

SINGLE LANE BASIC FREEWAY SEGMENT WORKSHEET

General Information

Analyst: JP
 Agency or Company: Florence & Hutcheson
 Date Performed: 8/24/2011
 Analysis Time Period: AM

Site Information

Highway/Dir of Travel I-85 NB C-D
 From/To Woodruff Loop to I-85NB C-D
 Jurisdiction Greenville, SC
 Analysis Year 2035 Alternate 4A

Flow Inputs

Volume, V 1305 veh/h
 Driver Population, f_p 1
 General Terrain Level

Peak Hour Factor, PHF 0.90
 %Trucks and Buses, P_T 18%
 %RVs, P_R 0%

LOS and Performance Measures

$$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)} = 0.91743$$

$$V_P = \frac{V}{PHF * N * f_{HV} * f_p} = 1580.50$$

LOS	V_P (pc/h/ln)
A	600
B	990
C	1430
D	1910
E	2250

LOS: D

* From Exhibit 23-2 of the 2000 HCM - Maximum Service Flow Rate for a BFS with a FFS of 55mph.