

Florence & Hutcheson
501 Huger Street
Columbia, SC 29201

Phone: (803)254-5800

Fax: (803)929-0334

E-mail:

Operational Analysis

Analyst: JP
Agency or Company: Florence & Hutcheson
Date Performed: 8/24/2011
Analysis Time Period: PM
Freeway/Direction: I-85 SB
From/To: I-85SB - I-85SB CD (RAMP)
Jurisdiction: Greenville, SC
Analysis Year: 2035
Description: I-85/I-385 Alternate 4A

Flow Inputs and Adjustments

| | | |
|-------------------------------|-------|---------|
| Volume, V | 3899 | veh/h |
| Peak-hour factor, PHF | 0.90 | |
| Peak 15-min volume, v15 | 1083 | 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 | 1574 | 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 | 1574 | pc/h/ln |
| Free-flow speed, FFS | 55.0 | mi/h |
| Average passenger-car speed, S | 55.0 | mi/h |
| Number of lanes, N | 3 | |
| Density, D | 28.6 | pc/mi/ln |
| Level of service, LOS | D | |

Overall results are not computed when free-flow speed is less than 55 mph.