

Florence & Hutcheson  
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### Operational Analysis

Analyst: JP  
 Agency or Company: Florence & Hutcheson  
 Date Performed: 8/24/2011  
 Analysis Time Period: AM  
 Freeway/Direction: I-85 SB C-D  
 From/To: BEGIN TO I-385 NB EXIT  
 Jurisdiction: Greenville, SC  
 Analysis Year: 2035  
 Description: I-85/I-385 Alternate 4A

### Flow Inputs and Adjustments

Volume, V	4910	veh/h
Peak-hour factor, PHF	0.90	
Peak 15-min volume, v15	1364	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	1982	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	1982	pc/h/ln
Free-flow speed, FFS	55.0	mi/h
Average passenger-car speed, S	54.2	mi/h
Number of lanes, N	3	
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.