Charting a Course to 2040

SOUTH CAROLINA | MULTIMODAL TRANSPORTATION PLAN

INTERSTATE PLAN

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December 2014

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1 INTRODUCTION

The South Carolina Interstate Plan was developed in parallel and in close coordination with the 2040 South Carolina Multimodal Transportation Plan (MTP), as were similar plans for Strategic Corridor Network, Public Transit, Freight and Rail Plans. All of these plans have a common planning horizon of 2040, shared stakeholder and public outreach efforts, including a website[1], used the same SCDOT and national databases, and had a common foundation of statewide vision, goals, and objectives.

The Interstate Plan updates and replaces the previous plan developed in 2008, which had been prepared in parallel with the 2030 MTP. The purpose of the plan is to support South Carolina's statewide vision and goals by documenting existing and projected conditions on the state's interstate network in a way that is easily understood and helpful to all stakeholders and members of the public and to guide decision makers in investment decisions. The processes developed for this plan are consistent with state policies, use commonly available databases, are quantitative in nature and so repeatable, and provide the tools and information necessary to measure progress toward meeting goals and objectives as strategies and projects are implemented over time.

South Carolina's network of 11 Interstate freeways includes 851 centerline miles and 3,800 lane-miles of roadway. In 2013, vehicle-miles of travel (VMT) on this network amounted to 13.8 billion VMT, which accounted for 28 percent of total VMT in the state, even though Interstate highways account for only 2 percent of the lane-miles. Maintaining a safe and efficient interstate system is vital to moving people of goods throughout South Carolina. The existing and future interstate conditions analysis provides SCDOT with vital information on congested areas and bottlenecks where additional in-depth studies will be needed to identify investments required to improve investments. The analysis and output from the existing and future conditions will also be used in prioritizing interstate improvements based on Act 114 requirements.

The Interstate Plan has been updated using a revised methodology for determining interstate mainline capacity deficiencies with a new calculation of traffic congestion, which utilized probe speed data as part of the determination of freeway density for the entire interstate system. This approach is consistent with level of service determination for freeways in the 2010 *Highway Capacity Manual.* The Statewide Interstate Plan also reflects and references elements of the Statewide Multimodal Transportation Plan as well as the Statewide Freight Plan, Statewide Strategic Corridor Plan, the Statewide Transit and Human Services Coordination Plan, and the Statewide Rail Plan.

[1] www.scdot.org/Multimodal/

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2 GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

The vision statement of the 2040 MTP is ***Safe, reliable surface transportation and infrastructure that effectively supports a healthy economy for South Carolina.***

In addition to this vision statement, the following goals were developed during the development of the 2040 MTP.

MOBILITY AND SYSTEM RELIABILITY GOAL: Provide surface transportation infrastructure and services that will advance the efficient and reliable movement of people and goods throughout the state.

SAFETY GOAL: Improve the safety and security of the transportation system by implementing transportation improvements that reduce fatalities and serious injuries as well as enabling effective emergency management operations.

INFRASTRUCTURE CONDITION GOAL: Maintain surface transportation infrastructure assets in a state of good repair.

ECONOMIC AND COMMUNITY VITALITY GOAL: Provide an efficient and effective interconnected transportation system that is coordinated with the state and local planning efforts to support thriving communities and South Carolina's economic competitiveness in global markets.

ENVIRONMENTAL GOAL: Partner to sustain South Carolina's natural and cultural resources by minimizing and mitigating the impacts of state transportation improvements.

EQUITY GOAL: Manage a transportation system that recognizes the diversity of the state and strives to accommodate the mobility needs of all of South Carolina's citizens.

Plan goals and objectives define investment priorities and describe how SCDOT will work with its planning partners to achieve a shared transportation vision. Objectives for the 2040 MTP define the outcomes that SCDOT intends to achieve related to each goal. Performance measures "operationalize" that objective and define how that outcome will be measured, monitored, and reported. Performance targets will be established by SCDOT and the MPOs after FHWA provides the final performance management rules in 2016. Guiding Principles are implemented through process or policy changes or through enhanced relationships with local government, other state agencies, modal owners, and operators. The 2040 MTP vision, goals, objectives, performance measures, and guiding principles were developed in coordination with the State's transportation planning partners.

The specific 2040 MTP objectives, performance measures, and guiding principles relevant to the Interstate Plan are shown in **Table 2-1** through **Table 2-6**. The main focus of the Interstate Plan is analyzing existing and future congestion, which provides the basis for establishing future

improvement priorities. Interstate pavement, bridge conditions and safety issues are included in the Highway and Bridge and Safety and Security Technical Memorandums, as well as in the 2040 MTP.

Table 2-1: Mobility and System Reliability Goal

Objective	Measures
Reduce the number of system miles at unacceptable congestion levels.	Annual hours of delay on the Interstate, NHS and Strategic Corridor Network.
Improve the average speed on congested corridors.	Annual average speed of the congested interstate system corridors, as based upon probe speed data.
Improve travel time reliability (on priority corridors or congested corridors).	Travel time reliability Index.
Reduce the time it takes to clear incident traffic.	Average time to clear traffic incidents in urban areas.
Guiding Principles	
Encourage availability of both rail and truck modes to major freight hubs (ports, airports, intermodal facilities).	

Table 2-2: Safety Goal

Objective	Measures
Reduce roadway departure related fatality and serious injury crashes.	Number of roadway departure crashes involving fatality or injury.
Reduce highway fatalities and serious injuries.	Number or rate of fatalities and serious injuries (MAP-21 measure).
Reduce fatal and serious injury crashes within work zones.	Number of work zone fatal and serious injury crashes.
Reduce fatal and serious injury crashes at intersections	Number of crashes at intersections involving fatality or serious injury.
Reduce fatal and serious injury crashes involving commercial motor vehicle	Percent of commercial motor vehicle crashes involving fatality or serious injury
Guiding Principles	
Improve safety data collection, access, and analysis.	
Better integrate safety and emergency management considerations into project selection and decision making.	
Improve substandard roadways (one or more of the minimum current design standards are not met).	

Table 2-3: Infrastructure Condition Goal

Objective	Measures
Maintain or improve the current state of good repair for the National Highway System (NHS).	Number of Miles of interstate and NHS rated at “good” or higher condition.
Reduce the percentage of remaining state highway miles (non-interstate/strategic corridors) moving from a “fair” to a “very poor” rating while maintaining or increasing the percent of miles rated as “good.”	Percent of miles moving from “fair” to “very poor” condition. Percent of miles rated “good” condition.
Improve the condition of the state highway system bridges.	Percent of deficient bridge deck area (MAP-21 requirement).
Guiding Principles	
Recognize the importance of infrastructure condition in attracting new jobs to South Carolina by considering economic development when determining improvement priorities.	
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports, and intermodal facilities).	
Comply with Federal requirements for risk-based asset management planning while ensuring that State asset management priorities are also addressed.	

Table 2-4: Economic and Community Vitality Goal

Objective	Measure
Utilize the existing transportation system to facilitate enhanced freight movement to support a growing economy.	Truck travel time index on the freight corridor network, Annual hours of truck delay, Freight Reliability.
Guiding Principles	
Improve access and interconnectivity of the state highway system to major freight hubs (road, rail, marine, and air).	
Determine economic impacts of potential projects and include quantitative results in the Act 114 project prioritization process.	
Work with economic development partners to identify transportation investments that will improve South Carolina's economic competitiveness.	
Partner with public and private sectors to identify and implement transportation projects and services that facilitate freight movement.	
Encourage availability of both rail and truck modes to major freight hubs (for example ports, airports, and intermodal facilities).	

Table 2-5: Environmental Goal

Guiding Principles
Plan, design, construct, and maintain projects to avoid, minimize, and mitigate impact on the state's natural and cultural resources.
Improve travel time delay on the Interstate and Strategic Corridor Network to reduce Greenhouse Gas emissions.
Work with state and public transit agencies to purchase clean or alternative fueled transit vehicles to reduce Greenhouse Gas emissions
Partner to be more proactive and collaborative in avoiding vs. mitigating environmental impacts. Utilize Mitigation Forecast Model.
Work with environmental resource agency partners to explore the development of programmatic mitigation in South Carolina.

Table 2-6: Equity Goal

Guiding Principles
Ensure planning and project selection processes adequately consider rural accessibility and the unique mobility needs of specific groups.
Ensure broad-based public participation is incorporated into all planning and project development processes.

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3 RELATED STUDIES AND PRACTICES

As part of the development of the Interstate Plan, a review of previous studies and practices was undertaken to consider the impacts of intermodal connectivity in South Carolina, interstate plans of neighboring states, and several interstate feasibility studies conducted by SCDOT.

3.1 Intermodal Connectivity

Several large-scale port-related and airport-related projects are currently under construction in South Carolina that will have a significant impact on adjacent interstate operations in the near future. These large-scale projects and their associated impacts were included in the travel demand modeling of 2040 horizon-year conditions of the statewide model discussed in later sections. These projects are summarized in the following sections.

3.1.1 Port-Related Projects

Navy Base Container Terminal

The South Carolina State Ports Authority is currently constructing a new container port on the site of the former Charleston Naval Complex in North Charleston, South Carolina. The new container terminal covers approximately 280 acres and will consist of three container ship berths that will have an annual capacity of 1,400,000 Twenty-Foot Equivalent Units (TEU). The primary access to the Navy Base Container Terminal will be provided by the Port Access Road, a limited-access facility that will connect the port directly with I-26 near the existing North Meeting Street exit (#217).

Several studies have been completed with the development of the Navy Base Container Terminal site, which were reviewed as part of the development of the Interstate Plan, including the *Marine Container Terminal EIS Traffic Study* and the *Environmental Assessment for I-26 Improvements from I-526 to North Meeting Street.* The latter study considers the widening of I-26 between I-526 and North Meeting Street from six to eight/ten lanes and the reconstruction of the I-26 interchanges with Dorchester Road and Cosgrove Avenue due in part to area growth and the construction of the new container terminal.

South Carolina Inland Port

An Inland Port facility has recently been constructed by the South Carolina Ports Authority in Greer, South Carolina. The Inland Port facility, which began operations in October 2013, is located off of the Brockman McClimon Road exit (#58) along I-85 between Greenville and Spartanburg.

It is anticipated that approximately 100,000 containers will be moved annually at the Inland Port within the next five years via Norfolk Southern rail from the Port of Charleston, which will reduce the number of Port-related trucks traveling on I-26 from Charleston to the Upstate. With primary access

to the I-85 corridor, the Inland Port has the potential to be a significant economic generator for the region, and efficient traffic operations along I-85 will be important.

3.1.2 Airport-Related Projects

Charleston International Airport Terminal Expansion

Charleston County Aviation Authority has recently begun an expansion of the main passenger terminal at the Charleston International Airport, which will include six new gates, expanded concourses, a larger baggage claim area with the addition of the third baggage carousel, and a larger parking garage. The expansion is planned to be complete in four years, resulting in a 25 percent increase in overall terminal area. According to the aviation activity forecast contained in the *Charleston International Airport Master Plan Update* (2011), the airport authority projects annual growth of 3.2% in enplanements between 2010 and 2035.

Boeing South Carolina Expansion

Boeing currently employs approximately 6,600 employees at their North Charleston 787 plant adjacent to the Charleston International Airport and I-526. Boeing has committed to an additional 2,000 employees at the facility by 2020, resulting in a 30 percent increase in operations. Employment projections beyond 2020 are not available at this time; however, it is anticipated that Boeing will continue to grow beyond 2020. Recent studies in Charleston County have utilized an annual 3% growth factor to project Boeing employment beyond 2020, which would result in approximately 15,500 Boeing employees in 2040.

Airport Connector Road

To accommodate the growth of Charleston International Airport and Boeing, modifications to the local roadway network are being proposed by Charleston County. Currently, access to Charleston International Airport and Boeing is provided to I-526 through International Boulevard. The new Airport Connector Road roadway will provide a new access to Charleston International Airport to I-526 via Montague Avenue. This new access scenario was evaluated by SCDOT as part of an addendum to the I-526 Corridor Analysis Study. The results of the area growth and new roadway connection included recommendations for additional turn lanes along International Boulevard at the I-526 interchange and widening improvements along Montague Avenue and a new diverging diamond interchange form at the I-526 & Montague Avenue interchange. The area growth and new roadway connection did not change any of the recommendations along the I-526 mainline and ramps.

3.2 Neighboring Interstate Plans

A summary of the Interstate Plans of Georgia and North Carolina are summarized herein.

3.2.1 Georgia Department of Transportation (GDOT) Interstate System Plan

GDOT developed the Interstate System Plan for Georgia that identified improvements based on a comprehensive assessment of system travel demand and mobility needs through the horizon year

2035. As part of the development of the plan, potential funding sources to implement the projects were evaluated and proposed decision-making and project development guidelines were considered.

For analysis purposes, four categories of needs were identified: Congestion, Safety, System Preservation (bridges and pavement), and Connectivity (interchanges and access routes). The primary Congestion metric utilized in the GDOT Interstate System Plan analysis was the volume-to-capacity ratio for study segments, for both the existing and horizon-year timeframes.

In 2010, GDOT completed the widening of the entire length of I-95 in Georgia to six lanes, including up to the South Carolina state line. No GDOT improvements to I-85, I-20, or I-520 are planned or funded at the respective Georgia/South Carolina state lines.

3.2.2 North Carolina Strategic Prioritization

The North Carolina Department of Transportation has developed a strategic prioritization process that categorizes similar projects together into "buckets" where they are compared against each other using a data-driven methodology. The process focuses on highway mobility, highway modernization, bicycle and pedestrian, and public transportation.

In evaluating the performance of the highway mobility criteria, a number of quantitative data for congestion, safety, and project benefits compared to cost are considered, in addition to local input and multimodal characteristics. North Carolina's third version of the prioritization process, Prioritization 3.0, updated the Congestion criteria metric to include a weighted average of Travel Time Index information from INRIX (60 percent) and Existing Volume information (40 percent). In addition, the Benefit/Cost criteria metric was updated to consider future Travel Time Savings benefits based upon output from the North Carolina Statewide Travel Demand Model.

NCDOT has recently proposed future widening improvements to I-77 to include two new high-occupancy toll (HOT) lanes in each direction outside of Charlotte.

No NCDOT improvements to I-26, I-85, or I-95 are planned or funded at the respective North Carolina/South Carolina state lines.

3.3 Interstate Feasibility Studies Review

SCDOT has conducted several large-scale corridor-level studies for select segments of the South Carolina interstate system to identify improvements at high congestion locations and review the viability of implementing HOV/HOT along several major interstate corridors in the State. A summary of these studies are summarized in the following sections.

3.3.1 I-20/I-26/I-126 Plan of Action Study

Utilizing a Congestion Management Process, SCDOT developed a study of the I-26/I-20/I-126 corridor to address existing and future traffic volumes and congestion. Located in Richland and Lexington Counties, the three corridors are the crossroads of the South Carolina Interstate System. The study

consisted of an 8.5-mile segment of I-26, which included the two system-to-system interchanges of I-26 & I-20 and I-26 & I-126; the three-mile length of I-126; and a two-mile segment of I-20.

A study taskforce committee was established to develop a plan of action for the corridor. The study identified 39 strategies in four categories that could address the existing and future congestion needs of the corridor. The four categories consisted of strategies for: Travel Demand Management, Modal Options, Traffic Operations, and Capacity Improvements. Each strategy was evaluated based upon suitability and benefit-to-cost comparisons.

The results of the I-26/I-126/I-20 Plan of Action Study were utilized as one of the data sources when validating the Interstate Plan analyses discussed in Section 4.

3.3.2 Corridor Studies

In addition to the I-20/I-26/I-126 Plan of Action Study, SCDOT has conducted corridor studies for three other major interstate corridors. The studies include the three corridors identified in the previous Interstate Plan as being "mega" projects. Mega projects are defined as having improvement construction costs projected to exceed $400 million dollars for each project. The three mega projects consisted of I-26 in Lexington and Richland Counties, I-85 in Greenville and Spartanburg Counties, and I-526 in Charleston County. A corridor analysis for I-85 in Cherokee County has also recently been completed by SCDOT.

The goal of the corridor studies was to provide a holistic long-range management plan that did not just consider capacity needs, but also travel demand management and modal strategies to reduce future travel demand during the peak hours and traffic operations improvements to target specific, local congestion or safety issues. The analyses identified alternatives to resolve current congestion issues and address future ones. In addition to congestion relief benefits, all improvements were also evaluated on potential environmental impacts, right-of-way impacts, and cost. Alternatives were identified and evaluated for improvements ranging from near term and low-cost strategies to more costly future-year additional capacity strategies. It should be noted that a significant portion of the recommendations from these corridor studies have been programmed in the SCDOT TIP. The results of the corridor studies were utilized as one of the data sources when validating the Interstate Plan analyses discussed in Section 4. The extents of the three corridor studies are summarized below:

- I-85 Corridor Study (Greenville and Spartanburg Counties): conducted for a 22-mile segment of the I-85 corridor from US 25/White Horse Road to Fort Prince Boulevard in Greenville and Spartanburg Counties. I-85 is a vital transportation link in Upstate South Carolina and regionally between Atlanta and Charlotte, especially for the high demand of truck traffic.
- I-526 Corridor Study: conducted for a 9-mile segment from US 17/Savannah Highway to US 52/US 78/Rivers Avenue, including the I-26 and I-526 system-to-system interchange, in Charleston County. I-526 currently experiences high traffic volumes with considerable congestion during the weekday morning and afternoon peak periods. Future traffic volumes are expected to increase considerably with several large developments planned in the area.

- I-85 Corridor Study (Spartanburg and Cherokee Counties): conducted for the 26-mile corridor from Gossett Road to the North Carolina State line in Spartanburg and Cherokee Counties. As already notes, I-85 is a vital transportation link in Upstate South Carolina with heavy truck volumes.

It should be noted that SCDOT has identified three additional corridor studies to be initiated in the near future, including additional portions of I-85 in Greenville and Spartanburg Counties, I-26/I-20/I-77 in the Columbia area, and I-26 in the Charleston area.

3.3.3 HOV/HOT Feasibility Study

SCDOT conducted a feasibility assessment study of adding new High-Occupancy Vehicle (HOV) or High-Occupancy Toll (HOT) lanes on six major interstate corridors in South Carolina. The six locations consisted of I-385 in Greenville, I-77 in Rock Hill, I-26/I-126 in Columbia, I-20 and I-26 in Columbia, and I-26 in Charleston.

The study considered three basic analysis criteria: traffic congestion (existing and future), physical constraints, and user benefits and costs. The I-26 corridor in Charleston was selected for more detailed study after an initial screening process, as it provided the greatest opportunity for implementation of HOV or HOT lanes. Considering the traffic volume projections, the results of the study indicated that the implementation of HOV lanes would be viable in the intermediate term and the implementation of HOT lanes would be viable in the long term. However, numerous existing physical constraints along the corridor made the implementation of HOV and HOT lanes along I-26 in Charleston not cost effective or feasible. Therefore, further investigation of HOV/HOT feasibility of the study corridors was not recommended.

3.4 Future I-73

Interstate 73 was originally identified as a high priority route that was authorized by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) originating in Myrtle Beach, South Carolina and ultimately connecting to Michigan. An Environmental Impact Study has been completed by SCDOT for the South Carolina section of the future I-73 and ROW acquisition and other permitting is currently underway. However, there is currently no construction funding programmed for the project.

The northern part of I-73 ties to I-73/I-74 in the Rockingham/Hamlet, North Carolina region and runs along a new alignment south across the South Carolina/North Carolina state line through Marlboro and Dillon Counties to a connection at I-95. The southern part of the I-73 project continues from I-95 and runs along a new alignment to SC 22 (Conway Bypass/Veteran's Highway) in the Myrtle Beach/Conway area.

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4 CONGESTION ANALYSES

The Statewide Interstate Plan has been updated using a revised methodology for determining interstate mainline capacity needs with a new calculation of traffic congestion. The new calculation utilizes probe speed data as part of the determination of freeway density for all interstate mainline segments in South Carolina, which is consistent with level of service determination for freeways in the 2010 *Highway Capacity Manual.*

4.1 Previous Practice Review

For the 2008 Interstate Plan analysis, interstate mainline corridors were evaluated based upon then-present day volume-to-capacity (V/C) ratios and lane capacities based upon information documented in the *Highway Capacity Manual.* Data was gathered from various sources, including vehicle and truck volume data from permanent traffic count stations, crash data provided by the South Carolina Department of Public Safety, existing pavement conditions data from the SCDOT Pavement Management Section, financial viability considerations reflecting SCDOT's ability to fund and implement the proposed improvement, economic development impact as provided by the South Carolina Department of Commerce, and environmental impact as provided by the SCDOT Environmental Office. Interchanges were evaluated using the IIMS, which considered existing traffic volume data, crash data, geometric data, and the other applicable Act 114 criteria.

In addition to the evaluation of the interstate mainline and interchange capacity needs, a review of potential funding was considered utilizing then-existing funding levels and an annual inflation factor for potential construction costs. Included within the lists of potential improvements were three mega projects, with respective construction costs projected to exceed $400 million dollars for each project. The three mega projects consisted of a series of interchange improvements along I-26 in Lexington and Richland Counties, the I-85 corridor in Greenville and Spartanburg Counties, and the I-526 corridor in Charleston County. It should be noted that each of these three projects have had detailed corridor studies conducted to better detail needed improvements and to determine more detailed cost estimates.

The results of the 2008 Interstate Plan included a schedule of proposed interstate improvements that was developed for the 2030 horizon year, and included a constrained plan of five interstate mainline widening projects and five interchange reconstruction projects. The top three priority interstate mainline widening projects and two of the top interchange projects identified are summarized herein, and have been since widened or are currently under construction.

- I-26 in Charleston County from the US 52 Connector to I-526 – Completed in 2012, I-26 was widened from six to eight lanes between Ashley Phosphate Road and Remount Road, which included new collector-distributor ramps for both directions through the West Aviation Avenue and Remount Road interchanges.

- I-385 in Greenville County from north of Georgia Road to I-85 – Completed in 2012, I-385 was widened from four lanes to six lanes between Georgia Road and Woodruff Road. Widening of I-385 from Woodruff Road through the I-85 interchange is funded for construction as part of the I-85 & I-385 Interchange Design-Build project, with construction expected to begin in 2014.
- I-20 in Richland County from I-77 to Spears Creek Church Road – Currently under construction, I-20 is being widened from four to six lanes between I-77 and Spears Creek Church Road, with construction expected to be complete in 2014.
- I-26 & Remount Road/West Aviation Avenue – Reconstructed the interchanges to improve safety and capacity and widened I-26 to four lanes in each direction and with collector-distributor roadways providing access for both the interchanges
- I-95 & SC 327 – Reconstructed the interchanges to improve safety and capacity.

In addition, SCDOT Commission approved funding for and initiated construction on four additional prioritized projects through Act 98 in 2014. These projects are as follows:

- I-20 in Lexington County from US 378 to Longs Pond Road – Widen I-20 to three travel lanes in each direction for 11 miles;
- I-77 in Richland County from I-20 to north of SC 277 – Widen I-77 to three travel lanes in each direction for approximately seven miles;
- I-85 in Cherokee and Spartanburg Counties – Widen I-85 to three travel lanes in each direction for approximately 16 miles; and
- I-85 & I-385 Interchange – Reconfiguration of the interchange to improve safety and capacity and widening I-385 to provide three travel lanes in each direction in the interchange area.

The next three priority interstate mainline widening projects include the following, each of which have had detailed corridor studies currently underway or completed.

- I-26 in Lexington and Richland Counties from US 176 to Saint Andrews Road
- I-85 in Greenville and Spartanburg Counties from US 25/White Horse Road to SC 129
- I-526 in Charleston County from Sam Rittenberg Boulevard to Long Point Road

4.2 Existing Mainline Conditions

Existing conditions for all interstate mainline segments in South Carolina were determined using, in part, probe speed data in a calculation of freeway density, which is consistent with level of service determination for freeways in the 2010 *Highway Capacity Manual*. The analysis methodology, a summary of the data considered, and results summaries of freeway density and corresponding level of service for all South Carolina interstates are provided in the following sections.

4.2.1 Analysis Methodology

In the determination of interstate mainline improvement priorities, the primary measure of traffic and congestion considered for this analysis was freeway density, measured by the number of passenger

cars per mile per lane, which is consistent with the 2010 *Highway Capacity Manual (HCM)* methodologies for determining freeway level of service (LOS). Density describes the proximity to other vehicles and is related to the freedom to maneuver within the traffic stream. The measure of density is sensitive to variation of flow rates throughout the range of flows, whereas a measure of speed is relatively constant up to a certain flow rate.

The previous Interstate Plan developed in 2008 utilized the V/C ratio as its primary measure of traffic volume and congestion.

Table 4-1 summarizes the *HCM* density thresholds associated with each LOS grade for freeways.

Table 4-1: HCM LOS Criteria for Freeways

LOS	Density (passenger cars/mile/lane)
A	≤ 11
B	> 11 and ≤ 18
C	> 18 and ≤ 26
D	> 26 and ≤ 35
E	> 35 and ≤ 45
F	> 45 or V/C ratio > 1.00

For individual interstate mainline segments, Density (D) is calculated by dividing the segment Flow Rate (v_p), measured in passenger cars per hour per lane, by the segment Speed (S), measured in miles per hour, as shown below.

$$D = \frac{v_p}{S}$$

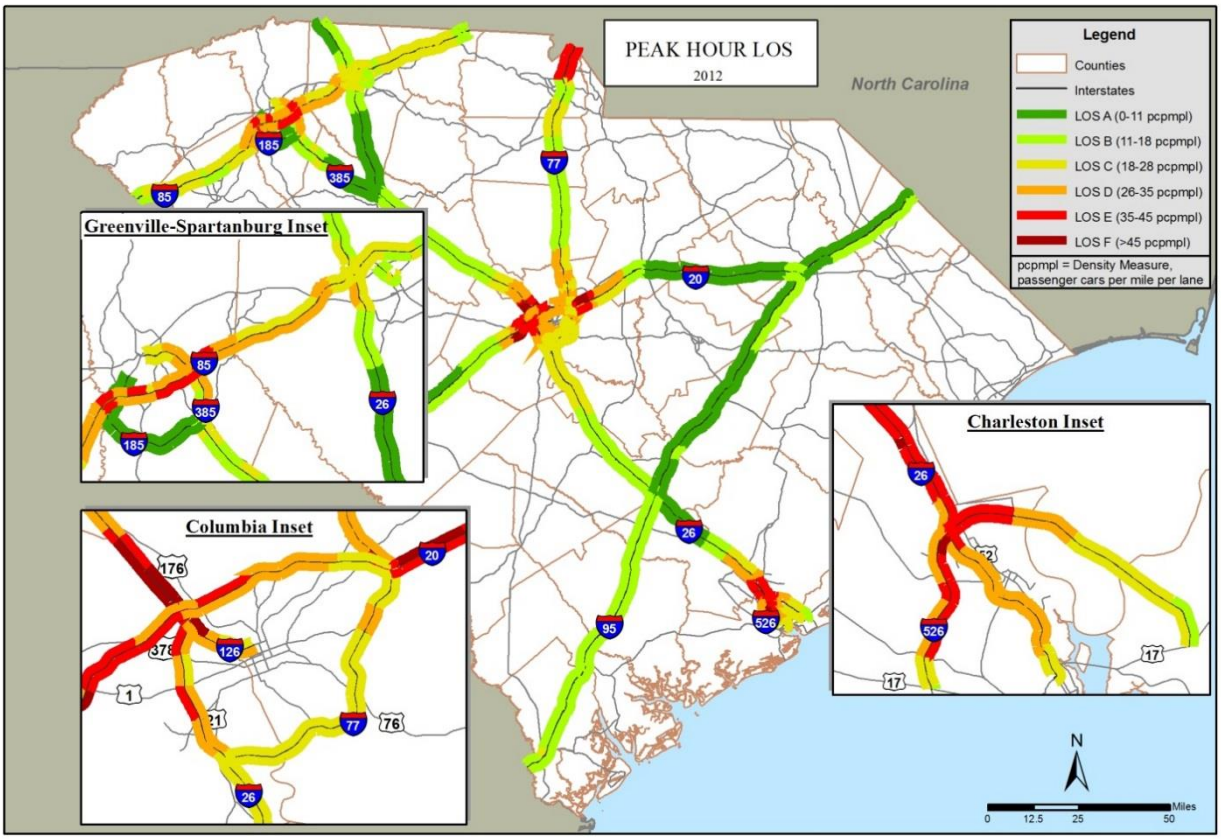
The data utilized and calculations implemented to determine the Flow Rate, Speed, and Density variables are discussed in the next section. The existing freeway Density conditions were calculated for both directions of all interstate mainline segments in South Carolina for four study hours, which consisted of the two typical morning peak hours (from 7:00 AM to 8:00 AM and from 8:00 AM to 9:00 AM) and the two typical afternoon peak hours (from 4:00 PM to 5:00 PM and from 5:00 PM to 6:00 PM). The respective LOS conditions were then determined for each study hour of all interstate mainline segments based upon the *HCM* criteria. **Appendix A** summarizes the data and performance metric calculation.

4.2.2 Interstate Density/LOS Analysis Summary

The Density and LOS data summary worksheets for the 11 interstates are provided in **Appendix B**. A discussion of the Density and LOS results for each interstate, including existing points of recurring congestion and bottlenecks, is provided herein.

A map showing the overall worst-case LOS results for the interstate system are illustrated in **Figure 4-1**.

Figure 4-1: Existing Conditions Peak Hour LOS



I-20

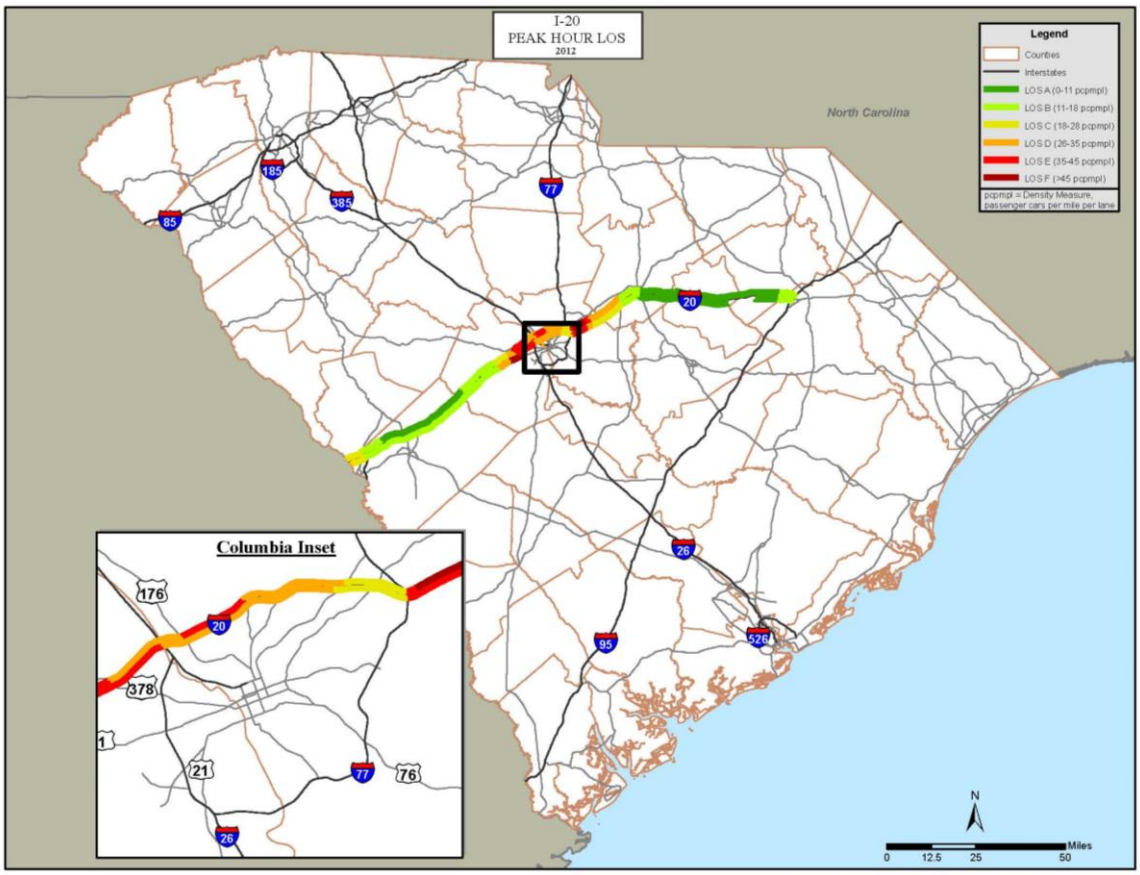
The LOS results of the worst-case peak hour for all segments of I-20 are illustrated in **Figure 4-2**.

The primary congestion points along I-20 are between Alpine Road and Clemson Road, northeast of Columbia, where I-20 operates at LOS E conditions in the westbound direction during the AM peak hour and in the eastbound direction during the PM peak hour. It should be noted that this segment is currently under construction for widening from four to six lanes. The I-77 and Clemson Road interchanges are the respective bottleneck points along I-20 during the AM peak hour and PM peak hour.

In addition, on the west and north sides of Columbia, a 16-mile stretch of I-20 between SC 6/South Lake Drive and US 21/Main Street is predominantly operating at LOS D conditions in the eastbound direction during the AM peak hour and in the westbound direction during the PM peak hour. During the PM peak hour, the bottleneck points along I-20 include the three interchanges with Broad River Road, I-26, and US 378.

There is one corridor along I-20 that are among the most congested corridors in the State, the corridor extending from I-77 (Exit 76A) to Clemson Road (Exit 80).

Figure 4-2: I-20 Peak-Hour LOS



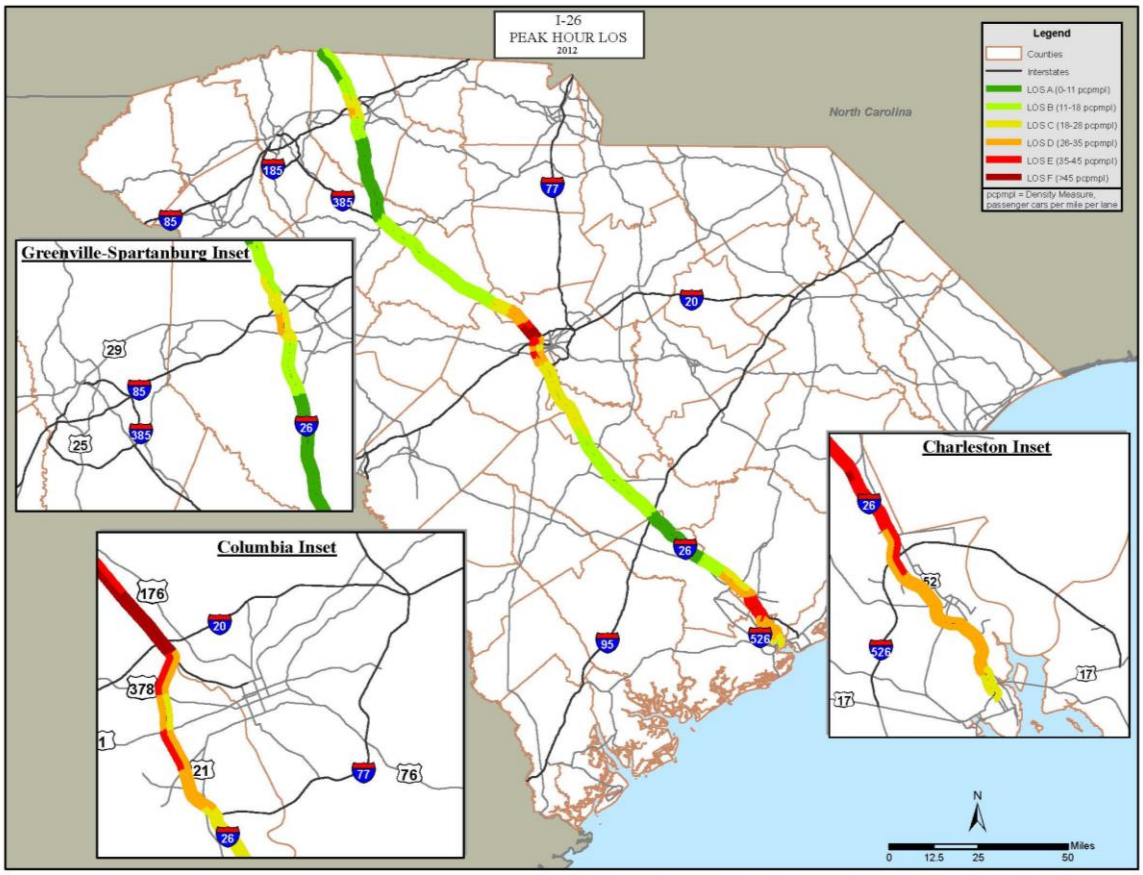
I-26

The LOS results of the worst-case peak hour for all segments of I-26 are illustrated in **Figure 4-3**.

In the Columbia area, the primary congestion points along I-26 occur in the eastbound direction (inbound towards Columbia) from SC 60/Lake Murray Boulevard to I-20 during the AM peak hour, where I-26 operates at LOS E conditions. During the PM peak hour, I-26 westbound operates at LOS F or LOS E conditions from I-126 to Piney Grove Road. For the Columbia area, the I-20 interchange is the primary bottleneck point along I-26 during the AM peak hour. The I-20 and St. Andrews Road interchanges are the primary bottleneck points along I-26 during the PM peak hour.

In the Charleston area, the primary congestion points along I-26 occur in the eastbound direction (towards downtown Charleston) from US 52 Connector to West Aviation Avenue during the AM peak hour, where I-26 operates at LOS D conditions. During the PM peak hour, I-26 westbound operates at LOS D conditions from Montague Avenue to Ashley Phosphate Road. For the Charleston area, the US 52 Connector/Ashley Phosphate Road interchange and the merge to I-526 are the primary bottleneck points along I-26 during the AM peak hour. The I-526 and Ashley Phosphate Road interchanges are the primary bottleneck points along I-26 during the PM peak hour.

Figure 4-3: I-26 Peak-Hour LOS



There are three corridors along I-26 that are among the most congested corridors in the State:

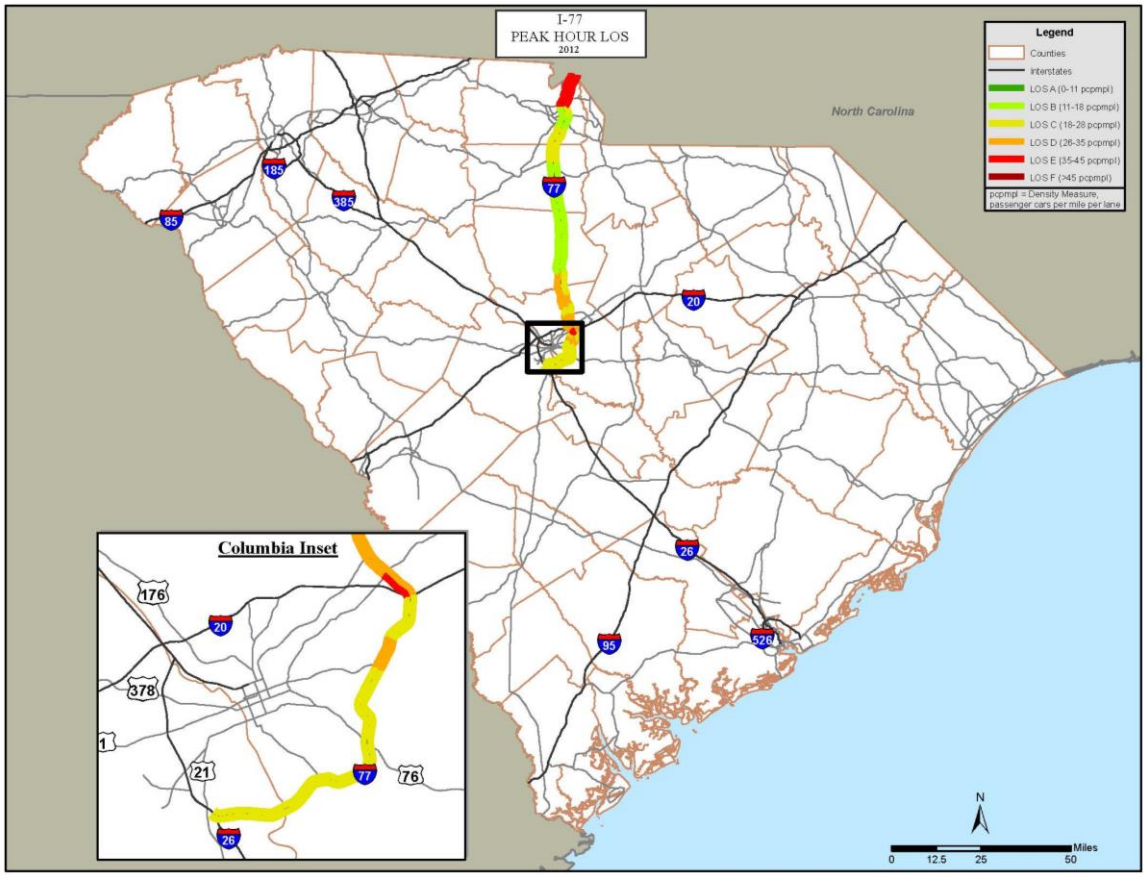
- Piney Grove Road (Exit 104)to I-20 (Exit 107);
- I-20 (Exit 107) to I-126/US-76; and
- SC 60/Lake Murray Boulevard (Exit 102) to Piney Grove Road (Exit 104).

I-77

The LOS results of the worst-case peak hour for all segments of I-77 are illustrated in **Figure 4-4**.

In the Rock Hill area, the primary congestion point along I-77 occurs in the northbound direction from SC 98/Gold Hill Road to US 21/Carowinds Boulevard during the AM peak hour, where I-77 operates at LOS D conditions.

Figure 4-4: I-77 Peak-Hour LOS



In the Columbia area, the primary congestion points along I-77 occur in the southbound direction from Killian Road to SC 12/Forest Drive during the AM peak hour, where several segments of I-77 operate at LOS D conditions. The primary bottleneck point is along I-77 southbound approaching the Forest Drive interchange every Thursday in the AM peak hour, due to weekly graduation ceremonies of Fort Jackson.

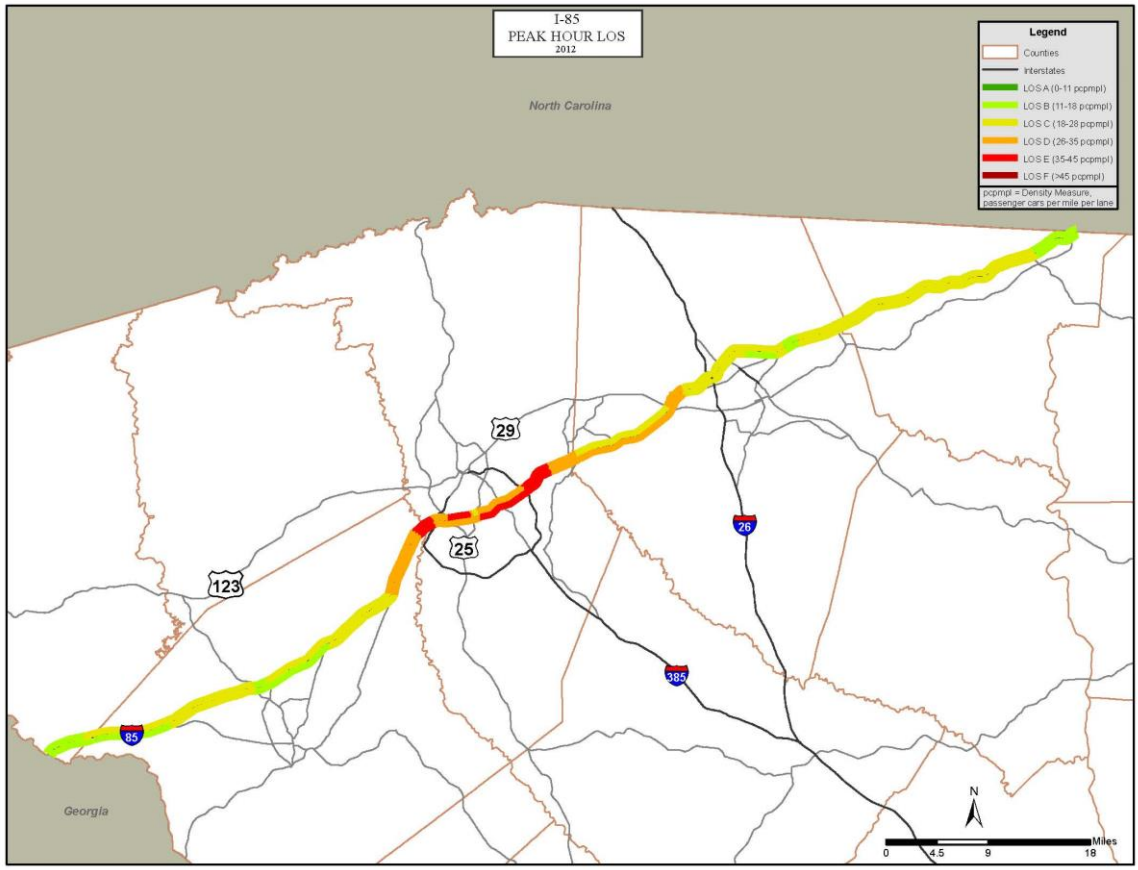
There are no corridors along I-77 that are among the most congested corridors in the State.

I-85

The LOS results of the worst-case peak hour for all segments of I-85 are illustrated in **Figure 4-5**.

Along I-85, a 39-mile stretch between SC 143/River Road in Greenville County and SC 129/Fort Prince Boulevard in Spartanburg County predominantly operates at LOS D or worse conditions in both directions during various times of the day.

Figure 4-5: I-85 Peak-Hour LOS



Along I-85 northbound during the AM peak hour, the primary congestion point is between Mauldin Road and US 276/Laurens Road, which operates at LOS E conditions. During the PM peak hour along I-85 northbound, the primary congestion point is between Woodruff Road/I-385 and Pelham Road, which operates at LOS E conditions. The Woodruff Road/I-385 interchange is the primary bottleneck along I-85 northbound.

Along I-85 southbound, the primary congestion point is between SC 14 and I-385/Woodruff Road, which operates at LOS F or LOS E conditions during the AM peak hour and PM peak hour. The I-385/Woodruff Road interchange is the primary bottleneck along I-85 southbound.

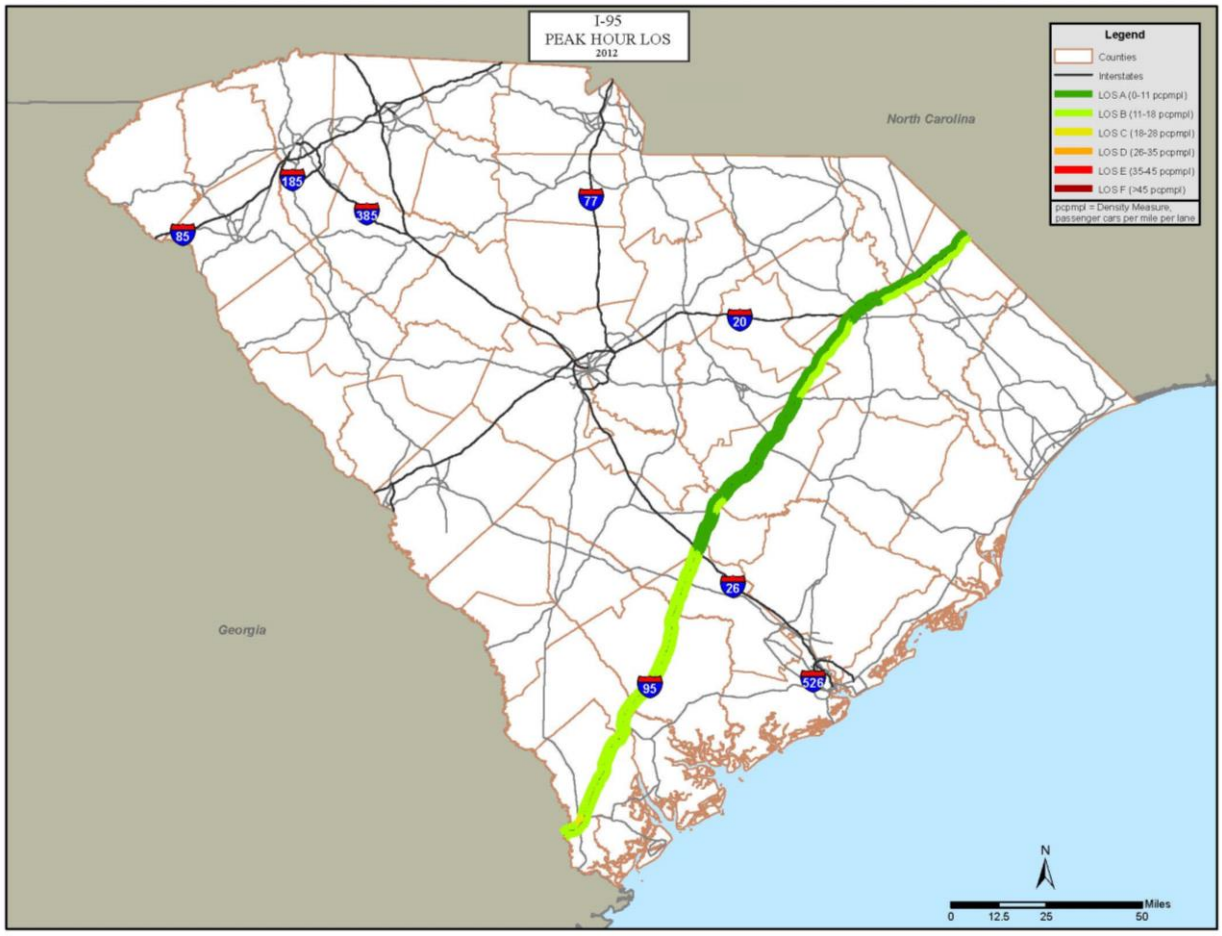
There are three corridors along I-85 that are among the most congested segments in the State:

- SC 153 (Exit 40) to US 29 (Exit 42);
- I-385/Woodruff Road (Exit 51) to Aviation Drive (Exit 57); and
- Mauldin Road (Exit 46) to I-385/Woodruff Road (Exit 51).

I-95

The LOS results of the worst-case peak hour for all segments of I-95 are illustrated in **Figure 4-6**.

Figure 4-6: I-95 Peak-Hour LOS



The results of the congestion analyses for I-95 indicate that it is currently operating at LOS A and LOS B conditions along its entire length in both directions.

There are no corridors along I-95 that are among the most congested corridors in the State.

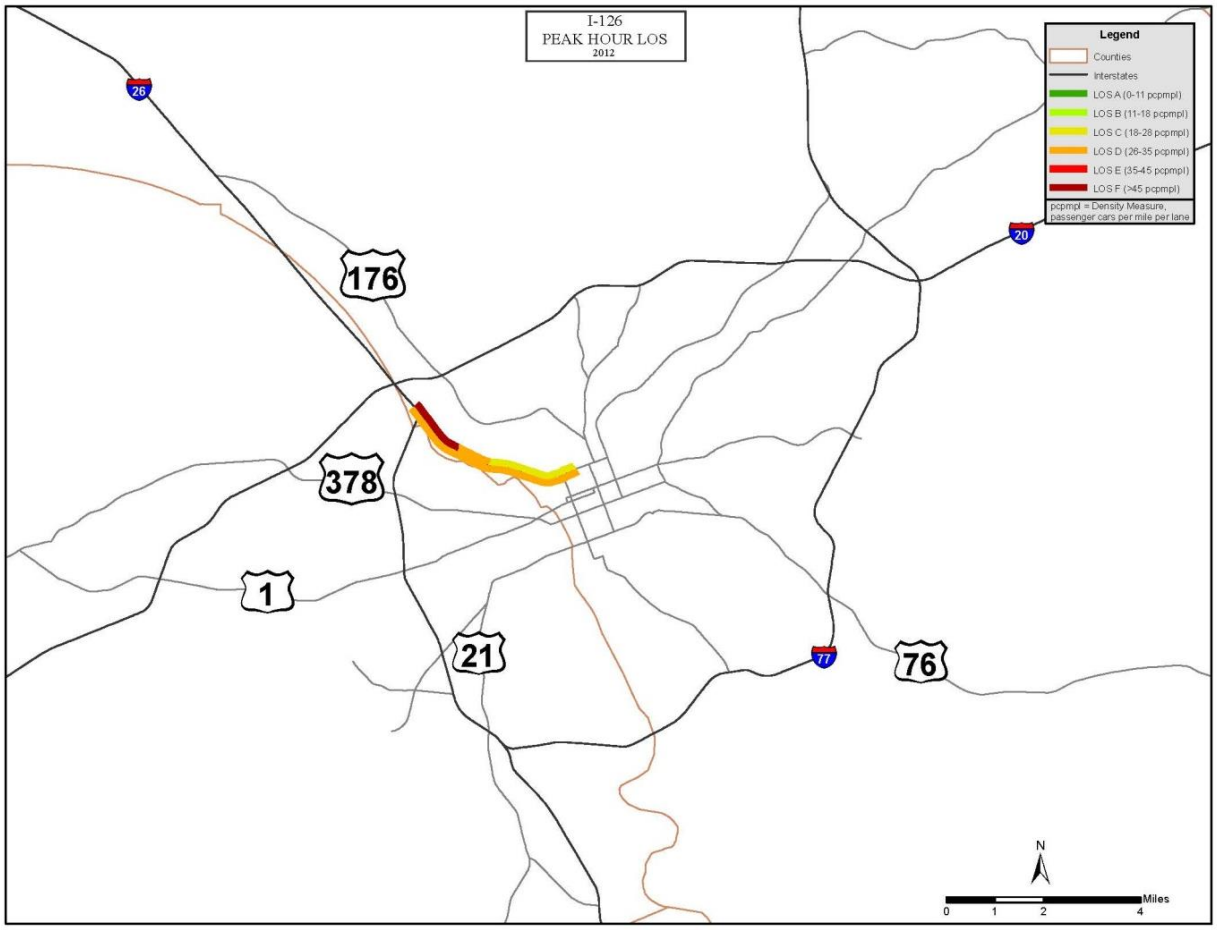
I-126

I-126 is a spur route of I-26 that extends between I-26 and Gadsden Street in the City of Columbia. The LOS results of the worst-case peak hour for all segments of I-126 are illustrated in **Figure 4-7**.

The primary congestion point along I-126 is between Saluda River Road and I-26, where I-126 westbound operates at LOS E conditions during the PM peak hour. The I-26 interchange is the primary bottleneck along I-126 westbound during the PM peak hour.

There are no corridors along I-126 that are among the most congested corridors in the State.

Figure 4-7: I-126 Peak Hour LOS



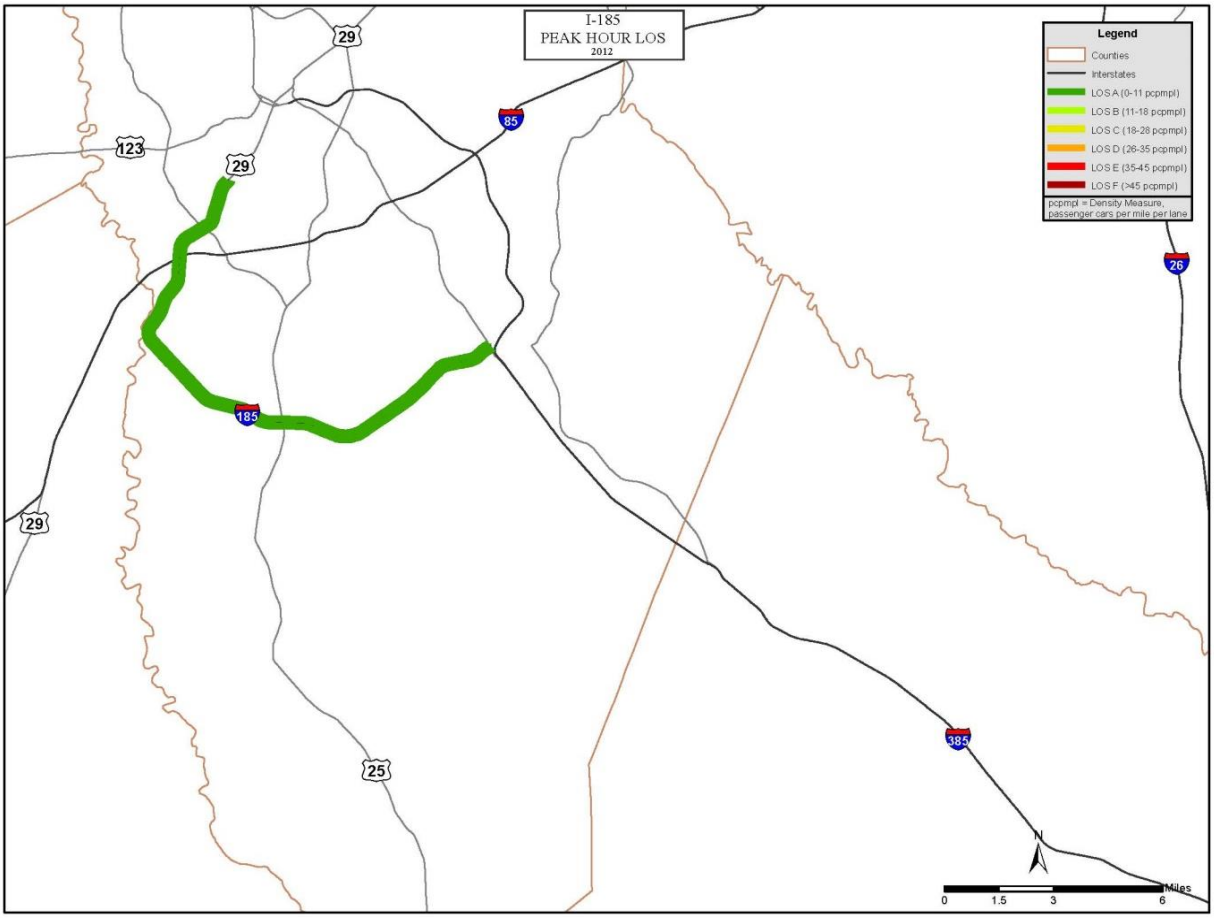
I-185

I-185 is a spur route of I-85 that connects I-85 west of the City of Greenville with I-385 southeast of the Greenville urban area. The LOS results of the worst-case peak hour for all segments of I-185 are illustrated in **Figure 4-8**.

The results of the congestion analyses for I-185 indicate that it is currently operating at LOS A or LOS B conditions along its entire length in both directions.

There are no corridors along I-185 that are among the most congested corridors in the State.

Figure 4-8: I-185 Peak-Hour LOS

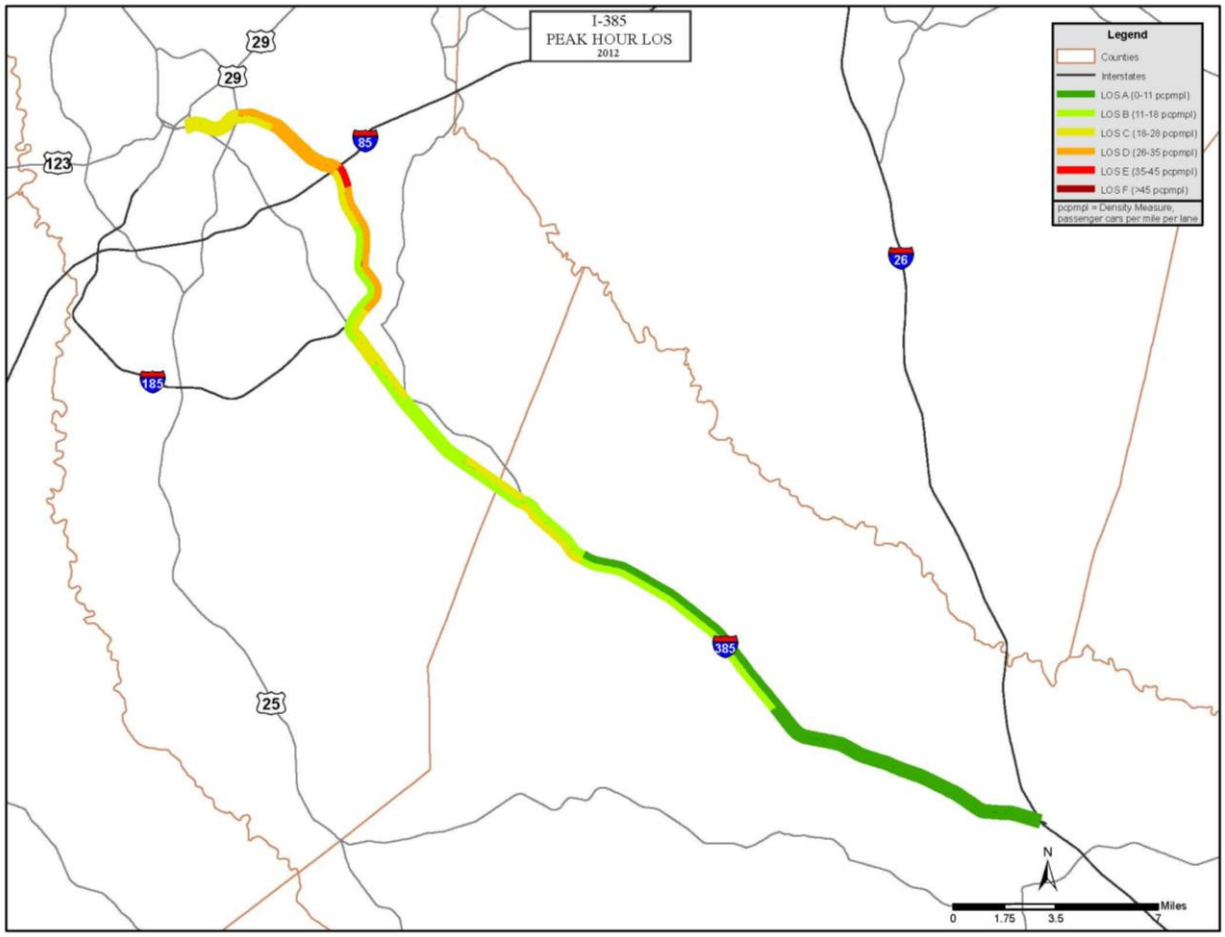


I-385

The LOS results of the worst-case peak hour for all segments of I-385 are illustrated in **Figure 4-9**.

Along I-385 northbound, the primary congestion points occur during the AM peak hour from Bridges Road to Roper Mountain Road, where I-385 operates at LOS D conditions. During the PM peak hour, I-385 southbound operates at LOS D conditions from Roper Mountain Road to Woodruff Road. The primary bottleneck along I-385 is the interchange with I-85.

Figure 4-9: I-385 Peak-Hour LOS



There are no corridors along I-385 that are among the most congested corridors in the State.

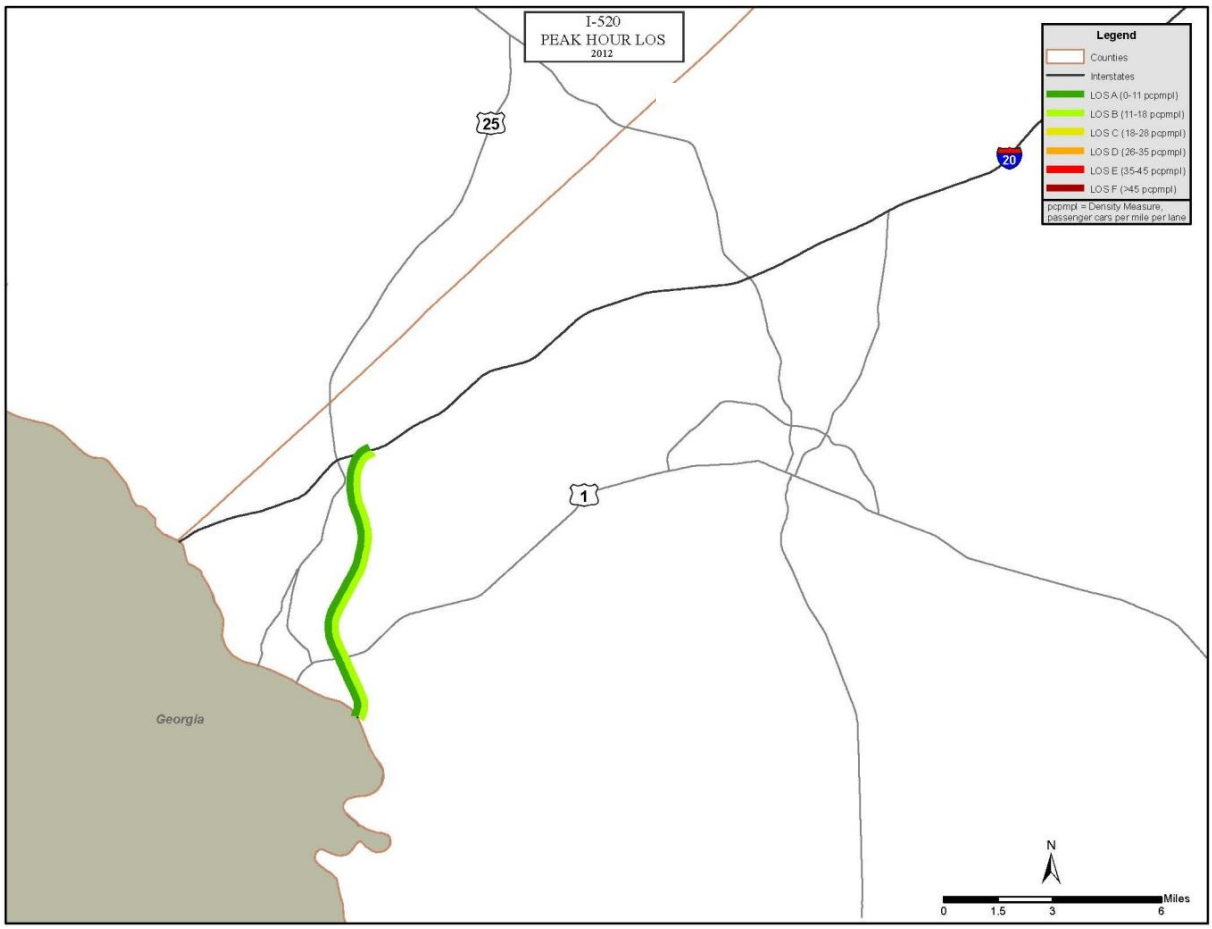
I-520

I-520 in South Carolina is the eastern portion of the Interstate beltway around the City of Augusta in Georgia. The LOS results of the worst-case peak hour for all segments of I-520 are illustrated in **Figure 4-10**.

The results of the congestion analyses for I-520 indicate that it is currently operating at LOS A conditions along its entire length in both directions.

There are no corridors along I-520 that are among the most congested corridors in the State.

Figure 4-10: I-520 Peak-Hour LOS



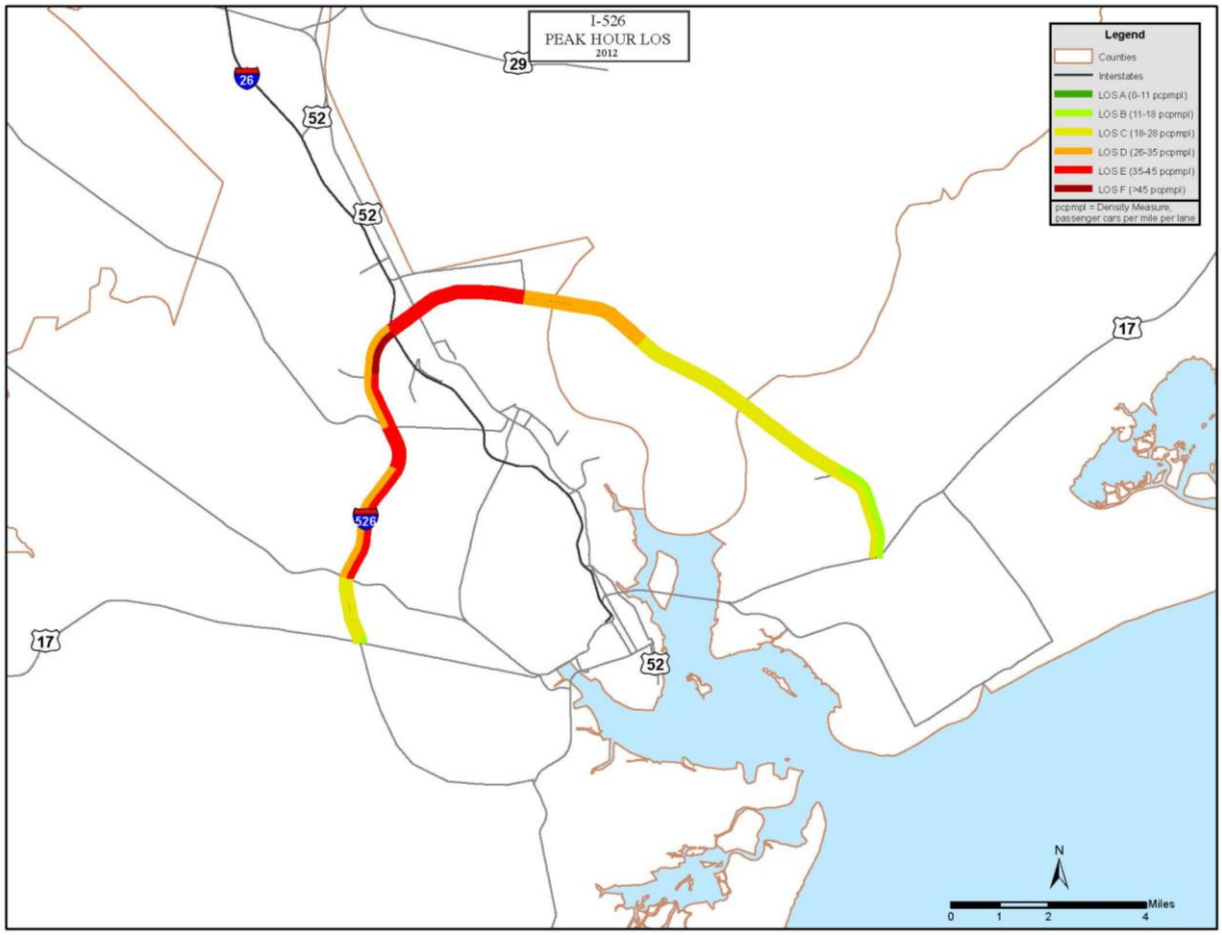
I-526

I-526 is a circumferential interstate route around the Charleston area located in Charleston and Berkeley Counties. The LOS results of the worst-case peak hour for all segments of I-526 are illustrated in **Figure 4-11**.

Along I-526, a 12-mile stretch between US 17/Savannah Highway (west of Charleston) and Clements Ferry Road predominantly operates at LOS D or worse conditions in both directions during various times of the day.

Along I-526 eastbound, the primary congestion point during the PM peak hour is between International Boulevard and I-26, which operates at LOS E conditions. The primary bottleneck along I-526 eastbound is the I-26 interchange.

Figure 4-11: I-526 Peak-Hour LOS



Along I-526 westbound, the primary congestion points during the PM peak hour are between Clements Ferry Road and I-26, which operates at LOS D conditions; and between International Boulevard and Paul Cantrell Boulevard, which operates at LOS E or LOS F conditions. During the PM peak hour, the

primary bottleneck points along I-526 westbound are the I-26 interchange, the merge from Leeds Avenue, and the Paul Cantrell Boulevard interchange.

There are three corridors along I-526 that are among the most congested corridors in the State:

- I-26 to North Rhett Avenue;
- North Rhett Avenue to Clements Ferry Road; and
- Paul Cantrell Boulevard to I-26.

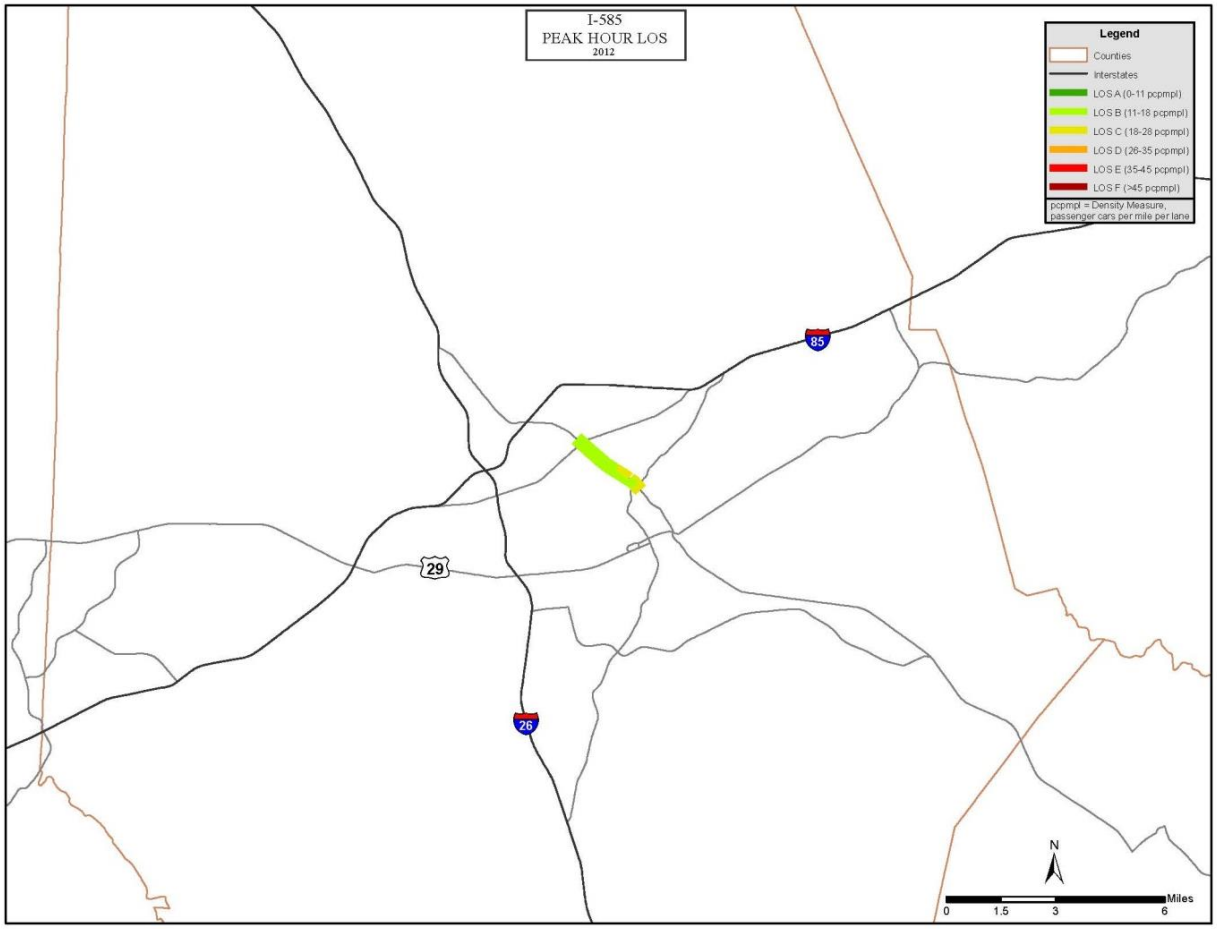
I-585

I-585 is a spur route of I-85 that extends between I-85 Business and US 221 in Spartanburg County. The LOS results of the worst-case peak hour for all segments of I-585 are illustrated in **Figure 4-12**.

The results of the congestion analyses for I-585 indicate that it is currently operating at LOS A or LOS B conditions along its entire length in both directions.

There are no corridors along I-585 that are among the most congested corridors in the State.

Figure 4-12: I-585 Peak-Hour LOS



4.3 Future Mainline Conditions

Future 2040 conditions for all interstate mainline segments in South Carolina were projected using the results of the Statewide Travel Demand Model.

4.3.1 Statewide Travel Demand Model Summary

The South Carolina Statewide Travel Demand Model (SC SWM) was developed for the SCDOT as part of the South Carolina Multimodal Transportation Plan. The SC SWM is a "state of the practice" model and follows the format of a traditional four-step modeling process of trip generation, trip distribution, vehicle trips, and traffic assignment. Additional model components of the SC SWM include a truck model and external model.

The model study area encompasses all of South Carolina and is built upon the existing MPO and COG models of the state. The highway networks and the traffic analysis zone systems of the existing travel demand models within South Carolina were used directly in the SC SWM. These model areas include AIKEN, APCOG, BCDCOG, CATCOG, CMCOG, FLATS, GSATS, LCOG, Metrolina, SLCOG, and USCOG. The non-MPO/COG areas were developed using HPMS data for roadway data and Census data for the zones and socio-economic data. The model provides outputs of daily traffic data on the highway network for analysis years of base year 2010 and forecast year 2040. Traffic data are available by trip purpose including auto and truck vehicle types, where auto volumes can be further defined by urban and rural and by home-based work, home-based other, non-home based, and external trips and truck volumes can be further defined by local trucks, long distance trucks, and external trucks. These outputs are useful in several components of the South Carolina Multimodal Transportation Plan including the Interstate Plan, Strategic Corridor Network Plan, and economic analysis.

4.3.2 Analysis Methodology

For the analysis of future interstate congestion, the primary measure of traffic and congestion considered was freeway density as in the existing conditions analysis. Freeway density is measured by the number of passenger cars per mile per lane and is consistent with the 2010 *HCM* methodologies for determining freeway LOS.

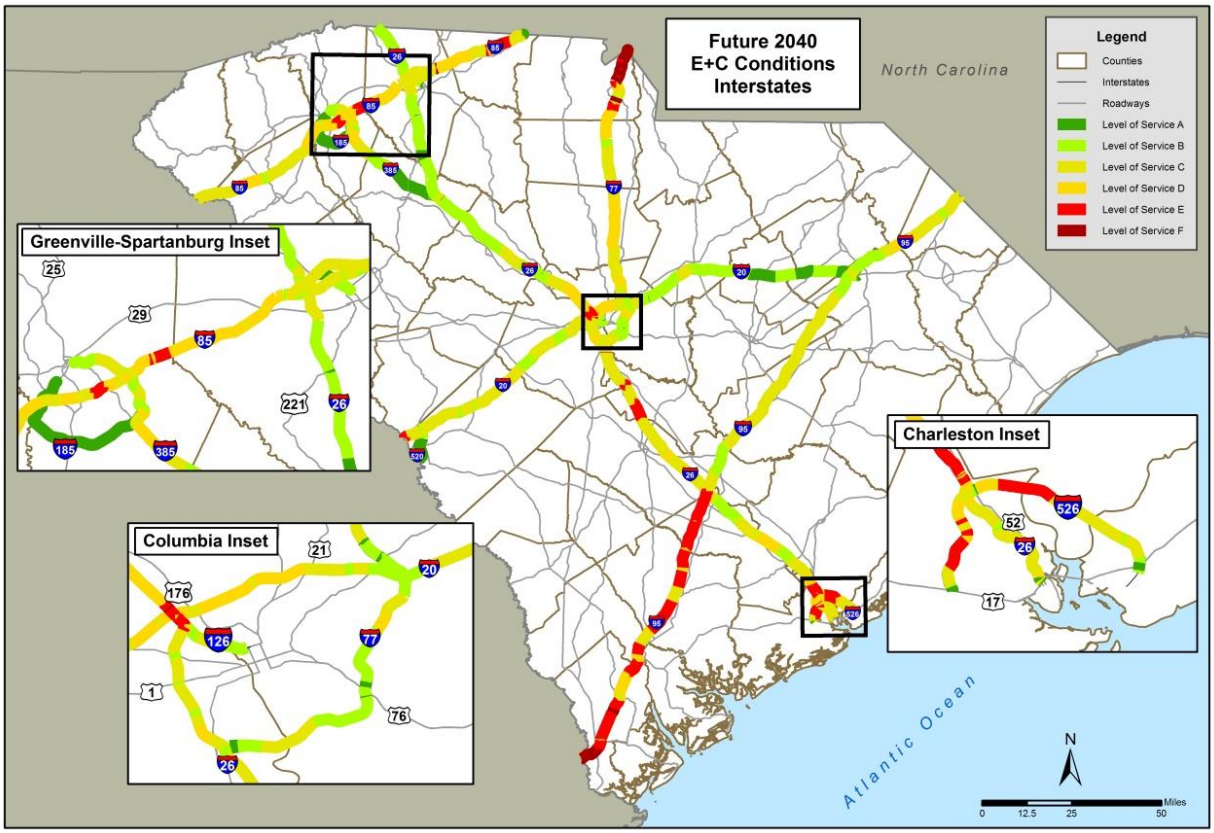
The Statewide Travel Demand Model outputs include Freeway Density and Volume-to-Capacity ratios for both the 2010 base-year model and 2040 Existing plus Committed (E+C) horizon-year model. To compare the future projections of interstate congestion to the Existing Conditions analysis previously described, the percent increase in density was determined between the 2040 E+C model and the 2010 based model. This percent increase was then applied to the existing conditions Density Index values for the respective Interstate Segments and Interstate Corridors to develop future density conditions in the interstate system.

4.3.3 Interstate Density/LOS Summary

Based upon the Statewide Travel Demand Model, the LOS results for the worst peak hour for the 2040 interstate system is illustrated in **Figure 4-13**. As illustrated by maps of the 2040 Interstate conditions,

gradual rates of growth in traffic volumes can be observed across the interstate system. Decreases in levels of services are as expected in metropolitan areas across the state, with particularly high growth in volume and congestion in the Charlotte Metropolitan area and suburban Rock Hill, South Carolina. At the southern border of South Carolina at the Georgia state line, a decrease in level of services is expected as the Lowcountry region anticipates growth in both residential and industrial activities in concert with continued growth in freight activity at the Ports of Savannah and Charleston. This, in turn, with no programed increases in capacity of I-95 in South Carolina results in this decrease in level of service.

Figure 4-13: Future Conditions AM and PM Peak Hour LOS



I-20

Based upon the future conditions, there are two corridors along I-20 that are projected to be among the most congested corridors in the State:

- GA State Line to SC 230 (Exit 1); and
- I-77/Exit 76A to Clemson Road (Exit 80).

I-26

Based upon the future conditions, there are three corridors along I-26 that are projected to be among the most congested corridors in the State:

- Piney Grove Road (Exit 104) to I-20 (Exit 107);
- I-20 (Exit 107) to I-126/US 76; and
- SC 60/Lake Murray Boulevard (Exit 102) to Piney Grove Road (Exit 104).

I-77

Based upon the future conditions, there is one corridor along I-77 that is projected to be among the most congested corridors in the State:

- SC 161 (Exit 82) to US-21/Carowinds Blvd (Exit 90).

I-85

Based upon the future conditions, there are three corridors along I-85 that are projected to be among the most congested corridors in the State:

- SC 153 (Exit 40) to US 29 – Greenville (Exit 42);
- Woodruff Road/I-385 (Exit 51) to Aviation Drive (Exit 57); and
- Mauldin Road (Exit 46) to Woodruff Road/I-385 (Exit 51).

I-95

Based upon the future conditions, there are no corridors along I-95 that are projected to be among the most congested corridors in the State.

I-126

Based upon the future conditions, there are no corridors along I-126 that are projected to be the most congested corridors in the State.

I-185

Based upon the future conditions, there are no corridors along I-185 that are projected to be the most congested corridors in the State.

I-385

Based upon the future conditions, there are no corridors along I-385 that are projected to be the most congested corridors in the State.

I-520

Based upon the future conditions, there are no corridors along I-520 that are projected to be the most congested corridors in the State.

I-526

There is one corridor along I-526 that is projected to be among the most congested corridors in the State:

- I-26 to North Rhett Avenue.

I-585

Based upon the future conditions, there are no corridors along I-585 that are projected to be the most congested corridors in the State.

4.4 Mainline Congestion Analyses Summary

4.4.1 Current Interstate Planning Process

The South Carolina Department of Transportation strives to provide safe, reliable surface transportation systems and infrastructure and effective support for a healthy South Carolina economy through smart stewardship of all available resources. As part of this vision, SCDOT has implemented a proven process for the management of congestion for the State's Interstate system and Strategic Corridor Network.

This process is currently broken into the following six parts: 1) Freeway Management, 2) Congestion Comparison, 3) Corridor Management Plans, 4) Incorporation into the STIP and TIP, 5) Strategy Implementation, and 6) Monitor System & Strategy Effectiveness. These parts have been previously discussed and are summarized herein.

Freeway Monitoring

SCDOT uses Freeway Density as its performance measure to evaluate the South Carolina Interstate system needs, which is derived on a segment-by-segment basis to identify and quantify existing points of recurring congestion and bottlenecks.

A Density Index performance measure was developed to compare relative congestion across the Interstate system. The Density Index is defined as the summation of the Interstate densities in both directions during the four study peak hours.

The Density Index metric is combined with crash data and utilized to compare the respective levels of congestion for all segments of the Interstate system. In addition, an Average Density Index across segments in larger Interstate corridors is calculated to compare the respective levels of congestion for the Interstate corridors.

These congestion metrics are then compared to the other criteria of Act 114, including public safety, truck traffic, pavement condition, financial viability, environmental impacts, and economic development impacts, to develop ultimate improvement priorities.

Corridor Management Plans

Based upon the results of SCDOT's Congestion Management Process, detailed Interstate corridor management plans are conducted for those interstates that are currently congested or projected to be congested in the future, typically in urban areas. The corridor management plans identify alternatives to resolve current congestion issues and address future needs. Improvement alternatives in the following four improvement categories are considered: 1) Travel Demand Management, 2) Modal, 3) Traffic Operations, and 4) Capacity Improvements.

Incorporation into the STIP and TIP & Strategy Implementation

When funding of Interstate improvement projects becomes available through the SCDOT Statewide Transportation Improvement Program (STIP), the funds are allocated to prioritized projects. If the projects have had Corridor Management Plans completed, the improvement programs in the plans are utilized.

Monitor System and Strategy Effectiveness

To monitor Interstate performance, SCDOT has developed spiral graphs from the probe speed data that illustrate the Average Annual Hourly Speeds for each Interstate. They are utilized to identify congestion bottlenecks and compare severity of peaks on a yearly basis. They can also be broken down on a daily, weekly, or monthly basis to evaluate before and after impacts of improvements; which is vital to illustrate the benefits of large-scale, high-cost projects to the policy makers, stakeholders, and transportation system users.

4.4.2 Mainline Summary

The Density Index summary and overall congestion for the individual interstate mainline segments and the interstate corridors for existing and future conditions are provided in **Appendix C**. As previously noted, the Density Index metric for segments is defined as the summation of the individual interstate mainline segment Densities for each of four study hours for both directions. For corridors, the Average Density Index across all segments was then calculated to compare the respective levels of congestion for the interstate corridors.

Table 4-2 and **Table 4-3** summarize the most congested interstate corridors in the State based upon Existing Conditions and Future Conditions, respectively. **Table 4-4** and **Table 4-5** summarizes the most congested individual interstate segments in the State based upon Existing Conditions and Future Conditions, respectively.

Table 4-2: Most Congested Interstate Corridors (Existing Conditions)

Interstate	Corridor Between		Length (miles)	Location	Existing Corridor Density Index
I-526	I-26	Virginia Ave	3	Charleston	288.5
I-26	Piney Grove Rd/Exit 104	I-20/Exit 107	3	Columbia	276.4
I-26	I-20/Exit 107	I-126/US-76	1	Columbia	253.7
I-85	SC-153/Exit 40	US-29/Exit 42 (Greenville)	2	Greenville	242.2
I-85	Woodruff Rd/I-385/Exit 51	Aviation Dr/Exit 57	6	Greenville	239.3
I-526	Virginia Ave	Clements Ferry Rd	3	Charleston	233.2
I-85	Mauldin Rd/Exit 46	Woodruff Rd/I-385/Exit 51	5	Greenville	228.9
I-26	SC-60/Lake Murray Bl/Exit 102	Piney Grove Rd/Exit 104	2	Columbia	228.6
I-20	I-77/Exit 76A	Clemson Rd/Exit 80	4	Columbia	226.1
I-526	Paul Cantrell Blvd	I-26	5	Charleston	223.4

Table 4-3: Top 10 Most Congested Interstate Corridors (Future Conditions)

Interstate	Corridor Between		Length (miles)	Location	Projected Corridor Density Index
I-77	SC-161/Exit 82	US-21/Carowinds Bl/Exit 90	8	Rock Hill	435.1
I-26	Piney Grove Rd/Exit 104	I-20/Exit 107	3	Columbia	390.7
I-526	I-26	Virginia Ave	3	Charleston	363.0
I-26	I-20/Exit 107	I-126/US-76	1	Columbia	358.6
I-26	SC-60/Lake Murray Bl/Exit 102	Piney Grove Rd/Exit 104	2	Columbia	323.1
I-85	SC-153/Exit 40	US-29/Exit 42 (Greenville)	2	Greenville	317.1
I-85	Woodruff Rd/I-385/Exit 51	Aviation Dr/Exit 57	6	Greenville	313.3
I-20	GA State Line	SC-230/Exit 1	1	Augusta	306.0
I-85	Mauldin Rd/Exit 46	Woodruff Rd/I-385/Exit 51	5	Greenville	299.7
I-20	I-77/Exit 76A	Clemson Rd/Exit 80	4	Columbia	292.8

Table 4-4: Most Congested Individual Interstate Segments (Existing Conditions)

Interstate	Segment Between		Existing Segment Density Index
I-526	I-26	US-52/Rivers Ave	301.4
I-526	N Rhett Ave	Virginia Ave	282.7
I-26	Saint Andrews Rd/Exit 106	I-20/Exit 107	281.5
I-526	US-52/Rivers Ave	N Rhett Ave	281.3
I-85	I-385/Exit 51	Pelham Rd/Exit 54	279.5
I-26	Piney Grove Rd/Exit 104	Saint Andrews Rd/Exit 106	271.4
I-26	Bush River Rd/Exit 108	I-126/US-76	258.5
I-26	I-20/Exit 107	Bush River Rd/Exit 108	248.9
I-20	Alpine Rd/Exit 76B	Clemson Rd/Exit 80	245.5
I-526	International Blvd	I-26	244.5
I-85	SC-153/Exit 40	US-29/Exit 42 (Greenville)	242.2
I-26	Harbison Blvd/Exit 103	Piney Grove Rd/Exit 104	240.6
I-85	Mauldin Rd/Exit 46	US-276/Exit 48	238.0
I-85	Pelham Rd/Exit 54	SC-14/Exit 56	236.7
I-526	W Montague Ave	International Blvd	236.2
I-526	Don N Holt Bridge	Clements Ferry Rd	233.4
I-526	N Rhett Ave	Don N Holt Bridge	232.9
I-20	US-176/Broad River Rd/Exit 65	SC-215/Monticello Rd/Exit 68	226.2
I-85	US-276/Exit 48	I-385/Exit 51	219.8
I-526	Dorchester Rd	W Montague Ave	217.7

Table 4-5: Most Congested Individual Interstate Segments (Future Conditions)

Interstate	Segment Between		Projected Segment Density Index
I-77	SC-98/Gold Hill Rd/Exit 88	US-21/Carowinds Blvd/Exit 90	485.5
I-77	SC-161/Exit 82	Sutton Rd/Exit 83	429.4
I-77	SC-160/Exit 85	SC-98/Gold Hill Rd/Exit 88	406.2
I-77	Sutton Rd/Exit 83	SC-160/Exit 85	398.0
I-526	N Rhett Ave	Virginia Ave	388.7
I-26	Saint Andrews Rd/Exit 106	I-20/Exit 107	381.1
I-26	Piney Grove Rd/Exit 104	Saint Andrews Rd/Exit 106	362.3
I-185	SC-20/Piedmont Hwy/Exit 10	SC-153/Exit 12	352.4
I-85	SC-153/Exit 40	US-29/Exit 42 (Greenville)	351.3
I-26	Bush River Rd/Exit 108	I-126/US-76	343.2
I-20	GA State Line	SC-230/Exit 1	339.5
I-26	Harbison Blvd/Exit 103	Piney Grove Rd/Exit 104	331.6
I-526	US-52/Rivers Ave	N Rhett Ave	325.4
I-26	I-20/Exit 107	Bush River Rd/Exit 108	324.1
I-85	Pelham Rd/Exit 54	SC-14/Exit 56	324.0
I-26	SC-60/Lake Murray Blvd/Exit 102	Harbison Blvd/Exit 103	321.4
I-526	Virginia Ave	Don N Holt Bridge	320.9
I-85	US-29/Exit 34	SC-86/Exit 35	313.9
I-20	US-378/Exit 61	Bush River Rd/Exit 63	313.7
I-526	Don N Holt Bridge	Clements Ferry Rd	312.6

4.5 Interchange Needs

The consideration of interchange needs are addressed in two ways. First, the performance of an interchange is largely related to the performance of the interstate mainline. As a result, interchanges are inherently considered in the interstate mainline evaluation process as outlined in the plan. Interstate segments that reflect poor performance in terms of congestion are candidates for more detailed corridor management plans, which provide additional analysis and recommendations for project improvements.

Secondly, the Interactive Interchange Management System (IIMS) is an additional tool that provides a comparative analysis of interchange performance. The 271 interstate interchanges are evaluated using a combination of the IIMS, which considers traffic, roadway and bridge characteristics, geometric design, capacity analysis, safety, and benefit-cost analysis, as well as other applicable Act 114 criteria.

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5 ANALYSIS SUMMARY

Existing Density and LOS conditions for the South Carolina interstate system were updated utilizing probe speed data and 2010 *Highway Capacity Manual* methodologies. The following sections summarize the areas of recurring congestion, planning-level cost projections for potential improvements, and a high-level environmental review of the potential improvements.

The use of SCDOT's probe data in updating the Interstate Plan and the recently developed statewide Travel Demand Model (TDM) provide SCDOT with new capabilities to monitor interstate conditions and prioritize future investments. A prioritization process to evaluate mainline interstate capacity needs is being developed to prioritize interstate corridors based on a number of criteria consistent with Act 114, including congestion, safety, truck traffic, pavement condition, environmental impacts, economic development impacts, and financial viability. These monitoring and prioritization capabilities will provide valuable tools to guide future investments in South Carolina's interstate highways.

5.1 Congestion Summary

5.1.1 Existing Bottlenecks/Recurring Congestion

Based upon the results of the Density and LOS calculations for each of the 11 interstates, a summary of the existing points of recurring congestion and bottlenecks for each interstate is provided herein. The results show that 31% of the interstate network is operating at LOS C or worse considering existing densities.

- I-20: The I-77 and Clemson Road interchanges are the respective bottleneck points along I-20 during the AM peak hour and PM peak hour. It should be noted that this segment is currently under construction for widening from four to six lanes. In addition, during the PM peak hour, the bottleneck points along I-20 include the three interchanges with Broad River Road, I-26, and US 378.
- I-26: In the Columbia area, the I-20 interchange is the primary bottleneck point during the AM peak hour and the I-20 and St. Andrews Road interchanges are the primary bottleneck points during the PM peak hour. In the Charleston area, the US 52 Connector/Ashley Phosphate Road interchange and the merge to I-526 are the primary bottleneck points during the AM peak hour and the I-526 and Ashley Phosphate Road interchanges are the primary bottleneck points during the PM peak hour.
- I-77: The primary bottleneck point along I-77 southbound is approaching the Forest Drive interchange in the Columbia area every Thursday in the AM peak hour, due to weekly graduation ceremonies at Fort Jackson.

- I-85: The Woodruff Road/I-385 and Pelham Road interchanges are the primary bottlenecks for both directions of I-85 during both the AM and PM peak hours. Improvements to the I-85 and Woodruff Road/I-385 interchange are expected to begin construction in 2014 as part of a Design-Build project.
- I-126: The I-26 interchange is the primary bottleneck along I-126 westbound during the PM peak hour.
- I-385: The primary bottleneck along I-385 is the interchange with I-85.
- I-526: During the PM peak hour, the primary bottleneck along I-526 eastbound is the I-26 interchange and the primary bottleneck points along I-526 westbound are the I-26 interchange, the merge from Leeds Avenue, and the Paul Cantrell Boulevard interchange.

No points of recurring congestion or bottlenecks were identified along I-95, I-185, I-520, or I-585. It should be noted that the congestion analyses considered the typical weekday morning and afternoon peak hours only, and not weekend or peak seasonal conditions along coastal interstates such as I-26 and I-95.

5.1.2 Future Bottlenecks/Recurring Congestion

Future Density and LOS calculations were developed for 2040 conditions for each of the 11 interstates based upon the statewide travel demand modeling. The model estimated future traffic volumes based on projections for socioeconomic data, such as population and employment, and future land use patterns, including the special trip generation characteristics of the state's commercial airports, the coastal ports in Charleston and Georgetown and the Inland Port in Greer. In the future 2040 horizon year, the results show that 62% of the interstate network is projected to operate at LOS C or worse.

Decreases in levels of services are expected in metropolitan areas across the state, with particularly high growth in volume and congestion in the Charlotte Metropolitan area and suburban Rock Hill, South Carolina. At the southern border of South Carolina at the Georgia state line, a decrease in level of services is expected as the Lowcountry region anticipates growth in both residential and industrial activities in concert with continued growth in freight activity at the Ports of Savannah and Charleston. This growth, combined with no programed increases in capacity for I-95 in South Carolina, results in the projected decrease in level of service.

5.1.3 Next Steps

It is recommended that Interstate Corridor Studies be conducted for the interstate corridors that have been identified as being one of the most congested and do not have detailed traffic operations studies currently underway or previously conducted. As previously noted several studies are currently underway or have been completed by SCDOT for areas of congestion along the interstate system, including the I-26/I-20/I-126 Plan of Action Study, the I-85 Corridor Analysis, the I-526 Corridor Analysis, and the I-85 Corridor Analysis (Spartanburg & Cherokee Counties).

These studies will provide a detailed assessment of existing and future traffic congestion with the use of the *VISSIM* microsimulation tool and *Synchro* LOS evaluation tool, and identify specific strategies in

the four improvement categories to address the specific congestion issues for each corridor. The four improvement categories include Travel Demand Management – strategies to shift travel demand away from the peak hours; Modal Strategies – strategies to shift travel demand to transit or rail; Traffic Operations Strategies – lower impact improvements to address specific congestion and safety issues; and Capacity Improvements – high impact improvements that add capacity. As part of these studies, more detailed environmental impact reviews, right-of-way impact evaluations, and cost projections will be able to be developed for the improvement mitigation projects.

5.2 Project Costs – Order of Magnitude

Based upon the results of the Density and LOS analyses for the interstate mainline corridors, planning-level cost estimates were developed for potential improvements to mitigate the most congested interstate corridors and interstate interchanges (IIMS).

5.2.1 Interstate Segments

Planning-level cost estimates were developed for 10 current congested interstate corridors in the State. These cost estimates were based upon several sources, including the results of the Interstate Feasibility Studies that are currently underway or complete and SCDOT planning estimates. For the purposes of this planning-level estimate, if specific improvements are currently unknown for a congested interstate corridor, widening of the interstate corridor by one lane in each direction was assumed at a planning-level cost of $15 million per two-way mile, which does not include interchange improvements. It is recommended that a detailed Interstate Traffic Operations & Feasibility Study be conducted for corridors where specific improvements have not yet been identified.

Table 5-1 summarizes the planning-level estimates for the 10 most congested interstate corridors in the State.

Table 5-1: Planning-Level Cost Estimate for the Most Congested Interstate Corridors

Interstate	Corridor Between		Length (mi)	Location	Planning-Level Cost (In Millions)	Sources
I-526	US-17/ Savannah Hwy	SC-703/Ben Sawyer	20	Charleston	**$533.9***	**1, 3**
I-85	US-29/Exit 34	I-26/Exit 70	36	Greenville	**$404.3**	**2, 4**
I-26	Columbia Ave/Exit 91	US-21/US-176/Exit 119	28	Columbia	**$1,200.0**	**3, 4**
I-20	SC-204/Exit 51	White Pond Rd/Exit 87	36	Columbia	**$540.0**	**3, 4**
I-85	I-26/Exit 70	SC-110/Exit 83	13	Spartanburg	**$195.0**	**3, 4**
I-85	SC-110/Exit 83	US-29/Exit 106	23	North of Spartanburg	**$345.0**	**3, 4**
I-26	Jedburg Road	US 17	27	Charleston	**$405.0**	**4**
I-77	I-26/Exit 1	SC-34/Exit 34	33	Columbia	**$495.0**	**3, 4**
I-385	Fairview Street/ Exit 24	End of Freeway	18	Greenville	**$270.0**	**4**

**The planning-level improvement costs for the I-526 corridor include the reconstruction of the I-526 & I-26 interchange.*
(1) I-526 Corridor Analysis
(2) I-85 Corridor Analysis
(3) SCDOT Planning
(4) Planning-Level $15 Million Cost per Mile Estimate

5.3 Environmental Screening

An environmental screening assessment was conducted to establish the potential baseline of environmental impacts was completed for each Interstate segment of each Interstate route. The environmental screening is detailed in **Appendix D.**

The results of the environmental screening indicates that I-85 has the highest percentage of segments ranked as having Low impacts and I-520 has the highest percentage of segments ranked as having High impacts. In addition, I-77 has the most Interstate miles ranked as having a High impact with approximately 8.3 miles in the Columbia area, which has also been identified as a major congested Interstate corridor.

APPENDIX A:
CONGESTION ANALYSES DATA & PERFORMANCE METRIC CALCULATION DETERMINATION

Probe Speed Data

The Speed (S) portion of the Density calculation for the interstate mainline segments was derived utilizing SCDOT's historical probe speed database for all interstates in South Carolina. Probe speed information is collected along all interstate segments in South Carolina every few seconds from millions of anonymous GPS-enabled vehicles and mobile devices, as well as traditional road sensors, which provides SCDOT with accurate real-time and historical traffic speed information. As noted in the *HCM,* this direct measurement of speeds along the interstate mainline segments is the preferable way to determine the Speed variable for density analysis.

The Speed variable for each interstate mainline segment was derived from the probe speed information averaged over all Tuesdays, Wednesdays, and Thursdays in 2012 for each of the four study hours. The Free-Flow Speed (FFS) for each interstate mainline segment was derived from the probe speed information averaged over all Tuesdays, Wednesdays, and Thursdays in 2012 for the other 20 non-study hours.

It should be noted that the analysis period for the Interstate Plan congestion evaluation was the four study peak hours, based upon the probe speed data being reported in hours, and not 15-minute intervals.

In addition to the Speed data, the interstate mainline segment length, in miles, is provided in the probe speed database.

Flow Rate Calculation Data

The Flow Rate (v_p) portion of the Density calculation for the interstate mainline segments was derived utilizing SCDOT traffic information. As defined by the *HCM,* Flow Rate is calculated by dividing the Hourly Volume (V) by the multiplication of the Peak Hour Factor (PHF), Number of Lanes (N), Heavy-Vehicle Adjustment Factor (f_{HV}), and Population Factor (f_p), as shown herein.

$$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$$

- Hourly Volume (V) for each interstate mainline segment was calculated by multiplying its 2011 AADT by segment-specific K- and D-factors for each of the four study hours. At the time the analysis work began the latest year for which AADT data were available was 2011. The K- and D- factors for each of the four study hours were developed based upon a representative sample of the available SCDOT Automatic Traffic Recorder (ATR) hourly data for each interstate by urban and rural sections. The peak direction for urban interstate mainline segments was also determined.
- Peak Hour Factor (PHF) was assumed to be 0.90 for all interstate mainline segments.
- Number of Lanes (N) was based upon observations of existing conditions.
- Heavy-Vehicle Adjustment Factor (f_{HV}) was derived based upon the *HCM* equation, which considers the segment truck percentage (P_T) and Passenger Car Equivalents (E_T) defined by

the *HCM* and shown herein. The truck percentages (P_T) were based upon 2011 truck percentage data at ATR locations along the interstate system from SCDOT Road Data Services and the Passenger Car Equivalents (E_T) were based upon *HCM* tables and observed terrain conditions for the State. It should be noted that Recreational Vehicle (RV) data was not available; therefore RVs were not considered in the Heavy-Vehicle Adjustment Factor calculation.

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

- Population Factor (f_p) was assumed to be 1.0 for all interstate mainline segments.

Density Index Calculation

Based upon the determination of the existing freeway Density conditions for both directions of all interstate mainline segments for the four study hours, a Density Index metric was then derived to compare the respective levels of congestion for the individual interstate mainline segments. The Density Index metric is defined as the summation of the individual interstate mainline segment Densities for each of the four study hours for both directions.

In addition, the interstate mainline segments were combined into interstate corridors, based upon continuous segments having similar densities. The Average Density Index across all segments was then calculated to compare the respective levels of congestion for the interstate corridors.

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APPENDIX B:
DENSITY/LOS CALCULATIONS FOR THE INTERSTATE MAINLINE SEGMENTS AND CORRIDORS

INRIX CONGESTION ANALYSIS
I-20 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
20%	0.00	57.62	GA State Line to US 1 @ Lexington
12%	57.62	75.72	US 1 @ Lexington to I-77
20%	75.72	141.51	I-77 to I-95

Terrain Data

Terrain	(E_T)	Description
Level	1.5	Exit 116 to End
Rolling	2.5	GA State Line to Exit 116

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-20

Segment #	Segment Between			Density Index			I-20 Segment Rank	Corridor Name	Corridor Density Index	
				I-20 EB	I-20 WB	I-20 Two-Way			Average Index	Rank by Average Index
1	GA State Line	&	SC-230/Exit 1	83.5	77.9	161.4	15	I-20 A	161.4	5
2	SC-230/Exit 1	&	US-25/SC-121/Exit 5	62.2	58.7	120.9	20	I-20 B	120.9	9
3	US-25/SC-121/Exit 5	&	SC-144/Exit 11	50.1	49.5	99.6	22	I-20 C	85.6	10
4	SC-144/Exit 11	&	SC-19/Exit 18	42.9	39.7	82.6	25			
5	SC-19/Exit 18	&	US-1/Exit 22	40.0	37.5	77.4	30			
6	US-1/Exit 22	&	Road 49/Exit 29	41.4	38.8	80.2	29			
7	Road 49/Exit 29	&	SC-39/Exit 33	42.1	39.8	81.9	26			
8	SC-39/Exit 33	&	US-178/Exit 39	42.3	39.2	81.5	27			
9	US-178/Exit 39	&	SC-34/Exit 44	40.9	43.5	84.4	24			
10	SC-34/Exit 44	&	SC-204/Exit 51	46.5	50.1	96.6	23			
11	SC-204/Exit 51	&	SC-6/Exit 55	79.3	60.0	139.2	16	I-20 D	139.2	6
12	SC-6/Exit 55	&	US-1/Exit 58	115.7	83.7	199.4	5	I-20 E	190.0	3
13	US-1/Exit 58	&	US-378/Exit 61	105.0	85.3	190.3	9			
14	US-378/Exit 61	&	Bush River Rd/Exit 63	99.2	83.9	183.1	10			
15	Bush River Rd/Exit 63	&	I-26/US-76/Exit 64	106.1	76.5	182.6	11			
16	I-26/US-76/Exit 64	&	US-176/Broad River Rd/Exit 65	90.3	104.3	194.6	8			
17	US-176/Broad River Rd/Exit 65	&	SC-215/Monticello Rd/Exit 68	101.6	124.6	226.2	2	I-20 F	194.9	2
18	SC-215/Monticello Rd/Exit 68	&	US-321/Fairfield Rd/Exit 70	103.9	103.5	207.4	3			
19	US-321/Fairfield Rd/Exit 70	&	US-21/Main St/Exit 71	98.8	98.2	197.0	6			
20	US-21/Main St/Exit 71	&	SC-555/Farrow Rd/Exit 72	98.5	97.6	196.1	7			
21	SC-555/Farrow Rd/Exit 72	&	SC-277/Exit 73	90.0	88.6	178.5	12			
22	SC-277/Exit 73	&	US-1/Two Notch Rd/Exit 74	80.4	84.0	164.3	14			
23	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	65.7	70.9	136.6	18	I-20 G	136.6	7
24	I-77/Exit 76A	&	Alpine Rd/Exit 76B	108.3	98.4	206.7	4	I-20 H	226.1	1
25	Alpine Rd/Exit 76B	&	Clemson Rd/Exit 80	128.9	116.6	245.5	1			
26	Clemson Rd/Exit 80	&	Spears Creek Church Road/Exit 82	88.4	88.3	176.7	13	I-20 I	176.7	4
27	Spears Creek Church Road/Exit 82	&	White Pond Rd/Exit 87	69.9	68.9	138.8	17	I-20 J	122.2	8
28	White Pond Rd/Exit 87	&	US-601/Exit 92	64.1	61.9	126.0	19			
29	US-601/Exit 92	&	US-521/Exit 98	51.2	50.6	101.8	21			
30	US-521/Exit 98	&	Humphries Rd/Exit 101	40.4	40.4	80.8	28	I-20 K	68.5	11
31	Humphries Rd/Exit 101	&	Jamestown Rd/Exit 108	39.0	38.3	77.4	31			
32	Jamestown Rd/Exit 108	&	US-15/Exit 116	36.7	37.4	74.1	32			
33	US-15/Exit 116	&	SC-341/Exit 120	29.8	30.3	60.0	36			
34	SC-341/Exit 120	&	SC-22/Exit 123	29.8	30.7	60.4	35			
35	SC-22/Exit 123	&	US-401/Exit 131	29.3	30.0	59.3	37			
36	US-401/Exit 131	&	SC-340/Exit 137	29.0	36.6	65.6	34			
37	SC-340/Exit 137	&	I-95/Exit 141	31.0	39.8	70.8	33			

INRIX CONGESTION ANALYSIS
I-20 SUMMARY

I-20 Segment #	Segment Between			I-20 Eastbound LOS												I-20 Westbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	GA State Line	&	SC-230/Exit 1	A	B	B	A	B	B	B	B	B	C	C	D	A	C	C	B	B	B	B	B	B	B	B	C
2	SC-230/Exit 1	&	US-25/SC-121/Exit 5	A	A	A	A	A	A	B	B	B	B	C	C	A	C	B	B	A	A	B	B	B	B	B	B
3	US-25/SC-121/Exit 5	&	SC-144/Exit 11	A	A	A	A	A	A	A	A	A	B	B	B	A	B	B	A	A	A	A	A	A	A	A	B
4	SC-144/Exit 11	&	SC-19/Exit 18	A	A	A	A	A	A	A	A	A	A	B	B	A	A	A	A	A	A	A	A	A	A	A	A
5	SC-19/Exit 18	&	US-1/Exit 22	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A
6	US-1/Exit 22	&	Road 49/Exit 29	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A
7	Road 49/Exit 29	&	SC-39/Exit 33	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A
8	SC-39/Exit 33	&	US-178/Exit 39	A	A	A	A	A	A	A	A	A	A	B	B	A	A	A	A	A	A	A	A	A	A	A	A
9	US-178/Exit 39	&	SC-34/Exit 44	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
10	SC-34/Exit 44	&	SC-204/Exit 51	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	B
11	SC-204/Exit 51	&	SC-6/Exit 55	D	C	B	B	B	B	B	B	B	B	B	A	A	A	A	A	A	B	B	B	B	C	C	B
12	SC-6/Exit 55	&	US-1/Exit 58	F	D	C	B	B	B	B	B	B	B	B	B	A	A	B	B	B	B	B	C	C	D	D	C
13	US-1/Exit 58	&	US-378/Exit 61	E	D	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	C	D	E	C
14	US-378/Exit 61	&	Bush River Rd/Exit 63	C	E	D	B	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	C	D	D
15	Bush River Rd/Exit 63	&	I-26/US-76/Exit 64	C	E	D	C	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	C	D	D
16	I-26/US-76/Exit 64	&	US-176/Broad River Rd/Exit 65	B	D	C	B	B	B	B	B	B	B	C	C	B	C	C	B	B	B	C	C	C	C	D	D
17	US-176/Broad River Rd/Exit 65	&	SC-215/Monticello Rd/Exit 68	B	D	C	B	B	B	B	B	B	C	C	C	B	C	D	C	C	C	C	C	C	D	E	E
18	SC-215/Monticello Rd/Exit 68	&	US-321/Fairfield Rd/Exit 70	B	D	D	B	B	B	B	B	C	C	C	C	B	C	C	B	B	B	B	B	C	C	D	D
19	US-321/Fairfield Rd/Exit 70	&	US-21/Main St/Exit 71	B	D	D	B	B	B	B	B	B	C	C	C	B	C	C	B	B	B	B	B	C	C	D	D
20	US-21/Main St/Exit 71	&	SC-555/Farrow Rd/Exit 72	B	D	D	B	B	B	B	B	B	C	C	C	B	C	C	B	B	B	B	B	C	C	D	D
21	SC-555/Farrow Rd/Exit 72	&	SC-277/Exit 73	B	C	C	B	B	B	B	B	B	B	C	C	B	C	B	B	B	B	B	B	B	C	D	C
22	SC-277/Exit 73	&	US-1/Two Notch Rd/Exit 74	A	C	C	B	B	B	B	B	B	B	B	C	A	C	B	B	B	B	B	B	B	C	C	C
23	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	A	C	B	B	A	A	A	A	B	B	B	B	A	B	B	A	A	A	B	B	B	B	C	C
24	I-77/Exit 76A	&	Alpine Rd/Exit 76B	A	B	B	B	B	C	C	C	C	C	E	E	C	E	C	C	B	B	C	C	C	C	C	C
25	Alpine Rd/Exit 76B	&	Clemson Rd/Exit 80	A	B	B	C	C	C	C	C	C	D	E	E	D	F	D	C	C	C	C	C	C	C	C	C
26	Clemson Rd/Exit 80	&	Spears Creek Church Road/Exit 82	A	A	B	B	B	B	B	B	C	C	D	D	C	E	C	B	B	B	B	B	B	B	B	B
27	Spears Creek Church Road/Exit 82	&	White Pond Rd/Exit 87	A	A	A	A	B	B	B	B	B	B	C	C	B	D	B	B	B	B	B	B	B	B	B	B
28	White Pond Rd/Exit 87	&	US-601/Exit 92	A	A	A	A	A	B	B	B	B	B	C	C	B	D	B	B	A	A	B	B	B	B	B	B
29	US-601/Exit 92	&	US-521/Exit 98	A	A	A	A	A	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B
30	US-521/Exit 98	&	Humphries Rd/Exit 101	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
31	Humphries Rd/Exit 101	&	Jamestown Rd/Exit 108	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
32	Jamestown Rd/Exit 108	&	US-15/Exit 116	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
33	US-15/Exit 116	&	SC-341/Exit 120	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
34	SC-341/Exit 120	&	SC-22/Exit 123	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
35	SC-22/Exit 123	&	US-401/Exit 131	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
36	US-401/Exit 131	&	SC-340/Exit 137	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
37	SC-340/Exit 137	&	I-95/Exit 141	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B

INRIX CONGESTION ANALYSIS
I-26 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
20%	0.00	17.83	NC State Line to I-85
15%	17.83	20.96	I-85 to US 29
20%	20.96	96.55	US 29 to US 176 (N Columbia Interchange)
15%	96.55	115.69	US 176 (N Columbia Interchange) to I-77
20%	115.69	199.04	I-77 to US 17A
15%	199.04	204.95	US 17A to US 78
10%	204.95	208.09	US 78 to US 52 Connector
7%	208.09	212.60	US 52 Connector to I-526
5%	212.60	220.95	I-526 to End (US 17)

Terrain Data

Terrain	(E_T)	Description
Level	1.5	Exit 97 to Exit 125, Exit 136 to End
Rolling	2.5	NC State Line to Exit 97, Exit 125 to Exit 136

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-26 SUMMARY

I-26 Segment #	Segment Between			Segment Density Index			I-26 Segment Rank	Corridor Name	Corridor Density Index	
				I-26 EB	I-26 WB	I-26 Two-Way			Average Index	Rank by Average Index
1	NC State Line	&	SC-14/Exit 1	36.6	41.7	78.3	65	I-26 A	83.5	18
2	SC-14/Exit 1	&	SC-11/Exit 5	36.4	41.3	77.7	66			
3	SC-11/Exit 5	&	SC-292/Exit 10	38.1	44.7	82.8	63			
4	SC-292/Exit 10	&	US-176/Exit 15	44.2	50.9	95.1	57			
5	US-176/Exit 15	&	John Dodd Rd/Exit 16	59.0	61.5	120.5	43	I-26 B	138.9	13
6	John Dodd Rd/Exit 16	&	New Cut Rd/Exit 17	67.6	68.5	136.1	38			
7	New Cut Rd/Exit 17	&	I-85/Exit 18	78.5	79.1	157.6	26			
8	I-85/Exit 18	&	I-85 Bus/Exit 19	68.9	72.4	141.3	35			
9	I-85 Bus/Exit 19	&	US-29/Exit 21	90.2	95.6	185.9	**10**	I-26 C	185.9	5
10	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	69.4	79.0	148.4	31	I-26 D	148.4	12
11	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	41.8	47.3	89.1	62	I-26 E	89.1	17
12	US-221/Exit 28	&	Frontage Rd 35/Exit 35	31.8	39.4	71.2	69	I-26 F	65.5	20
13	Frontage Rd 35/Exit 35	&	SC-146/Exit 38	30.4	37.5	67.9	70			
14	SC-146/Exit 38	&	SC-92/Exit 41	29.4	36.4	65.8	71			
15	SC-92/Exit 41	&	SC-49/Exit 44	27.6	34.6	62.2	72			
16	SC-49/Exit 44	&	I-385	27.1	33.3	60.4	73			
17	I-385	&	SC-56/Exit 52	56.4	56.1	112.5	48	I-26 G	104.8	16
18	SC-56/Exit 52	&	SC-72/Exit 54	49.2	51.7	100.9	56			
19	SC-72/Exit 54	&	SC-66/Exit 60	46.3	46.9	93.2	59			
20	SC-66/Exit 60	&	Road 32/Exit 66	45.8	47.1	92.9	61			
21	Road 32/Exit 66	&	SC-121/Exit 72	45.9	47.1	93.0	60			
22	SC-121/Exit 72	&	SC-34/Exit 74	44.0	57.2	101.2	55			
23	SC-34/Exit 74	&	SC-219/Exit 76	44.9	60.8	105.7	54			
24	SC-219/Exit 76	&	SC-773/Exit 82	50.3	64.0	114.3	47			
25	SC-773/Exit 82	&	SC-202/Exit 85	52.4	64.7	117.1	44			
26	SC-202/Exit 85	&	Columbia Ave/Exit 91	51.7	65.4	117.1	45			
27	Columbia Ave/Exit 91	&	US-176/Exit 97	68.8	74.8	143.6	34	I-26 H	152.3	10
28	US-176/Exit 97	&	US-176/US-76/Exit 101	83.0	70.4	153.4	29			
29	US-176/US-76/Exit 101	&	SC-60/Lake Murray Blvd/Exit 102	91.2	68.6	159.8	22			
30	SC-60/Lake Murray Blvd/Exit 102	&	Harbison Blvd/Exit 103	126.1	90.6	216.7	**6**	I-26 I	228.6	3
31	Harbison Blvd/Exit 103	&	Piney Grove Rd/Exit 104	138.5	102.1	240.6	**5**			
32	Piney Grove Rd/Exit 104	&	Saint Andrews Rd/Exit 106	148.1	123.3	271.4	**2**	I-26 J	276.4	1
33	Saint Andrews Rd/Exit 106	&	I-20/Exit 107	135.0	146.5	281.5	**1**			
34	I-20/Exit 107	&	Bush River Rd/Exit 108	115.6	133.3	248.9	**4**	I-26 K	253.7	2
35	Bush River Rd/Exit 108	&	I-126/US-76	110.8	147.8	258.5	**3**			
36	I-126/US-76	&	US-378/Exit 110	96.3	68.2	164.5	20	I-26 L	162.8	7
37	US-378/Exit 110	&	US-1/Exit 111	89.6	56.4	146.0	33			
38	US-1/Exit 111	&	SC-302/Exit 113	95.1	81.7	176.8	14			
39	SC-302/Exit 113	&	US-321/US-21/US-176/Exit 115	90.1	75.6	165.7	19			
40	US-321/US-21/US-176/Exit 115	&	I-77/Exit 116	66.2	80.1	146.3	32			
41	I-77/Exit 116	&	US-21/US-176/Exit 119	84.9	92.6	177.5	12			
42	US-21/US-176/Exit 119	&	Road 31/Exit 125	77.0	81.5	158.5	25	I-26 M	150.5	11
43	Road 31/Exit 125	&	US-21/Exit 129	75.7	80.2	155.9	28			
44	US-21/Exit 129	&	Caw Caw Rd	71.5	79.5	151.0	30			
45	Caw Caw Rd	&	Burke Rd	59.2	77.3	136.5	37			
46	Burke Rd	&	US-601/Saint Matthews Rd	55.7	61.0	116.7	46	I-26 N	111.1	15
47	US-601/Saint Matthews Rd	&	SC-33/Cameron Rd/Russell St	52.9	59.1	112.0	49			
48	SC-33/Cameron Rd/Russell St	&	Five Chop Rd	56.5	54.8	111.3	50			
49	Five Chop Rd	&	Homestead Rd	55.5	53.8	109.3	51			
50	Homestead Rd	&	Vance Rd	55.3	53.0	108.3	53			
51	Vance Rd	&	I-95	55.7	53.3	109.0	52			
52	I-95	&	US-15	38.7	37.2	75.9	67	I-26 O	80.9	19
53	US-15	&	SC-453	38.7	36.8	75.5	68			
54	SC-453	&	Ridgeville Rd	40.3	38.1	78.5	64			
55	Ridgeville Rd	&	Jedburg Rd	48.4	45.5	93.9	58			
56	Jedburg Rd	&	N Main St	56.4	78.2	134.5	39	I-26 P	129.6	14
57	N Main St	&	College Park Rd	52.4	72.3	124.6	42			
58	College Park Rd	&	US-78/University Blvd	67.5	89.8	157.3	27	I-26 Q	172.1	6
59	US-78/University Blvd	&	US-52/Rivers Ave	74.7	112.3	186.9	**9**			
60	US-52/Rivers Ave	&	Ashley Phosphate Rd	95.3	110.5	205.8	**7**	I-26 R	205.3	4
61	Ashley Phosphate Rd	&	W Aviation Ave	78.2	126.7	204.9	**8**			
62	W Aviation Ave	&	Remount Rd	60.7	98.4	159.1	23	I-26 S	159.1	9
63	Remount Rd	&	I-526	65.2	117.0	182.3	11	I-26 T	159.9	8
64	I-526	&	Mall Dr/W Montague Ave	85.2	91.7	176.9	13			
65	Mall Dr/W Montague Ave	&	Dorchester Rd	87.2	81.7	168.9	16			
66	Dorchester Rd	&	SC-7/Cosgrove Ave	90.3	85.5	175.8	15			
67	SC-7/Cosgrove Ave	&	Meeting Street Rd	85.8	80.3	166.2	18			
68	Meeting Street Rd	&	Spruill Ave	84.1	77.4	161.4	21			
69	Spruill Ave	&	Rutledge Ave	87.2	79.0	166.2	17			
70	Rutledge Ave	&	Mount Pleasant St	84.5	74.6	159.1	24			
71	Mount Pleasant St	&	Cypress St	74.1	66.1	140.3	36			
72	Cypress St	&	Romney St	70.4	61.7	132.1	40			
73	Romney St	&	US 17	68.8	60.8	129.6	41			

INRIX CONGESTION ANALYSIS

I-26 SUMMARY

I-26 Segment #	Segment Between		I-26 Eastbound LOS												I-26 Westbound LOS											
			7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	NC State Line	& SC-14/Exit 1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
2	SC-14/Exit 1	& SC-11/Exit 5	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
3	SC-11/Exit 5	& SC-292/Exit 10	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
4	SC-292/Exit 10	& US-176/Exit 15	A	B	A	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	B	B	B	B
5	US-176/Exit 15	& John Dodd Rd/Exit 16	A	B	A	A	B	B	B	A	B	B	B	B	A	B	A	A	A	A	B	B	B	B	B	B
6	John Dodd Rd/Exit 16	& New Cut Rd/Exit 17	A	B	B	B	B	B	B	B	B	B	B	C	B	B	B	A	A	A	B	B	B	B	B	B
7	New Cut Rd/Exit 17	& I-85/Exit 18	A	B	B	B	B	B	B	B	B	C	C	C	B	C	B	A	A	B	B	B	C	C	C	C
8	I-85/Exit 18	& I-85 Bus/Exit 19	A	B	B	B	B	B	B	B	B	B	B	C	B	C	B	A	A	B	B	B	B	B	B	C
9	I-85 Bus/Exit 19	& US-29/Exit 21	A	C	B	B	B	C	C	B	B	C	C	D	B	C	B	B	B	B	C	C	C	C	C	C
10	US-29/Exit 21	& SC-296/Reidville Rd/Exit 22	A	B	B	B	B	B	B	B	B	B	B	C	B	C	B	B	B	B	B	B	B	C	C	B
11	SC-296/Reidville Rd/Exit 22	& US-221/Exit 28	A	A	A	A	A	A	A	A	A	A	A	B	A	B	A	A	A	A	A	A	A	B	B	A
12	US-221/Exit 28	& Frontage Rd 35/Exit 35	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
13	Frontage Rd 35/Exit 35	& SC-146/Exit 38	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
14	SC-146/Exit 38	& SC-92/Exit 41	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
15	SC-92/Exit 41	& SC-49/Exit 44	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
16	SC-49/Exit 44	& I-385	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
17	I-385	& SC-56/Exit 52	A	A	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
18	SC-56/Exit 52	& SC-72/Exit 54	A	A	B	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
19	SC-72/Exit 54	& SC-66/Exit 60	A	A	A	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	B	A
20	SC-66/Exit 60	& Road 32/Exit 66	A	A	A	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	B	A
21	Road 32/Exit 66	& SC-121/Exit 72	A	A	A	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	B	A
22	SC-121/Exit 72	& SC-34/Exit 74	A	A	A	B	B	B	B	A	B	A	B	B	A	A	A	A	A	A	B	B	B	B	B	B
23	SC-34/Exit 74	& SC-219/Exit 76	A	A	B	B	B	B	B	B	B	A	B	B	A	A	A	A	A	A	B	B	B	B	B	B
24	SC-219/Exit 76	& SC-773/Exit 82	A	A	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B
25	SC-773/Exit 82	& SC-202/Exit 85	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B
26	SC-202/Exit 85	& Columbia Ave/Exit 91	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B
27	Columbia Ave/Exit 91	& US-176/Exit 97	C	C	C	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	C	C	C	C	B
28	US-176/Exit 97	& US-176/US-76/Exit 101	C	D	C	C	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	C	D	D
29	US-176/US-76/Exit 101	& SC-60/Lake Murray Blvd/Exit 102	C	E	C	C	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	B	C	D	D
30	SC-60/Lake Murray Blvd/Exit 102	& Harbison Blvd/Exit 103	D	F	D	C	C	C	C	B	B	B	B	C	A	A	A	A	B	B	B	C	C	D	D	E
31	Harbison Blvd/Exit 103	& Piney Grove Rd/Exit 104	E	F	E	D	C	C	C	C	B	B	B	C	A	A	B	B	B	B	C	C	C	D	E	E
32	Piney Grove Rd/Exit 104	& Saint Andrews Rd/Exit 106	E	F	E	D	D	C	C	C	C	C	C	C	A	B	B	B	B	C	C	C	D	E	F	F
33	Saint Andrews Rd/Exit 106	& I-20/Exit 107	D	F	E	D	C	C	C	C	C	B	C	C	A	A	B	B	B	B	C	C	C	D	F	F
34	I-20/Exit 107	& Bush River Rd/Exit 108	D	F	D	C	C	C	C	B	B	B	B	C	A	A	A	A	B	B	B	C	C	D	F	E
35	Bush River Rd/Exit 108	& I-126/US-76	D	E	D	D	C	C	C	B	B	B	B	C	A	A	B	B	B	B	C	C	C	D	F	F
36	I-126/US-76	& US-378/Exit 110	C	E	D	C	C	B	B	B	B	B	B	B	A	A	A	A	A	A	B	B	B	C	D	C
37	US-378/Exit 110	& US-1/Exit 111	C	D	D	C	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	B	B	B	C	C
38	US-1/Exit 111	& SC-302/Exit 113	C	E	D	C	C	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C	C	D	D
39	SC-302/Exit 113	& US-321/US-21/US-176/Exit 115	C	D	D	C	B	B	B	B	B	B	B	B	A	A	A	A	A	B	B	B	C	C	D	D
40	US-321/US-21/US-176/Exit 115	& I-77/Exit 116	B	C	C	B	B	B	B	A	A	A	A	B	A	A	A	A	A	B	B	B	C	C	D	D
41	I-77/Exit 116	& US-21/US-176/Exit 119	B	B	C	C	C	C	C	C	C	C	C	C	A	B	B	B	C	C	C	C	C	C	C	C
42	US-21/US-176/Exit 119	& Road 31/Exit 125	A	B	B	B	C	C	C	C	C	C	C	B	A	A	B	B	B	B	B	C	C	C	C	C
43	Road 31/Exit 125	& US-21/Exit 129	A	B	B	B	C	C	C	C	C	C	C	B	A	A	B	B	B	B	B	C	C	C	C	C
44	US-21/Exit 129	& Caw Caw Rd	A	B	B	B	B	C	C	C	C	B	B	B	A	A	B	B	B	B	B	C	C	C	C	C
45	Caw Caw Rd	& Burke Rd	A	B	B	B	B	B	B	B	B	B	B	B	A	A	B	B	B	B	B	B	C	C	C	C
46	Burke Rd	& US-601/Saint Matthews Rd	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
47	US-601/Saint Matthews Rd	& SC-33/Cameron Rd/Russell St	A	A	B	B	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
48	SC-33/Cameron Rd/Russell St	& Five Chop Rd	A	A	A	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
49	Five Chop Rd	& Homestead Rd	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
50	Homestead Rd	& Vance Rd	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
51	Vance Rd	& I-95	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
52	I-95	& US-15	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
53	US-15	& SC-453	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
54	SC-453	& Ridgeville Rd	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
55	Ridgeville Rd	& Jedburg Rd	A	A	A	A	A	A	A	B	B	B	B	B	A	A	B	B	B	A	A	A	B	B	B	A
56	Jedburg Rd	& N Main St	C	D	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	B	B	B	C	C	C
57	N Main St	& College Park Rd	C	D	B	B	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	B	B	C	C	C
58	College Park Rd	& US-78/University Blvd	D	D	C	B	B	B	B	B	B	B	A	B	A	A	A	A	B	B	B	B	B	C	D	D
59	US-78/University Blvd	& US-52/Rivers Ave	E	E	D	C	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C	D	E	E
60	US-52/Rivers Ave	& Ashley Phosphate Rd	F	F	D	C	C	C	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C	D	E	E
61	Ashley Phosphate Rd	& W Aviation Ave	E	F	D	C	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	C	D	E	E
62	W Aviation Ave	& Remount Rd	D	D	C	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	B	B	D	E	D
63	Remount Rd	& I-526	D	D	C	B	B	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	C	D	E	E
64	I-526	& Mall Dr/W Montague Ave	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	A	B	B	B	B	B	D	E	D
65	Mall Dr/W Montague Ave	& Dorchester Rd	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	A	B	B	B	B	B	C	D	D
66	Dorchester Rd	& SC-7/Cosgrove Ave	C	D	D	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	C	D	D
67	SC-7/Cosgrove Ave	& Meeting Street Rd	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	A	B	B	B	B	B	C	D	D
68	Meeting Street Rd	& Spruill Ave	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	A	A	B	B	B	B	C	D	C
69	Spruill Ave	& Rutledge Ave	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	A	B	B	B	B	B	C	D	D
70	Rutledge Ave	& Mount Pleasant St	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	A	A	B	B	B	B	C	D	C
71	Mount Pleasant St	& Cypress St	C	D	C	B	B	B	B	B	B	B	B	B	A	A	A	A	A	A	B	B	B	C	C	C
72	Cypress St	& Romney St	C	C	C	B	B	A	A	B	B	B	B	B	A	A	A	A	A	A	A	A	B	B	C	C
73	Romney St	& US 17	C	C	C	B	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	B	B	C	C

INRIX CONGESTION ANALYSIS
I-77 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
15%	0.00	15.87	I-26 to I-20
25%	15.87	76.87	I-20 to US 21 S of Rock Hill
15%	76.87	91.05	US 21 S of Rock Hill to NC State Line

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to NC State Line

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-77

Segment #	Segment Between			Density Index			I-77 Segment Rank	Corridor Name	Corridor Density Index	
				I-77 NB	I-77 SB	I-77 Two-Way			Average Index	Rank by Average Index
1	I-26/Exit 1	&	12th St Ext	67.5	74.1	141.5	18	I-77 A	138.7	5
2	12th St Ext	&	Alex Sanders Brg	71.6	77.3	148.9	14			
3	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	72.5	78.1	150.5	13			
4	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	69.8	74.5	144.3	16			
5	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	61.9	65.1	127.0	22			
6	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	61.7	64.9	126.6	23			
7	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	63.1	69.1	132.2	19			
8	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	73.7	78.7	152.4	12	I-77 B	157.7	3
9	SC-12/Forest Dr/Exit 12	&	Decker Blvd/Exit 13	84.5	89.9	174.4	6			
10	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	72.1	75.3	147.4	15			
11	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	77.1	79.5	156.6	11			
12	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	97.0	98.7	195.6	1	I-77 C	183.6	1
13	US-1/Two Notch Rd/Exit 17	&	SC-277/Exit 18	92.1	89.8	182.0	3			
14	SC-277/Exit 18	&	SC-555/Farrow Rd/Exit 19	81.2	93.5	174.7	5			
15	SC-555/Farrow Rd/Exit 19	&	Killian Rd/Exit 22	84.7	97.5	182.2	2			
16	Killian Rd/Exit 22	&	US-21/Exit 24	60.1	69.2	129.3	21	I-77 D	145.0	4
17	US-21/Exit 24	&	Blythewood Rd/Exit 27	75.7	87.9	163.6	9			
18	Blythewood Rd/Exit 27	&	SC-34/Exit 34	65.6	76.5	142.2	17			
19	SC-34/Exit 34	&	Road 41/Exit 41	66.4	45.7	112.0	25	I-77 E	110.2	7
20	Road 41/Exit 41	&	Road 20/Exit 46	65.8	45.1	110.9	27			
21	Road 20/Exit 46	&	SC-200/Exit 48	66.2	45.3	111.5	26			
22	SC-200/Exit 48	&	SC-97/Exit 55	61.9	47.1	108.9	29			
23	SC-97/Exit 55	&	SC-56/Exit 62	61.5	47.1	108.6	30			
24	SC-56/Exit 62	&	SC-9/Exit 65	61.9	47.4	109.3	28			
25	SC-9/Exit 65	&	SC-901/Exit 73	70.7	54.3	125.0	24	I-77 F	127.4	6
26	SC-901/Exit 73	&	Porter Rd/Exit 75	72.8	57.0	129.8	20			
27	Porter Rd/Exit 75	&	US-21/SC-5/Exit 77	50.4	38.7	89.1	32	I-77 G	87.7	8
28	US-21/SC-5/Exit 77	&	SC-122/Dave Lyle Blvd/Exit 79	43.3	36.7	80.0	34			
29	SC-122/Dave Lyle Blvd/Exit 79	&	US-21/Exit 82	54.8	46.0	100.8	31			
30	US-21/Exit 82	&	SC-161/Exit 82	43.6	37.1	80.7	33			
31	SC-161/Exit 82	&	Sutton Rd/Exit 83	82.4	86.6	168.9	7	I-77 H	168.2	2
32	Sutton Rd/Exit 83	&	SC-160/Exit 85	80.7	82.0	162.6	10			
33	SC-160/Exit 85	&	SC-98/Gold Hill Rd/Exit 88	80.1	83.6	163.7	8			
34	SC-98/Gold Hill Rd/Exit 88	&	US-21/Carowinds Blvd/Exit 90	88.3	89.4	177.7	4			

INRIX CONGESTION ANALYSIS
I-77 SUMMARY

I-77 Segment #	Segment Between			I-77 Northbound LOS											I-77 Southbound LOS										
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	I-26/Exit 1	&	12th St Ext	A	B	B	B	A	A	B	B	B	B	B	C	B	C	B	B	B	B	B	B	B	B	B	B
2	12th St Ext	&	Alex Sanders Brg	A	B	B	B	A	B	B	B	B	B	C	C	B	C	B	B	B	B	B	B	B	B	C	C
3	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	A	B	B	B	A	B	B	B	B	B	C	C	B	C	B	B	B	B	B	B	B	B	C	C
4	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	A	B	B	B	A	B	B	B	B	B	B	C	B	C	B	B	B	B	B	B	B	B	B	B
5	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	A	B	B	A	A	A	A	A	B	B	B	C	B	C	B	A	B	B	B	B	B	B	B	B
6	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	A	B	B	A	A	A	A	A	B	B	B	C	B	C	B	A	B	B	B	B	B	B	B	B
7	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	A	B	B	A	A	A	A	A	B	B	B	C	B	C	B	A	B	B	B	B	B	B	B	B
8	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	A	B	B	B	A	B	B	B	B	B	C	C	B	C	B	B	B	B	B	B	B	B	C	C
9	SC-12/Forest Dr/Exit 12	&	Decker Blvd/Exit 13	A	B	B	B	B	B	B	B	B	C	C	D	B	D	C	B	B	B	B	B	B	C	C	C
10	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	A	B	B	B	A	B	B	B	B	B	C	C	B	C	B	B	B	B	B	B	B	B	B	B
11	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	A	B	B	B	B	B	B	B	B	B	C	C	B	C	C	B	B	B	B	B	B	B	C	C
12	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	A	B	B	B	B	B	B	C	C	C	D	D	C	E	D	C	B	B	B	B	B	B	B	C
13	US-1/Two Notch Rd/Exit 17	&	SC-277/Exit 18	A	B	B	B	B	B	B	B	C	C	D	D	C	D	C	B	B	B	B	B	B	B	B	B
14	SC-277/Exit 18	&	SC-555/Farrow Rd/Exit 19	A	B	B	A	B	B	B	B	C	C	D	D	B	D	D	C	C	B	B	B	B	B	B	B
15	SC-555/Farrow Rd/Exit 19	&	Killian Rd/Exit 22	A	B	B	B	B	B	B	B	C	C	D	D	B	D	D	C	C	C	B	B	B	B	B	B
16	Killian Rd/Exit 22	&	US-21/Exit 24	A	A	A	A	A	A	A	B	B	B	C	C	A	C	C	B	B	B	B	A	A	B	B	B
17	US-21/Exit 24	&	Blythewood Rd/Exit 27	A	A	B	A	A	B	B	B	C	C	C	D	B	D	C	B	B	B	B	B	B	B	B	B
18	Blythewood Rd/Exit 27	&	SC-34/Exit 34	A	A	A	A	A	A	B	B	B	B	C	C	A	D	C	B	B	B	B	B	B	B	B	B
19	SC-34/Exit 34	&	Road 41/Exit 41	A	A	A	A	A	A	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A
20	Road 41/Exit 41	&	Road 20/Exit 46	A	A	A	A	A	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A
21	Road 20/Exit 46	&	SC-200/Exit 48	A	A	A	A	A	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A
22	SC-200/Exit 48	&	SC-97/Exit 55	A	A	A	A	A	A	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A
23	SC-97/Exit 55	&	SC-56/Exit 62	A	A	A	A	A	A	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A
24	SC-56/Exit 62	&	SC-9/Exit 65	A	A	A	A	A	A	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	A
25	SC-9/Exit 65	&	SC-901/Exit 73	A	A	A	A	A	B	B	B	B	B	C	C	A	B	B	B	C	B	B	B	B	B	B	B
26	SC-901/Exit 73	&	Porter Rd/Exit 75	A	A	A	A	B	B	B	B	B	B	C	C	A	B	B	C	C	B	B	B	B	B	B	B
27	Porter Rd/Exit 75	&	US-21/SC-5/Exit 77	A	A	A	A	A	A	A	A	B	B	B	B	A	A	B	B	B	B	A	A	A	A	A	A
28	US-21/SC-5/Exit 77	&	SC-122/Dave Lyle Blvd/Exit 79	B	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
29	SC-122/Dave Lyle Blvd/Exit 79	&	US-21/Exit 82	B	C	B	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	B	B
30	US-21/Exit 82	&	SC-161/Exit 82	B	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B
31	SC-161/Exit 82	&	Sutton Rd/Exit 83	A	A	A	A	A	B	B	B	B	C	D	E	D	E	C	B	B	B	B	B	B	A	A	A
32	Sutton Rd/Exit 83	&	SC-160/Exit 85	A	A	A	A	A	B	B	B	B	C	D	E	D	E	C	B	B	B	B	B	B	A	A	A
33	SC-160/Exit 85	&	SC-98/Gold Hill Rd/Exit 88	A	A	A	A	A	B	B	B	B	C	D	E	D	E	C	B	B	B	B	B	B	A	A	A
34	SC-98/Gold Hill Rd/Exit 88	&	US-21/Carowinds Blvd/Exit 90	A	A	A	A	B	B	B	B	B	C	D	E	D	E	C	B	B	B	B	B	B	A	A	A

INRIX CONGESTION ANALYSIS
I-85 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
35%	0.00	41.88	GA State Line to I-185
28%	41.88	77.93	I-185 to US 221
30%	77.93	106.28	US 221 to NC State Line

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	GA State Line to NC State Line

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-85 SUMMARY

I-85 Segment #	Segment Between			Density Index			I-85 Segment Rank	Corridor Name	Corridor Density Index	
				I-85 NB	I-85 SB	I-85 Two-Way			Average Index	Rank by Average Index
1	GA State Line	&	SC-11/Exit 1	56.8	67.7	124.5	37	I-85 A	129.5	11
2	SC-11/Exit 1	&	SC-59/Exit 2	56.4	64.9	121.3	39			
3	SC-59/Exit 2	&	Exit 4	53.9	65.6	119.5	40			
4	Exit 4	&	SC-24/Exit 11	57.7	69.3	126.9	36			
5	SC-24/Exit 11	&	SC-187/Exit 14	63.5	76.2	139.7	31			
6	SC-187/Exit 14	&	US-76/SC-28/Exit 19	65.3	79.6	144.9	28			
7	US-76/SC-28/Exit 19	&	US-178/Exit 21	56.0	52.7	108.8	43	I-85 B	123.6	12
8	US-178/Exit 21	&	SC-81/Exit 27	63.8	60.1	123.9	38			
9	SC-81/Exit 27	&	SC-8/Exit 32	69.4	64.6	134.0	33			
10	SC-8/Exit 32	&	US-29/Exit 34	65.2	62.8	128.0	35			
11	US-29/Exit 34	&	SC-86/Exit 35	80.5	97.4	177.8	18	I-85 C	183.9	7
12	SC-86/Exit 35	&	SC-143/Exit 39	83.0	99.8	182.8	15			
13	SC-143/Exit 39	&	SC-153/Exit 40	85.5	105.7	191.2	10			
14	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	108.2	134.0	242.2	2	I-85 D	242.2	1
15	US-29/Exit 42 (Greenville)	&	US-25/SC-20/White Horse Rd/Exit 44	84.3	100.7	185.0	13	I-85 E	193.5	4
16	US-25/SC-20/White Horse Rd/Exit 44	&	US-25 Bus/Augusta Rd/Exit 46	89.5	112.6	202.0	6			
17	US-25 Bus/Augusta Rd/Exit 46	&	SC-291/Pleasantburg Dr	78.9	96.7	175.6	19	I-85 F	168.2	8
18	SC-291/Pleasantburg Dr	&	Mauldin Rd/Exit 46	92.4	68.4	160.8	22			
19	Mauldin Rd/Exit 46	&	US-276/Exit 48	136.6	101.4	238.0	3	I-85 G	228.9	3
20	US-276/Exit 48	&	Woodruff Road/I-385/Exit 51	124.6	95.2	219.8	5			
21	Woodruff Road/I-385/Exit 51	&	Pelham Rd/Exit 54	143.5	136.0	279.5	1	I-85 H	239.3	2
22	Pelham Rd/Exit 54	&	SC-14/Exit 56	114.1	122.7	236.7	4			
23	SC-14/Exit 56	&	Aviation Dr/Exit 57	100.2	101.3	201.5	7			
24	Aviation Dr/Exit 57	&	SC-101/Exit 60	94.9	88.2	183.2	14	I-85 I	187.0	5
25	SC-101/Exit 60	&	SC-290/Exit 63	97.8	87.8	185.6	12			
26	SC-290/Exit 63	&	US-29/Exit 66	99.6	87.4	187.1	11			
27	US-29/Exit 66	&	SC-129/Exit 68	95.8	96.6	192.4	9			
28	SC-129/Exit 68	&	I-26/Exit 70	73.9	74.6	148.5	27	I-85 J	145.3	10
29	I-26/Exit 70	&	US-176/Exit 72	77.7	79.2	156.9	23			
30	US-176/Exit 72	&	SC-9/Exit 75	73.2	75.6	148.9	26			
31	SC-9/Exit 75	&	I-85 Bus/Exit 77	64.9	66.3	131.2	34			
32	I-85 Bus/Exit 77	&	US-221/Exit 78	76.0	76.5	152.5	25			
33	US-221/Exit 78	&	Gossett Rd/Exit 80	67.5	66.6	134.0	32			
34	Gossett Rd/Exit 80	&	SC-110/Exit 83	98.1	96.5	194.6	8	I-85 K	185.8	6
35	SC-110/Exit 83	&	Green River Rd/Exit 86	90.7	91.4	182.2	16			
36	Green River Rd/Exit 86	&	Hyatt St/Exit 90	89.8	90.9	180.7	17			
37	Hyatt St/Exit 90	&	SC-11/Exit 92	82.3	81.6	163.9	20	I-85 L	153.4	9
38	SC-11/Exit 92	&	SC-150/SC-18/Road 82/Exit 95	83.8	78.6	162.4	21			
39	SC-150/SC-18/Road 82/Exit 95	&	SC-18/Shelby Hwy/Exit 96	81.6	74.0	155.6	24			
40	SC-18/Shelby Hwy/Exit 96	&	SC-5/Exit 99	73.5	68.4	141.9	30			
41	SC-5/Exit 99	&	SC-198/Exit 102	76.7	66.4	143.1	29			
42	SC-198/Exit 102	&	Exit 104	61.7	48.5	110.2	42	I-85 M	110.7	13
43	Exit 104	&	US-29/Exit 106	62.2	49.0	111.1	41			

INRIX CONGESTION ANALYSIS
I-85 SUMMARY

I-85 Segment #	Segment Between			I-85 Northbound LOS												I-85 Southbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	GA State Line	&	SC-11/Exit 1	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
2	SC-11/Exit 1	&	SC-59/Exit 2	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
3	SC-59/Exit 2	&	Exit 4	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
4	Exit 4	&	SC-24/Exit 11	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	C
5	SC-24/Exit 11	&	SC-187/Exit 14	B	C	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	C	C	C	C
6	SC-187/Exit 14	&	US-76/SC-28/Exit 19	B	C	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	C	C	C	C	C
7	US-76/SC-28/Exit 19	&	US-178/Exit 21	A	B	B	A	A	B	B	B	B	B	B	B	A	A	A	A	A	A	A	B	B	B	B	B
8	US-178/Exit 21	&	SC-81/Exit 27	A	B	B	A	B	B	B	B	B	B	B	B	A	A	B	B	B	B	B	B	B	B	B	C
9	SC-81/Exit 27	&	SC-8/Exit 32	B	C	B	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	C
10	SC-8/Exit 32	&	US-29/Exit 34	A	C	B	A	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	C
11	US-29/Exit 34	&	SC-86/Exit 35	C	D	C	B	B	B	B	B	B	B	B	C	A	B	B	B	B	B	B	B	C	C	D	D
12	SC-86/Exit 35	&	SC-143/Exit 39	C	D	C	B	B	B	B	B	B	B	B	C	A	B	B	B	B	B	B	C	C	C	D	D
13	SC-143/Exit 39	&	SC-153/Exit 40	C	D	C	B	B	B	B	B	B	B	B	C	A	B	B	B	B	B	B	C	C	D	D	D
14	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	D	E	D	C	C	C	C	C	C	C	C	C	A	C	C	C	C	C	C	C	D	D	E	E
15	US-29/Exit 42 (Greenville)	&	US-25/SC-20/White Horse Rd/Exit 4	C	D	C	B	B	B	B	B	B	B	B	C	A	B	B	B	B	B	B	B	C	C	D	D
16	US-25/SC-20/White Horse Rd/Exit 4	&	US-25 Bus/Augusta Rd/Exit 46	C	D	C	B	B	B	B	B	B	B	C	C	A	B	B	B	B	B	C	C	C	D	D	E
17	US-25 Bus/Augusta Rd/Exit 46	&	SC-291/Pleasantburg Dr	C	D	C	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	C	C	D	D
18	SC-291/Pleasantburg Dr	&	Mauldin Rd/Exit 46	B	D	C	B	B	B	B	B	B	C	C	C	A	B	B	B	B	B	B	B	B	B	C	C
19	Mauldin Rd/Exit 46	&	US-276/Exit 48	C	E	D	C	C	C	C	C	C	D	D	D	B	C	C	B	B	B	C	C	C	C	D	D
20	US-276/Exit 48	&	Woodruff Road/I-385/Exit 51	C	E	D	C	C	C	C	C	C	C	D	D	B	C	C	B	B	B	B	C	C	C	C	D
21	Woodruff Road/I-385/Exit 51	&	Pelham Rd/Exit 54	D	D	C	C	C	C	C	D	D	D	E	E	C	E	D	C	C	C	C	C	C	D	E	D
22	Pelham Rd/Exit 54	&	SC-14/Exit 56	C	D	C	B	B	B	C	C	C	C	D	D	C	D	C	C	C	C	C	C	C	C	D	D
23	SC-14/Exit 56	&	Aviation Dr/Exit 57	C	C	C	B	B	B	B	C	C	C	C	D	B	D	C	B	B	B	B	B	B	C	D	C
24	Aviation Dr/Exit 57	&	SC-101/Exit 60	C	C	B	B	B	B	B	B	C	C	C	D	B	C	C	B	B	B	B	B	B	C	C	C
25	SC-101/Exit 60	&	SC-290/Exit 63	C	C	C	B	B	B	B	C	C	C	C	D	B	C	C	B	B	B	B	B	B	C	C	C
26	SC-290/Exit 63	&	US-29/Exit 66	C	C	C	B	B	B	B	C	C	C	C	D	B	C	C	B	B	B	B	B	B	C	C	C
27	US-29/Exit 66	&	SC-129/Exit 68	B	C	C	B	B	B	B	B	C	C	C	D	C	C	C	B	B	B	B	C	C	C	C	D
28	SC-129/Exit 68	&	I-26/Exit 70	A	C	B	B	B	B	B	B	B	B	B	C	C	C	B	B	B	B	B	B	B	B	C	C
29	I-26/Exit 70	&	US-176/Exit 72	A	C	B	B	B	B	B	B	B	B	C	C	C	C	B	B	B	B	B	B	B	B	C	C
30	US-176/Exit 72	&	SC-9/Exit 75	A	C	B	B	B	B	B	B	B	B	B	C	C	C	B	B	B	B	B	B	B	B	C	C
31	SC-9/Exit 75	&	I-85 Bus/Exit 77	A	B	B	B	A	A	A	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	C
32	I-85 Bus/Exit 77	&	US-221/Exit 78	A	B	B	B	B	B	B	B	C	C	C	C	B	B	B	B	B	B	B	B	C	C	C	C
33	US-221/Exit 78	&	Gossett Rd/Exit 80	A	B	B	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B	B	B
34	Gossett Rd/Exit 80	&	SC-110/Exit 83	B	C	C	C	C	C	C	C	C	C	C	C	B	C	B	C	C	C	C	C	C	C	C	C
35	SC-110/Exit 83	&	Green River Rd/Exit 86	B	B	B	B	B	B	C	C	C	C	C	C	B	C	B	B	C	C	C	C	C	C	C	C
36	Green River Rd/Exit 86	&	Hyatt St/Exit 90	B	B	B	B	B	B	C	C	C	C	C	C	B	C	B	B	C	C	C	C	C	C	C	C
37	Hyatt St/Exit 90	&	SC-11/Exit 92	A	B	B	B	B	B	B	C	C	C	C	C	B	B	B	B	B	B	B	C	C	C	C	C
38	SC-11/Exit 92	&	SC-150/SC-18/Road 82/Exit 95	B	B	B	B	B	B	C	C	C	C	C	B	B	B	B	C	C	C	C	C	C	C	C	B
39	SC-150/SC-18/Road 82/Exit 95	&	SC-18/Shelby Hwy/Exit 96	B	B	B	B	B	B	C	C	C	C	C	B	B	B	B	C	C	B	B	B	C	C	C	B
40	SC-18/Shelby Hwy/Exit 96	&	SC-5/Exit 99	B	B	B	B	B	B	B	C	C	C	C	B	B	B	B	B	B	B	B	B	B	C	B	B
41	SC-5/Exit 99	&	SC-198/Exit 102	B	B	B	B	B	B	B	C	C	C	C	B	B	B	B	B	B	B	B	B	B	B	B	B
42	SC-198/Exit 102	&	Exit 104	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	B
43	Exit 104	&	US-29/Exit 106	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	A	A	A	A	B	B	B	B	B

INRIX CONGESTION ANALYSIS
I-95 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
25%	0.00	157.26	GA State Line to I-20
20%	157.26	170.47	I-20 to SC 327
25%	170.47	198.76	SC 327 to NC State Line

Terrain Data

Terrain	(E_T)	Description
Level	1.5	GA State Line to NC State Line
Rolling	2.5	N/A

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-95

I-95 Segment #	Segment Between			Density Index			I-95 Segment Rank	Corridor Name	Corridor Density Index	
				I-95 NB	I-95 SB	I-95 Two-Way			Average Index	Rank by Average Index
1	GA State Line	&	US-17/General William Hardee Blvd	66.8	63.2	130.1	2	I-95 A	131.2	1
2	US-17/General William Hardee Blvd	&	US-278/Red Dam Rd	69.2	65.9	135.1	1			
3	US-278/Red Dam Rd	&	SC-13/SC-S-27-13 Ext	67.7	60.8	128.5	3			
4	SC-13/SC-S-27-13 Ext	&	SC-336	63.3	57.0	120.3	6	I-95 B	119.4	3
5	SC-336	&	US-17 (Ridgeland) (South)	61.0	55.2	116.2	9			
6	US-17 (Ridgeland) (South)	&	SC-462	61.5	56.1	117.6	8			
7	SC-462	&	US-17 (Ridgeland) (North)	65.1	58.5	123.6	4			
8	US-17 (Ridgeland) (North)	&	SC-68/Yemassee Hwy	47.3	58.8	106.1	13	I-95 C	105.6	5
9	SC-68/Yemassee Hwy	&	US-21/Low Country Hwy	47.8	59.1	106.9	11			
10	US-21/Low Country Hwy	&	SC-63/Sniders Hwy/Exit 53	47.1	58.3	105.5	15			
11	SC-63/Sniders Hwy/Exit 53	&	SC-64/Bells Hwy/Exit 57	46.2	56.8	103.0	16			
12	SC-64/Bells Hwy/Exit 57	&	McLeod Rd/Exit 62	47.4	58.4	105.8	14			
13	McLeod Rd/Exit 62	&	SC-61/Augusta Hwy/Exit 68	47.3	59.0	106.2	12			
14	SC-61/Augusta Hwy/Exit 68	&	US-78/W Jim Bilton Blvd/Exit 77	58.9	55.8	114.7	10	I-95 D	116.4	4
15	US-78/W Jim Bilton Blvd/Exit 77	&	US-178/Charleston Hwy/Exit 82	60.1	58.0	118.1	7			
16	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	62.6	59.1	121.7	5	I-95 E	121.7	2
17	I-26/Exit 86	&	US-176/Old Hwy/Exit 90	39.7	39.0	78.6	27	I-95 F	77.2	7
18	US-176/Old Hwy/Exit 90	&	US-15/Bass Dr/Exit 93	38.9	37.3	76.2	32			
19	US-15/Bass Dr/Exit 93	&	US-15/US-301/Exit 97	39.7	37.1	76.8	29			
20	US-15/US-301/Exit 97	&	SC-6/Exit 98	46.5	42.6	89.2	18			
21	SC-6/Exit 98	&	US-15/US-301/Exit 102	46.2	41.9	88.1	19			
22	US-15/US-301/Exit 102	&	Buff Blvd/Exit 108	42.0	38.5	80.5	25			
23	Buff Blvd/Exit 108	&	US-301/Exit 115	39.2	35.9	75.2	34			
24	US-301/Exit 115	&	SC-261/Paxville Hwy/Exit 119	40.0	36.9	76.8	28			
25	SC-261/Paxville Hwy/Exit 119	&	US-521/Exit 122	39.5	36.3	75.8	33			
26	US-521/Exit 122	&	SC-527/Black River Rd/Exit 132	35.6	35.4	71.0	38			
27	SC-527/Black River Rd/Exit 132	&	US-378/Myrtle Beach Hwy/Exit 135	35.5	35.1	70.6	40			
28	US-378/Myrtle Beach Hwy/Exit 135	&	SC-53/Narrow Paved Rd/Exit 141	36.7	34.2	70.9	39			
29	SC-53/Narrow Paved Rd/Exit 141	&	SC-341/Lynches River Rd/Exit 146	37.1	34.6	71.7	37			
30	SC-341/Lynches River Rd/Exit 146	&	SC-403/Cale Yarborough Hwy/Exit 150	37.7	35.1	72.8	36			
31	SC-403/Cale Yarborough Hwy/Exit 150	&	Center Rd/Exit 153	39.7	37.0	76.7	30			
32	Center Rd/Exit 153	&	US-76/W Palmetto St/Exit 157	41.0	38.2	79.2	26			
33	US-76/W Palmetto St/Exit 157	&	I-20/Exit 160	41.1	41.6	82.7	24			
34	I-20/Exit 160	&	US-52/W Lucas St/Exit 164	41.4	42.0	83.4	23	I-95 G	83.5	6
35	US-52/W Lucas St/Exit 164	&	Tv Rd/Exit 169	40.0	36.5	76.5	31			
36	Tv Rd/Exit 169	&	SC-327/N Williston Rd/Exit 170	39.7	33.2	72.9	35			
37	SC-327/N Williston Rd/Exit 170	&	SC-38/Exit 181	49.8	40.9	90.6	17			
38	SC-38/Exit 181	&	SC-34/Exit 190	47.8	40.1	87.9	20			
39	SC-34/Exit 190	&	SC-9/Radford Blvd/Exit 193	47.2	39.0	86.3	22			
40	SC-9/Radford Blvd/Exit 193	&	US-301/Exit 1	47.3	39.4	86.7	21			

INRIX CONGESTION ANALYSIS
I-95 SUMMARY

I-95 Segment #	Segment Between			I-95 Northbound LOS												I-95 Southbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	GA State Line	&	US-17/General William Hardee Blvd	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
2	US-17/General William Hardee Blvd	&	US-278/Red Dam Rd	A	B	B	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	C
3	US-278/Red Dam Rd	&	SC-13/SC-S-27-13 Ext	A	A	A	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
4	SC-13/SC-S-27-13 Ext	&	SC-336	A	A	A	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
5	SC-336	&	US-17 (Ridgeland) (South)	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
6	US-17 (Ridgeland) (South)	&	SC-462	A	A	A	B	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
7	SC-462	&	US-17 (Ridgeland) (North)	A	A	A	B	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
8	US-17 (Ridgeland) (North)	&	SC-68/Yemassee Hwy	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
9	SC-68/Yemassee Hwy	&	US-21/Low Country Hwy	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
10	US-21/Low Country Hwy	&	SC-63/Sniders Hwy/Exit 53	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
11	SC-63/Sniders Hwy/Exit 53	&	SC-64/Bells Hwy/Exit 57	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
12	SC-64/Bells Hwy/Exit 57	&	McLeod Rd/Exit 62	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
13	McLeod Rd/Exit 62	&	SC-61/Augusta Hwy/Exit 68	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	B	B	B	B	B	B	B	B
14	SC-61/Augusta Hwy/Exit 68	&	US-78/W Jim Bilton Blvd/Exit 77	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B
15	US-78/W Jim Bilton Blvd/Exit 77	&	US-178/Charleston Hwy/Exit 82	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
16	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	A	A	A	A	B	B	B	B	B	B	B	B	A	A	A	B	B	B	B	B	B	B	B	B
17	I-26/Exit 86	&	US-176/Old Hwy/Exit 90	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
18	US-176/Old Hwy/Exit 90	&	US-15/Bass Dr/Exit 93	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
19	US-15/Bass Dr/Exit 93	&	US-15/US-301/Exit 97	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
20	US-15/US-301/Exit 97	&	SC-6/Exit 98	A	A	A	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A
21	SC-6/Exit 98	&	US-15/US-301/Exit 102	A	A	A	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A
22	US-15/US-301/Exit 102	&	Buff Blvd/Exit 108	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
23	Buff Blvd/Exit 108	&	US-301/Exit 115	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
24	US-301/Exit 115	&	SC-261/Paxville Hwy/Exit 119	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
25	SC-261/Paxville Hwy/Exit 119	&	US-521/Exit 122	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
26	US-521/Exit 122	&	SC-527/Black River Rd/Exit 132	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
27	SC-527/Black River Rd/Exit 132	&	US-378/Myrtle Beach Hwy/Exit 135	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
28	US-378/Myrtle Beach Hwy/Exit 135	&	SC-53/Narrow Paved Rd/Exit 141	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
29	SC-53/Narrow Paved Rd/Exit 141	&	SC-341/Lynches River Rd/Exit 146	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
30	SC-341/Lynches River Rd/Exit 146	&	SC-403/Cale Yarborough Hwy/Exit 1	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
31	SC-403/Cale Yarborough Hwy/Exit 1	&	Center Rd/Exit 153	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
32	Center Rd/Exit 153	&	US-76/W Palmetto St/Exit 157	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
33	US-76/W Palmetto St/Exit 157	&	I-20/Exit 160	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
34	I-20/Exit 160	&	US-52/W Lucas St/Exit 164	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
35	US-52/W Lucas St/Exit 164	&	Tv Rd/Exit 169	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
36	Tv Rd/Exit 169	&	SC-327/N Williston Rd/Exit 170	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
37	SC-327/N Williston Rd/Exit 170	&	SC-38/Exit 181	A	A	A	A	A	A	A	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A
38	SC-38/Exit 181	&	SC-34/Exit 190	A	A	A	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A
39	SC-34/Exit 190	&	SC-9/Radford Blvd/Exit 193	A	A	A	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A
40	SC-9/Radford Blvd/Exit 193	&	US-301/Exit 1	A	A	A	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A

INRIX CONGESTION ANALYSIS
I-126 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
5%	0.00	3.68	I-26 to Gadsden St

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-126

Segment #	Segment Between			Density Index			I-126 Segment Rank	Corridor Name	Corridor Density Index	
				I-126 EB	I-126 WB	I-20 Two-Way			Average Index	Rank by Average Index
1	I-26	&	Saluda River Rd	82.9	101.2	184.1	1	I-126 A	184.1	1
2	Saluda River Rd	&	Greystone Blvd	71.5	60.8	132.3	3	I-126 B	135.7	2
3	Greystone Blvd	&	Huger St	82.6	56.6	139.1	2			

INRIX CONGESTION ANALYSIS
I-126 SUMMARY

I-126 Segment #	Segment Between			I-126 Eastbound LOS											I-126 Westbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	I-26	&	Saluda River Rd	B	D	D	B	B	A	A	B	A	A	A	A	A	A	A	A	A	A	B	B	B	C	F	E
2	Saluda River Rd	&	Greystone Blvd	B	D	D	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	D	C
3	Greystone Blvd	&	Huger St	B	D	D	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	C	C

INRIX CONGESTION ANALYSIS
I-185 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
5%	0.00	16.40	I-385/US 276 to US 29

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-185

I-185 Segment #	Segment Between			Density Index			I-185 Segment Rank	Corridor Name	Corridor Density Index	
				I-185 NB	I-185 SB	I-185 Two-Way			Average Index	Rank by Average Index
1	Neely Ferry Rd/Exit 1A	&	SC-417	12.0	12.1	24.1	4	I-185 A	20.5	2
2	SC-417	&	I-385/Exit 1B	11.8	12.0	23.8	5			
3	I-385/Exit 1B	&	Fork Shoals Rd/Exit 4	11.2	11.5	22.7	6			
4	Fork Shoals Rd/Exit 4	&	US-25/Augusta Rd/Exit 7	9.8	10.1	19.9	8			
5	US-25/Augusta Rd/Exit 7	&	SC-20/Piedmont Hwy/Exit 10	9.5	9.9	19.4	9			
6	SC-20/Piedmont Hwy/Exit 10	&	SC-153/Exit 12	10.9	11.0	21.9	7			
7	SC-153/Exit 12	&	I-85/US-29	5.7	5.7	11.4	10			
8	I-85/US-29	&	US-25/White Horse Rd/Exit 1	35.2	29.3	64.5	1	I-185 B	51.1	1
9	US-25/White Horse Rd/Exit 1	&	SC-20/Exit 2	26.8	6.7	33.5	3			
10	SC-20/Exit 2	&	Henrydale Ave/Mills Ave	44.7	10.6	55.3	2			

INRIX CONGESTION ANALYSIS
I-185 SUMMARY

I-185 Segment #	Segment Between			I-185 Northbound LOS										I-185 Southbound LOS									
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	Neely Ferry Rd/Exit 1A	&	SC-417	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2	SC-417	&	I-385/Exit 1B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
3	I-385/Exit 1B	&	Fork Shoals Rd/Exit 4	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
4	Fork Shoals Rd/Exit 4	&	US-25/Augusta Rd/Exit 7	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
5	US-25/Augusta Rd/Exit 7	&	SC-20/Piedmont Hwy/Exit 10	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
6	SC-20/Piedmont Hwy/Exit 10	&	SC-153/Exit 12	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
7	SC-153/Exit 12	&	I-85/US-29	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
8	I-85/US-29	&	US-25/White Horse Rd/Exit 1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
9	US-25/White Horse Rd/Exit 1	&	SC-20/Exit 2	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
10	SC-20/Exit 2	&	Henrydale Ave/Mills Ave	A	B	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B

I-385 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
20%	0.00	36.33	I-26 to I-85
5%	36.33	42.16	I-85 to End (I-385 Spur)

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-385

I-385 Segment #	Segment Between			Density Index			I-385 Segment Rank	Corridor Name	Corridor Density Index	
				I-385 NB	I-385 SB	I-385 Two-Way			Average Index	Rank by Average Index
1	I-26	&	SC-308/Exit 2	28.0	34.2	62.2	24	I-385 A	71.2	8
2	SC-308/Exit 2	&	SC-49/Exit 5	29.8	34.5	64.4	23			
3	SC-49/Exit 5	&	US-221/Exit 9	30.2	35.7	65.9	22			
4	US-221/Exit 9	&	Road 23/Exit 10	33.2	39.7	72.9	21			
5	Road 23/Exit 10	&	SC-101/Exit 16	34.2	43.8	78.0	20			
6	SC-101/Exit 16	&	SC-14/Exit 19	37.5	46.5	84.0	19			
7	SC-14/Exit 19	&	SC-14/Exit 22	50.8	64.1	114.9	16	I-385 B	119.4	5
8	SC-14/Exit 22	&	Old Laurens Rd/Exit 22	54.5	64.6	119.1	12			
9	Old Laurens Rd/Exit 22	&	SC-418/Exit 23	61.5	53.8	115.3	15			
10	SC-418/Exit 23	&	Fairview St/Exit 24	69.2	59.3	128.5	11			
11	Fairview St/Exit 24	&	Harrison Bridge Rd/Exit 26	50.7	43.1	93.9	18	I-385 C	96.2	7
12	Harrison Bridge Rd/Exit 26	&	Fairview Rd/Exit 27	54.8	43.8	98.6	17			
13	Fairview Rd/Exit 27	&	Georgia Rd/Exit 29	73.3	58.9	132.2	10	I-385 D	141.4	3
14	Georgia Rd/Exit 29	&	US-276/Exit 30	85.9	64.8	150.7	6			
15	US-276/Exit 30	&	Old Stage Rd/E Standing Springs Rd/	66.5	49.9	116.4	14	I-385 E	116.5	6
16	Old Stage Rd/E Standing Springs Rd/Ex	&	SC-417/Exit 31	67.5	49.1	116.7	13			
17	SC-417/Exit 31	&	Bridges Rd/Exit 33	80.0	56.1	136.1	8	I-385 F	150.5	2
18	Bridges Rd/Exit 33	&	Butler Rd/Exit 34	89.0	58.3	147.4	7			
19	Butler Rd/Exit 34	&	SC-146/Woodruff Rd/Exit 35	100.4	67.5	167.9	5			
20	SC-146/Woodruff Rd/Exit 35	&	I-85/Exit 36	129.0	84.6	213.6	1	I-385 G	190.4	1
21	I-85/Exit 36	&	Roper Mountain Rd/Exit 37	108.3	83.1	191.4	2			
22	Roper Mountain Rd/Exit 37	&	Haywood Rd/Exit 39	103.6	81.0	184.6	3			
23	Haywood Rd/Exit 39	&	SC-291/Pleasantburg Dr/Exit 40	96.1	76.0	172.1	4			
24	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	75.6	56.7	132.3	9	I-385 H	132.3	4

INRIX CONGESTION ANALYSIS
I-385 SUMMARY

I-385 Segment #	Segment Between			I-385 Northbound LOS										I-385 Southbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM									4-5 PM	5-6 PM
1	I-26	&	SC-308/Exit 2	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2	SC-308/Exit 2	&	SC-49/Exit 5	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
3	SC-49/Exit 5	&	US-221/Exit 9	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
4	US-221/Exit 9	&	Road 23/Exit 10	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
5	Road 23/Exit 10	&	SC-101/Exit 16	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B
6	SC-101/Exit 16	&	SC-14/Exit 19	A	A	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	B	B
7	SC-14/Exit 19	&	SC-14/Exit 22	A	B	A	A	A	A	A	A	B	B	B	B	B	C	B	A	A	A	A	A	B	B	B	B
8	SC-14/Exit 22	&	Old Laurens Rd/Exit 22	A	B	A	A	A	A	A	A	B	B	B	B	B	C	B	A	A	A	A	A	B	B	B	B
9	Old Laurens Rd/Exit 22	&	SC-418/Exit 23	A	C	B	A	A	A	A	A	A	B	B	B	A	B	A	A	A	A	A	A	B	B	B	B
10	SC-418/Exit 23	&	Fairview St/Exit 24	A	C	B	B	A	B	B	A	B	B	B	B	A	B	A	A	A	A	A	A	B	B	B	B
11	Fairview St/Exit 24	&	Harrison Bridge Rd/Exit 26	A	B	A	A	A	A	A	A	A	B	B	B	A	A	A	A	A	A	A	A	A	A	B	B
12	Harrison Bridge Rd/Exit 26	&	Fairview Rd/Exit 27	A	B	B	A	A	A	A	A	A	B	B	B	A	A	A	A	A	A	A	A	A	A	B	B
13	Fairview Rd/Exit 27	&	Georgia Rd/Exit 29	B	C	B	B	A	B	B	B	B	B	B	C	A	B	A	A	A	A	A	B	B	B	B	B
14	Georgia Rd/Exit 29	&	US-276/Exit 30	B	C	C	B	B	B	B	B	B	C	C	C	B	B	B	A	A	A	B	B	B	B	B	C
15	US-276/Exit 30	&	Stage Rd/E Standing Springs Rd/Ex	A	C	B	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	B
16	Stage Rd/E Standing Springs Rd/Ex	&	SC-417/Exit 31	A	C	B	A	A	A	A	A	B	B	B	B	A	A	A	A	A	A	A	A	B	B	B	B
17	SC-417/Exit 31	&	Bridges Rd/Exit 33	B	D	B	B	B	B	B	B	B	B	B	C	A	B	A	A	A	A	A	B	B	B	B	B
18	Bridges Rd/Exit 33	&	Butler Rd/Exit 34	B	D	B	B	B	B	B	B	B	B	C	C	A	B	A	A	A	A	A	B	B	B	B	B
19	Butler Rd/Exit 34	&	SC-146/Woodruff Rd/Exit 35	B	D	C	B	B	B	B	B	B	C	C	C	B	B	B	A	A	A	B	B	B	B	B	C
20	SC-146/Woodruff Rd/Exit 35	&	I-85/Exit 36	C	E	D	C	C	C	C	C	C	D	D	D	B	B	B	B	B	B	B	B	C	C	C	C
21	I-85/Exit 36	&	Roper Mountain Rd/Exit 37	A	D	D	C	B	B	B	B	C	C	C	D	B	B	B	B	B	B	C	B	C	C	C	D
22	Roper Mountain Rd/Exit 37	&	Haywood Rd/Exit 39	A	D	D	C	B	B	B	B	B	C	C	C	B	B	B	B	B	B	B	B	B	C	C	D
23	Haywood Rd/Exit 39	&	SC-291/Pleasantburg Dr/Exit 40	A	C	D	B	B	B	B	B	B	B	C	C	A	B	B	B	B	B	B	B	B	B	C	C
24	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	A	C	C	B	A	B	B	B	B	B	B	C	A	B	A	A	A	B	B	B	B	B	B	C

INRIX CONGESTION ANALYSIS
I-520 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
10%	15.62	23.61	GA State Line to I-20

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	GA State Line to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-520

I-520 Segment #	Segment Between			Density Index			I-520 Segment Rank	Corridor Name	Corridor Density Index	
				I-520 EB	I-520 WB	I-520 Two-Way			Average Index	Rank by Average Index
1	GA State Line	&	US-1/US-278/Jefferson Davis Hwy	30.8	28.9	59.6	1	I-520 A	59.6	1

INRIX CONGESTION ANALYSIS
I-520 SUMMARY

I-520 Segment #	Segment Between			I-520 Eastbound LOS											I-520 Westbound LOS											I-520 Corridor
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	
1	GA State Line	&	US-1/US-278/Jefferson Davis Hwy	A	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	I-520 A

INRIX CONGESTION ANALYSIS
I-526 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
15%	10.00	17.03	US 17 to I-26
25%	17.03	27.50	I-26 to S-97 (Long Point Rd)
5%	27.50	29.56	S-97 (Long Point Rd) to US 17

Terrain Data

Terrain	(E_T)	Description
Level	1.5	Begin to End
Rolling	2.5	N/A

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS

I-526

Segment #	Segment Between			Density Index			I-526 Segment Rank	Corridor Name	Corridor Density Index	
				I-526 EB	I-526 WB	I-526 Two-Way			Average Index	Rank by Average Index
1	US-17/Savannah Hwy	&	Sam Rittenberg Blvd	45.8	76.6	122.4	16	I-526 A	123.5	6
2	Sam Rittenberg Blvd	&	Paul Cantrell Blvd	62.4	62.3	124.6	15			
3	Paul Cantrell Blvd	&	Leeds Ave	118.8	95.1	213.9	10	I-526 B	223.4	3
4	Leeds Ave	&	Paramount Dr	114.4	101.7	216.1	9			
5	Paramount Dr	&	Dorchester Rd	116.6	95.4	212.0	11			
6	Dorchester Rd	&	W Montague Ave	120.5	97.2	217.7	8			
7	W Montague Ave	&	International Blvd	132.5	103.6	236.2	5			
8	International Blvd	&	I-26	143.0	101.5	244.5	4			
9	I-26	&	US-52/Rivers Ave	151.2	150.3	301.4	1	I-526 C	288.5	1
10	US-52/Rivers Ave	&	N Rhett Ave	137.9	143.5	281.3	3			
11	N Rhett Ave	&	Virginia Ave	138.6	144.1	282.7	2			
12	Virginia Ave	&	Don N Holt Brg	114.9	118.0	232.9	7	I-526 D	233.2	2
13	Don N Holt Brg	&	Clements Ferry Rd	110.4	123.0	233.4	6			
14	Clements Ferry Rd	&	James B Edwards Brg	85.7	88.5	174.2	13	I-526 E	175.8	4
15	James B Edwards Brg	&	Long Point Rd	87.7	89.7	177.4	12			
16	Long Point Rd	&	US-17	76.9	61.2	138.0	14	I-526 F	138.0	5
17	US-17	&	SC-17 Bus	4.4	37.0	41.4	18	I-526 G	41.4	8
18	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	61.0	45.8	106.8	17	I-526 H	106.8	7

INRIX CONGESTION ANALYSIS

I-526 SUMMARY

I-526 Segment #	Segment Between			I-526 Eastbound LOS												I-526 Westbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	US-17/Savannah Hwy	&	Sam Rittenberg Blvd	A	B	B	A	A	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	C	C	C
2	Sam Rittenberg Blvd	&	Paul Cantrell Blvd	B	C	B	A	A	B	B	B	B	B	B	B	A	A	B	B	B	B	B	B	B	C	C	C
3	Paul Cantrell Blvd	&	Leeds Ave	D	E	D	C	C	C	C	C	C	C	C	C	A	B	C	B	B	C	C	B	C	D	D	D
4	Leeds Ave	&	Paramount Dr	C	E	D	C	C	C	C	C	C	C	C	C	A	B	B	B	B	B	B	B	C	C	E	D
5	Paramount Dr	&	Dorchester Rd	D	E	D	C	C	C	C	C	C	C	C	C	A	B	B	B	B	B	B	B	C	C	E	D
6	Dorchester Rd	&	W Montague Ave	D	E	D	C	C	C	C	C	C	C	C	C	A	B	C	B	B	C	C	B	C	C	D	D
7	W Montague Ave	&	International Blvd	D	E	D	C	C	C	D	D	D	D	D	D	A	B	C	C	C	C	C	C	C	D	D	D
8	International Blvd	&	I-26	D	F	D	C	C	C	D	D	D	D	D	D	A	B	C	C	C	C	C	C	C	D	D	D
9	I-26	&	US-52/Rivers Ave	C	E	E	C	C	C	C	C	C	D	E	E	C	E	D	C	C	C	C	C	D	D	E	E
10	US-52/Rivers Ave	&	N Rhett Ave	C	D	D	C	B	B	C	C	C	D	E	D	C	E	D	C	C	C	C	C	D	D	E	E
11	N Rhett Ave	&	Virginia Ave	C	D	D	C	B	C	C	C	C	D	E	D	C	E	D	C	C	C	C	C	D	D	E	E
12	Virginia Ave	&	Don N Holt Brg	B	D	D	C	B	B	B	B	C	C	D	D	B	D	C	B	B	B	C	C	C	C	D	D
13	Don N Holt Brg	&	Clements Ferry Rd	B	D	D	C	B	B	B	B	C	C	D	D	B	D	D	B	B	B	C	C	C	C	D	D
14	Clements Ferry Rd	&	James B Edwards Brg	B	C	C	B	B	B	B	B	B	C	C	C	B	C	C	B	B	B	B	B	B	C	C	C
15	James B Edwards Brg	&	Long Point Rd	B	C	C	B	B	B	B	B	B	C	C	C	B	C	C	B	B	B	B	B	B	C	C	C
16	Long Point Rd	&	US-17	A	B	B	B	B	B	B	B	B	B	C	C	A	B	B	A	A	A	B	B	B	B	B	B
17	US-17	&	SC-17 Bus	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
18	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	A	B	B	B	A	B	B	A	A	B	B	C	A	B	B	A	A	A	A	A	A	B	A	A

INRIX CONGESTION ANALYSIS
I-585 SUMMARY

PHF	0.90

Truck Percentage Data

Percent Trucks (P_T)	Begin MP	End MP	Description
10%	0.00	2.25	I-85 to US 176

Terrain Data

Terrain	(E_T)	Description
Level	1.5	N/A
Rolling	2.5	Begin to End

Analysis Description

Parameter	Data Source	Definition
Segment Length	INRIX	Measured distance between data collection points
N	Observed	Predominant number of lanes in a segment
AADT	SCDOT	2011 AADT
Speed (Free-Flow)	INRIX	Average speed during off-peak hours
Speed (Hourly)	INRIX	Measured speed during respective peak hour
Peak Time	Observed	Period of highest D-Factor in respective direction
K-Factor	Calculated - Count Stations	Percent of traffic during peak hour
D-Factor	Calculated - Count Stations	Directional distribution during peak hour
Hourly Volumes (V)	Calculated	$V = AADT \times K \times D$
Heavy Vehicle Factor	Calculated - HCM	$f_{HV} = \frac{1}{1 + P_T(E_T - 1) + P_R(E_R - 1)}$ *RV data not considered.*
Flow Rate	Calculated - HCM	$v_p = \frac{V}{PHF \times N \times f_{HV} \times f_p}$ *Assumed f_p = 1.0*
Density	Calculated - HCM	$D = \frac{v_p}{S}$
LOS	Calculated - HCM	Level of Service based on HCM 2010 criteria
Urban	Observed	Urban areas defined by 2010 Census
Rural	Observed	All non-urban areas

INRIX CONGESTION ANALYSIS
I-585

I-585 Segment #	Segment Between			Density Index			I-585 Segment Rank	Corridor Name	Corridor Density Index	
				I-585 NB	I-585 SB	I-585 Two-Way			Average Index	Rank by Average Index
1	US-221/Exit 25	&	SC-9/Exit 25	77.2	69.4	146.6	1	I-585 A	146.6	1
2	SC-9/Exit 25	&	California Ave/Exit 24	60.1	51.9	112.1	2	I-585 B	103.7	2
3	California Ave/Exit 24	&	Exit 24	52.4	45.0	97.5	4			
4	Exit 24	&	I-85 Bus/Exit 23	52.7	48.9	101.5	3			

INRIX CONGESTION ANALYSIS
I-585 SUMMARY

I-585 Segment #	Segment Between			I-585 Northbound LOS											I-585 Southbound LOS											
				7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM	7-8 AM	8-9 AM	9-10 AM	10-11 AM	11-12 PM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM	6-7 PM
1	US-221/Exit 25	&	SC-9/Exit 25	A	C	C	B	B	B	B	B	B	B	B	C	A	B	B	A	B	B	B	B	B	B	C	C
2	SC-9/Exit 25	&	California Ave/Exit 24	A	B	C	A	A	A	A	A	A	B	B	B	A	B	A	A	A	A	B	A	B	B	B	B
3	California Ave/Exit 24	&	Exit 24	A	B	B	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	B	B
4	Exit 24	&	I-85 Bus/Exit 23	A	B	B	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	B	B	B

APPENDIX C:
INTERSTATE MAINLINE SEGMENTS AND CORRIDORS – SUMMARY AND OVERALL RANKING

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-20	GA State Line	&	SC-230/Exit 1	161.4	86
I-20	SC-230/Exit 1	&	US-25/SC-121/Exit 5	120.9	161
I-20	US-25/SC-121/Exit 5	&	SC-144/Exit 11	99.6	207
I-20	SC-144/Exit 11	&	SC-19/Exit 18	82.6	230
I-20	SC-19/Exit 18	&	US-1/Exit 22	77.4	244
I-20	US-1/Exit 22	&	Road 49/Exit 29	80.2	236
I-20	Road 49/Exit 29	&	SC-39/Exit 33	81.9	231
I-20	SC-39/Exit 33	&	US-178/Exit 39	81.5	232
I-20	US-178/Exit 39	&	SC-34/Exit 44	84.4	225
I-20	SC-34/Exit 44	&	SC-204/Exit 51	96.6	210
I-20	SC-204/Exit 51	&	SC-6/Exit 55	139.2	123
I-20	SC-6/Exit 55	&	US-1/Exit 58	199.4	32
I-20	US-1/Exit 58	&	US-378/Exit 61	190.3	41
I-20	US-378/Exit 61	&	Bush River Rd/Exit 63	183.1	50
I-20	Bush River Rd/Exit 63	&	I-26/US-76/Exit 64	182.6	52
I-20	I-26/US-76/Exit 64	&	US-176/Broad River Rd/Exit 65	194.6	36
I-20	US-176/Broad River Rd/Exit 65	&	SC-215/Monticello Rd/Exit 68	226.2	18
I-20	SC-215/Monticello Rd/Exit 68	&	US-321/Fairfield Rd/Exit 70	207.4	26
I-20	US-321/Fairfield Rd/Exit 70	&	US-21/Main St/Exit 71	197.0	33
I-20	US-21/Main St/Exit 71	&	SC-555/Farrow Rd/Exit 72	196.1	34
I-20	SC-555/Farrow Rd/Exit 72	&	SC-277/Exit 73	178.5	58
I-20	SC-277/Exit 73	&	US-1/Two Notch Rd/Exit 74	164.3	79
I-20	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	136.6	127
I-20	I-77/Exit 76A	&	Alpine Rd/Exit 76B	206.7	27
I-20	Alpine Rd/Exit 76B	&	Clemson Rd/Exit 80	245.5	9
I-20	Clemson Rd/Exit 80	&	Spears Creek Church Road/Exit 82	176.7	65
I-20	Spears Creek Church Road/Exit 82	&	White Pond Rd/Exit 87	138.8	125
I-20	White Pond Rd/Exit 87	&	US-601/Exit 92	126.0	151
I-20	US-601/Exit 92	&	US-521/Exit 98	101.8	202
I-20	US-521/Exit 98	&	Humphries Rd/Exit 101	80.8	233
I-20	Humphries Rd/Exit 101	&	Jamestown Rd/Exit 108	77.4	245
I-20	Jamestown Rd/Exit 108	&	US-15/Exit 116	74.1	255
I-20	US-15/Exit 116	&	SC-341/Exit 120	60.0	275
I-20	SC-341/Exit 120	&	SC-22/Exit 123	60.4	273
I-20	SC-22/Exit 123	&	US-401/Exit 131	59.3	277
I-20	US-401/Exit 131	&	SC-340/Exit 137	65.6	268
I-20	SC-340/Exit 137	&	I-95/Exit 141	70.8	263
I-26	NC State Line	&	SC-14/Exit 1	78.3	241
I-26	SC-14/Exit 1	&	SC-11/Exit 5	77.7	243
I-26	SC-11/Exit 5	&	SC-292/Exit 10	82.8	228
I-26	SC-292/Exit 10	&	US-176/Exit 15	95.1	211
I-26	US-176/Exit 15	&	John Dodd Rd/Exit 16	120.5	162
I-26	John Dodd Rd/Exit 16	&	New Cut Rd/Exit 17	136.1	130
I-26	New Cut Rd/Exit 17	&	I-85/Exit 18	157.6	92
I-26	I-85/Exit 18	&	I-85 Bus/Exit 19	141.3	120
I-26	I-85 Bus/Exit 19	&	US-29/Exit 21	185.9	44
I-26	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	148.4	107
I-26	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	89.1	219
I-26	US-221/Exit 28	&	Frontage Rd 35/Exit 35	71.2	260
I-26	Frontage Rd 35/Exit 35	&	SC-146/Exit 38	67.9	265
I-26	SC-146/Exit 38	&	SC-92/Exit 41	65.8	267
I-26	SC-92/Exit 41	&	SC-49/Exit 44	62.2	271
I-26	SC-49/Exit 44	&	I-385	60.4	274
I-26	I-385	&	SC-56/Exit 52	112.5	178
I-26	SC-56/Exit 52	&	SC-72/Exit 54	100.9	205

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-26	SC-72/Exit 54	&	SC-66/Exit 60	93.2	214
I-26	SC-66/Exit 60	&	Road 32/Exit 66	92.9	216
I-26	Road 32/Exit 66	&	SC-121/Exit 72	93.0	215
I-26	SC-121/Exit 72	&	SC-34/Exit 74	101.2	204
I-26	SC-34/Exit 74	&	SC-219/Exit 76	105.7	199
I-26	SC-219/Exit 76	&	SC-773/Exit 82	114.3	177
I-26	SC-773/Exit 82	&	SC-202/Exit 85	117.1	168
I-26	SC-202/Exit 85	&	Columbia Ave/Exit 91	117.1	169
I-26	Columbia Ave/Exit 91	&	US-176/Exit 97	143.6	115
I-26	US-176/Exit 97	&	US-176/US-76/Exit 101	153.4	98
I-26	US-176/US-76/Exit 101	&	SC-60/Lake Murray Blvd/Exit 102	159.8	88
I-26	SC-60/Lake Murray Blvd/Exit 102	&	Harbison Blvd/Exit 103	216.7	21
I-26	Harbison Blvd/Exit 103	&	Piney Grove Rd/Exit 104	240.6	12
I-26	Piney Grove Rd/Exit 104	&	Saint Andrews Rd/Exit 106	271.4	6
I-26	Saint Andrews Rd/Exit 106	&	I-20/Exit 107	281.5	3
I-26	I-20/Exit 107	&	Bush River Rd/Exit 108	248.9	8
I-26	Bush River Rd/Exit 108	&	I-126/US-76	258.5	7
I-26	I-126/US-76	&	US-378/Exit 110	164.5	78
I-26	US-378/Exit 110	&	US-1/Exit 111	146.0	112
I-26	US-1/Exit 111	&	SC-302/Exit 113	176.8	64
I-26	SC-302/Exit 113	&	US-321/US-21/US-176/Exit 115	165.7	77
I-26	US-321/US-21/US-176/Exit 115	&	I-77/Exit 116	146.3	111
I-26	I-77/Exit 116	&	US-21/US-176/Exit 119	177.5	61
I-26	US-21/US-176/Exit 119	&	Road 31/Exit 125	158.5	91
I-26	Road 31/Exit 125	&	US-21/Exit 129	155.9	96
I-26	US-21/Exit 129	&	Caw Caw Rd	151.0	101
I-26	Caw Caw Rd	&	Burke Rd	136.5	128
I-26	Burke Rd	&	US-601/Saint Matthews Rd	116.7	170
I-26	US-601/Saint Matthews Rd	&	SC-33/Cameron Rd/Russell St	112.0	181
I-26	SC-33/Cameron Rd/Russell St	&	Five Chop Rd	111.3	183
I-26	Five Chop Rd	&	Homestead Rd	109.3	187
I-26	Homestead Rd	&	Vance Rd	108.3	193
I-26	Vance Rd	&	I-95	109.0	189
I-26	I-95	&	US-15	75.9	251
I-26	US-15	&	SC-453	75.5	253
I-26	SC-453	&	Ridgeville Rd	78.5	240
I-26	Ridgeville Rd	&	Jedburg Rd	93.9	212
I-26	Jedburg Rd	&	N Main St	134.5	132
I-26	N Main St	&	College Park Rd	124.6	154
I-26	College Park Rd	&	US-78/University Blvd	157.3	93
I-26	US-78/University Blvd	&	US-52/Rivers Ave	186.9	43
I-26	US-52/Rivers Ave	&	Ashley Phosphate Rd	205.8	28
I-26	Ashley Phosphate Rd	&	W Aviation Ave	204.9	29
I-26	W Aviation Ave	&	Remount Rd	159.1	89
I-26	Remount Rd	&	I-526	182.3	53
I-26	I-526	&	Mall Dr/W Montague Ave	176.9	63
I-26	Mall Dr/W Montague Ave	&	Dorchester Rd	168.9	73
I-26	Dorchester Rd	&	SC-7/Cosgrove Ave	175.8	66
I-26	SC-7/Cosgrove Ave	&	Meeting Street Rd	166.2	76
I-26	Meeting Street Rd	&	Spruill Ave	161.4	85
I-26	Spruill Ave	&	Rutledge Ave	166.2	75
I-26	Rutledge Ave	&	Mount Pleasant St	159.1	90
I-26	Mount Pleasant St	&	Cypress St	140.3	121
I-26	Cypress St	&	Romney St	132.1	139
I-26	Romney St	&	US 17	129.6	143

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-77	I-26/Exit 1	&	12th St Ext	141.5	119
I-77	12th St Ext	&	Alex Sanders Brg	148.9	104
I-77	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	150.5	103
I-77	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	144.3	114
I-77	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	127.0	148
I-77	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	126.6	150
I-77	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	132.2	138
I-77	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	152.4	100
I-77	SC-12/Forest Dr/Exit 12	&	Decker Blvd/Exit 13	174.4	69
I-77	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	147.4	108
I-77	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	156.6	95
I-77	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	195.6	35
I-77	US-1/Two Notch Rd/Exit 17	&	SC-277/Exit 18	182.0	56
I-77	SC-277/Exit 18	&	SC-555/Farrow Rd/Exit 19	174.7	68
I-77	SC-555/Farrow Rd/Exit 19	&	Killian Rd/Exit 22	182.2	54
I-77	Killian Rd/Exit 22	&	US-21/Exit 24	129.3	144
I-77	US-21/Exit 24	&	Blythewood Rd/Exit 27	163.6	82
I-77	Blythewood Rd/Exit 27	&	SC-34/Exit 34	142.2	117
I-77	SC-34/Exit 34	&	Road 41/Exit 41	112.0	180
I-77	Road 41/Exit 41	&	Road 20/Exit 46	110.9	185
I-77	Road 20/Exit 46	&	SC-200/Exit 48	111.5	182
I-77	SC-200/Exit 48	&	SC-97/Exit 55	108.9	190
I-77	SC-97/Exit 55	&	SC-56/Exit 62	108.6	192
I-77	SC-56/Exit 62	&	SC-9/Exit 65	109.3	188
I-77	SC-9/Exit 65	&	SC-901/Exit 73	125.0	152
I-77	SC-901/Exit 73	&	Porter Rd/Exit 75	129.8	142
I-77	Porter Rd/Exit 75	&	US-21/SC-5/Exit 77	89.1	220
I-77	US-21/SC-5/Exit 77	&	SC-122/Dave Lyle Blvd/Exit 79	80.0	237
I-77	SC-122/Dave Lyle Blvd/Exit 79	&	US-21/Exit 82	100.8	206
I-77	US-21/Exit 82	&	SC-161/Exit 82	80.7	234
I-77	SC-161/Exit 82	&	Sutton Rd/Exit 83	168.9	72
I-77	Sutton Rd/Exit 83	&	SC-160/Exit 85	162.6	83
I-77	SC-160/Exit 85	&	SC-98/Gold Hill Rd/Exit 88	163.7	81
I-77	SC-98/Gold Hill Rd/Exit 88	&	US-21/Carowinds Blvd/Exit 90	177.7	60
I-85	GA State Line	&	SC-11/Exit 1	124.5	155
I-85	SC-11/Exit 1	&	SC-59/Exit 2	121.3	160
I-85	SC-59/Exit 2	&	Exit 4	119.5	164
I-85	Exit 4	&	SC-24/Exit 11	126.9	149
I-85	SC-24/Exit 11	&	SC-187/Exit 14	139.7	122
I-85	SC-187/Exit 14	&	US-76/SC-28/Exit 19	144.9	113
I-85	US-76/SC-28/Exit 19	&	US-178/Exit 21	108.8	191
I-85	US-178/Exit 21	&	SC-81/Exit 27	123.9	156
I-85	SC-81/Exit 27	&	SC-8/Exit 32	134.0	134
I-85	SC-8/Exit 32	&	US-29/Exit 34	128.0	147
I-85	US-29/Exit 34	&	SC-86/Exit 35	177.8	59
I-85	SC-86/Exit 35	&	SC-143/Exit 39	182.8	51
I-85	SC-143/Exit 39	&	SC-153/Exit 40	191.2	40
I-85	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	242.2	11
I-85	US-29/Exit 42 (Greenville)	&	US-25/SC-20/White Horse Rd/Exit 44	185.0	46
I-85	US-25/SC-20/White Horse Rd/Exit 44	&	US-25 Bus/Augusta Rd/Exit 46	202.0	30
I-85	US-25 Bus/Augusta Rd/Exit 46	&	SC-291/Pleasantburg Dr	175.6	67
I-85	SC-291/Pleasantburg Dr	&	Mauldin Rd/Exit 46	160.8	87
I-85	Mauldin Rd/Exit 46	&	US-276/Exit 48	238.0	13
I-85	US-276/Exit 48	&	Woodruff Road/I-385/Exit 51	219.8	19
I-85	Woodruff Road/I-385/Exit 51	&	Pelham Rd/Exit 54	279.5	4

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-85	Pelham Rd/Exit 54	&	SC-14/Exit 56	236.7	14
I-85	SC-14/Exit 56	&	Aviation Dr/Exit 57	201.5	31
I-85	Aviation Dr/Exit 57	&	SC-101/Exit 60	183.2	49
I-85	SC-101/Exit 60	&	SC-290/Exit 63	185.6	45
I-85	SC-290/Exit 63	&	US-29/Exit 66	187.1	42
I-85	US-29/Exit 66	&	SC-129/Exit 68	192.4	38
I-85	SC-129/Exit 68	&	I-26/Exit 70	148.5	106
I-85	I-26/Exit 70	&	US-176/Exit 72	156.9	94
I-85	US-176/Exit 72	&	SC-9/Exit 75	148.9	105
I-85	SC-9/Exit 75	&	I-85 Bus/Exit 77	131.2	140
I-85	I-85 Bus/Exit 77	&	US-221/Exit 78	152.5	99
I-85	US-221/Exit 78	&	Gossett Rd/Exit 80	134.0	133
I-85	Gossett Rd/Exit 80	&	SC-110/Exit 83	194.6	37
I-85	SC-110/Exit 83	&	Green River Rd/Exit 86	182.2	55
I-85	Green River Rd/Exit 86	&	Hyatt St/Exit 90	180.7	57
I-85	Hyatt St/Exit 90	&	SC-11/Exit 92	163.9	80
I-85	SC-11/Exit 92	&	SC-150/SC-18/Road 82/Exit 95	162.4	84
I-85	SC-150/SC-18/Road 82/Exit 95	&	SC-18/Shelby Hwy/Exit 96	155.6	97
I-85	SC-18/Shelby Hwy/Exit 96	&	SC-5/Exit 99	141.9	118
I-85	SC-5/Exit 99	&	SC-198/Exit 102	143.1	116
I-85	SC-198/Exit 102	&	Exit 104	110.2	186
I-85	Exit 104	&	US-29/Exit 106	111.1	184
I-95	GA State Line	&	US-17/General William Hardee Blvd	130.1	141
I-95	US-17/General William Hardee Blvd	&	US-278/Red Dam Rd	135.1	131
I-95	US-278/Red Dam Rd	&	SC-13/SC-S-27-13 Ext	128.5	145
I-95	SC-13/SC-S-27-13 Ext	&	SC-336	120.3	163
I-95	SC-336	&	US-17 (Ridgeland) (South)	116.2	173
I-95	US-17 (Ridgeland) (South)	&	SC-462	117.6	167
I-95	SC-462	&	US-17 (Ridgeland) (North)	123.6	157
I-95	US-17 (Ridgeland) (North)	&	SC-68/Yemassee Hwy	106.1	197
I-95	SC-68/Yemassee Hwy	&	US-21/Low Country Hwy	106.9	194
I-95	US-21/Low Country Hwy	&	SC-63/Sniders Hwy/Exit 53	105.5	200
I-95	SC-63/Sniders Hwy/Exit 53	&	SC-64/Bells Hwy/Exit 57	103.0	201
I-95	SC-64/Bells Hwy/Exit 57	&	McLeod Rd/Exit 62	105.8	198
I-95	McLeod Rd/Exit 62	&	SC-61/Augusta Hwy/Exit 68	106.2	196
I-95	SC-61/Augusta Hwy/Exit 68	&	US-78/W Jim Bilton Blvd/Exit 77	114.7	176
I-95	US-78/W Jim Bilton Blvd/Exit 77	&	US-178/Charleston Hwy/Exit 82	118.1	166
I-95	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	121.7	159
I-95	I-26/Exit 86	&	US-176/Old Hwy/Exit 90	78.6	239
I-95	US-176/Old Hwy/Exit 90	&	US-15/Bass Dr/Exit 93	76.2	250
I-95	US-15/Bass Dr/Exit 93	&	US-15/US-301/Exit 97	76.8	247
I-95	US-15/US-301/Exit 97	&	SC-6/Exit 98	89.2	218
I-95	SC-6/Exit 98	&	US-15/US-301/Exit 102	88.1	221
I-95	US-15/US-301/Exit 102	&	Buff Blvd/Exit 108	80.5	235
I-95	Buff Blvd/Exit 108	&	US-301/Exit 115	75.2	254
I-95	US-301/Exit 115	&	SC-261/Paxville Hwy/Exit 119	76.8	246
I-95	SC-261/Paxville Hwy/Exit 119	&	US-521/Exit 122	75.8	252
I-95	US-521/Exit 122	&	SC-527/Black River Rd/Exit 132	71.0	261
I-95	SC-527/Black River Rd/Exit 132	&	US-378/Myrtle Beach Hwy/Exit 135	70.6	264
I-95	US-378/Myrtle Beach Hwy/Exit 135	&	SC-53/Narrow Paved Rd/Exit 141	70.9	262
I-95	SC-53/Narrow Paved Rd/Exit 141	&	SC-341/Lynches River Rd/Exit 146	71.7	259
I-95	SC-341/Lynches River Rd/Exit 146	&	SC-403/Cale Yarborough Hwy/Exit 150	72.8	258
I-95	SC-403/Cale Yarborough Hwy/Exit 150	&	Center Rd/Exit 153	76.7	248
I-95	Center Rd/Exit 153	&	US-76/W Palmetto St/Exit 157	79.2	238
I-95	US-76/W Palmetto St/Exit 157	&	I-20/Exit 160	82.7	229

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-95	I-20/Exit 160	&	US-52/W Lucas St/Exit 164	83.4	227
I-95	US-52/W Lucas St/Exit 164	&	Tv Rd/Exit 169	76.5	249
I-95	Tv Rd/Exit 169	&	SC-327/N Williston Rd/Exit 170	72.9	257
I-95	SC-327/N Williston Rd/Exit 170	&	SC-38/Exit 181	90.6	217
I-95	SC-38/Exit 181	&	SC-34/Exit 190	87.9	222
I-95	SC-34/Exit 190	&	SC-9/Radford Blvd/Exit 193	86.3	224
I-95	SC-9/Radford Blvd/Exit 193	&	US-301/Exit 1	86.7	223
I-126	I-26	&	Saluda River Rd	184.1	48
I-126	Saluda River Rd	&	Greystone Blvd	132.3	136
I-126	Greystone Blvd	&	Huger St	139.1	124
I-185	Neely Ferry Rd/Exit 1A	&	SC-417	24.1	281
I-185	SC-417	&	I-385/Exit 1B	23.8	282
I-185	I-385/Exit 1B	&	Fork Shoals Rd/Exit 4	22.7	283
I-185	Fork Shoals Rd/Exit 4	&	US-25/Augusta Rd/Exit 7	19.9	285
I-185	US-25/Augusta Rd/Exit 7	&	SC-20/Piedmont Hwy/Exit 10	19.4	286
I-185	SC-20/Piedmont Hwy/Exit 10	&	SC-153/Exit 12	21.9	284
I-185	SC-153/Exit 12	&	I-85/US-29	11.4	287
I-185	I-85/US-29	&	US-25/White Horse Rd/Exit 1	64.5	269
I-185	US-25/White Horse Rd/Exit 1	&	SC-20/Exit 2	33.5	280
I-185	SC-20/Exit 2	&	Henrydale Ave/Mills Ave	55.3	278
I-385	I-26	&	SC-308/Exit 2	62.2	272
I-385	SC-308/Exit 2	&	SC-49/Exit 5	64.4	270
I-385	SC-49/Exit 5	&	US-221/Exit 9	65.9	266
I-385	US-221/Exit 9	&	Road 23/Exit 10	72.9	256
I-385	Road 23/Exit 10	&	SC-101/Exit 16	78.0	242
I-385	SC-101/Exit 16	&	SC-14/Exit 19	84.0	226
I-385	SC-14/Exit 19	&	SC-14/Exit 22	114.9	175
I-385	SC-14/Exit 22	&	Old Laurens Rd/Exit 22	119.1	165
I-385	Old Laurens Rd/Exit 22	&	SC-418/Exit 23	115.3	174
I-385	SC-418/Exit 23	&	Fairview St/Exit 24	128.5	146
I-385	Fairview St/Exit 24	&	Harrison Bridge Rd/Exit 26	93.9	213
I-385	Harrison Bridge Rd/Exit 26	&	Fairview Rd/Exit 27	98.6	208
I-385	Fairview Rd/Exit 27	&	Georgia Rd/Exit 29	132.2	137
I-385	Georgia Rd/Exit 29	&	US-276/Exit 30	150.7	102
I-385	US-276/Exit 30	&	Old Stage Rd/E Standing Springs Rd/Exit3	116.4	172
I-385	Old Stage Rd/E Standing Springs Rd/Exit3	&	SC-417/Exit 31	116.7	171
I-385	SC-417/Exit 31	&	Bridges Rd/Exit 33	136.1	129
I-385	Bridges Rd/Exit 33	&	Butler Rd/Exit 34	147.4	109
I-385	Butler Rd/Exit 34	&	SC-146/Woodruff Rd/Exit 35	167.9	74
I-385	SC-146/Woodruff Rd/Exit 35	&	I-85/Exit 36	213.6	24
I-385	I-85/Exit 36	&	Roper Mountain Rd/Exit 37	191.4	39
I-385	Roper Mountain Rd/Exit 37	&	Haywood Rd/Exit 39	184.6	47
I-385	Haywood Rd/Exit 39	&	SC-291/Pleasantburg Dr/Exit 40	172.1	71
I-385	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	132.3	135
I-520	GA State Line	&	US-1/US-278/Jefferson Davis Hwy	59.6	276
I-526	US-17/Savannah Hwy	&	Sam Rittenberg Blvd	122.4	158
I-526	Sam Rittenberg Blvd	&	Paul Cantrell Blvd	124.6	153
I-526	Paul Cantrell Blvd	&	Leeds Ave	213.9	23
I-526	Leeds Ave	&	Paramount Dr	216.1	22
I-526	Paramount Dr	&	Dorchester Rd	212.0	25
I-526	Dorchester Rd	&	W Montague Ave	217.7	20
I-526	W Montague Ave	&	International Blvd	236.2	15
I-526	International Blvd	&	I-26	244.5	10
I-526	I-26	&	US-52/Rivers Ave	301.4	1
I-526	US-52/Rivers Ave	&	N Rhett Ave	281.3	4

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-526	N Rhett Ave	&	Virginia Ave	282.7	2
I-526	Virginia Ave	&	Don N Holt Brg	232.9	17
I-526	Don N Holt Brg	&	Clements Ferry Rd	233.4	16
I-526	Clements Ferry Rd	&	James B Edwards Brg	174.2	70
I-526	James B Edwards Brg	&	Long Point Rd	177.4	62
I-526	Long Point Rd	&	US-17	138.0	126
I-526	US-17	&	SC-17 Bus	41.4	279
I-526	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	106.8	195
I-585	US-221/Exit 25	&	SC-9/Exit 25	146.6	110
I-585	SC-9/Exit 25	&	California Ave/Exit 24	112.1	179
I-585	California Ave/Exit 24	&	Exit 24	97.5	209
I-585	Exit 24	&	I-85 Bus/Exit 23	101.5	203

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-526	I-26	&	US-52/Rivers Ave	301.4	1
I-526	N Rhett Ave	&	Virginia Ave	282.7	2
I-26	Saint Andrews Rd/Exit 106	&	I-20/Exit 107	281.5	3
I-526	US-52/Rivers Ave	&	N Rhett Ave	281.3	4
I-85	Woodruff Road/I-385/Exit 51	&	Pelham Rd/Exit 54	279.5	5
I-26	Piney Grove Rd/Exit 104	&	Saint Andrews Rd/Exit 106	271.4	6
I-26	Bush River Rd/Exit 108	&	I-126/US-76	258.5	7
I-26	I-20/Exit 107	&	Bush River Rd/Exit 108	248.9	8
I-20	Alpine Rd/Exit 76B	&	Clemson Rd/Exit 80	245.5	9
I-526	International Blvd	&	I-26	244.5	10
I-85	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	242.2	11
I-26	Harbison Blvd/Exit 103	&	Piney Grove Rd/Exit 104	240.6	12
I-85	Mauldin Rd/Exit 46	&	US-276/Exit 48	238.0	13
I-85	Pelham Rd/Exit 54	&	SC-14/Exit 56	236.7	14
I-526	W Montague Ave	&	International Blvd	236.2	15
I-526	Don N Holt Brg	&	Clements Ferry Rd	233.4	16
I-526	Virginia Ave	&	Don N Holt Brg	232.9	17
I-20	US-176/Broad River Rd/Exit 65	&	SC-215/Monticello Rd/Exit 68	226.2	18
I-85	US-276/Exit 48	&	Woodruff Road/I-385/Exit 51	219.8	19
I-526	Dorchester Rd	&	W Montague Ave	217.7	20
I-26	SC-60/Lake Murray Blvd/Exit 102	&	Harbison Blvd/Exit 103	216.7	21
I-526	Leeds Ave	&	Paramount Dr	216.1	22
I-526	Paul Cantrell Blvd	&	Leeds Ave	213.9	23
I-385	SC-146/Woodruff Rd/Exit 35	&	I-85/Exit 36	213.6	24
I-526	Paramount Dr	&	Dorchester Rd	212.0	25
I-20	SC-215/Monticello Rd/Exit 68	&	US-321/Fairfield Rd/Exit 70	207.4	26
I-20	I-77/Exit 76A	&	Alpine Rd/Exit 76B	206.7	27
I-26	US-52/Rivers Ave	&	Ashley Phosphate Rd	205.8	28
I-26	Ashley Phosphate Rd	&	W Aviation Ave	204.9	29
I-85	US-25/SC-20/White Horse Rd/Exit 44	&	US-25 Bus/Augusta Rd/Exit 46	202.0	30
I-85	SC-14/Exit 56	&	Aviation Dr/Exit 57	201.5	31
I-20	SC-6/Exit 55	&	US-1/Exit 58	199.4	32
I-20	US-321/Fairfield Rd/Exit 70	&	US-21/Main St/Exit 71	197.0	33
I-20	US-21/Main St/Exit 71	&	SC-555/Farrow Rd/Exit 72	196.1	34
I-77	I-20/Exit 16	&	US-1/Two Notch Rd/Exit 17	195.6	35
I-20	I-26/US-76/Exit 64	&	US-176/Broad River Rd/Exit 65	194.6	36
I-85	Gossett Rd/Exit 80	&	SC-110/Exit 83	194.6	37
I-85	US-29/Exit 66	&	SC-129/Exit 68	192.4	38
I-385	I-85/Exit 36	&	Roper Mountain Rd/Exit 37	191.4	39
I-85	SC-143/Exit 39	&	SC-153/Exit 40	191.2	40
I-20	US-1/Exit 58	&	US-378/Exit 61	190.3	41
I-85	SC-290/Exit 63	&	US-29/Exit 66	187.1	42
I-26	US-78/University Blvd	&	US-52/Rivers Ave	186.9	43
I-26	I-85 Bus/Exit 19	&	US-29/Exit 21	185.9	44
I-85	SC-101/Exit 60	&	SC-290/Exit 63	185.6	45
I-85	US-29/Exit 42 (Greenville)	&	US-25/SC-20/White Horse Rd/Exit 44	185.0	46
I-385	Roper Mountain Rd/Exit 37	&	Haywood Rd/Exit 39	184.6	47
I-126	I-26	&	Saluda River Rd	184.1	48
I-85	Aviation Dr/Exit 57	&	SC-101/Exit 60	183.2	49
I-20	US-378/Exit 61	&	Bush River Rd/Exit 63	183.1	50
I-85	SC-86/Exit 35	&	SC-143/Exit 39	182.8	51
I-20	Bush River Rd/Exit 63	&	I-26/US-76/Exit 64	182.6	52
I-26	Remount Rd	&	I-526	182.3	53
I-77	SC-555/Farrow Rd/Exit 19	&	Killian Rd/Exit 22	182.2	54

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-85	SC-110/Exit 83	&	Green River Rd/Exit 86	182.2	55
I-77	US-1/Two Notch Rd/Exit 17	&	SC-277/Exit 18	182.0	56
I-85	Green River Rd/Exit 86	&	Hyatt St/Exit 90	180.7	57
I-20	SC-555/Farrow Rd/Exit 72	&	SC-277/Exit 73	178.5	58
I-85	US-29/Exit 34	&	SC-86/Exit 35	177.8	59
I-77	SC-98/Gold Hill Rd/Exit 88	&	US-21/Carowinds Blvd/Exit 90	177.7	60
I-26	I-77/Exit 116	&	US-21/US-176/Exit 119	177.5	61
I-526	James B Edwards Brg	&	Long Point Rd	177.4	62
I-26	I-526	&	Mall Dr/W Montague Ave	176.9	63
I-26	US-1/Exit 111	&	SC-302/Exit 113	176.8	64
I-20	Clemson Rd/Exit 80	&	Spears Creek Church Road/Exit 82	176.7	65
I-26	Dorchester Rd	&	SC-7/Cosgrove Ave	175.8	66
I-85	US-25 Bus/Augusta Rd/Exit 46	&	SC-291/Pleasantburg Dr	175.6	67
I-77	SC-277/Exit 18	&	SC-555/Farrow Rd/Exit 19	174.7	68
I-77	SC-12/Forest Dr/Exit 12	&	Decker Blvd/Exit 13	174.4	69
I-526	Clements Ferry Rd	&	James B Edwards Brg	174.2	70
I-385	Haywood Rd/Exit 39	&	SC-291/Pleasantburg Dr/Exit 40	172.1	71
I-77	SC-161/Exit 82	&	Sutton Rd/Exit 83	168.9	72
I-26	Mall Dr/W Montague Ave	&	Dorchester Rd	168.9	73
I-385	Butler Rd/Exit 34	&	SC-146/Woodruff Rd/Exit 35	167.9	74
I-26	Spruill Ave	&	Rutledge Ave	166.2	75
I-26	SC-7/Cosgrove Ave	&	Meeting Street Rd	166.2	76
I-26	SC-302/Exit 113	&	US-321/US-21/US-176/Exit 115	165.7	77
I-26	I-126/US-76	&	US-378/Exit 110	164.5	78
I-20	SC-277/Exit 73	&	US-1/Two Notch Rd/Exit 74	164.3	79
I-85	Hyatt St/Exit 90	&	SC-11/Exit 92	163.9	80
I-77	SC-160/Exit 85	&	SC-98/Gold Hill Rd/Exit 88	163.7	81
I-77	US-21/Exit 24	&	Blythewood Rd/Exit 27	163.6	82
I-77	Sutton Rd/Exit 83	&	SC-160/Exit 85	162.6	83
I-85	SC-11/Exit 92	&	SC-150/SC-18/Road 82/Exit 95	162.4	84
I-26	Meeting Street Rd	&	Spruill Ave	161.4	85
I-20	GA State Line	&	SC-230/Exit 1	161.4	86
I-85	SC-291/Pleasantburg Dr	&	Mauldin Rd/Exit 46	160.8	87
I-26	US-176/US-76/Exit 101	&	SC-60/Lake Murray Blvd/Exit 102	159.8	88
I-26	W Aviation Ave	&	Remount Rd	159.1	89
I-26	Rutledge Ave	&	Mount Pleasant St	159.1	90
I-26	US-21/US-176/Exit 119	&	Road 31/Exit 125	158.5	91
I-26	New Cut Rd/Exit 17	&	I-85/Exit 18	157.6	92
I-26	College Park Rd	&	US-78/University Blvd	157.3	93
I-85	I-26/Exit 70	&	US-176/Exit 72	156.9	94
I-77	SC-12/Percival Rd/Exit 15	&	I-20/Exit 16	156.6	95
I-26	Road 31/Exit 125	&	US-21/Exit 129	155.9	96
I-85	SC-150/SC-18/Road 82/Exit 95	&	SC-18/Shelby Hwy/Exit 96	155.6	97
I-26	US-176/Exit 97	&	US-176/US-76/Exit 101	153.4	98
I-85	I-85 Bus/Exit 77	&	US-221/Exit 78	152.5	99
I-77	Jackson Blvd/Exit 10	&	SC-12/Forest Dr/Exit 12	152.4	100
I-26	US-21/Exit 129	&	Caw Caw Rd	151.0	101
I-385	Georgia Rd/Exit 29	&	US-276/Exit 30	150.7	102
I-77	Alex Sanders Brg	&	SC-48/Bluff Rd/Exit 5	150.5	103
I-77	12th St Ext	&	Alex Sanders Brg	148.9	104
I-85	US-176/Exit 72	&	SC-9/Exit 75	148.9	105
I-85	SC-129/Exit 68	&	I-26/Exit 70	148.5	106
I-26	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	148.4	107
I-77	Decker Blvd/Exit 13	&	SC-12/Percival Rd/Exit 15	147.4	108

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-385	Bridges Rd/Exit 33	&	Butler Rd/Exit 34	147.4	109
I-585	US-221/Exit 25	&	SC-9/Exit 25	146.6	110
I-26	US-321/US-21/US-176/Exit 115	&	I-77/Exit 116	146.3	111
I-26	US-378/Exit 110	&	US-1/Exit 111	146.0	112
I-85	SC-187/Exit 14	&	US-76/SC-28/Exit 19	144.9	113
I-77	SC-48/Bluff Rd/Exit 5	&	SC-768/Shop Rd/Exit 6	144.3	114
I-26	Columbia Ave/Exit 91	&	US-176/Exit 97	143.6	115
I-85	SC-5/Exit 99	&	SC-198/Exit 102	143.1	116
I-77	Blythewood Rd/Exit 27	&	SC-34/Exit 34	142.2	117
I-85	SC-18/Shelby Hwy/Exit 96	&	SC-5/Exit 99	141.9	118
I-77	I-26/Exit 1	&	12th St Ext	141.5	119
I-26	I-85/Exit 18	&	I-85 Bus/Exit 19	141.3	120
I-26	Mount Pleasant St	&	Cypress St	140.3	121
I-85	SC-24/Exit 11	&	SC-187/Exit 14	139.7	122
I-20	SC-204/Exit 51	&	SC-6/Exit 55	139.2	123
I-126	Greystone Blvd	&	Huger St	139.1	124
I-20	Spears Creek Church Road/Exit 82	&	White Pond Rd/Exit 87	138.8	125
I-526	Long Point Rd	&	US-17	138.0	126
I-20	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	136.6	127
I-26	Caw Caw Rd	&	Burke Rd	136.5	128
I-385	SC-417/Exit 31	&	Bridges Rd/Exit 33	136.1	129
I-26	John Dodd Rd/Exit 16	&	New Cut Rd/Exit 17	136.1	130
I-95	US-17/General William Hardee Blvd	&	US-278/Red Dam Rd	135.1	131
I-26	Jedburg Rd	&	N Main St	134.5	132
I-85	US-221/Exit 78	&	Gossett Rd/Exit 80	134.0	133
I-85	SC-81/Exit 27	&	SC-8/Exit 32	134.0	134
I-385	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	132.3	135
I-126	Saluda River Rd	&	Greystone Blvd	132.3	136
I-385	Fairview Rd/Exit 27	&	Georgia Rd/Exit 29	132.2	137
I-77	SC-262/Leesburg Rd/Exit 9B	&	Jackson Blvd/Exit 10	132.2	138
I-26	Cypress St	&	Romney St	132.1	139
I-85	SC-9/Exit 75	&	I-85 Bus/Exit 77	131.2	140
I-95	GA State Line	&	US-17/General William Hardee Blvd	130.1	141
I-77	SC-901/Exit 73	&	Porter Rd/Exit 75	129.8	142
I-26	Romney St	&	US 17	129.6	143
I-77	Killian Rd/Exit 22	&	US-21/Exit 24	129.3	144
I-95	US-278/Red Dam Rd	&	SC-13/SC-S-27-13 Ext	128.5	145
I-385	SC-418/Exit 23	&	Fairview St/Exit 24	128.5	146
I-85	SC-8/Exit 32	&	US-29/Exit 34	128.0	147
I-77	SC-768/Shop Rd/Exit 6	&	US-378/US-76/Exit 9	127.0	148
I-85	Exit 4	&	SC-24/Exit 11	126.9	149
I-77	US-378/US-76/Exit 9	&	SC-262/Leesburg Rd/Exit 9B	126.6	150
I-20	White Pond Rd/Exit 87	&	US-601/Exit 92	126.0	151
I-77	SC-9/Exit 65	&	SC-901/Exit 73	125.0	152
I-526	Sam Rittenberg Blvd	&	Paul Cantrell Blvd	124.6	153
I-26	N Main St	&	College Park Rd	124.6	154
I-85	GA State Line	&	SC-11/Exit 1	124.5	155
I-85	US-178/Exit 21	&	SC-81/Exit 27	123.9	156
I-95	SC-462	&	US-17 (Ridgeland) (North)	123.6	157
I-526	US-17/Savannah Hwy	&	Sam Rittenberg Blvd	122.4	158
I-95	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	121.7	159
I-85	SC-11/Exit 1	&	SC-59/Exit 2	121.3	160
I-20	SC-230/Exit 1	&	US-25/SC-121/Exit 5	120.9	161
I-26	US-176/Exit 15	&	John Dodd Rd/Exit 16	120.5	162

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-95	SC-13/SC-S-27-13 Ext	&	SC-336	120.3	163
I-85	SC-59/Exit 2	&	Exit 4	119.5	164
I-385	SC-14/Exit 22	&	Old Laurens Rd/Exit 22	119.1	165
I-95	US-78/W Jim Bilton Blvd/Exit 77	&	US-178/Charleston Hwy/Exit 82	118.1	166
I-95	US-17 (Ridgeland) (South)	&	SC-462	117.6	167
I-26	SC-773/Exit 82	&	SC-202/Exit 85	117.1	168
I-26	SC-202/Exit 85	&	Columbia Ave/Exit 91	117.1	169
I-26	Burke Rd	&	US-601/Saint Matthews Rd	116.7	170
I-385	)ld Stage Rd/E Standing Springs Rd/Exit3	&	SC-417/Exit 31	116.7	171
I-385	US-276/Exit 30	&	)ld Stage Rd/E Standing Springs Rd/Exit3	116.4	172
I-95	SC-336	&	US-17 (Ridgeland) (South)	116.2	173
I-385	Old Laurens Rd/Exit 22	&	SC-418/Exit 23	115.3	174
I-385	SC-14/Exit 19	&	SC-14/Exit 22	114.9	175
I-95	SC-61/Augusta Hwy/Exit 68	&	US-78/W Jim Bilton Blvd/Exit 77	114.7	176
I-26	SC-219/Exit 76	&	SC-773/Exit 82	114.3	177
I-26	I-385	&	SC-56/Exit 52	112.5	178
I-585	SC-9/Exit 25	&	California Ave/Exit 24	112.1	179
I-77	SC-34/Exit 34	&	Road 41/Exit 41	112.0	180
I-26	US-601/Saint Matthews Rd	&	SC-33/Cameron Rd/Russell St	112.0	181
I-77	Road 20/Exit 46	&	SC-200/Exit 48	111.5	182
I-26	SC-33/Cameron Rd/Russell St	&	Five Chop Rd	111.3	183
I-85	Exit 104	&	US-29/Exit 106	111.1	184
I-77	Road 41/Exit 41	&	Road 20/Exit 46	110.9	185
I-85	SC-198/Exit 102	&	Exit 104	110.2	186
I-26	Five Chop Rd	&	Homestead Rd	109.3	187
I-77	SC-56/Exit 62	&	SC-9/Exit 65	109.3	188
I-26	Vance Rd	&	I-95	109.0	189
I-77	SC-200/Exit 48	&	SC-97/Exit 55	108.9	190
I-85	US-76/SC-28/Exit 19	&	US-178/Exit 21	108.8	191
I-77	SC-97/Exit 55	&	SC-56/Exit 62	108.6	192
I-26	Homestead Rd	&	Vance Rd	108.3	193
I-95	SC-68/Yemassee Hwy	&	US-21/Low Country Hwy	106.9	194
I-526	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	106.8	195
I-95	McLeod Rd/Exit 62	&	SC-61/Augusta Hwy/Exit 68	106.2	196
I-95	US-17 (Ridgeland) (North)	&	SC-68/Yemassee Hwy	106.1	197
I-95	SC-64/Bells Hwy/Exit 57	&	McLeod Rd/Exit 62	105.8	198
I-26	SC-34/Exit 74	&	SC-219/Exit 76	105.7	199
I-95	US-21/Low Country Hwy	&	SC-63/Sniders Hwy/Exit 53	105.5	200
I-95	SC-63/Sniders Hwy/Exit 53	&	SC-64/Bells Hwy/Exit 57	103.0	201
I-20	US-601/Exit 92	&	US-521/Exit 98	101.8	202
I-585	Exit 24	&	I-85 Bus/Exit 23	101.5	203
I-26	SC-121/Exit 72	&	SC-34/Exit 74	101.2	204
I-26	SC-56/Exit 52	&	SC-72/Exit 54	100.9	205
I-77	SC-122/Dave Lyle Blvd/Exit 79	&	US-21/Exit 82	100.8	206
I-20	US-25/SC-121/Exit 5	&	SC-144/Exit 11	99.6	207
I-385	Harrison Bridge Rd/Exit 26	&	Fairview Rd/Exit 27	98.6	208
I-585	California Ave/Exit 24	&	Exit 24	97.5	209
I-20	SC-34/Exit 44	&	SC-204/Exit 51	96.6	210
I-26	SC-292/Exit 10	&	US-176/Exit 15	95.1	211
I-26	Ridgeville Rd	&	Jedburg Rd	93.9	212
I-385	Fairview St/Exit 24	&	Harrison Bridge Rd/Exit 26	93.9	213
I-26	SC-72/Exit 54	&	SC-66/Exit 60	93.2	214
I-26	Road 32/Exit 66	&	SC-121/Exit 72	93.0	215
I-26	SC-66/Exit 60	&	Road 32/Exit 66	92.9	216

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-95	SC-327/N Williston Rd/Exit 170	&	SC-38/Exit 181	90.6	217
I-95	US-15/US-301/Exit 97	&	SC-6/Exit 98	89.2	218
I-26	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	89.1	219
I-77	Porter Rd/Exit 75	&	US-21/SC-5/Exit 77	89.1	220
I-95	SC-6/Exit 98	&	US-15/US-301/Exit 102	88.1	221
I-95	SC-38/Exit 181	&	SC-34/Exit 190	87.9	222
I-95	SC-9/Radford Blvd/Exit 193	&	US-301/Exit 1	86.7	223
I-95	SC-34/Exit 190	&	SC-9/Radford Blvd/Exit 193	86.3	224
I-20	US-178/Exit 39	&	SC-34/Exit 44	84.4	225
I-385	SC-101/Exit 16	&	SC-14/Exit 19	84.0	226
I-95	I-20/Exit 160	&	US-52/W Lucas St/Exit 164	83.4	227
I-26	SC-11/Exit 5	&	SC-292/Exit 10	82.8	228
I-95	US-76/W Palmetto St/Exit 157	&	I-20/Exit 160	82.7	229
I-20	SC-144/Exit 11	&	SC-19/Exit 18	82.6	230
I-20	Road 49/Exit 29	&	SC-39/Exit 33	81.9	231
I-20	SC-39/Exit 33	&	US-178/Exit 39	81.5	232
I-20	US-521/Exit 98	&	Humphries Rd/Exit 101	80.8	233
I-77	US-21/Exit 82	&	SC-161/Exit 82	80.7	234
I-95	US-15/US-301/Exit 102	&	Buff Blvd/Exit 108	80.5	235
I-20	US-1/Exit 22	&	Road 49/Exit 29	80.2	236
I-77	US-21/SC-5/Exit 77	&	SC-122/Dave Lyle Blvd/Exit 79	80.0	237
I-95	Center Rd/Exit 153	&	US-76/W Palmetto St/Exit 157	79.2	238
I-95	I-26/Exit 86	&	US-176/Old Hwy/Exit 90	78.6	239
I-26	SC-453	&	Ridgeville Rd	78.5	240
I-26	NC State Line	&	SC-14/Exit 1	78.3	241
I-385	Road 23/Exit 10	&	SC-101/Exit 16	78.0	242
I-26	SC-14/Exit 1	&	SC-11/Exit 5	77.7	243
I-20	SC-19/Exit 18	&	US-1/Exit 22	77.4	244
I-20	Humphries Rd/Exit 101	&	Jamestown Rd/Exit 108	77.4	245
I-95	US-301/Exit 115	&	SC-261/Paxville Hwy/Exit 119	76.8	246
I-95	US-15/Bass Dr/Exit 93	&	US-15/US-301/Exit 97	76.8	247
I-95	SC-403/Cale Yarborough Hwy/Exit 150	&	Center Rd/Exit 153	76.7	248
I-95	US-52/W Lucas St/Exit 164	&	Tv Rd/Exit 169	76.5	249
I-95	US-176/Old Hwy/Exit 90	&	US-15/Bass Dr/Exit 93	76.2	250
I-26	I-95	&	US-15	75.9	251
I-95	SC-261/Paxville Hwy/Exit 119	&	US-521/Exit 122	75.8	252
I-26	US-15	&	SC-453	75.5	253
I-95	Buff Blvd/Exit 108	&	US-301/Exit 115	75.2	254
I-20	Jamestown Rd/Exit 108	&	US-15/Exit 116	74.1	255
I-385	US-221/Exit 9	&	Road 23/Exit 10	72.9	256
I-95	Tv Rd/Exit 169	&	SC-327/N Williston Rd/Exit 170	72.9	257
I-95	SC-341/Lynches River Rd/Exit 146	&	SC-403/Cale Yarborough Hwy/Exit 150	72.8	258
I-95	SC-53/Narrow Paved Rd/Exit 141	&	SC-341/Lynches River Rd/Exit 146	71.7	259
I-26	US-221/Exit 28	&	Frontage Rd 35/Exit 35	71.2	260
I-95	US-521/Exit 122	&	SC-527/Black River Rd/Exit 132	71.0	261
I-95	US-378/Myrtle Beach Hwy/Exit 135	&	SC-53/Narrow Paved Rd/Exit 141	70.9	262
I-20	SC-340/Exit 137	&	I-95/Exit 141	70.8	263
I-95	SC-527/Black River Rd/Exit 132	&	US-378/Myrtle Beach Hwy/Exit 135	70.6	264
I-26	Frontage Rd 35/Exit 35	&	SC-146/Exit 38	67.9	265
I-385	SC-49/Exit 5	&	US-221/Exit 9	65.9	266
I-26	SC-146/Exit 38	&	SC-92/Exit 41	65.8	267
I-20	US-401/Exit 131	&	SC-340/Exit 137	65.6	268
I-185	I-85/US-29	&	US-25/White Horse Rd/Exit 1	64.5	269
I-385	SC-308/Exit 2	&	SC-49/Exit 5	64.4	270

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE SEGMENTS SUMMARY

Interstate	Segment Between			Two-Way Density Index	Segment Rank
I-26	SC-92/Exit 41	&	SC-49/Exit 44	62.2	271
I-385	I-26	&	SC-308/Exit 2	62.2	272
I-20	SC-341/Exit 120	&	SC-22/Exit 123	60.4	273
I-26	SC-49/Exit 44	&	I-385	60.4	274
I-20	US-15/Exit 116	&	SC-341/Exit 120	60.0	275
I-520	GA State Line	&	US-1/US-278/Jefferson Davis Hwy	59.6	276
I-20	SC-22/Exit 123	&	US-401/Exit 131	59.3	277
I-185	SC-20/Exit 2	&	Henrydale Ave/Mills Ave	55.3	278
I-526	US-17	&	SC-17 Bus	41.4	279
I-185	US-25/White Horse Rd/Exit 1	&	SC-20/Exit 2	33.5	280
I-185	Neely Ferry Rd/Exit 1A	&	SC-417	24.1	281
I-185	SC-417	&	I-385/Exit 1B	23.8	282
I-185	I-385/Exit 1B	&	Fork Shoals Rd/Exit 4	22.7	283
I-185	SC-20/Piedmont Hwy/Exit 10	&	SC-153/Exit 12	21.9	284
I-185	Fork Shoals Rd/Exit 4	&	US-25/Augusta Rd/Exit 7	19.9	285
I-185	US-25/Augusta Rd/Exit 7	&	SC-20/Piedmont Hwy/Exit 10	19.4	286
I-185	SC-153/Exit 12	&	I-85/US-29	11.4	287

INRIX CONGESTION ANALYSIS
ALL SC INTERSTATE CORRIDORS RANKED

Corridor Rank	Interstate	Corridor Between			Approximate Length (mi)	Location	Urban/Rural	Average Corridor Density Index
1	I-526	I-26	&	Virginia Ave	3	Charleston	Urban	288.5
2	I-26	Piney Grove Rd/Exit 104	&	I-20/Exit 107	3	Columbia	Urban	276.4
3	I-26	I-20/Exit 107	&	I-126/US-76	1	Columbia	Urban	253.7
4	I-85	SC-153/Exit 40	&	US-29/Exit 42 (Greenville)	2	Greenville	Urban	242.2
5	I-85	Woodruff Road/I-385/Exit 51	&	Aviation Dr/Exit 57	6	Greenville	Urban	239.3
6	I-526	Virginia Ave	&	Clements Ferry Rd	3	Charleston	Urban	233.2
7	I-85	Mauldin Rd/Exit 46	&	Woodruff Road/I-385/Exit 51	5	Greenville	Urban	228.9
8	I-26	SC-60/Lake Murray Blvd/Exit 10	&	Piney Grove Rd/Exit 104	2	Columbia	Urban	228.6
9	I-20	I-77/Exit 76A	&	Clemson Rd/Exit 80	4	Columbia	Urban	226.1
10	I-526	Paul Cantrell Blvd	&	I-26	5	Charleston	Urban	223.4
11	I-26	US-52/Rivers Ave	&	Ashley Phosphate Rd	1	Charleston	Urban	205.3
12	I-20	US-176/Broad River Rd/Exit 65	&	US-1/Two Notch Rd/Exit 74	9	Columbia	Urban	194.9
13	I-85	US-29/Exit 42 (Greenville)	&	US-25 Bus/Augusta Rd/Exit 46	4	Greenville	Urban	193.5
14	I-385	SC-146/Woodruff Rd/Exit 35	&	SC-291/Pleasantburg Dr/Exit 40	5	South of Greenville	Rural	190.4
15	I-20	SC-6/Exit 55	&	US-176/Broad River Rd/Exit 65	10	b/w Augusta & Columbia	Urban/Rural	190.0
16	I-85	Aviation Dr/Exit 57	&	SC-129/Exit 68	11	Greenville	Urban	187.0
17	I-26	I-85 Bus/Exit 19	&	US-29/Exit 21	2	Spartanburg	Urban	185.9
18	I-85	Gossett Rd/Exit 80	&	Hyatt St/Exit 90	10	North of Spartanburg	Rural	185.8
19	I-126	I-26	&	Saluda River Rd	1	Columbia	Urban	184.1
20	I-85	US-29/Exit 34	&	SC-153/Exit 40	6	Greenville	Urban	183.9
21	I-77	I-20/Exit 16	&	Killian Rd/Exit 22	6	Columbia	Urban	183.6
22	I-20	Clemson Rd/Exit 80	&	Spears Creek Church Road/Exit 82	2	Columbia	Urban	176.7
23	I-526	Clements Ferry Rd	&	Long Point Rd	5	Charleston	Urban	175.8
24	I-26	College Park Rd	&	US 52/Rivers Ave	5	Charleston	Urban	172.1
25	I-77	SC-161/Exit 82	&	US-21/Carowinds Blvd/Exit 90	8	Rock Hill	Urban	168.2
26	I-85	US-25 Bus/Augusta Rd/Exit 46	&	Mauldin Rd/Exit 46	1	Greenville	Urban	168.2
27	I-26	I-126/US-76	&	US-21/US-176/Exit 119	11	Columbia	Urban	162.8
28	I-20	GA State Line	&	SC-230/Exit 1	1	Augusta	Urban	161.4
29	I-26	Remount Rd	&	US 17	9	Charleston	Urban	159.9
30	I-26	W Aviation Ave	&	Remount Rd	1	Charleston	Urban	159.1
31	I-77	Jackson Blvd/Exit 10	&	I-20/Exit 16	6	Columbia	Urban	157.7
32	I-85	Hyatt St/Exit 90	&	SC-198/Exit 102	12	North of Spartanburg	Rural	153.4
33	I-26	Columbia Ave/Exit 91	&	SC-60/Lake Murray Blvd/Exit 102	11	Columbia	Urban	152.3
34	I-26	US-21/US-176/Exit 119	&	Burke Rd	15	b/w Columbia & Charleston	Rural	150.5
35	I-385	SC-417/Exit 31	&	SC-146/Woodruff Rd/Exit 35	4	South of Greenville	Rural	150.5
36	I-26	US-29/Exit 21	&	SC-296/Reidville Rd/Exit 22	1	Spartanburg	Urban	148.4
37	I-585	US-221/Exit 25	&	SC-9/Exit 25	1	Spartanburg	Urban	146.6
38	I-85	SC-129/Exit 68	&	Gossett Rd/Exit 80	12	Spartanburg	Urban	145.3
39	I-77	Killian Rd/Exit 22	&	SC-34/Exit 34	12	b/w Columbia & Rock Hill	Rural	145.0
40	I-385	Fairview Rd/Exit 27	&	US-276/Exit 30	3	South of Greenville	Rural	141.4
41	I-20	SC-204/Exit 51	&	SC-6/Exit 55	4	b/w Augusta & Columbia	Rural	139.2
42	I-26	US-176/Exit 15	&	I-85 Bus/Exit 19	4	Spartanburg	Urban	138.9
43	I-77	I-26/Exit 1	&	Jackson Blvd/Exit 10	10	Columbia	Urban	138.7
44	I-526	Long Point Rd	&	US-17	2	Charleston	Urban	138.0
45	I-20	US-1/Two Notch Rd/Exit 74	&	I-77/Exit 76A	2	Columbia	Urban	136.6
46	I-126	Saluda River Rd	&	Huger St	2	Columbia	Urban	135.7
47	I-385	SC-291/Pleasantburg Dr/Exit 40	&	End of Freeway	2	South of Greenville	Rural	132.3
48	I-95	GA State Line	&	SC-13/SC-S-27-13 Ext	18	South of I-26	Rural	131.2
49	I-26	Jedburg Rd	&	College Park Rd	9	Charleston	Urban	129.6
50	I-85	GA State Line	&	US-76/SC-28/Exit 19	19	South of Greenville	Urban	129.5
51	I-77	SC-9/Exit 65	&	Porter Rd/Exit 75	10	b/w Columbia & Rock Hill	Rural	127.4
52	I-85	US-76/SC-28/Exit 19	&	US-29/Exit 34	15	South of Greenville	Urban	123.6
53	I-526	US-17/Savannah Hwy	&	Paul Cantrell Blvd	2	Charleston	Urban	123.5
54	I-20	pears Creek Church Road/Exit 8	&	US-521/Exit 98	16	b/w Columbia & Florence	Urban/Rural	122.2
55	I-95	US-178/Charleston Hwy/Exit 82	&	I-26/Exit 86	4	South of I-26	Rural	121.7
56	I-20	SC-230/Exit 1	&	US-25/SC-121/Exit 5	4	Augusta	Urban	120.9
57	I-385	SC-14/Exit 19	&	Fairview St/Exit 24	5	Greenville	Urban	119.4
58	I-95	SC-13/SC-S-27-13 Ext	&	US-17 (Ridgeland) (North)	15	South of I-26	Rural	119.4
59	I-385	US-276/Exit 30	&	SC-417/Exit 31	1	South of Greenville	Rural	116.5
60	I-95	SC-61/Augusta Hwy/Exit 68	&	US-178/Charleston Hwy/Exit 82	14	South of I-26	Rural	116.4
61	I-26	Burke Rd	&	I-95	29	b/w Columbia & Charleston	Rural	111.1
62	I-85	SC-198/Exit 102	&	US-29/Exit 106	4	North of Spartanburg	Rural	110.7
63	I-77	SC-34/Exit 34	&	SC-9/Exit 65	31	b/w Columbia & Rock Hill	Rural	110.2
64	I-526	SC-17 Bus	&	SC-703/Ben Sawyer Blvd/Coleman Blvd	1	Charleston	Urban	106.8
65	I-95	US-17 (Ridgeland) (North)	&	SC-61/Augusta Hwy/Exit 68	35	South of I-26	Rural	105.6
66	I-26	I-385	&	Columbia Ave/Exit 91	36	b/w Columbia & Spartanburg	Rural	104.8
67	I-585	SC-9/Exit 25	&	I-85 Bus/Exit 23	2	Spartanburg	Urban	103.7
68	I-385	Fairview St/Exit 24	&	Fairview Rd/Exit 27	3	South of Greenville	Rural	96.2
69	I-26	SC-296/Reidville Rd/Exit 22	&	US-221/Exit 28	6	Spartanburg	Urban	89.1
70	I-77	Porter Rd/Exit 75	&	SC-161/Exit 82	7	Rock Hill	Urban	87.7
71	I-20	US-25/SC-121/Exit 5	&	SC-204/Exit 51	46	b/w Augusta & Columbia	Rural	85.6
72	I-26	NC State Line	&	US-176/Exit 15	15	West of Spartanburg	Rural	83.5
73	I-95	I-20/Exit 160	&	US-301/Exit 1	37	North of I-20	Urban/Rural	83.5
74	I-26	I-95	&	Jedburg Rd	26	b/w Columbia & Charleston	Rural	80.9
75	I-95	I-26/Exit 86	&	I-20/Exit 160	79	b/w I-26 & I-20	Urban/Rural	77.2
76	I-385	I-26	&	SC-14/Exit 19	19	Greenville	Urban	71.2
77	I-20	US-521/Exit 98	&	I-95/Exit 141	43	b/w Columbia & Florence	Urban/Rural	68.5
78	I-26	US-221/Exit 28	&	I-385	22	b/w Columbia & Spartanburg	Rural	65.5
79	I-520	GA State Line	&	US-1/US-278/Jefferson Davis Hwy	1	Augusta	Urban	59.6
80	I-185	I-85/US-29	&	Henrydale Ave/Mills Ave	2	Greenville	Rural	51.1
81	I-526	US-17	&	SC-17 Bus	1	Charleston	Urban	41.4
82	I-185	I-385/Neely Ferry Rd/Exit 1A	&	I-85/US-29	15	Greenville	Rural	20.5

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APPENDIX D:
ENVIRONMENTAL SCREENING

Under the provisions of MAP-21 as codified in 23 U.S.C § 150(b), the federal government has established seven (7) national goals for the federal-aid highway program. One of those goals is "Environmental Sustainability", which requires the enhancement of the transportation system "while protecting and enhancing the natural environment". At the state level, under Section 57-1-370(B)(8) as revised by the passage of Act 114 in 2007, South Carolina has established a set of criteria to be used for project identification and prioritization of transportation projects to be included in the Statewide Transportation Improvement Program (STIP) and receive federal funding.

The criteria set forth by Act 114 impact transportation projects identified by not only COGs and MPOs within the state but the SCDOT as well. For COGs and MPOs, this set of criteria includes the requirement for an assessment of environmental impact for new facility, widening, and intersection projects. For SCDOT, the revisions to Sections 57-1-370 and 57-1-460 under Act 114 required SCDOT to revise regulations for the project selection process for bridge replacement, Interstate rehabilitation, non-Interstate road resurfacing, safety, Interstate mainline capacity, and other forms of Interstate projects. Transportation projects identified by the SCDOT that must include an assessment of environmental impact include those for bridge replacement and Interstate and interchange facility capacity and upgrades in addition to those projects identified for COGs and MPOs.

In order for projects to be identified, prioritized, and funded on the Interstate system, a baseline of potential environmental impacts must be established. The environmental impact assessment determines the potential impacts to cultural, natural, and social resources in association with a particular transportation project and of those areas, which may be impacted by implementation of the said project. SCDOT conducted an environmental impact assessment for the use of establishing a baseline impact analysis for the Interstate Plan. Further discussion below describes the methodology and results of the environmental assessment.

Methodology

The environmental assessment conducted to establish the potential baseline of environmental impacts was completed for each Interstate segment of each Interstate route. This assessment reviewed four resource areas to determine impacts to cultural, natural, and social resources for Interstate segments. Those four resource areas included: (1) wetlands, (2) streams, (3) threatened and endangered species, and (4) cultural resources.

SCDOT established a scoring system to rank each resource area. Wetlands and cultural resources were scored by the amount of acres, streams by the amount of associated miles, and threatened and endangered species by the amount of species identified in the area. Each resource area received a score between 0 to 2, with 0 indicating low to no observations of the identified resources within the area of an Interstate segment and 2 indicating significant amount of observations. After assessment of each area, the scores were averaged to develop a total resource ranking for the Interstate segments.

The results of the scoring for each of the four resource areas provided an average ranking score as determined by the SCDOT. In order to illustrate the results, a GIS classification method called "natural breaks" was used to arrange the average ranking scores into a three-class ranking system. This three-

class ranking is displayed as Low, Medium, and High Impact. Interstate segments ranked Low will have little to no impact to environmental resources in relation to the weak presence of these resources around a particular segment. However, Interstate segments ranked High will have significant impacts due to the strong presence of environmental resources within the area of the segment. Percentages were calculated by summing the length of Interstate segments assessed with a specific ranking (Low, Medium, and High) and dividing by the total length of Interstate segments for each Interstate route.

Analysis Results

Figure D1 illustrates the environmental impact along the Interstates. **Table D1** displays the results of the average ranking scores for each Interstate to provide a general illustration how Interstate projects may impact the identified resources. Overall, the majority of the Interstate segments are ranked Low with only approximately 4 percent of Interstate segments ranked as having a High impact on environmental conditions.

Table D1: Enivronmental Impact along the Interstates

Interstate	Length (mi)	Environmental Impact Ranking (by Length)		
		Low	**Medium**	**High**
I-20	143.0	45%	52%	3%
I-26	232.1	74%	26%	0%
I-77	92.9	80%	11%	9%
I-85	108.6	90%	6%	4%
I-95	169.2	53%	42%	5%
I-126	3.7	0%	50%	50%
I-185	16.4	88%	12%	0%
I-385	43.2	84%	16%	0%
I-520	8.0	20%	18%	62%
I-526	19.6	44%	26%	30%
I-585	2.3	1%	99%	0%
Overall	**838.8**	**67%**	**29%**	**4%**

I-85 has the highest percentage of segments ranked as having Low impacts and I-520 has the highest percentage of segments ranked as having High impacts. I-77 has the most Interstate miles ranked as having a High impact with approximately 8.3 miles in the Columbia area, which has also been identified as a major congested Interstate corridor. Though I-520 contains the highest percentage of having a High impact ranking, the individual Interstate segments are some of the lowest in the congestion ranking.

Figure D1: Environmental Impact along the Interstates