

## HCS 2010: Basic Freeway Segments Release 6.1

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 Operational Analysis
 

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Analyst: NJ  
Agency or Company: Florence & Hutcheson  
Date Performed: 3/31/2011  
Analysis Time Period: PM  
Freeway/Direction: I-85 SB  
From/To: 276 EB  
Jurisdiction: Greenville, SC  
Analysis Year: 2035  
Description: I-85/I-385 No-Build

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 Flow Inputs and Adjustments
 

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|                               |       |         |
|-------------------------------|-------|---------|
| Volume, V                     | 8183  | veh/h   |
| Peak-hour factor, PHF         | 0.90  |         |
| Peak 15-min volume, v15       | 2273  | 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                 | 2478  | pc/h/ln |

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 Speed Inputs and Adjustments
 

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|                                   |          |          |
|-----------------------------------|----------|----------|
| 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     |

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 LOS and Performance Measures
 

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|                                |      |          |
|--------------------------------|------|----------|
| Flow rate, vp                  | 2478 | pc/h/ln  |
| Free-flow speed, FFS           | 60.0 | mi/h     |
| Average passenger-car speed, S | 46.0 | mi/h     |
| Number of lanes, N             | 4    |          |
| Density, D                     | 53.9 | pc/mi/ln |
| Level of service, LOS          | F    |          |

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