

Florence & Hutcheson  
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### Operational Analysis

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Analyst: JP  
Agency or Company: Florence & Hutcheson  
Date Performed: 8/24/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 NB  
From/To: I-85 to I-85NB (RAMP)  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 Alternate 4A

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### Flow Inputs and Adjustments

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Volume, V	4388	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1219	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	1771	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	1771	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	32.2	pc/mi/ln
Level of service, LOS	D	

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