

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-385 SB
 From/To I-385 SB to I-85 NB
 Jurisdiction Greenville, SC
 Analysis Year 2035 Alternate 4A

Flow Inputs

Volume, V 1647 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

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

$$V_P = \frac{V}{PHF * N * f_{HV} * f_p} = 1994.70$$

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

LOS: E

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