

SINGLE LANE BASIC FREEWAY SEGMENT WORKSHEET

General Information

Analyst: JP
 Agency or Company: Florence & Hutcheson
 Date Performed: 9/29/2011
 Analysis Time Period: PM

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 2010 Existing

Flow Inputs

Volume, V 846 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

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

$$V_P = \frac{V}{PHF * N * f_{HV} * f_p} = 1024.60$$

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

LOS: C

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