

## HCS 2010: Basic Freeway Segments Release 6.1

Florence & Hutcheson  
501 Huger Street  
Columbia, SC 29201

Phone: (803)254-5800  
E-mail:

Fax: (803)929-0334

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: BEGIN TO US 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	6412	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1781	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1941	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1941	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	57.9	mi/h
Number of lanes, N	4	
Density, D	33.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: AT 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	6058	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1683	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1834	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1834	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	59.0	mi/h
Number of lanes, N	4	
Density, D	31.1	pc/mi/ln
Level of service, LOS	D	

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## Operational Analysis

Analyst: NJ  
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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: 276 EB to 276 WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	6388	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1774	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1934	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	1934	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	58.0	mi/h
Number of lanes, N	4	
Density, D	33.4	pc/mi/ln
Level of service, LOS	D	

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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: at 276 WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	5563	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1545	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1684	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1684	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	59.9	mi/h
Number of lanes, N	4	
Density, D	28.1	pc/mi/ln
Level of service, LOS	D	

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: US 276 to Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	6350	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1764	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1923	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1923	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	58.1	mi/h
Number of lanes, N	4	
Density, D	33.1	pc/mi/ln
Level of service, LOS	D	

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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: I-85NB CD off to I-85NB CD on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	3743	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1040	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1133	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1133	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	18.9	pc/mi/ln
Level of service, LOS	C	

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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: C-D Ramp to I-385 on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	4384	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1218	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1327	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1327	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	22.1	pc/mi/ln
Level of service, LOS	C	

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### Operational Analysis

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Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: I-385 to Pel ham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

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Volume, V	7864	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2184	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2381	pc/h/ln

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### Speed Inputs and Adjustments

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2381	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	48.9	mi/h
Number of lanes, N	4	
Density, D	48.7	pc/mi/ln
Level of service, LOS	F	

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: Pelham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	5404	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1501	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1636	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1636	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	27.3	pc/mi/ln
Level of service, LOS	D	

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 Operational Analysis
 

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Analyst: NJ  
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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: Pelham Rd eb on to wb on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	6535	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1815	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1979	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1979	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	57.4	mi/h
Number of lanes, N	4	
Density, D	34.5	pc/mi/ln
Level of service, LOS	D	

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 Operational Analysis
 

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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 NB  
From/To: Pelham Rd to End  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	7392	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2053	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2238	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	2238	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	52.6	mi/h
Number of lanes, N	4	
Density, D	42.5	pc/mi/ln
Level of service, LOS	E	

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## Operational Analysis

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Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: BEGIN TO US 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	6609	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1836	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2001	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2001	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	57.1	mi/h
Number of lanes, N	4	
Density, D	35.1	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: AT 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	4933	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1370	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1494	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1494	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	24.9	pc/mi/ln
Level of service, LOS	C	

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Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: 276 EB to 276 WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	5550	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1542	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1680	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	1680	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	59.9	mi/h
Number of lanes, N	4	
Density, D	28.1	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

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Fax: (803)929-0334

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: at 276 WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

---

Volume, V	5044	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1401	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1527	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1527	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	25.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: US 276 to Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	5930	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1647	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1795	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	1795	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	59.3	mi/h
Number of lanes, N	4	
Density, D	30.3	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.



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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: I-85NB CD off to I-85NB CD on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

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Volume, V	3259	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	905	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	987	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	987	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	16.5	pc/mi/ln
Level of service, LOS	B	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: I-85NB C-D Ramp to I-385 on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	5346	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1485	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1619	pc/h/ln

---

 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1619	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	27.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: I-385 to Pel ham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	9734	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2704	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2947	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2947	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	27.1	mi/h
Number of lanes, N	4	
Density, D	108.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: Pelham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

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Volume, V	6960	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1933	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2107	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2107	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	55.3	mi/h
Number of lanes, N	4	
Density, D	38.1	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: Pelham Rd WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	8341	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2317	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2525	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2525	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	44.5	mi/h
Number of lanes, N	4	
Density, D	56.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: Nj  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: Pelham Rd to End  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	9468	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2630	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2867	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2867	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	30.8	mi/h
Number of lanes, N	4	
Density, D	92.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: US 276 EB TO BEGIN  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	7213	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2004	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2184	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2184	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	53.8	mi/h
Number of lanes, N	4	
Density, D	40.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

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Volume, V	6598	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1833	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1998	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	1998	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	57.1	mi/h
Number of lanes, N	4	
Density, D	35.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.



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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: at US 276  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	7663	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2129	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2320	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2320	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	50.6	mi/h
Number of lanes, N	4	
Density, D	45.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: 276 WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	6172	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1714	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1869	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	1869	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	58.7	mi/h
Number of lanes, N	4	
Density, D	31.8	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: TCA  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: Woodruff Rd to US 276  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

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Volume, V	6840	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1900	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2071	pc/h/ln

---

 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	2071	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	56.0	mi/h
Number of lanes, N	4	
Density, D	37.0	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

Florence & Hutcheson  
501 Huger Street  
Columbia, SC 29201

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Fax: (803)929-0334

---

 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: I-85SB C-D on - Woodruff  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	6004	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1668	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1818	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	1818	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	59.1	mi/h
Number of lanes, N	4	
Density, D	30.7	pc/mi/ln
Level of service, LOS	D	

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: I-85SB C-D off - I-85SB C-D on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

---

Volume, V	3949	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1097	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1196	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	1196	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	19.9	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: Pelham Rd to I-385  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	8859	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2461	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2682	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2682	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	38.7	mi/h
Number of lanes, N	4	
Density, D	69.2	pc/mi/ln
Level of service, LOS	F	

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: Pelham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	6910	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1919	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2092	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2092	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	55.6	mi/h
Number of lanes, N	4	
Density, D	37.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: Pelham Rd WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	6467	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1796	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1958	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	1958	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	57.7	mi/h
Number of lanes, N	4	
Density, D	34.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.



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 Operational Analysis
 

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Analyst: NJ  
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Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-85 SB  
From/To: End to Pelham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

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Volume, V	9250	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2569	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2801	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2801	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	33.8	mi/h
Number of lanes, N	4	
Density, D	82.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: US 276 EB TO BEGIN  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

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Volume, V	9009	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2503	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2728	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2728	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	36.9	mi/h
Number of lanes, N	4	
Density, D	73.9	pc/mi/ln
Level of service, LOS	F	

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	8183	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2273	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2478	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2478	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	46.0	mi/h
Number of lanes, N	4	
Density, D	53.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: at US 276  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	8897	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2471	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2694	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2694	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	38.3	mi/h
Number of lanes, N	4	
Density, D	70.4	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: 276 WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	8006	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2224	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2424	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2424	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	47.7	mi/h
Number of lanes, N	4	
Density, D	50.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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---

 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: Woodruff Rd to US 276  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	8610	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2392	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2607	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2607	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	41.6	mi/h
Number of lanes, N	4	
Density, D	62.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: I-85SB C-D on - Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	7192	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1998	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2178	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2178	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	53.9	mi/h
Number of lanes, N	4	
Density, D	40.4	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: I-85SB C-D off - I-85SB C-D on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	5200	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1444	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1574	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	1574	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	60.0	mi/h
Number of lanes, N	4	
Density, D	26.2	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.



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501 Huger Street  
Columbia, SC 29201

Phone: (803)254-5800  
E-mail:

Fax: (803)929-0334

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: Pelham Rd to I-385  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	9099	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2528	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2755	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	2755	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	35.8	mi/h
Number of lanes, N	4	
Density, D	77.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

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---

 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: Pelham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	7579	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2105	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2295	pc/h/ln

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 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	2295	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	51.2	mi/h
Number of lanes, N	4	
Density, D	44.8	pc/mi/ln
Level of service, LOS	E	

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: Pelham Rd WB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

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Volume, V	6789	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1886	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2056	pc/h/ln

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### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2056	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	56.2	mi/h
Number of lanes, N	4	
Density, D	36.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: End to Pelham Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	7927	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2202	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2400	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	60.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	60.0	mi/h

## LOS and Performance Measures

Flow rate, vp	2400	pc/h/ln
Free-flow speed, FFS	60.0	mi/h
Average passenger-car speed, S	48.4	mi/h
Number of lanes, N	4	
Density, D	49.6	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Begin to Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	5999	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1666	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2422	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2422	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	45.4	mi/h
Number of lanes, N	3	
Density, D	53.3	pc/mi/ln
Level of service, LOS	F	

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 Operational Analysis
 

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Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	5548	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1541	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2240	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2240	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	50.2	mi/h
Number of lanes, N	3	
Density, D	44.6	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Butler Rd to Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

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Volume, V	6847	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1902	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2764	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2764	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	32.1	mi/h
Number of lanes, N	3	
Density, D	86.2	pc/mi/ln
Level of service, LOS	F	

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	5742	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1595	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2318	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2318	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	48.4	mi/h
Number of lanes, N	3	
Density, D	47.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.



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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Woodruff Rd to I-85  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	7506	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2085	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3030	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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### LOS and Performance Measures

---

Flow rate, vp	3030	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	17.6	mi/h
Number of lanes, N	3	
Density, D	171.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: I-85NB ramp - I-85SB ramp  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	5673	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1576	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2290	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2290	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	49.1	mi/h
Number of lanes, N	3	
Density, D	46.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: I-85 sb off to I-85 on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	4490	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1247	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1813	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	1813	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	33.0	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: I-85 to Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

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Volume, V	7566	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2102	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2291	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2291	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	49.0	mi/h
Number of lanes, N	4	
Density, D	46.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

---

Volume, V	4999	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1389	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2018	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2018	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	53.8	mi/h
Number of lanes, N	3	
Density, D	37.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 NB  
From/To: Roper Mtn Rd to End  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	5726	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1591	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2312	pc/h/ln

---

 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	2312	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	48.5	mi/h
Number of lanes, N	3	
Density, D	47.6	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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---

### Operational Analysis

---

Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Begin to Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

---

Volume, V	6638	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1844	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2680	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2680	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	35.9	mi/h
Number of lanes, N	3	
Density, D	74.7	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

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---

 Operational Analysis
 

---

Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	6270	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1742	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2531	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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 LOS and Performance Measures
 

---

Flow rate, vp	2531	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	41.8	mi/h
Number of lanes, N	3	
Density, D	60.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.



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## Operational Analysis

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Butler Rd to Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

## Flow Inputs and Adjustments

Volume, V	7708	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2141	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3112	pc/h/ln

## Speed Inputs and Adjustments

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

## LOS and Performance Measures

Flow rate, vp	3112	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	12.5	mi/h
Number of lanes, N	3	
Density, D	249.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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---

 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

---

Volume, V	6585	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1829	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2658	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

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Flow rate, vp	2658	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	36.8	mi/h
Number of lanes, N	3	
Density, D	72.2	pc/mi/ln
Level of service, LOS	F	

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Woodruff Rd to I-85 nb off  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	8234	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2287	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3324	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	3324	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	3	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: I-85NB ramp - I-85SB ramp  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	6359	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1766	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2567	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

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Flow rate, vp	2567	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	40.5	mi/h
Number of lanes, N	3	
Density, D	63.4	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: I-85 sb off to I-85 on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	5358	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1488	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2163	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2163	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	51.7	mi/h
Number of lanes, N	3	
Density, D	41.8	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: I-85 to Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	8318	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2311	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2519	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2519	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	42.2	mi/h
Number of lanes, N	4	
Density, D	59.6	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

---

Volume, V	6874	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1909	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2775	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2775	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	31.5	mi/h
Number of lanes, N	3	
Density, D	88.0	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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---

 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 NB  
From/To: Roper Mtn Rd to End  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	8203	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2279	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3312	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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 LOS and Performance Measures
 

---

Flow rate, vp	3312	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	3	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.



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### Operational Analysis

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Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: Butler Rd to Begin  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	3541	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	984	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1430	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	1430	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	26.0	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

---

Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	3199	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	889	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1291	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	1291	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	23.5	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: Woodruff Rd to Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	4326	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1202	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1746	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	1746	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	31.7	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

Florence & Hutcheson  
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---

 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	4023	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1118	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1624	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	1624	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	29.5	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: I-85 to Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	5912	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1642	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2387	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2387	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	46.5	mi/h
Number of lanes, N	3	
Density, D	51.3	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: I-85SB ramp to I-85NB ramp  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	5095	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1415	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2057	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2057	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	53.4	mi/h
Number of lanes, N	3	
Density, D	38.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: I-85 off to I-85 sb on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	3030	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	842	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1223	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	1223	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	22.2	pc/mi/ln
Level of service, LOS	C	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: Roper Mtn Rd to I-85  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	5626	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1563	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1703	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	1703	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	4	
Density, D	31.0	pc/mi/ln
Level of service, LOS	D	

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### Operational Analysis

---

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Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	4267	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1185	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	1723	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	1723	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	55.0	mi/h
Number of lanes, N	3	
Density, D	31.3	pc/mi/ln
Level of service, LOS	D	

Overall results are not computed when free-flow speed is less than 55 mph.

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---

 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: AM  
Freeway/Direction: I-385 SB  
From/To: End to Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	5543	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1540	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2238	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2238	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	50.3	mi/h
Number of lanes, N	3	
Density, D	44.5	pc/mi/ln
Level of service, LOS	E	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: Butler Rd to Begin  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	7376	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2049	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2978	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2978	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	20.7	mi/h
Number of lanes, N	3	
Density, D	143.6	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

---

Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 6/23/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	6726	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1868	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fhv	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2715	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, FLW	-	mi/h
Lateral clearance adjustment, FLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2715	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	34.3	mi/h
Number of lanes, N	3	
Density, D	79.1	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: Woodruff Rd to Butler Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	7893	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2193	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3186	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	3186	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	7.6	mi/h
Number of lanes, N	3	
Density, D	420.8	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	7010	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1947	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2830	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	2830	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	28.8	mi/h
Number of lanes, N	3	
Density, D	98.2	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: I-85 to Woodruff Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

 Flow Inputs and Adjustments
 

---

Volume, V	8924	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2479	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3603	pc/h/ln

---

 Speed Inputs and Adjustments
 

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

 LOS and Performance Measures
 

---

Flow rate, vp	3603	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	3	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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### Operational Analysis

---

Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: I-85SB ramp to I-85NB ramp  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

---

### Flow Inputs and Adjustments

---

Volume, V	7352	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2042	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2968	pc/h/ln

---

### Speed Inputs and Adjustments

---

Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

---

### LOS and Performance Measures

---

Flow rate, vp	2968	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	21.3	mi/h
Number of lanes, N	3	
Density, D	139.2	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.



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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: I-85 off to I-85 sb on  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

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Volume, V	6180	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1717	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2495	pc/h/ln

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### Speed Inputs and Adjustments

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2495	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	43.1	mi/h
Number of lanes, N	3	
Density, D	57.9	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

## HCS 2010: Basic Freeway Segments Release 6.1

Florence & Hutcheson  
501 Huger Street  
Columbia, SC 29201

Phone: (803)254-5800  
E-mail:

Fax: (803)929-0334

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: Roper Mtn Rd to I-85  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	10149	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2819	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3073	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	4	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	3073	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	15.0	mi/h
Number of lanes, N	4	
Density, D	205.0	pc/mi/ln
Level of service, LOS	F	

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### Operational Analysis

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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### Flow Inputs and Adjustments

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Volume, V	7256	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2016	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	2929	pc/h/ln

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### Speed Inputs and Adjustments

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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### LOS and Performance Measures

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Flow rate, vp	2929	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	23.5	mi/h
Number of lanes, N	3	
Density, D	124.5	pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-385 SB  
From/To: End to Roper Mtn Rd  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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Volume, V	8498	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	2361	v
Trucks and buses	18	%
Recreational vehicles	0	%
Terrain type:	Level	
Grade	-	%
Segment length	-	mi
Trucks and buses PCE, ET	1.5	
Recreational vehicle PCE, ER	1.2	
Heavy vehicle adjustment, fHV	0.917	
Driver population factor, fp	1.00	
Flow rate, vp	3431	pc/h/ln

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 Speed Inputs and Adjustments
 

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Lane width	-	ft
Right-side lateral clearance	-	ft
Total ramp density, TRD	-	ramps/mi
Number of lanes, N	3	
Free-flow speed:	Measured	
FFS or BFFS	55.0	mi/h
Lane width adjustment, fLW	-	mi/h
Lateral clearance adjustment, fLC	-	mi/h
TRD adjustment	-	mi/h
Free-flow speed, FFS	55.0	mi/h

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 LOS and Performance Measures
 

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Flow rate, vp	3431	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S		mi/h
Number of lanes, N	3	
Density, D		pc/mi/ln
Level of service, LOS	F	

Overall results are not computed when free-flow speed is less than 55 mph.