

HCS 2010: Basic Freeway Segments Release 6.1

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Operational Analysis

Analyst: JP
Agency or Company: Florence & Hutcheson
Date Performed: 7/7/2011
Analysis Time Period: PM
Freeway/Direction: I-85 SB
From/To: 276 WB
Jurisdiction: Greenville, SC
Analysis Year: 2035
Description: I-85/I-385 Alternate 4A

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.