



Charting a Course to 2040

SOUTH CAROLINA

MULTIMODAL TRANSPORTATION PLAN

INTERSTATE PLAN

Prepared for:



Prepared by:



August 2014



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1 INTRODUCTION

The South Carolina Interstate Plan was developed in parallel and in close coordination with the 2040 South Carolina Multimodal Transportation Plan (MTP), as were similar plans for Strategic Corridor Network, Public Transit, Freight and Rail Plans. All of these plans have a common planning horizon of 2040, shared stakeholder and public outreach efforts, including a website¹, used the same SCDOT and national databases, and had a common foundation of statewide vision, goals, and objectives.

The Interstate Plan updates and replaces the previous plan developed in 2008, which had been prepared in parallel with the 2030 MTP. The purpose of the plan is to support South Carolina's statewide vision and goals by documenting existing and projected conditions on the state's interstate network in a way that is easily understood and helpful to all stakeholders and members of the public and to guide decision makers in investment decisions. The processes developed for this plan are consistent with state policies, use commonly available databases, are quantitative in nature and so repeatable, and provide the tools and information necessary to measure progress toward meeting goals and objectives as strategies and projects are implemented over time.

South Carolina's network of 11 Interstate freeways includes 851 centerline miles and 3,800 lane-miles of roadway. In 2013, vehicle-miles of travel (VMT) on this network amounted to 13.8 billion VMT, which accounted for 28 percent of total VMT in the state, even though Interstate highways account for only 2 percent of the lane-miles. Maintaining a safe and efficient interstate system is vital to moving people of goods throughout South Carolina. The existing and future interstate conditions analysis provides SCDOT with vital information on congested areas and bottlenecks where additional in-depth studies will be needed to identify investments required to improve investments. The analysis and output from the existing and future conditions will also be used in prioritizing interstate improvements based on Act 114 requirements.

The Interstate Plan has been updated using a revised methodology for determining interstate mainline capacity deficiencies with a new calculation of traffic congestion, which utilized probe speed data as part of the determination of freeway density for the entire interstate system. This approach is consistent with level of service determination for freeways in the 2010 *Highway Capacity Manual*. The Statewide Interstate Plan also reflects and references elements of the Statewide Multimodal Transportation Plan as well as the Statewide Freight Plan, Statewide Strategic Corridor Plan, the Statewide Transit and Human Services Coordination Plan, and the Statewide Rail Plan.

¹ www.scdot.org/Multimodal/



2 GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

The vision statement of the 2040 MTP is *Safe, reliable surface transportation and infrastructure that effectively supports a healthy economy for South Carolina.*

In addition to this vision statement, the following goals were developed during the development of the 2040 MTP.

MOBILITY AND SYSTEM RELIABILITY GOAL: Provide surface transportation infrastructure and services that will advance the efficient and reliable movement of people and goods throughout the state.

SAFETY GOAL: Improve the safety and security of the transportation system by implementing transportation improvements that reduce fatalities and serious injuries as well as enabling effective emergency management operations.

INFRASTRUCTURE CONDITION GOAL: Maintain surface transportation infrastructure assets in a state of good repair.

ECONOMIC AND COMMUNITY VITALITY GOAL: Provide an efficient and effective interconnected transportation system that is coordinated with the state and local planning efforts to support thriving communities and South Carolina's economic competitiveness in global markets.

ENVIRONMENTAL GOAL: Partner to sustain South Carolina's natural and cultural resources by minimizing and mitigating the impacts of state transportation improvements.

EQUITY GOAL: Manage a transportation system that recognizes the diversity of the state and strives to accommodate the mobility needs of all of South Carolina's citizens.

Plan goals and objectives define investment priorities and describe how SCDOT will work with its planning partners to achieve a shared transportation vision. Objectives for the 2040 MTP define the outcomes that SCDOT intends to achieve related to each goal. Performance measures "operationalize" that objective and define how that outcome will be measured, monitored, and reported. Performance targets will be established by SCDOT and the MPOs after FHWA provides the final performance management rules in 2016. Guiding Principles are implemented through process or policy changes or through enhanced relationships with local government, other state agencies, modal owners, and operators. The 2040 MTP vision, goals, objectives, performance measures, and guiding principles were developed in coordination with the State's transportation planning partners.

The specific 2040 MTP objectives, performance measures, and guiding principles relevant to the Interstate Plan are shown in **Table 2-1** through **Table 2-6**. The main focus of the Interstate Plan is analyzing existing and future congestion, which provides the basis for establishing future

improvement priorities. Interstate pavement, bridge conditions and safety issues are included in the Highway and Bridge and Safety and Security Technical Memorandums, as well as in the 2040 MTP.

Table 2-1: Mobility and System Reliability Goal

Objective	Measures
Reduce the number of system miles at unacceptable congestion levels.	Annual hours of delay on the Interstate, NHS and Strategic Corridor Network.
Improve the average speed on congested corridors.	Annual average speed of the congested interstate system corridors, as based upon probe speed data.
Improve travel time reliability (on priority corridors or congested corridors).	Travel time reliability Index.
Reduce the time it takes to clear incident traffic.	Average time to clear traffic incidents in urban areas.
Guiding Principles	
Encourage availability of both rail and truck modes to major freight hubs (ports, airports, intermodal facilities).	

Table 2-2: Safety Goal

Objective	Measures
Reduce roadway departure related fatality and serious injury crashes.	Number of roadway departure crashes involving fatality or injury.
Reduce highway fatalities and serious injuries.	Number or rate of fatalities and serious injuries (MAP-21 measure).
Reduce fatal and serious injury crashes within work zones.	Number of work zone fatal and serious injury crashes.
Reduce fatal and serious injury crashes at intersections	Number of crashes at intersections involving fatality or serious injury.
Reduce fatal and serious injury crashes involving commercial motor vehicle	Percent of commercial motor vehicle crashes involving fatality or serious injury
Guiding Principles	
Improve safety data collection, access, and analysis.	
Better integrate safety and emergency management considerations into project selection and decision making.	
Improve substandard roadways (one or more of the minimum current design standards are not met).	

Table 2-3: Infrastructure Condition Goal

Objective	Measures
Maintain or improve the current state of good repair for the National Highway System (NHS).	Number of Miles of interstate and NHS rated at “good” or higher condition.
Reduce the percentage of remaining state highway miles (non-interstate/strategic corridors) moving from a “fair” to a “very poor” rating while maintaining or increasing the percent of miles rated as “good.”	Percent of miles moving from “fair” to “very poor” condition. Percent of miles rated “good” condition.
Improve the condition of the state highway system bridges.	Percent of deficient bridge deck area (MAP-21 requirement).
Guiding Principles	
Recognize the importance of infrastructure condition in attracting new jobs to South Carolina by considering economic development when determining improvement priorities.	
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports, and intermodal facilities).	
Comply with Federal requirements for risk-based asset management planning while ensuring that State asset management priorities are also addressed.	

Table 2-4: Economic and Community Vitality Goal

Objective	Measure
Utilize the existing transportation system to facilitate enhanced freight movement to support a growing economy.	Truck travel time index on the freight corridor network, Annual hours of truck delay, Freight Reliability.
Guiding Principles	
Improve access and interconnectivity of the state highway system to major freight hubs (road, rail, marine, and air).	
Determine economic impacts of potential projects and include quantitative results in the Act 114 project prioritization process.	
Work with economic development partners to identify transportation investments that will improve South Carolina’s economic competitiveness.	
Partner with public and private sectors to identify and implement transportation projects and services that facilitate freight movement.	
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports, and intermodal facilities).	

Table 2-5: Environmental Goal

Guiding Principles
Plan, design, construct, and maintain projects to avoid, minimize, and mitigate impact on the state’s natural and cultural resources.
Improve travel time delay on the Interstate and Strategic Corridor Network to reduce Greenhouse Gas emissions.
Work with state and public transit agencies to purchase clean or alternative fueled transit vehicles to reduce Greenhouse Gas emissions
Partner to be more proactive and collaborative in avoiding vs. mitigating environmental impacts. Utilize Mitigation Forecast Model.
Work with environmental resource agency partners to explore the development of programmatic mitigation in South Carolina.

Table 2-6: Equity Goal

Guiding Principles
Ensure planning and project selection processes adequately consider rural accessibility and the unique mobility needs of specific groups.
Ensure broad-based public participation is incorporated into all planning and project development processes.



3 RELATED STUDIES AND PRACTICES

As part of the development of the Interstate Plan, a review of previous studies and practices was undertaken to consider the impacts of intermodal connectivity in South Carolina, interstate plans of neighboring states, and several interstate feasibility studies conducted by SCDOT.

3.1 Intermodal Connectivity

Several large-scale port-related and airport-related projects are currently under construction in South Carolina that will have a significant impact on adjacent interstate operations in the near future. These large-scale projects and their associated impacts were included in the travel demand modeling of 2040 horizon-year conditions of the statewide model discussed in later sections. These projects are summarized in the following sections.

3.1.1 Port-Related Projects

Navy Base Container Terminal

The South Carolina State Ports Authority is currently constructing a new container port on the site of the former Charleston Naval Complex in North Charleston, South Carolina. The new container terminal covers approximately 280 acres and will consist of three container ship berths that will have an annual capacity of 1,400,000 Twenty-Foot Equivalent Units (TEU). The primary access to the Navy Base Container Terminal will be provided by the Port Access Road, a limited-access facility that will connect the port directly with I-26 near the existing North Meeting Street exit (#217).

Several studies have been completed with the development of the Navy Base Container Terminal site, which were reviewed as part of the development of the Interstate Plan, including the *Marine Container Terminal EIS Traffic Study* and the *Environmental Assessment for I-26 Improvements from I-526 to North Meeting Street*. The latter study considers the widening of I-26 between I-526 and North Meeting Street from six to eight/ten lanes and the reconstruction of the I-26 interchanges with Dorchester Road and Cosgrove Avenue due in part to area growth and the construction of the new container terminal.

South Carolina Inland Port

An Inland Port facility has recently been constructed by the South Carolina Ports Authority in Greer, South Carolina. The Inland Port facility, which began operations in October 2013, is located off of the Brockman McClimon Road exit (#58) along I-85 between Greenville and Spartanburg.

It is anticipated that approximately 100,000 containers will be moved annually at the Inland Port within the next five years via Norfolk Southern rail from the Port of Charleston, which will reduce the number of Port-related trucks traveling on I-26 from Charleston to the Upstate. With primary access

to the I-85 corridor, the Inland Port has the potential to be a significant economic generator for the region, and efficient traffic operations along I-85 will be important.

3.1.2 Airport-Related Projects

Charleston International Airport Terminal Expansion

Charleston County Aviation Authority has recently begun an expansion of the main passenger terminal at the Charleston International Airport, which will include six new gates, expanded concourses, a larger baggage claim area with the addition of the third baggage carousel, and a larger parking garage. The expansion is planned to be complete in four years, resulting in a 25 percent increase in overall terminal area. According to the aviation activity forecast contained in the *Charleston International Airport Master Plan Update* (2011), the airport authority projects annual growth of 3.2% in enplanements between 2010 and 2035.

Boeing South Carolina Expansion

Boeing currently employs approximately 6,600 employees at their North Charleston 787 plant adjacent to the Charleston International Airport and I-526. Boeing has committed to an additional 2,000 employees at the facility by 2020, resulting in a 30 percent increase in operations. Employment projections beyond 2020 are not available at this time; however, it is anticipated that Boeing will continue to grow beyond 2020. Recent studies in Charleston County have utilized an annual 3% growth factor to project Boeing employment beyond 2020, which would result in approximately 15,500 Boeing employees in 2040.

Airport Connector Road

To accommodate the growth of Charleston International Airport and Boeing, modifications to the local roadway network are being proposed by Charleston County. Currently, access to Charleston International Airport and Boeing is provided to I-526 through International Boulevard. The new Airport Connector Road roadway will provide a new access to Charleston International Airport to I-526 via Montague Avenue. This new access scenario was evaluated by SCDOT as part of an addendum to the I-526 Corridor Analysis Study. The results of the area growth and new roadway connection included recommendations for additional turn lanes along International Boulevard at the I-526 interchange and widening improvements along Montague Avenue and a new diverging diamond interchange form at the I-526 & Montague Avenue interchange. The area growth and new roadway connection did not change any of the recommendations along the I-526 mainline and ramps.

3.2 Neighboring Interstate Plans

A summary of the Interstate Plans of Georgia and North Carolina are summarized herein.

3.2.1 Georgia Department of Transportation (GDOT) Interstate System Plan

GDOT developed the Interstate System Plan for Georgia that identified improvements based on a comprehensive assessment of system travel demand and mobility needs through the horizon year

2035. As part of the development of the plan, potential funding sources to implement the projects were evaluated and proposed decision-making and project development guidelines were considered.

For analysis purposes, four categories of needs were identified: Congestion, Safety, System Preservation (bridges and pavement), and Connectivity (interchanges and access routes). The primary Congestion metric utilized in the GDOT Interstate System Plan analysis was the volume-to-capacity ratio for study segments, for both the existing and horizon-year timeframes.

In 2010, GDOT completed the widening of the entire length of I-95 in Georgia to six lanes, including up to the South Carolina state line. No GDOT improvements to I-85, I-20, or I-520 are planned or funded at the respective Georgia/South Carolina state lines.

3.2.2 North Carolina Strategic Prioritization

The North Carolina Department of Transportation has developed a strategic prioritization process that categorizes similar projects together into “buckets” where they are compared against each other using a data-driven methodology. The process focuses on highway mobility, highway modernization, bicycle and pedestrian, and public transportation.

In evaluating the performance of the highway mobility criteria, a number of quantitative data for congestion, safety, and project benefits compared to cost are considered, in addition to local input and multimodal characteristics. North Carolina’s third version of the prioritization process, Prioritization 3.0, updated the Congestion criteria metric to include a weighted average of Travel Time Index information from INRIX (60 percent) and Existing Volume information (40 percent). In addition, the Benefit/Cost criteria metric was updated to consider future Travel Time Savings benefits based upon output from the North Carolina Statewide Travel Demand Model.

NCDOT has recently proposed future widening improvements to I-77 to include two new high-occupancy toll (HOT) lanes in each direction outside of Charlotte.

No NCDOT improvements to I-26, I-85, or I-95 are planned or funded at the respective North Carolina/South Carolina state lines.

3.3 Interstate Feasibility Studies Review

SCDOT has conducted several large-scale corridor-level studies for select segments of the South Carolina interstate system to identify improvements at high congestion locations and review the viability of implementing HOV/HOT along several major interstate corridors in the State. A summary of these studies are summarized in the following sections.

3.3.1 I-20/I-26/I-126 Plan of Action Study

Utilizing a Congestion Management Process, SCDOT developed a study of the I-26/I-20/I-126 corridor to address existing and future traffic volumes and congestion. Located in Richland and Lexington Counties, the three corridors are the crossroads of the South Carolina Interstate System. The study

consisted of an 8.5-mile segment of I-26, which included the two system-to-system interchanges of I-26 & I-20 and I-26 & I-126; the three-mile length of I-126; and a two-mile segment of I-20.

A study taskforce committee was established to develop a plan of action for the corridor. The study identified 39 strategies in four categories that could address the existing and future congestion needs of the corridor. The four categories consisted of strategies for: Travel Demand Management, Modal Options, Traffic Operations, and Capacity Improvements. Each strategy was evaluated based upon suitability and benefit-to-cost comparisons.

The results of the I-26/I-126/I-20 Plan of Action Study were utilized as one of the data sources when validating the Interstate Plan analyses discussed in Section 4.

3.3.2 Corridor Studies

In addition to the I-20/I-26/I-126 Plan of Action Study, SCDOT has conducted corridor studies for three other major interstate corridors. The studies include the three corridors identified in the previous Interstate Plan as being “mega” projects. Mega projects are defined as having improvement construction costs projected to exceed \$400 million dollars for each project. The three mega projects consisted of I-26 in Lexington and Richland Counties, I-85 in Greenville and Spartanburg Counties, and I-526 in Charleston County. A corridor analysis for I-85 in Cherokee County has also recently been completed by SCDOT.

The goal of the corridor studies was to provide a holistic long-range management plan that did not just consider capacity needs, but also travel demand management and modal strategies to reduce future travel demand during the peak hours and traffic operations improvements to target specific, local congestion or safety issues. The analyses identified alternatives to resolve current congestion issues and address future ones. In addition to congestion relief benefits, all improvements were also evaluated on potential environmental impacts, right-of-way impacts, and cost. Alternatives were identified and evaluated for improvements ranging from near term and low-cost strategies to more costly future-year additional capacity strategies. It should be noted that a significant portion of the recommendations from these corridor studies have been programmed in the SCDOT TIP. The results of the corridor studies were utilized as one of the data sources when validating the Interstate Plan analyses discussed in Section 4. The extents of the three corridor studies are summarized below:

- I-85 Corridor Study (Greenville and Spartanburg Counties): conducted for a 22-mile segment of the I-85 corridor from US 25/White Horse Road to Fort Prince Boulevard in Greenville and Spartanburg Counties. I-85 is a vital transportation link in Upstate South Carolina and regionally between Atlanta and Charlotte, especially for the high demand of truck traffic.
- I-526 Corridor Study: conducted for a 9-mile segment from US 17/Savannah Highway to US 52/US 78/Rivers Avenue, including the I-26 and I-526 system-to-system interchange, in Charleston County. I-526 currently experiences high traffic volumes with considerable congestion during the weekday morning and afternoon peak periods. Future traffic volumes are expected to increase considerably with several large developments planned in the area.

- I-85 Corridor Study (Spartanburg and Cherokee Counties): conducted for the 26-mile corridor from Gossett Road to the North Carolina State line in Spartanburg and Cherokee Counties. As already notes, I-85 is a vital transportation link in Upstate South Carolina with heavy truck volumes.

It should be noted that SCDOT has identified three additional corridor studies to be initiated in the near future, including additional portions of I-85 in Greenville and Spartanburg Counties, I-26/I-20/I-77 in the Columbia area, and I-26 in the Charleston area.

3.3.3 HOV/HOT Feasibility Study

SCDOT conducted a feasibility assessment study of adding new High-Occupancy Vehicle (HOV) or High-Occupancy Toll (HOT) lanes on six major interstate corridors in South Carolina. The six locations consisted of I-385 in Greenville, I-77 in Rock Hill, I-26/I-126 in Columbia, I-20 and I-26 in Columbia, and I-26 in Charleston.

The study considered three basic analysis criteria: traffic congestion (existing and future), physical constraints, and user benefits and costs. The I-26 corridor in Charleston was selected for more detailed study after an initial screening process, as it provided the greatest opportunity for implementation of HOV or HOT lanes. Considering the traffic volume projections, the results of the study indicated that the implementation of HOV lanes would be viable in the intermediate term and the implementation of HOT lanes would be viable in the long term. However, numerous existing physical constraints along the corridor made the implementation of HOV and HOT lanes along I-26 in Charleston not cost effective or feasible. Therefore, further investigation of HOV/HOT feasibility of the study corridors was not recommended.

3.4 Future I-73

Interstate 73 was originally identified as a high priority route that was authorized by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) originating in Myrtle Beach, South Carolina and ultimately connecting to Michigan. An Environmental Impact Study has been completed by SCDOT for the South Carolina section of the future I-73 and ROW acquisition and other permitting is currently underway. However, there is currently no construction funding programmed for the project.

The northern part of I-73 ties to I-73/I-74 in the Rockingham/Hamlet, North Carolina region and runs along a new alignment south across the South Carolina/North Carolina state line through Marlboro and Dillon Counties to a connection at I-95. The southern part of the I-73 project continues from I-95 and runs along a new alignment to SC 22 (Conway Bypass/Veteran's Highway) in the Myrtle Beach/Conway area.



4 CONGESTION ANALYSES

The Statewide Interstate Plan has been updated using a revised methodology for determining interstate mainline capacity needs with a new calculation of traffic congestion. The new calculation utilizes probe speed data as part of the determination of freeway density for all interstate mainline segments in South Carolina, which is consistent with level of service determination for freeways in the 2010 *Highway Capacity Manual*.

4.1 Previous Practice Review

For the 2008 Interstate Plan analysis, interstate mainline corridors were evaluated based upon then-present day volume-to-capacity (V/C) ratios and lane capacities based upon information documented in the *Highway Capacity Manual*. Data was gathered from various sources, including vehicle and truck volume data from permanent traffic count stations, crash data provided by the South Carolina Department of Public Safety, existing pavement conditions data from the SCDOT Pavement Management Section, financial viability considerations reflecting SCDOT's ability to fund and implement the proposed improvement, economic development impact as provided by the South Carolina Department of Commerce, and environmental impact as provided by the SCDOT Environmental Office. Interchanges were evaluated using the IIMS, which considered existing traffic volume data, crash data, geometric data, and the other applicable Act 114 criteria.

In addition to the evaluation of the interstate mainline and interchange capacity needs, a review of potential funding was considered utilizing then-existing funding levels and an annual inflation factor for potential construction costs. Included within the lists of potential improvements were three mega projects, with respective construction costs projected to exceed \$400 million dollars for each project. The three mega projects consisted of a series of interchange improvements along I-26 in Lexington and Richland Counties, the I-85 corridor in Greenville and Spartanburg Counties, and the I-526 corridor in Charleston County. It should be noted that each of these three projects have had detailed corridor studies conducted to better detail needed improvements and to determine more detailed cost estimates.

The results of the 2008 Interstate Plan included a schedule of proposed interstate improvements that was developed for the 2030 horizon year, and included a constrained plan of five interstate mainline widening projects and five interchange reconstruction projects. The top three priority interstate mainline widening projects and two of the top interchange projects identified are summarized herein, and have been since widened or are currently under construction.

- I-26 in Charleston County from the US 52 Connector to I-526 – Completed in 2012, I-26 was widened from six to eight lanes between Ashley Phosphate Road and Remount Road, which

included new collector-distributor ramps for both directions through the West Aviation Avenue and Remount Road interchanges.

- I-385 in Greenville County from north of Georgia Road to I-85 – Completed in 2012, I-385 was widened from four lanes to six lanes between Georgia Road and Woodruff Road. Widening of I-385 from Woodruff Road through the I-85 interchange is funded for construction as part of the I-85 & I-385 Interchange Design-Build project, with construction expected to begin in 2014.
- I-20 in Richland County from I-77 to Spears Creek Church Road – Currently under construction, I-20 is being widened from four to six lanes between I-77 and Spears Creek Church Road, with construction expected to be complete in 2014.
- I-26 & Remount Road/West Aviation Avenue – Reconstructed the interchanges to improve safety and capacity and widened I-26 to four lanes in each direction and with collector-distributor roadways providing access for both the interchanges
- I-95 & SC 327 – Reconstructed the interchanges to improve safety and capacity.

In addition, SCDOT Commission approved funding for and initiated construction on four additional prioritized projects through Act 98 in 2014. These projects are as follows:

- I-20 in Lexington County from US 378 to Longs Pond Road – Widen I-20 to three travel lanes in each direction for 11 miles;
- I-77 in Richland County from I-20 to north of SC 277 – Widen I-77 to three travel lanes in each direction for approximately seven miles;
- I-85 in Cherokee and Spartanburg Counties – Widen I-85 to three travel lanes in each direction for approximately 16 miles; and
- I-85 & I-385 Interchange – Reconfiguration of the interchange to improve safety and capacity and widening I-385 to provide three travel lanes in each direction in the interchange area.

The next three priority interstate mainline widening projects include the following, each of which have had detailed corridor studies currently underway or completed.

- I-26 in Lexington and Richland Counties from US 176 to Saint Andrews Road
- I-85 in Greenville and Spartanburg Counties from US 25/White Horse Road to SC 129
- I-526 in Charleston County from Sam Rittenberg Boulevard to Long Point Road

4.2 Existing Mainline Conditions

Existing conditions for all interstate mainline segments in South Carolina were determined using, in part, probe speed data in a calculation of freeway density, which is consistent with level of service determination for freeways in the 2010 *Highway Capacity Manual*. The analysis methodology, a summary of the data considered, and results summaries of freeway density and corresponding level of service for all South Carolina interstates are provided in the following sections.

4.2.1 Analysis Methodology

In the determination of interstate mainline improvement priorities, the primary measure of traffic and congestion considered for this analysis was freeway density, measured by the number of passenger cars per mile per lane, which is consistent with the 2010 *Highway Capacity Manual (HCM)* methodologies for determining freeway level of service (LOS). Density describes the proximity to other vehicles and is related to the freedom to maneuver within the traffic stream. The measure of density is sensitive to variation of flow rates throughout the range of flows, whereas a measure of speed is relatively constant up to a certain flow rate.

The previous Interstate Plan developed in 2008 utilized the V/C ratio as its primary measure of traffic volume and congestion.

Table 4-1 summarizes the *HCM* density thresholds associated with each LOS grade for freeways.

Table 4-1: HCM LOS Criteria for Freeways

LOS	Density (passenger cars/mile/lane)
A	≤ 11
B	> 11 and ≤ 18
C	> 18 and ≤ 26
D	> 26 and ≤ 35
E	> 35 and ≤ 45
F	> 45 or V/C ratio > 1.00

For individual interstate mainline segments, Density (D) is calculated by dividing the segment Flow Rate (v_p), measured in passenger cars per hour per lane, by the segment Speed (S), measured in miles per hour, as shown below.

$$D = \frac{v_p}{S}$$

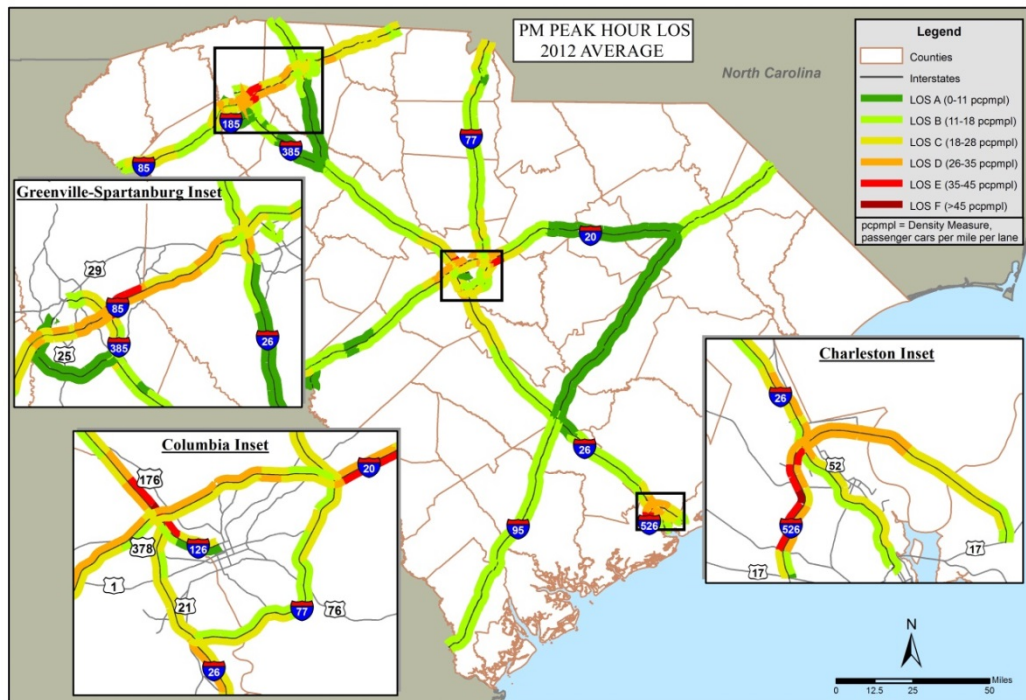
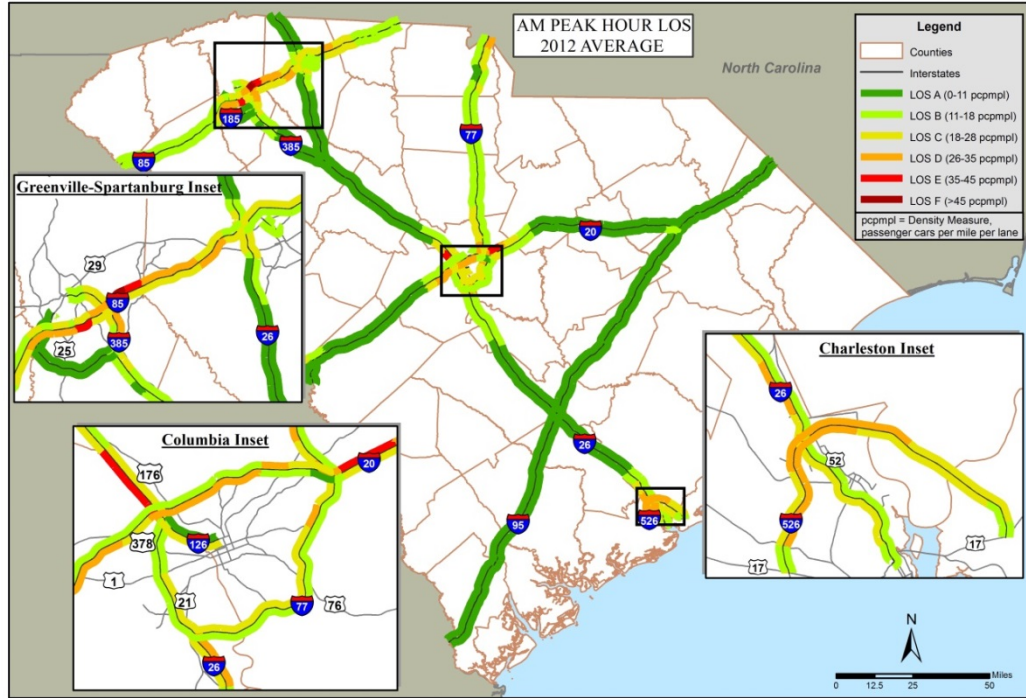
The data utilized and calculations implemented to determine the Flow Rate, Speed, and Density variables are discussed in the next section. The existing freeway Density conditions were calculated for both directions of all interstate mainline segments in South Carolina for four study hours, which consisted of the two typical morning peak hours (from 7:00 AM to 8:00 AM and from 8:00 AM to 9:00 AM) and the two typical afternoon peak hours (from 4:00 PM to 5:00 PM and from 5:00 PM to 6:00 PM). The respective LOS conditions were then determined for each study hour of all interstate mainline segments based upon the *HCM* criteria. **Appendix A** summarizes the data and performance metric calculation.

4.2.2 Interstate Density/LOS Analysis Summary

The Density and LOS data summary and calculation worksheets for the 11 interstates are provided in **Appendix B**. A discussion of the Density and LOS results for each interstate, including existing points of recurring congestion and bottlenecks, is provided herein. Maps showing the overall LOS results of the

existing worst AM peak hour and the worst PM peak hour for the interstate system are illustrated in Figure 4-1.

Figure 4-1: Existing Conditions AM and PM Peak Hour LOS



I-20

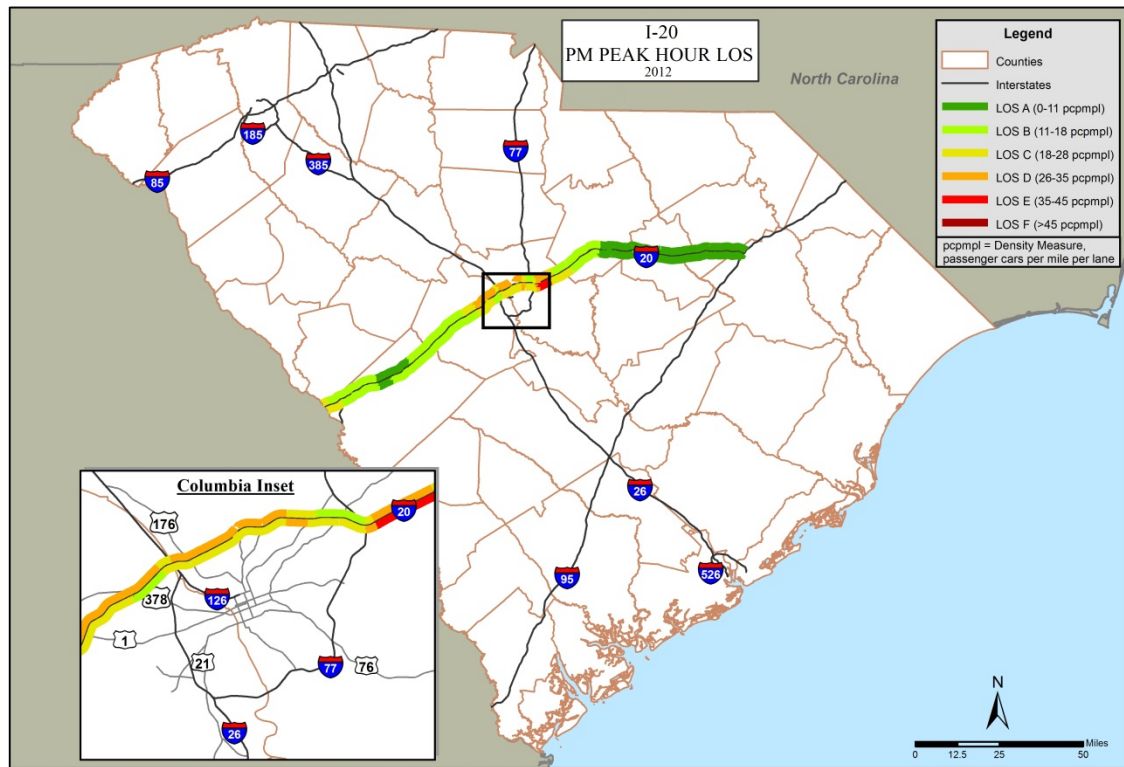
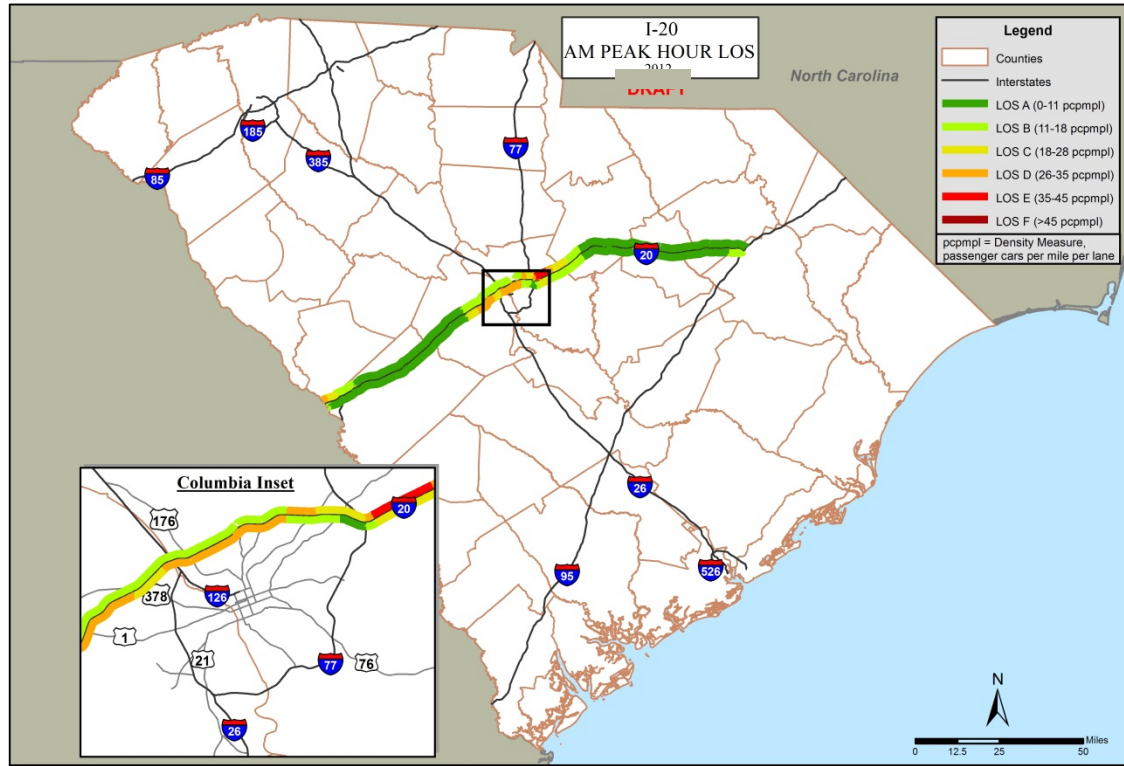
The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-20 are illustrated in **Figure 4-2**.

The primary congestion points along I-20 are between Alpine Road and Clemson Road, northeast of Columbia, where I-20 operates at LOS E conditions in the westbound direction during the AM peak hour and in the eastbound direction during the PM peak hour. It should be noted that this segment is currently under construction for widening from four to six lanes. The I-77 and Clemson Road interchanges are the respective bottleneck points along I-20 during the AM peak hour and PM peak hour.

In addition, on the west and north sides of Columbia, a 16-mile stretch of I-20 between SC 6/South Lake Drive and US 21/Main Street is predominantly operating at LOS D conditions in the eastbound direction during the AM peak hour and in the westbound direction during the PM peak hour. During the PM peak hour, the bottleneck points along I-20 include the three interchanges with Broad River Road, I-26, and US 378.

There are two corridors along I-20 that are among the most congested corridors in the State. The first is the 36-mile long corridor extending from SC-204 (Exit 51) to White Pond Road (Exit 87). The second segment extends from Alpine Road (Exit 76B) to Clemson Road (Exit 80).

Figure 4-2: I-20 AM and PM Peak Hour LOS



I-26

The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-26 are illustrated in **Figure 4-3**.

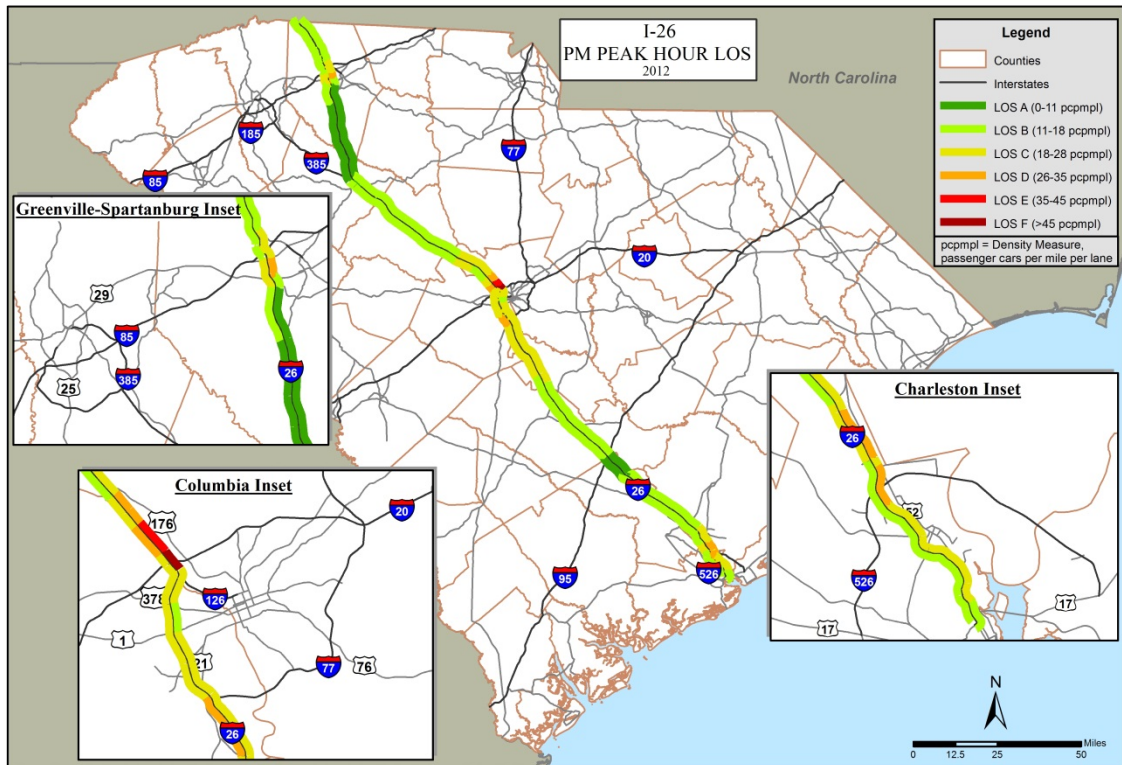
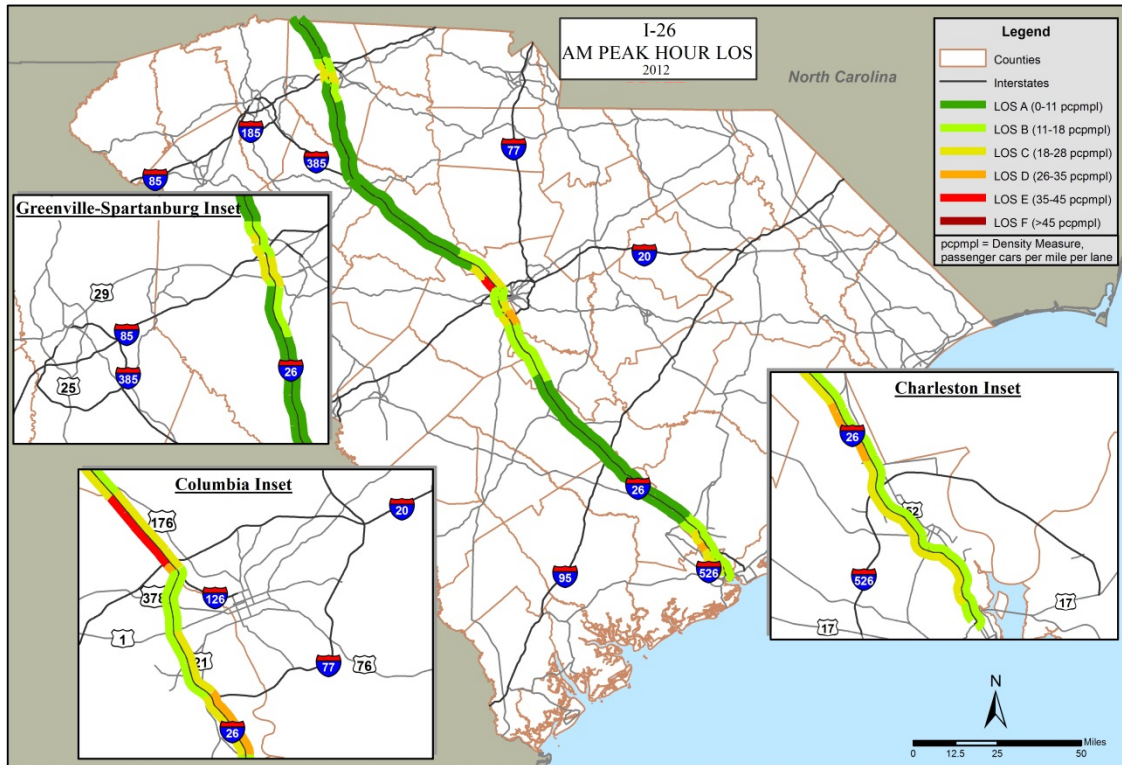
In the Columbia area, the primary congestion points along I-26 occur in the eastbound direction (inbound towards Columbia) from SC 60/Lake Murray Boulevard to I-20 during the AM peak hour, where I-26 operates at LOS E conditions. During the PM peak hour, I-26 westbound operates at LOS F or LOS E conditions from I-126 to Piney Grove Road. For the Columbia area, the I-20 interchange is the primary bottleneck point along I-26 during the AM peak hour. The I-20 and St. Andrews Road interchanges are the primary bottleneck points along I-26 during the PM peak hour.

In the Charleston area, the primary congestion points along I-26 occur in the eastbound direction (towards downtown Charleston) from US 52 Connector to West Aviation Avenue during the AM peak hour, where I-26 operates at LOS D conditions. During the PM peak hour, I-26 westbound operates at LOS D conditions from Montague Avenue to Ashley Phosphate Road. For the Charleston area, the US 52 Connector/Ashley Phosphate Road interchange and the merge to I-526 are the primary bottleneck points along I-26 during the AM peak hour. The I-526 and Ashley Phosphate Road interchanges are the primary bottleneck points along I-26 during the PM peak hour.

There are also seven segments along I-26 that are among the most congested segments in the State:

- Columbia Avenue (Exit 91) to US-21/US-176 (Exit 119);
- Jedburg Road (Exit 194) to US-17 (Exit 221);
- Saint Andrews Road (Exit 106) to I-20 (Exit 107);
- Piney Grove Road (Exit 104) to Saint Andes Road (Exit 106);
- Bush River Road (Exit 108) to I-126/US-76;
- Harbison Boulevard (Exit 103) to Piney Grove Road (Exit 104); and
- I-20 (Exit 107) to Bush River Road (Exit 108).

Figure 4-3: I-26 AM and PM Peak Hour LOS



I-77

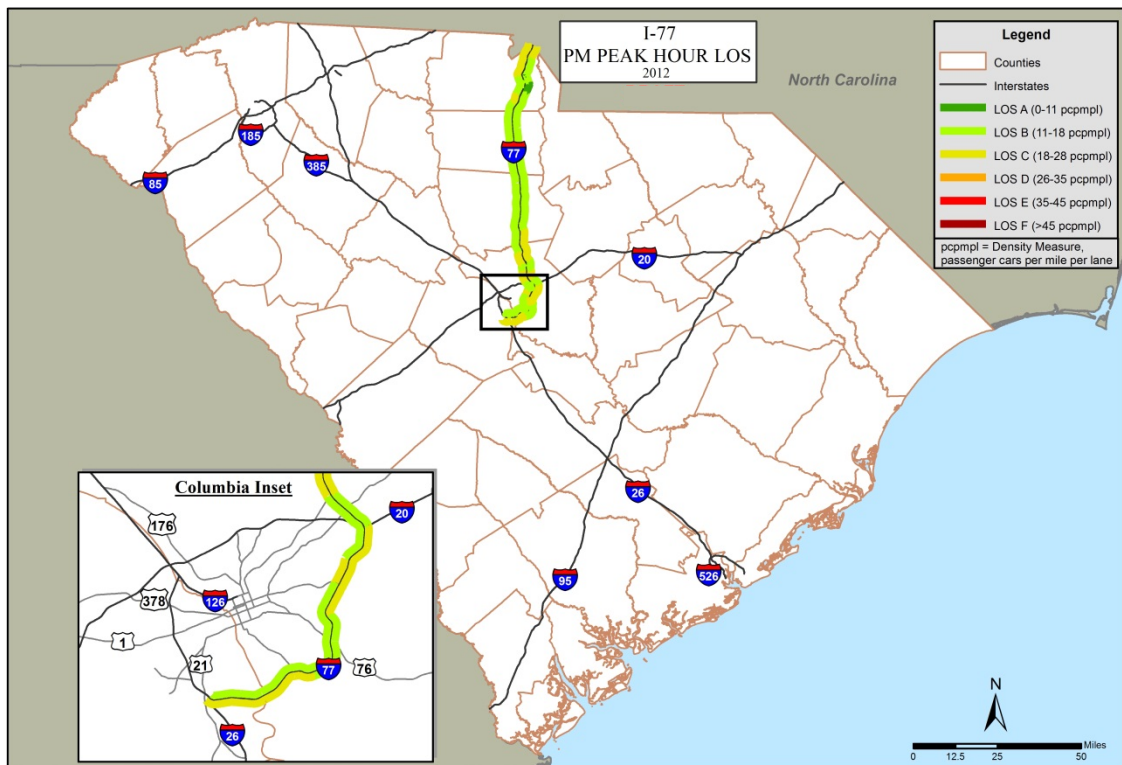
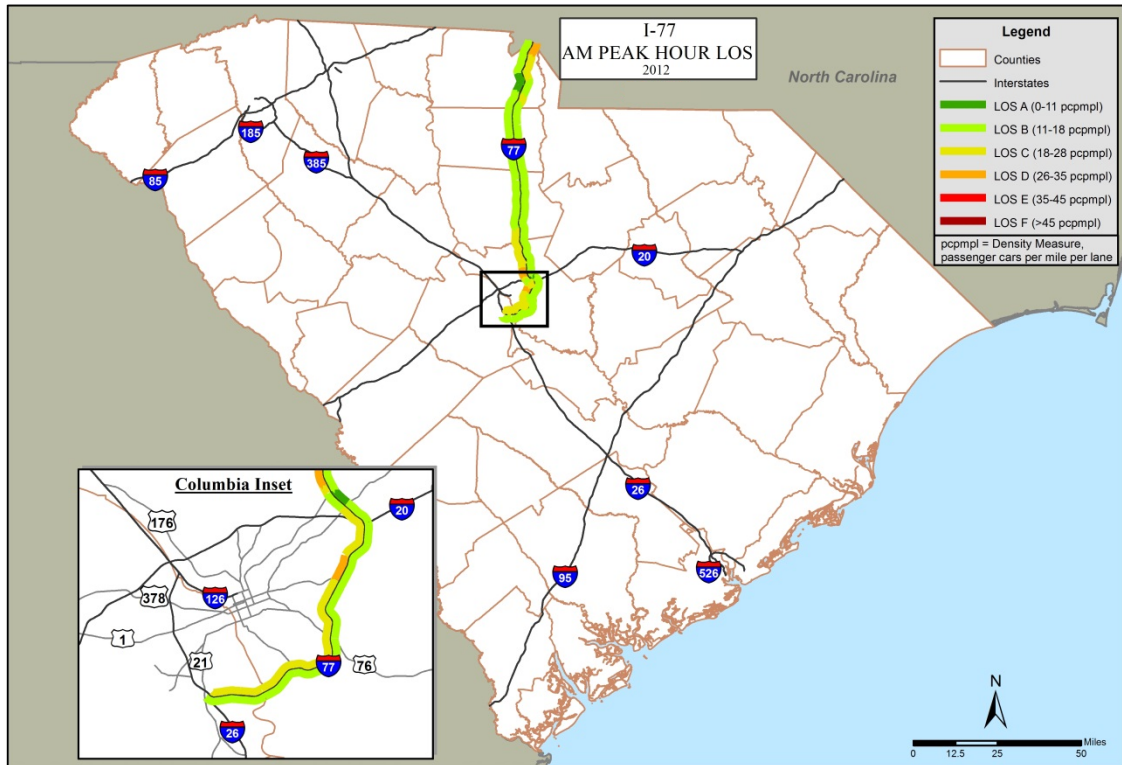
The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-77 are illustrated in **Figure 4-4**.

In the Rock Hill area, the primary congestion point along I-77 occurs in the northbound direction from SC 98/Gold Hill Road to US 21/Carowinds Boulevard during the AM peak hour, where I-77 operates at LOS D conditions.

In the Columbia area, the primary congestion points along I-77 occur in the southbound direction from Killian Road to SC 12/Forest Drive during the AM peak hour, where several segments of I-77 operate at LOS D conditions. The primary bottleneck point is along I-77 southbound approaching the Forest Drive interchange every Thursday in the AM peak hour, due to weekly graduation ceremonies of Fort Jackson.

The 33-mile long I-77 corridor extending from I-26 (Exit 1) to SC-34 (Exit 34) is among the most congested corridors in the State.

Figure 4-4: I-77 AM and PM Peak Hour LOS



I-85

The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-85 are illustrated in **Figure 4-5**.

Along I-85, a 39-mile stretch between SC 143/River Road in Greenville County and SC 129/Fort Prince Boulevard in Spartanburg County predominantly operates at LOS D or worse conditions in both directions during various times of the day.

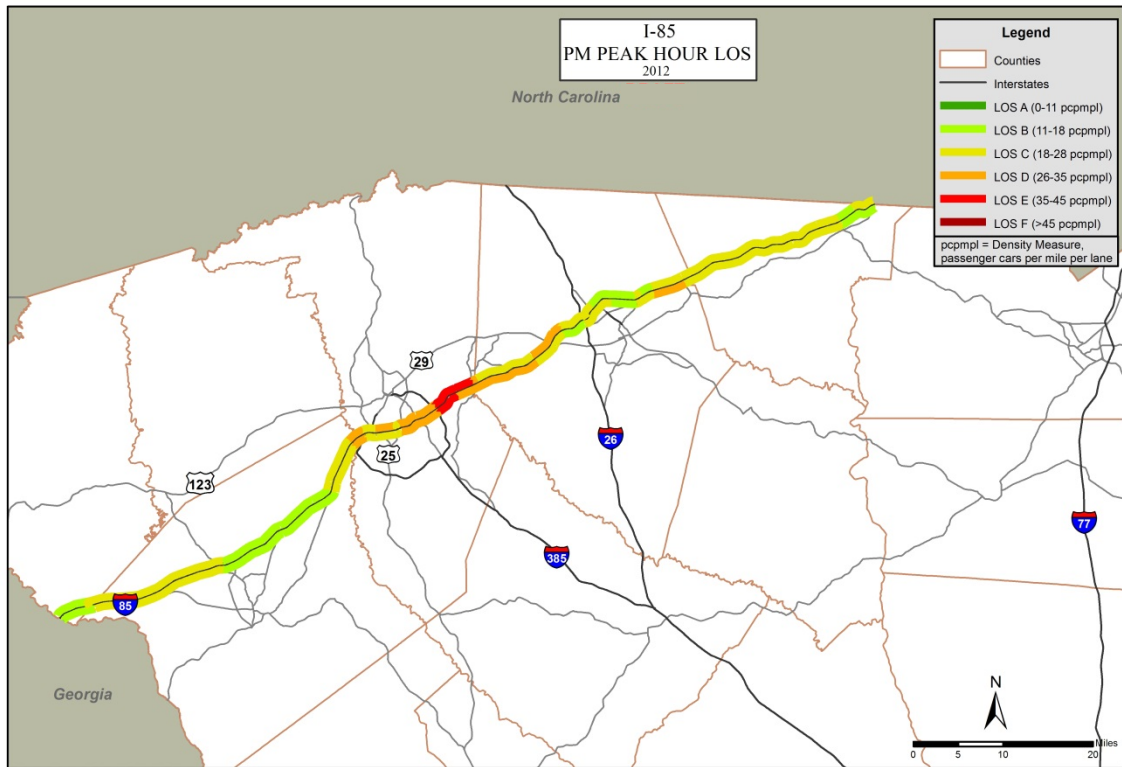
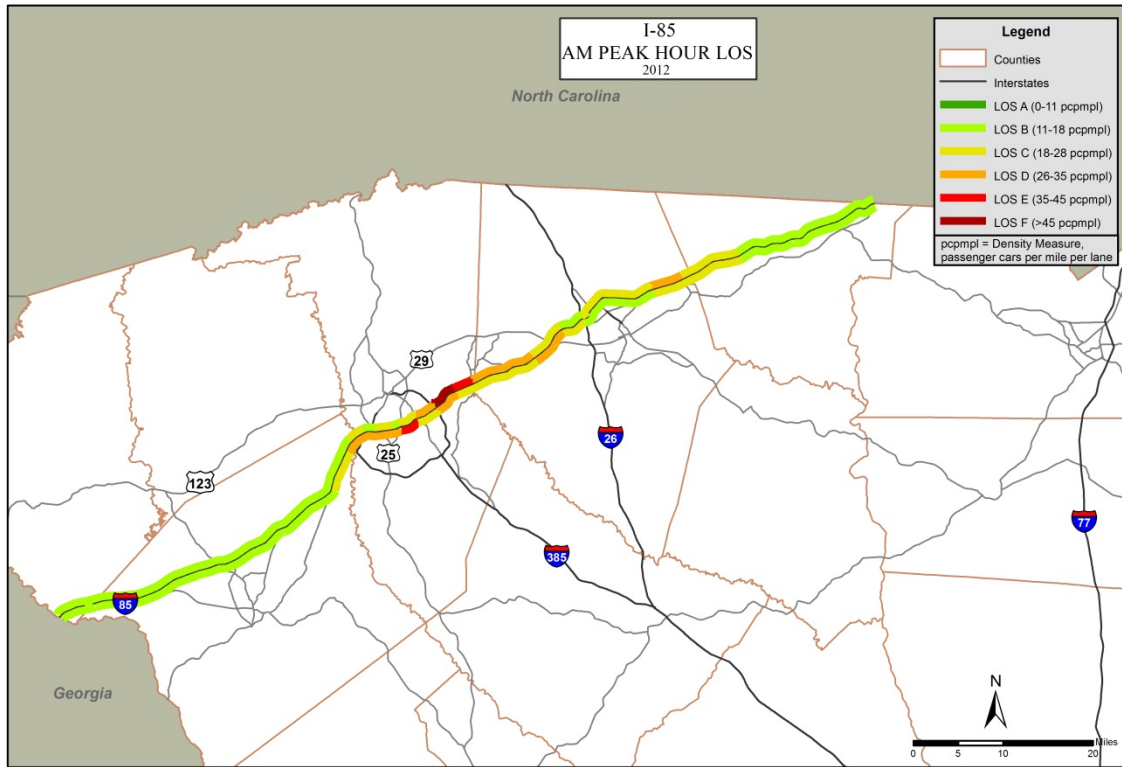
Along I-85 northbound during the AM peak hour, the primary congestion point is between Mauldin Road and US 276/Laurens Road, which operates at LOS E conditions. During the PM peak hour along I-85 northbound, the primary congestion point is between Woodruff Road/I-385 and Pelham Road, which operates at LOS E conditions. The Woodruff Road/I-385 interchange is the primary bottleneck along I-85 northbound.

Along I-85 southbound, the primary congestion point is between SC 14 and I-385/Woodruff Road, which operates at LOS F or LOS E conditions during the AM peak hour and PM peak hour. The I-385/Woodruff Road interchange is the primary bottleneck along I-85 southbound.

There are also eight segments along I-85 that are among the most congested segments in the State:

- US-29 (Exit 34) to I-26 (Exit 70);
- I-26 (Exit 70) to SC-110 (Exit 83);
- SC-110 (Exit 83) to US-29 (Exit 106);
- I-385/Woodruff Road (Exit 51) to Pelham Road (Exit 54);
- Pelham Road (Exit 54) to SC-14 (Exit 56);
- Mauldin Road (Exit 46) to US-276 (Exit 48);
- SC-153 (Exit 50) to US-29 (Exit 42); and,
- US-276 (Exit 48) to I-385/Woodruff Road (Exit 51).

Figure 4-5: I-85 AM and PM Peak Hour LOS



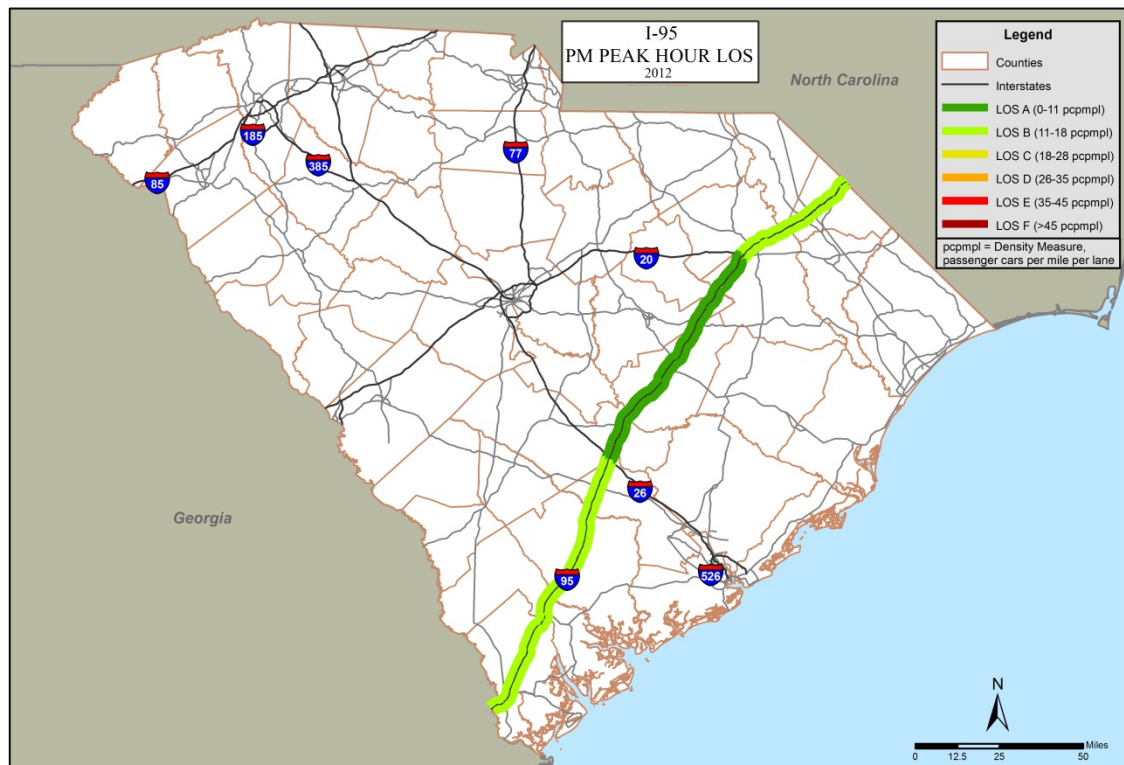
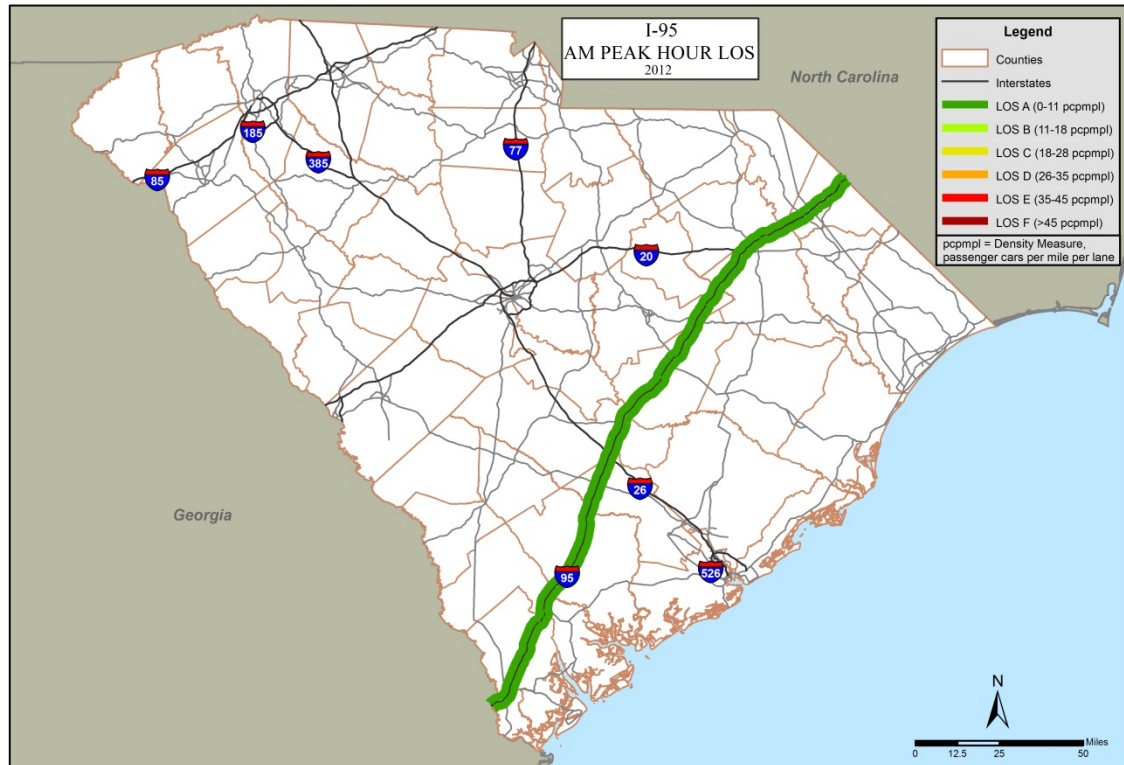
I-95

The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-95 are illustrated in **Figure 4-6**.

The results of the congestion analyses for I-95 indicate that it is currently operating at LOS A and LOS B conditions along its entire length in both directions.

There are no corridors along I-95 that are among the most congested corridors in the State.

Figure 4-6: I-95 AM and PM Peak Hour LOS



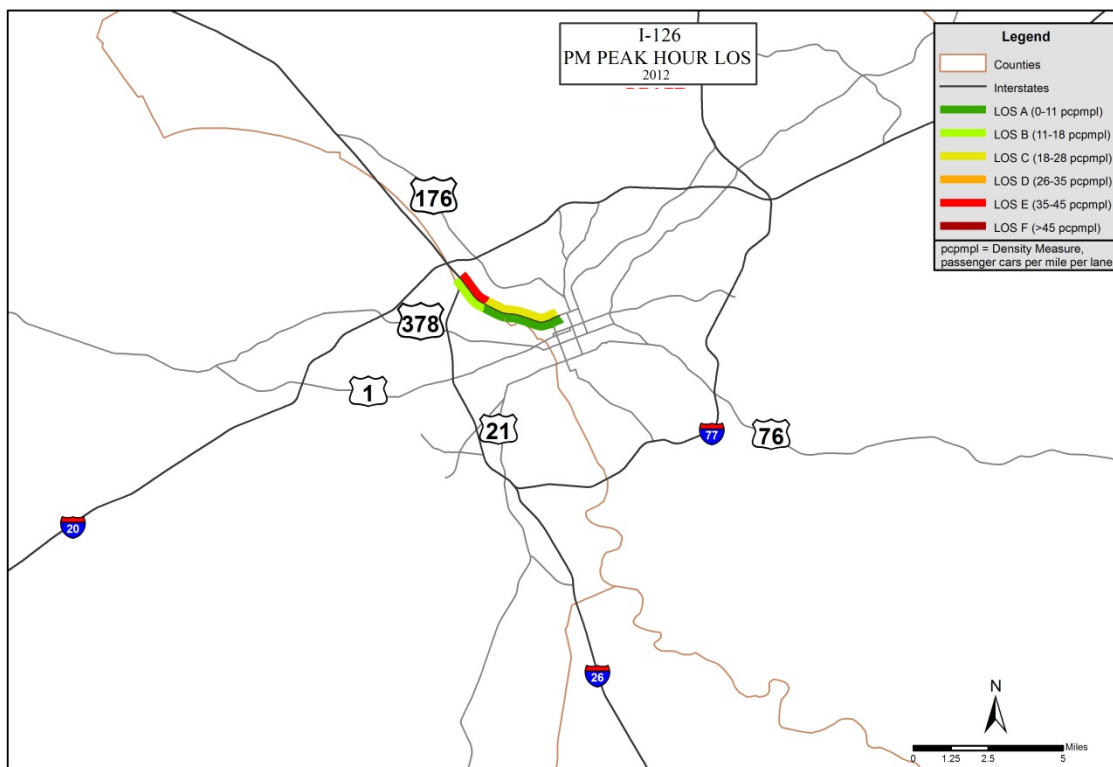
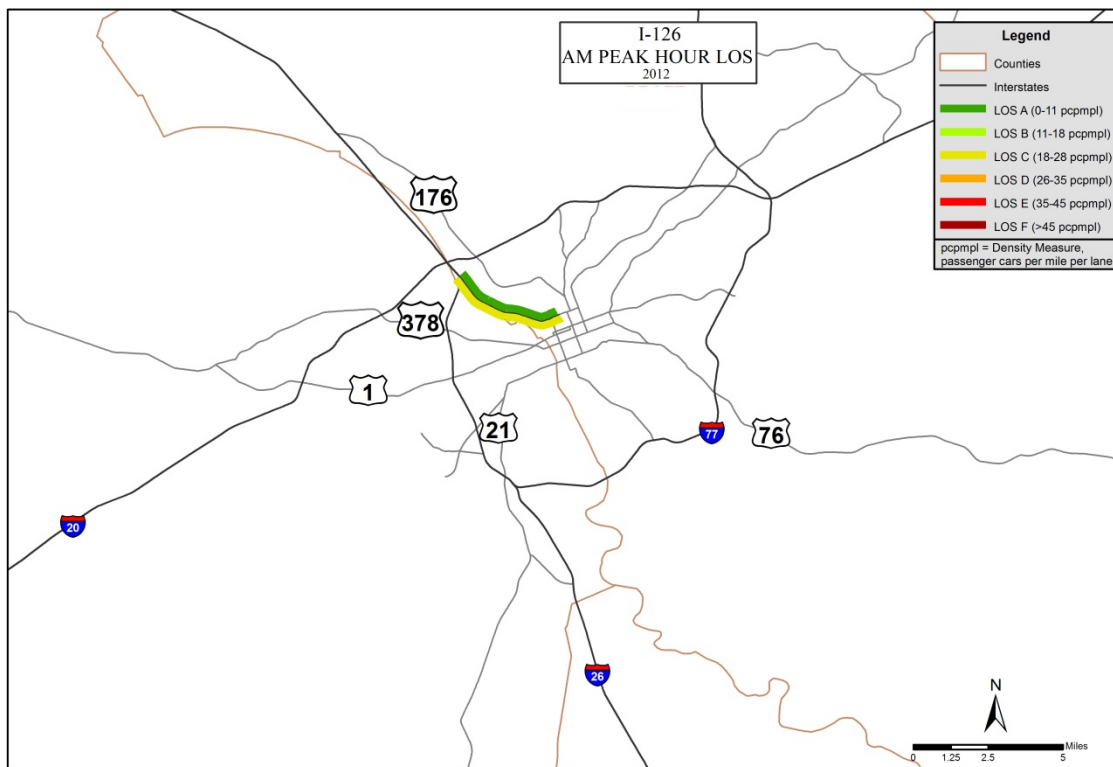
I-126

I-126 is a spur route of I-26 that extends between I-26 and Gadsden Street in the City of Columbia. The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-126 are illustrated in **Figure 4-7**.

The primary congestion point along I-126 is between Saluda River Road and I-26, where I-126 westbound operates at LOS E conditions during the PM peak hour. The I-26 interchange is the primary bottleneck along I-126 westbound during the PM peak hour.

There are no corridors along I-126 that are among the most congested corridors in the State.

Figure 4-7: I-126 AM and PM Peak Hour LOS



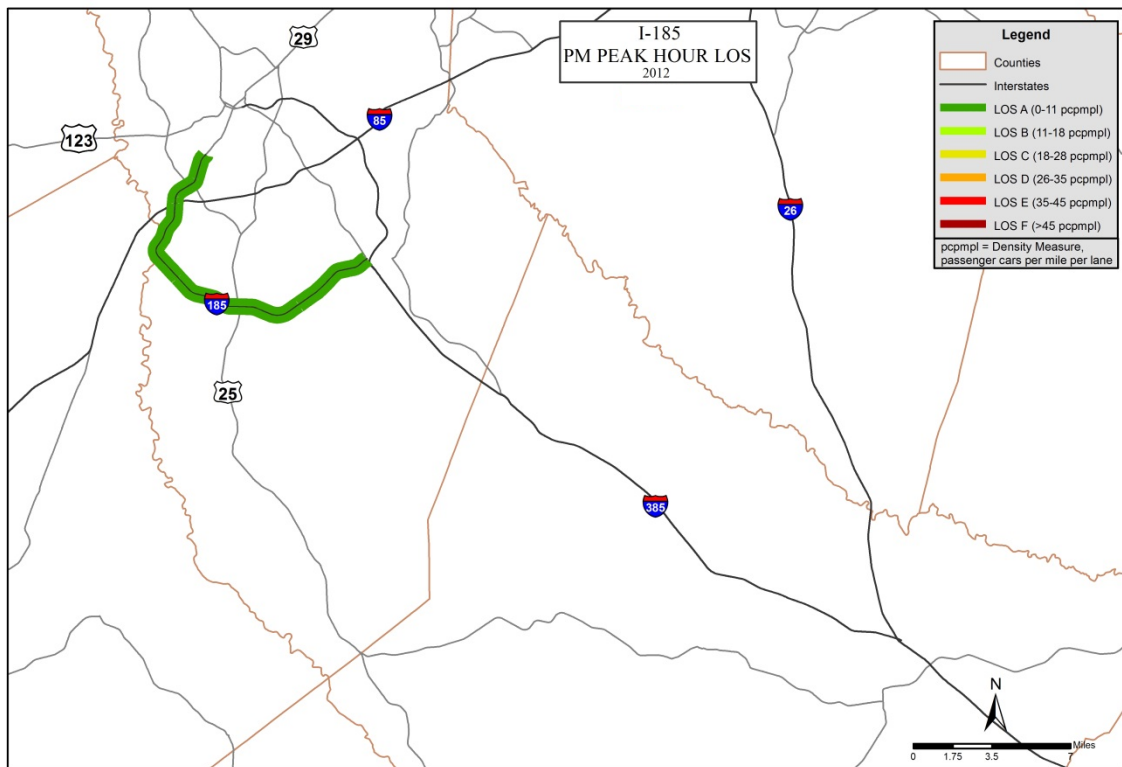
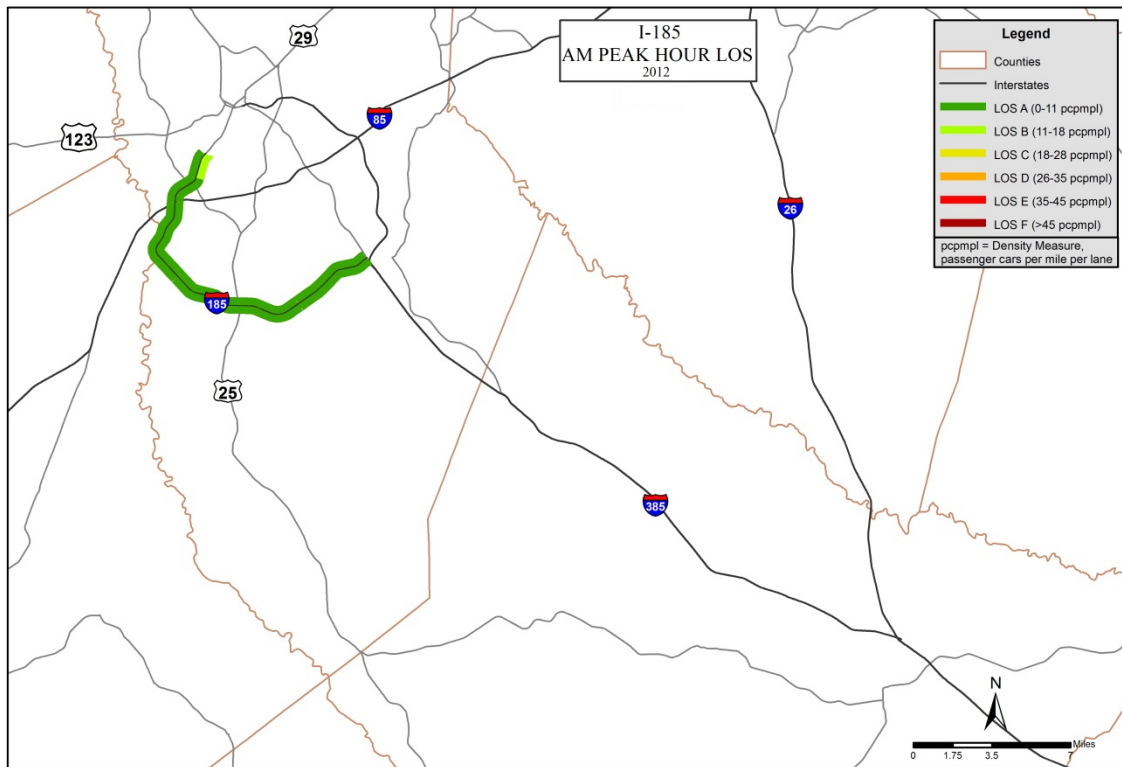
I-185

I-185 is a spur route of I-85 that connects I-85 west of the City of Greenville with I-385 southeast of the Greenville urban area. The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-185 are illustrated in **Figure 4-8**.

The results of the congestion analyses for I-185 indicate that it is currently operating at LOS A or LOS B conditions along its entire length in both directions.

There are no corridors along I-185 that are among the most congested corridors in the State.

Figure 4-8: I-185 AM and PM Peak Hour LOS



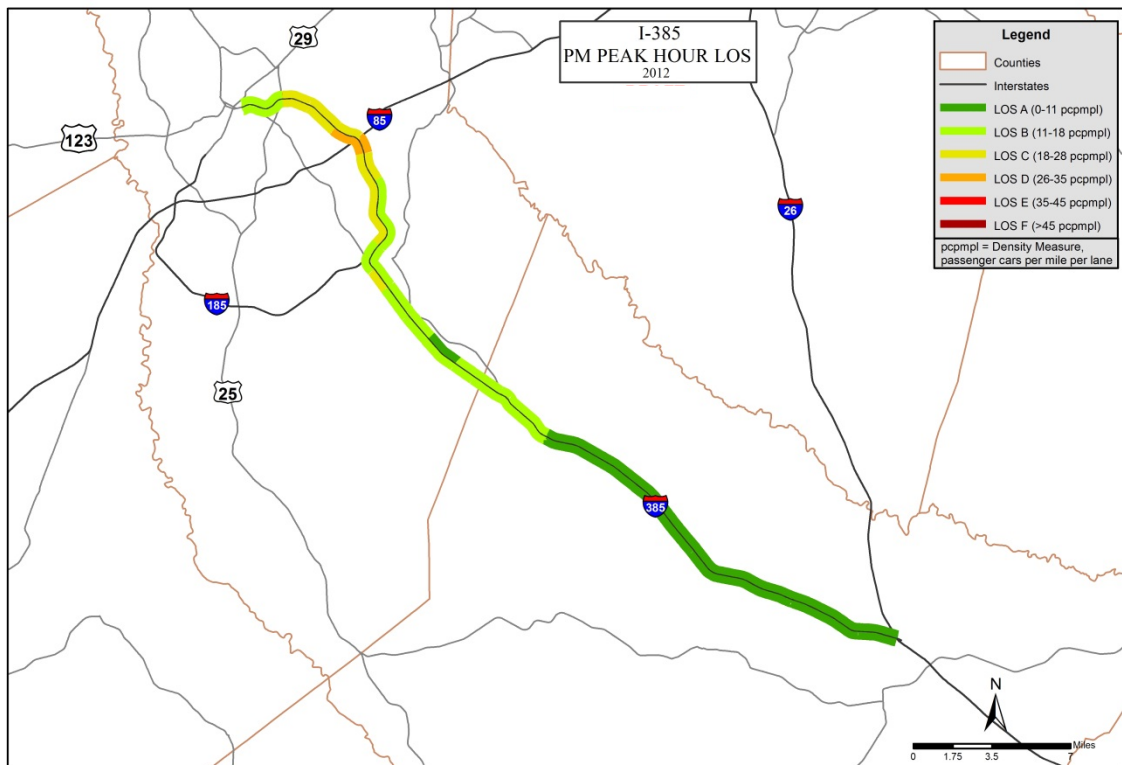
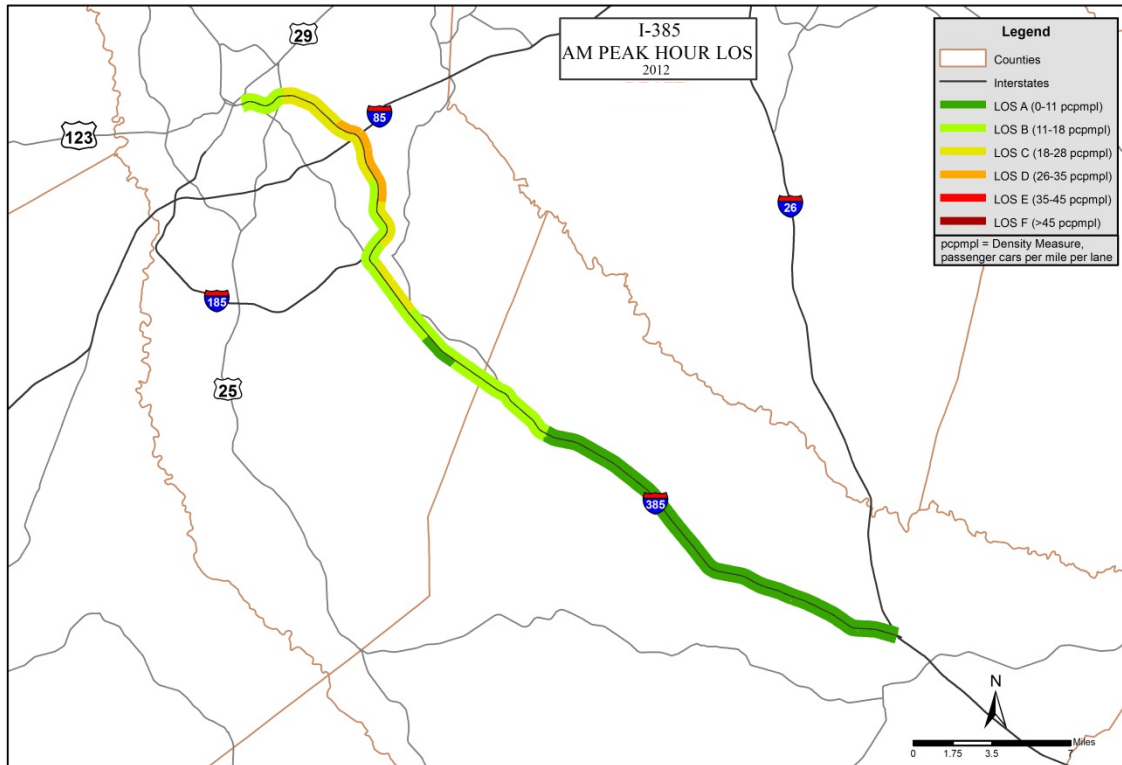
I-385

The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-385 are illustrated in **Figure 4-9**.

Along I-385 northbound, the primary congestion points occur during the AM peak hour from Bridges Road to Roper Mountain Road, where I-385 operates at LOS D conditions. During the PM peak hour, I-385 southbound operates at LOS D conditions from Roper Mountain Road to Woodruff Road. The primary bottleneck along I-385 is the interchange with I-85.

The 18-mile long I-385 corridor extending from Fairview Street (Exit 24) to the east of the downtown area of Greenville where I-385 terminates is among the most congested corridors in the State.

Figure 4-9: I-385 AM and PM Peak Hour LOS



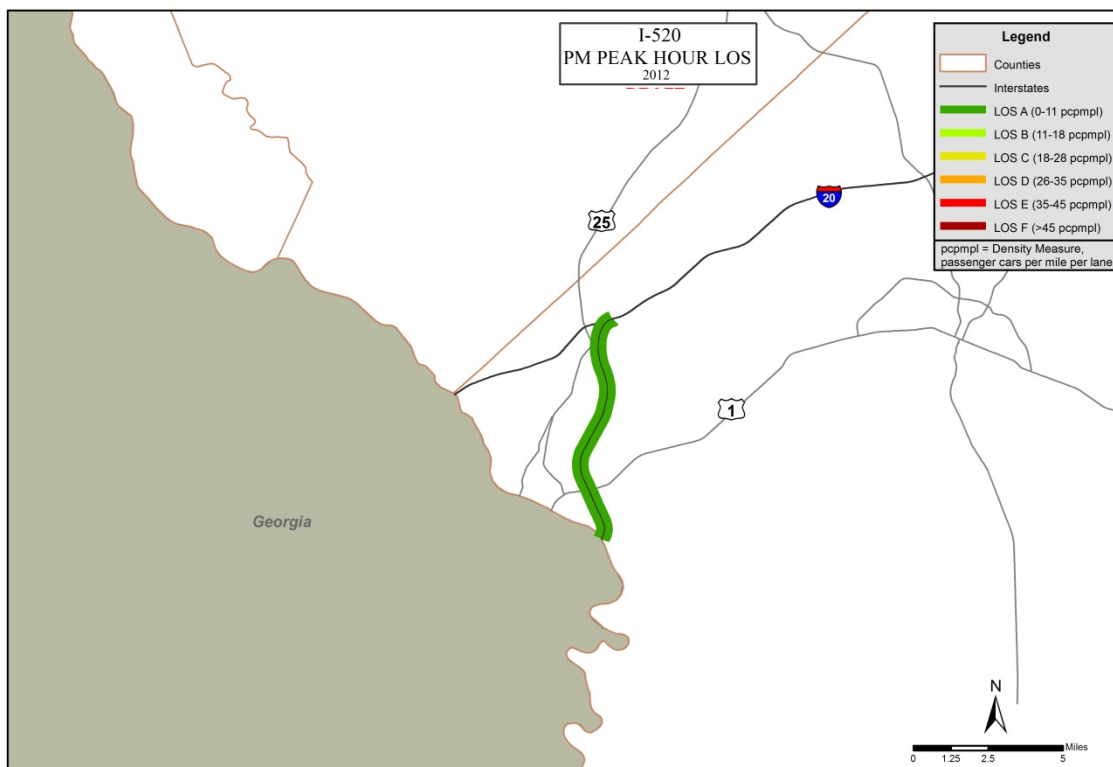
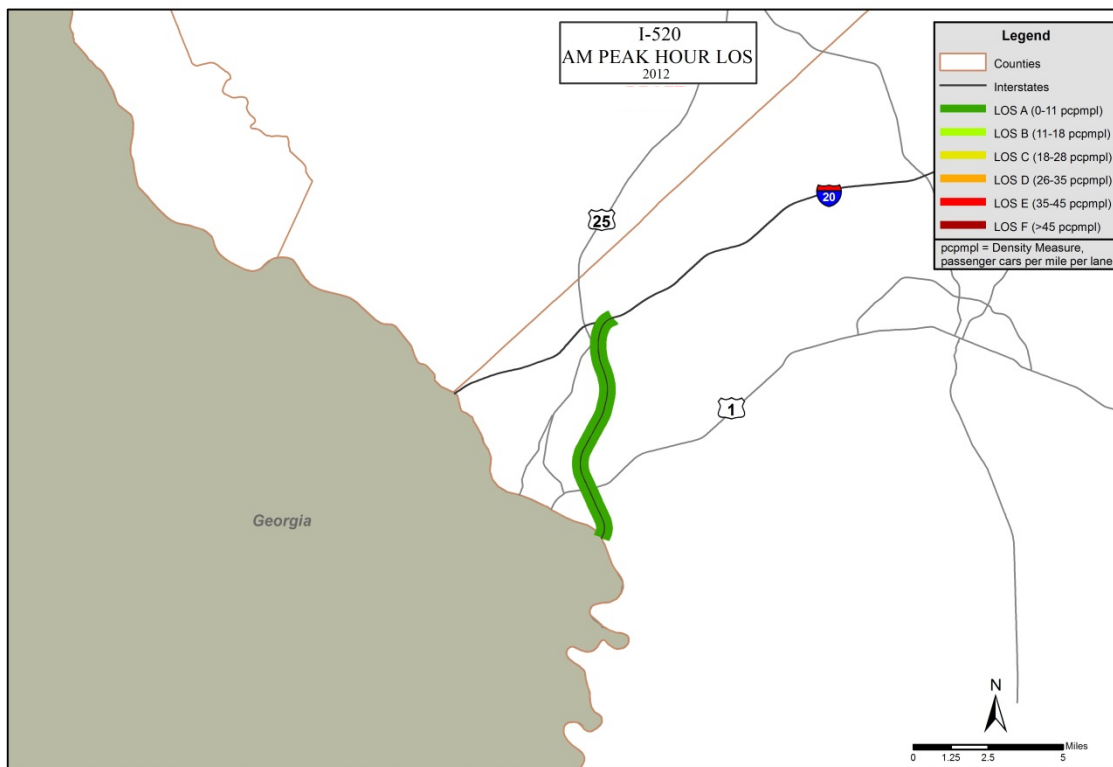
I-520

I-520 in South Carolina is the eastern portion of the Interstate beltway around the City of Augusta in Georgia. The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-520 are illustrated in **Figure 4-10**.

The results of the congestion analyses for I-520 indicate that it is currently operating at LOS A conditions along its entire length in both directions.

There are no corridors along I-520 that are among the most congested corridors in the State.

Figure 4-10: I-520 AM and PM Peak Hour LOS



I-526

I-526 is a circumferential interstate route around the Charleston area located in Charleston and Berkeley Counties. The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-526 are illustrated in **Figure 4-11**.

Along I-526, a 12-mile stretch between US 17/Savannah Highway (west of Charleston) and Clements Ferry Road predominantly operates at LOS D or worse conditions in both directions during various times of the day.

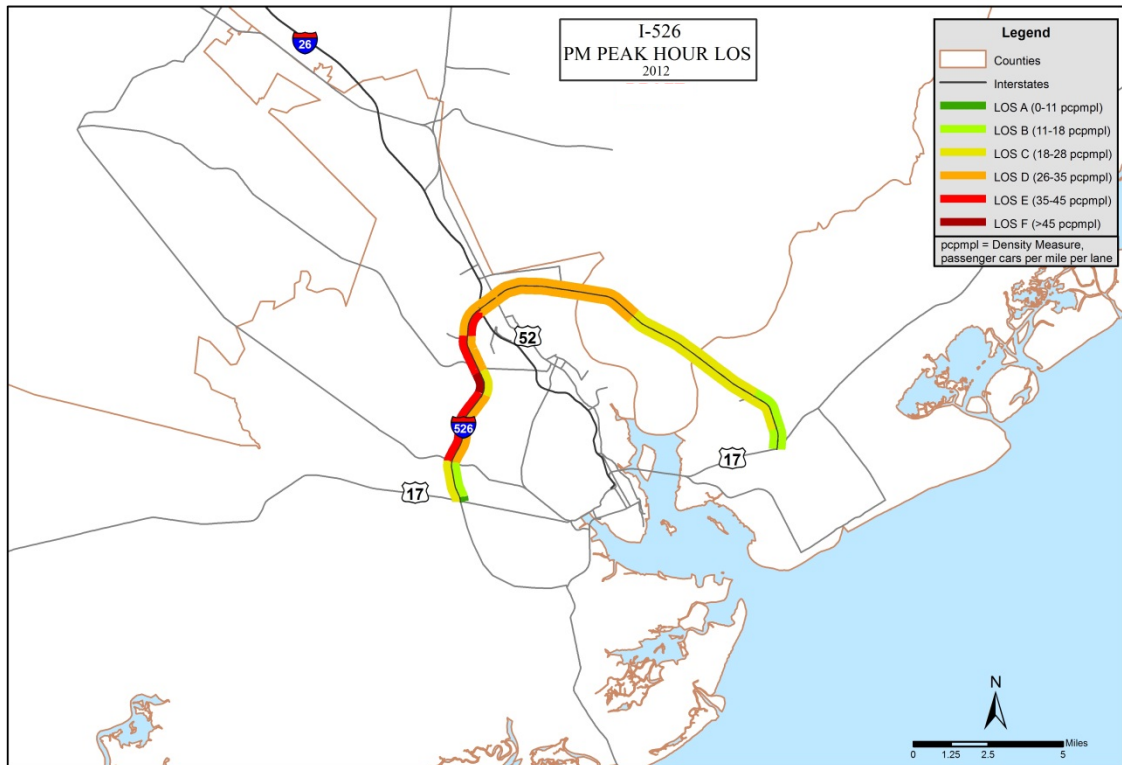
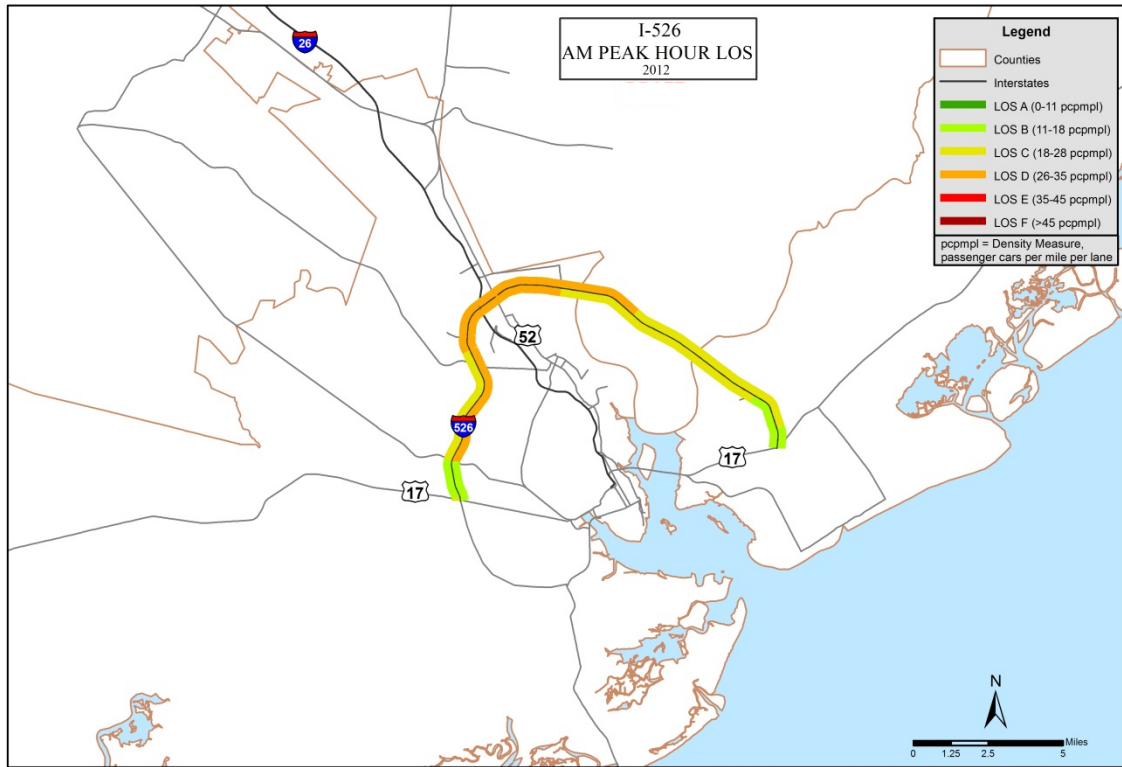
Along I-526 eastbound, the primary congestion point during the PM peak hour is between International Boulevard and I-26, which operates at LOS E conditions. The primary bottleneck along I-526 eastbound is the I-26 interchange.

Along I-526 westbound, the primary congestion points during the PM peak hour are between Clements Ferry Road and I-26, which operates at LOS D conditions; and between International Boulevard and Paul Cantrell Boulevard, which operates at LOS E or LOS F conditions. During the PM peak hour, the primary bottleneck points along I-526 westbound are the I-26 interchange, the merge from Leeds Avenue, and the Paul Cantrell Boulevard interchange.

There are also 11 segments along I-85 that are among the most congested segments in the State:

- US-17/Savannah Highway to US-52/Rivers Avenue
- US-52/Rivers Avenue to SC-703/Ben Sawyer
- I-26 to US-52/Rivers Avenue;
- International Boulevard to I-26;
- West Montague Avenue to International Boulevard;
- North Rhett Avenue to Virginia Avenue;
- US-52/Rivers Avenue to North Rhett Avenue;
- Leeds Avenue to Paramount Drive;
- Dorchester Road to West Montague Avenue;
- Paul Cantrell Boulevard to Leeds Avenue; and,
- Paramount Drive to Dorchester Road.

Figure 4-11: I-526 AM and PM Peak Hour LOS



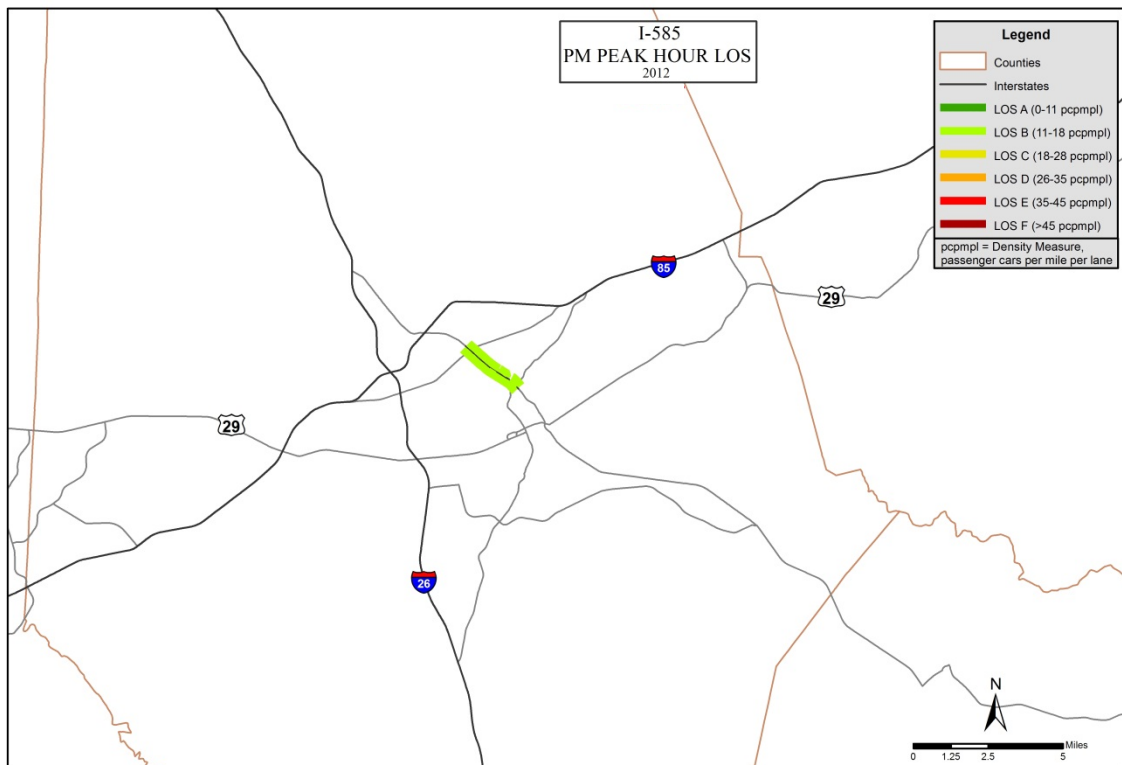
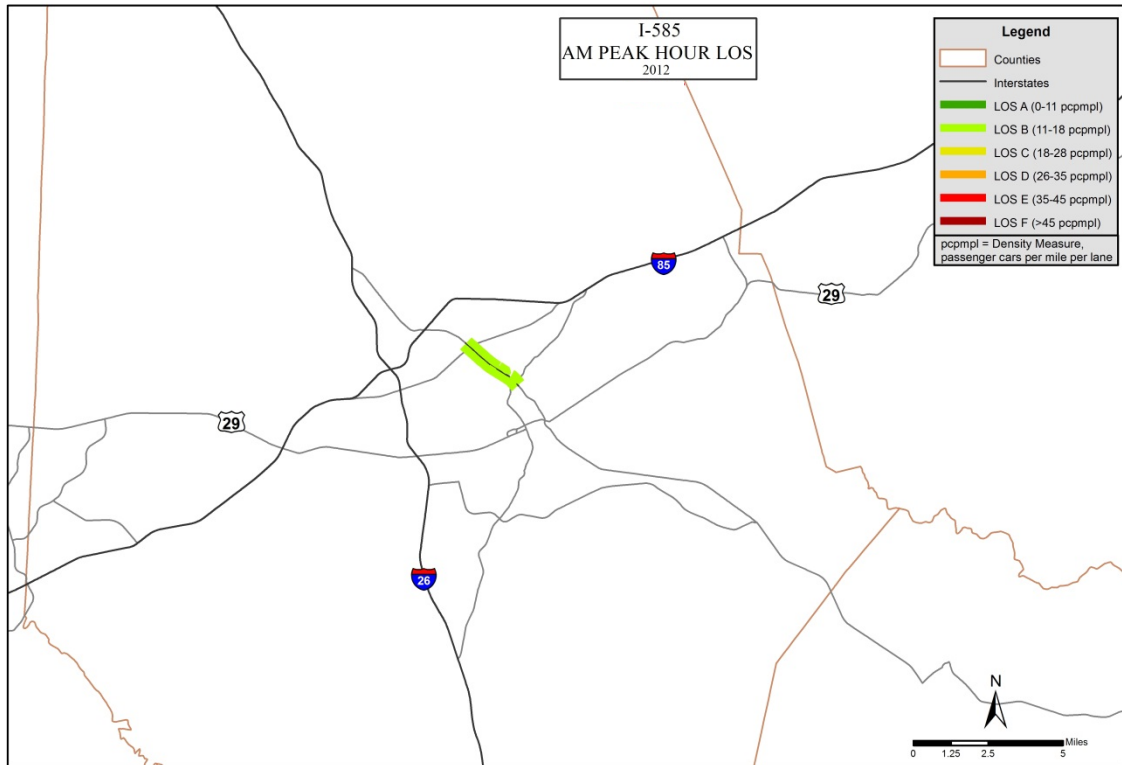
I-585

I-585 is a spur route of I-85 that extends between I-85 Business and US 221 in Spartanburg County. The LOS results of the worst AM peak hour and the worst PM peak hour for all segments of I-585 are illustrated in **Figure 4-12**.

The results of the congestion analyses for I-585 indicate that it is currently operating at LOS A or LOS B conditions along its entire length in both directions.

There are no corridors along I-585 that are among the most congested corridors in the State.

Figure 4-12: I-585 AM and PM Peak Hour LOS



4.3 Future Mainline Conditions

Future 2040 conditions for all interstate mainline segments in South Carolina were projected using the results of the Statewide Travel Demand Model.

4.3.1 Statewide Travel Demand Model Summary

The South Carolina Statewide Travel Demand Model (SC SWM) was developed for the SCDOT as part of the South Carolina Multimodal Transportation Plan. The SC SWM is a “state of the practice” model and follows the format of a traditional four-step modeling process of trip generation, trip distribution, vehicle trips, and traffic assignment. Additional model components of the SC SWM include a truck model and external model.

The model study area encompasses all of South Carolina and is built upon the existing MPO and COG models of the state. The highway networks and the traffic analysis zone systems of the existing travel demand models within South Carolina were used directly in the SC SWM. These model areas include AIKEN, APCOG, BCDCOG, CATCOG, CMCOG, FLATS, GSATS, LCOG, Metrolina, SLCOG, and USCOG. The non-MPO/COG areas were developed using HPMS data for roadway data and Census data for the zones and socio-economic data. The model provides outputs of daily traffic data on the highway network for analysis years of base year 2010 and forecast year 2040. Traffic data are available by trip purpose including auto and truck vehicle types, where auto volumes can be further defined by urban and rural and by home-based work, home-based other, non-home based, and external trips and truck volumes can be further defined by local trucks, long distance trucks, and external trucks. These outputs are useful in several components of the South Carolina Multimodal Transportation Plan including the Interstate Plan, Strategic Corridor Network Plan, and economic analysis.

4.3.2 Analysis Methodology

For the analysis of future interstate congestion, the primary measure of traffic and congestion considered was freeway density as in the existing conditions analysis. Freeway density is measured by the number of passenger cars per mile per lane and is consistent with the 2010 *HCM* methodologies for determining freeway LOS.

The Statewide Travel Demand Model outputs include Freeway Density and Volume-to-Capacity ratios for both the 2010 base-year model and 2040 Existing Plus Committed (E+C) horizon-year model. To compare the future projections of interstate congestion to the Existing Conditions analysis previously described, the percent increase in density was determined between the 2040 E+C model and the 2010 based model. This percent increase was then applied to the existing conditions Density Index values for the respective Interstate Segments and Interstate Corridors to develop future density conditions in the interstate system.

4.3.3 Interstate Density/LOS Summary

Based upon the Statewide Travel Demand Model, the LOS results for the worst AM peak hour and the worst PM peak hour for the 2040 interstate system is illustrated in **Figure 4-13**. As illustrated by maps of the 2040 Interstate conditions, gradual rates of growth in traffic volumes can be observed across the interstate system. Decreases in levels of services are as expected in metropolitan areas across the state, with particularly high growth in volume and congestion in the Charlotte Metropolitan area and suburban Rock Hill, South Carolina. At the southern border of South Carolina at the Georgia state line, a decrease in level of services is expected as the Lowcountry region anticipates growth in both residential and industrial activities in concert with continued growth in freight activity at the Ports of Savannah and Charleston. This, in turn, with no programmed increases in capacity of I-95 in South Carolina results in this decrease in level of service.

I-20

Based upon the future conditions, there is one segment along I-20 that is projected to be among the most congested segments in the State:

- GA State Line to SC 230 (Exit 1).

I-26

Based upon the future conditions, there are six segments along I-26 that are projected to be among the most congested segments in the State:

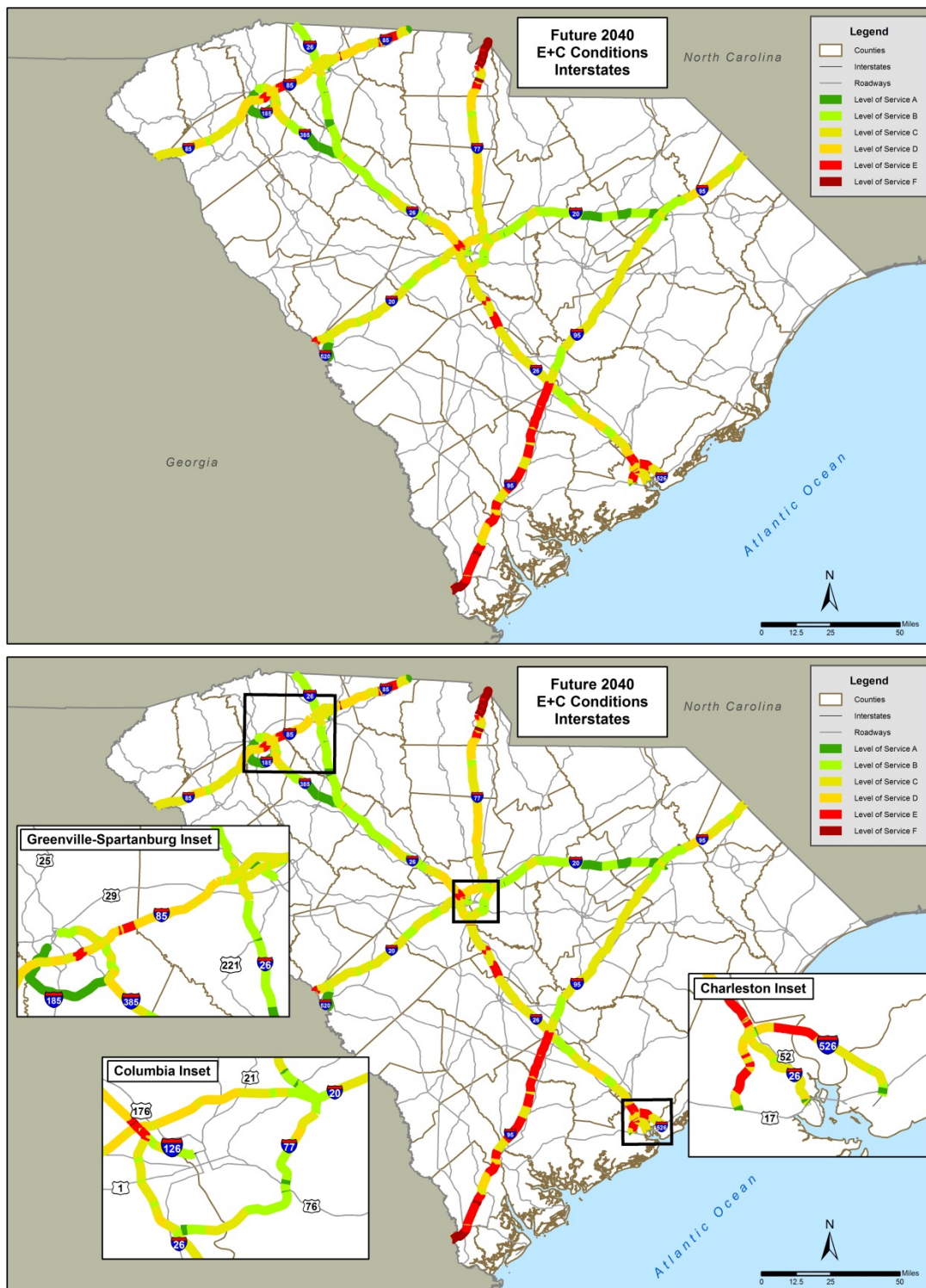
- Saint Andrews Road (Exit 106) to I-20 (Exit 107);
- Piney Grove Road (Exit 104) to Saint Andes Road (Exit 106);
- Bush River Road (Exit 108) to I-126/US-76;
- I-20 (Exit 107) to Bush River Road (Exit 108);
- Harbison Boulevard (Exit 103) to Piney Grove Road (Exit 104); and
- I-77 (Exit 116) to US-21/US-176 (Exit 119).

I-77

Based upon the future conditions, there are six segments along I-77 that are projected to be among the most congested segments in the State:

- SC-98/Gold Hill Rd (Exit 88) to US-21/Carowinds Blvd (Exit 90);
- Porter Rd (Exit 75) to US-21/SC-5 (Exit 77);
- SC-161 (Exit 82) to Sutton Rd (Exit 83);
- SC-160 (Exit 85) to SC-98/Gold Hill Rd (Exit 88);
- Sutton Rd (Exit 83) to SC-160 (Exit 85); and
- SC-901 (Exit 73) to Porter Rd (Exit 75).

Figure 4-13: Future Conditions AM and PM Peak Hour LOS



I-85

Based upon the future conditions, there are three segments along I-85 that are projected to be among the most congested segments in the State:

- Gossett Rd (Exit 80) to SC-110 (Exit 83);
- Pelham Road (Exit 54) to SC-14 (Exit 56); and
- SC-153 (Exit 50) to US-29 (Exit 42).

I-95

Based upon the future conditions, there is one segment along I-95 that is projected to be among the most congested segments in the State:

- GA State Line to US-17/General William Hardee Blvd

I-126

Based upon the future conditions, there are no corridors along I-126 that are projected to be the most congested corridors in the State.

I-185

Based upon the future conditions, there are no corridors along I-185 that are projected to be the most congested corridors in the State.

I-385

Based upon the future conditions, there are no corridors along I-385 that are projected to be the most congested corridors in the State.

I-520

Based upon the future conditions, there are no corridors along I-520 that are projected to be the most congested corridors in the State.

I-526

There are five corridors along I-526 that are projected to be among the most congested corridors in the State:

- US-17/Savannah Highway to US-52/Rivers Avenue
- US-52/Rivers Avenue to SC-703/Ben Sawyer
- North Rhett Avenue to Virginia Avenue;
- Virginia Avenue to Don Holt Bridge; and
- Don Holt Bridge to Clements Ferry Road.

I-585

Based upon the future conditions, there are no corridors along I-585 that are projected to be the most congested corridors in the State.

4.4 Mainline Congestion Analyses Summary

4.4.1 Current Interstate Planning Process

The South Carolina Department of Transportation strives to provide safe, reliable surface transportation systems and infrastructure and effective support for a healthy South Carolina economy through smart stewardship of all available resources. As part of this vision, SCDOT has implemented a proven process for the management of congestion for the State's Interstate system and Strategic Corridor Network.

This process is currently broken into the following six parts: 1) Freeway Management, 2) Congestion Comparison, 3) Corridor Management Plans, 4) Incorporation into the STIP and TIP, 5) Strategy Implementation, and 6) Monitor System & Strategy Effectiveness. These parts have been previously discussed and are summarized herein.

Freeway Monitoring

SCDOT uses Freeway Density as its performance measure to evaluate the South Carolina Interstate system needs, which is derived on a segment-by-segment basis to identify and quantify existing points of recurring congestion and bottlenecks.

A Density Index performance measure was developed to compare relative congestion across the Interstate system. The Density Index is defined as the summation of the Interstate densities in both directions during the four study peak hours.

The Density Index metric is combined with crash data and utilized to compare the respective levels of congestion for all segments of the Interstate system. In addition, an Average Density Index across segments in larger Interstate corridors is calculated to compare the respective levels of congestion for the Interstate corridors.

These congestion metrics are then compared to the other criteria of Act 114, including public safety, truck traffic, pavement condition, financial viability, environmental impacts, and economic development impacts, to develop ultimate improvement priorities.

Corridor Management Plans

Based upon the results of SCDOT's Congestion Management Process, detailed Interstate corridor management plans are conducted for those interstates that are currently congested or projected to be congested in the future, typically in urban areas. The corridor management plans identify alternatives to resolve current congestion issues and address future needs. Improvement alternatives in the following four improvement categories are considered: 1) Travel Demand Management, 2) Modal, 3) Traffic Operations, and 4) Capacity Improvements.

Incorporation into the STIP and TIP & Strategy Implementation

When funding of Interstate improvement projects becomes available through the SCDOT Statewide Transportation Improvement Program (STIP), the funds are allocated to prioritized projects. If the

projects have had Corridor Management Plans completed, the improvement programs in the plans are utilized.

Monitor System and Strategy Effectiveness

To monitor Interstate performance, SCDOT has developed spiral graphs from the probe speed data that illustrate the Average Annual Hourly Speeds for each Interstate. They are utilized to identify congestion bottlenecks and compare severity of peaks on a yearly basis. They can also be broken down on a daily, weekly, or monthly basis to evaluate before and after impacts of improvements; which is vital to illustrate the benefits of large-scale, high-cost projects to the policy makers, stakeholders, and transportation system users.

4.4.2 Mainline Summary

The Density Index summary and overall congestion for the individual interstate mainline segments and the interstate corridors for existing and future conditions are provided in **Appendix C**. As previously noted, the Density Index metric for segments is defined as the summation of the individual interstate mainline segment Densities for each of the four study hours for both directions. For corridors, the Average Density Index across all segments was then calculated to compare the respective levels of congestion for the interstate corridors.

Table 4-2 and **Table 4-3** summarizes the most congested interstate corridors in the State based upon Existing Conditions and Future Conditions, respectively. **Table 4-4** and **Table 4-5** summarizes the most congested individual interstate segments in the State based upon Existing Conditions and Future Conditions, respectively.

Table 4-2: Most Congested Interstate Corridors (Existing Conditions)

Interstate	Corridor Between		Length (miles)	Location	Existing Corridor Density Index
I-526	US-17/Savannah Hwy	US-52/Rivers Ave	8	Charleston	189.6
I-85	US-29/Exit 34	I-26/Exit 70	36	Greenville	180.6
I-26	Columbia Ave/Exit 91	US-21/US-176/Exit 119	28	Columbia	168.9
I-526	US-52/Rivers Ave	SC-703/Ben Sawyer	12	Charleston	151.8
I-20	SC-204/Exit 51	White Pond Rd/Exit 87	36	Columbia	151.5
I-85	I-26/Exit 70	SC-110/Exit 83	13	Spartanburg	142.9
I-85	SC-110/Exit 83	US-29/Exit 106	23	North of Spartanburg	137.3
I-26	Jedburg Rd/Exit 194	US 17/Exit 221	27	Charleston	132.3
I-77	I-26/Exit 1	SC-34/Exit 34	33	Columbia	130.2
I-385	Fairview St/Exit 24	End of Freeway	18	Greenville	124.0

Table 4-3: Top 10 Most Congested Interstate Corridors (Future Conditions)

Interstate	Corridor Between		Length (miles)	Location	Projected Corridor Density Index
I-77	SC-901/Exit 73	US-21/Carowinds Blvd/Exit 90	23	Rock Hill	297.7
I-26	Columbia Ave/Exit 91	US-21/US-176/Exit 119	28	Columbia	238.8
I-526	US-17/Savannah Hwy	US-52/Rivers Ave	8	Charleston	238.6
I-85	US-29/Exit 34	I-26/Exit 70	36	Greenville	236.5
I-20	GA State Line	SC-144/Exit 11	34	Aiken	209.6
I-85	GA State Line	US-29/Exit 34	34	Greenville	196.9
I-20	SC-204/Exit 51	White Pond Rd/Exit 87	36	Columbia	196.2
I-77	SC-34/Exit 34	SC-901/Exit 73	39	Rock Hill	195.1
I-85	I-26/Exit 70	SC-110/Exit 83	13	Spartanburg	182.8
I-77	I-26/Exit 1	SC-34/Exit 34	34	Columbia	181.0

Table 4-4: Most Congested Individual Interstate Segments (Existing Conditions)

Interstate	Segment Between		Existing Segment Density Index
I-85	I-385/Woodruff Rd/Exit 51	Pelham Rd/Exit 54	265.2
I-26	Saint Andrews Rd/Exit 106	I-20/Exit 107	239.1
I-26	Piney Grove Rd/Exit 104	Saint Andrews Rd/Exit 106	232.1
I-85	Pelham Rd/Exit 54	SC-14/Exit 56	224.8
I-85	Mauldin Rd/Exit 46	US-276/Exit 48	222.8
I-526	I-26	US-52/Rivers Ave	220.6
I-526	International Blvd	I-26	219.3
I-526	W. Montague Ave	International Blvd	217.9
I-526	N Rhett Ave	Virginia Ave	214.0
I-26	Bush River Rd/Exit 108	I-126/US-76	214.0
I-20	Alpine Rd/Exit 76B	Clemson Rd/Exit 80	214.0
I-526	US-52/Rivers Ave	N Rhett Ave	211.7
I-26	Harbison Blvd/Exit 103	Piney Grove Rd/Exit 104	208.1
I-526	Leeds Ave	Paramount Dr	207.0
I-85	SC-153/Exit 40	US-29/Exit 42 (Greenville)	206.7
I-26	I-20/Exit 107	Bush River Rd/Exit 108	206.2
I-85	US-276/Exit 48	I-385/Woodruff Rd/Exit 51	205.8
I-526	Dorchester Rd	W Montague Ave	204.4
I-526	Paul Cantrell Blvd	Leeds Ave	202.6
I-526	Paramount Dr	Dorchester Rd	201.8

Table 4-5: Most Congested Individual Interstate Segments (Future Conditions)

Interstate	Segment Between		Projected Segment Density Index
I-77	SC-98/Gold Hill Rd/Exit 88	US-21/Carowinds Blvd/Exit 90	400.0
I-77	SC-161/Exit 82	Sutton Rd/Exit 83	350.8
I-77	SC-160/Exit 85	SC-98/Gold Hill Rd/Exit 88	327.4
I-26	Saint Andrews Rd/Exit 106	I-20/Exit 107	323.7
I-77	Sutton Rd/Exit 83	SC-160/Exit 85	323.1
I-77	Porter Rd/Exit 75	US-21/SC-5/Exit 77	312.9
I-26	Piney Grove Rd/Exit 104	Saint Andrews Rd/Exit 106	309.9
I-85	Pelham Rd/Exit 54	SC-14/Exit 56	307.7
I-77	SC-901/Exit 73	Porter Rd/Exit 75	300.7
I-85	SC-153/Exit 40	US-29/Exit 42 (Greenville)	299.8
I-20	GA State Line	SC-230/Exit 1	296.4
I-526	N Rhett Ave	Virginia Ave	294.3
I-26	I-77/Exit 116	US-21/US-176/Exit 119	287.1
I-26	Harbison Blvd/Exit 103	Piney Grove Rd/Exit 104	286.8
I-26	Bush River Rd/Exit 108	I-126/US-76	284.0
I-85	I-385/SC-146/Woodruff Rd/Exit 51	Pelham Rd/Exit 54	280.9
I-26	SC-60/Lake Murray Blvd/Exit 102	Harbison Blvd/Exit 103	272.9
I-26	I-20/Exit 107	Bush River Rd/Exit 108	268.6
I-85	US-29/Exit 34	SC-86/Exit 35	267.3
I-77	US-21/Exit 24	Blythewood Rd/Exit 27	264.9

4.5 Interchange Needs

The consideration of interchange needs are addressed in two ways. First, the performance of an interchange is largely related to the performance of the interstate mainline. As a result, interchanges are inherently considered in the interstate mainline evaluation process as outlined in the plan. Interstate segments that reflect poor performance in terms of congestion are candidates for more detailed corridor management plans, which provide additional analysis and recommendations for project improvements.

Secondly, the Interactive Interchange Management System (IIMS) is an additional tool that provides a comparative analysis of interchange performance. The 271 interstate interchanges are evaluated using a combination of the IIMS, which considers traffic, roadway and bridge characteristics, geometric design, capacity analysis, safety, and benefit-cost analysis, as well as other applicable Act 114 criteria.



5 ANALYSIS SUMMARY

Existing Density and LOS conditions for the South Carolina interstate system were updated utilizing probe speed data and 2010 *Highway Capacity Manual* methodologies. The following sections summarize the areas of recurring congestion, planning-level cost projections for potential improvements, and a high-level environmental review of the potential improvements.

The use of SCDOT's probe data in updating the Interstate Plan and the recently developed statewide Travel Demand Model (TDM) provide SCDOT with new capabilities to monitor interstate conditions and prioritize future investments. A prioritization process to evaluate mainline interstate capacity needs is being developed to prioritize interstate corridors based on a number of criteria consistent with Act 114, including congestion, safety, truck traffic, pavement condition, environmental impacts, economic development impacts, and financial viability. These monitoring and prioritization capabilities will provide valuable tools to guide future investments in South Carolina's interstate highways.

5.1 Congestion Summary

5.1.1 Existing Bottlenecks/Recurring Congestion

Based upon the results of the Density and LOS calculations for each of the 11 interstates, a summary of the existing points of recurring congestion and bottlenecks for each interstate is provided herein. The results show that 31% of the interstate network is operating at LOS C or worse considering existing densities.

- I-20: The I-77 and Clemson Road interchanges are the respective bottleneck points along I-20 during the AM peak hour and PM peak hour. It should be noted that this segment is currently under construction for widening from four to six lanes. In addition, during the PM peak hour, the bottleneck points along I-20 include the three interchanges with Broad River Road, I-26, and US 378.
- I-26: In the Columbia area, the I-20 interchange is the primary bottleneck point during the AM peak hour and the I-20 and St. Andrews Road interchanges are the primary bottleneck points during the PM peak hour. In the Charleston area, the US 52 Connector/Ashley Phosphate Road interchange and the merge to I-526 are the primary bottleneck points during the AM peak hour and the I-526 and Ashley Phosphate Road interchanges are the primary bottleneck points during the PM peak hour.
- I-77: The primary bottleneck point along I-77 southbound is approaching the Forest Drive interchange in the Columbia area every Thursday in the AM peak hour, due to weekly graduation ceremonies at Fort Jackson.

- I-85: The Woodruff Road/I-385 and Pelham Road interchanges are the primary bottlenecks for both directions of I-85 during both the AM and PM peak hours. Improvements to the I-85 and Woodruff Road/I-385 interchange are expected to begin construction in 2014 as part of a Design-Build project.
- I-126: The I-26 interchange is the primary bottleneck along I-126 westbound during the PM peak hour.
- I-385: The primary bottleneck along I-385 is the interchange with I-85.
- I-526: During the PM peak hour, the primary bottleneck along I-526 eastbound is the I-26 interchange and the primary bottleneck points along I-526 westbound are the I-26 interchange, the merge from Leeds Avenue, and the Paul Cantrell Boulevard interchange.

No points of recurring congestion or bottlenecks were identified along I-95, I-185, I-520, or I-585. It should be noted that the congestion analyses considered the typical weekday morning and afternoon peak hours only, and not weekend or peak seasonal conditions along coastal interstates such as I-26 and I-95.

5.1.2 Future Bottlenecks/Recurring Congestion

Future Density and LOS calculations were developed for 2040 conditions for each of the 11 interstates based upon the statewide travel demand modeling. The model estimated future traffic volumes based on projections for socioeconomic data, such as population and employment, and future land use patterns, including the special trip generation characteristics of the state's commercial airports, the coastal ports in Charleston and Georgetown and the Inland Port in Greer. In the future 2040 horizon year, the results show that 62% of the interstate network is projected to operate at LOS C or worse.

Decreases in levels of services are expected in metropolitan areas across the state, with particularly high growth in volume and congestion in the Charlotte Metropolitan area and suburban Rock Hill, South Carolina. At the southern border of South Carolina at the Georgia state line, a decrease in level of services is expected as the Lowcountry region anticipates growth in both residential and industrial activities in concert with continued growth in freight activity at the Ports of Savannah and Charleston. This growth, combined with no programed increases in capacity for I-95 in South Carolina, results in the projected decrease in level of service.

5.1.3 Next Steps

It is recommended that Interstate Corridor Studies be conducted for the interstate corridors that have been identified as being one of the most congested and do not have detailed traffic operations studies currently underway or previously conducted. As previously noted several studies are currently underway or have been completed by SCDOT for areas of congestion along the interstate system, including the I-26/I-20/I-126 Plan of Action Study, the I-85 Corridor Analysis, the I-526 Corridor Analysis, and the I-85 Corridor Analysis (Spartanburg & Cherokee Counties).

These studies will provide a detailed assessment of existing and future traffic congestion with the use of the *VISSIM* microsimulation tool and *Synchro* LOS evaluation tool, and identify specific strategies in

the four improvement categories to address the specific congestion issues for each corridor. The four improvement categories include Travel Demand Management – strategies to shift travel demand away from the peak hours; Modal Strategies – strategies to shift travel demand to transit or rail; Traffic Operations Strategies – lower impact improvements to address specific congestion and safety issues; and Capacity Improvements – high impact improvements that add capacity. As part of these studies, more detailed environmental impact reviews, right-of-way impact evaluations, and cost projections will be able to be developed for the improvement mitigation projects.

5.2 Project Costs – Order of Magnitude

Based upon the results of the Density and LOS analyses for the interstate mainline corridors, planning-level cost estimates were developed for potential improvements to mitigate the most congested interstate corridors and interstate interchanges (IIMS).

5.2.1 Interstate Segments

Planning-level cost estimates were developed for 10 current congested interstate corridors in the State. These cost estimates were based upon several sources, including the results of the Interstate Feasibility Studies that are currently underway or complete and SCDOT planning estimates. For the purposes of this planning-level estimate, if specific improvements are currently unknown for a congested interstate corridor, widening of the interstate corridor by one lane in each direction was assumed at a planning-level cost of \$15 million per two-way mile, which does not include interchange improvements. It is recommended that a detailed Interstate Traffic Operations & Feasibility Study be conducted for corridors where specific improvements have not yet been identified.

Table 5-1 summarizes the planning-level estimates for the 10 most congested interstate corridors in the State.

Table 5-1: Planning-Level Cost Estimate for the Most Congested Interstate Corridors

Interstate	Corridor Between		Length (mi)	Location	Planning-Level Cost (In Millions)	Sources
I-526	US-17/ Savannah Hwy	SC-703/Ben Sawyer	20	Charleston	\$533.9*	1, 3
I-85	US-29/Exit 34	I-26/Exit 70	36	Greenville	\$404.3	2, 4
I-26	Columbia Ave/Exit 91	US-21/US-176/Exit 119	28	Columbia	\$1,200.0	3, 4
I-20	SC-204/Exit 51	White Pond Rd/Exit 87	36	Columbia	\$540.0	3, 4
I-85	I-26/Exit 70	SC-110/Exit 83	13	Spartanburg	\$195.0	3, 4
I-85	SC-110/Exit 83	US-29/Exit 106	23	North of Spartanburg	\$345.0	3, 4
I-26	Jedburg Road	US 17	27	Charleston	\$405.0	4
I-77	I-26/Exit 1	SC-34/Exit 34	33	Columbia	\$495.0	3, 4
I-385	Fairview Street/ Exit 24	End of Freeway	18	Greenville	\$270.0	4

*The planning-level improvement costs for the I-526 corridor include the reconstruction of the I-526 & I-26 interchange.

(1) I-526 Corridor Analysis

(2) I-85 Corridor Analysis

(3) SCDOT Planning

(4) Planning-Level \$15 Million Cost per Mile Estimate

5.3 Environmental Screening

An environmental screening assessment was conducted to establish the potential baseline of environmental impacts was completed for each Interstate segment of each Interstate route. The environmental screening is detailed in **Appendix D**.

The results of the environmental screening indicates that I-85 has the highest percentage of segments ranked as having Low impacts and I-520 has the highest percentage of segments ranked as having High impacts. In addition, I-77 has the most Interstate miles ranked as having a High impact with approximately 8.3 miles in the Columbia area, which has also been identified as a major congested Interstate corridor.



**APPENDIX A:
CONGESTION ANALYSES DATA & PERFORMANCE METRIC
CALCULATION DETERMINATION**

Probe Speed Data

The Speed (S) portion of the Density calculation for the interstate mainline segments was derived utilizing SCDOT’s historical probe speed database for all interstates in South Carolina. Probe speed information is collected along all interstate segments in South Carolina every few seconds from millions of anonymous GPS-enabled vehicles and mobile devices, as well as traditional road sensors, which provides SCDOT with accurate real-time and historical traffic speed information. As noted in the *HCM*, this direct measurement of speeds along the interstate mainline segments is the preferable way to determine the Speed variable for density analysis.

The Speed variable for each interstate mainline segment was derived from the probe speed information averaged over all Tuesdays, Wednesdays, and Thursdays in 2012 for each of the four study hours. The Free-Flow Speed (FFS) for each interstate mainline segment was derived from the probe speed information averaged over all Tuesdays, Wednesdays, and Thursdays in 2012 for the other 20 non-study hours.

It should be noted that the analysis period for the Interstate Plan congestion evaluation was the four study peak hours, based upon the probe speed data being reported in hours, and not 15-minute intervals.

In addition to the Speed data, the interstate mainline segment length, in miles, is provided in the probe speed database.

Flow Rate Calculation Data

The Flow Rate (v_p) portion of the Density calculation for the interstate mainline segments was derived utilizing SCDOT traffic information. As defined by the *HCM*, Flow Rate is calculated by dividing the Hourly Volume (V) by the multiplication of the Peak Hour Factor (PHF), Number of Lanes (N), Heavy-Vehicle Adjustment Factor (f_{HV}), and Population Factor (f_p), as shown herein.

$$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$$

- Hourly Volume (V) for each interstate mainline segment was calculated by multiplying its 2011 AADT by segment-specific K- and D-factors for each of the four study hours. At the time the analysis work began the latest year for which AADT data were available was 2011. The K- and D- factors for each of the four study hours were developed based upon a representative sample of the available SCDOT Automatic Traffic Recorder (ATR) hourly data for each interstate by urban and rural sections. The peak direction for urban interstate mainline segments was also determined.
- Peak Hour Factor (PHF) was assumed to be 0.90 for all interstate mainline segments.
- Number of Lanes (N) was based upon observations of existing conditions.
- Heavy-Vehicle Adjustment Factor (f_{HV}) was derived based upon the *HCM* equation, which considers the segment truck percentage (P_T) and Passenger Car Equivalents (E_T) defined by

the *HCM* and shown herein. The truck percentages (P_T) were based upon 2011 truck percentage data at ATR locations along the interstate system from SCDOT Road Data Services and the Passenger Car Equivalents (E_T) were based upon *HCM* tables and observed terrain conditions for the State. It should be noted that Recreational Vehicle (RV) data was not available; therefore RVs were not considered in the Heavy-Vehicle Adjustment Factor calculation.

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1)}$$

- Population Factor (f_p) was assumed to be 1.0 for all interstate mainline segments.

Density Index Calculation

Based upon the determination of the existing freeway Density conditions for both directions of all interstate mainline segments for the four study hours, a Density Index metric was then derived to compare the respective levels of congestion for the individual interstate mainline segments. The Density Index metric is defined as the summation of the individual interstate mainline segment Densities for each of the four study hours for both directions.

In addition, the interstate mainline segments were combined into interstate corridors, based upon continuous segments having similar densities. The Average Density Index across all segments was then calculated to compare the respective levels of congestion for the interstate corridors.



APPENDIX B: DENSITY/LOS CALCULATIONS FOR THE INTERSTATE MAINLINE SEGMENTS AND CORRIDORS

**INRIX CONGESTION ANALYSIS
I-20 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	<i>K-Factor</i>		4.03%	7.51%	6.89%	7.89%
	<i>D-Factor</i>		0.59	0.67	0.54	0.57
Rural	<i>K-Factor</i>		4.44%	5.45%	7.03%	7.46%
	<i>D-Factor</i>		0.53	0.51	0.50	0.52

<i>PHF</i>	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0086: I-20 Between US 378 & Bush River Rd
Urban	0108: I-20 Between S-340 & I-95
Rural	0115: I-20 Between S-144 & SC 19 @ S-105
Rural	0053: I-20 Between S-329 & S-31

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
20%	0.00	57.62	GA State Line to US 1 @ Lexington
12%	57.62	75.72	US 1 @ Lexington to I-77
20%	75.72	141.51	I-77 to I-95

Terrain Data

Terrain	(E_T)	Description
<i>Level</i>	1.5	Exit 116 to End
<i>Rolling</i>	2.5	GA State Line to Exit 116

Analysis Description

Parameter	Data Source	Definition
<i>Segment Length</i>	INRIX	Measured distance between data collection points
<i>N</i>	Observed	Predominant number of lanes in a segment
<i>AADT</i>	SCDOT	2011 AADT
<i>Speed (Free-Flow)</i>	INRIX	Average speed during off-peak hours
<i>Speed (Hourly)</i>	INRIX	Measured speed during respective peak hour
<i>Peak Time</i>	Observed	Period of highest D-Factor in respective direction
<i>K-Factor</i>	Calculated - Count Stations	Percent of traffic during peak hour
<i>D-Factor</i>	Calculated - Count Stations	Directional distribution during peak hour
<i>Hourly Volumes (V)</i>	Calculated	$V = AADT \times K \times D$
<i>Heavy Vehicle Factor</i>	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
<i>Flow Rate</i>	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed $f_p = 1.0$</i>
<i>Density</i>	Calculated - HCM	$D = \frac{v_p}{S}$
<i>LOS</i>	Calculated - HCM	Level of Service based on HCM 2010 criteria
<i>Urban</i>	Observed	Urban areas defined by 2010 Census
<i>Rural</i>	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS									
I-20									
Segment #	Segment Between		Density Index			I-20 Segment Rank	Corridor Name	Corridor Density Index	
			I-20 EB	I-20 WB	I-20 Two-Way			Average Index	Rank by Average Index
1	GA State Line	& SC-230/Exit 1	67.4	73.5	141.0	12	I-20 A	110.6	2
2	SC-230/Exit 1	& US-25/SC-121/Exit 5	50.6	54.8	105.4	18			
3	US-25/SC-121/Exit 5	& SC-144/Exit 11	39.8	45.6	85.4	23			
4	SC-144/Exit 11	& SC-19/Exit 18	36.6	36.0	72.6	26	I-20 B	74.4	3
5	SC-19/Exit 18	& US-1/Exit 22	34.7	35.2	69.9	29			
6	US-1/Exit 22	& Road 49/Exit 29	36.0	35.5	71.5	28			
7	Road 49/Exit 29	& SC-39/Exit 33	36.8	36.3	73.1	25			
8	SC-39/Exit 33	& US-178/Exit 39	36.3	35.9	72.2	27			
9	US-178/Exit 39	& SC-34/Exit 44	38.0	37.6	75.5	24			
10	SC-34/Exit 44	& SC-204/Exit 51	42.7	43.3	86.0	22			
11	SC-204/Exit 51	& SC-6/Exit 55	63.2	56.1	119.3	17	I-20 C	151.5	1
12	SC-6/Exit 55	& US-1/Exit 58	89.3	75.7	164.9	5			
13	US-1/Exit 58	& US-378/Exit 61	82.1	74.8	156.9	7			
14	US-378/Exit 61	& Bush River Rd/Exit 63	69.8	67.2	137.0	13			
15	Bush River Rd/Exit 63	& I-26/US-76/Exit 64	74.0	62.6	136.6	14			
16	I-26/US-76/Exit 64	& US-176/Broad River Rd/Exit 65	82.1	73.5	155.6	8			
17	US-176/Broad River Rd/Exit 65	& SC-215/Monticello Rd/Exit 68	92.5	85.0	177.5	2			
18	SC-215/Monticello Rd/Exit 68	& US-321/Fairfield Rd/Exit 70	88.6	78.5	167.0	4			
19	US-321/Fairfield Rd/Exit 70	& US-21/Main St/Exit 71	83.8	77.1	160.9	6			
20	US-21/Main St/Exit 71	& SC-555/Farrow Rd/Exit 72	73.6	80.9	154.5	10			
21	SC-555/Farrow Rd/Exit 72	& SC-277/Exit 73	67.6	79.9	147.5	11			
22	SC-277/Exit 73	& US-1/Two Notch Rd/Exit 74	60.1	70.8	130.9	15			
23	US-1/Two Notch Rd/Exit 74	& I-77/Exit 76A	49.7	54.8	104.5	19			
24	I-77/Exit 76A	& Alpine Rd/Exit 76B	84.8	88.6	173.4	3			
25	Alpine Rd/Exit 76B	& Clemson Rd/Exit 80	101.3	112.6	214.0	1			
26	Clemson Rd/Exit 80	& Spears Creek Church Road/Exit 82	70.1	85.0	155.2	9			
27	Spears Creek Church Road/Exit 82	& White Pond Rd/Exit 87	55.2	65.1	120.3	16			
28	White Pond Rd/Exit 87	& US-601/Exit 92	51.4	51.4	102.8	20	I-20 D	66.7	4
29	US-601/Exit 92	& US-521/Exit 98	43.8	43.8	87.7	21			
30	US-521/Exit 98	& Humphries Rd/Exit 101	34.8	34.8	69.6	30			
31	Humphries Rd/Exit 101	& Jamestown Rd/Exit 108	33.6	33.5	67.1	31			
32	Jamestown Rd/Exit 108	& US-15/Exit 116	32.1	32.2	64.3	32			
33	US-15/Exit 116	& SC-341/Exit 120	26.2	26.3	52.5	35			
34	SC-341/Exit 120	& SC-22/Exit 123	26.2	26.3	52.5	36			
35	SC-22/Exit 123	& US-401/Exit 131	25.7	25.8	51.5	37			
36	US-401/Exit 131	& SC-340/Exit 137	27.8	27.9	55.8	34			
37	SC-340/Exit 137	& I-95/Exit 141	33.7	29.8	63.5	33			

INRIX CONGESTION ANALYSIS I-20 SUMMARY											
I-20 Segment #	Segment Between		I-20 Eastbound LOS				I-20 Westbound LOS				I-20 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	GA State Line	& SC-230/Exit 1	A	B	C	C	B	D	B	C	I-20 A
2	SC-230/Exit 1	& US-25/SC-121/Exit 5	A	A	B	C	A	C	B	B	
3	US-25/SC-121/Exit 5	& SC-144/Exit 11	A	A	B	B	A	B	A	B	
4	SC-144/Exit 11	& SC-19/Exit 18	A	A	A	B	A	A	A	B	I-20 B
5	SC-19/Exit 18	& US-1/Exit 22	A	A	A	A	A	A	A	A	
6	US-1/Exit 22	& Road 49/Exit 29	A	A	A	B	A	A	A	A	
7	Road 49/Exit 29	& SC-39/Exit 33	A	A	A	B	A	A	A	B	
8	SC-39/Exit 33	& US-178/Exit 39	A	A	A	B	A	A	A	B	
9	US-178/Exit 39	& SC-34/Exit 44	A	A	A	B	A	A	A	B	
10	SC-34/Exit 44	& SC-204/Exit 51	A	A	B	B	A	A	B	B	I-20 C
11	SC-204/Exit 51	& SC-6/Exit 55	A	C	B	B	A	B	B	C	
12	SC-6/Exit 55	& US-1/Exit 58	B	D	C	C	A	B	C	D	
13	US-1/Exit 58	& US-378/Exit 61	B	D	B	C	A	B	C	D	
14	US-378/Exit 61	& Bush River Rd/Exit 63	B	C	B	B	A	B	C	D	
15	Bush River Rd/Exit 63	& I-26/US-76/Exit 64	B	D	B	C	A	B	C	C	
16	I-26/US-76/Exit 64	& US-176/Broad River Rd/Exit 65	B	D	C	C	A	B	C	D	
17	US-176/Broad River Rd/Exit 65	& SC-215/Monticello Rd/Exit 68	B	D	C	C	A	B	C	D	
18	SC-215/Monticello Rd/Exit 68	& US-321/Fairfield Rd/Exit 70	B	D	C	C	A	B	C	D	
19	US-321/Fairfield Rd/Exit 70	& US-21/Main St/Exit 71	B	D	C	C	A	B	C	D	
20	US-21/Main St/Exit 71	& SC-555/Farrow Rd/Exit 72	A	B	C	D	B	D	C	C	
21	SC-555/Farrow Rd/Exit 72	& SC-277/Exit 73	A	B	C	C	B	D	B	C	
22	SC-277/Exit 73	& US-1/Two Notch Rd/Exit 74	A	B	C	C	B	C	B	B	
23	US-1/Two Notch Rd/Exit 74	& I-77/Exit 76A	A	A	B	C	A	C	B	B	
24	I-77/Exit 76A	& Alpine Rd/Exit 76B	A	B	C	D	B	D	C	C	
25	Alpine Rd/Exit 76B	& Clemson Rd/Exit 80	B	C	D	E	C	E	C	D	
26	Clemson Rd/Exit 80	& Spears Creek Church Road/Exit 82	A	B	C	C	B	D	B	C	
27	Spears Creek Church Road/Exit 82	& White Pond Rd/Exit 87	A	B	B	C	B	C	B	B	
28	White Pond Rd/Exit 87	& US-601/Exit 92	A	B	B	B	A	B	B	B	I-20 D
29	US-601/Exit 92	& US-521/Exit 98	A	A	B	B	A	A	B	B	
30	US-521/Exit 98	& Humphries Rd/Exit 101	A	A	A	A	A	A	A	A	
31	Humphries Rd/Exit 101	& Jamestown Rd/Exit 108	A	A	A	A	A	A	A	A	
32	Jamestown Rd/Exit 108	& US-15/Exit 116	A	A	A	A	A	A	A	A	
33	US-15/Exit 116	& SC-341/Exit 120	A	A	A	A	A	A	A	A	
34	SC-341/Exit 120	& SC-22/Exit 123	A	A	A	A	A	A	A	A	
35	SC-22/Exit 123	& US-401/Exit 131	A	A	A	A	A	A	A	A	
36	US-401/Exit 131	& SC-340/Exit 137	A	A	A	A	A	A	A	A	
37	SC-340/Exit 137	& I-95/Exit 141	A	B	A	A	A	A	A	A	

**INRIX CONGESTION ANALYSIS
I-26 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		4.66%	7.45%	7.32%	7.99%
	D-Factor		0.64	0.58	0.57	0.58
Rural	K-Factor		3.30%	4.42%	7.71%	7.51%
	D-Factor		0.53	0.52	0.54	0.52

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0071: I-26 Between US 78 & US 52 Connector
Urban	0125: I-26 Between I-126 & US 378
Urban	0123: I-26 Between S-85 & US 29
Rural	0020: I-26 @ SC 92 NW of S-210
Rural	0096: I-26 Between S-34 & S-21

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
20%	0.00	17.83	NC State Line to I-85
15%	17.83	20.96	I-85 to US 29
20%	20.96	96.55	US 29 to US 176 (N Columbia Interchange)
15%	96.55	115.69	US 176 (N Columbia Interchange) to I-77
20%	115.69	199.04	I-77 to US 17A
15%	199.04	204.95	US 17A to US 78
10%	204.95	208.09	US 78 to US 52 Connector
7%	208.09	212.60	US 52 Connector to I-526
5%	212.60	220.95	I-526 to End (US 17)

Terrain Data

Terrain	(E _T)	Description
Level	1.5	Exit 97 to Exit 125, Exit 136 to End
Rolling	2.5	NC State Line to Exit 97, Exit 125 to Exit 136

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <small>RV data not considered.</small>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <small>Assumed $f_p = 1.0$</small>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-26 SUMMARY										
I-26 Segment #	Segment Between		Segment Density Index			I-26 Segment Rank	Corridor Name	Corridor Density Index		
			I-26 EB	I-26 WB	I-26 Two-Way			Average Index	Rank by Average Index	
1	NC State Line	&	SC-14/Exit 1	33.4	32.9	66.3	65	I-26 A	70.5	6
2	SC-14/Exit 1	&	SC-11/Exit 5	33.3	32.6	66.0	66			
3	SC-11/Exit 5	&	SC-292/Exit 10	34.7	35.2	69.8	63			
4	SC-292/Exit 10	&	US-176/Exit 15	39.9	40.0	79.9	57	I-26 B	118.1	3
5	US-176/Exit 15	&	John Dodd Rd/Exit 16	52.3	51.2	103.5	40			
6	John Dodd Rd/Exit 16	&	New Cut Rd/Exit 17	59.8	56.8	116.6	35			
7	New Cut Rd/Exit 17	&	I-85/Exit 18	60.1	56.5	116.7	34			
8	I-85/Exit 18	&	I-85 Bus/Exit 19	61.2	60.1	121.3	33			
9	I-85 Bus/Exit 19	&	US-29/Exit 21	80.0	79.3	159.2	10			
10	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	64.4	66.5	131.0	25			
11	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	38.7	39.8	78.5	62	I-26 C	75.5	5
12	US-221/Exit 28	&	Frontage Rd 35/Exit 35	29.3	29.5	58.9	69			
13	Frontage Rd 35/Exit 35	&	SC-146/Exit 38	27.9	27.9	55.8	70			
14	SC-146/Exit 38	&	SC-92/Exit 41	27.0	27.3	54.3	71			
15	SC-92/Exit 41	&	SC-49/Exit 44	25.4	25.8	51.2	72			
16	SC-49/Exit 44	&	I-385	24.6	24.7	49.3	73			
17	I-385	&	SC-56/Exit 52	48.2	47.1	95.3	45			
18	SC-56/Exit 52	&	SC-72/Exit 54	41.8	43.2	85.0	54			
19	SC-72/Exit 54	&	SC-66/Exit 60	39.6	39.4	79.0	61			
20	SC-66/Exit 60	&	Road 32/Exit 66	39.4	39.7	79.1	60			
21	Road 32/Exit 66	&	SC-121/Exit 72	39.5	39.7	79.2	59			
22	SC-121/Exit 72	&	SC-34/Exit 74	41.1	40.7	81.7	56			
23	SC-34/Exit 74	&	SC-219/Exit 76	41.1	42.8	83.8	55			
24	SC-219/Exit 76	&	SC-773/Exit 82	46.0	45.0	91.0	51			
25	SC-773/Exit 82	&	SC-202/Exit 85	47.1	47.1	94.1	48			
26	SC-202/Exit 85	&	Columbia Ave/Exit 91	46.8	47.8	94.6	47			
27	Columbia Ave/Exit 91	&	US-176/Exit 97	57.7	58.5	116.2	36	I-26 D	168.9	1
28	US-176/Exit 97	&	US-176/US-76/Exit 101	64.4	64.5	128.9	28			
29	US-176/US-76/Exit 101	&	SC-60/Lake Murray Blvd/Exit 102	71.9	63.7	135.6	21			
30	SC-60/Lake Murray Blvd/Exit 102	&	Harbison Blvd/Exit 103	100.2	83.8	184.0	6			
31	Harbison Blvd/Exit 103	&	Piney Grove Rd/Exit 104	111.6	96.5	208.1	4			
32	Piney Grove Rd/Exit 104	&	Saint Andrews Rd/Exit 106	118.3	113.9	232.1	2			
33	Saint Andrews Rd/Exit 106	&	I-20/Exit 107	109.3	129.8	239.1	1			
34	I-20/Exit 107	&	Bush River Rd/Exit 108	90.9	115.3	206.2	5			
35	Bush River Rd/Exit 108	&	I-126/US-76	86.6	127.4	214.0	3			
36	I-126/US-76	&	US-378/Exit 110	75.7	61.2	136.9	19			
37	US-378/Exit 110	&	US-1/Exit 111	71.4	54.6	126.0	31			
38	US-1/Exit 111	&	SC-302/Exit 113	75.5	79.5	155.0	11			
39	SC-302/Exit 113	&	US-321/US-21/US-176/Exit 115	72.5	74.0	146.5	13			
40	US-321/US-21/US-176/Exit 115	&	I-77/Exit 116	53.1	77.8	130.9	26			
41	I-77/Exit 116	&	US-21/US-176/Exit 119	86.4	87.2	173.6	7			
42	US-21/US-176/Exit 119	&	Road 31/Exit 125	68.3	65.9	134.1	23			
43	Road 31/Exit 125	&	US-21/Exit 129	66.7	64.2	130.9	27			
44	US-21/Exit 129	&	Caw Caw Rd	62.4	63.2	125.6	32			
45	Caw Caw Rd	&	Burke Rd	52.0	61.9	113.9	38			
46	Burke Rd	&	US-601/Saint Matthews Rd	49.3	49.4	98.6	44			
47	US-601/Saint Matthews Rd	&	SC-33/Cameron Rd/Russell St	47.2	48.0	95.2	46			
48	SC-33/Cameron Rd/Russell St	&	Five Chop Rd	46.2	46.8	92.9	49			
49	Five Chop Rd	&	Homestead Rd	45.4	45.9	91.2	50			
50	Homestead Rd	&	Vance Rd	45.0	44.8	89.7	53			
51	Vance Rd	&	I-95	45.2	45.2	90.4	52			
52	I-95	&	US-15	30.9	31.6	62.5	67	I-26 F	67.7	7
53	US-15	&	SC-453	31.1	31.2	62.3	68			
54	SC-453	&	Ridgeville Rd	33.2	33.3	66.5	64			
55	Ridgeville Rd	&	Jedburg Rd	39.8	39.8	79.6	58	I-26 G	132.3	2
56	Jedburg Rd	&	N Main St	50.7	51.1	101.8	41			
57	N Main St	&	College Park Rd	50.9	50.7	101.5	42			
58	College Park Rd	&	US-78/University Blvd	65.4	62.8	128.2	29			
59	US-78/University Blvd	&	US-52/Rivers Ave	74.2	71.0	145.2	15			
60	US-52/Rivers Ave	&	Ashley Phosphate Rd	98.2	72.3	170.5	8			
61	Ashley Phosphate Rd	&	W Aviation Ave	80.1	81.9	162.0	9			
62	W Aviation Ave	&	Remount Rd	65.7	67.0	132.7	24			
63	Remount Rd	&	I-526	68.0	76.9	144.9	16			
64	I-526	&	Mall Dr/W Montague Ave	70.2	80.3	150.5	12			
65	Mall Dr/W Montague Ave	&	Dorchester Rd	69.8	70.5	140.3	17			
66	Dorchester Rd	&	SC-7/Cosgrove Ave	72.4	74.1	146.4	14			
67	SC-7/Cosgrove Ave	&	Meeting Street Rd	68.8	69.6	138.4	18			
68	Meeting Street Rd	&	Spruill Ave	67.2	67.2	134.5	22			
69	Spruill Ave	&	Rutledge Ave	68.8	67.5	136.3	20			
70	Rutledge Ave	&	Mount Pleasant St	64.8	62.2	127.0	30			
71	Mount Pleasant St	&	Cypress St	57.7	56.2	114.0	37			
72	Cypress St	&	Romney St	51.9	49.4	101.2	43			
73	Romney St	&	US 17	53.9	51.5	105.4	39			

INRIX CONGESTION ANALYSIS											
I-26 SUMMARY											
I-26 Segment #	Segment Between		I-26 Eastbound LOS				I-26 Westbound LOS				I-26 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	NC State Line	& SC-14/Exit 1	A	A	B	A	A	A	B	A	I-26 A
2	SC-14/Exit 1	& SC-11/Exit 5	A	A	B	A	A	A	B	A	
3	SC-11/Exit 5	& SC-292/Exit 10	A	A	B	B	A	A	B	B	
4	SC-292/Exit 10	& US-176/Exit 15	A	A	B	B	A	A	B	B	
5	US-176/Exit 15	& John Dodd Rd/Exit 16	B	B	B	B	A	B	B	B	I-26 B
6	John Dodd Rd/Exit 16	& New Cut Rd/Exit 17	B	C	B	B	A	B	B	C	
7	New Cut Rd/Exit 17	& I-85/Exit 18	B	C	B	B	A	B	B	C	
8	I-85/Exit 18	& I-85 Bus/Exit 19	B	C	B	B	A	B	C	C	
9	I-85 Bus/Exit 19	& US-29/Exit 21	B	C	C	C	A	C	C	D	
10	US-29/Exit 21	& SC-296/Reidville Rd/Exit 22	A	B	C	C	B	C	B	B	
11	SC-296/Reidville Rd/Exit 22	& US-221/Exit 28	A	A	B	B	A	B	A	A	I-26 C
12	US-221/Exit 28	& Frontage Rd 35/Exit 35	A	A	A	A	A	A	A	A	
13	Frontage Rd 35/Exit 35	& SC-146/Exit 38	A	A	A	A	A	A	A	A	
14	SC-146/Exit 38	& SC-92/Exit 41	A	A	A	A	A	A	A	A	
15	SC-92/Exit 41	& SC-49/Exit 44	A	A	A	A	A	A	A	A	
16	SC-49/Exit 44	& I-385	A	A	A	A	A	A	A	A	
17	I-385	& SC-56/Exit 52	A	A	B	B	A	A	B	B	
18	SC-56/Exit 52	& SC-72/Exit 54	A	A	B	B	A	A	B	B	
19	SC-72/Exit 54	& SC-66/Exit 60	A	A	B	B	A	A	B	B	
20	SC-66/Exit 60	& Road 32/Exit 66	A	A	B	B	A	A	B	B	
21	Road 32/Exit 66	& SC-121/Exit 72	A	A	B	B	A	A	B	B	
22	SC-121/Exit 72	& SC-34/Exit 74	A	A	B	B	A	A	B	B	
23	SC-34/Exit 74	& SC-219/Exit 76	A	A	B	B	A	A	B	B	
24	SC-219/Exit 76	& SC-773/Exit 82	A	A	B	B	A	A	B	B	
25	SC-773/Exit 82	& SC-202/Exit 85	A	A	B	B	A	A	B	B	
26	SC-202/Exit 85	& Columbia Ave/Exit 91	A	A	B	B	A	A	B	B	
27	Columbia Ave/Exit 91	& US-176/Exit 97	A	A	C	C	A	B	C	C	I-26 D
28	US-176/Exit 97	& US-176/US-76/Exit 101	B	C	B	B	A	B	C	C	
29	US-176/US-76/Exit 101	& SC-60/Lake Murray Blvd/Exit 102	B	C	B	B	A	B	C	C	
30	SC-60/Lake Murray Blvd/Exit 102	& Harbison Blvd/Exit 103	C	E	C	C	A	C	C	D	
31	Harbison Blvd/Exit 103	& Piney Grove Rd/Exit 104	C	E	C	C	B	C	D	D	
32	Piney Grove Rd/Exit 104	& Saint Andrews Rd/Exit 106	D	E	C	D	B	C	D	E	
33	Saint Andrews Rd/Exit 106	& I-20/Exit 107	C	E	C	C	B	C	D	F	
34	I-20/Exit 107	& Bush River Rd/Exit 108	C	D	C	C	A	C	D	F	
35	Bush River Rd/Exit 108	& I-126/US-76	C	D	C	C	B	C	D	F	
36	I-126/US-76	& US-378/Exit 110	A	B	C	C	B	B	B	C	
37	US-378/Exit 110	& US-1/Exit 111	A	B	C	C	B	B	B	B	
38	US-1/Exit 111	& SC-302/Exit 113	A	B	C	C	B	C	C	C	
39	SC-302/Exit 113	& US-321/US-21/US-176/Exit 115	A	B	C	C	B	C	B	C	
40	US-321/US-21/US-176/Exit 115	& I-77/Exit 116	A	B	B	C	B	C	B	C	
41	I-77/Exit 116	& US-21/US-176/Exit 119	A	C	D	D	C	D	C	C	
42	US-21/US-176/Exit 119	& Road 31/Exit 125	A	B	C	C	A	B	C	C	
43	Road 31/Exit 125	& US-21/Exit 129	A	B	C	C	A	B	C	C	
44	US-21/Exit 129	& Caw Caw Rd	A	B	C	C	A	B	C	C	
45	Caw Caw Rd	& Burke Rd	A	A	B	B	A	B	C	C	
46	Burke Rd	& US-601/Saint Matthews Rd	A	A	B	B	A	A	B	B	
47	US-601/Saint Matthews Rd	& SC-33/Cameron Rd/Russell St	A	A	B	B	A	A	B	B	
48	SC-33/Cameron Rd/Russell St	& Five Chop Rd	A	A	B	B	A	A	B	B	
49	Five Chop Rd	& Homestead Rd	A	A	B	B	A	A	B	B	
50	Homestead Rd	& Vance Rd	A	A	B	B	A	A	B	B	
51	Vance Rd	& I-95	A	A	B	B	A	A	B	B	
52	I-95	& US-15	A	A	A	A	A	A	A	A	I-26 F
53	US-15	& SC-453	A	A	A	A	A	A	A	A	
54	SC-453	& Ridgeville Rd	A	A	B	A	A	A	B	A	
55	Ridgeville Rd	& Jedburg Rd	A	A	B	B	A	A	B	B	
56	Jedburg Rd	& N Main St	A	A	B	B	A	A	B	B	
57	N Main St	& College Park Rd	A	B	B	B	A	B	B	B	
58	College Park Rd	& US-78/University Blvd	B	C	B	B	A	B	C	C	
59	US-78/University Blvd	& US-52/Rivers Ave	B	C	B	B	A	B	C	C	
60	US-52/Rivers Ave	& Ashley Phosphate Rd	C	D	C	C	A	B	C	C	
61	Ashley Phosphate Rd	& W Aviation Ave	B	D	B	C	A	B	C	D	
62	W Aviation Ave	& Remount Rd	B	C	B	B	A	B	C	C	
63	Remount Rd	& I-526	B	C	B	B	A	B	C	D	
64	I-526	& Mall Dr/W Montague Ave	B	C	B	B	A	B	C	D	
65	Mall Dr/W Montague Ave	& Dorchester Rd	B	C	B	B	A	B	C	C	
66	Dorchester Rd	& SC-7/Cosgrove Ave	B	C	B	B	A	B	C	C	
67	SC-7/Cosgrove Ave	& Meeting Street Rd	B	C	B	B	A	B	C	C	
68	Meeting Street Rd	& Spruill Ave	B	C	B	B	A	B	C	C	
69	Spruill Ave	& Rutledge Ave	B	C	B	B	A	B	C	C	
70	Rutledge Ave	& Mount Pleasant St	B	C	B	B	A	B	C	C	
71	Mount Pleasant St	& Cypress St	B	C	B	B	A	B	B	C	
72	Cypress St	& Romney St	B	B	B	B	A	B	B	B	
73	Romney St	& US 17	B	B	B	B	A	B	B	B	I-26 G

**INRIX CONGESTION ANALYSIS
I-77 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		5.10%	7.96%	6.84%	7.86%
	D-Factor		0.63	0.63	0.52	0.53
Rural	K-Factor		3.78%	5.15%	7.13%	7.30%
	D-Factor		0.57	0.61	0.53	0.53

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0092: I-77 Between I-20 & US 1
Urban	0069: I-77 Between US 21 & S-122
Rural	0043: I-77 @ SC 21 Between SC 34 & S-41

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
15%	0.00	15.87	I-26 to I-20
25%	15.87	76.87	I-20 to US 21 S of Rock Hill
15%	76.87	91.05	US 21 S of Rock Hill to NC State Line

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to NC State Line

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <small>RV data not considered.</small>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <small>Assumed $f_p = 1.0$</small>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-77										
Segment #	Segment Between			Density Index			I-77 Segment Rank	Corridor Name	Corridor Density Index	
				I-77 NB	I-77 SB	I-77 Two-Way			Average Index	Rank by Average Index
1	I-26/Exit 1	&	12th St Ext	55.1	68.3	123.4	18	I-77 A	130.2	1
2	12th St Ext	&	Alex Sanders Brg	57.8	70.5	128.2	15			
3	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	58.7	71.2	129.9	14			
4	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	55.4	66.5	121.9	19			
5	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	49.4	58.6	108.0	23			
6	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	49.0	58.2	107.1	24			
7	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	49.5	61.4	110.9	21			
8	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	59.0	71.4	130.4	13			
9	SC-12/Forest Dr/Exit 12	&	Decker Blvd/Exit 13	67.3	81.3	148.6	3			
10	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	57.2	67.9	125.1	16			
11	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	60.8	71.1	131.9	11			
12	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	72.9	90.1	162.9	1			
13	US-1/Two Notch Rd/Exit 17	&	SC-277/Exit 18	65.4	77.1	142.5	6			
14	SC-277/Exit 18	&	SC-555/Farrow Rd/Exit 19	66.8	78.6	145.4	5			
15	SC-555/Farrow Rd/Exit 19	&	Killian Rd/Exit 22	69.5	82.2	151.7	2			
16	Killian Rd/Exit 22	&	US-21/Exit 24	50.4	59.5	109.9	22			
17	US-21/Exit 24	&	Blythewood Rd/Exit 27	64.3	76.7	141.0	7			
18	Blythewood Rd/Exit 27	&	SC-34/Exit 34	56.8	67.4	124.2	17			
19	SC-34/Exit 34	&	Road 41/Exit 41	51.6	52.4	103.9	25	I-77 B	103.5	3
20	Road 41/Exit 41	&	Road 20/Exit 46	51.0	51.5	102.5	27			
21	Road 20/Exit 46	&	SC-200/Exit 48	51.0	51.8	102.8	26			
22	SC-200/Exit 48	&	SC-97/Exit 55	50.3	50.1	100.4	29			
23	SC-97/Exit 55	&	SC-56/Exit 62	49.8	49.7	99.5	31			
24	SC-56/Exit 62	&	SC-9/Exit 65	49.9	50.0	99.9	30			
25	SC-9/Exit 65	&	SC-901/Exit 73	57.5	57.6	115.1	20			
26	SC-901/Exit 73	&	Porter Rd/Exit 75	71.4	60.5	131.9	12	I-77 C	115.1	2
27	Porter Rd/Exit 75	&	US-21/SC-5/Exit 77	49.5	41.3	90.8	32			
28	US-21/SC-5/Exit 77	&	SC-122/Dave Lyle Blvd/Exit 79	44.6	37.3	81.9	33			
29	SC-122/Dave Lyle Blvd/Exit 79	&	US-21/Exit 82	55.6	46.2	101.8	28			
30	US-21/Exit 82	&	SC-161/Exit 82	43.9	36.9	80.7	34			
31	SC-161/Exit 82	&	Sutton Rd/Exit 83	74.6	63.5	138.0	8			
32	Sutton Rd/Exit 83	&	SC-160/Exit 85	72.7	59.3	132.0	9			
33	SC-160/Exit 85	&	SC-98/Gold Hill Rd/Exit 88	72.0	59.9	131.9	10			
34	SC-98/Gold Hill Rd/Exit 88	&	US-21/Carowinds Blvd/Exit 90	81.8	64.6	146.4	4			

INRIX CONGESTION ANALYSIS I-77 SUMMARY											
I-77 Segment #	Segment Between		I-77 Northbound LOS				I-77 Southbound LOS				I-77 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	I-26/Exit 1	& 12th St Ext	A	B	B	C	B	C	B	B	I-77 A
2	12th St Ext	& Alex Sanders Brg	A	B	B	C	B	C	B	B	
3	Alex Sanders Brg	& SC-48/Bluff Rd/Exit 5	A	B	B	C	B	C	B	B	
4	SC-48/Bluff Rd/Exit 5	& SC-768/Shop Rd/Exit 6	A	B	B	C	B	C	B	B	
5	SC-768/Shop Rd/Exit 6	& US-378/US-76/Exit 9	A	B	B	B	B	C	B	B	
6	US-378/US-76/Exit 9	& SC-262/Leesburg Rd/Exit 9B	A	B	B	B	B	C	B	B	
7	SC-262/Leesburg Rd/Exit 9B	& Jackson Blvd/Exit 10	A	B	B	B	B	C	B	B	
8	Jackson Blvd/Exit 10	& SC-12/Forest Dr/Exit 12	A	B	B	C	B	C	B	B	
9	SC-12/Forest Dr/Exit 12	& Decker Blvd/Exit 13	A	B	C	C	B	D	B	C	
10	Decker Blvd/Exit 13	& SC-12/Percival Rd/Exit 15	A	B	B	C	B	C	B	B	
11	SC-12/Percival Rd/Exit 15	& I-20/Exit 16	A	B	B	C	B	C	B	B	
12	I-20/Exit 16	& US-1/Two Notch Rd/Exit 17	A	B	C	C	C	D	C	C	
13	US-1/Two Notch Rd/Exit 17	& SC-277/Exit 18	A	B	C	C	B	C	B	C	
14	SC-277/Exit 18	& SC-555/Farrow Rd/Exit 19	A	B	C	C	B	C	B	C	
15	SC-555/Farrow Rd/Exit 19	& Killian Rd/Exit 22	A	B	C	C	B	D	B	C	
16	Killian Rd/Exit 22	& US-21/Exit 24	A	B	B	B	B	C	B	B	
17	US-21/Exit 24	& Blythewood Rd/Exit 27	A	B	C	C	B	C	B	C	
18	Blythewood Rd/Exit 27	& SC-34/Exit 34	A	B	B	C	B	C	B	B	
19	SC-34/Exit 34	& Road 41/Exit 41	A	B	B	B	A	B	B	B	
20	Road 41/Exit 41	& Road 20/Exit 46	A	B	B	B	A	B	B	B	
21	Road 20/Exit 46	& SC-200/Exit 48	A	B	B	B	A	B	B	B	
22	SC-200/Exit 48	& SC-97/Exit 55	A	B	B	B	A	B	B	B	
23	SC-97/Exit 55	& SC-56/Exit 62	A	B	B	B	A	B	B	B	
24	SC-56/Exit 62	& SC-9/Exit 65	A	B	B	B	A	B	B	B	
25	SC-9/Exit 65	& SC-901/Exit 73	A	B	B	B	A	B	B	B	
26	SC-901/Exit 73	& Porter Rd/Exit 75	B	C	B	B	A	B	B	C	
27	Porter Rd/Exit 75	& US-21/SC-5/Exit 77	A	B	A	B	A	A	B	B	
28	US-21/SC-5/Exit 77	& SC-122/Dave Lyle Blvd/Exit 79	A	B	A	A	A	A	A	B	
29	SC-122/Dave Lyle Blvd/Exit 79	& US-21/Exit 82	B	C	B	B	A	A	B	B	
30	US-21/Exit 82	& SC-161/Exit 82	A	B	A	A	A	A	A	B	
31	SC-161/Exit 82	& Sutton Rd/Exit 83	B	C	B	B	A	B	B	C	
32	Sutton Rd/Exit 83	& SC-160/Exit 85	B	C	B	B	A	B	B	C	
33	SC-160/Exit 85	& SC-98/Gold Hill Rd/Exit 88	B	C	B	B	A	B	B	C	
34	SC-98/Gold Hill Rd/Exit 88	& US-21/Carowinds Blvd/Exit 90	B	D	B	C	A	B	C	C	

**INRIX CONGESTION ANALYSIS
I-85 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		5.01%	7.45%	7.09%	7.78%
	D-Factor		0.65	0.60	0.54	0.54
Rural	K-Factor		3.64%	4.95%	6.82%	7.05%
	D-Factor		0.56	0.57	0.52	0.51

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0048: I-85 1.0 mi N of US 25
Urban	0101: I-85 Between US 29 & S-129
Rural	0016: I-85 in Anderson County at S-71
Rural	0132: I-85 Between S-18 & S-5

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
35%	0.00	41.88	GA State Line to I-185
28%	41.88	77.93	I-185 to US 221
30%	77.93	106.28	US 221 to NC State Line

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	GA State Line to NC State Line

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed $f_p = 1.0$</i>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-85 SUMMARY									
I-85 Segment #	Segment Between		Density Index			I-85 Segment Rank	Corridor Name	Corridor Density Index	
			I-85 NB	I-85 SB	I-85 Two-Way			Average Index	Rank by Average Index
1	GA State Line	& SC-11/Exit 1	58.5	58.0	116.6	37	I-85 A	117.5	4
2	SC-11/Exit 1	& SC-59/Exit 2	58.5	55.8	114.4	38			
3	SC-59/Exit 2	& Exit 4	56.0	56.7	112.7	40			
4	Exit 4	& SC-24/Exit 11	60.2	60.2	120.4	33			
5	SC-24/Exit 11	& SC-187/Exit 14	67.0	66.7	133.7	27			
6	SC-187/Exit 14	& US-76/SC-28/Exit 19	69.3	70.2	139.6	24			
7	US-76/SC-28/Exit 19	& US-178/Exit 21	58.3	50.8	109.1	41			
8	US-178/Exit 21	& SC-81/Exit 27	54.0	53.5	107.5	43			
9	SC-81/Exit 27	& SC-8/Exit 32	57.1	56.1	113.2	39			
10	SC-8/Exit 32	& US-29/Exit 34	53.6	54.3	107.9	42			
11	US-29/Exit 34	& SC-86/Exit 35	80.8	70.6	151.4	20	I-85 B	180.6	1
12	SC-86/Exit 35	& SC-143/Exit 39	82.2	71.6	153.7	19			
13	SC-143/Exit 39	& SC-153/Exit 40	85.0	75.7	160.7	13			
14	SC-153/Exit 40	& US-29/Exit 42 (Greenville)	109.3	97.4	206.7	4			
15	US-29/Exit 42 (Greenville)	& US-25/SC-20/White Horse Rd/Exit 44	85.9	73.6	159.5	14			
16	US-25/SC-20/White Horse Rd/Exit 44	& US-25 Bus/Augusta Rd/Exit 46	89.8	81.1	170.9	11			
17	US-25 Bus/Augusta Rd/Exit 46	& SC-291/Pleasantburg Dr	84.2	74.2	158.5	16			
18	SC-291/Pleasantburg Dr	& Mauldin Rd/Exit 46	85.8	72.7	158.5	15			
19	Mauldin Rd/Exit 46	& US-276/Exit 48	120.5	102.3	222.8	3			
20	US-276/Exit 48	& I-385/SC-146/Woodruff Rd/Exit 51	96.9	108.9	205.8	5			
21	I-385/SC-146/Woodruff Rd/Exit 51	& Pelham Rd/Exit 54	118.9	146.2	265.2	1			
22	Pelham Rd/Exit 54	& SC-14/Exit 56	95.2	129.6	224.8	2			
23	SC-14/Exit 56	& Aviation Dr/Exit 57	83.0	104.7	187.8	7			
24	Aviation Dr/Exit 57	& SC-101/Exit 60	79.1	93.2	172.3	10			
25	SC-101/Exit 60	& SC-290/Exit 63	81.1	93.6	174.7	9			
26	SC-290/Exit 63	& US-29/Exit 66	93.7	81.8	175.5	8			
27	US-29/Exit 66	& SC-129/Exit 68	91.2	79.4	170.6	12			
28	SC-129/Exit 68	& I-26/Exit 70	70.1	60.9	131.1	29			
29	I-26/Exit 70	& US-176/Exit 72	64.9	73.7	138.7	26	I-85 C	142.9	2
30	US-176/Exit 72	& SC-9/Exit 75	61.4	70.6	132.1	28			
31	SC-9/Exit 75	& I-85 Bus/Exit 77	55.0	62.7	117.7	36			
32	I-85 Bus/Exit 77	& US-221/Exit 78	69.2	80.3	149.4	21			
33	US-221/Exit 78	& Gossett Rd/Exit 80	61.2	69.5	130.8	30			
34	Gossett Rd/Exit 80	& SC-110/Exit 83	88.5	100.2	188.7	6			
35	SC-110/Exit 83	& Green River Rd/Exit 87	77.1	78.5	155.6	17	I-85 D	137.3	3
36	Green River Rd/Exit 87	& Hyatt St/Exit 90	76.8	78.2	155.0	18			
37	Hyatt St/Exit 90	& SC-11/Exit 92	71.6	71.3	142.9	23			
38	SC-11/Exit 92	& SC-150/SC-18/Road 82/Exit 95	71.0	72.6	143.6	22			
39	SC-150/SC-18/Road 82/Exit 95	& SC-18/Shelby Hwy/Exit 96	69.8	69.2	139.0	25			
40	SC-18/Shelby Hwy/Exit 96	& SC-5/Exit 99	64.2	65.3	129.5	32			
41	SC-5/Exit 99	& SC-198/Exit 102	67.2	63.4	130.6	31			
42	SC-198/Exit 102	& Exit 104	59.5	59.9	119.5	35			
43	Exit 104	& US-29/Exit 106	59.9	60.3	120.3	34			

INRIX CONGESTION ANALYSIS I-85 SUMMARY												
I-85 Segment #	Segment Between		I-85 Northbound LOS				I-85 Southbound LOS				I-85 Corridor	
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM		
1	GA State Line	&	SC-11/Exit 1	A	B	B	B	A	B	B	B	I-85 A
2	SC-11/Exit 1	&	SC-59/Exit 2	A	B	B	B	A	B	B	B	
3	SC-59/Exit 2	&	Exit 4	A	B	B	B	A	B	B	B	
4	Exit 4	&	SC-24/Exit 11	A	B	B	C	A	B	B	C	
5	SC-24/Exit 11	&	SC-187/Exit 14	B	B	C	C	B	B	C	C	
6	SC-187/Exit 14	&	US-76/SC-28/Exit 19	B	B	C	C	B	B	C	C	
7	US-76/SC-28/Exit 19	&	US-178/Exit 21	B	B	B	B	A	B	B	B	
8	US-178/Exit 21	&	SC-81/Exit 27	A	B	B	B	A	B	B	B	
9	SC-81/Exit 27	&	SC-8/Exit 32	A	B	B	B	A	B	B	B	
10	SC-8/Exit 32	&	US-29/Exit 34	A	B	B	B	A	B	B	B	
11	US-29/Exit 34	&	SC-86/Exit 35	C	C	B	C	A	B	C	C	I-85 B
12	SC-86/Exit 35	&	SC-143/Exit 39	C	C	C	C	A	B	C	C	
13	SC-143/Exit 39	&	SC-153/Exit 40	C	D	C	C	A	B	C	C	
14	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	C	D	C	D	B	C	D	D	
15	US-29/Exit 42 (Greenville)	&	US-25/SC-20/White Horse Rd/Exit 4	C	D	C	C	A	B	C	C	
16	US-25/SC-20/White Horse Rd/Exit 4	&	US-25 Bus/Augusta Rd/Exit 46	C	D	C	C	B	C	C	D	
17	US-25 Bus/Augusta Rd/Exit 46	&	SC-291/Pleasantburg Dr	C	D	C	C	A	B	C	C	
18	SC-291/Pleasantburg Dr	&	Mauldin Rd/Exit 46	C	D	C	C	A	B	C	C	
19	Mauldin Rd/Exit 46	&	US-276/Exit 48	D	E	D	D	B	C	D	D	
20	US-276/Exit 48	&	I-385/SC-146/Woodruff Rd/Exit 51	B	C	D	D	C	D	C	D	
21	I-385/SC-146/Woodruff Rd/Exit 51	&	Pelham Rd/Exit 54	B	D	D	E	D	F	D	E	
22	Pelham Rd/Exit 54	&	SC-14/Exit 56	B	C	D	D	D	E	C	E	
23	SC-14/Exit 56	&	Aviation Dr/Exit 57	B	C	C	D	C	D	C	D	
24	Aviation Dr/Exit 57	&	SC-101/Exit 60	A	C	C	D	C	D	C	C	
25	SC-101/Exit 60	&	SC-290/Exit 63	B	C	C	D	C	D	C	C	
26	SC-290/Exit 63	&	US-29/Exit 66	C	D	C	C	B	C	C	D	
27	US-29/Exit 66	&	SC-129/Exit 68	C	D	C	C	A	C	C	D	
28	SC-129/Exit 68	&	I-26/Exit 70	B	C	B	B	A	B	C	C	
29	I-26/Exit 70	&	US-176/Exit 72	A	B	C	C	B	C	B	C	I-85 C
30	US-176/Exit 72	&	SC-9/Exit 75	A	B	C	C	B	C	B	B	
31	SC-9/Exit 75	&	I-85 Bus/Exit 77	A	B	B	B	B	C	B	B	
32	I-85 Bus/Exit 77	&	US-221/Exit 78	A	B	C	C	B	C	B	C	
33	US-221/Exit 78	&	Gossett Rd/Exit 80	A	B	C	C	B	C	B	B	
34	Gossett Rd/Exit 80	&	SC-110/Exit 83	B	C	D	D	C	D	C	C	
35	SC-110/Exit 83	&	Green River Rd/Exit 87	B	C	C	C	B	C	C	C	I-85 D
36	Green River Rd/Exit 87	&	Hyatt St/Exit 90	B	C	C	C	B	C	C	C	
37	Hyatt St/Exit 90	&	SC-11/Exit 92	B	B	C	C	B	B	C	C	
38	SC-11/Exit 92	&	SC-150/SC-18/Road 82/Exit 95	B	B	C	C	B	B	C	C	
39	SC-150/SC-18/Road 82/Exit 95	&	SC-18/Shelby Hwy/Exit 96	B	B	C	C	B	B	C	C	
40	SC-18/Shelby Hwy/Exit 96	&	SC-5/Exit 99	A	B	C	C	B	B	C	C	
41	SC-5/Exit 99	&	SC-198/Exit 102	B	B	C	C	A	B	C	C	
42	SC-198/Exit 102	&	Exit 104	A	B	B	B	A	B	B	B	
43	Exit 104	&	US-29/Exit 106	A	B	B	B	A	B	B	C	

INRIX CONGESTION ANALYSIS
I-95 SUMMARY

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		3.29%	5.11%	7.07%	7.09%
	D-Factor		0.53	0.52	0.50	0.50
Rural	K-Factor		2.68%	3.81%	7.10%	6.87%
	D-Factor		0.52	0.52	0.53	0.54

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0127: I-95 Between US 52 & S-26
Rural	0089: I-95 Between S-64 & S-63
Rural	0019: I-95 at S-49 N of Manning

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
25%	0.00	157.26	GA State Line to I-20
20%	157.26	170.47	I-20 to SC 327
25%	170.47	198.76	SC 327 to NC State Line

Terrain Data

Terrain	(E _T)	Description
Level	1.5	GA State Line to NC State Line
Rolling	2.5	N/A

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed f_p = 1.0</i>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS									
I-95									
I-95 Segment #	Segment Between		Density Index			I-95 Segment Rank	Corridor Name	Corridor Density Index	
			I-95 NB	I-95 SB	I-95 Two-Way			Average Index	Rank by Average Index
1	GA State Line	& US-17/General William Hardee Blvd	46.7	46.5	93.3	2	I-95 A	79.9	1
2	US-17/General William Hardee Blvd	& US-278/Red Dam Rd	48.1	48.1	96.2	1			
3	US-278/Red Dam Rd	& SC-13/SC-S-27-13 Ext	42.5	42.1	84.6	4			
4	SC-13/SC-S-27-13 Ext	& SC-336	41.1	41.0	82.1	8			
5	SC-336	& US-17 (Ridgeland) (South)	39.7	39.7	79.3	11			
6	US-17 (Ridgeland) (South)	& SC-462	40.1	40.5	80.5	10			
7	SC-462	& US-17 (Ridgeland) (North)	42.4	42.1	84.5	5			
8	US-17 (Ridgeland) (North)	& SC-68/Yemassee Hwy	36.8	37.1	73.9	17			
9	SC-68/Yemassee Hwy	& US-21/Low Country Hwy	37.3	37.3	74.6	14			
10	US-21/Low Country Hwy	& SC-63/Sniders Hwy/Exit 53	36.9	36.8	73.7	18			
11	SC-63/Sniders Hwy/Exit 53	& SC-64/Bells Hwy/Exit 57	36.1	36.0	72.1	19			
12	SC-64/Bells Hwy/Exit 57	& McLeod Rd/Exit 62	37.0	37.0	74.0	16			
13	McLeod Rd/Exit 62	& SC-61/Augusta Hwy/Exit 68	37.0	37.0	74.0	15			
14	SC-61/Augusta Hwy/Exit 68	& US-78/W Jim Bilton Blvd/Exit 77	38.4	38.0	76.4	13			
15	US-78/W Jim Bilton Blvd/Exit 77	& US-178/Charleston Hwy/Exit 82	39.3	39.4	78.7	12			
16	US-178/Charleston Hwy/Exit 82	& I-26/Exit 86	41.0	40.2	81.1	9			
17	I-26/Exit 86	& US-176/Old Hwy/Exit 90	26.9	27.4	54.4	29	I-95 B	53.8	3
18	US-176/Old Hwy/Exit 90	& US-15/Bass Dr/Exit 93	26.4	26.2	52.6	34			
19	US-15/Bass Dr/Exit 93	& US-15/US-301/Exit 97	26.7	26.3	53.0	32			
20	US-15/US-301/Exit 97	& SC-6/Exit 98	30.9	30.9	61.8	24			
21	SC-6/Exit 98	& US-15/US-301/Exit 102	30.9	30.4	61.3	25			
22	US-15/US-301/Exit 102	& Buff Blvd/Exit 108	28.0	28.0	56.0	27			
23	Buff Blvd/Exit 108	& US-301/Exit 115	26.2	26.2	52.4	35			
24	US-301/Exit 115	& SC-261/Paxville Hwy/Exit 119	26.7	26.8	53.5	31			
25	SC-261/Paxville Hwy/Exit 119	& US-521/Exit 122	26.4	26.3	52.7	33			
26	US-521/Exit 122	& SC-527/Black River Rd/Exit 132	24.4	24.3	48.7	39			
27	SC-527/Black River Rd/Exit 132	& US-378/Myrtle Beach Hwy/Exit 135	24.3	24.2	48.5	40			
28	US-378/Myrtle Beach Hwy/Exit 135	& SC-53/Narrow Paved Rd/Exit 141	25.1	25.0	50.0	38			
29	SC-53/Narrow Paved Rd/Exit 141	& SC-341/Lynches River Rd/Exit 146	25.3	25.2	50.5	37			
30	SC-341/Lynches River Rd/Exit 146	& SC-403/Cale Yarborough Hwy/Exit 150	25.7	25.6	51.3	36			
31	SC-403/Cale Yarborough Hwy/Exit 150	& Center Rd/Exit 153	27.1	27.0	54.0	30			
32	Center Rd/Exit 153	& US-76/W Palmetto St/Exit 157	28.0	27.9	55.8	28			
33	US-76/W Palmetto St/Exit 157	& I-20/Exit 160	29.5	28.7	58.2	26			
34	I-20/Exit 160	& US-52/W Lucas St/Exit 164	44.2	43.2	87.4	3	I-95 C	75.2	2
35	US-52/W Lucas St/Exit 164	& Tv Rd/Exit 169	41.2	42.8	84.1	7			
36	Tv Rd/Exit 169	& SC-327/N Williston Rd/Exit 170	42.0	42.4	84.4	6			
37	SC-327/N Williston Rd/Exit 170	& SC-38/Exit 181	35.0	34.8	69.8	20			
38	SC-38/Exit 181	& SC-34/Exit 190	33.6	34.1	67.7	21			
39	SC-34/Exit 190	& SC-9/Radford Blvd/Exit 193	33.2	33.2	66.4	23			
40	SC-9/Radford Blvd/Exit 193	& US-301/Exit 1	33.3	33.6	66.9	22			

INRIX CONGESTION ANALYSIS I-95 SUMMARY												
I-95 Segment #	Segment Between		I-95 Northbound LOS				I-95 Southbound LOS				I-95 Corridor	
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM		
1	GA State Line	&	US-17/General William Hardee Blvd	A	A	B	B	A	A	B	B	I-95 A
2	US-17/General William Hardee Blvd	&	US-278/Red Dam Rd	A	A	B	B	A	A	B	B	
3	US-278/Red Dam Rd	&	SC-13/SC-S-27-13 Ext	A	A	B	B	A	A	B	B	
4	SC-13/SC-S-27-13 Ext	&	SC-336	A	A	B	B	A	A	B	B	
5	SC-336	&	US-17 (Ridgeland) (South)	A	A	B	B	A	A	B	B	
6	US-17 (Ridgeland) (South)	&	SC-462	A	A	B	B	A	A	B	B	
7	SC-462	&	US-17 (Ridgeland) (North)	A	A	B	B	A	A	B	B	
8	US-17 (Ridgeland) (North)	&	SC-68/Yemassee Hwy	A	A	B	B	A	A	B	B	
9	SC-68/Yemassee Hwy	&	US-21/Low Country Hwy	A	A	B	B	A	A	B	B	
10	US-21/Low Country Hwy	&	SC-63/Sniders Hwy/Exit 53	A	A	B	B	A	A	B	B	
11	SC-63/Sniders Hwy/Exit 53	&	SC-64/Bells Hwy/Exit 57	A	A	B	B	A	A	B	B	
12	SC-64/Bells Hwy/Exit 57	&	McLeod Rd/Exit 62	A	A	B	B	A	A	B	B	
13	McLeod Rd/Exit 62	&	SC-61/Augusta Hwy/Exit 68	A	A	B	B	A	A	B	B	
14	SC-61/Augusta Hwy/Exit 68	&	US-78/W Jim Bilton Blvd/Exit 77	A	A	B	B	A	A	B	B	
15	US-78/W Jim Bilton Blvd/Exit 77	&	US-178/Charleston Hwy/Exit 82	A	A	B	B	A	A	B	B	
16	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	A	A	B	B	A	A	B	B	
17	I-26/Exit 86	&	US-176/Old Hwy/Exit 90	A	A	A	A	A	A	A	A	I-95 B
18	US-176/Old Hwy/Exit 90	&	US-15/Bass Dr/Exit 93	A	A	A	A	A	A	A	A	
19	US-15/Bass Dr/Exit 93	&	US-15/US-301/Exit 97	A	A	A	A	A	A	A	A	
20	US-15/US-301/Exit 97	&	SC-6/Exit 98	A	A	A	A	A	A	A	A	
21	SC-6/Exit 98	&	US-15/US-301/Exit 102	A	A	A	A	A	A	A	A	
22	US-15/US-301/Exit 102	&	Buff Blvd/Exit 108	A	A	A	A	A	A	A	A	
23	Buff Blvd/Exit 108	&	US-301/Exit 115	A	A	A	A	A	A	A	A	
24	US-301/Exit 115	&	SC-261/Paxville Hwy/Exit 119	A	A	A	A	A	A	A	A	
25	SC-261/Paxville Hwy/Exit 119	&	US-521/Exit 122	A	A	A	A	A	A	A	A	
26	US-521/Exit 122	&	SC-527/Black River Rd/Exit 132	A	A	A	A	A	A	A	A	
27	SC-527/Black River Rd/Exit 132	&	US-378/Myrtle Beach Hwy/Exit 135	A	A	A	A	A	A	A	A	
28	US-378/Myrtle Beach Hwy/Exit 135	&	SC-53/Narrow Paved Rd/Exit 141	A	A	A	A	A	A	A	A	
29	SC-53/Narrow Paved Rd/Exit 141	&	SC-341/Lynches River Rd/Exit 146	A	A	A	A	A	A	A	A	
30	SC-341/Lynches River Rd/Exit 146	&	SC-403/Cale Yarborough Hwy/Exit 153	A	A	A	A	A	A	A	A	
31	SC-403/Cale Yarborough Hwy/Exit 153	&	Center Rd/Exit 153	A	A	A	A	A	A	A	A	
32	Center Rd/Exit 153	&	US-76/W Palmetto St/Exit 157	A	A	A	A	A	A	A	A	
33	US-76/W Palmetto St/Exit 157	&	I-20/Exit 160	A	A	A	A	A	A	A	A	
34	I-20/Exit 160	&	US-52/W Lucas St/Exit 164	A	A	B	B	A	A	B	B	I-95 C
35	US-52/W Lucas St/Exit 164	&	Tv Rd/Exit 169	A	A	B	B	A	A	B	B	
36	Tv Rd/Exit 169	&	SC-327/N Williston Rd/Exit 170	A	A	B	B	A	A	B	B	
37	SC-327/N Williston Rd/Exit 170	&	SC-38/Exit 181	A	A	B	B	A	A	B	B	
38	SC-38/Exit 181	&	SC-34/Exit 190	A	A	B	B	A	A	B	B	
39	SC-34/Exit 190	&	SC-9/Radford Blvd/Exit 193	A	A	B	B	A	A	B	B	
40	SC-9/Radford Blvd/Exit 193	&	US-301/Exit 1	A	A	B	B	A	A	B	B	

**INRIX CONGESTION ANALYSIS
I-126 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		3.21%	7.55%	6.78%	8.62%
	D-Factor		0.77	0.75	0.60	0.66
Rural	K-Factor					
	D-Factor					

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0021: I-126 Between Broad River & Greystone Blvd
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Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
5%	0.00	3.68	I-26 to Gadsden St

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <small>RV data not considered.</small>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <small>Assumed $f_p = 1.0$</small>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-126 EASTBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment AADT (2011)	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Two-Way	Free-Flow	7-8 AM	8-9 AM	4-5 PM		5-6 PM	7-8 AM	8-9 AM	4-5 PM			5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM
1	I-26	Saluda River Rd	0.936	3	61,800	65.2	65.0	63.4	66.0	65.4	AM	1,531	3,495	1,692	1,805	5.0%	Rolling	610	1,391	674	719	9.4	21.9	10.2	11.0	A	C	A	A
2	Saluda River Rd	Greystone Blvd	1.047	4	71,000	65.0	64.8	62.8	66.0	65.0	AM	1,759	4,015	1,944	2,074	5.0%	Rolling	525	1,199	580	619	8.1	19.1	8.8	9.5	A	C	A	A
3	Greystone Blvd	Huger St	1.411	4	71,200	58.7	57.6	52.7	59.6	58.9	AM	1,764	4,026	1,949	2,079	5.0%	Rolling	527	1,202	582	621	9.1	22.8	9.8	10.5	A	C	A	A

INRIX CONGESTION ANALYSIS I-126 WESTBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment AADT (2011)	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Two-Way	Free-Flow	7-8 AM	8-9 AM	4-5 PM		5-6 PM	7-8 AM	8-9 AM	4-5 PM			5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM
1	Huger St	Greystone Blvd	1.235	4	71,200	64.7	65.0	65.0	66.0	63.3	PM	524	1,348	2,880	4,059	5.0%	Rolling	156	403	860	1,212	2.4	6.2	13.0	19.2	A	A	B	C
2	Greystone Blvd	Saluda River Rd	0.972	4	71,000	64.9	65.0	65.7	65.7	54.2	PM	522	1,344	2,872	4,048	5.0%	Rolling	156	401	858	1,209	2.4	6.1	13.0	22.3	A	A	B	C
3	Saluda River Rd	I-26	1.007	3	61,800	62.6	62.4	63.3	57.9	32.8	PM	455	1,170	2,500	3,523	5.0%	Rolling	181	466	995	1,403	2.9	7.4	17.2	42.7	A	A	B	E

INRIX CONGESTION ANALYSIS I-126									
Segment #	Segment Between		Density Index			I-126 Segment Rank	Corridor Name	Corridor Density Index	
			I-126 EB	I-126 WB	I-20 Two-Way			Average Index	Rank by Average Index
1	I-26	& Saluda River Rd	52.5	70.2	122.7	1	I-126 A	101.7	1
2	Saluda River Rd	& Greystone Blvd	45.5	43.8	89.4	3			
3	Greystone Blvd	& Huger St	52.3	40.8	93.1	2			

INRIX CONGESTION ANALYSIS I-126 SUMMARY											
I-126 Segment #	Segment Between		I-126 Eastbound LOS				I-126 Westbound LOS				I-126 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	I-26	& Saluda River Rd	A	C	A	A	A	A	B	E	I-126 A
2	Saluda River Rd	& Greystone Blvd	A	C	A	A	A	A	B	C	
3	Greystone Blvd	& Huger St	A	C	A	A	A	A	B	C	

**INRIX CONGESTION ANALYSIS
I-185 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		4.46%	9.90%	6.64%	8.00%
	D-Factor		0.60	0.65	0.54	0.58
Rural	K-Factor					
	D-Factor					

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0145: I-185 Between I-85 & US 25
Urban	0080: I-185 S of Toll Plaza at S-316

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
5%	0.00	16.40	I-385/US 276 to US 29

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed $f_p = 1.0$</i>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-185 NORTHBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment Two-Way	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Free-Flow	7-8 AM	8-9 AM	4-5 PM	5-6 PM		7-8 AM	8-9 AM	4-5 PM	5-6 PM			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM
1	I-385/Neely Ferry Rd/Exit 1A	SC-417	0.787	2	6,600	58.9	56.5	56.5	58.5	58.5	AM	177	422	200	220	5.0%	Rolling	106	252	119	131	1.9	4.5	2.0	2.2	A	A	A	A
2	SC-417	I-385/Exit 1B	1.180	2	6,600	60.1	56.8	57.7	60.5	60.4	AM	177	422	200	220	5.0%	Rolling	106	252	119	131	1.9	4.4	2.0	2.2	A	A	A	A
3	I-385/Exit 1B	Fork Shoals Rd/Exit 4	3.573	2	6,600	62.2	60.8	61.0	61.8	61.2	AM	177	422	200	220	5.0%	Rolling	106	252	119	131	1.7	4.1	1.9	2.1	A	A	A	A
4	Fork Shoals Rd/Exit 4	US-25/Augusta Rd/Exit 7	2.835	2	6,100	65.7	66.7	67.0	67.0	67.0	AM	164	390	185	203	5.0%	Rolling	98	233	110	121	1.5	3.5	1.6	1.8	A	A	A	A
5	US-25/Augusta Rd/Exit 7	SC-20/Piedmont Hwy/Exit 10	3.061	2	5,900	65.3	66.5	66.2	66.7	66.2	AM	158	377	179	196	5.0%	Rolling	95	225	107	117	1.4	3.4	1.6	1.8	A	A	A	A
6	SC-20/Piedmont Hwy/Exit 10	SC-153/Exit 12	1.916	2	5,800	60.2	58.2	56.6	56.9	56.1	AM	156	371	176	193	5.0%	Rolling	93	221	105	115	1.6	3.9	1.8	2.1	A	A	A	A
7	SC-153/Exit 12	I-85/US-29	2.092	2	3,300	62.6	63.1	63.1	61.8	61.8	AM	89	211	100	110	5.0%	Rolling	53	126	60	66	0.8	2.0	1.0	1.1	A	A	A	A
8	I-85/US-29	US-25/White Horse Rd/Exit 1	0.689	2	16,700	59.3	61.0	60.0	59.0	59.0	AM	448	1,067	506	556	5.0%	Rolling	268	637	302	332	4.4	10.6	5.1	5.6	A	A	A	A
9	US-25/White Horse Rd/Exit 1	SC-20/Exit 2	0.661	2	16,700	59.4	61.5	60.5	59.5	59.2	AM	448	1,067	506	556	5.0%	Rolling	268	637	302	332	4.4	10.5	5.1	5.6	A	A	A	A
10	SC-20/Exit 2	Henrydale Ave/Mills Ave	0.905	2	15,200	54.7	54.0	51.0	52.0	53.0	AM	408	971	460	506	5.0%	Rolling	244	580	275	302	4.5	11.4	5.3	5.7	A	B	A	A

INRIX CONGESTION ANALYSIS I-185 SOUTHBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment Two-Way	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Free-Flow	7-8 AM	8-9 AM	4-5 PM	5-6 PM		7-8 AM	8-9 AM	4-5 PM	5-6 PM			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM
1	Henrydale Ave/Mills Ave	SC-20/Exit 2	1.067	2	15,200	54.8	54.1	54.2	53.4	54.2	PM	270	534	549	711	5.0%	Rolling	161	319	328	424	3.0	5.9	6.1	7.8	A	A	A	A
2	SC-20/Exit 2	US-25/White Horse Rd/Exit 1	0.616	2	16,700	58.4	59.2	60.4	59.4	59.4	PM	296	586	603	781	5.0%	Rolling	177	350	360	466	3.0	5.8	6.1	7.8	A	A	A	A
3	US-25/White Horse Rd/Exit 1	I-85/US-29	1.470	2	16,700	59.7	59.6	60.6	60.0	60.0	PM	296	586	603	781	5.0%	Rolling	177	350	360	466	3.0	5.8	6.0	7.8	A	A	A	A
4	I-85/US-29	SC-153/Exit 12	1.932	2	3,300	63.9	64.0	64.7	63.3	64.3	PM	59	116	119	154	5.0%	Rolling	35	69	71	92	0.5	1.1	1.1	1.4	A	A	A	A
5	SC-153/Exit 12	SC-20/Piedmont Hwy/Exit 10	2.033	2	5,800	58.6	56.5	56.2	57.1	58.9	PM	103	204	209	271	5.0%	Rolling	61	122	125	162	1.1	2.2	2.2	2.7	A	A	A	A
6	SC-20/Piedmont Hwy/Exit 10	US-25/Augusta Rd/Exit 7	2.988	2	5,900	65.4	67.2	65.2	66.0	67.0	PM	105	207	213	276	5.0%	Rolling	62	124	127	165	0.9	1.9	1.9	2.5	A	A	A	A
7	US-25/Augusta Rd/Exit 7	Fork Shoals Rd/Exit 4	2.937	2	6,100	65.7	68.0	67.0	66.3	67.0	PM	108	214	220	285	5.0%	Rolling	65	128	132	170	1.0	1.9	2.0	2.5	A	A	A	A
8	Fork Shoals Rd/Exit 4	I-385/Exit 1B	1.804	2	6,600	62.3	63.0	61.9	61.1	62.1	PM	117	232	238	309	5.0%	Rolling	70	138	142	184	1.1	2.2	2.3	3.0	A	A	A	A
9	I-385/Exit 1B	SC-417	1.241	2	6,600	59.9	58.1	57.1	60.8	59.9	PM	117	232	238	309	5.0%	Rolling	70	138	142	184	1.2	2.4	2.3	3.1	A	A	A	A
10	SC-417	I-385/Neely Ferry Rd/Exit 1A	0.615	2	6,600	60.2	58.0	56.0	60.0	59.0	PM	117	232	238	309	5.0%	Rolling	70	138	142	184	1.2	2.5	2.4	3.1	A	A	A	A

INRIX CONGESTION ANALYSIS I-185									
I-185 Segment #	Segment Between		Density Index			I-185 Segment Rank	Corridor Name	Corridor Density Index	
			I-185 NB	I-185 SB	I-185 Two-Way			Average Index	Rank by Average Index
1	I-385/Neely Ferry Rd/Exit 1A	& SC-417	10.6	9.2	19.8	4	I-185 A	26.2	1
2	SC-417	& I-385/Exit 1B	10.4	9.0	19.4	5			
3	I-385/Exit 1B	& Fork Shoals Rd/Exit 4	9.9	8.6	18.6	6			
4	Fork Shoals Rd/Exit 4	& US-25/Augusta Rd/Exit 7	8.4	7.4	15.8	8			
5	US-25/Augusta Rd/Exit 7	& SC-20/Piedmont Hwy/Exit 10	8.2	7.2	15.4	9			
6	SC-20/Piedmont Hwy/Exit 10	& SC-153/Exit 12	9.4	8.2	17.6	7			
7	SC-153/Exit 12	& I-85/US-29	4.9	4.2	9.0	10			
8	I-85/US-29	& US-25/White Horse Rd/Exit 1	25.8	22.5	48.3	2			
9	US-25/White Horse Rd/Exit 1	& SC-20/Exit 2	25.6	22.7	48.2	3			
10	SC-20/Exit 2	& Henrydale Ave/Mills Ave	26.9	22.8	49.7	1			

INRIX CONGESTION ANALYSIS I-185 SUMMARY											
I-185 Segment #	Segment Between		I-185 Northbound LOS				I-185 Southbound LOS				I-185 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	I-385/Neely Ferry Rd/Exit 1A	& SC-417	A	A	A	A	A	A	A	A	I-185 A
2	SC-417	& I-385/Exit 1B	A	A	A	A	A	A	A	A	
3	I-385/Exit 1B	& Fork Shoals Rd/Exit 4	A	A	A	A	A	A	A	A	
4	Fork Shoals Rd/Exit 4	& US-25/Augusta Rd/Exit 7	A	A	A	A	A	A	A	A	
5	US-25/Augusta Rd/Exit 7	& SC-20/Piedmont Hwy/Exit 10	A	A	A	A	A	A	A	A	
6	SC-20/Piedmont Hwy/Exit 10	& SC-153/Exit 12	A	A	A	A	A	A	A	A	
7	SC-153/Exit 12	& I-85/US-29	A	A	A	A	A	A	A	A	
8	I-85/US-29	& US-25/White Horse Rd/Exit 1	A	A	A	A	A	A	A	A	
9	US-25/White Horse Rd/Exit 1	& SC-20/Exit 2	A	A	A	A	A	A	A	A	
10	SC-20/Exit 2	& Henrydale Ave/Mills Ave	A	B	A	A	A	A	A	A	

**INRIX CONGESTION ANALYSIS
I-385 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		3.23%	7.86%	6.97%	7.68%
	D-Factor		0.56	0.54	0.52	0.53
Rural	K-Factor		5.06%	7.15%	7.41%	7.90%
	D-Factor		0.53	0.51	0.51	0.52

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0033: I-385 Between Greenville City Limit & S-273
Rural	0097: I-385 Between S-14 & S-14/S-414

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
20%	0.00	36.33	I-26 to I-85
5%	36.33	42.16	I-85 to End (I-385 Spur)

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed $f_p = 1.0$</i>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-385									
I-385 Segment #	Segment Between		Density Index			I-385 Segment Rank	Corridor Name	Corridor Density Index	
			I-385 NB	I-385 SB	I-385 Two-Way			Average Index	Rank by Average Index
1	I-26	& SC-308/Exit 2	26.4	26.4	52.8	24	I-385 A	73.8	2
2	SC-308/Exit 2	& SC-49/Exit 5	27.6	28.0	55.7	23			
3	SC-49/Exit 5	& US-221/Exit 9	28.5	28.6	57.1	22			
4	US-221/Exit 9	& Road 23/Exit 10	31.2	31.4	62.7	21			
5	Road 23/Exit 10	& SC-101/Exit 16	32.0	32.2	64.2	20			
6	SC-101/Exit 16	& SC-14/Exit 19	34.6	34.4	69.0	19			
7	SC-14/Exit 19	& SC-14/Exit 22	46.7	46.8	93.5	15			
8	SC-14/Exit 22	& Old Laurens Rd/Exit 22	49.5	44.1	93.5	14			
9	Old Laurens Rd/Exit 22	& SC-418/Exit 23	45.0	44.3	89.3	16			
10	SC-418/Exit 23	& Fairview St/Exit 24	50.8	49.0	99.9	13			
11	Fairview St/Exit 24	& Harrison Bridge Rd/Exit 26	38.0	37.4	75.4	18	I-385 B	124.0	1
12	Harrison Bridge Rd/Exit 26	& Fairview Rd/Exit 27	41.3	39.6	80.9	17			
13	Fairview Rd/Exit 27	& Georgia Rd/Exit 29	56.2	55.0	111.2	9			
14	Georgia Rd/Exit 29	& US-276/Exit 30	65.3	60.4	125.7	7			
15	US-276/Exit 30	& Old Stage Rd/E Standing Springs Rd/	50.0	49.9	99.9	12			
16	Old Stage Rd/E Standing Springs Rd/Ex	& SC-417/Exit 31	51.4	48.9	100.3	11			
17	SC-417/Exit 31	& Bridges Rd/Exit 33	62.3	55.9	118.2	8			
18	Bridges Rd/Exit 33	& Butler Rd/Exit 34	70.2	58.1	128.3	6			
19	Butler Rd/Exit 34	& SC-146/Woodruff Rd/Exit 35	77.8	68.4	146.2	4			
20	SC-146/Woodruff Rd/Exit 35	& I-85/Exit 36	96.5	89.0	185.5	1			
21	I-85/Exit 36	& Roper Mountain Rd/Exit 37	80.9	89.3	170.1	2			
22	Roper Mountain Rd/Exit 37	& Haywood Rd/Exit 39	76.4	74.5	150.9	3			
23	Haywood Rd/Exit 39	& SC-291/Pleasantburg Dr/Exit 40	69.0	69.3	138.3	5			
24	SC-291/Pleasantburg Dr/Exit 40	& End of Freeway	54.0	51.4	105.4	10			

INRIX CONGESTION ANALYSIS												
I-385 SUMMARY												
I-385 Segment #	Segment Between			I-385 Northbound LOS				I-385 Southbound LOS				I-385 Corridor
				7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	I-26	&	SC-308/Exit 2	A	A	A	A	A	A	A	A	I-385 A
2	SC-308/Exit 2	&	SC-49/Exit 5	A	A	A	A	A	A	A	A	
3	SC-49/Exit 5	&	US-221/Exit 9	A	A	A	A	A	A	A	A	
4	US-221/Exit 9	&	Road 23/Exit 10	A	A	A	A	A	A	A	A	
5	Road 23/Exit 10	&	SC-101/Exit 16	A	A	A	A	A	A	A	A	
6	SC-101/Exit 16	&	SC-14/Exit 19	A	A	A	A	A	A	A	A	
7	SC-14/Exit 19	&	SC-14/Exit 22	A	B	B	B	A	B	B	B	
8	SC-14/Exit 22	&	Old Laurens Rd/Exit 22	A	B	B	B	A	B	B	B	
9	Old Laurens Rd/Exit 22	&	SC-418/Exit 23	A	B	B	B	A	B	B	B	
10	SC-418/Exit 23	&	Fairview St/Exit 24	A	B	B	B	A	B	B	B	
11	Fairview St/Exit 24	&	Harrison Bridge Rd/Exit 26	A	B	A	A	A	A	A	B	I-385 B
12	Harrison Bridge Rd/Exit 26	&	Fairview Rd/Exit 27	A	B	A	B	A	B	B	B	
13	Fairview Rd/Exit 27	&	Georgia Rd/Exit 29	A	C	B	B	A	B	B	B	
14	Georgia Rd/Exit 29	&	US-276/Exit 30	A	C	B	B	A	B	B	C	
15	US-276/Exit 30	&	Stage Rd/E Standing Springs Rd/Ex	A	B	B	B	A	B	B	B	
16	Stage Rd/E Standing Springs Rd/Ex	&	SC-417/Exit 31	A	B	B	B	A	B	B	B	
17	SC-417/Exit 31	&	Bridges Rd/Exit 33	A	C	B	B	A	B	B	C	
18	Bridges Rd/Exit 33	&	Butler Rd/Exit 34	A	D	B	B	A	B	B	C	
19	Butler Rd/Exit 34	&	SC-146/Woodruff Rd/Exit 35	B	D	C	C	A	C	C	C	
20	SC-146/Woodruff Rd/Exit 35	&	I-85/Exit 36	B	D	C	D	A	C	C	D	
21	I-85/Exit 36	&	Roper Mountain Rd/Exit 37	B	D	C	C	A	C	C	D	
22	Roper Mountain Rd/Exit 37	&	Haywood Rd/Exit 39	A	C	C	C	A	C	C	C	
23	Haywood Rd/Exit 39	&	SC-291/Pleasantburg Dr/Exit 40	A	C	B	C	A	C	C	C	
24	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	A	B	B	B	A	B	B	B	

**INRIX CONGESTION ANALYSIS
I-520 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		4.57%	8.29%	7.39%	7.98%
	D-Factor		0.56	0.56	0.52	0.53
Rural	K-Factor					
	D-Factor					

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0034: I-526 Between S-475 & Ashley River*
Urban	0046: I 526 at Cooper River*
Urban	0090: I-526 Between S-97 & S-56 near Long Point Rd*
*I-520 Count Stations Not Available	

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
10%	15.62	23.61	GA State Line to I-20

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	GA State Line to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed f_p = 1.0</i>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-520 EASTBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment AADT (2011)	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Two-Way	Free-Flow	7-8 AM	8-9 AM	4-5 PM		5-6 PM	7-8 AM	8-9 AM	4-5 PM			5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM
1	GA State Line	US-1/US-278/Jefferson Davis Hwy	1.769	2	15,100	57.9	58.3	58.3	58.1	58.1	PM	306	553	579	639	10.0%	Rolling	196	353	370	408	3.4	6.1	6.4	7.0	A	A	A	A

INRIX CONGESTION ANALYSIS I-520 WESTBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment AADT (2011)	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Two-Way	Free-Flow	7-8 AM	8-9 AM	4-5 PM		5-6 PM	7-8 AM	8-9 AM	4-5 PM			5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM
1	US-1/US-278/Jefferson Davis Hwy	GA-SC State Border	1.841	2	15,100	62.7	63.0	62.7	63.1	63.1	AM	384	698	538	565	10.0%	Rolling	245	446	344	361	3.9	7.1	5.4	5.7	A	A	A	A

INRIX CONGESTION ANALYSIS I-520									
I-520 Segment #	Segment Between	Density Index			I-520 Segment Rank	Corridor Name	Corridor Density Index		
		I-520 EB	I-520 WB	I-520 Two-Way			Average Index	Rank by Average Index	
1	GA State Line & US-1/US-278/Jefferson Davis Hwy	22.8	22.2	45.0	1	I-520 A	45.0	1	

INRIX CONGESTION ANALYSIS I-520 SUMMARY										
I-520 Segment #	Segment Between	I-520 Eastbound LOS				I-520 Westbound LOS				I-520 Corridor
		7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	GA State Line & US-1/US-278/Jefferson Davis Hwy	A	A	A	A	A	A	A	A	I-520 A

**INRIX CONGESTION ANALYSIS
I-526 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		4.57%	8.29%	7.39%	7.98%
	D-Factor		0.56	0.56	0.52	0.53
Rural	K-Factor					
	D-Factor					

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0034: I-526 Between S-475 & Ashley River
Urban	0046: I 526 at Cooper River
Urban	0090: I-526 Between S-97 & S-56 near Long Point Rd

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
15%	10.00	17.03	US 17 to I-26
25%	17.03	27.50	I-26 to S-97 (Long Point Rd)
5%	27.50	29.56	S-97 (Long Point Rd) to US 17

Terrain Data

Terrain	(E _T)	Description
Level	1.5	Begin to End
Rolling	2.5	N/A

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ <i>RV data not considered.</i>
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ <i>Assumed f_p = 1.0</i>
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-526									
Segment #	Segment Between		Density Index			I-526 Segment Rank	Corridor Name	Corridor Density Index	
			I-526 EB	I-526 WB	I-526 Two-Way			Average Index	Rank by Average Index
1	US-17/Savannah Hwy	& Sam Rittenberg Blvd	37.0	80.3	117.3	15	I-526 A	189.6	1
2	Sam Rittenberg Blvd	& Paul Cantrell Blvd	51.2	64.6	115.8	16			
3	Paul Cantrell Blvd	& Leeds Ave	100.5	102.1	202.6	8			
4	Leeds Ave	& Paramount Dr	97.5	109.5	207.0	6			
5	Paramount Dr	& Dorchester Rd	99.4	102.4	201.8	9			
6	Dorchester Rd	& W Montague Ave	101.1	103.3	204.4	7			
7	W Montague Ave	& International Blvd	109.2	108.7	217.9	3			
8	International Blvd	& I-26	112.8	106.5	219.3	2			
9	I-26	& US-52/Rivers Ave	112.2	108.4	220.6	1			
10	US-52/Rivers Ave	& N Rhett Ave	101.4	110.2	211.7	5	I-526 B	151.8	2
11	N Rhett Ave	& Virginia Ave	102.3	111.8	214.0	4			
12	Virginia Ave	& Don N Holt Brg	89.5	95.6	185.1	10			
13	Don N Holt Brg	& Clements Ferry Rd	85.8	97.4	183.2	11			
14	Clements Ferry Rd	& James B Edwards Brg	69.8	73.9	143.7	13			
15	James B Edwards Brg	& Long Point Rd	70.9	74.5	145.4	12			
16	Long Point Rd	& US-17	60.6	59.6	120.2	14			
17	US-17	& SC-17 Bus	30.7	36.9	67.6	18			
18	SC-17 Bus	& SC-703/Ben Sawyer Blvd/Coleman Blvd	49.7	46.1	95.8	17			

INRIX CONGESTION ANALYSIS I-526 SUMMARY											
I-526 Segment #	Segment Between		I-526 Eastbound LOS				I-526 Westbound LOS				I-526 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	US-17/Savannah Hwy	& Sam Rittenberg Blvd	A	B	A	A	A	C	C	C	I-526 A
2	Sam Rittenberg Blvd	& Paul Cantrell Blvd	A	B	B	B	A	B	C	C	
3	Paul Cantrell Blvd	& Leeds Ave	B	D	C	D	B	C	D	E	
4	Leeds Ave	& Paramount Dr	B	D	C	C	B	C	D	F	
5	Paramount Dr	& Dorchester Rd	B	D	C	D	B	C	C	E	
6	Dorchester Rd	& W Montague Ave	B	D	C	D	B	C	D	E	
7	W Montague Ave	& International Blvd	C	D	D	D	B	D	D	E	
8	International Blvd	& I-26	B	D	D	E	B	D	D	D	
9	I-26	& US-52/Rivers Ave	B	D	D	D	B	D	D	D	
10	US-52/Rivers Ave	& N Rhett Ave	B	D	D	D	B	D	D	D	I-526 B
11	N Rhett Ave	& Virginia Ave	B	D	D	D	B	D	D	D	
12	Virginia Ave	& Don N Holt Brg	B	C	C	D	B	D	C	D	
13	Don N Holt Brg	& Clements Ferry Rd	B	C	C	D	B	D	C	D	
14	Clements Ferry Rd	& James B Edwards Brg	A	C	C	C	B	C	C	C	
15	James B Edwards Brg	& Long Point Rd	A	C	C	C	B	C	C	C	
16	Long Point Rd	& US-17	A	B	B	C	A	C	B	B	
17	US-17	& SC-17 Bus	A	A	A	A	A	B	A	A	
18	SC-17 Bus	& SC-703/Ben Sawyer Blvd/Coleman Blvd	A	B	B	B	A	B	B	B	

**INRIX CONGESTION ANALYSIS
I-585 SUMMARY**

Summary of Traffic Parameters

		Hours:	7 - 8 AM	8 - 9 AM	4 - 5 PM	5 - 6 PM
Urban	K-Factor		3.23%	7.86%	6.97%	7.68%
	D-Factor		0.56	0.54	0.52	0.53
Rural	K-Factor					
	D-Factor					

PHF	0.90
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Count Stations Utilized for Traffic Parameter Data

Urban	0033: I-385 Between Greenville City Limit & S-273*
*I-585 Count Stations Not Available	

Truck Percentage Data

Percent Trucks (P _T)	Begin MP	End MP	Description
10%	0.00	2.25	I-85 to US 176

Terrain Data

Terrain	(E _T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ RV data not considered.
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ Assumed $f_p = 1.0$
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS I-585 NORTHBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment AADT (2011)	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Two-Way	Free-Flow	7-8 AM	8-9 AM	4-5 PM		5-6 PM	7-8 AM	8-9 AM	4-5 PM			5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM
1	US-221/Exit 25	SC-9/Exit 25	0.305	2	26,500	51.9	52.7	52.7	52.7	51.7	PM	372	950	959	1,080	10.0%	Rolling	238	607	612	690	4.5	11.5	11.6	13.3	A	B	B	B
2	SC-9/Exit 25	California Ave/Exit 24	0.326	2	26,500	56.2	55.9	56.4	56.9	56.4	PM	372	950	959	1,080	10.0%	Rolling	238	607	612	690	4.3	10.8	10.8	12.2	A	A	A	B
3	California Ave/Exit 24	Exit 24	0.912	2	29,100	59.0	59.0	59.0	59.0	59.0	PM	409	1,043	1,053	1,186	10.0%	Rolling	261	667	673	758	4.4	11.3	11.4	12.8	A	B	B	B
4	Exit 24	I-85 Bus/Exit 23	0.740	2	34,700	59.5	58.1	58.0	59.0	59.0	PM	488	1,244	1,255	1,414	10.0%	Rolling	312	795	802	904	5.4	13.7	13.6	15.3	A	B	B	B

INRIX CONGESTION ANALYSIS I-585 SOUTHBOUND																													
Segment #	Segment Begin	Segment End	Segment Length (mi)	# Lanes	Segment AADT (2011)	Speeds (mph)					Peak Time	Hourly Volumes (by K- & D-Factors)				% Trucks	Terrain	Flow Rate (pc/hr/ln)				Density (pc/mi/ln)				LOS			
						Two-Way	Free-Flow	7-8 AM	8-9 AM	4-5 PM		5-6 PM	7-8 AM	8-9 AM	4-5 PM			5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM
1	I-85 Bus/Exit 23	Exit 24	0.041	2	34,700	55.7	55.4	55.4	55.0	55.7	AM	632	1,483	1,164	1,251	10.0%	Rolling	404	947	744	799	7.3	17.1	13.5	14.3	A	B	B	B
2	Exit 24	California Ave/Exit 24	1.100	2	29,100	59.5	60.1	60.1	60.1	60.0	AM	530	1,243	976	1,049	10.0%	Rolling	339	794	624	670	5.6	13.2	10.4	11.2	A	B	A	B
3	California Ave/Exit 24	SC-9/Exit 25	0.460	2	26,500	56.5	57.1	57.1	57.7	57.1	AM	483	1,132	889	955	10.0%	Rolling	308	723	568	610	5.4	12.7	9.8	10.7	A	B	A	A
4	SC-9/Exit 25	US-221/Exit 25	0.251	2	26,500	50.9	51.1	51.1	51.1	50.1	AM	483	1,132	889	955	10.0%	Rolling	308	723	568	610	6.0	14.2	11.1	12.2	A	B	B	B

INRIX CONGESTION ANALYSIS I-585									
I-585 Segment #	Segment Between		Density Index			I-585 Segment Rank	Corridor Name	Corridor Density Index	
			I-585 NB	I-585 SB	I-585 Two-Way			Average Index	Rank by Average Index
1	US-221/Exit 25	& SC-9/Exit 25	41.0	43.5	84.5	2	I-585 A	85.4	1
2	SC-9/Exit 25	& California Ave/Exit 24	38.0	38.6	76.6				
3	California Ave/Exit 24	& Exit 24	40.0	40.4	80.3				
4	Exit 24	& I-85 Bus/Exit 23	48.0	52.3	100.2				

INRIX CONGESTION ANALYSIS I-585 SUMMARY											
I-585 Segment #	Segment Between		I-585 Northbound LOS				I-585 Southbound LOS				I-585 Corridor
			7-8 AM	8-9 AM	4-5 PM	5-6 PM	7-8 AM	8-9 AM	4-5 PM	5-6 PM	
1	US-221/Exit 25	& SC-9/Exit 25	A	B	B	B	A	B	B	B	I-585 A
2	SC-9/Exit 25	& California Ave/Exit 24	A	A	A	B	A	B	A	A	
3	California Ave/Exit 24	& Exit 24	A	B	B	B	A	B	A	B	
4	Exit 24	& I-85 Bus/Exit 23	A	B	B	B	A	B	B	B	



**APPENDIX C:
INTERSTATE MAINLINE SEGMENTS AND CORRIDORS –
SUMMARY AND OVERALL RANKING**

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between		Two-Way Density Index	Segment Rank	
I-20	GA State Line	&	SC-230/Exit 1	141.0	75
I-20	SC-230/Exit 1	&	US-25/SC-121/Exit 5	105.4	149
I-20	US-25/SC-121/Exit 5	&	SC-144/Exit 11	85.4	191
I-20	SC-144/Exit 11	&	SC-19/Exit 18	72.6	225
I-20	SC-19/Exit 18	&	US-1/Exit 22	69.9	229
I-20	US-1/Exit 22	&	Road 49/Exit 29	71.5	228
I-20	Road 49/Exit 29	&	SC-39/Exit 33	73.1	224
I-20	SC-39/Exit 33	&	US-178/Exit 39	72.2	226
I-20	US-178/Exit 39	&	SC-34/Exit 44	75.5	217
I-20	SC-34/Exit 44	&	SC-204/Exit 51	86.0	190
I-20	SC-204/Exit 51	&	SC-6/Exit 55	119.3	126
I-20	SC-6/Exit 55	&	US-1/Exit 58	164.9	38
I-20	US-1/Exit 58	&	US-378/Exit 61	156.9	47
I-20	US-378/Exit 61	&	Bush River Rd/Exit 63	137.0	83
I-20	Bush River Rd/Exit 63	&	I-26/US-76/Exit 64	136.6	85
I-20	I-26/US-76/Exit 64	&	US-176/Broad River Rd/Exit 65	155.6	48
I-20	US-176/Broad River Rd/Exit 65	&	SC-215/Monticello Rd/Exit 68	177.5	27
I-20	SC-215/Monticello Rd/Exit 68	&	US-321/Fairfield Rd/Exit 70	167.0	37
I-20	US-321/Fairfield Rd/Exit 70	&	US-21/Main St/Exit 71	160.9	41
I-20	US-21/Main St/Exit 71	&	SC-555/Farrow Rd/Exit 72	154.5	53
I-20	SC-555/Farrow Rd/Exit 72	&	SC-277/Exit 73	147.5	61
I-20	SC-277/Exit 73	&	US-1/Two Notch Rd/Exit 74	130.9	101
I-20	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	104.5	152
I-20	I-77/Exit 76A	&	Alpine Rd/Exit 76B	173.4	31
I-20	Alpine Rd/Exit 76B	&	Clemson Rd/Exit 80	214.0	11
I-20	Clemson Rd/Exit 80	&	Spears Creek Church Road/Exit 82	155.2	50
I-20	Spears Creek Church Road/Exit 82	&	White Pond Rd/Exit 87	120.3	122
I-20	White Pond Rd/Exit 87	&	US-601/Exit 92	102.8	156
I-20	US-601/Exit 92	&	US-521/Exit 98	87.7	188
I-20	US-521/Exit 98	&	Humphries Rd/Exit 101	69.6	232
I-20	Humphries Rd/Exit 101	&	Jamestown Rd/Exit 108	67.1	236
I-20	Jamestown Rd/Exit 108	&	US-15/Exit 116	64.3	242
I-20	US-15/Exit 116	&	SC-341/Exit 120	52.5	266
I-20	SC-341/Exit 120	&	SC-22/Exit 123	52.5	267
I-20	SC-22/Exit 123	&	US-401/Exit 131	51.5	269
I-20	US-401/Exit 131	&	SC-340/Exit 137	55.8	256
I-20	SC-340/Exit 137	&	I-95/Exit 141	63.5	244
I-26	NC State Line	&	SC-14/Exit 1	66.3	240
I-26	SC-14/Exit 1	&	SC-11/Exit 5	66.0	241
I-26	SC-11/Exit 5	&	SC-292/Exit 10	69.8	230
I-26	SC-292/Exit 10	&	US-176/Exit 15	79.9	207
I-26	US-176/Exit 15	&	John Dodd Rd/Exit 16	103.5	154
I-26	John Dodd Rd/Exit 16	&	New Cut Rd/Exit 17	116.6	131
I-26	New Cut Rd/Exit 17	&	I-85/Exit 18	116.7	130
I-26	I-85/Exit 18	&	I-85 Bus/Exit 19	121.3	120

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-26	I-85 Bus/Exit 19	&	US-29/Exit 21	159.2	44
I-26	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	131.0	98
I-26	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	78.5	214
I-26	US-221/Exit 28	&	Frontage Rd 35/Exit 35	58.9	250
I-26	Frontage Rd 35/Exit 35	&	SC-146/Exit 38	55.8	254
I-26	SC-146/Exit 38	&	SC-92/Exit 41	54.3	259
I-26	SC-92/Exit 41	&	SC-49/Exit 44	51.2	271
I-26	SC-49/Exit 44	&	I-385	49.3	275
I-26	I-385	&	SC-56/Exit 52	95.3	172
I-26	SC-56/Exit 52	&	SC-72/Exit 54	85.0	192
I-26	SC-72/Exit 54	&	SC-66/Exit 60	79.0	212
I-26	SC-66/Exit 60	&	Road 32/Exit 66	79.1	211
I-26	Road 32/Exit 66	&	SC-121/Exit 72	79.2	210
I-26	SC-121/Exit 72	&	SC-34/Exit 74	81.7	201
I-26	SC-34/Exit 74	&	SC-219/Exit 76	83.8	198
I-26	SC-219/Exit 76	&	SC-773/Exit 82	91.0	182
I-26	SC-773/Exit 82	&	SC-202/Exit 85	94.1	175
I-26	SC-202/Exit 85	&	Columbia Ave/Exit 91	94.6	174
I-26	Columbia Ave/Exit 91	&	US-176/Exit 97	116.2	133
I-26	US-176/Exit 97	&	US-176/US-76/Exit 101	128.9	107
I-26	US-176/US-76/Exit 101	&	SC-60/Lake Murray Blvd/Exit 102	135.6	87
I-26	SC-60/Lake Murray Blvd/Exit 102	&	Harbison Blvd/Exit 103	184.0	25
I-26	Harbison Blvd/Exit 103	&	Piney Grove Rd/Exit 104	208.1	13
I-26	Piney Grove Rd/Exit 104	&	Saint Andrews Rd/Exit 106	232.1	3
I-26	Saint Andrews Rd/Exit 106	&	I-20/Exit 107	239.1	2
I-26	I-20/Exit 107	&	Bush River Rd/Exit 108	206.2	16
I-26	Bush River Rd/Exit 108	&	I-126/US-76	214.0	10
I-26	I-126/US-76	&	US-378/Exit 110	136.9	84
I-26	US-378/Exit 110	&	US-1/Exit 111	126.0	112
I-26	US-1/Exit 111	&	SC-302/Exit 113	155.0	51
I-26	SC-302/Exit 113	&	US-321/US-21/US-176/Exit 115	146.5	62
I-26	US-321/US-21/US-176/Exit 115	&	I-77/Exit 116	130.9	99
I-26	I-77/Exit 116	&	US-21/US-176/Exit 119	173.6	30
I-26	US-21/US-176/Exit 119	&	Road 31/Exit 125	134.1	89
I-26	Road 31/Exit 125	&	US-21/Exit 129	130.9	100
I-26	US-21/Exit 129	&	Caw Caw Rd	125.6	114
I-26	Caw Caw Rd	&	Burke Rd	113.9	138
I-26	Burke Rd	&	US-601/Saint Matthews Rd	98.6	169
I-26	US-601/Saint Matthews Rd	&	SC-33/Cameron Rd/Russell St	95.2	173
I-26	SC-33/Cameron Rd/Russell St	&	Five Chop Rd	92.9	180
I-26	Five Chop Rd	&	Homestead Rd	91.2	181
I-26	Homestead Rd	&	Vance Rd	89.7	185
I-26	Vance Rd	&	I-95	90.4	184
I-26	I-95	&	US-15	62.5	246
I-26	US-15	&	SC-453	62.3	247

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-26	SC-453	&	Ridgeville Rd	66.5	238
I-26	Ridgeville Rd	&	Jedburg Rd	79.6	208
I-26	Jedburg Rd	&	N Main St	101.8	159
I-26	N Main St	&	College Park Rd	101.5	160
I-26	College Park Rd	&	US-78/University Blvd	128.2	110
I-26	US-78/University Blvd	&	US-52/Rivers Ave	145.2	68
I-26	US-52/Rivers Ave	&	Ashley Phosphate Rd	170.5	35
I-26	Ashley Phosphate Rd	&	W Aviation Ave	162.0	40
I-26	W Aviation Ave	&	Remount Rd	132.7	91
I-26	Remount Rd	&	I-526	144.9	69
I-26	I-526	&	Mall Dr/W Montague Ave	150.5	58
I-26	Mall Dr/W Montague Ave	&	Dorchester Rd	140.3	76
I-26	Dorchester Rd	&	SC-7/Cosgrove Ave	146.4	63
I-26	SC-7/Cosgrove Ave	&	Meeting Street Rd	138.4	80
I-26	Meeting Street Rd	&	Spruill Ave	134.5	88
I-26	Spruill Ave	&	Rutledge Ave	136.3	86
I-26	Rutledge Ave	&	Mount Pleasant St	127.0	111
I-26	Mount Pleasant St	&	Cypress St	114.0	137
I-26	Cypress St	&	Romney St	101.2	161
I-26	Romney St	&	US 17	105.4	150
I-77	I-26/Exit 1	&	12th St Ext	123.4	117
I-77	12th St Ext	&	Alex Sanders Brg	128.2	109
I-77	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	129.9	105
I-77	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	121.9	119
I-77	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	108.0	145
I-77	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	107.1	148
I-77	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	110.9	142
I-77	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	130.4	104
I-77	SC-12/Forest Dr/Exit 12	&	Decker Blvd/Exit 13	148.6	60
I-77	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	125.1	115
I-77	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	131.9	95
I-77	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	162.9	39
I-77	US-1/Two Notch Rd/Exit 17	&	SC-277/Exit 18	142.5	73
I-77	SC-277/Exit 18	&	SC-555/Farrow Rd/Exit 19	145.4	67
I-77	SC-555/Farrow Rd/Exit 19	&	Killian Rd/Exit 22	151.7	55
I-77	Killian Rd/Exit 22	&	US-21/Exit 24	109.9	143
I-77	US-21/Exit 24	&	Blythewood Rd/Exit 27	141.0	74
I-77	Blythewood Rd/Exit 27	&	SC-34/Exit 34	124.2	116
I-77	SC-34/Exit 34	&	Road 41/Exit 41	103.9	153
I-77	Road 41/Exit 41	&	Road 20/Exit 46	102.5	157
I-77	Road 20/Exit 46	&	SC-200/Exit 48	102.8	155
I-77	SC-200/Exit 48	&	SC-97/Exit 55	100.4	162
I-77	SC-97/Exit 55	&	SC-56/Exit 62	99.5	168
I-77	SC-56/Exit 62	&	SC-9/Exit 65	99.9	166
I-77	SC-9/Exit 65	&	SC-901/Exit 73	115.1	135

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between		Two-Way Density Index	Segment Rank
I-77	SC-901/Exit 73	& Porter Rd/Exit 75	131.9	96
I-77	Porter Rd/Exit 75	& US-21/SC-5/Exit 77	90.8	183
I-77	US-21/SC-5/Exit 77	& SC-122/Dave Lyle Blvd/Exit 79	81.9	200
I-77	SC-122/Dave Lyle Blvd/Exit 79	& US-21/Exit 82	101.8	158
I-77	US-21/Exit 82	& SC-161/Exit 82	80.7	204
I-77	SC-161/Exit 82	& Sutton Rd/Exit 83	138.0	82
I-77	Sutton Rd/Exit 83	& SC-160/Exit 85	132.0	93
I-77	SC-160/Exit 85	& SC-98/Gold Hill Rd/Exit 88	131.9	94
I-77	SC-98/Gold Hill Rd/Exit 88	& US-21/Carowinds Blvd/Exit 90	146.4	64
I-85	GA State Line	& SC-11/Exit 1	116.6	132
I-85	SC-11/Exit 1	& SC-59/Exit 2	114.4	136
I-85	SC-59/Exit 2	& Exit 4	112.7	140
I-85	Exit 4	& SC-24/Exit 11	120.4	121
I-85	SC-24/Exit 11	& SC-187/Exit 14	133.7	90
I-85	SC-187/Exit 14	& US-76/SC-28/Exit 19	139.6	77
I-85	US-76/SC-28/Exit 19	& US-178/Exit 21	109.1	144
I-85	US-178/Exit 21	& SC-81/Exit 27	107.5	147
I-85	SC-81/Exit 27	& SC-8/Exit 32	113.2	139
I-85	SC-8/Exit 32	& US-29/Exit 34	107.9	146
I-85	US-29/Exit 34	& SC-86/Exit 35	151.4	56
I-85	SC-86/Exit 35	& SC-143/Exit 39	153.7	54
I-85	SC-143/Exit 39	& SC-153/Exit 40	160.7	42
I-85	SC-153/Exit 40	& US-29/Exit 42 (Greenville)	206.7	15
I-85	US-29/Exit 42 (Greenville)	& US-25/SC-20/White Horse Rd/Exit 44	159.5	43
I-85	US-25/SC-20/White Horse Rd/Exit 44	& US-25 Bus/Augusta Rd/Exit 46	170.9	33
I-85	US-25 Bus/Augusta Rd/Exit 46	& SC-291/Pleasantburg Dr	158.5	46
I-85	SC-291/Pleasantburg Dr	& Mauldin Rd/Exit 46	158.5	45
I-85	Mauldin Rd/Exit 46	& US-276/Exit 48	222.8	5
I-85	US-276/Exit 48	& I-385/SC-146/Woodruff Rd/Exit 51	205.8	17
I-85	I-385/SC-146/Woodruff Rd/Exit 51	& Pelham Rd/Exit 54	265.2	1
I-85	Pelham Rd/Exit 54	& SC-14/Exit 56	224.8	4
I-85	SC-14/Exit 56	& Aviation Dr/Exit 57	187.8	22
I-85	Aviation Dr/Exit 57	& SC-101/Exit 60	172.3	32
I-85	SC-101/Exit 60	& SC-290/Exit 63	174.7	29
I-85	SC-290/Exit 63	& US-29/Exit 66	175.5	28
I-85	US-29/Exit 66	& SC-129/Exit 68	170.6	34
I-85	SC-129/Exit 68	& I-26/Exit 70	131.1	97
I-85	I-26/Exit 70	& US-176/Exit 72	138.7	79
I-85	US-176/Exit 72	& SC-9/Exit 75	132.1	92
I-85	SC-9/Exit 75	& I-85 Bus/Exit 77	117.7	128
I-85	I-85 Bus/Exit 77	& US-221/Exit 78	149.4	59
I-85	US-221/Exit 78	& Gossett Rd/Exit 80	130.8	102
I-85	Gossett Rd/Exit 80	& SC-110/Exit 83	188.7	21
I-85	SC-110/Exit 83	& Green River Rd/Exit 87	155.6	49
I-85	Green River Rd/Exit 87	& Hyatt St/Exit 90	155.0	52

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between		Two-Way Density Index	Segment Rank
I-85	Hyatt St/Exit 90	& SC-11/Exit 92	142.9	72
I-85	SC-11/Exit 92	& SC-150/SC-18/Road 82/Exit 95	143.6	71
I-85	SC-150/SC-18/Road 82/Exit 95	& SC-18/Shelby Hwy/Exit 96	139.0	78
I-85	SC-18/Shelby Hwy/Exit 96	& SC-5/Exit 99	129.5	106
I-85	SC-5/Exit 99	& SC-198/Exit 102	130.6	103
I-85	SC-198/Exit 102	& Exit 104	119.5	125
I-85	Exit 104	& US-29/Exit 106	120.3	123
I-95	GA State Line	& US-17/General William Hardee Blvd	93.3	178
I-95	US-17/General William Hardee Blvd	& US-278/Red Dam Rd	96.2	170
I-95	US-278/Red Dam Rd	& SC-13/SC-S-27-13 Ext	84.6	193
I-95	SC-13/SC-S-27-13 Ext	& SC-336	82.1	199
I-95	SC-336	& US-17 (Ridgeland) (South)	79.3	209
I-95	US-17 (Ridgeland) (South)	& SC-462	80.5	205
I-95	SC-462	& US-17 (Ridgeland) (North)	84.5	194
I-95	US-17 (Ridgeland) (North)	& SC-68/Yemassee Hwy	73.9	222
I-95	SC-68/Yemassee Hwy	& US-21/Low Country Hwy	74.6	219
I-95	US-21/Low Country Hwy	& SC-63/Sniders Hwy/Exit 53	73.7	223
I-95	SC-63/Sniders Hwy/Exit 53	& SC-64/Bells Hwy/Exit 57	72.1	227
I-95	SC-64/Bells Hwy/Exit 57	& McLeod Rd/Exit 62	74.0	221
I-95	McLeod Rd/Exit 62	& SC-61/Augusta Hwy/Exit 68	74.0	220
I-95	SC-61/Augusta Hwy/Exit 68	& US-78/W Jim Bilton Blvd/Exit 77	76.4	216
I-95	US-78/W Jim Bilton Blvd/Exit 77	& US-178/Charleston Hwy/Exit 82	78.7	213
I-95	US-178/Charleston Hwy/Exit 82	& I-26/Exit 86	81.1	202
I-95	I-26/Exit 86	& US-176/Old Hwy/Exit 90	54.4	258
I-95	US-176/Old Hwy/Exit 90	& US-15/Bass Dr/Exit 93	52.6	265
I-95	US-15/Bass Dr/Exit 93	& US-15/US-301/Exit 97	53.0	262
I-95	US-15/US-301/Exit 97	& SC-6/Exit 98	61.8	248
I-95	SC-6/Exit 98	& US-15/US-301/Exit 102	61.3	249
I-95	US-15/US-301/Exit 102	& Buff Blvd/Exit 108	56.0	253
I-95	Buff Blvd/Exit 108	& US-301/Exit 115	52.4	268
I-95	US-301/Exit 115	& SC-261/Paxville Hwy/Exit 119	53.5	261
I-95	SC-261/Paxville Hwy/Exit 119	& US-521/Exit 122	52.7	264
I-95	US-521/Exit 122	& SC-527/Black River Rd/Exit 132	48.7	276
I-95	SC-527/Black River Rd/Exit 132	& US-378/Myrtle Beach Hwy/Exit 135	48.5	277
I-95	US-378/Myrtle Beach Hwy/Exit 135	& SC-53/Narrow Paved Rd/Exit 141	50.0	273
I-95	SC-53/Narrow Paved Rd/Exit 141	& SC-341/Lynches River Rd/Exit 146	50.5	272
I-95	SC-341/Lynches River Rd/Exit 146	& SC-403/Cale Yarborough Hwy/Exit 150	51.3	270
I-95	SC-403/Cale Yarborough Hwy/Exit 150	& Center Rd/Exit 153	54.0	260
I-95	Center Rd/Exit 153	& US-76/W Palmetto St/Exit 157	55.8	255
I-95	US-76/W Palmetto St/Exit 157	& I-20/Exit 160	58.2	251
I-95	I-20/Exit 160	& US-52/W Lucas St/Exit 164	87.4	189
I-95	US-52/W Lucas St/Exit 164	& Tv Rd/Exit 169	84.1	197
I-95	Tv Rd/Exit 169	& SC-327/N Williston Rd/Exit 170	84.4	196
I-95	SC-327/N Williston Rd/Exit 170	& SC-38/Exit 181	69.8	231
I-95	SC-38/Exit 181	& SC-34/Exit 190	67.7	234

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between		Two-Way Density Index	Segment Rank
I-95	SC-34/Exit 190	& SC-9/Radford Blvd/Exit 193	66.4	239
I-95	SC-9/Radford Blvd/Exit 193	& US-301/Exit 1	66.9	237
I-126	I-26	& Saluda River Rd	122.7	118
I-126	Saluda River Rd	& Greystone Blvd	89.4	186
I-126	Greystone Blvd	& Huger St	93.1	179
I-185	I-385/Neely Ferry Rd/Exit 1A	& SC-417	19.8	281
I-185	SC-417	& I-385/Exit 1B	19.4	282
I-185	I-385/Exit 1B	& Fork Shoals Rd/Exit 4	18.6	283
I-185	Fork Shoals Rd/Exit 4	& US-25/Augusta Rd/Exit 7	15.8	285
I-185	US-25/Augusta Rd/Exit 7	& SC-20/Piedmont Hwy/Exit 10	15.4	286
I-185	SC-20/Piedmont Hwy/Exit 10	& SC-153/Exit 12	17.6	284
I-185	SC-153/Exit 12	& I-85/US-29	9.0	287
I-185	I-85/US-29	& US-25/White Horse Rd/Exit 1	48.3	278
I-185	US-25/White Horse Rd/Exit 1	& SC-20/Exit 2	48.2	279
I-185	SC-20/Exit 2	& Henrydale Ave/Mills Ave	49.7	274
I-385	I-26	& SC-308/Exit 2	52.8	263
I-385	SC-308/Exit 2	& SC-49/Exit 5	55.7	257
I-385	SC-49/Exit 5	& US-221/Exit 9	57.1	252
I-385	US-221/Exit 9	& Road 23/Exit 10	62.7	245
I-385	Road 23/Exit 10	& SC-101/Exit 16	64.2	243
I-385	SC-101/Exit 16	& SC-14/Exit 19	69.0	233
I-385	SC-14/Exit 19	& SC-14/Exit 22	93.5	177
I-385	SC-14/Exit 22	& Old Laurens Rd/Exit 22	93.5	176
I-385	Old Laurens Rd/Exit 22	& SC-418/Exit 23	89.3	187
I-385	SC-418/Exit 23	& Fairview St/Exit 24	99.9	167
I-385	Fairview St/Exit 24	& Harrison Bridge Rd/Exit 26	75.4	218
I-385	Harrison Bridge Rd/Exit 26	& Fairview Rd/Exit 27	80.9	203
I-385	Fairview Rd/Exit 27	& Georgia Rd/Exit 29	111.2	141
I-385	Georgia Rd/Exit 29	& US-276/Exit 30	125.7	113
I-385	US-276/Exit 30	& d Stage Rd/E Standing Springs Rd/Exit	99.9	165
I-385	d Stage Rd/E Standing Springs Rd/Exit	& SC-417/Exit 31	100.3	163
I-385	SC-417/Exit 31	& Bridges Rd/Exit 33	118.2	127
I-385	Bridges Rd/Exit 33	& Butler Rd/Exit 34	128.3	108
I-385	Butler Rd/Exit 34	& SC-146/Woodruff Rd/Exit 35	146.2	65
I-385	SC-146/Woodruff Rd/Exit 35	& I-85/Exit 36	185.5	23
I-385	I-85/Exit 36	& Roper Mountain Rd/Exit 37	170.1	36
I-385	Roper Mountain Rd/Exit 37	& Haywood Rd/Exit 39	150.9	57
I-385	Haywood Rd/Exit 39	& SC-291/Pleasantburg Dr/Exit 40	138.3	81
I-385	SC-291/Pleasantburg Dr/Exit 40	& End of Freeway	105.4	151
I-520	GA State Line	& US-1/US-278/Jefferson Davis Hwy	45.0	280
I-526	US-17/Savannah Hwy	& Sam Rittenberg Blvd	117.3	129
I-526	Sam Rittenberg Blvd	& Paul Cantrell Blvd	115.8	134
I-526	Paul Cantrell Blvd	& Leeds Ave	202.6	19
I-526	Leeds Ave	& Paramount Dr	207.0	14
I-526	Paramount Dr	& Dorchester Rd	201.8	20

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY**

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-526	Dorchester Rd	&	W Montague Ave	204.4	18
I-526	W Montague Ave	&	International Blvd	217.9	8
I-526	International Blvd	&	I-26	219.3	7
I-526	I-26	&	US-52/Rivers Ave	220.6	6
I-526	US-52/Rivers Ave	&	N Rhett Ave	211.7	12
I-526	N Rhett Ave	&	Virginia Ave	214.0	9
I-526	Virginia Ave	&	Don N Holt Brg	185.1	24
I-526	Don N Holt Brg	&	Clements Ferry Rd	183.2	26
I-526	Clements Ferry Rd	&	James B Edwards Brg	143.7	70
I-526	James B Edwards Brg	&	Long Point Rd	145.4	66
I-526	Long Point Rd	&	US-17	120.2	124
I-526	US-17	&	SC-17 Bus	67.6	235
I-526	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	95.8	171
I-585	US-221/Exit 25	&	SC-9/Exit 25	84.5	195
I-585	SC-9/Exit 25	&	California Ave/Exit 24	76.6	215
I-585	California Ave/Exit 24	&	Exit 24	80.3	206
I-585	Exit 24	&	I-85 Bus/Exit 23	100.2	164

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between		Two-Way Density Index	Segment Rank	
I-85	I-385/SC-146/Woodruff Rd/Exit 51	&	Pelham Rd/Exit 54	265.2	1
I-26	Saint Andrews Rd/Exit 106	&	I-20/Exit 107	239.1	2
I-26	Piney Grove Rd/Exit 104	&	Saint Andrews Rd/Exit 106	232.1	3
I-85	Pelham Rd/Exit 54	&	SC-14/Exit 56	224.8	4
I-85	Mauldin Rd/Exit 46	&	US-276/Exit 48	222.8	5
I-526	I-26	&	US-52/Rivers Ave	220.6	6
I-526	International Blvd	&	I-26	219.3	7
I-526	W Montague Ave	&	International Blvd	217.9	8
I-526	N Rhett Ave	&	Virginia Ave	214.0	9
I-26	Bush River Rd/Exit 108	&	I-126/US-76	214.0	10
I-20	Alpine Rd/Exit 76B	&	Clemson Rd/Exit 80	214.0	11
I-526	US-52/Rivers Ave	&	N Rhett Ave	211.7	12
I-26	Harbison Blvd/Exit 103	&	Piney Grove Rd/Exit 104	208.1	13
I-526	Leeds Ave	&	Paramount Dr	207.0	14
I-85	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	206.7	15
I-26	I-20/Exit 107	&	Bush River Rd/Exit 108	206.2	16
I-85	US-276/Exit 48	&	I-385/SC-146/Woodruff Rd/Exit 51	205.8	17
I-526	Dorchester Rd	&	W Montague Ave	204.4	18
I-526	Paul Cantrell Blvd	&	Leeds Ave	202.6	19
I-526	Paramount Dr	&	Dorchester Rd	201.8	20
I-85	Gossett Rd/Exit 80	&	SC-110/Exit 83	188.7	21
I-85	SC-14/Exit 56	&	Aviation Dr/Exit 57	187.8	22
I-385	SC-146/Woodruff Rd/Exit 35	&	I-85/Exit 36	185.5	23
I-526	Virginia Ave	&	Don N Holt Brg	185.1	24
I-26	SC-60/Lake Murray Blvd/Exit 102	&	Harbison Blvd/Exit 103	184.0	25
I-526	Don N Holt Brg	&	Clements Ferry Rd	183.2	26
I-20	US-176/Broad River Rd/Exit 65	&	SC-215/Monticello Rd/Exit 68	177.5	27
I-85	SC-290/Exit 63	&	US-29/Exit 66	175.5	28
I-85	SC-101/Exit 60	&	SC-290/Exit 63	174.7	29
I-26	I-77/Exit 116	&	US-21/US-176/Exit 119	173.6	30
I-20	I-77/Exit 76A	&	Alpine Rd/Exit 76B	173.4	31
I-85	Aviation Dr/Exit 57	&	SC-101/Exit 60	172.3	32
I-85	US-25/SC-20/White Horse Rd/Exit 44	&	US-25 Bus/Augusta Rd/Exit 46	170.9	33
I-85	US-29/Exit 66	&	SC-129/Exit 68	170.6	34
I-26	US-52/Rivers Ave	&	Ashley Phosphate Rd	170.5	35
I-385	I-85/Exit 36	&	Roper Mountain Rd/Exit 37	170.1	36
I-20	SC-215/Monticello Rd/Exit 68	&	US-321/Fairfield Rd/Exit 70	167.0	37
I-20	SC-6/Exit 55	&	US-1/Exit 58	164.9	38
I-77	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	162.9	39
I-26	Ashley Phosphate Rd	&	W Aviation Ave	162.0	40
I-20	US-321/Fairfield Rd/Exit 70	&	US-21/Main St/Exit 71	160.9	41
I-85	SC-143/Exit 39	&	SC-153/Exit 40	160.7	42
I-85	US-29/Exit 42 (Greenville)	&	US-25/SC-20/White Horse Rd/Exit 44	159.5	43
I-26	I-85 Bus/Exit 19	&	US-29/Exit 21	159.2	44
I-85	SC-291/Pleasantburg Dr	&	Mauldin Rd/Exit 46	158.5	45

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between		Two-Way Density Index	Segment Rank
I-85	US-25 Bus/Augusta Rd/Exit 46	& SC-291/Pleasantburg Dr	158.5	46
I-20	US-1/Exit 58	& US-378/Exit 61	156.9	47
I-20	I-26/US-76/Exit 64	& US-176/Broad River Rd/Exit 65	155.6	48
I-85	SC-110/Exit 83	& Green River Rd/Exit 87	155.6	49
I-20	Clemson Rd/Exit 80	& Spears Creek Church Road/Exit 82	155.2	50
I-26	US-1/Exit 111	& SC-302/Exit 113	155.0	51
I-85	Green River Rd/Exit 87	& Hyatt St/Exit 90	155.0	52
I-20	US-21/Main St/Exit 71	& SC-555/Farrow Rd/Exit 72	154.5	53
I-85	SC-86/Exit 35	& SC-143/Exit 39	153.7	54
I-77	SC-555/Farrow Rd/Exit 19	& Killian Rd/Exit 22	151.7	55
I-85	US-29/Exit 34	& SC-86/Exit 35	151.4	56
I-385	Roper Mountain Rd/Exit 37	& Haywood Rd/Exit 39	150.9	57
I-26	I-526	& Mall Dr/W Montague Ave	150.5	58
I-85	I-85 Bus/Exit 77	& US-221/Exit 78	149.4	59
I-77	SC-12/Forest Dr/Exit 12	& Decker Blvd/Exit 13	148.6	60
I-20	SC-555/Farrow Rd/Exit 72	& SC-277/Exit 73	147.5	61
I-26	SC-302/Exit 113	& US-321/US-21/US-176/Exit 115	146.5	62
I-26	Dorchester Rd	& SC-7/Cosgrove Ave	146.4	63
I-77	SC-98/Gold Hill Rd/Exit 88	& US-21/Carowinds Blvd/Exit 90	146.4	64
I-385	Butler Rd/Exit 34	& SC-146/Woodruff Rd/Exit 35	146.2	65
I-526	James B Edwards Brg	& Long Point Rd	145.4	66
I-77	SC-277/Exit 18	& SC-555/Farrow Rd/Exit 19	145.4	67
I-26	US-78/University Blvd	& US-52/Rivers Ave	145.2	68
I-26	Remount Rd	& I-526	144.9	69
I-526	Clements Ferry Rd	& James B Edwards Brg	143.7	70
I-85	SC-11/Exit 92	& SC-150/SC-18/Road 82/Exit 95	143.6	71
I-85	Hyatt St/Exit 90	& SC-11/Exit 92	142.9	72
I-77	US-1/Two Notch Rd/Exit 17	& SC-277/Exit 18	142.5	73
I-77	US-21/Exit 24	& Blythewood Rd/Exit 27	141.0	74
I-20	GA State Line	& SC-230/Exit 1	141.0	75
I-26	Mall Dr/W Montague Ave	& Dorchester Rd	140.3	76
I-85	SC-187/Exit 14	& US-76/SC-28/Exit 19	139.6	77
I-85	SC-150/SC-18/Road 82/Exit 95	& SC-18/Shelby Hwy/Exit 96	139.0	78
I-85	I-26/Exit 70	& US-176/Exit 72	138.7	79
I-26	SC-7/Cosgrove Ave	& Meeting Street Rd	138.4	80
I-385	Haywood Rd/Exit 39	& SC-291/Pleasantburg Dr/Exit 40	138.3	81
I-77	SC-161/Exit 82	& Sutton Rd/Exit 83	138.0	82
I-20	US-378/Exit 61	& Bush River Rd/Exit 63	137.0	83
I-26	I-126/US-76	& US-378/Exit 110	136.9	84
I-20	Bush River Rd/Exit 63	& I-26/US-76/Exit 64	136.6	85
I-26	Spruill Ave	& Rutledge Ave	136.3	86
I-26	US-176/US-76/Exit 101	& SC-60/Lake Murray Blvd/Exit 102	135.6	87
I-26	Meeting Street Rd	& Spruill Ave	134.5	88
I-26	US-21/US-176/Exit 119	& Road 31/Exit 125	134.1	89
I-85	SC-24/Exit 11	& SC-187/Exit 14	133.7	90

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-26	W Aviation Ave	&	Remount Rd	132.7	91
I-85	US-176/Exit 72	&	SC-9/Exit 75	132.1	92
I-77	Sutton Rd/Exit 83	&	SC-160/Exit 85	132.0	93
I-77	SC-160/Exit 85	&	SC-98/Gold Hill Rd/Exit 88	131.9	94
I-77	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	131.9	95
I-77	SC-901/Exit 73	&	Porter Rd/Exit 75	131.9	96
I-85	SC-129/Exit 68	&	I-26/Exit 70	131.1	97
I-26	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	131.0	98
I-26	US-321/US-21/US-176/Exit 115	&	I-77/Exit 116	130.9	99
I-26	Road 31/Exit 125	&	US-21/Exit 129	130.9	100
I-20	SC-277/Exit 73	&	US-1/Two Notch Rd/Exit 74	130.9	101
I-85	US-221/Exit 78	&	Gossett Rd/Exit 80	130.8	102
I-85	SC-5/Exit 99	&	SC-198/Exit 102	130.6	103
I-77	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	130.4	104
I-77	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	129.9	105
I-85	SC-18/Shelby Hwy/Exit 96	&	SC-5/Exit 99	129.5	106
I-26	US-176/Exit 97	&	US-176/US-76/Exit 101	128.9	107
I-385	Bridges Rd/Exit 33	&	Butler Rd/Exit 34	128.3	108
I-77	12th St Ext	&	Alex Sanders Brg	128.2	109
I-26	College Park Rd	&	US-78/University Blvd	128.2	110
I-26	Rutledge Ave	&	Mount Pleasant St	127.0	111
I-26	US-378/Exit 110	&	US-1/Exit 111	126.0	112
I-385	Georgia Rd/Exit 29	&	US-276/Exit 30	125.7	113
I-26	US-21/Exit 129	&	Caw Caw Rd	125.6	114
I-77	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	125.1	115
I-77	Blythwood Rd/Exit 27	&	SC-34/Exit 34	124.2	116
I-77	I-26/Exit 1	&	12th St Ext	123.4	117
I-126	I-26	&	Saluda River Rd	122.7	118
I-77	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	121.9	119
I-26	I-85/Exit 18	&	I-85 Bus/Exit 19	121.3	120
I-85	Exit 4	&	SC-24/Exit 11	120.4	121
I-20	Spears Creek Church Road/Exit 82	&	White Pond Rd/Exit 87	120.3	122
I-85	Exit 104	&	US-29/Exit 106	120.3	123
I-526	Long Point Rd	&	US-17	120.2	124
I-85	SC-198/Exit 102	&	Exit 104	119.5	125
I-20	SC-204/Exit 51	&	SC-6/Exit 55	119.3	126
I-385	SC-417/Exit 31	&	Bridges Rd/Exit 33	118.2	127
I-85	SC-9/Exit 75	&	I-85 Bus/Exit 77	117.7	128
I-526	US-17/Savannah Hwy	&	Sam Rittenberg Blvd	117.3	129
I-26	New Cut Rd/Exit 17	&	I-85/Exit 18	116.7	130
I-26	John Dodd Rd/Exit 16	&	New Cut Rd/Exit 17	116.6	131
I-85	GA State Line	&	SC-11/Exit 1	116.6	132
I-26	Columbia Ave/Exit 91	&	US-176/Exit 97	116.2	133
I-526	Sam Rittenberg Blvd	&	Paul Cantrell Blvd	115.8	134
I-77	SC-9/Exit 65	&	SC-901/Exit 73	115.1	135

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between		Two-Way Density Index	Segment Rank	
I-85	SC-11/Exit 1	&	SC-59/Exit 2	114.4	136
I-26	Mount Pleasant St	&	Cypress St	114.0	137
I-26	Caw Caw Rd	&	Burke Rd	113.9	138
I-85	SC-81/Exit 27	&	SC-8/Exit 32	113.2	139
I-85	SC-59/Exit 2	&	Exit 4	112.7	140
I-385	Fairview Rd/Exit 27	&	Georgia Rd/Exit 29	111.2	141
I-77	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	110.9	142
I-77	Killian Rd/Exit 22	&	US-21/Exit 24	109.9	143
I-85	US-76/SC-28/Exit 19	&	US-178/Exit 21	109.1	144
I-77	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	108.0	145
I-85	SC-8/Exit 32	&	US-29/Exit 34	107.9	146
I-85	US-178/Exit 21	&	SC-81/Exit 27	107.5	147
I-77	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	107.1	148
I-20	SC-230/Exit 1	&	US-25/SC-121/Exit 5	105.4	149
I-26	Romney St	&	US 17	105.4	150
I-385	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	105.4	151
I-20	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	104.5	152
I-77	SC-34/Exit 34	&	Road 41/Exit 41	103.9	153
I-26	US-176/Exit 15	&	John Dodd Rd/Exit 16	103.5	154
I-77	Road 20/Exit 46	&	SC-200/Exit 48	102.8	155
I-20	White Pond Rd/Exit 87	&	US-601/Exit 92	102.8	156
I-77	Road 41/Exit 41	&	Road 20/Exit 46	102.5	157
I-77	SC-122/Dave Lyle Blvd/Exit 79	&	US-21/Exit 82	101.8	158
I-26	Jedburg Rd	&	N Main St	101.8	159
I-26	N Main St	&	College Park Rd	101.5	160
I-26	Cypress St	&	Romney St	101.2	161
I-77	SC-200/Exit 48	&	SC-97/Exit 55	100.4	162
I-385	d Stage Rd/E Standing Springs Rd/Exit	&	SC-417/Exit 31	100.3	163
I-585	Exit 24	&	I-85 Bus/Exit 23	100.2	164
I-385	US-276/Exit 30	&	d Stage Rd/E Standing Springs Rd/Exit	99.9	165
I-77	SC-56/Exit 62	&	SC-9/Exit 65	99.9	166
I-385	SC-418/Exit 23	&	Fairview St/Exit 24	99.9	167
I-77	SC-97/Exit 55	&	SC-56/Exit 62	99.5	168
I-26	Burke Rd	&	US-601/Saint Matthews Rd	98.6	169
I-95	US-17/General William Hardee Blvd	&	US-278/Red Dam Rd	96.2	170
I-526	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	95.8	171
I-26	I-385	&	SC-56/Exit 52	95.3	172
I-26	US-601/Saint Matthews Rd	&	SC-33/Cameron Rd/Russell St	95.2	173
I-26	SC-202/Exit 85	&	Columbia Ave/Exit 91	94.6	174
I-26	SC-773/Exit 82	&	SC-202/Exit 85	94.1	175
I-385	SC-14/Exit 22	&	Old Laurens Rd/Exit 22	93.5	176
I-385	SC-14/Exit 19	&	SC-14/Exit 22	93.5	177
I-95	GA State Line	&	US-17/General William Hardee Blvd	93.3	178
I-126	Greystone Blvd	&	Huger St	93.1	179
I-26	SC-33/Cameron Rd/Russell St	&	Five Chop Rd	92.9	180

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between		Two-Way Density Index	Segment Rank	
I-26	Five Chop Rd	&	Homestead Rd	91.2	181
I-26	SC-219/Exit 76	&	SC-773/Exit 82	91.0	182
I-77	Porter Rd/Exit 75	&	US-21/SC-5/Exit 77	90.8	183
I-26	Vance Rd	&	I-95	90.4	184
I-26	Homestead Rd	&	Vance Rd	89.7	185
I-126	Saluda River Rd	&	Greystone Blvd	89.4	186
I-385	Old Laurens Rd/Exit 22	&	SC-418/Exit 23	89.3	187
I-20	US-601/Exit 92	&	US-521/Exit 98	87.7	188
I-95	I-20/Exit 160	&	US-52/W Lucas St/Exit 164	87.4	189
I-20	SC-34/Exit 44	&	SC-204/Exit 51	86.0	190
I-20	US-25/SC-121/Exit 5	&	SC-144/Exit 11	85.4	191
I-26	SC-56/Exit 52	&	SC-72/Exit 54	85.0	192
I-95	US-278/Red Dam Rd	&	SC-13/SC-S-27-13 Ext	84.6	193
I-95	SC-462	&	US-17 (Ridgeland) (North)	84.5	194
I-585	US-221/Exit 25	&	SC-9/Exit 25	84.5	195
I-95	Tv Rd/Exit 169	&	SC-327/N Williston Rd/Exit 170	84.4	196
I-95	US-52/W Lucas St/Exit 164	&	Tv Rd/Exit 169	84.1	197
I-26	SC-34/Exit 74	&	SC-219/Exit 76	83.8	198
I-95	SC-13/SC-S-27-13 Ext	&	SC-336	82.1	199
I-77	US-21/SC-5/Exit 77	&	SC-122/Dave Lyle Blvd/Exit 79	81.9	200
I-26	SC-121/Exit 72	&	SC-34/Exit 74	81.7	201
I-95	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	81.1	202
I-385	Harrison Bridge Rd/Exit 26	&	Fairview Rd/Exit 27	80.9	203
I-77	US-21/Exit 82	&	SC-161/Exit 82	80.7	204
I-95	US-17 (Ridgeland) (South)	&	SC-462	80.5	205
I-585	California Ave/Exit 24	&	Exit 24	80.3	206
I-26	SC-292/Exit 10	&	US-176/Exit 15	79.9	207
I-26	Ridgeville Rd	&	Jedburg Rd	79.6	208
I-95	SC-336	&	US-17 (Ridgeland) (South)	79.3	209
I-26	Road 32/Exit 66	&	SC-121/Exit 72	79.2	210
I-26	SC-66/Exit 60	&	Road 32/Exit 66	79.1	211
I-26	SC-72/Exit 54	&	SC-66/Exit 60	79.0	212
I-95	US-78/W Jim Bilton Blvd/Exit 77	&	US-178/Charleston Hwy/Exit 82	78.7	213
I-26	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	78.5	214
I-585	SC-9/Exit 25	&	California Ave/Exit 24	76.6	215
I-95	SC-61/Augusta Hwy/Exit 68	&	US-78/W Jim Bilton Blvd/Exit 77	76.4	216
I-20	US-178/Exit 39	&	SC-34/Exit 44	75.5	217
I-385	Fairview St/Exit 24	&	Harrison Bridge Rd/Exit 26	75.4	218
I-95	SC-68/Yemassee Hwy	&	US-21/Low Country Hwy	74.6	219
I-95	McLeod Rd/Exit 62	&	SC-61/Augusta Hwy/Exit 68	74.0	220
I-95	SC-64/Bells Hwy/Exit 57	&	McLeod Rd/Exit 62	74.0	221
I-95	US-17 (Ridgeland) (North)	&	SC-68/Yemassee Hwy	73.9	222
I-95	US-21/Low Country Hwy	&	SC-63/Sniders Hwy/Exit 53	73.7	223
I-20	Road 49/Exit 29	&	SC-39/Exit 33	73.1	224
I-20	SC-144/Exit 11	&	SC-19/Exit 18	72.6	225

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between		Two-Way Density Index	Segment Rank
I-20	SC-39/Exit 33	& US-178/Exit 39	72.2	226
I-95	SC-63/Sniders Hwy/Exit 53	& SC-64/Bells Hwy/Exit 57	72.1	227
I-20	US-1/Exit 22	& Road 49/Exit 29	71.5	228
I-20	SC-19/Exit 18	& US-1/Exit 22	69.9	229
I-26	SC-11/Exit 5	& SC-292/Exit 10	69.8	230
I-95	SC-327/N Williston Rd/Exit 170	& SC-38/Exit 181	69.8	231
I-20	US-521/Exit 98	& Humphries Rd/Exit 101	69.6	232
I-385	SC-101/Exit 16	& SC-14/Exit 19	69.0	233
I-95	SC-38/Exit 181	& SC-34/Exit 190	67.7	234
I-526	US-17	& SC-17 Bus	67.6	235
I-20	Humphries Rd/Exit 101	& Jamestown Rd/Exit 108	67.1	236
I-95	SC-9/Radford Blvd/Exit 193	& US-301/Exit 1	66.9	237
I-26	SC-453	& Ridgeville Rd	66.5	238
I-95	SC-34/Exit 190	& SC-9/Radford Blvd/Exit 193	66.4	239
I-26	NC State Line	& SC-14/Exit 1	66.3	240
I-26	SC-14/Exit 1	& SC-11/Exit 5	66.0	241
I-20	Jamestown Rd/Exit 108	& US-15/Exit 116	64.3	242
I-385	Road 23/Exit 10	& SC-101/Exit 16	64.2	243
I-20	SC-340/Exit 137	& I-95/Exit 141	63.5	244
I-385	US-221/Exit 9	& Road 23/Exit 10	62.7	245
I-26	I-95	& US-15	62.5	246
I-26	US-15	& SC-453	62.3	247
I-95	US-15/US-301/Exit 97	& SC-6/Exit 98	61.8	248
I-95	SC-6/Exit 98	& US-15/US-301/Exit 102	61.3	249
I-26	US-221/Exit 28	& Frontage Rd 35/Exit 35	58.9	250
I-95	US-76/W Palmetto St/Exit 157	& I-20/Exit 160	58.2	251
I-385	SC-49/Exit 5	& US-221/Exit 9	57.1	252
I-95	US-15/US-301/Exit 102	& Buff Blvd/Exit 108	56.0	253
I-26	Frontage Rd 35/Exit 35	& SC-146/Exit 38	55.8	254
I-95	Center Rd/Exit 153	& US-76/W Palmetto St/Exit 157	55.8	255
I-20	US-401/Exit 131	& SC-340/Exit 137	55.8	256
I-385	SC-308/Exit 2	& SC-49/Exit 5	55.7	257
I-95	I-26/Exit 86	& US-176/Old Hwy/Exit 90	54.4	258
I-26	SC-146/Exit 38	& SC-92/Exit 41	54.3	259
I-95	SC-403/Cale Yarborough Hwy/Exit 150	& Center Rd/Exit 153	54.0	260
I-95	US-301/Exit 115	& SC-261/Paxville Hwy/Exit 119	53.5	261
I-95	US-15/Bass Dr/Exit 93	& US-15/US-301/Exit 97	53.0	262
I-385	I-26	& SC-308/Exit 2	52.8	263
I-95	SC-261/Paxville Hwy/Exit 119	& US-521/Exit 122	52.7	264
I-95	US-176/Old Hwy/Exit 90	& US-15/Bass Dr/Exit 93	52.6	265
I-20	US-15/Exit 116	& SC-341/Exit 120	52.5	266
I-20	SC-341/Exit 120	& SC-22/Exit 123	52.5	267
I-95	Buff Blvd/Exit 108	& US-301/Exit 115	52.4	268
I-20	SC-22/Exit 123	& US-401/Exit 131	51.5	269
I-95	SC-341/Lynches River Rd/Exit 146	& SC-403/Cale Yarborough Hwy/Exit 150	51.3	270

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS RANKING**

Interstate	Segment Between		Two-Way Density Index	Segment Rank	
I-26	SC-92/Exit 41	&	SC-49/Exit 44	51.2	271
I-95	SC-53/Narrow Paved Rd/Exit 141	&	SC-341/Lynches River Rd/Exit 146	50.5	272
I-95	US-378/Myrtle Beach Hwy/Exit 135	&	SC-53/Narrow Paved Rd/Exit 141	50.0	273
I-185	SC-20/Exit 2	&	Henrydale Ave/Mills Ave	49.7	274
I-26	SC-49/Exit 44	&	I-385	49.3	275
I-95	US-521/Exit 122	&	SC-527/Black River Rd/Exit 132	48.7	276
I-95	SC-527/Black River Rd/Exit 132	&	US-378/Myrtle Beach Hwy/Exit 135	48.5	277
I-185	I-85/US-29	&	US-25/White Horse Rd/Exit 1	48.3	278
I-185	US-25/White Horse Rd/Exit 1	&	SC-20/Exit 2	48.2	279
I-520	GA State Line	&	US-1/US-278/Jefferson Davis Hwy	45.0	280
I-185	I-385/Neely Ferry Rd/Exit 1A	&	SC-417	19.8	281
I-185	SC-417	&	I-385/Exit 1B	19.4	282
I-185	I-385/Exit 1B	&	Fork Shoals Rd/Exit 4	18.6	283
I-185	SC-20/Piedmont Hwy/Exit 10	&	SC-153/Exit 12	17.6	284
I-185	Fork Shoals Rd/Exit 4	&	US-25/Augusta Rd/Exit 7	15.8	285
I-185	US-25/Augusta Rd/Exit 7	&	SC-20/Piedmont Hwy/Exit 10	15.4	286
I-185	SC-153/Exit 12	&	I-85/US-29	9.0	287

**INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE CORRIDORS RANKED**

Corridor Rank	Interstate	Corridor Between		Approximate Length (mi)	Location	Urban/Rural	Average Corridor Density Index
1	I-526	US-17/Savannah Hwy	& US-52/Rivers Ave	8	Charleston	Urban	189.6
2	I-85	US-29/Exit 34	& I-26/Exit 70	36	Greenville	Urban	180.6
3	I-26	Columbia Ave/Exit 91	& US-21/US-176/Exit 119	28	Columbia	Urban	168.9
4	I-526	US-52/Rivers Ave	& SC-703/Ben Sawyer Bl/Coleman Bl	12	Charleston	Urban	151.8
5	I-20	SC-204/Exit 51	& White Pond Rd/Exit 87	36	Columbia	Urban	151.5
6	I-85	I-26/Exit 70	& SC-110/Exit 83	13	Spartanburg	Urban	142.9
7	I-85	SC-110/Exit 83	& US-29/Exit 106	23	North of Spartanburg	Rural	137.3
8	I-26	Jedburg Rd	& US 17	27	Charleston	Urban	132.3
9	I-77	I-26/Exit 1	& SC-34/Exit 34	33	Columbia	Urban	130.2
10	I-385	Fairview St/Exit 24	& End of Freeway	18	Greenville	Urban	124.0
11	I-26	US-176/Exit 15	& US-221/Exit 28	13	Spartanburg	Urban	118.1
12	I-85	GA State Line	& US-29/Exit 34	34	South of Greenville	Urban	117.5
13	I-77	SC-901/Exit 73	& US-21/Carowinds Blvd/Exit 90	23	Rock Hill	Urban	115.1
14	I-20	GA State Line	& SC-144/Exit 11	11	Augusta	Rural	110.6
15	I-26	US-21/US-176/Exit 119	& I-95	50	b/w Columbia & Charleston	Rural	106.3
16	I-77	SC-34/Exit 34	& SC-901/Exit 73	39	b/w Columbia & Rock Hill	Rural	103.5
17	I-126	I-26	& Huger St	3	Columbia	Urban	101.7
18	I-585	US-221/Exit 25	& I-85 Bus/Exit 23	2	Spartanburg	Urban	85.4
19	I-95	GA State Line	& I-26/Exit 86	86	South of I-26	Rural	79.9
20	I-26	US-221/Exit 28	& Columbia Ave/Exit 91	63	b/w Columbia & Spartanburg	Rural	75.5
21	I-95	I-20/Exit 160	& US-301/Exit 1	34	North of I-20	Urban/Rural	75.2
22	I-20	SC-144/Exit 11	& SC-204/Exit 51	40	b/w Augusta & Columbia	Rural	74.4
23	I-385	I-26	& Fairview St/Exit 24	24	South of Greenville	Rural	73.8
24	I-26	NC State Line	& US-176/Exit 15	15	West of Spartanburg	Rural	70.5
25	I-26	I-95	& Jedburg Rd	25	b/w Columbia & Charleston	Rural	67.7
26	I-20	White Pond Rd/Exit 87	& I-95/Exit 141	54	b/w Columbia & Florence	Urban/Rural	66.7
27	I-95	I-26/Exit 86	& I-20/Exit 160	74	b/w I-26 & I-20	Urban/Rural	53.8
28	I-520	GA State Line	& US-1/US-278/Jefferson Davis Hwy	1	Augusta	Urban	45.0
29	I-185	I-385/Neely Ferry Rd/Exit 1A	& Henrydale Ave/Mills Ave	16	Greenville	Rural	26.2



APPENDIX D: ENVIRONMENTAL SCREENING

Under the provisions of MAP-21 as codified in 23 U.S.C § 150(b), the federal government has established seven (7) national goals for the federal-aid highway program. One of those goals is “Environmental Sustainability”, which requires the enhancement of the transportation system “while protecting and enhancing the natural environment”. At the state level, under Section 57-1-370(B)(8) as revised by the passage of Act 114 in 2007, South Carolina has established a set of criteria to be used for project identification and prioritization of transportation projects to be included in the Statewide Transportation Improvement Program (STIP) and receive federal funding.

The criteria set forth by Act 114 impact transportation projects identified by not only COGs and MPOs within the state but the SCDOT as well. For COGs and MPOs, this set of criteria includes the requirement for an assessment of environmental impact for new facility, widening, and intersection projects. For SCDOT, the revisions to Sections 57-1-370 and 57-1-460 under Act 114 required SCDOT to revise regulations for the project selection process for bridge replacement, Interstate rehabilitation, non-Interstate road resurfacing, safety, Interstate mainline capacity, and other forms of Interstate projects. Transportation projects identified by the SCDOT that must include an assessment of environmental impact include those for bridge replacement and Interstate and interchange facility capacity and upgrades in addition to those projects identified for COGs and MPOs.

In order for projects to be identified, prioritized, and funded on the Interstate system, a baseline of potential environmental impacts must be established. The environmental impact assessment determines the potential impacts to cultural, natural, and social resources in association with a particular transportation project and of those areas, which may be impacted by implementation of the said project. SCDOT conducted an environmental impact assessment for the use of establishing a baseline impact analysis for the Interstate Plan. Further discussion below describes the methodology and results of the environmental assessment.

Methodology

The environmental assessment conducted to establish the potential baseline of environmental impacts was completed for each Interstate segment of each Interstate route. This assessment reviewed four resource areas to determine impacts to cultural, natural, and social resources for Interstate segments. Those four resource areas included: (1) wetlands, (2) streams, (3) threatened and endangered species, and (4) cultural resources.

SCDOT established a scoring system to rank each resource area. Wetlands and cultural resources were scored by the amount of acres, streams by the amount of associated miles, and threatened and endangered species by the amount of species identified in the area. Each resource area received a score between 0 to 2, with 0 indicating low to no observations of the identified resources within the area of an Interstate segment and 2 indicating significant amount of observations. After assessment of each area, the scores were averaged to develop a total resource ranking for the Interstate segments.

The results of the scoring for each of the four resource areas provided an average ranking score as determined by the SCDOT. In order to illustrate the results, a GIS classification method called “natural breaks” was used to arrange the average ranking scores into a three-class ranking system. This three-

class ranking is displayed as Low, Medium, and High Impact. Interstate segments ranked Low will have little to no impact to environmental resources in relation to the weak presence of these resources around a particular segment. However, Interstate segments ranked High will have significant impacts due to the strong presence of environmental resources within the area of the segment. Percentages were calculated by summing the length of Interstate segments assessed with a specific ranking (Low, Medium, and High) and dividing by the total length of Interstate segments for each Interstate route.

Analysis Results

Figure D1 illustrates the environmental impact along the Interstates. **Table D1** displays the results of the average ranking scores for each Interstate to provide a general illustration how Interstate projects may impact the identified resources. Overall, the majority of the Interstate segments are ranked Low with only approximately 4 percent of Interstate segments ranked as having a High impact on environmental conditions.

Table D1: Environmental Impact along the Interstates

Interstate	Length (mi)	Environmental Impact Ranking (by Length)		
		Low	Medium	High
I-20	143.0	45%	52%	3%
I-26	232.1	74%	26%	0%
I-77	92.9	80%	11%	9%
I-85	108.6	90%	6%	4%
I-95	169.2	53%	42%	5%
I-126	3.7	0%	50%	50%
I-185	16.4	88%	12%	0%
I-385	43.2	84%	16%	0%
I-520	8.0	20%	18%	62%
I-526	19.6	44%	26%	30%
I-585	2.3	1%	99%	0%
Overall	838.8	67%	29%	4%

I-85 has the highest percentage of segments ranked as having Low impacts and I-520 has the highest percentage of segments ranked as having High impacts. I-77 has the most Interstate miles ranked as having a High impact with approximately 8.3 miles in the Columbia area, which has also been identified as a major congested Interstate corridor. Though I-520 contains the highest percentage of having a High impact ranking, the individual Interstate segments are some of the lowest in the congestion ranking.

Figure D1: Environmental Impact along the Interstates

