Columbia Area Transportation Study
Metropolitan Planning Organization
Adopted September 24, 2015

2015 CONGESTION MANAGEMENT PLAN

COLUMBIA AREA TRANSPORTATION STUDY METROPOLITAN PLANNING ORGANIZATION CONGESTION MANAGEMENT PLAN

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1. INTRODUCTION

1.1. Background

Traffic congestion can be generally defined as a condition where the volume of users on a transportation facility approaches or exceeds the capacity of that facility. Congestion is characterized by reduced travel speeds, increased travel times and delay, and, in some cases, increased traffic crashes, which can lead to uncertainty, frustration, and dissatisfaction of transportation system users. Some secondary impacts of congestion include decreased productivity and increased greenhouse gas emissions. However, it is important to acknowledge that the high levels of traffic volumes that cause congestion are also symptomatic of growth in economic activity and development. Therefore, transportation planners, engineers, and decision makers should seek to manage congestion rather than totally eradicate it.

The ability to increase highway capacity will always be restricted by limited financial resources. Therefore, it is necessary to plan for efficient management and operation of the existing transportation system. The Congestion Management Process (CMP) is intended to be a systematic way of monitoring, measuring and diagnosing the causes of current and future congestion on a region's multi-modal transportation systems; evaluating and recommending alternative strategies to manage current and future regional congestion; and monitoring and evaluating the performance of strategies implemented to manage congestion. The CMP also responds to requirements set forth by federal transportation legislation (23 CFR 450.320).

1.2. Purpose and Scope

COATS MPO has developed a CMP to meet the unique needs of the Columbia metropolitan area. The CMP includes an ongoing method to provide information on the performance of the transportation system and on alternative strategies to manage congestion and enhance mobility and safety. The CMP uses an objectives-driven, performance-based approach to managing congestion, and emphasizes effective management of existing facilities through use of travel demand and operational management strategies. In Transportation Management Areas (TMAs) that are in non-attainment of ozone or carbon monoxide (CO) standards, Federal funds may not be advanced for any new project that will significantly increase the carrying capacity for single-occupant vehicles (SOVs) other than projects that address bottlenecks or safety needs unless the project results from a CMP.

The FHWA and FTA Guidebook, Advancing Metropolitan Planning for Operations, outlines an 8-step framework for the development of a CMP.

1. Develop Regional Objectives for Congestion Management

2. Define CMP Network

3. Develop Multimodal Performance Measures

4. Collect Data/Monitor System Performance

5. Analyze Congestion Problems and Needs

6. Identify and Assess Strategies

7. Program and Implement Strategies

8. Evaluate Strategy Effectiveness

1.3. Integration with the Metropolitan Transportation Planning Process

The COATS MPO CMP is one component of the metropolitan planning process. It is integrated with the Long-Range Transportation Plan (LRTP), Transportation Improvement Program (TIP) and corridor studies, including those being conducted in accordance with the National Environmental Policy Act (NEPA), through its data and analysis functions as well as through the CMP Toolbox. These relationships are summarized below.

Relationship to the LRTP

The COATS MPO CMP is related to the regional Long-Range Transportation Plan in four ways:

- The LRTP provides a set of congestion management objectives and performance measures that are applied through the CMP;
- The LRTP development process includes an evaluation and prioritization of transportation projects and strategies structured around advancing these identified CMP objectives and measures;
- The LRTP provides system performance information in support of the CMP which is used by COATS MPO and its planning partners to identify corridors or segments for detailed analysis in Corridor or Major Investment Studies, as recommended by the LRTP; and
- The CMP Toolbox provides alternative congestion management strategies for consideration in MIS and Corridor Studies, which ultimately are reflected in project design and are incorporated into the LRTP's financial constrained project listing.

Relationship to the TIP

The COATS MPO CMP is related to the development of the regional Transportation Improvement Program in four ways:

- The CMP provides system performance information for use by COATS MPO in evaluating projects nominated for inclusion in the TIP;
- The CMP provides system performance information for project sponsors, which may influence their recommended projects for incorporation in the TIP;
- The CMP provides information about alternative congestion management strategies considered for SOV capacity projects to be advanced using federal funds; and
- The CMP objectives are integrated with the application scoring process used to select and prioritize projects in the TIP.

Relationship to Corridor Studies

The COATS MPO CMP is related to the development of corridor studies and related NEPA documents in two ways:

- The CMP provides system performance information which is used by COATS MPO to identify corridors or segments for detailed analysis in corridor or NEPA studies; and
- The CMP Toolbox provides alternative congestion management strategies for consideration in corridor studies and related NEPA documents. When traffic congestion is referenced in the Purpose and Need Statement for an Environmental Assessment (EA) or Environmental Impact Statement (EIS), the EA/EIS shall consider the congestion management strategies included in the COATS MPO CMP Toolbox as a starting point for the development of alternative strategies. This does not preclude the EA/EIS from considering other strategies that may not be in the CMP Toolbox, nor does it require that the EA/EIS select a strategy from the CMP Toolbox as the preferred alternative. However, the EA/EIS document must include a discussion of how the CMP Toolbox strategies were addressed.

Relationship to the Regional Intelligent Transportation Systems (ITS) Architecture

All ITS strategies implemented from the CMP Toolbox will be consistent with the Regional ITS Architecture. COATS MPO will ensure that both the Regional ITS Architecture and the CMP Toolbox are reviewed for consistency and reconciled as necessary when either is updated.

2. CONGESTION MANAGEMENT PROCESS

2.1. Overview

All metropolitan planning areas with a population over 200,000 are required by federal regulations (23 CFR 450.320) to adopt a formal Congestion Management Process (CMP) that provides for the safe and effective integrated management and operation of the multimodal transportation system through performance monitoring and the use of travel demand reduction and operational management strategies. The CMP is an integral component of the metropolitan transportation planning process as it helps to identify areas with high congestion (as a complement to the travel demand modeling process) and recommends appropriate mitigation strategies that manage travel demand, reduce single occupancy vehicle (SOV) usage, and improve travel conditions without having to add roadway capacity. When capacity improvement projects are warranted, the CMP provides recommendations for facilitating future demand management strategies and operational improvements that will help maintain the functional integrity and safety of the road once additional travel lanes are added. Per federal regulations, the congestion management process should include the following activities:

- Monitoring the performance of the multimodal transportation system to include identifying the causes of congestion and evaluating mitigation strategies;
- Defining congestion management objectives and appropriate performance measures
- Establishing a coordinated program for data collection and system performance monitoring to define the extent, duration, and causes of congestion, and to evaluate the efficiency and effectiveness of implemented actions;
- Identifying and evaluating the anticipated performance and expected benefits of appropriate congestion management strategies to include: demand management measures, including growth management and congestion pricing; traffic operational improvements; public transportation improvements; ITS technologies as related to the regional ITS architecture; and, where necessary, additional system capacity;
- Identifying an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation;
- Implementation of a process for periodic assessment of the effectiveness of implemented strategies.

To assist MPOs with CMP regulatory compliance the Federal Highway Administration (FHWA) developed a congestion management process model based on implementing the following eight actions or activities:

- Develop Regional Objectives for Congestion Management
- Define CMP Network
- Develop Multimodal Performance Measures
- Collect Data/Monitor System Performance
- Analyze Congestion Problems and Needs
- Identify and Assess Strategies
- Program and Implement Strategies
- Evaluate Strategy Effectiveness

As part of the 2040 LRTP, the regional congestion management process for the COATS MPO will be defined in terms of these eight activities. The following information describes each activity and outlines how it is being implemented and incorporated into the metropolitan transportation planning process.

2.2. Develop Regional Objectives for Congestion Management

Regional objectives define what the COATS MPO hopes to achieve through the congestion management process. This may include broader regional goals consistent with those defined for the larger long range transportation planning process, as well as more specific congestion management oriented objectives that help to achieve the regional goals. The COATS MPO therefore hopes to enhance regional mobility, increase transportation accessibility, and maintain existing infrastructure in a state-of-good repair by developing and implementing strategies that mitigate congestion through travel demand management, operational improvements, modal connectivity, land use compatibility, and where necessary, through capacity improvement projects.

2.3. Define the CMP Network

The geographic boundary or area of application for the CMP is consistent with the 2010 COATS MPO boundary which covers most of Richland and Lexington counties, and a small area of Fairfield, Newberry, Kershaw and Calhoun counties. The defined CMP road network was established through an iterative process that considered a number of factors including corridors analyzed in previous CMPs, an examination of base and horizon year travel demand model output, CMCOG staff and stakeholder input, and the availability of existing data coverages for monitoring system performance (i.e., AADT, Impedance Attributes, and Travel Time Information). The selected roadway network consists of federal aid eligible roadways that are functionally classified by SCDOT as primary arterials, minor arterials, major collectors, and minor collectors. Interstates are not included as a part of the COATS

CMP because all performance monitoring, analysis, and funding for Interstate improvement and congestion mitigation projects are programmed and implemented directly by SCDOT. Local roads are also not included in the CMP road network. The CMP transit network is defined by long term, high capacity, mainline routes currently operated by the Comet. Because bike and pedestrian facilities represent such a small percentage of the modal split in the COATS region, they are primarily monitored in the CMP in terms of their ability to contribute to the effectiveness of travel demand management strategies along adjacent congested roadway corridors. Figure 3.1 shows the aggregate CMP roadway corridor network which represents approximately 500 centerline miles and 1,000 directional miles of roadway. These corridors are analyzed in Section 3 as 53 individual sub-corridors. Figure 3.2 shows the CMP transit corridor network.

Figure 2.1: CMP Roadway Corridor Network

ROAD	SUM (MILES)		ROAD	SUM (MILES)
12TH ST	3.36		SAINT ANDREWS RD	11.93
ALPINE RD	4.85		SC-12	56.67
BLYTHEWOOD RD	9.53		SC-16	19.13
BUSH RIVER RD	6.00		SC-2	7.77
CHARTER OAK RD	0.92		SC-215	24.48
CHURCH ST	3.04		SC-262	29.63
CLEMSON RD	15.77		SC-277	16.23
COLUMBIA AVE	5.79		SC-302	35.74
COLUMBIA COLLEGE DR	3.85		SC-48	58.01
DECKER BLVD	3.97		SC-555	27.27
FONTAINE RD	1.82		SC-555/HARDEN ST	1.44
GREYSTONE BLVD	1.98		SC-6	63.68
HARBISON BLVD	4.35		SC-60	10.11
HARD SCRABBLE RD	20.52		SC-602	21.51
HARDEN ST	3.48		SC-768	8.64
KILLIAN RD	5.32		SC-768/S BELTLINE BLVD	0.60
LEAPHART RD	6.44		SPEARS CREEK CHURCH RD	5.06
LONGS POND RD	8.66		ST ANDREWS RD	1.23
LOWER RICHLAND BLVD	17.50		TRAM RD	1.74
MINERAL SPRINGS RD	10.90		TRENHOLM RD	8.54
N 12TH ST	1.39		TWO NOTCH RD	35.25
N TRENHOLM RD	3.27		US-1	110.33
OLD SANDY RUN RD	3.76		US-176	37.20
PARKLANE RD	4.62		US-21	23.68

ROAD	SUM (MILES)		ROAD	SUM (MILES)
PISGAH CHURCH RD/CHARTER OAK RD	4.64		US-378	77.29
PRESCOTT RD	3.38		US-601	59.90
S BELTLINE BLVD	4.99		US-76	43.20
S HARDEN ST	1.01		WHITE POND RD	4.76

Figure 2.2: CMP Transit Corridor Network

High Capacity Transit Route
Corridor #1: N. Main/Columbia College
Corridor #2: Palmetto Health Richland/Farrow Rd
Corridor #3: Two Notch Rd
Corridor #4: Forest Drive
Corridor #5: Assembly/Bluff Rd
Corridor #6: Devine/Garner's Ferry
Corridor # 7: Broad River/Harbison

2.4. Develop Multimodal Performance Measures

Performance measures are used in the CMP to characterize current and future travel conditions, track progress toward meeting regional objectives, identify locations of congestion, assess the effectiveness of congestion mitigation strategies, and to communicate system performance to public officials, private sector stakeholders, and the general public. A wide range of performance measures are available for measuring and monitoring system performance. For many performance measures, however, considerable human and financial resources are required to collect and analyze the necessary data. Some performance measures are also very difficult to understand and are not easily communicated to general audiences. As a result of these two factors, the COATS MPO selected a number of local and regional performance measures that are commonly used, relatively easy to communicate, and make use of readily available data sources. These performance measures include:

- **Roadway Segment Volume to Capacity (V/C) Ratio/Level of Service (LOS):** Comparison of observed and estimated traffic volumes to planning level roadway design capacities. This measure uses SCDOT Average Annual Daily Traffic (AADT)

counts and COATS Travel Demand Model output. Regional and System Level performance goals include reducing the number or share of road miles operating above V/C ratio 1.15 or operating at a LOS E or F.

- **Congestion Index (CI):** The CI is the ratio of the actual travel speed to the free flow travel speed. This was the primary performance measure used in the previous COATS Congestion Management Plan. This measure uses real-time and archived speed data available through the I-95 Corridor Coalition Vehicle Probe Project (provided by INRIX) and through point-in-time data collected on an as needed basis. Regional and System Level performance goals include reducing the number or share of congested road miles.

- **Travel Time Index (TTI):** The TTI compares peak-period travel times to free flow travel times illustrating both the duration and intensity of congestion on a corridor. This is a measure of congestion that focuses on each trip and each mile of travel. It is calculated as the ration of travel time in the peak period to travel time in free flow conditions. A value of 1.30 indicates that a 20 minute trip takes 26 minutes to complete. This measure uses real-time and archived speed data available through the I-95 Corridor Coalition Vehicle Probe Project (provided by INRIX) and through point-in-time data collected on an as needed basis. Regional and System Level performance goals include reducing total excess delay time and the number or share of roads experiencing a comparatively high TTI.

- **Transit Ridership:** Analysis of current and historic transit ridership data for high capacity routes. This measure will rely on data reported in the National Transit Database (NTD) and ridership information provided by the Comet. Regional and System Level performance goals include increasing transit ridership on high capacity routes and reducing crowding via increased frequencies as needed.

- **Transit On Time Performance:** Analysis of on time performance for high capacity routes. This measure will rely on data reported in the National Transit Database (NTD) and ridership information provided by the Comet. Regional and System Level performance goals include increasing the percentage of buses arriving on-time regionally.

- **Bike and Pedestrian LOS:** Congested corridors will be assessed in terms of the percentage of the roadway with access to sidewalks, crosswalks, bike lanes, multi-use pathways, transit stops and regional activity centers. Data will be derived from various sources. Regional and System Level performance goals include increasing access to bike, pedestrian, and transit access along congested corridors.

2.5. Collect Data/Monitor System Performance

Since 2013 the COATS MPO has been an affiliate member of the I-95 Corridor Coalition's Vehicle Probe Project. This project is a collaborative effort among Coalition members, University of Maryland and INRIX, Inc. providing comprehensive and continuous real-time travel information. The objective of this project is to acquire travel times and speeds on freeways and arterials using probe technology. While the dominant source of data is obtained from fleet systems that use GPS to monitor vehicle location, speed, and trajectory, other data sources such as sensors may also be used. The INRIX system fuses data from various sources to present a comprehensive picture of traffic flow.

As a member of the Coalition, the COATS MPO has been granted access to the data collected in the Vehicle Probe Project. This is an innovative data source for both highway performance monitoring and regional planning that provides continuous real-time speed and travel time data. The archived data is of particular interest as a valuable source for congestion monitoring and evaluation for the Congestion Management Process. Probe data will be used to examine the reliability of traffic conditions, addressing the CMP's need to look at non-recurring congestion due to accidents, construction, or weather events. To implement the CMP the COATS MPO will rely heavily upon this data as well as AADT data collected by SCDOT, GIS data generated by CMCOG staff, and transit data provided by the Comet.

2.6. Analyze Congestion Problems and Needs

Once collected, raw data will be analyzed and translated into meaningful measures of performance. The purpose of this process is to identify specific locations with congestion problems and identify the sources of these problems. The data collected from the sources identified above will be maintained on an ongoing basis by CMCOG GIS and transportation planning staff. Analysis will be conducted on a bi-annual basis.

2.7. Identify and Assess Strategies

During this step in the process, the MPO will analyze the information gathered in the performance monitoring step and determine which strategies and types of infrastructure modifications have the most impact on congestion and SOV usage. Regional CMP strategies (support for carpooling, bicycling, etc.) as well as the most appropriate localized CMP strategies will be evaluated to determine potential alternatives to expansion. The System Performance Report will be used over time to evaluate the most successful strategies to continue pursuing. Variations in types of roadways (differentiated by number of lanes, travel speeds, surrounding land uses, infrastructure design and designation for use by different transportation modes) will result in different CMP strategies being most appropriate for each. By using approved regional transit plans and regional bicycle/pedestrian plans, appropriate modal considerations will also be recommended for the various roadways throughout the region. Using these multimodal plans as a guide, a Complete Streets policy is being considered for the region. As a matter of standard practice, the policy would help assure that roadways are designed, built and maintained with very

strong consideration for accommodating not only automobiles but, in accordance with recommendations from the various modal plans, for transit vehicles and non-motorized modes of travel as well. The findings from the Performance Monitoring Plan could show that a given corridor may not need to include all of the capacity that would be required to eliminate all congestion at all times of the day, but may provide enough physical capacity to eliminate much of the congestion in the off-peak periods and shoulders of the peak period. Reliance on identified congestion management strategies could then be utilized to help improve traffic flow, primarily during the peak periods.

A primary component of the CMP process involves developing a toolbox of mitigation strategies that are consistent with federal guidelines and can be applied to the identified congested corridors and intersections. The toolbox is intended to provide a hierarchical methodology for congestion mitigation that begins with the most cost effective and efficient strategies and ends with the most cost prohibitive and intrusive strategies (i.e. road widening for capacity improvement). The five major levels of mitigation strategies can be summarized as projects that include:

1) **Decreasing the need for trip making (strategies at regional level versus corridor level)**

- Land use policies and regulations to limit growth in areas with limited infrastructure
- Land use policies and regulations to enhance jobs to housing balance along corridors and within sections of the region
- Flexible work hours

This level is intended to be a mitigation strategy at the regional and policy level. This strategy involves modifying/creating land use policies and regulations to limit growth in areas with limited infrastructure. It also looks to enhance jobs to housing balance along corridors and within sections of the region.

Growth Management strategies apply in this level of mitigation. Revising land use policies to balance jobs and housing targets the core issue of traffic congestion and livability and if done properly can benefit transportation operations in a local and regional scale.

2) **Shifting trips from automobiles to other modes**

- Public transit capital improvements (exclusive right-of-way, commuter express, circulator, park and ride)
- Public transit operational improvements (service enhancements, queue jumpers, information systems)
- Encourage the use of non-motorized modes (sidewalks, bicycle facilities, transit park and ride)

This level is intended to be a mitigation strategy that shifts trip from the automobile to other modes. These strategies include transit capital and operational improvements and the encouragement of other modes of travel.

Public transit capital improvements and operational improvements include exclusive right-of- way, commuter express bus service (transit service with limited stops), circulators (transit service that services a limited but dense area), and park and ride lots. Public transit operational improvements include service enhancements such as queue jumpers (that allow buses to receive a green light at an intersection) and information systems (that communicate key travel information like when the next bus is anticipated to arrive, via real time GPS data).

This level also encourages the use of non-motorized modes by considering the presence of sidewalks (or lack thereof) and bicycle facilities.

3) Increasing the use of High Occupancy Vehicles (HOV)

- Parking management/fee adjustment
- Vanpooling programs
- Ride share matching services

This level contains mitigation strategies that increase vehicular occupancy and manage travel demand. These travel demand management strategies include considerations of parking management/fee adjustment (for paid parking areas in a downtown area), vanpooling programs, and ride share matching services (where users can identify other commuters in their neighborhood who share a similar commute).

4) Enhancing operations on existing roadway facilities

- Traffic operations improvements (intersection widening, signal coordination, traffic surveillance and control systems)
- Incident Management (detection and clearing of incidents)
- Access management (medians, signal and driveway spacing, frontage roads, inter-parcel connections)

This level contains mitigation strategies aimed to improve traffic operations at the corridor level. Traffic operation improvements include intersection widenings (that may consist of adding turn lanes at intersections), signal coordination (choreographing the timings of closely spaced intersections), and traffic surveillance and control systems (advanced traffic systems that adjust traffic control patterns based on real time input data). Incident management and access management solutions include medians (controlling and limiting excess number of driveways along a corridor that may cause undue delay to thoroughfare traffic), signal and driveway spacing, frontage roads (parallel roadways that can serve local destinations and preserve the main arterial), and interparcel connections (additional

roadways that create options for travelers to get from point A to point B - this is also provides benefit to EMS vehicles and emergency situations).

5) Increasing roadway capacity through additional infrastructure Arterial roadway capacity (widening and new roads)

This level looks at increasing roadway capacity where capacity is deficient and all previous mitigation strategies discussed in Levels 1 through 4 were considered but do not provide the most effective solution or do not provide for a timely solution to the existing deficiencies. This solution involves constructing additional general purpose lanes and/or the creation of new roads.

As a part of the CMP, each congested corridor is subjected to a screening process that examines the unique characteristics of the roadway and determines the most appropriate level of mitigation treatment and corresponding improvement strategy. Figure 2.3 below further illustrates the application of the screening process.

In addition to collecting and analyzing data regionally across the congestion management network, any "needs" project proposed for the LRTP will also be analyzed (as part of future plan updates) through this process to determine the best CMP strategies to be pursued for each. Data items will include information related to roadway characteristics (e.g., name, description, jurisdiction, length), roadway performance (e.g., daily traffic volumes, V/C), roadway function (e.g., on core bus route, express bus corridor), and possible roadway strategies (e.g., travel demand management, ITS, access management, widening). A report will be developed with a listing of the top CMP strategies for each identified roadway segment.

An initial single occupant vehicle (SOV) analysis will also be conducted to estimate the potential reduction in the expected rate of growth in SOV usage that would result from implementing a series of CMP strategies throughout the region. This initial estimate will be used to identify where roadway LOS will continue to need additional capacity, even after CMP strategies are put in place. Over time, the SOV analysis will be refined through subarea analyses – to better indicate the locations and levels of impact that will result from specific types of CMP strategies. Figure 2.3 summarizes the toolbox of congestion mitigation strategies and Figure 2.4 discusses some of the congestion mitigation toolbox strategies in more detail.

Figure 2.3: Process and Toolbox of Mitigation Strategies

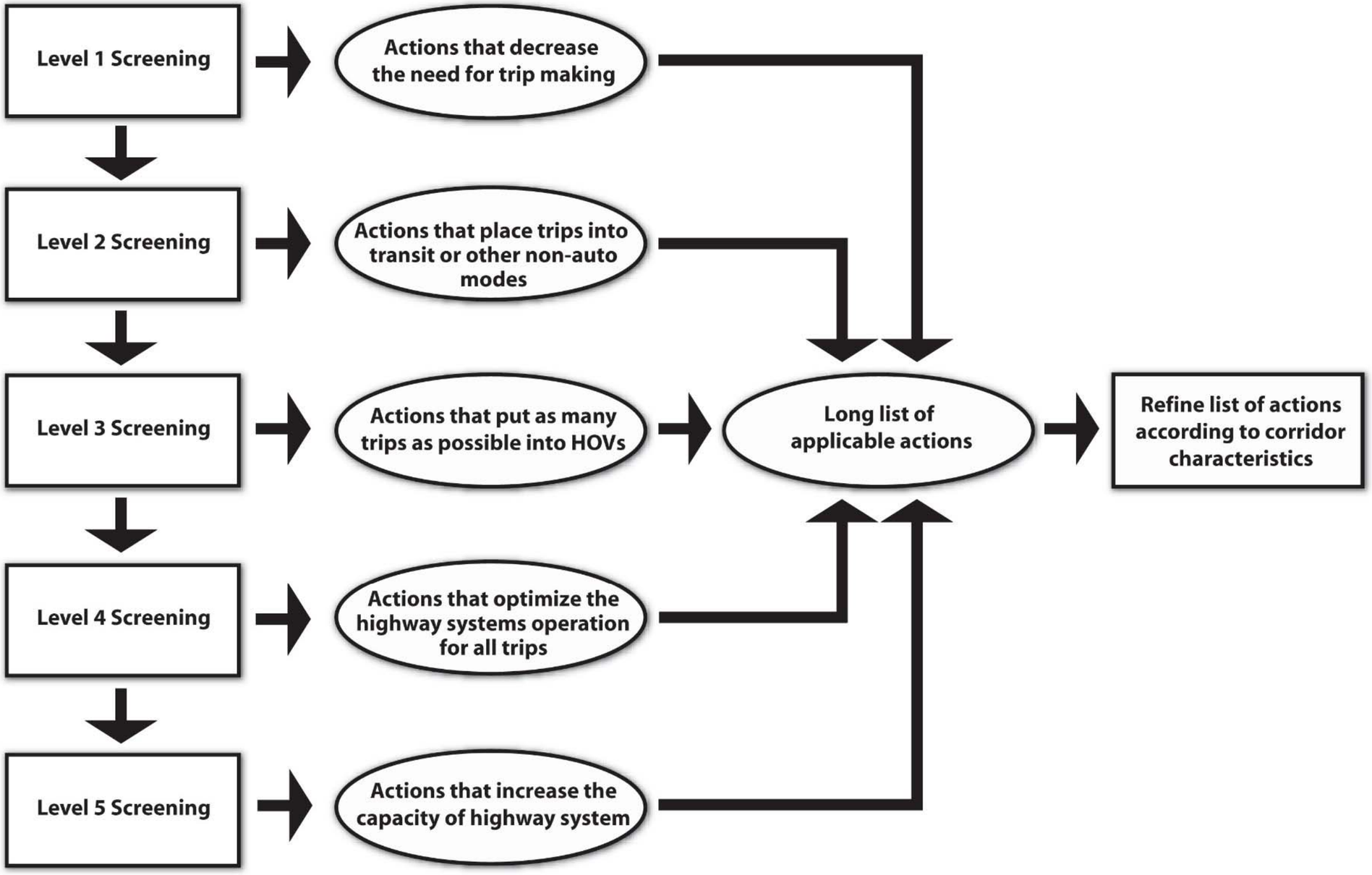


Figure 2.4: Congestion Management Toolbox

CONGESTION MANAGEMENT STRATEGY	DESCRIPTION	TYPICAL PROJECT APPLICATIONS	SCOPE AND BENEFITS	IMPLEMENTATION NEEDS
ROADWAY CAPACITY IMPROVEMENTS	Physical capital-intensive improvements that increase vehicle throughput capacity along roads and highways	• Roadway widening • Urban area bypass roads • Urban area freeway loops • New freeways, arterials and collector streets • Street grid with hierarchy in functions • Grade-separated interchange • Flyover ramp • Interchange configuration upgrade • One-way couplets • Connector roads	Roadway capacity enhancements are desired in high growth transitional areas to support forecast growth in regional population and employment, in isolated areas with major development or redevelopment proposals, and along roadway corridors that carries interstate, inter-regional and regional traffic. These projects are capital-intensive and will result in significant capacity expansion. These projects would either enhance or preserve mobility for future growth and development.	Roadway capacity expansion projects will typically require feasibility analysis, alternatives analysis, environmental assessment, funding assessment and public outreach. Project planning would require significant coordination and cooperation among multiple agencies and stakeholders. Projects using federal funds will require to follow federal guidelines such as NEPA in project planning
ROADWAY OPERATIONAL IMPROVEMENTS	Traffic control improvements to improve traffic flow and safety along roads and highways	• New traffic signal • Signal timing coordination • Street signs and markings • Adaptive signal control • Intersection turn lanes • Roadway realignments • Traffic surveillance cameras • Freeway ramp metering • Designated truck routes • On-street parking • Center turn lane • Road diet / traffic calming	Roadway operational improvements are desired in urbanized areas and congested roads where deficiencies exist in current conditions. These projects are far less expensive than roadway capacity projects. These projects will result in significant reduction of traffic delays or crashes along congested corridors or intersections. These are short-range improvement projects that can reduce intersection delays, stop-and-go traffic volumes, and crash incidence rates. These are also referred to as Transportation System Management (TSM) strategies.	Roadway operational improvement projects will require lesser amount of analysis and environmental impact assessment due to the limited influence area. These projects are typically identified and funded through a variety of existing state-wide and local transportation programs such as safety, traffic operations, congestion management, air quality, traffic calming and parking management. Project planning would require some coordination and cooperation among agencies and stakeholders.
TRANSIT CAPITAL IMPROVEMENTS	Capital improvements that increase person throughput capacity across transit ridership markets	• New Buses • Park-and-Ride Lots • Transit Stations • Transit rider amenities at bus stops • Parking for commuters and buses • Commuter rail transit (CRT), light rail transit (LRT), bus rapid transit (BRT) or people mover facilities • Dial-a-ride transit • Intermodal transportation centers	Transit capacity enhancements are desired in metropolitan and highly urbanized areas with air quality issues to support forecast growth in regional population and employment. These projects are capital-intensive and will result in significant capacity expansion of transit services. These projects would either enhance or preserve transit mobility, mode choices, and air quality while accommodating future growth and development.	Transit capital improvement projects typically require federal funding and grants. Therefore, project planning typically involves alternatives analysis, cost-benefit analysis, environmental analysis, community impacts, and financial feasibility. Projects eligible for federal "New Starts" funding include any fixed guideway system which utilizes and occupies a separate right-of-way, or rail line for the exclusive use of mass transportation and other high occupancy vehicles.
TRANSIT OPERATIONAL IMPROVEMENTS	Operational improvements to improve travel time and reliability of transit services	• Transit signal priority • Regional smart fare card • Automatic Vehicle Location (AVL) Technology	Transit operational improvements are typically targeted to increase ridership, and travel time reliability of transit services through use of technological solutions, scheduling solutions or small scale road improvements.	Transit operational improvements would typically need to be implemented based on detailed feasibility, environmental review, design, and contract agreements with bus operators and

CONGESTION MANAGEMENT STRATEGY	DESCRIPTION	TYPICAL PROJECT APPLICATIONS	SCOPE AND BENEFITS	IMPLEMENTATION NEEDS
		• Automatic Passenger Counts (APC) Technology • Express Bus Routes • Bus frequency and dwell times • Bus stops, pull-outs and transfer point locations		equipment suppliers. In addition, marketing activities are required to promote new services.
LAND USE PLAN	Policies and plans that link land use vision with appropriate transportation solutions	• Subarea master plan to integrate land use vision with proper transportation solutions • Strategic corridor plan to preserve mobility, access, and character along highways • Transit-oriented development (TOD) guidelines • Re-development guidelines • Mixed-use development guidelines • Zoning overlay districts	In one school of thought it is recognized that the best transportation plan is a land use plan. This implies the importance of land use strategies in solving traffic congestion. Increasingly, many metropolitan regions are seeing the benefits of proactive master planning approach where a land use vision is matched with the right mix of transportation solutions to reduce auto dependence and to allow taking alternate modes to work and shopping.	For localized high growth or redeveloping areas, individual jurisdictions would need to work with property owners and stakeholders to develop a master plan that defines the land use-transportation vision and outlines design standards for implementation. For larger areas crossing jurisdictional boundaries, CMCOG would need to take the lead in defining master plans that link land use vision with supporting multi-modal transportation facilities.
GROWTH MANAGEMENT PLAN	Policies and plans that outline type, mix, intensity and character of allowable growth by geographic areas and the mitigation requirements	• Mobility management goals and LOS standards by geographic areas • Growth management ordinance by local or regional agencies • Development moratoriums • Adoption of smart growth principles for development reviews and permit approvals • Transportation Impact Fees • Regional land use vision development and marketing • Local land use vision development and marketing	This strategy is similar to the land use plan, but more appropriate for urbanized built-up areas with limited developable or re-developable land. The main principle of this strategy is focused on defining an urban growth boundary to reduce suburban sprawl, minimize environmental impacts, and preserve rural lands and quality of life.	State legislative acts such as a Growth Management Act is desirable in order to develop consistent local growth management plans. However, local jurisdictions can adopt transportation impact fees based on detailed cost-benefit analysis of the impacts of new growth on public infrastructure cost of services.
CONGESTION MANAGEMENT PROCESS (CMP)	Traffic congestion monitoring and mitigation prioritization plan that identifies recurrent and non-recurrent bottlenecks	• Highway travel time and delay studies • Intersection delay and Level of Service (LOS) studies • Transit travel time and reliability studies • Crash studies	SAFETEA-LU mandates development of congestion management process by MPOs in urbanized areas. The purpose of CMP is to monitor traffic congestion in a systematic way such that effectiveness of mitigation strategies can be evaluated over time.	The data collected for CMP are expected to guide selection of short-term mitigation strategies that are easier to implement. Congestion mitigation projects requiring federal funds would require justification based on CMP evaluations.
NON-MOTORIZED TRANSPORTATION IMPROVEMENTS	Policies, plans and strategies that fosters safe and increased use of bicycles and walking for recreational, work, and school trip purposes	• Comprehensive bicycle plan development • Adoption of Bicycle Level of Service (BLOS) standards • Bicycle lanes • Intersection bicycle box • Comprehensive pedestrian plan development	Non-motorized transportation facilities should be an integral part of transportation planning projects and TIP development. It has been demonstrated that a good non-motorized transportation system contributes to healthier living and a lower carbon footprint for the communities.	SAFETEA-LU has expanded the funding program and provided flexibility in using federal transportation dollars for non-motorized projects.

CONGESTION MANAGEMENT STRATEGY	DESCRIPTION	TYPICAL PROJECT APPLICATIONS	SCOPE AND BENEFITS	IMPLEMENTATION NEEDS
		• Adoption of Pedestrian Level of Service (PLOS) standards • Sidewalks with ADA compliance • Safe route to schools • Off-road recreational and commuting trails • Adoption of "complete streets" principles • Awareness, education and promotional programs • Traffic calming devices		
HIGH-OCCUPANCY VEHICLE (HOV) SYSTEM	Highway lanes with limited access reserved for exclusive use by high-occupancy vehicles (HOV) and transit buses. HOV occupancy requirements typically vary from 2 or more persons (2+) to three or more persons (3+).	• Freeway HOV lane • Arterial HOV lane • Ramp metering with HOV bypass lane • Intersection queue jump lane for HOVs • HOV-only interchange • Conversion of General Purpose (GP) lane to HOV lane • Ride share services • Employer-based carpool monetary incentives • Preferential parking for carpools	HOV lanes have proven to be effective congestion mitigation strategy along corridors with severe recurring traffic congestion. The goal of providing HOV 2+ or HOV 3+ lane is to increase the person throughput capacity of the lane and provide significant travel time advantage for carpools, vanpools and transit.	SCDOT would need to take the lead to evaluate the need and feasibility of HOV lanes along congested freeway corridors, while CMCOG or individual jurisdictions can take the lead in defining the need for arterial HOV treatments along congested urban arterials. SAFETEA-LU funding programs have many incentives for implementing HOV lanes. A system planning approach is required to develop an effective HOV system.
TOLL ROADS	Highways constructed using private funds and financed by collecting user tolls	• Roads with toll collection facilities • Bridges with toll collection facilities • Electronic toll collection system • Traffic surveillance system • Traffic monitoring system for dynamic, variable toll pricing system	Toll road projects are very successful in South Carolina. The toll road projects in South Carolina helped in providing mobility along key transportation corridors. With shrinking transportation funding, toll roads are increasingly considered an important element of congestion management toolbox.	Toll road financial feasibility studies should be undertaken for the targeted corridors. These projects would require design-bid-build-operate type contracting.
PARKING MANAGEMENT	Policies, plans and application of technologies to improve parking access, safety, supply, utilization and payment management.	• Parking capacity, utilization and rate studies • Parking payment kiosks • Parking passes by zones • Parking subsidies for carpools/vanpools	Daily and hourly parking costs at central business districts or at major activity centers such as universities, airports, shopping centers and stadiums are an important element of how people choose their mode of travel. The parking cost is driven by market conditions, and land use.	Local jurisdictions are responsible for developing a comprehensive parking policy and management program. Policies are needed to provide monetary incentives to carpools and vanpools.
TRAVEL DEMAND MANAGEMENT (TDM)	Employer-based or area-wide strategies to reduce rush hour traffic congestion by providing mode choice, time choice, location choice, and route choice.	• Flex work or alternative work schedules • Telecommuting • Reduced-fare transit passes • Reduced-cost parking passes • Vanpools • Amenities at work for transit and bicycle commuters • Tax incentives at work for transit and bicycle commuters	TDM is part of the congestion management toolbox in growing urban areas. These strategies tend to provide incentives or dis-incentives to either shift travel from peak hours to off-peak hours or eliminate trips all together by providing alternate mode and work choices. TDM strategies help improve air quality and reduce energy usage.	CMCOG and SCDOT can take the co-lead in working with major employers in the region and develop employer-based TDM strategies. The region can develop and adopt a comprehensive trip reduction ordinance. There are several federal funds that can be used to implement TDM strategies.

CONGESTION MANAGEMENT STRATEGY	DESCRIPTION	TYPICAL PROJECT APPLICATIONS	SCOPE AND BENEFITS	IMPLEMENTATION NEEDS
		• Pre-trip route planning services such as real-time information on bus locations, construction closures, incident delays, and weather conditions • Alternate mode awareness/education programs • Car sharing • Bike Rentals		
CONGESTION PRICING/VALUE PRICING	Use of peak-period tolls on congested roads to reduce traffic congestion in urban areas. The toll amount is typically defined based on local prevailing traffic and market conditions to provide monetary incentive to travelers to find alternate routes, modes, or times of day for their discretionary trips.	• Variably priced lane such as High-occupancy toll (HOT) lanes that allow free or reduced cost access to qualifying HOVs, and also provide access to SOVs and trucks at a higher price • Cordon charges such as peak hour fee to access central business district (CBD) • Area wide per-mile charges in congested urban areas on all roads • Toll roads and bridges	Pricing is part of the congestion management toolbox in highly urbanized areas. These strategies tend to provide monetary dis-incentives to either shift travel from peak hours to off-peak hours, from congested corridors to non-congested corridors or eliminate trips all together. Pricing strategies make efficient use of the transportation system. Many European cities have adopted these strategies more aggressively than in the United States.	The region can develop a strategy for toll roads and HOV lanes prior to moving into congestion pricing.
ACCESS MANAGEMENT	Policies and plans to manage residential and commercial access to highways, major arterials and other roadways to promote safe and efficient use of the roadway capacities.	• Street functional class hierarchy • Access management guidelines by roadway functional class and geographic area • Strategic corridor access management plan • Spacing standards for interchanges, traffic signals and driveways • Roadway median treatments and openings • Left-turn movement treatments • Clear sight distance • Connectivity between adjacent parcels • Turn lanes and auxiliary lanes	Access management is an indirect congestion mitigation strategy. The purpose of access management is often preserving the available capacity of a roadway by developing access approval guidelines for future developments. This strategy should be applied to those highway corridors which not only provides local access, but also provides regional mobility to through traffic.	SCDOT is the lead agency to implement access management strategies. Access management guidelines should incorporate best-practice standards.
INTELLIGENT TRANSPORTATION SYSTEM (ITS)	Application of technological solutions to improve the operation, safety and security of existing transportation systems (highway, transit and other modes)	• Regional ITS deployment plan development • Traffic operation centers • Traffic surveillance system • Traffic monitoring devices • Traffic signal control interconnection and fiber-optic communication line • Real-time traveler information system • AVL and cameras for buses • 511 traveler information hotline	ITS improvements can help in getting extra capacity out of existing transportation system. ITS solutions improve traffic operations, security, and safety. In addition, ITS solutions support information dissemination to system users and operators.	SCDOT is the lead agency to implement ITS strategies. ITS implementation will require developing a regional ITS architecture that is in line with the national ITS architecture, and defining a multi-agency ITS deployment plan following systems engineering approach.

CONGESTION MANAGEMENT STRATEGY	DESCRIPTION	TYPICAL PROJECT APPLICATIONS	SCOPE AND BENEFITS	IMPLEMENTATION NEEDS
		• Work zone temporary traffic control • Evacuation routing system • Commercial Vehicle Operations (CVO) • Commercial vehicle Information System Networks (CVISN) • Road weather management		
INCIDENT MANAGEMENT	Multi-agency program to detect, respond, and clear traffic incidents and restore traffic flow to normal conditions	• Road ranger patrol vehicles • HAZMAT and major incident response team • Traffic surveillance system • Dynamic message signs (DMS) to inform motorists about incidents, delays and detours • Call boxes • Call dispatchers • Multiagency communication and incident response coordination protocols	Incident management improvements are an important element to mitigate non-recurrent traffic congestion, which is a big part of today's traffic congestion. The traffic delays due to crashes and incidents can be reduced significantly by developing a coordinated incident response program.	SCDOT is the lead agency to implement incident management (IM) strategies. IM guidelines should incorporate best-practice standards, and involve multiple agencies.

2.8. Implement Strategies and Evaluate Effectiveness

As part of the MPO ongoing planning processes, information about the best ways to minimize increases in SOV usage and maintain a strong transportation network while limiting roadway expansions will be used to help select the types of projects to be included in future editions of the LRTP and the Transportation Improvement Program (TIP). This information will primarily be learned through data compiled in the regularly produced CMP Performance Reports as well as through travel demand modeling work to analyze impacts of various changes to the MPO's transportation network. The Congestion management process will examine the effectiveness of CMP strategies at both the regional level and corridor level by continuously applying the performance measures adopted as a part of this planning process.

2.9. CMP Review and Update Process

All elements of the COATS MPO CMP will be reviewed and updated periodically to reflect changes to the region's transportation goals and objectives and transportation system. At a minimum:

- Congestion management objectives will be reviewed and revised as necessary in coordination with updates to the Long Range Transportation Plan (LRTP);
- The Congestion Management Network will be updated every five years, in advance of each update to the LRTP. Changes to the Congestion Management Network will be approved by the COATS MPO Transportation Subcommittee and Policy Committee;
- Travel time data will be monitored continuously and collected in advance of each update to the LRTP;
- Congestion Management Network performance will be updated and analyzed on a cycle consistent with the availability of current, supporting data.
- The regional travel demand forecasting model network will be updated every five years, in advance of each update to the LRTP;
- Observed traffic volumes will be incorporated into the CMP database as they are made available to COATS MPO;
- The CMP Toolbox will be reviewed and updated by COATS MPO at least every five years;
- Policies and procedures governing the CMP will be reviewed and revised as necessary to address changes to regional transportation goals and/or federal rules and requirements; and

- These and other elements of the CMP may be reviewed and updated on a case-by-case basis as requested by the Federal Highway Administration, Federal Transit Administration, and/or the State Department of Transportation.

3. ROAD CORRIDOR CONGESTION ANALYSIS

3.1. Overview

As discussed in the previous chapter the defined CMP road network was established through an iterative process that considered a number of factors including corridors analyzed in previous CMPs, an examination of base and horizon year travel demand model output, CMCOG staff and stakeholder input, and the availability of existing data coverages for monitoring system performance (i.e., AADT, Impedance Attributes, and Travel Time Information). The selected roadway network consists of federal aid eligible roadways that are functionally classified by SCDOT as primary arterials, minor arterials, major collectors, and minor collectors. Interstates are not included as a part of the COATS CMP because all performance monitoring, analysis, and funding for Interstate improvement and congestion mitigation projects are programmed and implemented directly by SCDOT. Local roads are also not included in the CMP road network.

The primary performance measures adopted by the COATS MPO to analyze road corridor system performance include roadway segment volume capacity/level of service ratio, the congestion index, and the travel time index. The road segment volume to capacity ratio consists of a comparison of observed and estimated traffic volumes to planning level roadway design capacities. This measure uses SCDOT Average Annual Daily Traffic (AADT) counts and SCDOT Level of Service "C" roadway planning capacities. Each segment with an AADT count is analyzed and all segments rated at a LOS E or F for the year 2014 are considered to be congested.

The congestion index (CI) represents the ratio of the actual travel speed to the free flow travel speed. The congestion index was the primary performance measure used in the previous COATS MPO Congestion Management Plan which defined the CI in terms of the following LOS rating:

- LOS A = CI > 84%
- LOS B= 84%-76%
- LOS C=76%-61%
- LOS D=61%-50% (Potentially Congested)
- LOS E=50%-37% (Congested)
- LOS F = CI<37% (Congested)

While the previous CMP used the floating car method to collect the travel time data necessary to calculate the congestion index the current CMP uses real-time and archived

speed data available through the I-95 Corridor Coalition Vehicle Probe Project (provided by INRIX).

The travel time index (TTI) also relies on the real-time and archived speed data provided through the I-95 Corridor Coalition. The TTI compares peak-period travel times to free flow travel times illustrating both the duration and intensity of congestion on a corridor. A value of 1.30 indicates that a 20 minute free flow trip takes 26 minutes under congested conditions. For the purposes of this CMP all TTI data is illustrated by a scale representing a TTI of 1,1.2, 1.5, 1.8, and 2 where a value of 1.5 or above represents potentially congestion conditions.

To conduct the data collection and system performance analysis for this plan each primary corridor was broken up into multiple sub-corridors based on logical break points and data availability. Data for each performance measure was then collected for each of the resulting 53 sub-corridors, a representative sample of which is presented in the following pages. Each sub-corridor assessment begins with summary information including the common name of the roadway, a unique CMP ID, the Route Number, a beginning and end point, the SCDOT designated functional classification, and the ranking of the corridor in the LRTP cost constrained plan if applicable. A table is then provided that contains:

- Historic AADT counts
- 2014 AADT counts
- 2040 projections (based on linear regression of historic trends)
- Number of lanes
- SCDOT Planning Capacity
- 2014 V/C ratio and LOS
- 2040 V/C ratio and LOS

All segments with a LOS rating of E and F are color coded accordingly in the corresponding tables with yellow indicating LOS E and orange indicating LOS F. In addition to the AADT tables each sub-corridor analysis contains a 24 hour average speed assessment for 2014, a color coded congestion index graphic, and a map illustrating the AM and PM peak travel time index.

3.2. 2015 CMP Findings

Based on the overall assessment for the COATS CMP network 17 of the 55 sub-corridors have segments with a 2014 AADT LOS of E or F. This represents a total of 64 centerline miles which is approximately 13.4% of the total road network. Based on the 2014 average Congestion Index (CI) approximately 7 miles of roadways are potentially congested (LOS D-F)

during the AM peak period and approximately 30 miles of roadways are potentially congested (LOS D-F) during the PM peak period. Based on the average Travel Time Index (TTI) approximately 28 miles of roadways are potentially congested (TTI >1.5) during the AM peak period and approximately 84 miles of roadways are potentially congested during the PM peak period.

The 2014 congested conditions are comparable to the findings of the 2008 CMP which was based only on the Congestion Index (CI). Based on this performance measure the 2008 CMP reported approximately 4% of the corridors were found to be congested (LOS E and F) and 4% were found to be potentially congested (LOS D) for both the AM and PM Peak period. Approximately 92% of the corridors examined were not considered to be congested. Because new corridors and new performance metrics were added to the 2015 CMP and because of the change in travel time data collection methodology, we can only compare the results from the two documents on a corridor by corridor basis. When conducting such a comparison many of the same corridors are identified in both documents as having segments or sub-corridors with peak period congested (or potentially congested) conditions. Figure 3.1 illustrates the 2014 corridors that have segments or sub-corridors with congested conditions based on each of the identified performance metrics. This table also identifies whether or not the corridor was identified as congested in the 2008 CMP. Figure 3.2 illustrates the locations of these LOS E and F roads and Figure 3.3 provides the AADT table information for these segments. Figure 3.4 shows the aggregate 24 hour average speed assessment for 2014, and Figure 3.5 and 3.6 shows the AM and PM average 2014 peak Travel Time Index for the entire CMP corridor network.

Figure 3.1: Summary of 2014 Congested Corridors

				2014 Performance Metrics *					2008 CI LOS D-F
Corridor ID	Route Number	Route Name	County	AADT LOS E-F	AM CI LOS D-F	PM CI LOS D-F	AM TTI >=1.5	PM TTI >=1.5	
1001	S-52	Clemson Rd/Killian Rd	Richland	●	●		●	●	●
1003	S-48	Columbia Avenue	Lexington	●					●
1011	SC12	Percival Road	Richland	●		●	●	●	●
1021	S-204	Charter Oak/Pisgah Church/Longs Pond	Lexington				●	●	●
1037	SC12	Forest Drive/Percival Rd	Richland			●	●	●	●
1039	SC215	Monticello Road	Richland		●	●	●	●	
1043	SC277	Bull Street	Richland		●	●	●	●	●
1047	SC6	North Lake Drive	Lexington	●	●	●	●	●	●
1049	SC 48	Assembly Street	Richland			●	●	●	●
1051	S-36	St. Andrews Road	Richland/Lexington	●	●		●	●	●
1053	SC16	Sunset Drive	Richland	●		●	●	●	●
1055	S-70	Two Notch Rd	Lexington	●					●
1059	US76	Broad River Rd	Richland/Lexington	●	●	●	●	●	●
1061	US21	Charleston Highway/Knox Abbot Drive	Lexington		●	●	●	●	●
1063	US 21	Huger Street	Richland		●	●	●	●	●
1065	US21/76	Elmwood Avenue	Richland		●	●	●	●	●
1069	US 378	Sunset Boulevard	Lexington		●	●	●	●	●
1071	US1	Two Notch Rd/Millwood Avenue	Richland	●		●	●	●	●
1073	US1	Augusta Rd	Lexington	●	●	●	●	●	●
1077	US 76	Garners Ferry Rd	Richland		●	●	●	●	●
1081	SC 12	Jarvis Klapman Boulevard	Lexington				●	●	
1083	SC60	Lake Murray Boulevard	Lexington	●		●		●	
1087	SC 35	12th Street West Columbia	Lexington				●	●	
1093	S-31	Bush River Rd	Richland/Lexington	●		●		●	
1097	S-757	Harbison Boulevard	Richland/Lexington	●					●
1105	SC555	Harden Street	Richland		●	●	●	●	
1117	S-63	Alpine Rd	Richland	●					
1121	SC555	Farrow Rd	Richland	●	●	●	●	●	
1125	S-59	Blythewood Rd	Richland	●					

*Congested conditions as represented by 2014 performance metrics are for specific individual segments or sub-corridors within each corridor. For more information on locations of congested conditions refer to the detailed corridor condition assessments contained in Appendix A.

Figure 3.2: LOS E and F Roads

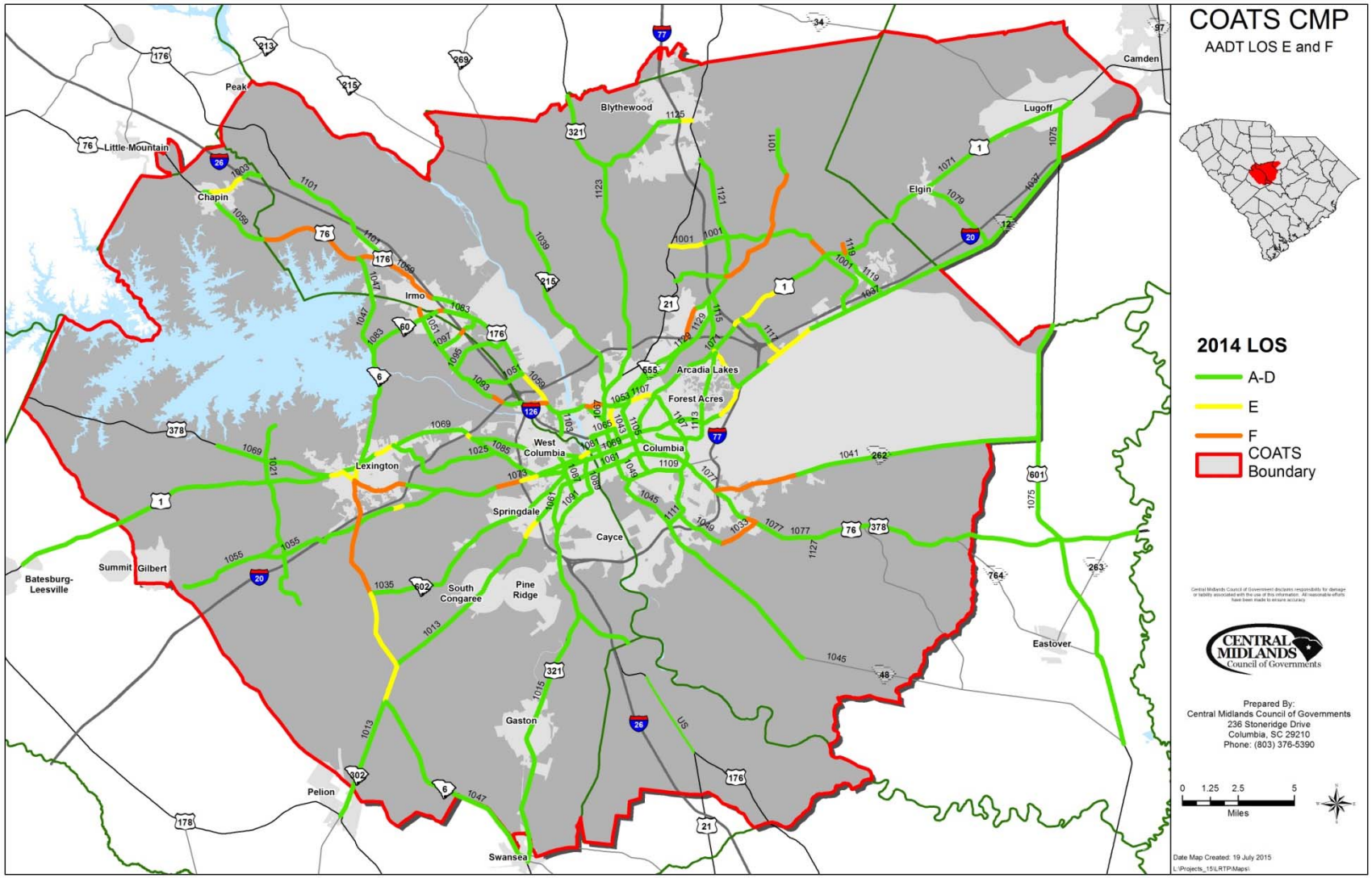


Figure 3.3: 2014 LOS E and F Corridor Segments

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1001	458	S-52	CLEMSON RD	3,200	9,800	12,800	31,000	43,178	2	45	2	29200	2.87	F	3.99	F
1003	477	S-48	COLUMBIA AV	6,200	11,300	12,500	12,800	23,465	2	45	3	10800	1.19	E	2.17	F
1011	428	S-83	HARD SCRABB	1,600	8,600	14,800	16,100	38,264	2	45	3	10800	1.49	F	3.54	F
1011	430	S-83	HARD SCRABB	1,600	8,600	21,800	23,900	45,352	2	45	3	10800	2.21	F	4.2	F
1011	437	S-83	HARD SCRABB	1,600	8,600	17,900	16,700	42,101	2	45	3	10800	1.54	F	3.9	F
1011	438	S-83	HARD SCRABB	7,200	15,100	21,000	20,700	38,939	2	45	3	10800	1.91	F	3.61	F
1011	214	SC12	PERCIVAL RD	10,100	8,900	9,700	12,900	8,858	2	45	3	10800	1.19	E	0.82	C
1011	216	SC12	PERCIVAL RD	4,700	6,300	11,000	12,600	15,156	2	45	3	10800	1.17	E	1.4	F
1047	217	SC6	N LAKE DR	9,200	11,700	11,800	12,500	19,671	2	35	3	10800	1.16	E	1.82	F
1047	219	SC6	S LAKE DR	15,880	14,300	18,600	19,900	29,427	2	35	3	10800	1.84	F	2.72	F
1047	222	SC6	HWY 6	8,042	13,300	11,600	12,800	20,708	2	35	3	10800	1.19	E	1.92	F
1047	224	SC6	HWY 6	2,618	5,000	6,100	12,800	19,584	2	55	3	10800	1.19	E	1.81	F
1051	801	S-36	ST ANDREWS	10,800	12,000	11,700	11,800	10,301	2	45	9	8600	1.37	F	1.2	E
1053	221	SC16	SUNSET DR	19,600	19,800	19,500	18,300	19,397	2	35	3	10800	1.47	F	1.52	F
1055	325	S-70	TWO NOTCH	1,359	9,700	10,900	11,000	18,704	2	45	4	8600	1.26	E	2.17	F
1059	145	US76	DUTCH FORK	10,400	13,900	20,100	21,800	32,839	2	55	3	10800	1.75	F	2.65	F
1059	147	US76	BROAD RIVER	9,500	12,700	17,900	18,500	29,736	2	55	3	10800	1.49	F	1.49	F
1059	149	US76	BROAD RIVER	14,000	19,000	24,900	22,100	38,247	3	45	3	10800	1.78	F	3.08	F
1071	120	US1	TWO NOTCH	11,300	13,100	16,300	17,700	25,259	5	45	2	29200	1.21	E	1.73	F
1073	119	US1	W MAIN ST	15,200	16,700	16,800	17,000	19,523	2	35	2	14600	1.16	E	1.33	E
1073	127	US1	AUGUSTA RD	38,000	39,900	39,100	43,200	56,704	5	55	2	14600	1.29	E	1.69	F
1083	245	SC60	LK MURRAY B	14,000	29,600	29,300	31,800	54,430	4	45	3	21600	1.28	E	2.19	F
1093	469	S-31	BUSH RIVER R	33,000	31,800	32,100	31,500	48,275	5	35	3	21600	1.27	E	1.94	F
1093	765	S-273	BUSH RIVER R	22,600	19,500	17,600	17,700	10,723	5	45	3	21600	1.64	F	0.99	C
1093	767	S-273	BUSH RIVER R	14,000	13,200	14,500	14,800	12,374	2	45	3	10800	1.37	F	1.14	D
1097	749	S-757	HARBISON BL	19,300	38,600	35,500	34,700	57,454	5	45	3	21600	1.4	F	2.32	F
1117	498	S-63	ALPINE RD	9,300	13,100	11,800	13,600	19,272	2	45	3	10800	1.26	E	1.78	F
1121	280	SC555	FARROW RD	8,500	15,500	15,200	15,900	23,819	2	45	3	10800	1.47	F	2.21	F
1125	494	S-59	BLYTHEWOOD RD		8,000	10,600	11,000	17,282	3	35	4	8600	1.28	E	2.01	F

LOS E

LOS F

Figure 3.4: Aggregate CMP Corridor Network Speeds 2014

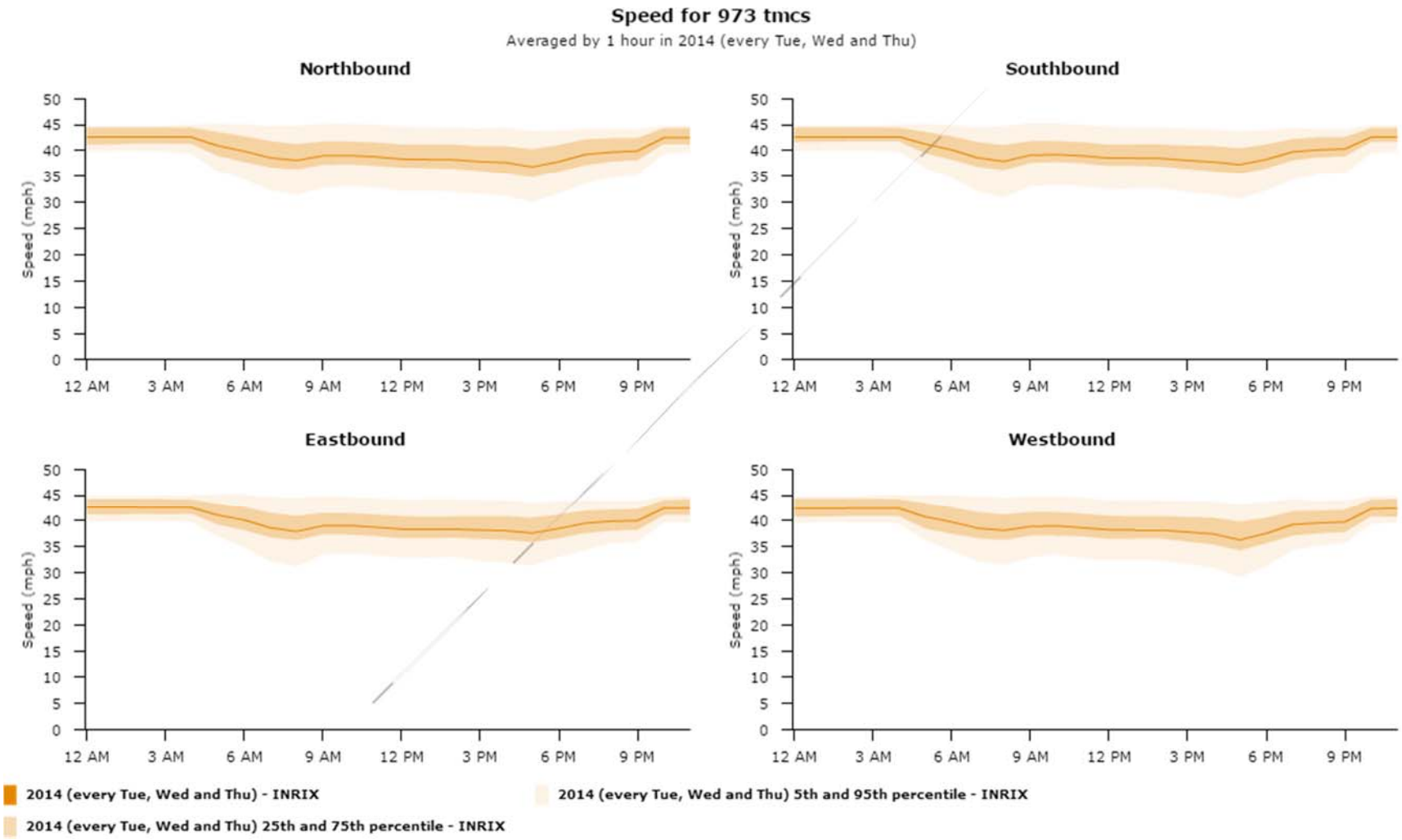


Figure 3.5: AM Peak Period Average Travel Time Index for 2014

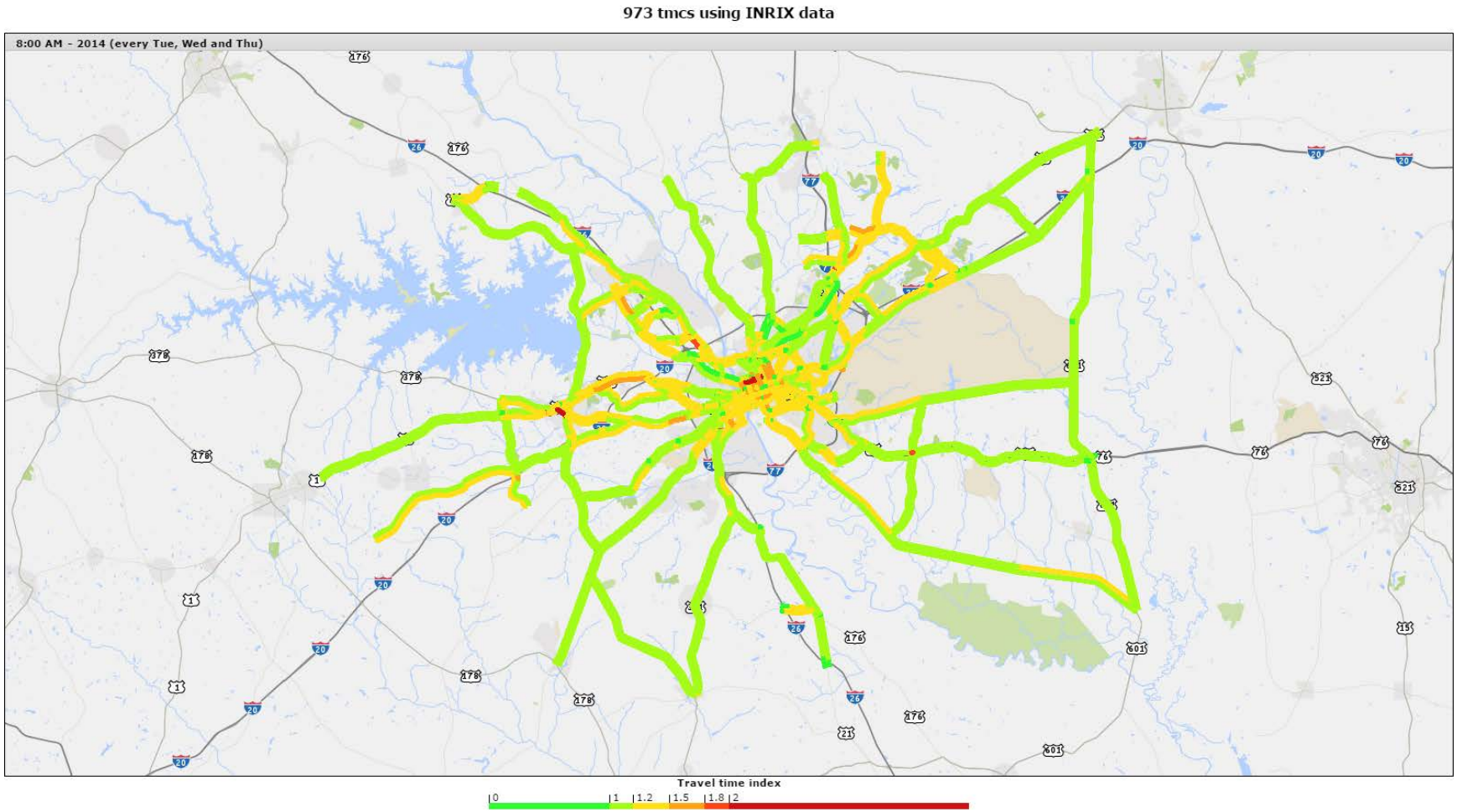
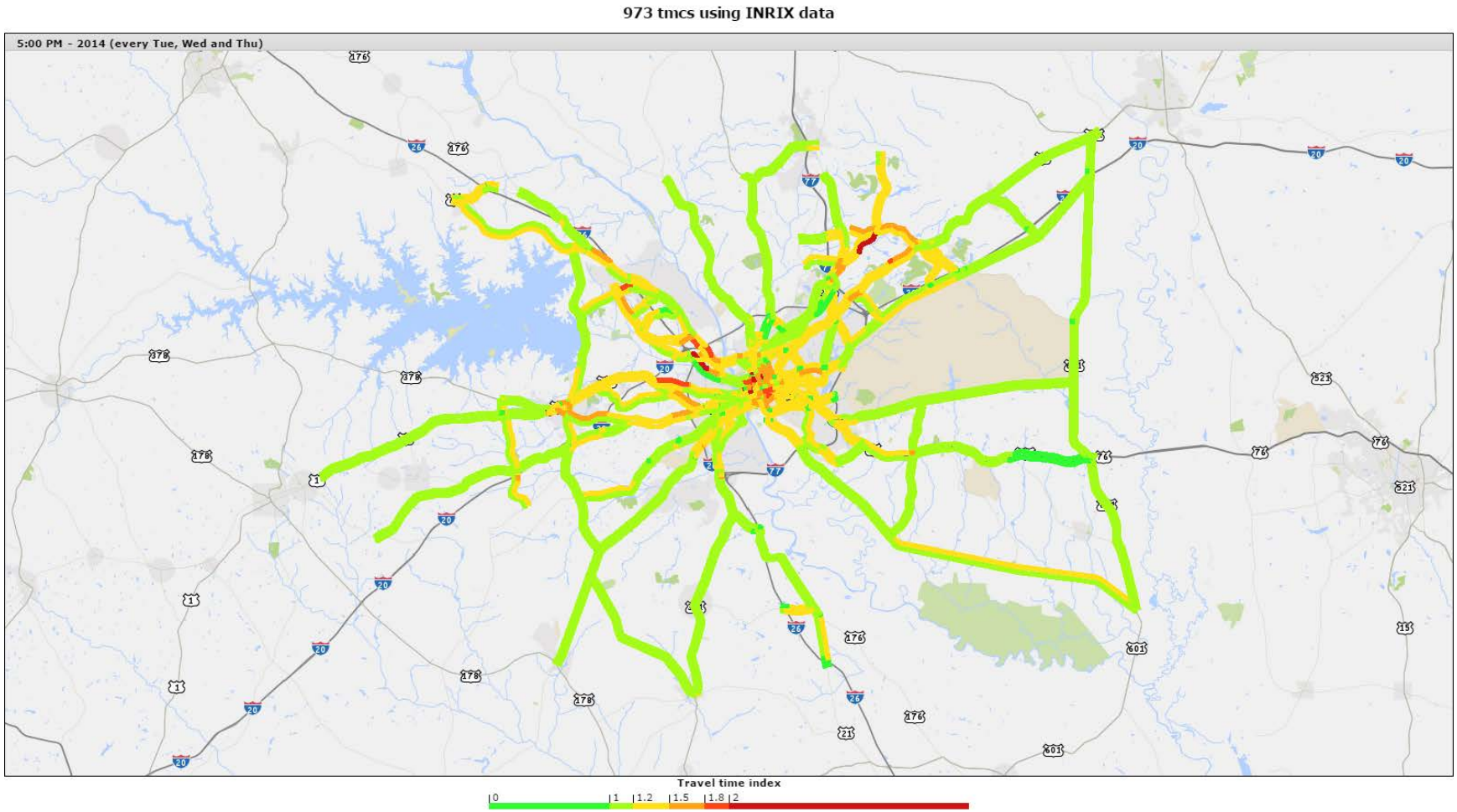


Figure 3.6: PM Peak Period Average Travel Time Index for 2014



3.3. Analysis of Potential Mitigation Strategies

The corridors identified as having segments or sub-corridors with congested conditions by one or more of the identified performance metrics, as identified in Figure 3.1, will be analyzed on an ongoing basis for potential mitigation strategies. Various unique characteristics pertaining to each corridor will be examined in relationship to the potential strategies to reduce congestion. As described in Chapter 2 of this document, the following list describes the general type of mitigation treatments considered for each corridor, in order of priority:

- Level 1) Decrease need for trip making
- Level 2) Increase use of transit over other modes Level 3) Increase HOV use
- Level 4) Enhance operations on existing roadway facilities
- Level 5) Increase roadway capacity through additional infrastructure

The following sections describe and summarize the analysis and mitigation strategies recommended for selected corridors identified as congested through this CMP process. For each congested corridor, the most applicable mitigation strategies unique to the corridor are detailed along with additional key information that served as input data into the process (i.e. choke point intersections with congestion). If available, a brief description of previously considered transportation improvements for the corridor is included. The analysis may also contain information on specific corridor characteristics supportive of various potential mitigation strategies. In some cases cost estimates are also included along with some of the mitigation strategies. Data and information for the cost estimates were obtained from the Institute of Transportation Engineers, Atlanta Regional Commission, Maryland Metropolitan Transit Authority, the Regional Bus Committee of the Transportation Planning Board, and project experience. Most of the costs represent construction costs, with the exception of adding new bus stops, which accounts for ROW, bus stop amenities and sidewalk reconstruction.

Figure 3.7 summarizes the selected toolbox mitigation strategies used in the corridor assessments and Figure 3.8 summarizes the selected corridor characteristics used in the assessments. Figures 3.9- 3.38 represents the corridor assessment/potential mitigation strategy evaluation matrices for the selected corridors.

Figure 3.7: Selected Toolbox of Mitigation Strategies Used in Corridor Assessments

Level 1	**Growth Management**	Land Use Policies
		Jobs/Housing Balance
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)
		Commuter Orientated Transit Service (express)
		Bus Circulator
		Bus Connections to Nearby Transit Route
		Transit park and ride facilities
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion
		Queue Jumper/Bypass Technology
		Transit information systems/Intelligent Bus Stops
		Transit Marketing
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems
		Sidewalks 5'
		Wide Sidewalks (>5') and Streetscape
		Pedestrian Grade Separation between major trip generators
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment
		Vanpooling Programs
		Ride share matching services
		Telecommuting
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes
		Intersection turn restrictions/One-way Pairs
		Signal Coordination
		Signal Consolidation
		Traffic Surveillance and control systems
Improve Roadway Operations	**Incident Management**	Detection of incidents
		Clearance/Response time improvements
		Information Distribution/Alternative Routes
	Access Management	Driveway control
		Median control
		Frontage roads/Interparcel Connectivity
		Deceleration Lanes
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes

Figure 3.8: Selected Corridor Characteristics Examined in Corridor Assessments

Corridor Characteristics	Methodology
Future Growth > 2% per year	CMCOG travel demand model volume projections were used
Current Transit Service (Commuter Orientated)	CMCOG GIS transit information was overlaid on the corridors
Current Transit Service (Local)	CMCOG GIS transit information was overlaid on the corridors
Planned Transit along Corridor	CMCOG GIS transit information was overlaid on the corridors
Major Trip Generators Present	General mapping was overlaid on the corridors to identify major trip generators (i.e. malls, CBD's, etc.)
Parallel High Capacity Transit Route(within 1/2 mil	CMCOG GIS transit information was overlaid on the corridors
Regional Activity Center or CBD within 1/2 mile	General mapping was overlaid on the corridors to identify regional activity centers or CBD's
Current Bicycle Routes or Lanes	CMCOG GIS bike lanes information was overlaid on the corridors
Current Sidewalk (standard 5')	Aerial photography was primarily used to identify sidewalks
Major trip generators on opposite sides of Road	General mapping was overlaid on the corridors to identify major trip generators (i.e. malls, CBD's, etc.)
Current paid parking lots along Corridor	Downtown corridors were assumed to have paid parking
Current or Planned Median	Aerial photography was primarily used to identify transportation geometry
Current or Planned 2 Lane Road	Aerial photography was primarily used to identify transportation geometry
Current or Planned Multilane Road	Aerial photography was primarily used to identify transportation geometry
Turn Lanes Present	Aerial photography was primarily used to identify transportation geometry
Frequent Signal Stops	Aerial photography was primarily used to identify transportation geometry and intersection control
Within Activity Center or CBD	General mapping was overlaid on the corridors to identify regional activity centers or CBD's
Congestion Index Less than 0.5	Congestion Index results for the corridors were used
Access to major truck generators	General mapping was overlaid on the corridors to identify major truck generators
Frequent median breaks	Aerial photography was primarily used to identify transportation geometry
Frequent driveways / tight driveway turning radii	Aerial photography was primarily used to identify transportation geometry
Presence of deceleration lanes	Aerial photography was primarily used to identify transportation geometry
Presence of parallel/alternative routes for incidents	Aerial photography was primarily used to identify transportation geometry
Congestion Present for >.5 mile (arterial)	Aerial photography was primarily used to identify transportation geometry

Figure 3.9: 1001 - Clemson Road (from US 1 to I-20)

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	n	y	n	y	n	n	y	y	n	n	n	y	n	n	n	n	n	y
Level 1	Growth Management	Land Use Policies	■																								
		Jobs/Housing Balance	■																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)					■																				
		Bus Circulator					■																				
		Bus Connections to Nearby Transit Route					■																				
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion					■																				
		Queue Jumper/Bypass Technology					■																				
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems					■																				
		Sidewalks 5'					■			■																	
		Wide Sidewalks (>5') and Streetscape					■					■															
		Pedestrian Grade Separation between major trip generators					■					■															
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■					■															
		Vanpooling Programs					■																				
		Ride share matching services					■																				
		Telecommuting					■																				
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes													■	■				■							
		Intersection turn restrictions/One-way Pairs																									
		Signal Coordination																		■							
		Signal Consolidation																									
		Traffic Surveillance and control systems														■											
Improve Roadway Operations	Incident Management	Detection of incidents																									
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control													■	■				■							
		Median control														■				■							
		Frontage roads/Interparcel Connectivity																		■							
		Deceleration Lanes													■	■				■				■			
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■							■

Figure 3.10: 1001 - Clemson Road (near Village at Sandhill, westside of US 1)

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for > .5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	n	y	n	n	n	n	n	y	y	n	y	y	n	n	n	y	n	y
LEVEL 1	Growth Management/Activity Centers	Land use policies/regulations																								
		Locations of jobs and housing																								
		Telecommuting																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
Shift Trips from Automobiles to other modes		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
	Public Transit Operational Improvements	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	Transportaion Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channalization and turn lanes																								
Improve Roadway Operations		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Mangament	Driveway control																								
		Median control																								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes																								
LEVEL 5 Add Capcity	Addition of General Purpose Lanes	**Arterial Lanes**																								

Figure 3.11. 1003 - Columbia Avenue

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	n	y	n	y	n	n	y	y	n	n	n	y	n	n	n	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route																									
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																									
		Queue Jumper/Bypass Technology																									
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																									
		Sidewalks 5'																									
		Wide Sidewalks (>5') and Streetscape																									
		Pedestrian Grade Separation between major trip generators																									
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																									
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																									
		Intersection turn restrictions/One-way Pairs																									
		Signal Coordination																									
		Signal Consolidation																									
		Traffic Surveillance and control systems																									
Improve Roadway Operations	Incident Management	Detection of incidents																									
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control																									
		Median control																									
		Frontage roads/Interparcel Connectivity																									
		Deceleration Lanes																									
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																									

Figure 3.12. 1101 – Hardscrabble Road (near Ridgeview High School)

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	n	y	n	n	n	n	y	n	n	n	n	y	n	n	n	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route																									
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																									
		Queue Jumper/Bypass Technology																									
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																									
		Sidewalks 5'																									
		Wide Sidewalks (>5') and Streetscape																									
		Pedestrian Grade Separation between major trip generators																									
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																									
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																									
		Intersection turn restrictions/One-way Pairs																									
		Signal Coordination																									
		Signal Consolidation																									
		Traffic Surveillance and control systems																									
Improve Roadway Operations	Incident Management	Detection of incidents																									
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control																									
		Median control																									
		Frontage roads/Interparcel Connectivity																									
		Deceleration Lanes																									
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																									

Figure 3.13. 1021 - Longs Pond Rd/Mt. Pisgah Church Rd, Near I-20

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	n	n	n	n	n	n	n	n	y	n	n	n	n	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route																									
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																									
		Queue Jumper/Bypass Technology																									
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																									
		Sidewalks 5'																									
		Wide Sidewalks (>5') and Streetscape																									
		Pedestrian Grade Separation between major trip generators																									
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																									
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																									
		Intersection turn restrictions/One-way Pairs																									
		Signal Coordination																									
		Signal Consolidation																									
		Traffic Surveillance and control systems																									
Improve Roadway Operations	Incident Management	Detection of incidents																									
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control																									
		Median control																									
		Frontage roads/Interparcel Connectivity																									
		Deceleration Lanes																									
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																									

Figure 3.14. 1037 - SC 12/Forest Dr/Percival Rd/Taylor St, East of Downtown Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	y	y	n	n	n	n	y	y	y	y	y	n	n	y	n	y	y
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																								
		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control																								
		Median control																								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes																								
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.15. 1039 - SC 215 Monticello Road

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	y	n	n	y	y	y	n	n	y	y	y	n	n	n	n	n	n	n	y	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)					■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■																			
		Bus Connections to Nearby Transit Route			■																					
		Transit park and ride facilities			■		■																			
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion			■		■																			
		Queue Jumper/Bypass Technology			■																					
		Transit information systems/Intelligent Bus Stops			■																					
		Transit Marketing			■		■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■		■			■																
		Sidewalks 5'			■		■					■														
		Wide Sidewalks (>5') and Streetscape					■				■	■														
		Pedestrian Grade Separation between major trip generators					■					■														
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■																			
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes													■	■										
		Intersection turn restrictions/One-way Pairs															■									
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems														■										
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control													■	■	■									
		Median control														■										
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes													■	■								■	■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.16. 1043 - SC 277/Bull St, Downtown Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" ---->	n	n	y	n	n	n	y	y	y	n	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route							■										■							
		Transit park and ride facilities			■																					
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion			■																					
		Queue Jumper/Bypass Technology			■																					
		Transit information systems/Intelligent Bus Stops			■																					
		Transit Marketing			■																					
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																					
		Sidewalks 5'			■				■	■									■							
		Wide Sidewalks (>5') and Streetscape			■				■										■							
		Pedestrian Grade Separation between major trip generators							■		■								■							
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																	■							
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■				■			■			
		Intersection turn restrictions/One-way Pairs															■	■	■							
		Signal Coordination																■	■	■						
		Signal Consolidation																■	■							
		Traffic Surveillance and control systems														■		■	■							
Improve Roadway Operations	Incident Management	Detection of incidents																■	■							
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control														■	■	■		■			■			
		Median control														■		■		■						
		Frontage roads/Interparcel Connectivity																	■	■						
		Deceleration Lanes														■		■		■			■	■		
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■						■

Figure 3.17. 1047 - SC 6/Lake Dr/Dreher Shoals Rd, Downtown Lexington

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	n	n	n	n	n	n	n	y	y	n	n	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																								
		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control																								
		Median control																								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes																								
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.18. 1049 – Assembly Street/US 76, Downtown Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	y	y	y	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																								
		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control																								
		Median control																								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes																								
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.19. 1051 - St. Andrews Rd, Near Irmo High School

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	y	n	n	n	y	y	y	n	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route																									
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																									
		Queue Jumper/Bypass Technology																									
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																									
		Sidewalks 5'																									
		Wide Sidewalks (>5') and Streetscape																									
		Pedestrian Grade Separation between major trip generators																									
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																									
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																									
		Intersection turn restrictions/One-way Pairs																									
		Signal Coordination																									
		Signal Consolidation																									
		Traffic Surveillance and control systems																									
Improve Roadway Operations	Incident Management	Detection of incidents																									
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control																									
		Median control																									
		Frontage roads/Interparcel Connectivity																									
		Deceleration Lanes																									
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																									

Figure 3.20. 1053 - Sunset Drive, Near Richland Medical Center

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	y	y	n	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	**Growth Management**	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route							■										■								
		Transit park and ride facilities			■																						
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion			■																						
		Queue Jumper/Bypass Technology			■																						
		Transit information systems/Intelligent Bus Stops			■																						
		Transit Marketing			■																						
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																						
		Sidewalks 5'			■				■	■									■								
		Wide Sidewalks (>5') and Streetscape			■				■										■								
		Pedestrian Grade Separation between major trip generators							■		■								■								
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment																									
		Vanpooling Programs																	■								
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes														■				■			■				
		Intersection turn restrictions/One-way Pairs															■	■	■								
		Signal Coordination																■	■	■							
		Signal Consolidation																■	■								
		Traffic Surveillance and control systems														■		■	■								
Improve Roadway Operations	**Incident Management**	Detection of incidents																■	■								
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control														■	■	■		■			■				
		Median control														■		■		■							
		Frontage roads/Interparcel Connectivity																	■	■							
		Deceleration Lanes														■		■		■			■	■			
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes																		■							■

Figure 3.21. 1055 - Two Notch Rd at Muddy Springs Rd

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	y	n	n	n	y	y	y	n	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes																								
		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control																								
		Median control																								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes																								
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.22. 1059 - US 176/River Dr/Broad River Rd (Near I-20 & I-26)

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	y	n	y	n	n	y	n	n	n	n	n	y	y	y	n	y	n	n	y	n	n	y
Level 1	**Growth Management**	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes																								
		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																								
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
Improve Roadway Operations	**Incident Management**	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control																								
		Median control																								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes																								
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes																								

Figure 3.23. 1061 - US 21/US 176/ US 321/Blossom St/Charleston Hwy, Downtown Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	n	y	n	n	n	y	n	n	n	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route							■										■								
		Transit park and ride facilities			■																						
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion			■																						
		Queue Jumper/Bypass Technology			■																						
		Transit information systems/Intelligent Bus Stops			■																						
		Transit Marketing			■																						
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																						
		Sidewalks 5'			■				■										■								
		Wide Sidewalks (>5') and Streetscape			■				■										■								
		Pedestrian Grade Separation between major trip generators							■		■								■								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																	■								
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes													■					■			■				
		Intersection turn restrictions/One-way Pairs																	■								
		Signal Coordination																	■	■							
		Signal Consolidation																	■								
		Traffic Surveillance and control systems																	■								
Improve Roadway Operations	Incident Management	Detection of incidents																	■								
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control													■					■			■				
		Median control																		■							
		Frontage roads/Interparcel Connectivity																	■	■							
		Deceleration Lanes													■					■			■	■			
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■							■

Figure 3.24. 1063 - US 321/Huger St, Downtown Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	y	y	y	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route							■										■								
		Transit park and ride facilities			■																						
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion			■																						
		Queue Jumper/Bypass Technology			■																						
		Transit information systems/Intelligent Bus Stops			■																						
		Transit Marketing			■																						
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																						
		Sidewalks 5'			■				■	■									■								
		Wide Sidewalks (>5') and Streetscape			■				■			■							■								
		Pedestrian Grade Separation between major trip generators							■		■	■							■								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment										■															
		Vanpooling Programs																	■								
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■				■			■				
		Intersection turn restrictions/One-way Pairs															■	■	■								
		Signal Coordination																■		■							
		Signal Consolidation																■	■								
		Traffic Surveillance and control systems														■		■	■								
Improve Roadway Operations	Incident Management	Detection of incidents																■	■								
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control														■	■	■		■			■				
		Median control														■		■		■							
		Frontage roads/Interparcel Connectivity																	■	■							
		Deceleration Lanes														■		■		■			■	■			
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■							■

Figure 3.25. 1065 - US 321/US 21/Elmwood Ave, Downtown Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	n	y	n	n	n	n	y	y	y	y	y	n	n	n	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route							■										■								
		Transit park and ride facilities			■																						
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion			■																						
		Queue Jumper/Bypass Technology			■																						
		Transit information systems/Intelligent Bus Stops			■																						
		Transit Marketing			■																						
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																						
		Sidewalks 5'			■				■										■								
		Wide Sidewalks (>5') and Streetscape			■				■										■								
		Pedestrian Grade Separation between major trip generators							■		■								■								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																	■								
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■				■							
		Intersection turn restrictions/One-way Pairs															■	■	■								
		Signal Coordination																■	■	■							
		Signal Consolidation																■	■								
		Traffic Surveillance and control systems														■		■	■								
Improve Roadway Operations	Incident Management	Detection of incidents																■	■								
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control														■	■	■		■							
		Median control														■		■		■							
		Frontage roads/Interparcel Connectivity																	■	■							
		Deceleration Lanes														■		■		■				■			
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■							■

Figure 3.26. 1069 - US 378/Columbia Ave/Augusta Hwy/ Sunset Blvd/Gervais St (in Downtown Columbia)

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	y	y	n	n	n	n	y	y	y	y	y	n	n	y	n	y	y
Level 1	**Growth Management**	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route							■										■							
		Transit park and ride facilities			■																					
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion			■																					
		Queue Jumper/Bypass Technology			■																					
		Transit information systems/Intelligent Bus Stops			■																					
		Transit Marketing			■																					
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																					
		Sidewalks 5'			■				■	■									■							
		Wide Sidewalks (>5') and Streetscape			■				■										■							
		Pedestrian Grade Separation between major trip generators							■		■								■							
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment																								
		Vanpooling Programs																	■							
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes														■				■			■			
		Intersection turn restrictions/One-way Pairs															■	■	■							
		Signal Coordination																■	■	■						
		Signal Consolidation																■	■							
		Traffic Surveillance and control systems														■		■	■							
Improve Roadway Operations	**Incident Management**	Detection of incidents																■	■							
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control														■	■	■		■			■			
		Median control														■		■		■						
		Frontage roads/Interparcel Connectivity																	■	■						
		Deceleration Lanes														■		■		■			■	■		
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes																		■						■

Figure 3.27. 1071 - US 378/US 1/Millwood Ave/Two Notch Rd

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	y	n	n	n	y	n	y	n	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route							■										■								
		Transit park and ride facilities			■																						
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion			■																						
		Queue Jumper/Bypass Technology			■																						
		Transit information systems/Intelligent Bus Stops			■																						
		Transit Marketing			■																						
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems			■																						
		Sidewalks 5'			■				■										■								
		Wide Sidewalks (>5') and Streetscape			■				■										■								
		Pedestrian Grade Separation between major trip generators							■		■								■								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																	■								
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■				■			■				
		Intersection turn restrictions/One-way Pairs															■	■	■								
		Signal Coordination																■		■							
		Signal Consolidation																■	■								
		Traffic Surveillance and control systems														■		■	■								
Improve Roadway Operations	Incident Management	Detection of incidents																■	■								
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control														■	■	■		■			■				
		Median control														■		■		■							
		Frontage roads/Interparcel Connectivity																	■	■							
		Deceleration Lanes														■		■		■			■	■			
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■							■

Figure 3.28. 1073 - US 1/US 50/SC 12/Jarvis Klapman Blvd/Main St/Augusta Rd, Downtown Lexington

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	n	n	n	n	y	y	n	n	n	n	y	n	n	n	y	y	n	n	y	n	n	y
Level 1	Growth Management	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route							■										■								
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																									
		Queue Jumper/Bypass Technology																									
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																									
		Sidewalks 5'							■	■									■								
		Wide Sidewalks (>5') and Streetscape							■										■								
		Pedestrian Grade Separation between major trip generators							■										■								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																									
		Vanpooling Programs																	■								
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes													■					■			■				
		Intersection turn restrictions/One-way Pairs																	■								
		Signal Coordination																	■	■							
		Signal Consolidation																	■								
		Traffic Surveillance and control systems																	■								
Improve Roadway Operations	Incident Management	Detection of incidents																	■								
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control													■					■			■				
		Median control																		■							
		Frontage roads/Interparcel Connectivity																	■	■							
		Deceleration Lanes													■					■			■	■			
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■							■

Figure 3.29. 1077 - US 76/Devine St/Garners Ferry Rd at I-77 and SC 16

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	y	n	n	n	y	y	n	n	n	n	n	y	y	y	y	y	n	n	y	n	n	y
Level 1	**Growth Management**	Land Use Policies																									
		Jobs/Housing Balance																									
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																									
		Commuter Orientated Transit Service (express)																									
		Bus Circulator																									
		Bus Connections to Nearby Transit Route																									
		Transit park and ride facilities																									
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion																									
		Queue Jumper/Bypass Technology																									
		Transit information systems/Intelligent Bus Stops																									
		Transit Marketing																									
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																									
		Sidewalks 5'																									
		Wide Sidewalks (>5') and Streetscape																									
		Pedestrian Grade Separation between major trip generators																									
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment																									
		Vanpooling Programs																									
		Ride share matching services																									
		Telecommuting																									
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes																									
		Intersection turn restrictions/One-way Pairs																									
		Signal Coordination																									
		Signal Consolidation																									
		Traffic Surveillance and control systems																									
Improve Roadway Operations	**Incident Management**	Detection of incidents																									
		Clearance/Response time improvements																									
		Information Distribution/Alternative Routes																									
	Access Management	Driveway control																									
		Median control																									
		Frontage roads/Interparcel Connectivity																									
		Deceleration Lanes																									
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes																									

Figure 3.30. 1081 - SC 12 Jarvis Klapman Boulevard

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	n	n	n	n	y	n	y	y	n	y	n	y	n	y	y	n	y	n	n	n	n	y	y	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)					■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■		■										■							
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities					■																			
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion					■																			
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing					■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems					■		■	■									■							
		Sidewalks 5'					■		■			■							■							
		Wide Sidewalks (>5') and Streetscape					■		■			■							■							
		Pedestrian Grade Separation between major trip generators					■					■														
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■												■							
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■										
		Intersection turn restrictions/One-way Pairs												■			■		■							
		Signal Coordination												■					■							
		Signal Consolidation												■					■							
		Traffic Surveillance and control systems														■			■							
Improve Roadway Operations	Incident Management	Detection of incidents																	■							
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control												■		■	■									
		Median control												■		■										
		Frontage roads/Interparcel Connectivity												■					■							
		Deceleration Lanes														■									■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.31. 1083 - SC 60 Lake Murray Boulevard

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	n	y	y	n	n	n	n	y	y	n	n	y	n	n	y	n	n	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)					■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■																			
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities					■																			
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion					■																			
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing					■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems					■			■																
		Sidewalks 5'					■																			
		Wide Sidewalks (>5') and Streetscape					■				■															
		Pedestrian Grade Separation between major trip generators					■																			
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■																			
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■				■			■			
		Intersection turn restrictions/One-way Pairs															■									
		Signal Coordination																		■						
		Signal Consolidation																								
		Traffic Surveillance and control systems														■										
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control														■	■			■			■			
		Median control														■				■						
		Frontage roads/Interparcel Connectivity																		■						
		Deceleration Lanes														■				■			■	■	■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■						

Figure 3.32. 1087 - SC 35 12th Street West Columbia

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	y	n	y	y	y	y	n	n	n	y	y	n	y	y	y	n	n	n	n	n
Level 1	**Growth Management**	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)					■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■		■										■							
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities					■																			
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion					■																			
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing					■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems					■		■	■									■							
		Sidewalks 5'					■		■			■							■							
		Wide Sidewalks (>5') and Streetscape					■		■		■	■							■							
		Pedestrian Grade Separation between major trip generators					■					■														
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment					■												■							
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes														■				■	■					
		Intersection turn restrictions/One-way Pairs															■		■							
		Signal Coordination																	■	■						
		Signal Consolidation																	■							
		Traffic Surveillance and control systems														■			■							
Improve Roadway Operations	**Incident Management**	Detection of incidents																	■							
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control														■	■			■						
		Median control														■				■						
		Frontage roads/Interparcel Connectivity																	■	■						
		Deceleration Lanes														■				■	■			■	■	
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes																		■						

Figure 3.33. 1093 - S-31 Bush River Road

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	y	y	y	y	n	n	n	y	y	n	n	n	y	y	y	n	y	n	n	y	n	n	n
Level 1	**Growth Management**	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	**Public Transit Capital Improvements**	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)				■	■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■																			
		Bus Connections to Nearby Transit Route			■																					
		Transit park and ride facilities		■	■	■	■																			
Shift Trips from Automobiles to other modes	**Public Transit Operational Improvements**	Service enhancement/Service Expansion		■	■	■	■																			
		Queue Jumper/Bypass Technology		■	■	■																				
		Transit information systems/Intelligent Bus Stops		■	■	■																				
		Transit Marketing		■	■	■	■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems		■	■	■	■																			
		Sidewalks 5'		■	■	■	■					■														
		Wide Sidewalks (>5') and Streetscape					■				■	■														
		Pedestrian Grade Separation between major trip generators					■					■														
LEVEL 3 Increase Vehicle Occupancy	**Transportation Demand Management**	Parking Management/Fee Adjustment					■																			
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	**Traffic Operational Improvements**	Intersection widening/Channelization and turn lanes														■				■			■			
		Intersection turn restrictions/One-way Pairs															■	■								
		Signal Coordination																■		■						
		Signal Consolidation																■								
		Traffic Surveillance and control systems														■		■								
Improve Roadway Operations	**Incident Management**	Detection of incidents																■								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control														■	■	■		■			■			
		Median control														■		■		■						
		Frontage roads/Interparcel Connectivity																		■						
		Deceleration Lanes														■		■		■			■	■	■	
LEVEL 5 Add Capacity	**Addition of General Purpose Lanes**	Arterial Lanes																		■						

Figure 3.34. 1105 - SC 555 Harden Street

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	y	y	y	y	y	y	y	y	y	n	y	n	y	y	y	y	n	n	n	y	n	y	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)				■	■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■		■										■							
		Bus Connections to Nearby Transit Route			■			■																		
		Transit park and ride facilities		■	■	■	■	■																		
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion		■	■	■	■																			
		Queue Jumper/Bypass Technology		■	■	■																				
		Transit information systems/Intelligent Bus Stops		■	■	■																				
		Transit Marketing		■	■	■	■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems		■	■	■	■		■	■									■							
		Sidewalks 5'		■	■	■	■		■			■							■							
		Wide Sidewalks (>5') and Streetscape					■		■		■	■							■							
		Pedestrian Grade Separation between major trip generators					■					■														
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■												■							
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■							■			
		Intersection turn restrictions/One-way Pairs												■			■	■	■							
		Signal Coordination												■				■	■							
		Signal Consolidation												■				■	■							
		Traffic Surveillance and control systems														■		■	■							
Improve Roadway Operations	Incident Management	Detection of incidents																■	■							
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control												■		■	■	■					■			
		Median control												■		■		■								
		Frontage roads/Interparcel Connectivity												■					■							
		Deceleration Lanes														■		■					■	■	■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.35. 1117- Alpine Road

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	y	y	n	n	y	y	n	n	n	y	n	y	n	n	y	n	n	n	n	n	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)				■	■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■																			
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities				■	■																			
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion				■	■																			
		Queue Jumper/Bypass Technology				■																				
		Transit information systems/Intelligent Bus Stops				■																				
		Transit Marketing				■	■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems				■	■			■																
		Sidewalks 5'				■	■																			
		Wide Sidewalks (>5') and Streetscape					■				■															
		Pedestrian Grade Separation between major trip generators					■																			
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■																			
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes													■					■						
		Intersection turn restrictions/One-way Pairs															■									
		Signal Coordination																		■						
		Signal Consolidation																								
		Traffic Surveillance and control systems																								
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control													■		■			■						
		Median control																		■						
		Frontage roads/Interparcel Connectivity																		■						
		Deceleration Lanes													■					■				■	■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■						

Figure 3.36. - 1121 SC 555 Farrow Road

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	y	y	y	y	y	n	n	y	y	n	n	n	y	y	y	n	n	n	n	n	n	y	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)				■	■																			
		Commuter Orientated Transit Service (express)					■																			
		Bus Circulator					■																			
		Bus Connections to Nearby Transit Route			■			■																		
		Transit park and ride facilities		■	■	■	■	■																		
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion		■	■	■	■																			
		Queue Jumper/Bypass Technology		■	■	■																				
		Transit information systems/Intelligent Bus Stops		■	■	■																				
		Transit Marketing		■	■	■	■																			
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems		■	■	■	■																			
		Sidewalks 5'		■	■	■	■					■														
		Wide Sidewalks (>5') and Streetscape					■				■	■														
		Pedestrian Grade Separation between major trip generators					■					■														
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment					■																			
		Vanpooling Programs					■																			
		Ride share matching services					■																			
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes														■										
		Intersection turn restrictions/One-way Pairs															■	■								
		Signal Coordination																■								
		Signal Consolidation																■								
		Traffic Surveillance and control systems														■		■								
Improve Roadway Operations	Incident Management	Detection of incidents																■								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control														■	■	■								
		Median control														■		■								
		Frontage roads/Interparcel Connectivity																								
		Deceleration Lanes														■		■						■	■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																								

Figure 3.37. - 1125 - S-59 Blythewood Road

Toolbox of Mitigation Strategies* and Thresholds for Congested Corridors			Corridor Characteristics																							
			Future Growth > 2% per year	Current Transit Service (Commuter Orientated)	Current Transit Service (Local)	Planned Transit along Corridor	Major Trip Generators Present	Parallel High Capacity Transit Route Present (within 1/2 mile)	Regional Activity Center or CBD within 1/2 mile	Current Bicycle Routes or Lanes	Current Sidewalk (standard 5')	Major trip generators on opposite sides of Road	Current paid parking lots along Corridor	Current or Planned Median	Current or Planned 2 Lane Road	Current or Planned Multilane Road	Turn Lanes Present	Frequent Signal Stops	Within Activity Center or CBD	Congestion Index Less than 0.5	Access to major truck generators/Major through truck	Frequent median breaks	Frequent driveways / tight driveway turning radii	Presence of deceleration lanes	Presence of parallel/alternative routes for incidents	Congestion Present for >.5 mile (arterial)
		enter "y" or "n" --->	y	n	n	n	n	n	n	n	n	n	n	n	y	y	n	n	n	y	n	n	n	n	n	n
Level 1	Growth Management	Land Use Policies																								
		Jobs/Housing Balance																								
LEVEL 2	Public Transit Capital Improvements	Exclusive r.o.w. (rapid rail, light rail, or bus rapid transit)																								
		Commuter Orientated Transit Service (express)																								
		Bus Circulator																								
		Bus Connections to Nearby Transit Route																								
		Transit park and ride facilities																								
Shift Trips from Automobiles to other modes	Public Transit Operational Improvements	Service enhancement/Service Expansion																								
		Queue Jumper/Bypass Technology																								
		Transit information systems/Intelligent Bus Stops																								
		Transit Marketing																								
	Encourage the use of non-motorized modes	Bicycle Facilities/Storage Systems																								
		Sidewalks 5'																								
		Wide Sidewalks (>5') and Streetscape																								
		Pedestrian Grade Separation between major trip generators																								
LEVEL 3 Increase Vehicle Occupancy	Transportation Demand Management	Parking Management/Fee Adjustment																								
		Vanpooling Programs																								
		Ride share matching services																								
		Telecommuting																								
LEVEL 4	Traffic Operational Improvements	Intersection widening/Channelization and turn lanes													■	■				■						
		Intersection turn restrictions/One-way Pairs																								
		Signal Coordination																		■						
		Signal Consolidation																								
		Traffic Surveillance and control systems														■										
Improve Roadway Operations	Incident Management	Detection of incidents																								
		Clearance/Response time improvements																								
		Information Distribution/Alternative Routes																								
	Access Management	Driveway control													■	■				■						
		Median control														■				■						
		Frontage roads/Interparcel Connectivity																		■						
		Deceleration Lanes													■	■				■				■	■	
LEVEL 5 Add Capacity	Addition of General Purpose Lanes	Arterial Lanes																		■						

1001 - Clemson Road (from US 1 to I-20)

Congestion Mitigation Strategies:

- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)
- Intersection widening/Channelization and turn lanes ($75,000 per turn lane)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)
- Interchange Improvements

Key Intersections:

Sparkleberry Lane, Wildwood Center Drive, 1-20 Interchange, Percival Road

1001 - Clemson Road (near Village at Sandhill, westside of US 1)

Congestion Mitigation Strategies:

- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)
- Intersection turn restrictions/One-way Pairs
- Signal Coordination ($2,500 per signal for retiming)
- Pedestrian improvements ($160,000 per lane mile of sidewalk)
- Bus Circulator, including commercial areas along US 1 ($500,000 per bus, $7,000 per bus stop)
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

Summit Pkwy, North Springs Rd

1003 - Columbia Avenue

Congestion Mitigation Strategies:

- Key intersection improvements ($75,000 per turn lane)
- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)
- Better marketing and incentivizing of SCDOT Newberry – Columbia Smart Ride Service

Key Intersections:

RR crossing, Chapin Road

Future road improvements previously considered included road improvements on Columbia Avenue. These improvements cover the key intersection at Chapin Road.

1011 - Hardscrabble Rd (in the vicinity of Ridge View High School)

Congestion Mitigation Strategies:

- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)
- Deceleration lanes ($50,000 per turn lane)
- Arterial lanes ($1,825,000 per lane mile)
- Key intersection improvements ($75,000 per turn lane)
- Pedestrian improvements ($160,000 per lane mile of sidewalk)

Key Intersections:

Rice Creek & Rice View Schools, Lee Rd, Clemson Rd, Summit Pkwy

Hardscrabble is planned for road widening improvements which will cover key intersections and the additional capacity needed to address current and future growth.

1021 Longs Pond Rd/Mt. Pisgah Church Rd (from 1-20 to Barr Rd)

Congestion Mitigation Strategies:

- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)
- Intersection widening/Channelization and turn lanes ($75,000 per turn lane)
- Driveway control
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

Mt. Pisgah Church Rd at: Barr Rd, Two Notch Rd, 1-20

Future road improvements previously considered includes road improvements on Longs Pond Rd/Mt. Pisgah Church Rd and on Two Notch Rd. These improvements cover the areas of congestion.

1037 - SC 12/Forest Or/Percival Rd/Taylor St (Downtown Columbia, west of US 76, and between SH 16 and Trenholm Rd)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Bicycle Facilities/Storage Systems
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Intersection widening/Channelization and turn lanes
- Signal Coordination ($2,500 per signal for retiming)
- Signal Consolidation
- Traffic Surveillance and control systems
- Driveway control
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

SC 12/Forest Or/Percival Rd at: Trenholm Rd, Beltline Blvd/SC 16

The congested area for this corridor is in the vicinity of Richland Mall, various schools, and Trenholm Plaza.

1039 SC 215 Monticello Road

Congestion Mitigation Strategies:

- Transit Park & ride facilities
- Commuter oriented transit service (express)
- Add bus connections to nearby transit route ($500,00 per bus, $7,000 per bus stop)
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Signal Coordination ($2,500 per signal for retiming)

Key Intersections:

Main Street US 21, Columbia College Drive S-96, Blue Ridge Terrace S-334

1043 - SC 277/Bull St, (Downtown Columbia, between US 1 and Harden St Ext)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Key intersection improvements ($75,000 per turn lane)
- Bus circulator/Transit Service enhancement ($500,000 per bus, $7,000 per bus stop)
- Pedestrian improvements ($160,000 per lane mile of sidewalk)

Key Intersections:

SC 277/Bull St at:US 1, SC 12, Colonial, Harden St Ext.

1047- SC 6/Lake Dr/Dreher Shoals Rd, (Downtown Lexington, between Tall Pine Ave and US 378, and between 1-20 and Platt Springs Rd)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Intersection widening/Channelization and turn lanes ($75,000 per turn lane)

- Driveway control
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)
- One-way Pair
- Parallel Route
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Pedestrian Improvements ($160,000 per lane mile of sidewalk)
- Interchange Improvements

Key Intersections:

SC 6 at US 378, US 1, Platt Springs Rd, Railroad Ave, 1-20

Time-of-day profiles indicate congestion may occur during the lunch hour in addition to the AM and PM peak hour. Future road improvements considered previously include roadway improvements along SC 6, US 378, US 1, and Platt Springs Rd. It should be noted that improvements are underway at Platt Springs Rd at SC 6. There is a new Wal-Mart in the area.

1049 - SC 768/Shop Rd/US 76, Downtown Columbia (Between Calhoun St and Park St)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Bicycle Facilities/Storage Systems
- Pedestrian Improvements ($160,000 per lane mile of sidewalk)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Intersection widening/Channelization and turn lanes ($75,000 per turn lane)
- Intersection turn restrictions/One-way Pairs
- Signal Coordination ($2,500 per signal for retiming)
- Traffic Surveillance and control systems
- Driveway control
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

SC 768/Shop Rd at Gervais St, Taylor St, Blossom St, Elmwood Ave

1051 - St. Andrews Rd, Near lrmo High School, south of Emory Lane

Congestion Mitigation Strategies:

- Key intersection improvements ($75,000 per turn lane)

Key Intersections:

St. Andrews Rd at Harbison Blvd

1053 - Sunset Drive, Near Richland Medical Center (Between Medical Park Rd and Richland Medical Park Drive)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Pedestrian improvements ($160,000 per lane mile of sidewalk)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)

Key Intersections:

Sunset Drive at SC 277

Future road improvements considered previously include roadway improvements on Sunset Drive, west of SC 277. These improvements do not cover congested area of Sunset Dr near Richland Medical Center which was an area flagged with congestion in the analysis.

1055 - Two Notch Rd at Muddy Springs Rd

Congestion Mitigation Strategies:

- Key intersection improvements ($75,000 per turn lane)

Key Intersections:

Two Notch Rd at Muddy Springs Rd

Future road improvements considered previously include roadway improvements on Two Notch Road. These improvements cover the congested area.

1059 - US 176/River Or/Broad River Rd (Between Bert Friday and Greystone Blvd)

Congestion Mitigation Strategies:

- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)
- Transit Service enhancement/Service Expansion ($500,000 per bus, $7,000 per bus stop) or commuter express buses and/or queue jumper technology
- Intersection widening/Channelization and turn lanes ($75,000 per turn lane)
- Signal Coordination ($2,500 per signal for retiming)
- Traffic Surveillance and control systems
- Driveway control
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)
- Interchange Improvements

Key Intersections:

Seminole Rd, 1-20 and Greystone Blvd

Future road improvements considered previously include projects at 1-20 and US 176. However, the projects identified on US 176 do not cover the area of identified congestion.

1059 - US 176/River Or/Broad River Rd (East of 1-26)

Congestion Mitigation Strategies:

- Regional growth management through land use policies
- Transportation demand management (vanpool, ride matching, telecommuting)

- Transit Service enhancement/Service Expansion ($500,000 per bus, $7,000 per bus stop) or commuter express buses and/or queue jumper technology
- Key intersection improvements ($75,000 per turn lane)

Key Intersections:

Lykes Lane, Kennerly Road, 1-26

Future road improvements considered include roadway improvements along Kennerly Road and on US 176. However, no projects were identified on US 176 in the vicinity of the congestion.

1061 - US 21/US 176/ US 321/Biossom St/Charleston Hwy, Downtown Columbia (Between US 76 and SH 555, and Between 1-26 and 1-77)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Pedestrian improvements ($160,000 per lane mile of sidewalk)
- Transit Service enhancement/Service Expansion ($500,000 per bus, $7,000 per bus stop) and Queue Jumper technology
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)

Key Intersections:

US 21/US 176/ US 321/Biossom St/Charleston Hwy at Harden St, Saluda Ave, Devine St, Frink St

1063 - US 321/Huger St, Downtown Columbia (Between 1-126 and Catawba St)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Intersection turn restrictions/One-way Pairs
- Signal Coordination ($2,500 per signal for retiming)

- Traffic Surveillance and control systems
- Driveway control
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

US 321/Huger St at Hampton St, Gervais St, Blossom St

1065 - US 321/US 21/Eimwood Ave, Downtown Columbia (Between Gadsden Stand SH 277)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Intersection turn restrictions/One-way Pairs
- Signal Coordination ($2,500 per signal for retiming)
- Traffic Surveillance and control systems
- Driveway control
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

US 321/US 21/Eimwood Ave at Assembly St, Main St, Bull St

1069 - US 378/Columbia Ave/Augusta Hwy/Sunset Blvd/Gervais St (in Downtown Columbia)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)

- Key intersection improvements ($75,000 per turn lane)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Intersection turn restrictions/One-way Pairs
- Signal Coordination ($2,500 per signal for retiming)
- Driveway control
- Median control
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

US 378 at Huger St, Assembly St, 1-26

1069 - US 378/Columbia Ave/Augusta Hwy/Sunset Blvd/Gervais St (in Downtown Lexington, between SC 6 and 1-20)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Signal Coordination ($2,500 per signal for retiming)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Driveway control
- Median control
- Frontage roads/Interparcel Connectivity ($1 ,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

US 378 at Old Cherokee Rd, SC 6, US 1

Time-of-day profiles indicate congestion may occur during the lunch hour in addition to the AM and PM peak hours.

1071 - US 378/US 1/Millwood Ave/Two Notch Rd (in Downtown Columbia, between SH 12 and Maple St)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Transit Service enhancement/Service Expansion ($500,000 per bus, $7,000 per bus stop) or commuter express buses and/or queue jumper technology
- Intersection turn restrictions/One-way Pairs
- Signal Coordination ($2,500 per signal for retiming)
- Driveway control
- Median control
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)

Key Intersections:

US 1 at Forest Dr and Gervais St

1073 - US 1/SC 12/Jarvis Klapman Blvd/Main St/Augusta Rd, Downtown Lexington (Between US 378 and SC 6, and the eastside of 1-20)

Congestion Mitigation Strategies:

- Transportation demand management (vanpool, ride matching, telecommuting)
- Key intersection improvements ($75,000 per turn lane)
- Bus Circulator ($500,000 per bus, $7,000 per bus stop)
- Signal Coordination ($2,500 per signal for retiming)
- Frontage roads/Interparcel Connectivity ($1,000,000 per lane mile)
- Deceleration Lanes ($50,000 per turn lane)
- Arterial Lanes ($1,825,000 per lane mile)

Key Intersections:

US 1 at US 378, SC 6, 1-20

Time-of-day profiles indicate congestion may occur during the lunch hour in addition to the AM and PM peak hour.

1077 - US 76/Devine St/Garners Ferry Rd at 1-77 and SC 16

Congestion Mitigation Strategies

- Interchange Improvements
- Key intersection improvements ($75,000 per turn lane)

Key Intersections:

US 76 at SC 16 and 1-77

1081 - SC 12 Jarvis Klapman Boulevard

Congestion Mitigation Strategies:

- Commuter oriented transit service (express)
- Exclusive ROW for transit service
- Transit Marketing
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Transit Park & ride facilities

Key Intersections:

Augusta Highway US 1, Sunset Boulevard US 378 / Columbia Farms / pedestrian crossing

1083 - SC 60 Lake Murray Boulevard

Congestion Mitigation Strategies:

- Commuter oriented Transit service (express)
- Transit Park & ride facilities
- Transit Marketing
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Pedestrian grade separation between major trip generators

- Signal Coordination
- Access Management (driveway control)

Key Intersections:

St Andrew Road S-36, S. Lake Drive SC 6

1087 - SC 35 12th Street

Congestion Mitigation Strategies:

- Transit service expansion
- Transit marketing
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Signal Coordination
- Traffic surveillance and control systems
- Frontage road / interparcel connectivity ($1,000,000 per lane mile)

Key Intersections:

SC 12 Jarvis Klapman Boulevard, SC 2 Frink St, Saxe Gotha Road S-1032– Cayce Tennis Center.

1093 - S-31 Bush River Rd

Congestion Mitigation Strategies:

- Transit park and ride facilities
- Transit Marketing
- Service enhancement
- Sidewalks 5'($160,000 per mile of sidewalk)
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Signal Coordination

Key Intersections:

Broad River Road US 176, St. Andrew Road S-36, N Lake Dr SC 6

1105 - SC 555 Harden Street

Congestion Mitigation Strategies:

- Bus connectivity to nearby transit routes
- Transit service enhancement/service expansions
- Transit information system / Intelligent bus stops
- Transit Marketing
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Signal Coordination

Key Intersections:

Taylor Street SC 12 (Benedict College, Allen University), Gervais Street US 1 , Devine Street US 21.

1117 - S-63 Alpine Road

Congestion Mitigation Strategies:

- Transit park and ride facilities
- Transit service expansion/enhancements
- Transportation demand management (vanpool, ride sharing, telecommuting)
- Signal Coordination ($2,500 per signal for retiming)
- Sidewalks and streetscaping ($160,000 per mile of sidewalk)

Key Intersections:

N Kings Street / N Trenholm Rd Extension, Percival Road SC 12, Two Notch Road US 1, Polo Road S-2214, Faraway Drive

1121 - SC 555 Farrow Rd

Congestion Mitigation Strategies:

- Transit service enhancements/service expansion
- Transit Marketing
- Arterial lanes ($1,825,000 per lane mile)
- Sidewalks 5' ($160,000 per mile of sidewalk)
- Bicycle facilities /Storage systems

Key Intersections:

Hardscrabble Road S-83, Parklane Road S-1036, Beltline Boulevard SC 16

1125 - S-59 Blythewood Road

Congestion Mitigation Strategies:

- Intersection widening/channelization and turn lanes
- Signal coordination/consolidation
- Access Management (driveway controls)
- Arterial lanes ($1,825,000 per lane mile)

Key Intersections:

Add turn lanes at key intersections: Muller Road, University Club Drive, Main Street / Wilson Road US 21, Winnsboro Road US 321

4. TRANSIT SYSTEM

This chapter describes the existing transit system in the Central Midlands region, the statutory requirement for analyzing the transit system as a mechanism for reducing congestion, the minimum performance measures for transit analysis, and CMP transit network reporting requirements. The purpose of the CMP transit component is to make the most effective use of bus and rail transit services as alternatives to the automobile, thereby alleviating congestion on the congestion network and improving regional mobility.

4.1. Statutory Requirement

CMP statute requires each CMP to include a performance element containing measures that evaluate current and future multimodal system performance for the movement of people and goods. The transit system performance measures discussed meet the requirements for this performance element.

4.2. Transit System Provider(s)

While the Central Midlands region is known for its extensive highway and roadway system, there is also a public transportation system provided by the Central Midlands Regional Transit Authority (The Comet). This system includes:

- **Fixed-Route Bus Service:** The Comet operates over 41 buses and has about 5,115 average weekday unlinked trips. The Columbia urbanized area is 380 square miles. The Comet has a service area of approximately 129 square miles. A total of 28 buses are used to provide the fixed route bus service.

- **Specialized Transportation Service:** Characterized as demand responsive, these systems provide curb-to-curb service, generally requiring a minimum advance notice. Over five (5) local systems currently provide service either to the general public or to specialized service groups, such as the elderly and persons with disabilities. In addition to local dial-a-ride services, several local churches provide transportation to a designated service area.

4.3. Purpose

CMP Statue requires the development of transit performance measures for the purpose of monitoring transit performance. The purpose of monitoring the transit system is to gauge the effectiveness of transit in relieving congestion on the congestion network and to improve regional mobility. Transit monitoring also serves as a planning tool to identify potential gaps in the current transit service as well as to identify opportunities to make transit a more effective traffic mitigation strategy.

As described earlier in this chapter, there is one primary public transit provider that is providing a mixture of local, regional and specialized service transportation. However, for purposes of CMP analysis, a subset of transit services has been established which can be effectively monitored and used to analyze its traffic congestion on the congested network. This subset of transit services is referred to as the CMP Transit Monitoring Network.

The Comet will also be able to use results of this transit analysis in developing recommended mitigation measures to address impacts of development projects on the transit system.

4.4. CMP Transit Monitoring Network

The CMP Transit Monitoring Network includes routes that provide services on the congested network. All of the Comet's transit routes are shown in Figure 4.1. The seven (7) high capacity transit routes as shown in Figure 2.2 will be included in the congested network.

There are limited passenger rail services in the Central Midlands region. The only passenger rail services in the Central Midlands region is provided by Amtrak. This service is often provided during a low congestion period which is between 3 a.m. to 6 a.m. The COATS MPO is currently coordinating with SCDOT on potential future rail service.

The transit network will be reviewed as part of the CMP update. Modifications will be necessary to reflect the expansion of the transit system, new transit routes, route changes, or deletions.

4.5. Minimum CMP Transit Performance Measures

As required by statute, the CMP requires transit performance measurements for the ridership and on time performance, and for the coordination of transit service provided by separate operators. The CMP Transit Monitoring Network performance measures are as follows:

- **Transit Ridership:** Analysis of current and historic transit ridership data for high capacity routes. This measure will rely on data reported in the National Transit Database (NTD) and ridership information provided by the Comet. Regional and System Level performance goals include increasing transit ridership on high capacity routes and reducing crowding via increased frequencies as needed.

- **Transit On Time Performance:** Analysis of on time performance for high capacity routes. This measure will rely on data reported in the National Transit Database (NTD) and ridership information provided by the Comet. Regional and System Level performance goals include increasing the percentage of buses arriving on-time regionally.

4.6. CMP Transit Network Reporting and Monitoring Requirements.

To effectively monitor the congested network, the COATS MPO will require the collection of transit service and ridership data for each transit line in the network. The Comet will be requested to provide that information on an annual basis.

4.7. CMP Transit Analysis

As discussed in the first chapter the primary performance measures adopted by the COATS MPO to analyze high capacity transit corridors include transit ridership and on-time performance data. Analysis of these performance measures will rely on data reported in the National Transit Database (NTD) and ridership information provided by the regional transit agency. The primary public transit provider in the COATS MPO is the Central Midlands Regional Transit Authority (aka The Comet). The Central Midlands Regional Transit Authority (CMRTA) provides fixed route service within Richland County and portions of Lexington County. Much of this service is provided within the City of Columbia with operations reaching into the communities of Cayce, West Columbia, Forest Acres, Arcadia Lakes, Springdale, St. Andrews area, and Harbison area. CMRTA current routes are shown in Figure 4.1. In FY 2013, the CMRTA provided 1,322,052 passenger trips, with 93,644 revenue vehicle hours. CMRTA recorded approximately 1,262,351 revenue vehicle miles.

With the passage of the penny sales tax in Richland County, the Comet has developed a transit vision which proposes a new direction and approach to public transportation in the Midlands that will create a more innovative, connected and accessible system to facilitate a better quality of life for all Richland County citizens. A primary component of this vision includes the development of high frequency service along high capacity corridors that will provide greater connectivity and added convenience for riders during peak hours so that they can get to work, school and retail in a more efficient manner. The Comet will also restructure service to begin serving neighborhoods with lower density routes with smaller buses to directly connect riders with the higher capacity transit corridors. This change will enhance efficiency, provide opportunity for increased ridership and better connect neighborhoods to the downtown business corridors.

With new technologies and improved infrastructure the CMRTA will create a more intelligent transit system. Some of these measures include implementing the automated vehicle locator (AVL) and enhanced GPS tracking to provide real time arrival and departure information for riders so that they can more efficiently plan their trips using their smart phones or the redesigned CMRTA website. And the new smartcard fare payment technology will allow riders to quickly and easily recharge their transit passes at terminals to speed rider commutes. All of these innovations and service enhancements will enable a more robust, accessible service for the citizens of Richland County to live, to work and to play. Increased frequency, more coverage and greater connection will contribute to a higher quality of life for all. The planned high capacity and enhanced local routes that will be the focus of the CMP in future years include the following:

- Corridor #1: N. Main/Columbia College: Enhanced to 30 minute all day service, later evenings, enhanced weekend and restored Sunday service. Key residential and retail corridor with service to Columbia College and Eau Claire Community Center.

- Corridor #2: Palmetto Health Richland/Farrow Rd: Enhanced to 30 minute peak service, later evenings, enhanced weekend and restored Sunday service. Will use neighborhood and flex services on weekends to connect to other routes. Key access to Palmetto Health, SC Health Department and large state employment sites.

- Corridor #3: Two Notch Rd: 30 minute all day service with new Limited Stop Express route during peak periods to provide near 15 minute service during peak travel times; restore evenings, enhance weekends and restore Sundays. Will enhance a major retail, residential and employment corridor that will reduce auto traffic and connect with new services to the Village at Sandhill.

- Corridor #4: Forest Dr: Enhanced to 30 minute peak service, later evenings, enhanced weekend and restored Sundays. Possible Limited Stop Express to Ft. Jackson for support workers and families attending Army graduation ceremonies/events. Route supports a growing retail and residential corridor.

- Corridor #5: Assembly/Bluff Rd.: Enhanced to 30 minute peak service and 60 minute midday service. Will use neighborhood and flex services on weekends to connect to other routes. Enhances transportation for University of South Carolina students and workers to campus with increased access to special events at Williams-Brice Stadium and State Fairgrounds. High use by students from the University of South Carolina/Midlands Technical College will allow for 20 minute frequency all day.

- Corridor #6: Devine/Garner's Ferry: Enhanced service for the entire area, expanding to Greenlawn Ave. with 30 minute all day service. A new Hopkins Limited Stop Express route during peak periods will provide near 15 minute service during peak travel times. Restores evenings and Saturdays with Sunday neighborhood service and flex services. Enhanced service to Midlands Technical College, Benedict College housing, Veterans' Administration Hospital and Shandon community.

- Corridor #7: Broad River/Harbison: Enhanced with 30 minute peak frequencies; enhanced evening and weekend service, including Sundays. Expanded frequency to Dutch Square Mall, state employment centers and Harbison Rd. retail/employment sites. High ridership builds toward a downtown to shopping weekend express service.

- Downtown Circulator: This high frequency service into downtown Columbia creates the opportunity for a downtown circulator at a much lower cost. As buses arrive downtown, they will depart the new transit center and "orbit" downtown to connect the north and south ends to include Bull and Assembly streets. Quick access to downtown high rises, University of South Carolina campus and The Vista without having to transfer routes to get there.

Operational improvements in service will be enhanced by the planned implementation of some of the following Transit based ITS solutions:

- CMRTA will take the next step in technology by adding automated vehicle location (AVL) to allow real time arrival and departure information for customers at stops or on smart phones.
- GPS tracking on buses can help trigger lights to turn green on major corridors helping push the buses through clogged city traffic and speed up commute times.
- New technology will text passengers when their buses will arrive (with userdefined settings) and even let them track the closest bus while waiting on the street corner and use web based trip planning on the new CMRTA website.
- Smartphone apps for visitors can link them to transit and QRT/bar code technology around town can tell tourists about routes and services on-the-go.
- Smartcard fare payment technology will allow customers to ride with the tap of their card and can recharge their transit passes at terminals (similar to an ATM). This also provides real-time bus arrival information, general passenger information and advertising revenue for the system.

The following figures provide an analysis of the most recent trends in ridership, annual revenue vehicle miles, annual revenue vehicle hours, operating expense, and unlinked passenger per revenue vehicle miles.

Figure 4.1: CMRTA Transit routes

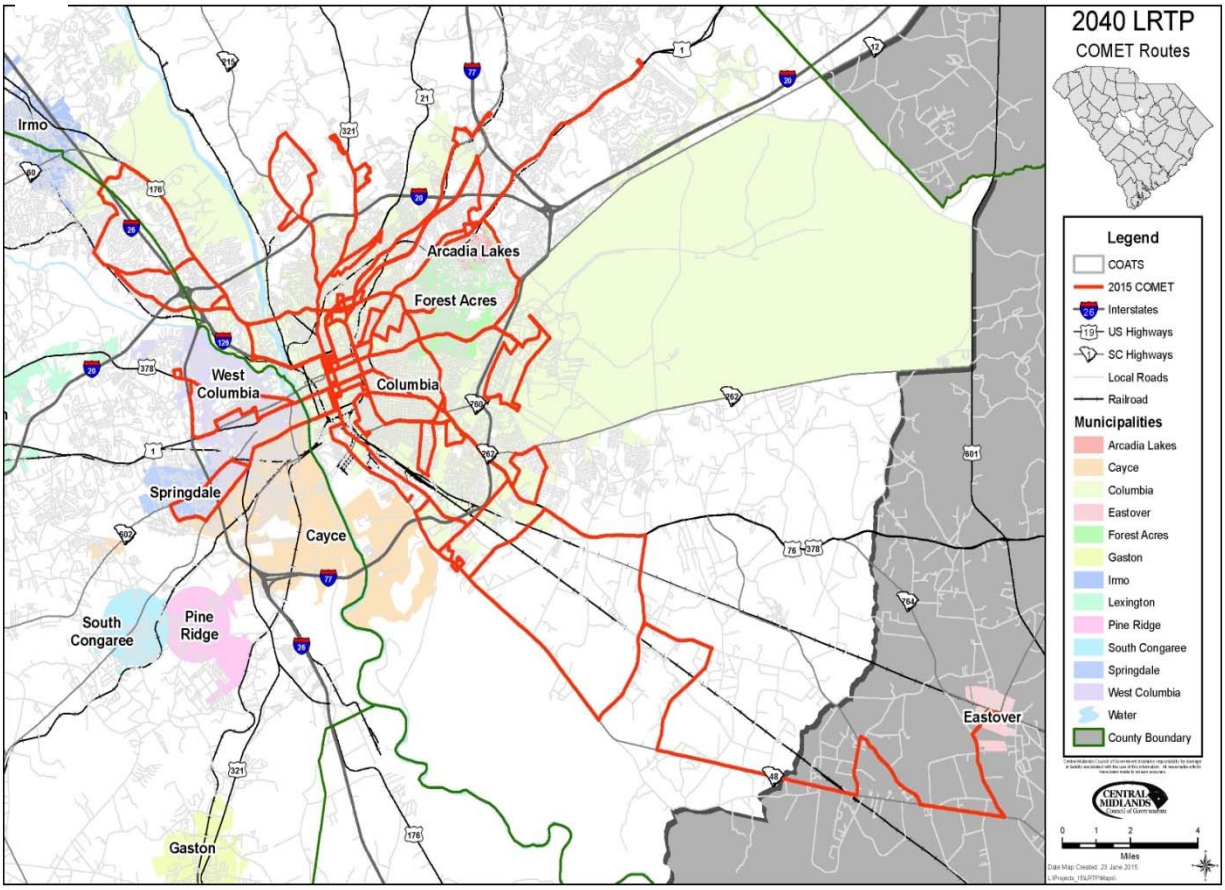


Figure 4.2: CMRTA Ridership

Service	2010	2011	2012	2013
Fixed Route	1,885,962	1,781,758	1,568,790	1,262,053
Demand Response	73,288	72,119	57,209	59,999
Total	1,959,250	1,853,877	1,625,999	1,322,052

Figure 4.3: CMRTA Ridership Trends

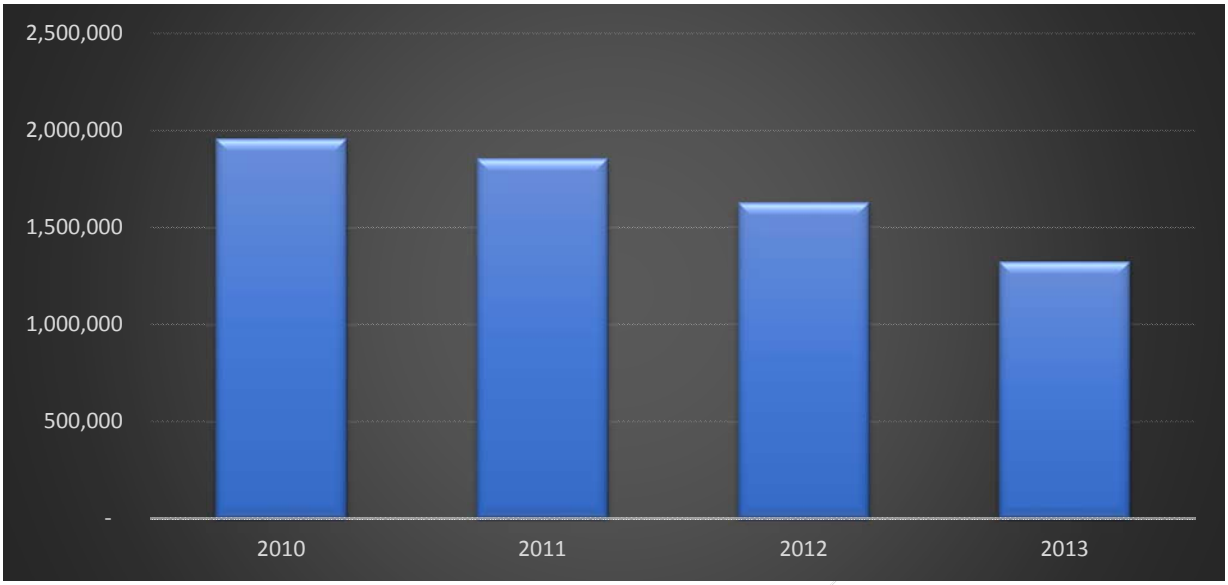


Figure 4.4: CMRTA Annual Vehicle Revenue Miles

Service	2010	2011	2012	2013
Fixed Route	1,470,225	1,412,624	1,148,398	773,201
Demand Response	578,140	538,656	533,549	489,150
Total	2,048,365	1,951,280	1,681,947	1,262,351

Figure 4.5: CMRTA Annual Vehicle Revenue Miles

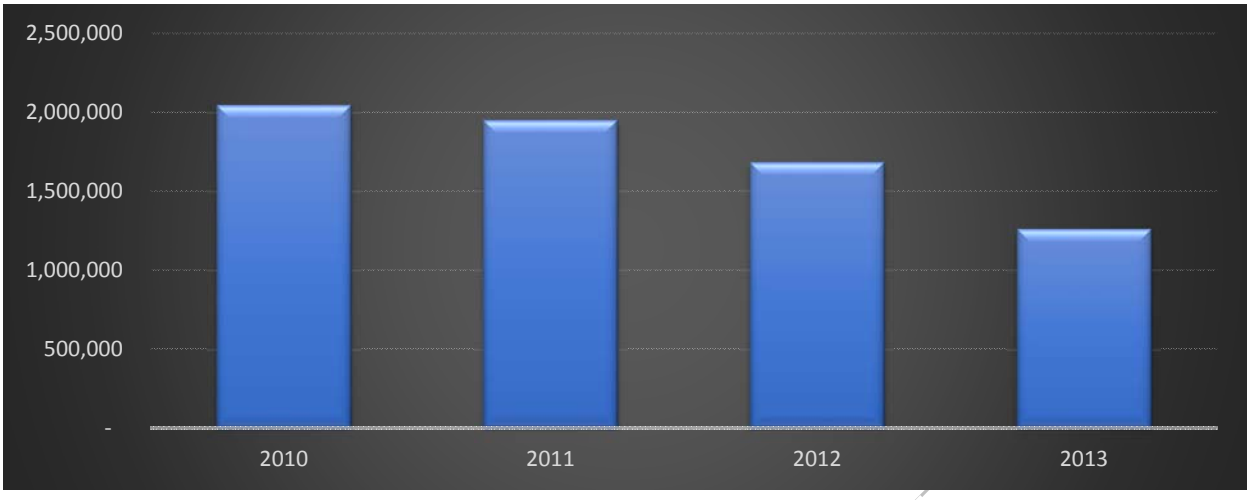


Figure 4.6: CMRTA Annual Revenue Vehicle Hours

Service	2010	2011	2012	2013
Fixed Route	117,070	110,878	95,280	66,679
Demand Response	33,412	32,200	25,408	26,965
Total	150,482	143,078	120,688	93,644

Figure 4.7: CMRTA Annual Revenue Vehicle Hours

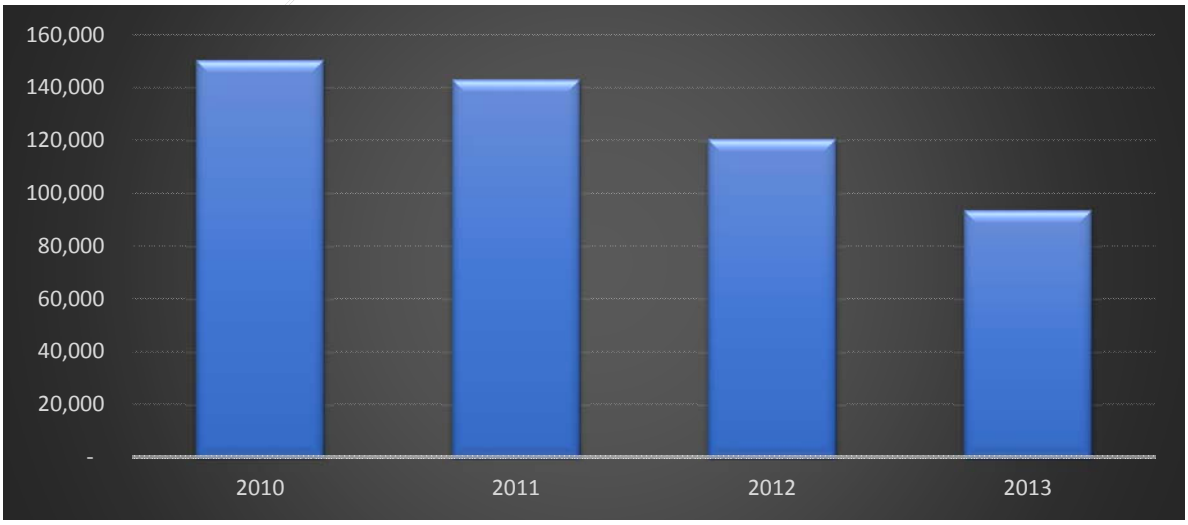
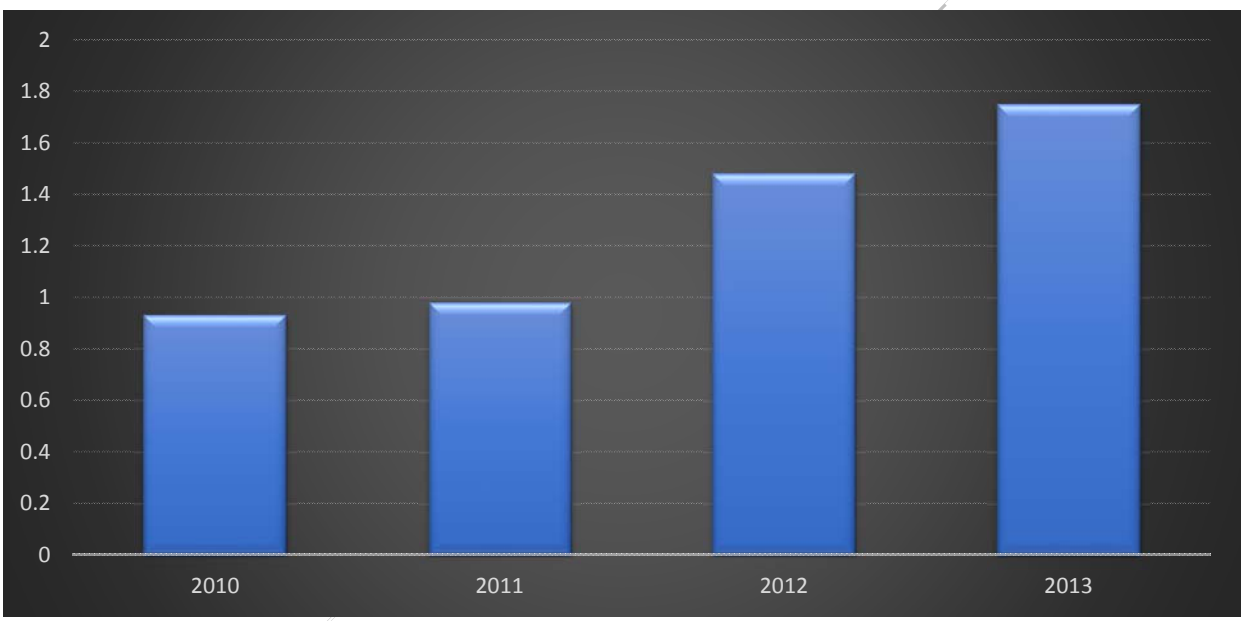


Figure 4.8: CMRTA Unlinked Passenger trips Per Vehicle revenue Miles

Service	2010	2011	2012	2013
Fixed Route	1.28	1.26	1.37	1.63
Demand Response	0.13	0.13	0.11	0.12
Total	0.93	0.98	1.48	1.75

Figure 4.9: CMRTA Unlinked Passenger trip Per Vehicle revenue Miles



4.8 Transit Coordination In Local Jurisdiction EIR Process

Transportation Demand Management practices that affect transit operators must be consulted regarding the potential impacts of development projects on transit services. All development projects/programs for which an Environmental Impact Report (EIR) will be prepared are required to consult with the affected transit operator(s) and to incorporate an analysis of transit impacts in the EIR. This responsibility strengthens the existing link between the development process and transportation planning.

In addition, jurisdictions are encouraged to consult existing transit friendly design standards available from such sources as The Comet, South Carolina Department of Transportation, and the American Public Transit Association, during the early design stages.

APPENDIX A: INDIVIDUAL CMP ROADWAY COORIDOR ASSESSMENTS

A1. Corridor Name: Clemson Rd / Killian Rd

Corridor ID: 1001

Route: S-52

Start: Percival Rd SC 16 (mm- 0)

End: Wilson Rd US 21 (mm- 11.11)

County: Richland

Functional Class: 3 Minor Arterial, 2 Principal Arterial

2040 LRTP Project Ranking: 16

Figure A1.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1001	440	S-52	CLEMSON RD		12,700	25,000	26,000	55,539	5	45	2	29200	0.77	C	1.65	F
1001	441	S-52	CLEMSON RD	6,100	13,600	28,500	29,000	61,645	5	45	2	14600	0.86	C	1.83	F
1001	442	S-52	CLEMSON RD		8,600	21,900	22,900	53,231	5	45	2	29200	0.68	B	1.58	F
1001	443	S-52	KILLIAN RD	1,400	2,600	11,600	14,000	22,733	2	45	3	10800	0.96	C	1.56	F
1001	444	S-52	CLEMSON RD	3,200	9,800	12,800	12,000	23,822	5	45	3	21600	0.48	B	0.96	C
1001	446	S-52	CLEMSON RD	3,200	9,800	19,100	18,200	44,891	5	45	2	29200	0.73	C	1.81	F
1001	448	S-52	KILLIAN RD/Clemson Rd			30,000	28,400	39,840	4	45	2	29200	0.85	C	1.19	E
1001	458	S-52	CLEMSON RD	3,200	9,800	12,800	31,000	43,178	2	45	2	29200	2.87	F	3.99	F

LOS E

LOS F

Figure A1.2: Average Corridor Speed

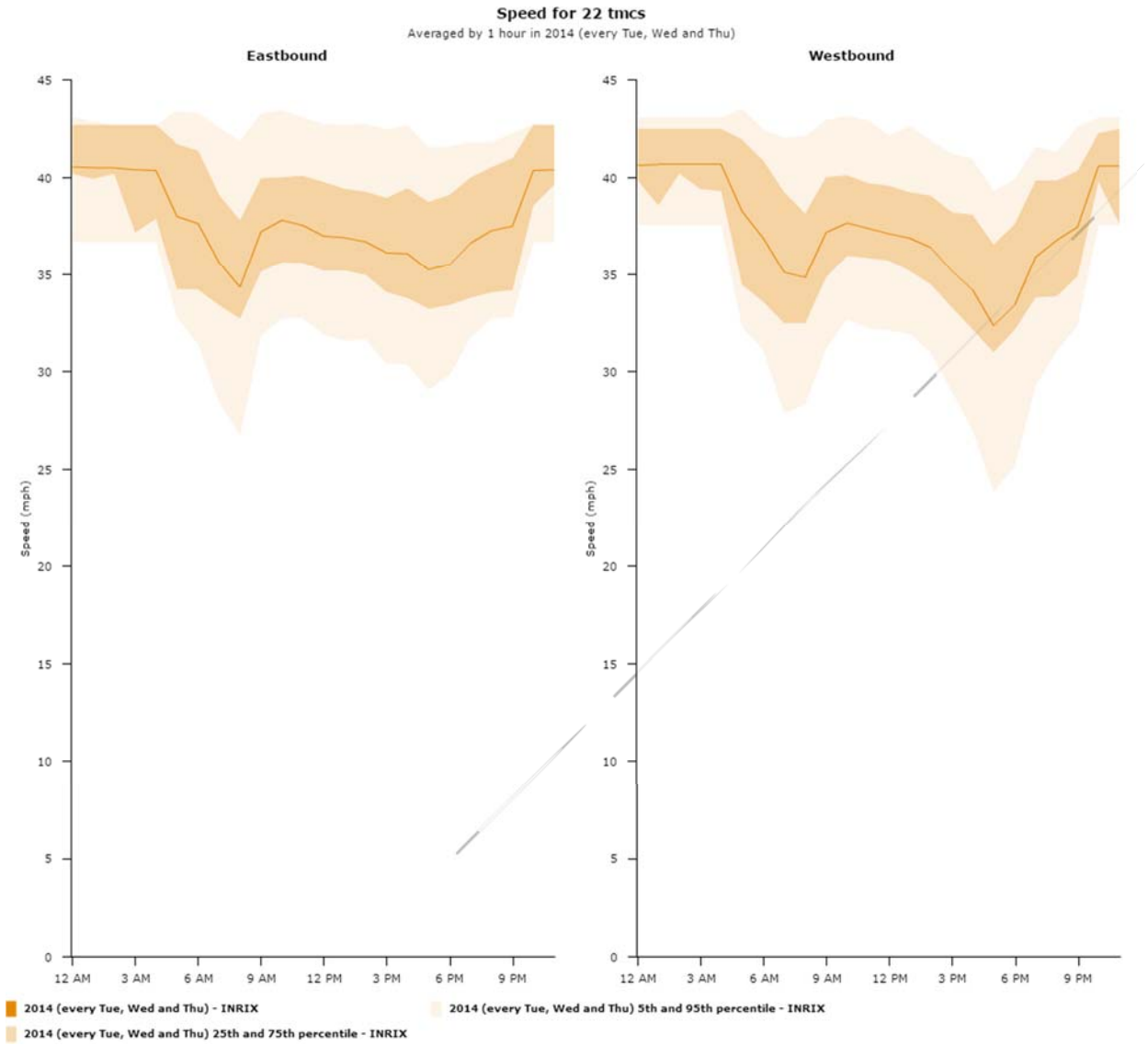


Figure A1.3: Corridor Congestion Index

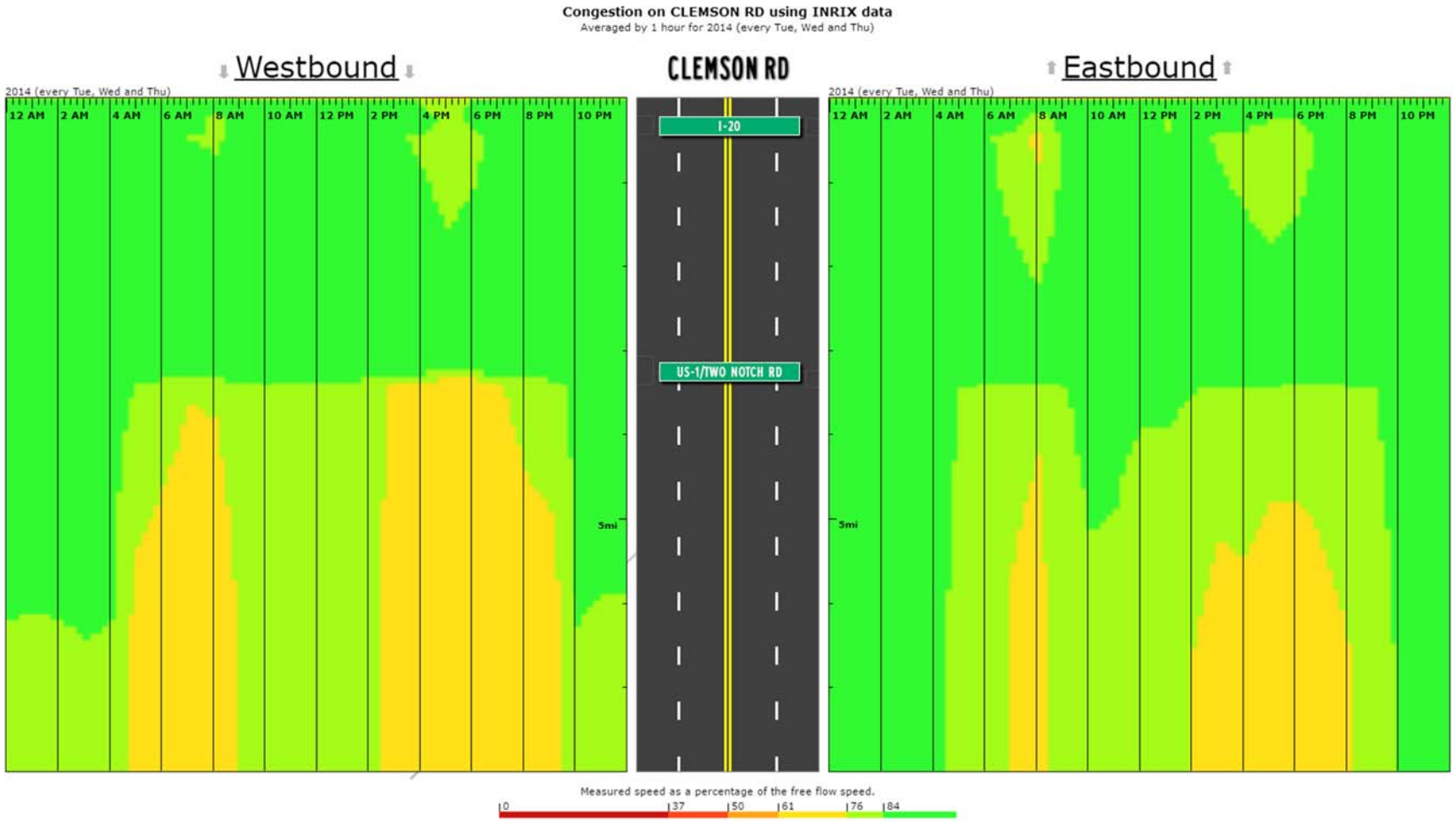


Figure A1.4: AM Peak Travel Time Index

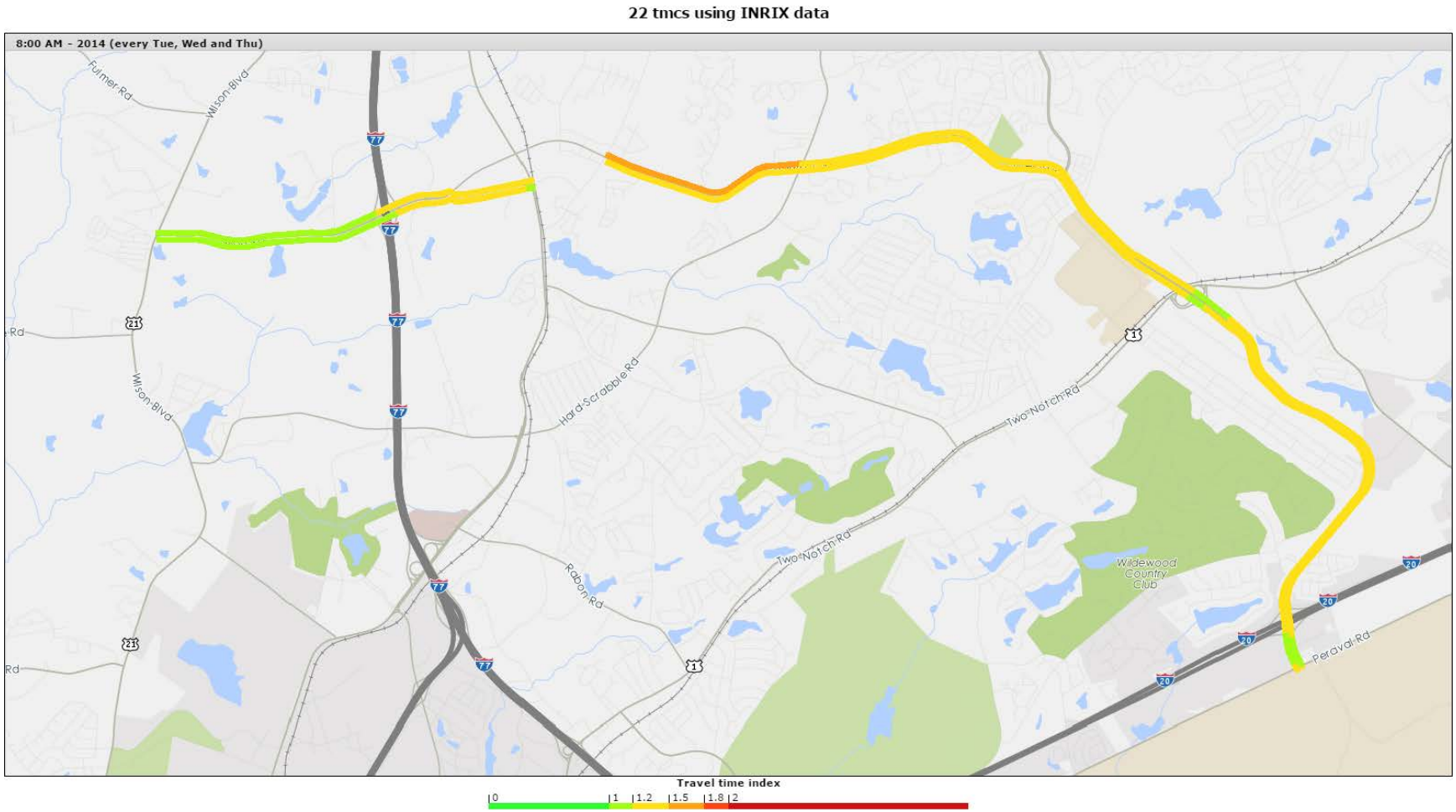
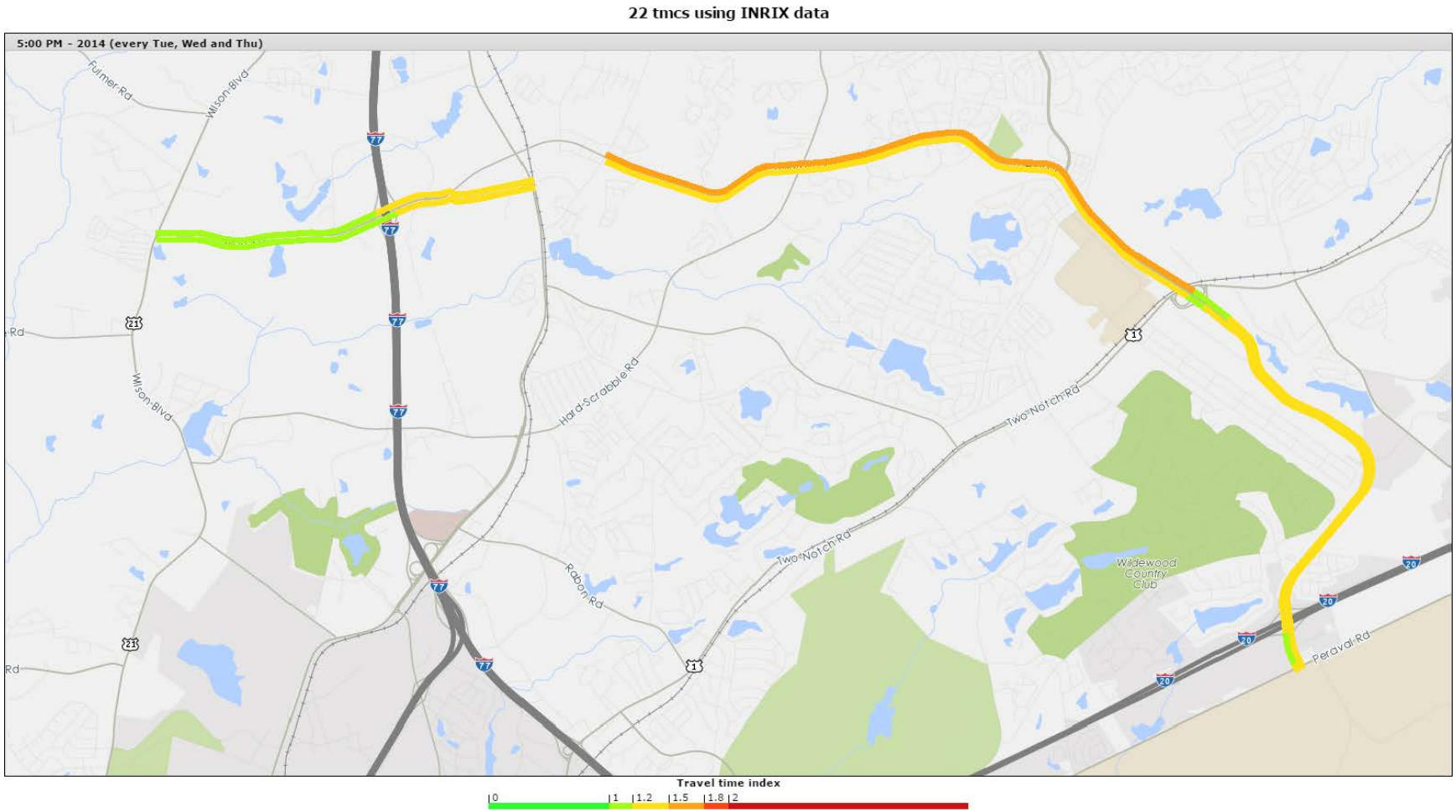


Figure A1.5: PM Peak Travel Time Index



A2. Corridor Name: Columbia Avenue

Corridor ID: 1003

Route: S-48

Start: I-26 (mm-3.61)

End: Chapin Rd US 76 (mm-0.49

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: 15

Figure A2.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1003	475	S-48	COLUMBIA AVE	5,200	8,300	8,700	9,100	14,729	2	35	3	10800	0.84	C	1.36	F
1003	477	S-48	COLUMBIA AVE	6,200	11,300	12,500	12,800	23,465	2	45	3	10800	1.19	E	2.17	F
1003	807	S-48	COLUMBIA AVE	800	1,500	1,900	2,100	3,665	2	45	9	8600	0.19	A	0.34	A

LOS E

LOS F

Figure A2.2: Average Corridor Speed

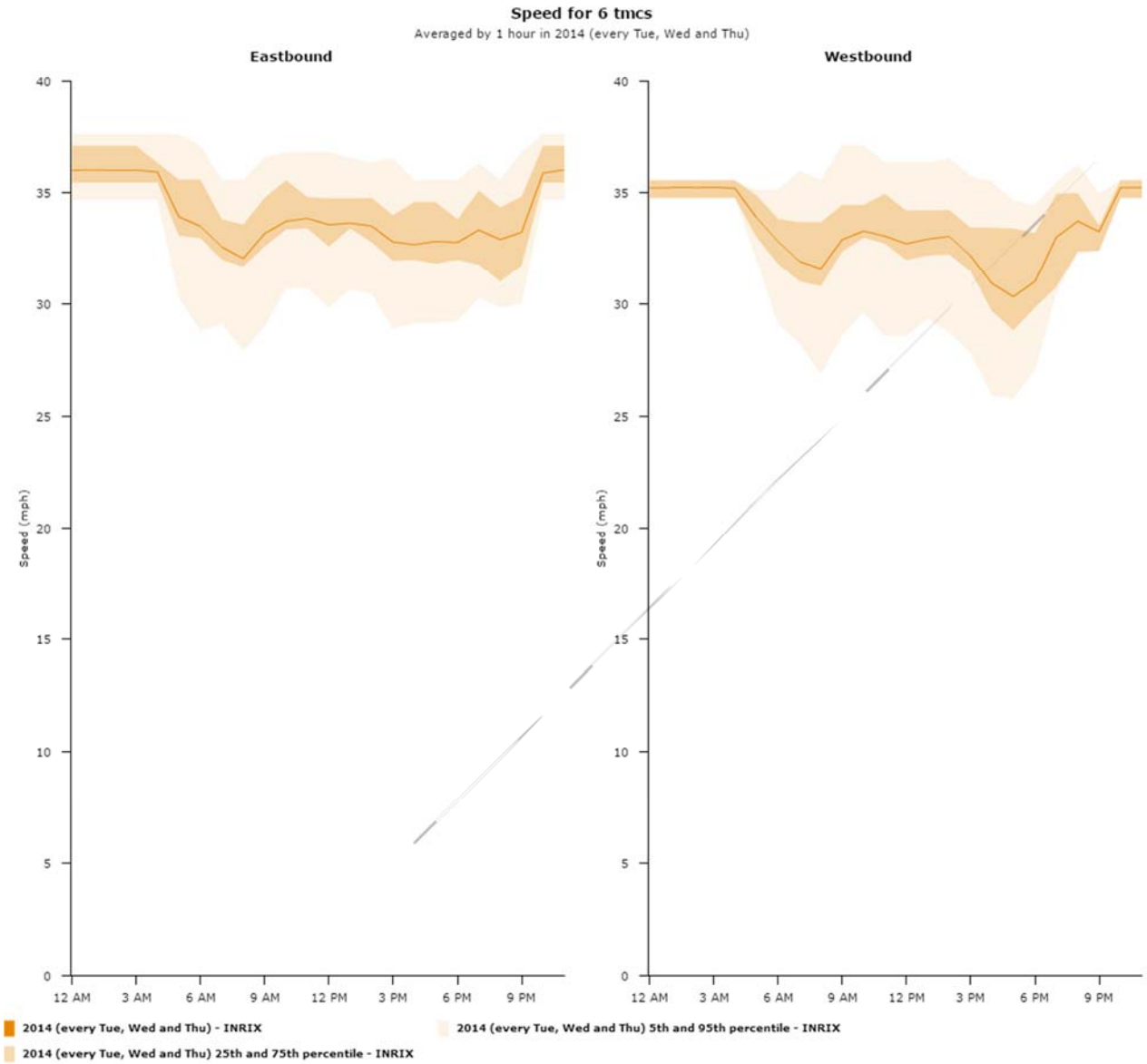


Figure A2.3: Corridor Congestion Index

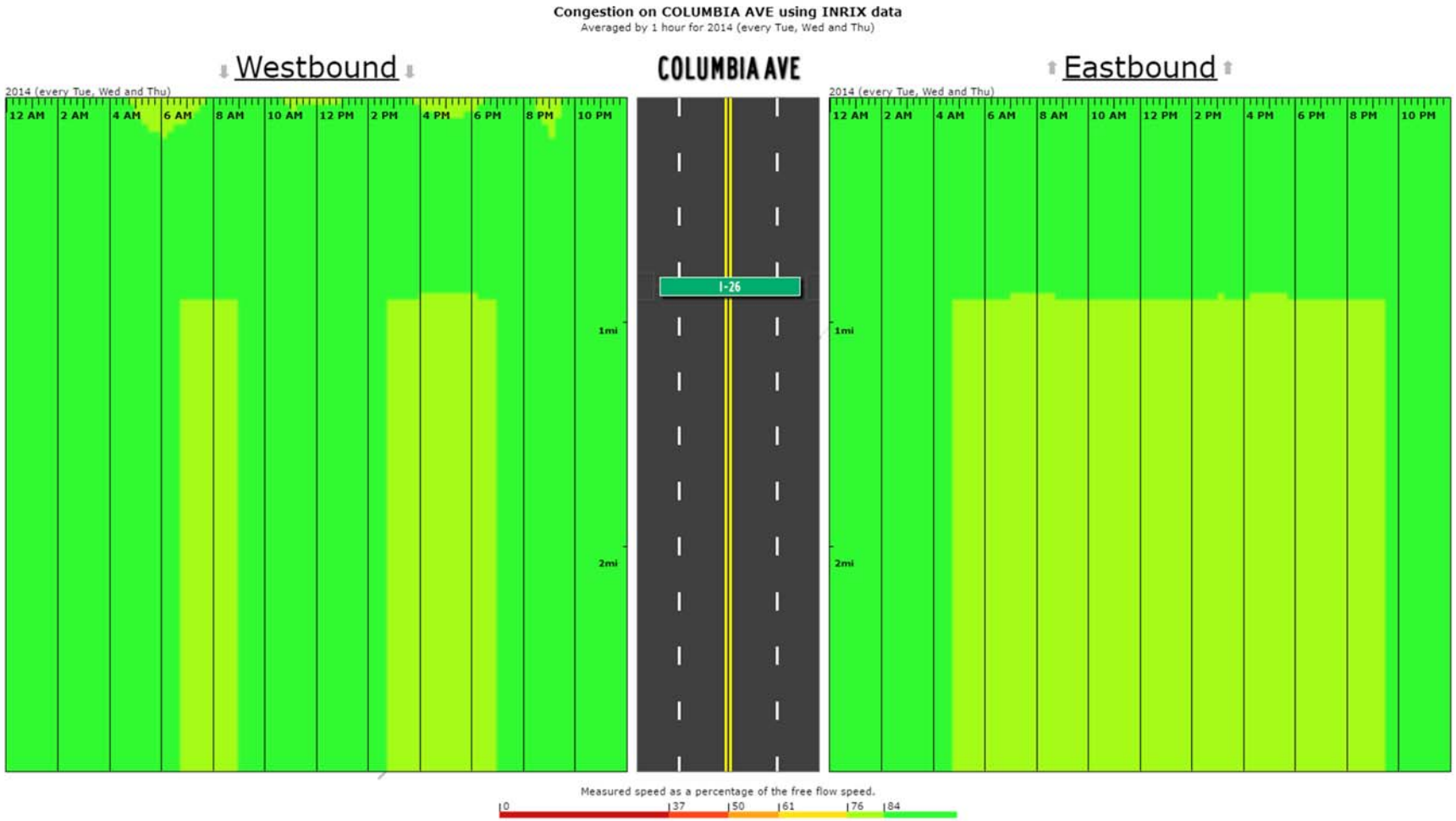
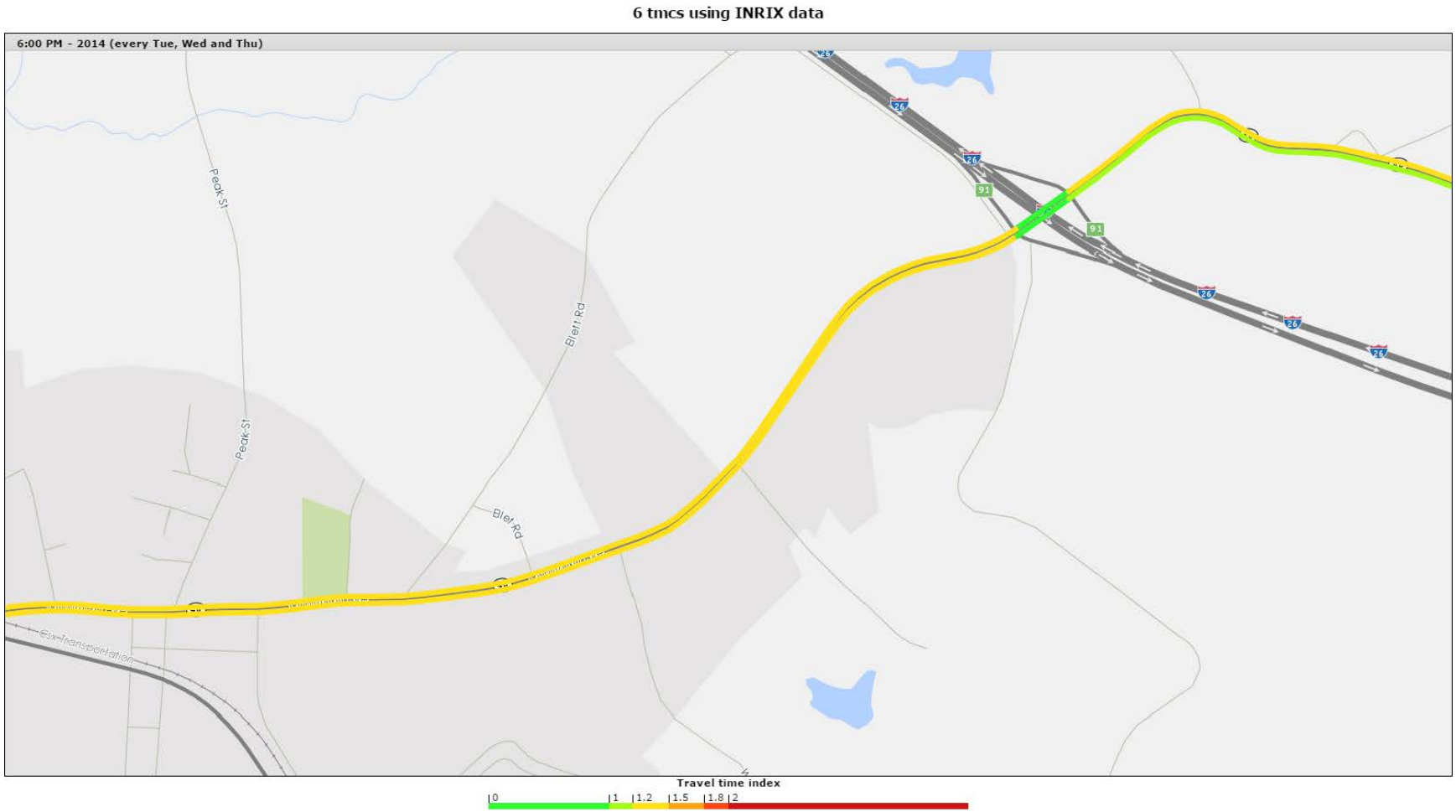


Figure A2.4: AM Peak Travel Time Index

Figure A2.5: PM Peak Travel Time Index



A3. Corridor Name: Hard Scrabble Rd

Corridor ID: 1011

Route: S-83

Start: Wilson Blvd US 21

End: Budkeef Rd

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: 5, 10

Figure A3.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1011	428	S-83	HARD SCRABBLE RD	1,600	8,600	14,800	16,100	38,264	2	45	3	10800	1.49	F	3.54	F
1011	430	S-83	HARD SCRABBLE RD	1,600	8,600	21,800	23,900	45,352	2	45	3	10800	2.21	F	4.2	F
1011	436	S-83	HARD SCRABBLE RD	1,600	8,600	4,200	5,300	11,404	2	45	3	10800	0.49	A	1.05	D
1011	437	S-83	HARD SCRABBLE RD	1,600	8,600	17,900	16,700	42,101	2	45	3	10800	1.54	F	3.9	F
1011	438	S-83	HARD SCRABBLE RD	7,200	15,100	21,000	20,700	38,939	2	45	3	10800	1.91	F	3.61	F
1011	439	S-83	HARD SCRABBLE RD	900	2,300	3,400	3,800	6,203	2	45	3	10800	0.35	A	0.57	B

LOS E

LOS F

Figure A3.2: Average Corridor Speed

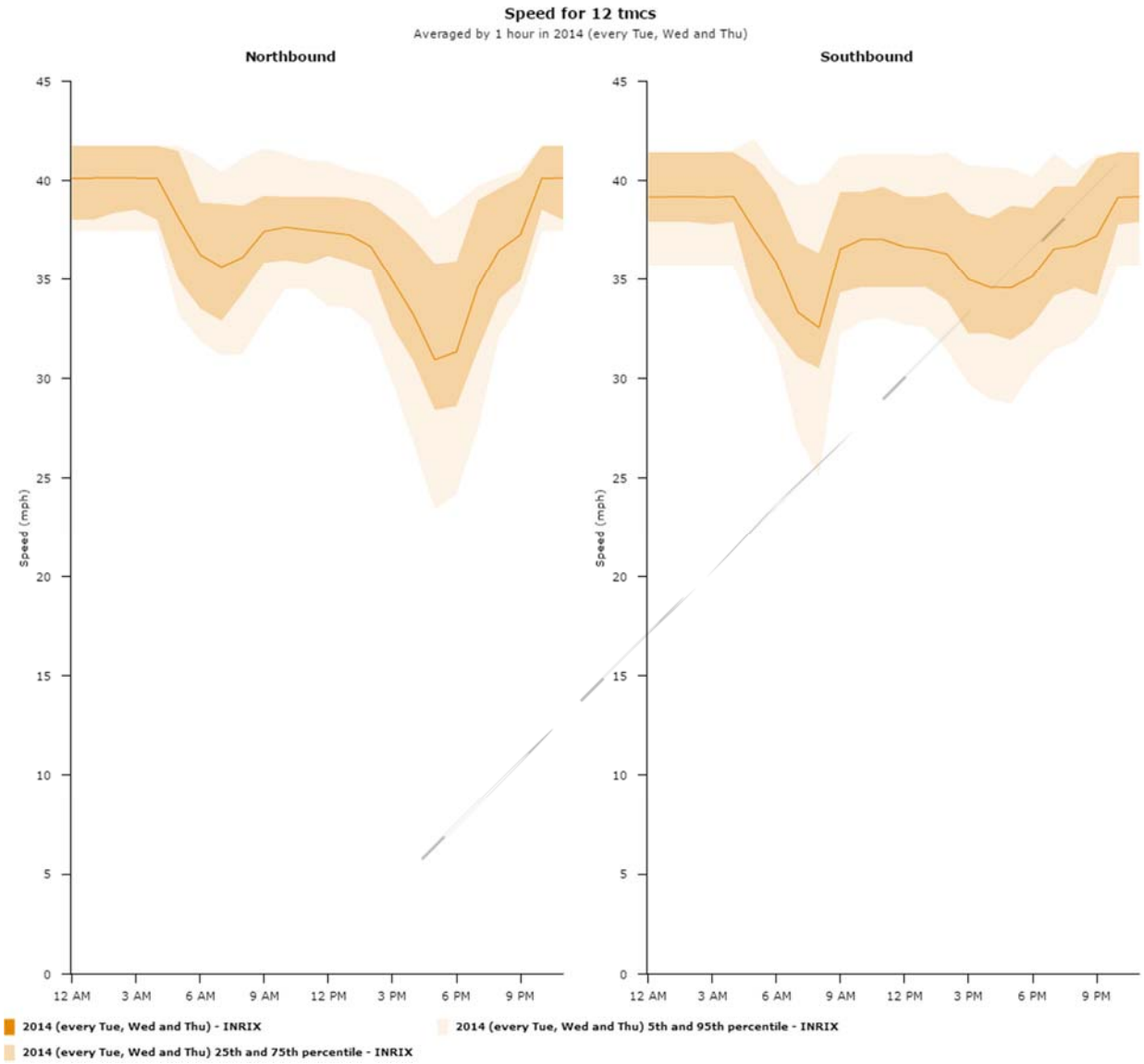


Figure A3.3: Corridor Congestion Index

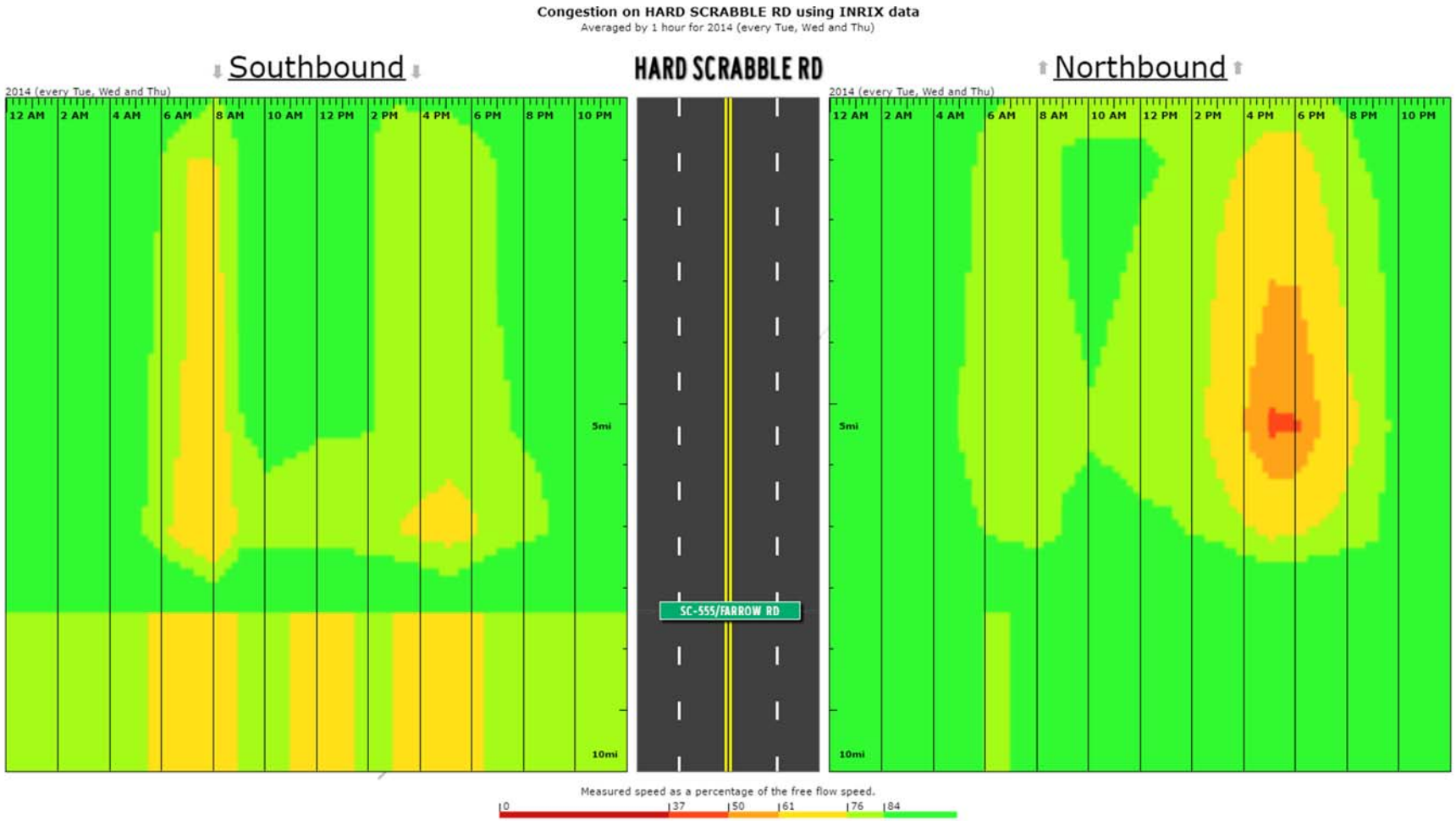


Figure A3.4: AM Peak Travel Time Index

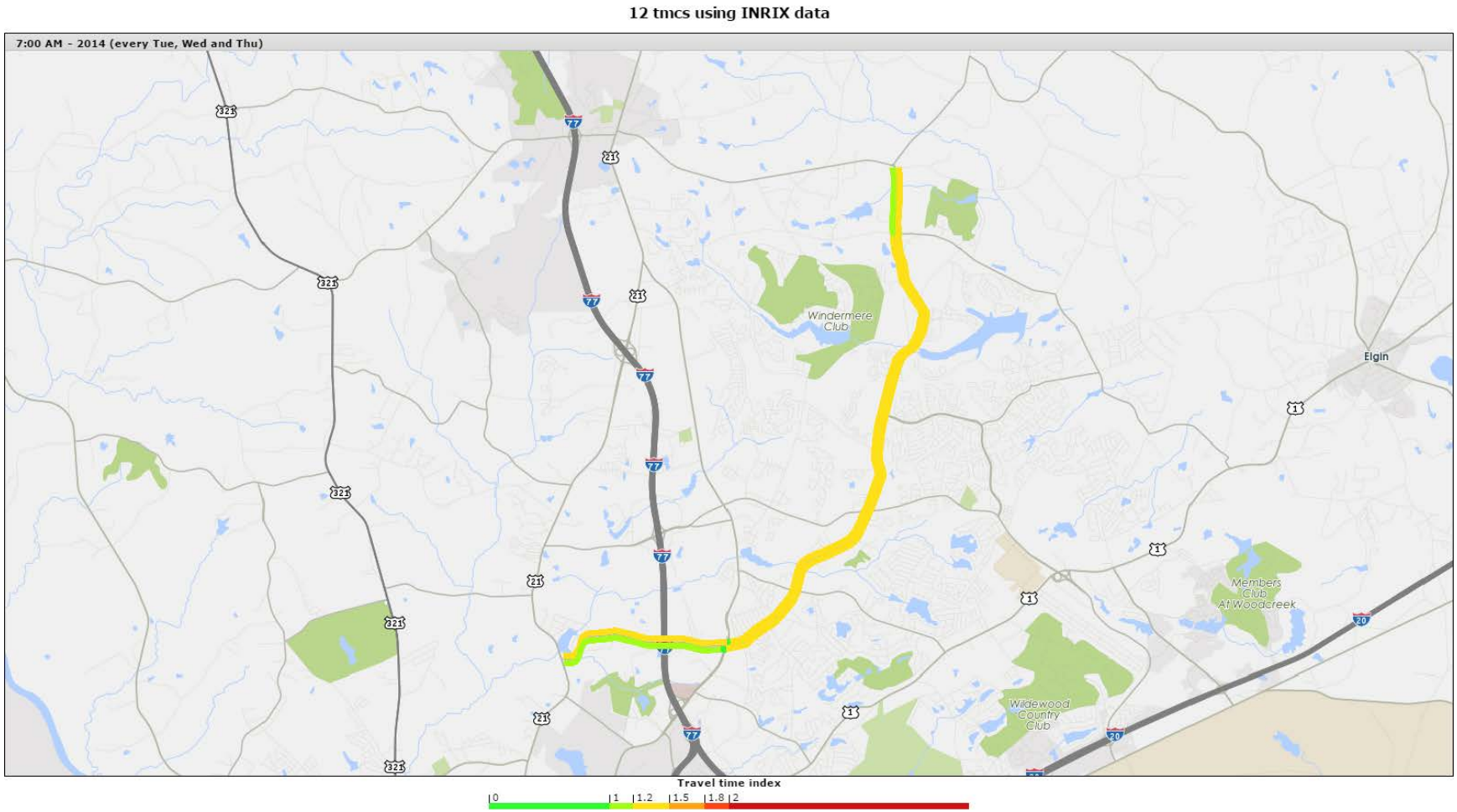
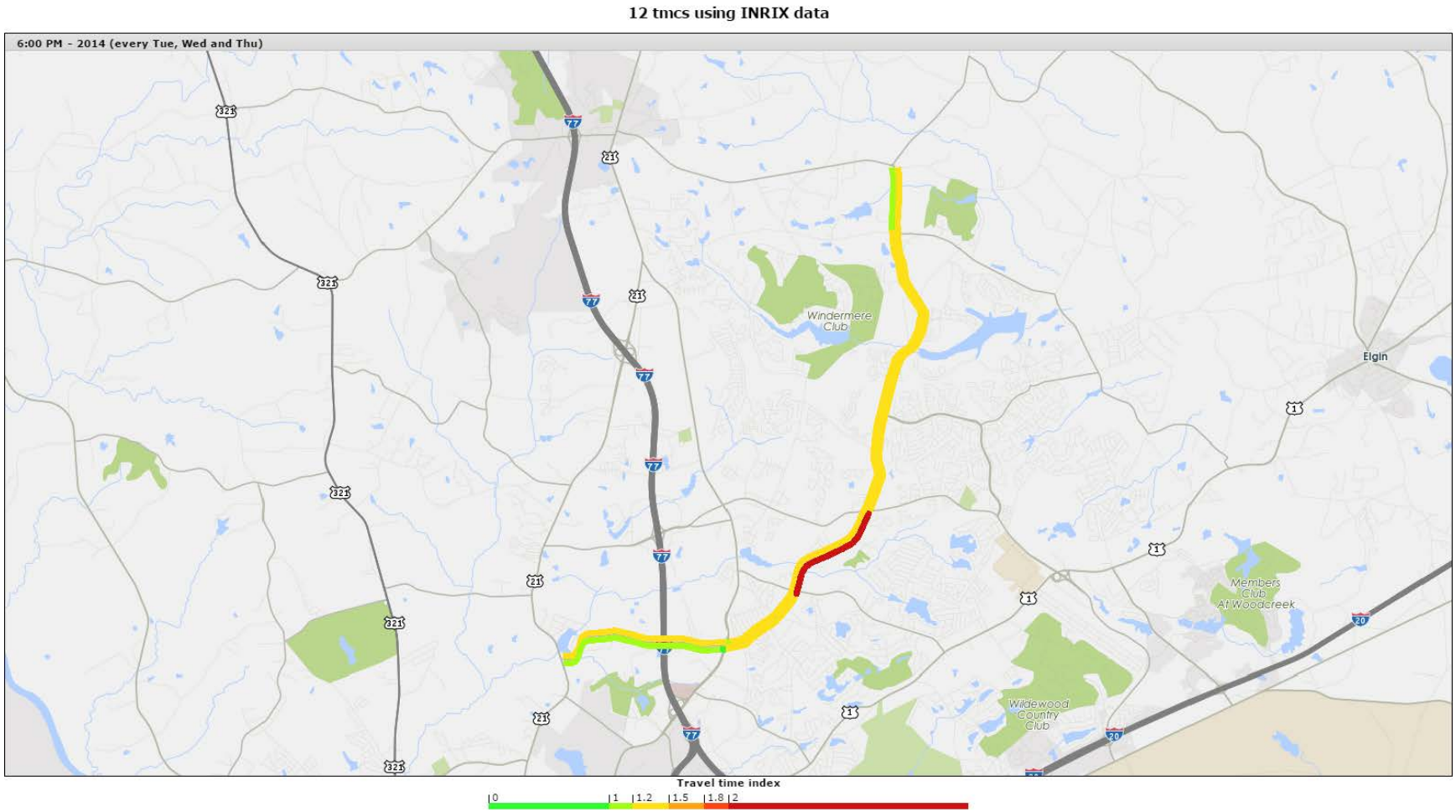


Figure A3.5: PM Peak Travel Time Index



A4. Corridor Name: Edmund Highway

Corridor ID: 1013

Route: SC 302

Start: US 178

End: Gator Rd S-647 (mm17.01)

County: Lexington

Functional Class: 3 Minor Arterial 2 Principal Arterial

2040 LRTP Project Ranking: 11, 18

Figure A4.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1013	275	SC302	EDMUND HWY	5,200	9,100	9,900	9,900	18,256	2	35	3	10800	0.91	C	1.69	F
1013	277	SC302	EDMUND HWY	4,100	7,000	9,400	8,600	14,603	2	55	3	10800	0.8	C	1.35	F
1013	279	SC302	EDMUND HWY	5,400	8,600	10,000	10,000	17,116	2	55	3	10800	0.93	C	1.58	F
1013	281	SC302	EDMUND HWY	11,400	12,800	13,600	14,200	18,511	5	55	3	21600	0.57	B	0.75	C
1013	283	SC302	EDMUND HWY	11,900	14,000	14,400	15,200	18,800	5	45	3	21600	0.61	B	0.76	C
1013	285	SC302	EDMUND HWY	29,987	33,700	31,700	33,900	41,644	5	35	2	29200	1.01	D	1.24	E
1013	287	SC302	EDMUND HWY	17,600	14,700	11,600	12,200	2,882	5	35	2	29200	0.36	B	0.09	A

LOS E

LOS F

Figure A4.2: Average Corridor Speed

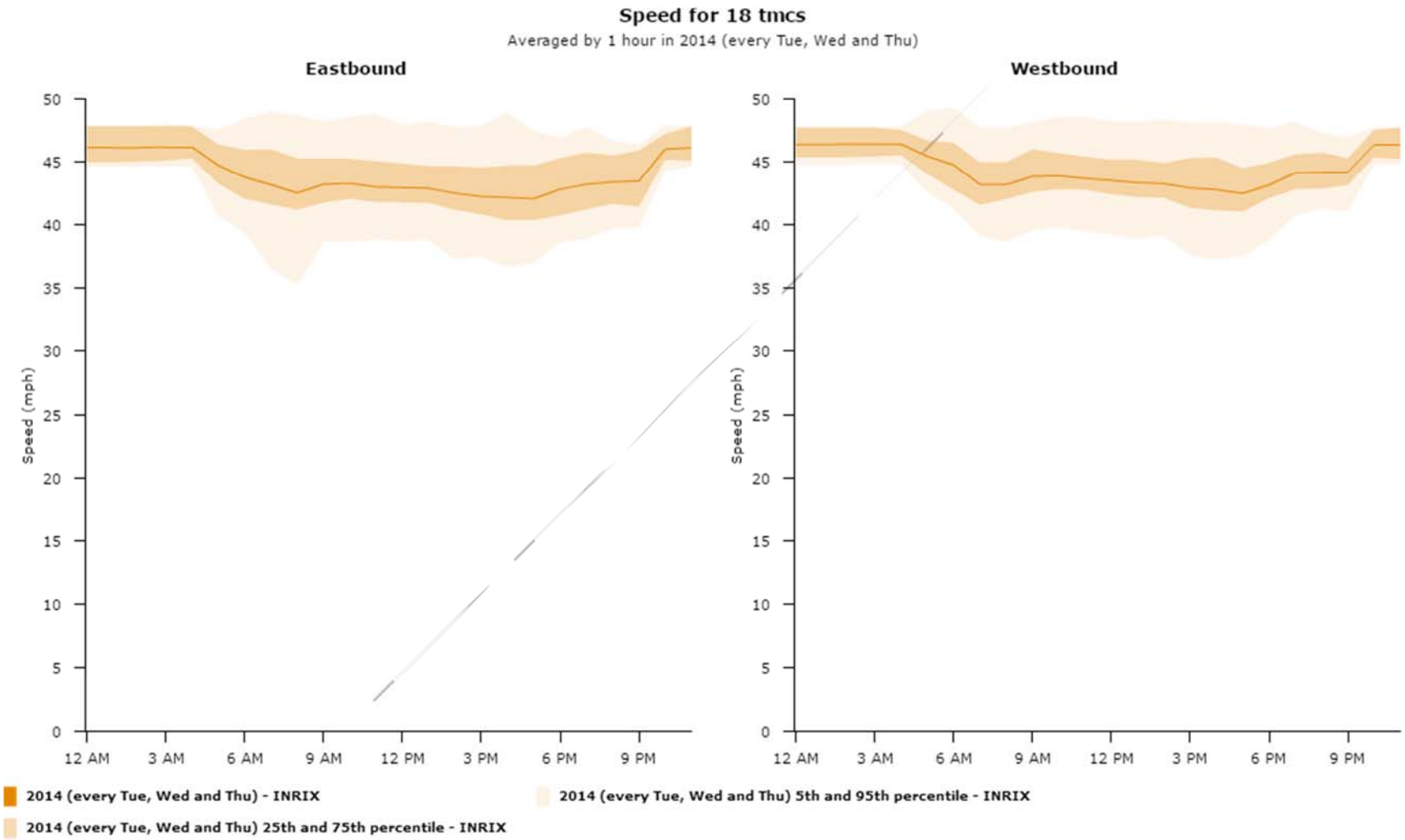


Figure A4.3: Corridor Congestion Index

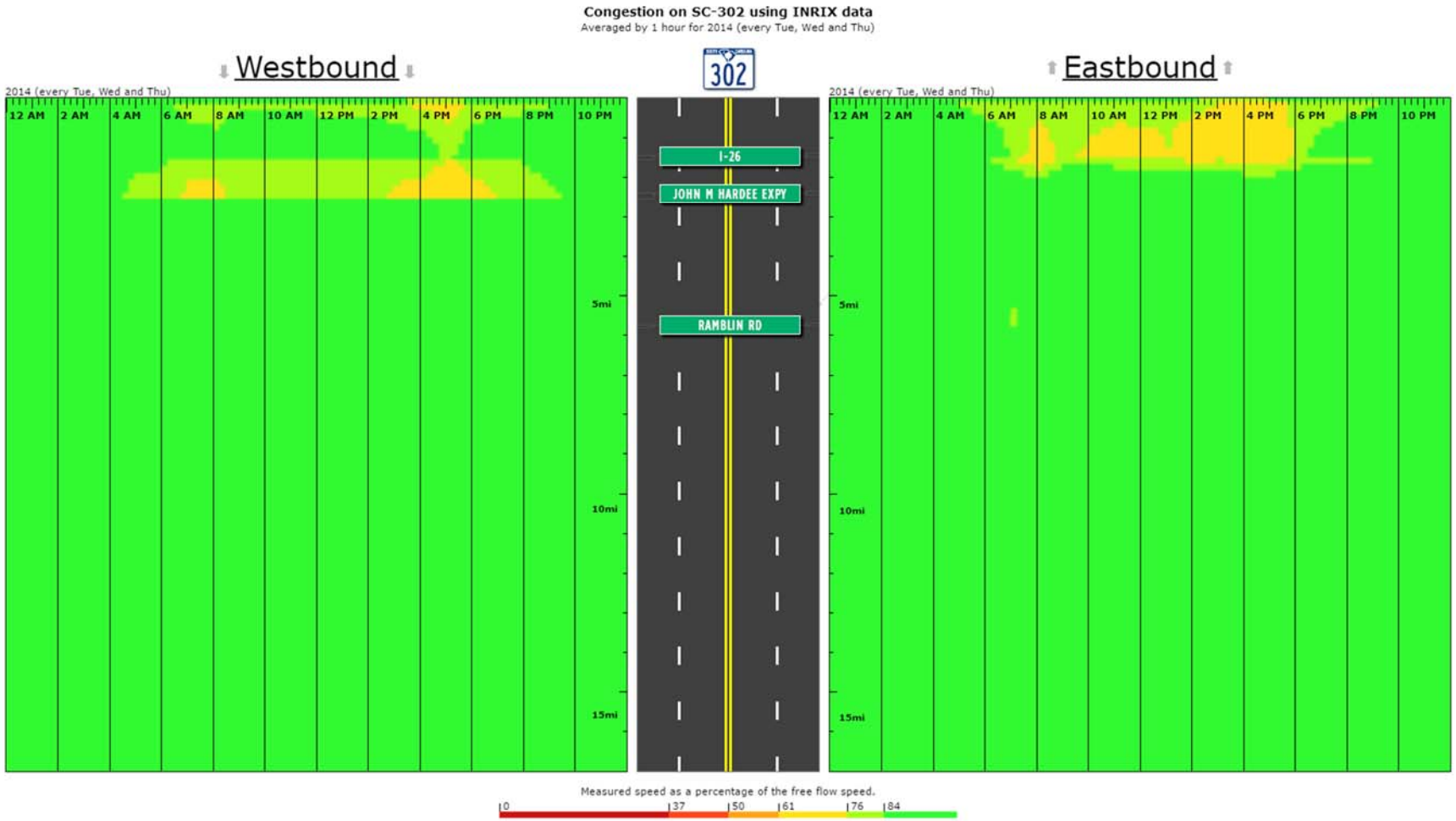


Figure A4.4: AM Peak Travel Time Index

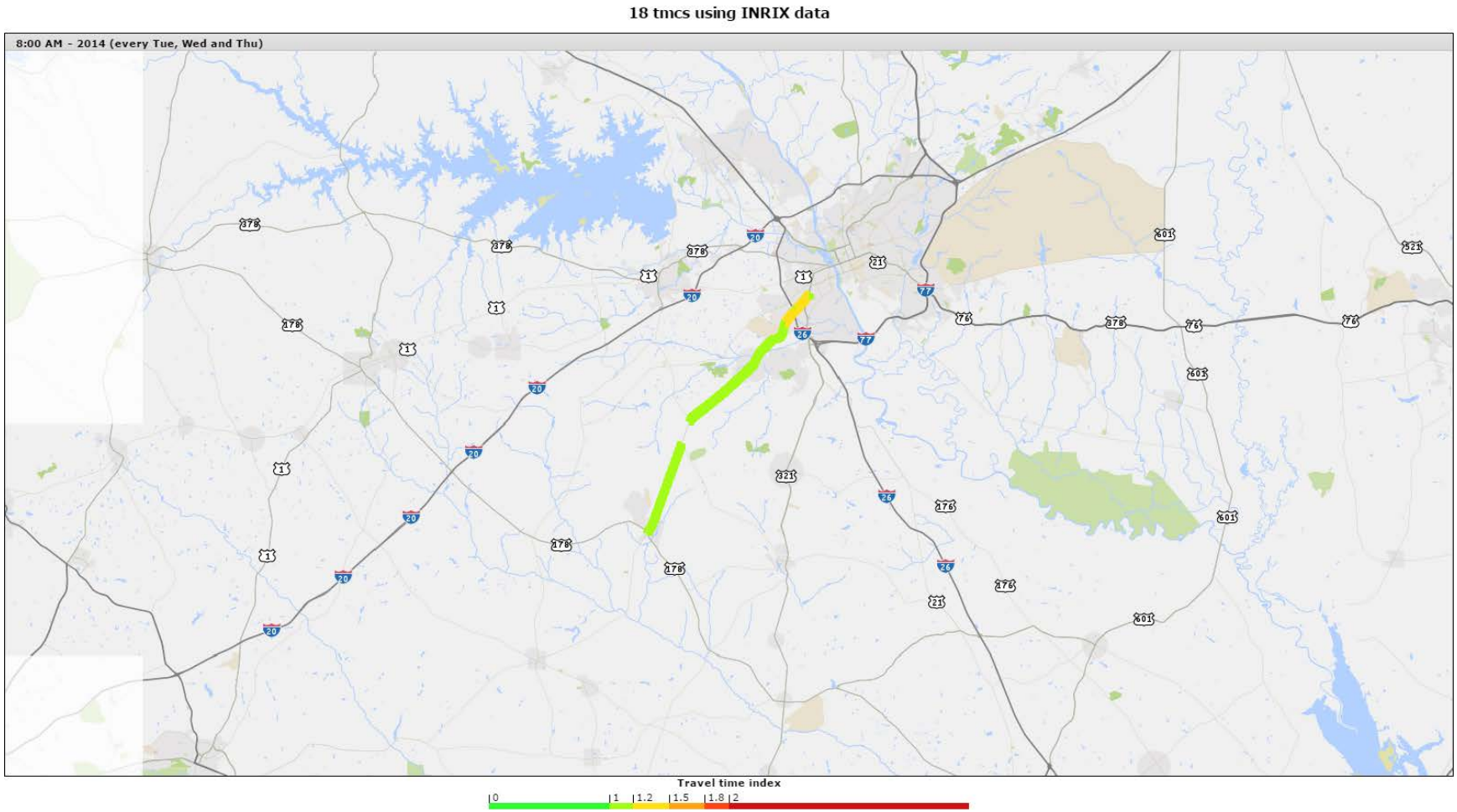
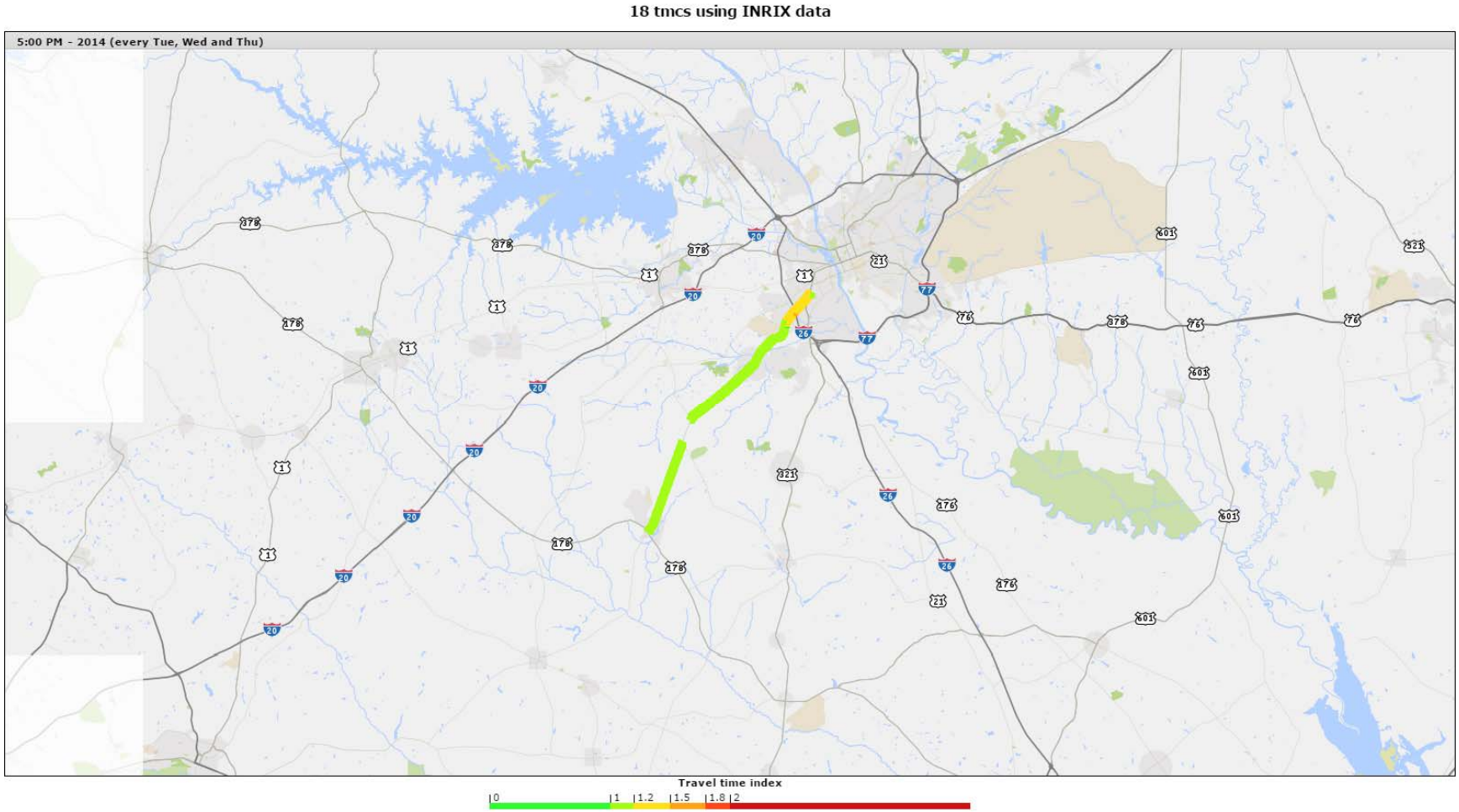


Figure A4.5: PM Peak Travel Time Index



A5. Corridor Name: US 321

Corridor ID: 1015

Route: US 321

Start: SC 692

End: US 21 Charleston Hwy (mm-15.5)

County: Lexington

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A5.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1015	167	US321	S CHURCH ST	9,900	11,300	10,300	11,200	14,925	4	35	2	29200	0.33	A	0.44	A
1015	169	US321	SOUTHBOUND RD	7,600	10,700	10,400	10,700	15,150	4	55	2	29200	0.32	A	0.45	A
1015	170	US321	SOUTHBOUND RD	12,900	12,400	11,500	11,800	14,701	4	55	2	14600	0.35	A	0.44	A
1015	171	US321	N MAIN ST	13,000	19,700	18,600	19,600	31,553	4	60	2	29200	0.58	B	0.93	C

LOS E

LOS F

Figure A5.2: Average Corridor Speed

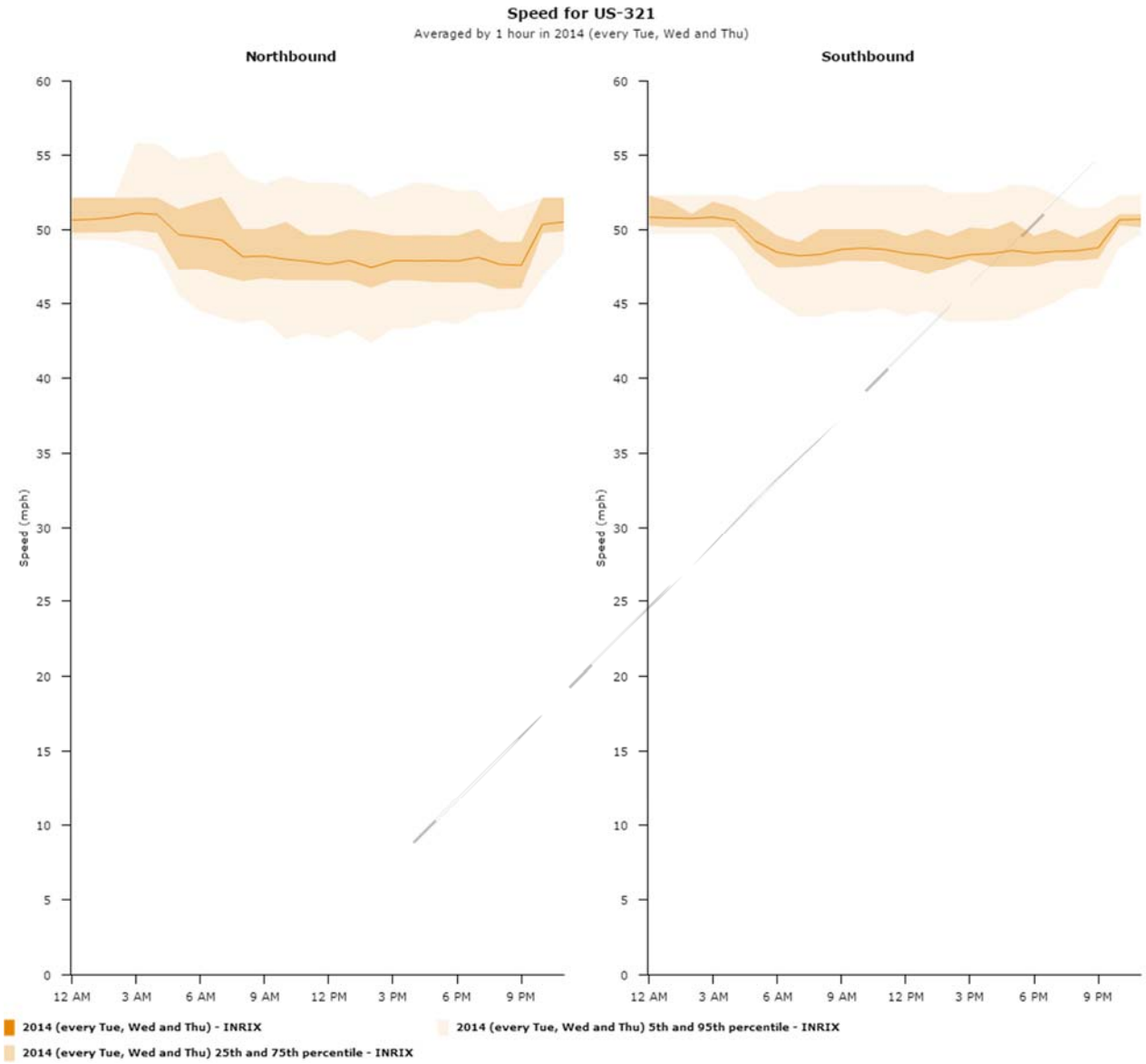


Figure A5.3: Corridor Congestion Index

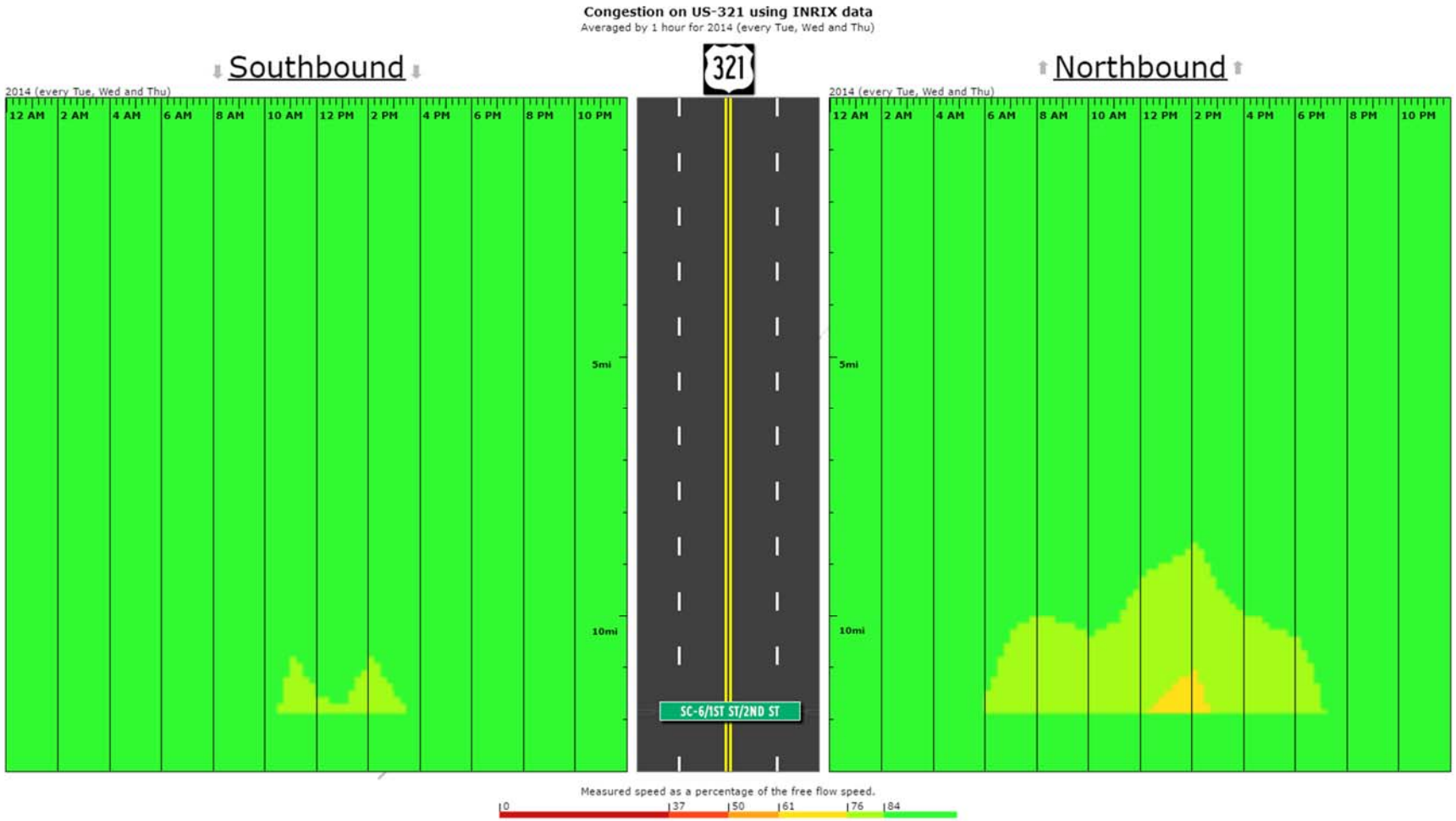


Figure A5.4: AM Peak Travel Time Index

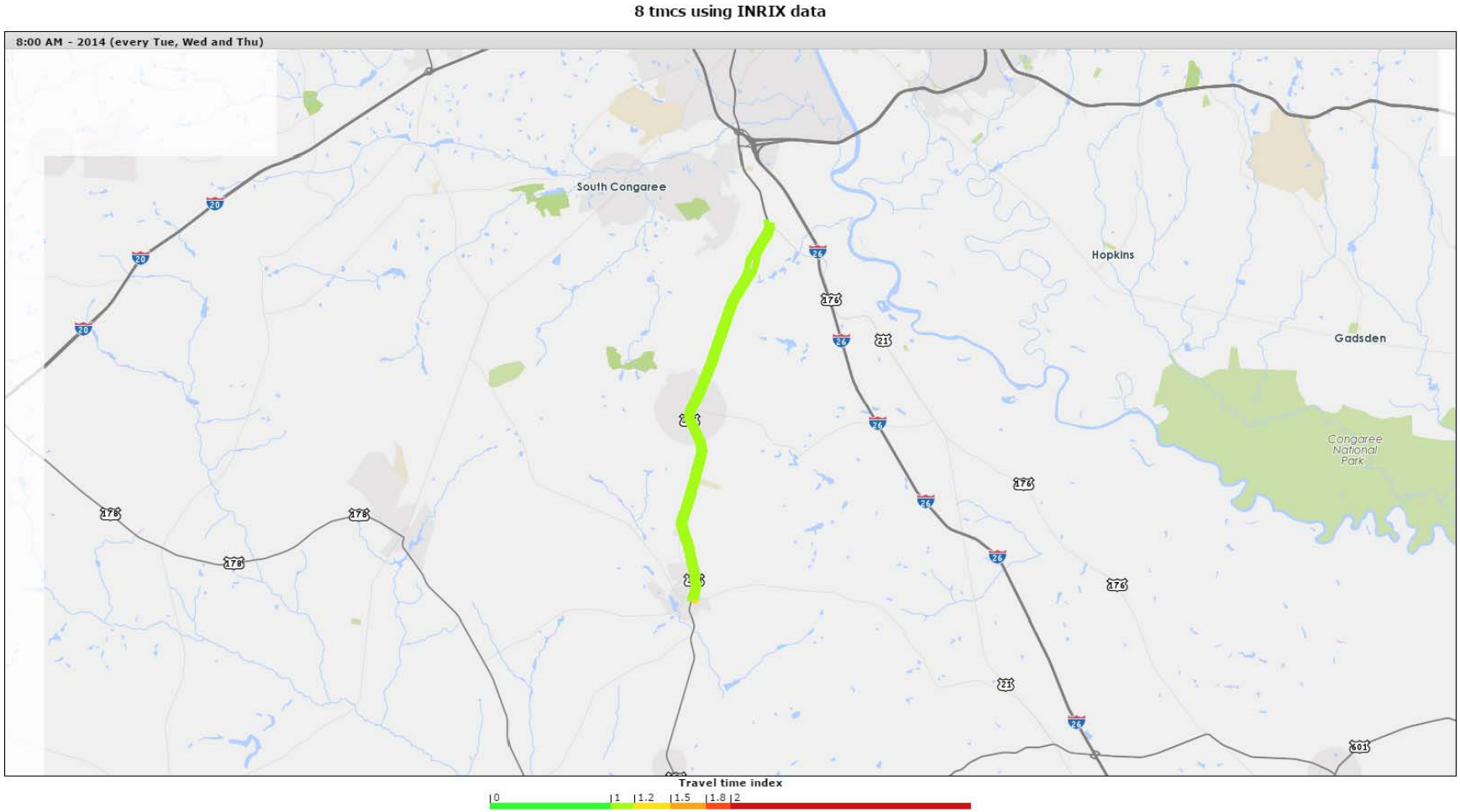
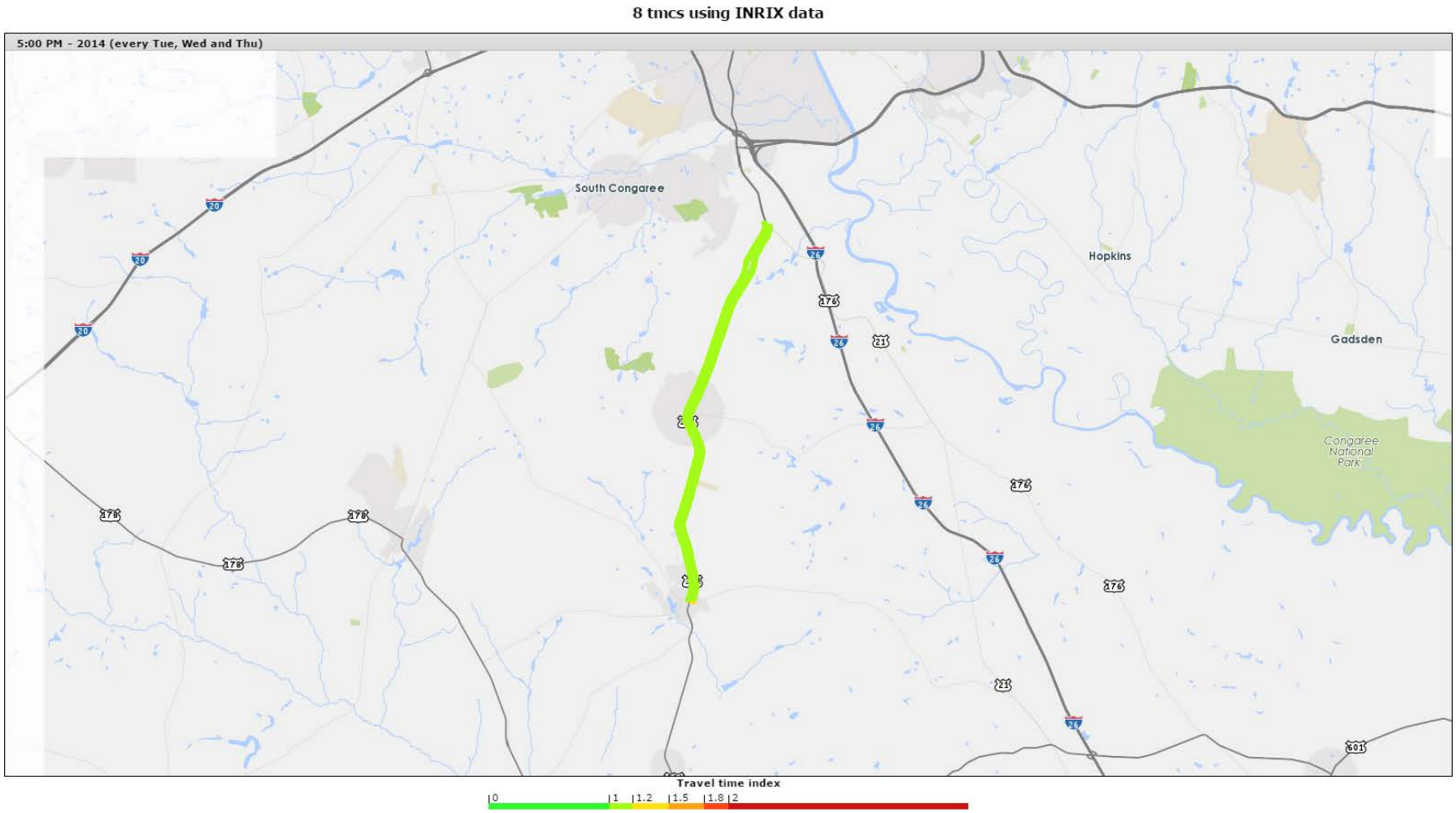


Figure A5.5: PM Peak Travel Time Index



A6. Corridor Name: Charter Oak Rd / Pisgah Church Rd / Long Ponds Rd

Corridor ID: 1021

Route: S-204

Start: US 378

End: Nazareth Rd S-243 (mm-9.05)

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: 2

Figure A6.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1021	333	S-204	CHARTER OAK RD	1,600	4,200	7,300	8,200	16,069	2	45	4	8600	0.76	C	1.49	F
1021	335	S-204	PISGAH CHURCH RD	1,900	4,400	7,600	8,300	16,163	2	45	3	10800	0.77	C	1.5	F
1021	337	S-204	PISGAH CHURCH RD	3,500	6,500	10,400	12,400	24,127	2	45	3	10800	1.15	D	2.23	F
1021	339	S-204	LONGS POND RD	2,600	5,500	8,100	8,000	15,969	2	45	4	8600	0.74	B	1.48	F

LOS E

LOS F

Figure A6.2: Average Corridor Speed

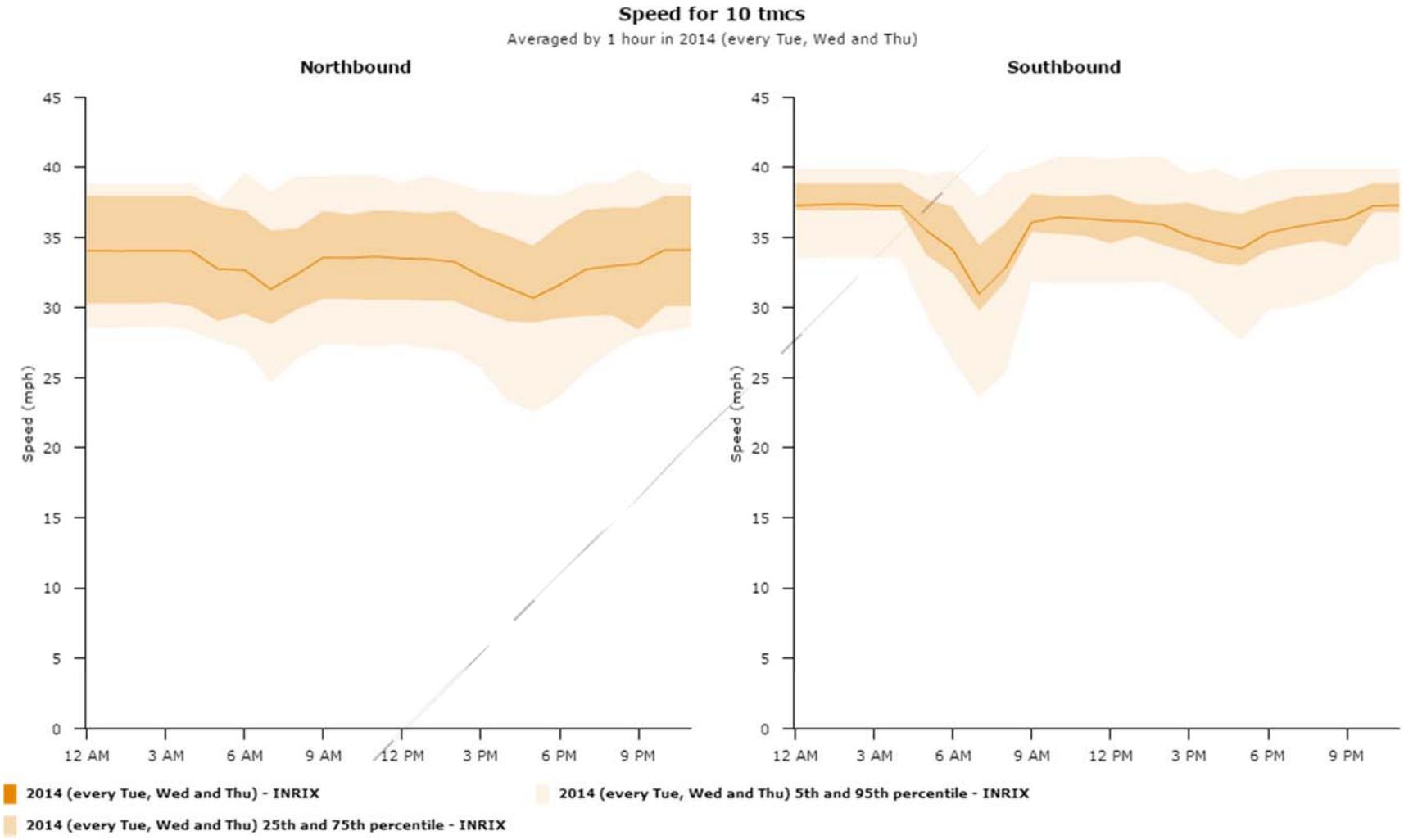


Figure A6.3: Corridor Congestion Index

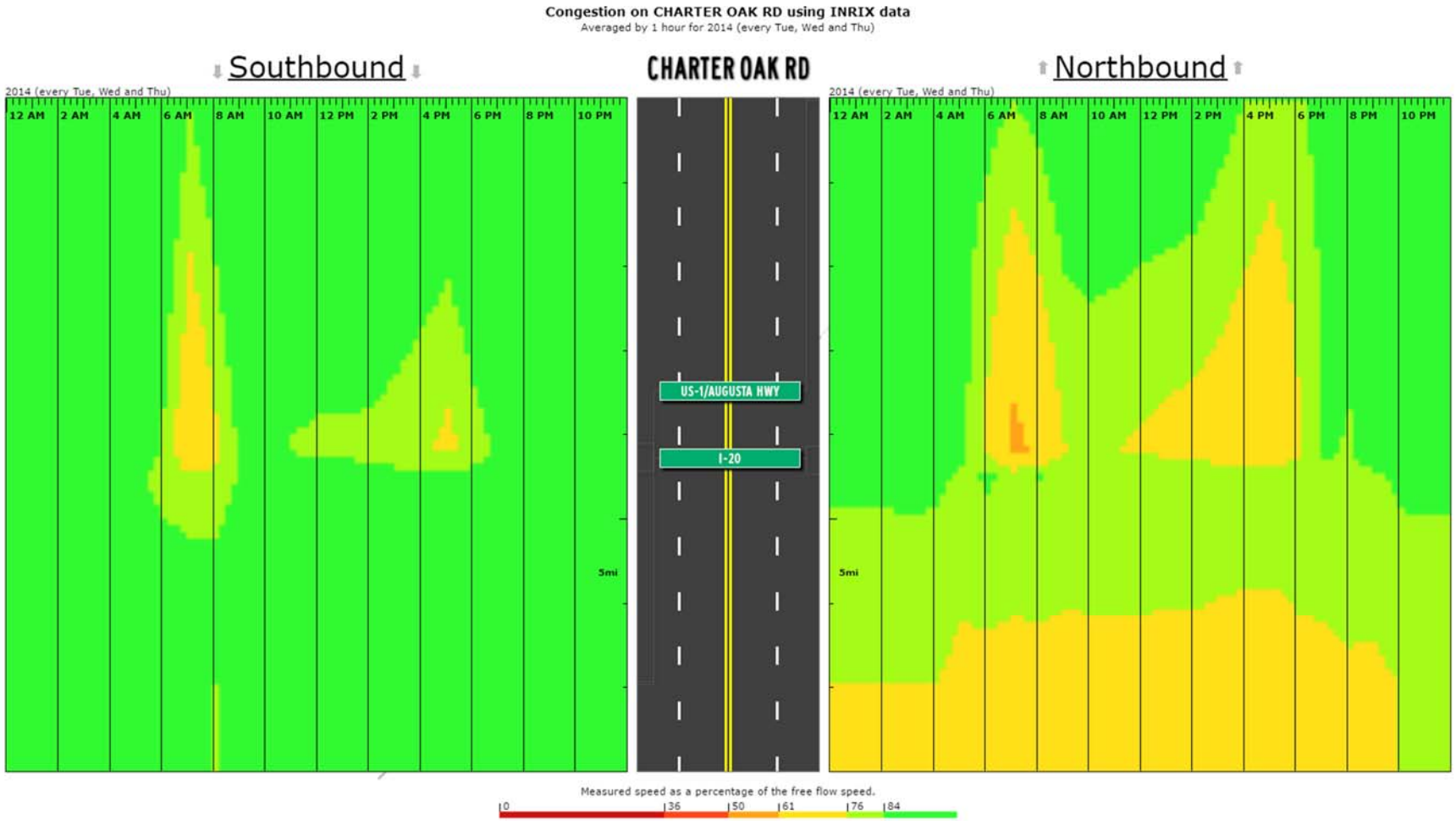


Figure A6.4: AM Peak Travel Time Index

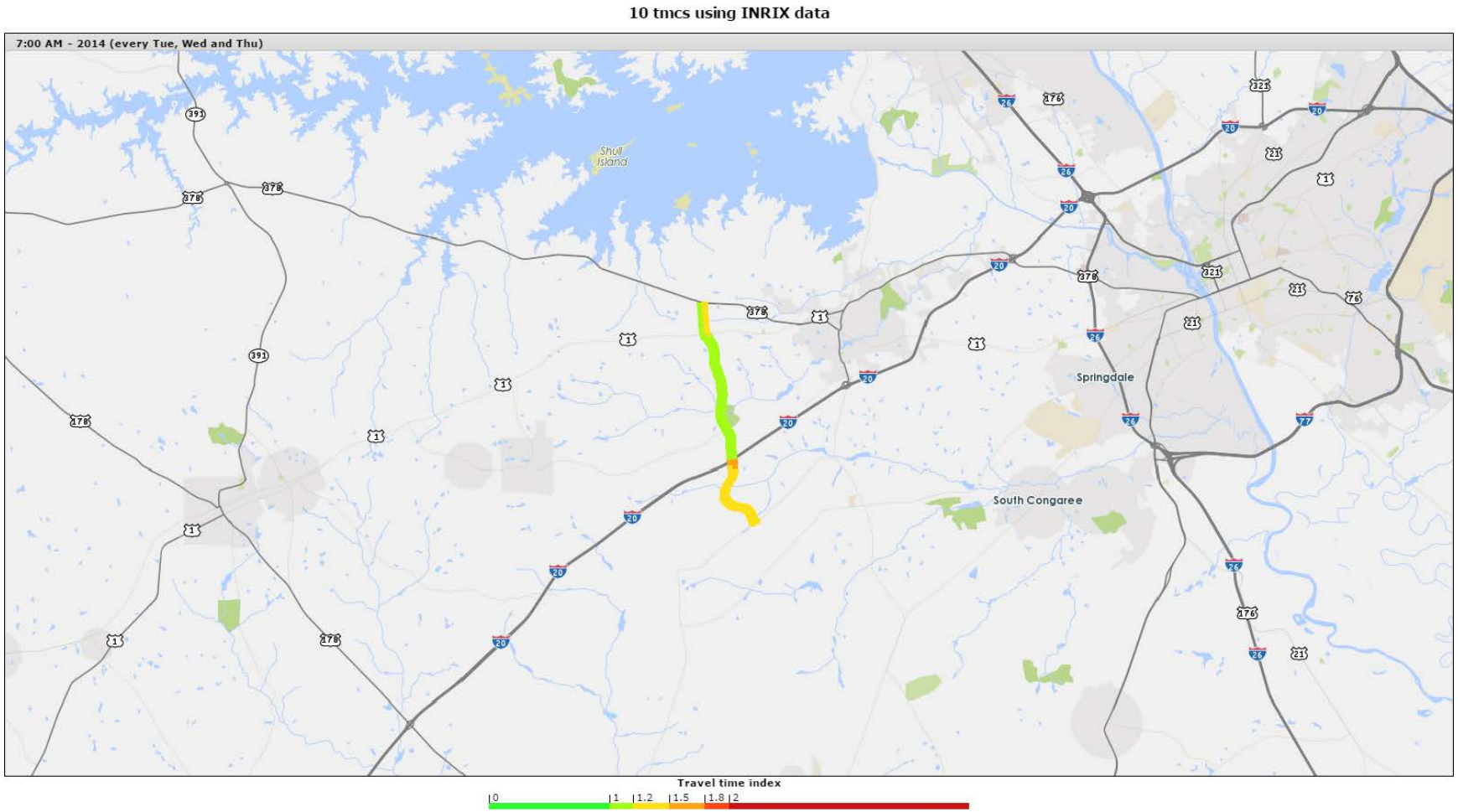
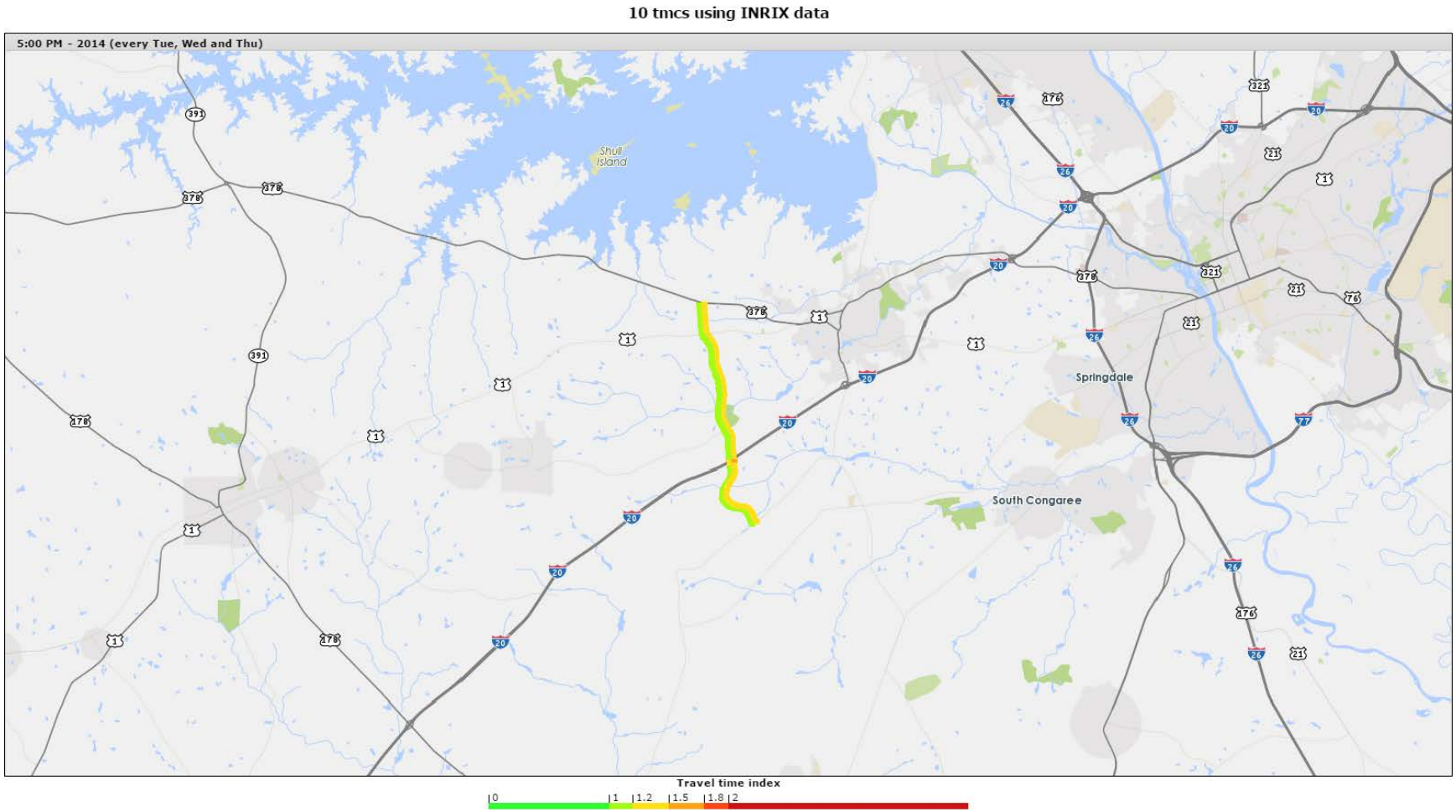


Figure A6.5: PM Peak Travel Time Index



A7. Corridor Name: Mineral Springs Rd

Corridor ID: 1025

Route: S-106

Start: Sunset Blvd US 378

End: Leaphart Rd S-30 (mm-5.65)

County: Lexington

Functional Class: 4 Major Collector

2040 LRTP Project Ranking: N/A

Figure A7.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1025	341	S-106	MINERAL SPRINGS RD	1,350	4,600	7,200	7,800	16,485	2	45	4	8600	0.91	C	1.92	F
1025	343	S-106	MINERAL SPRINGS RD	1,450	3,200	4,200	4,200	8,301	2	45	4	8600	0.49	A	0.97	C
1025	603	S-106	MINERAL SPRINGS RD	3,100	3,800	4,300	3,900	5,517	2	45	4	8600	0.45	A	0.64	B
1025	605	S-106	MINERAL SPRINGS RD	4,100	5,200	5,500	5,700	7,984	2	45	4	8600	0.66	B	0.93	C

LOS E

LOS F

Figure A7.2: Average Corridor Speed

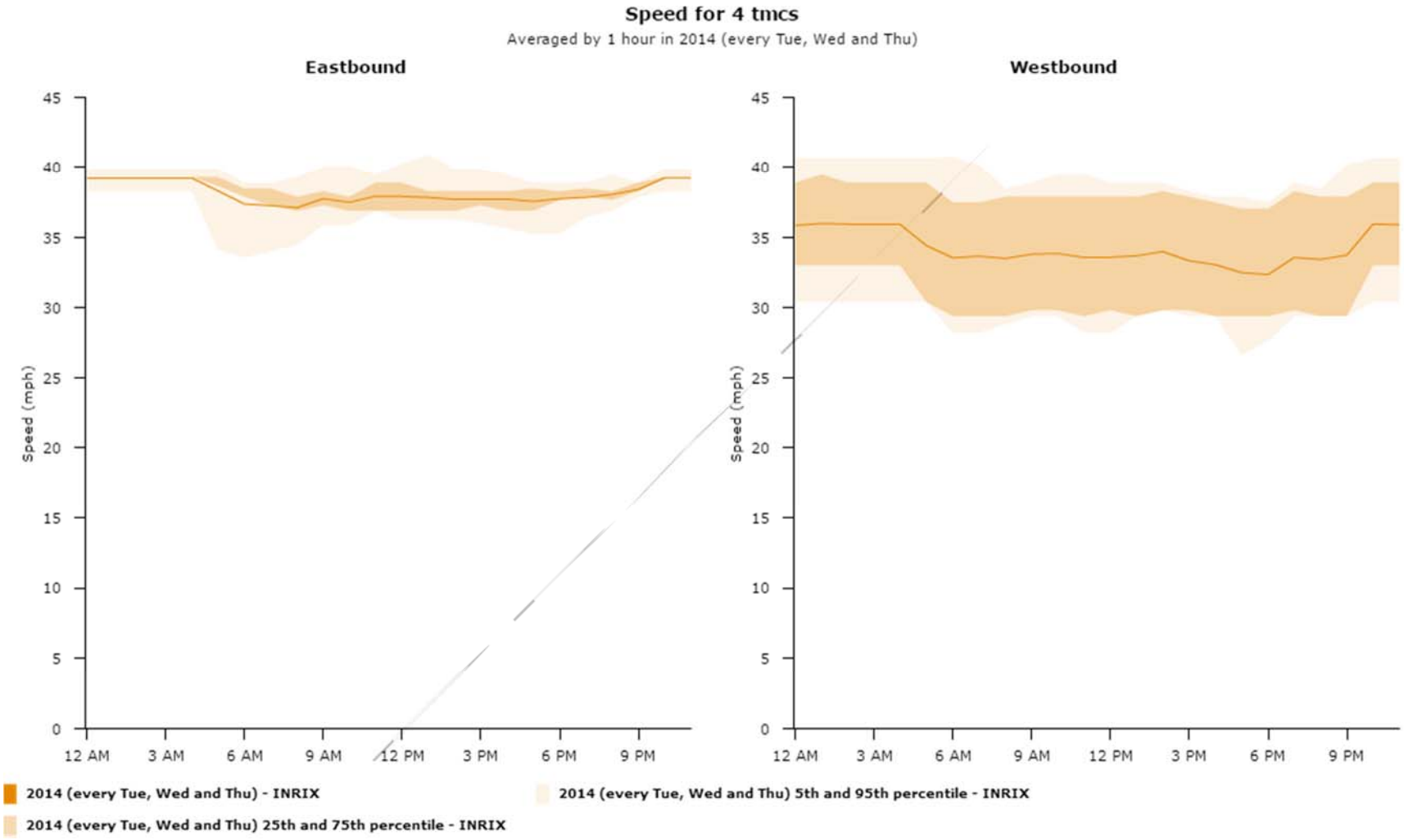


Figure A7.3: Corridor Congestion Index

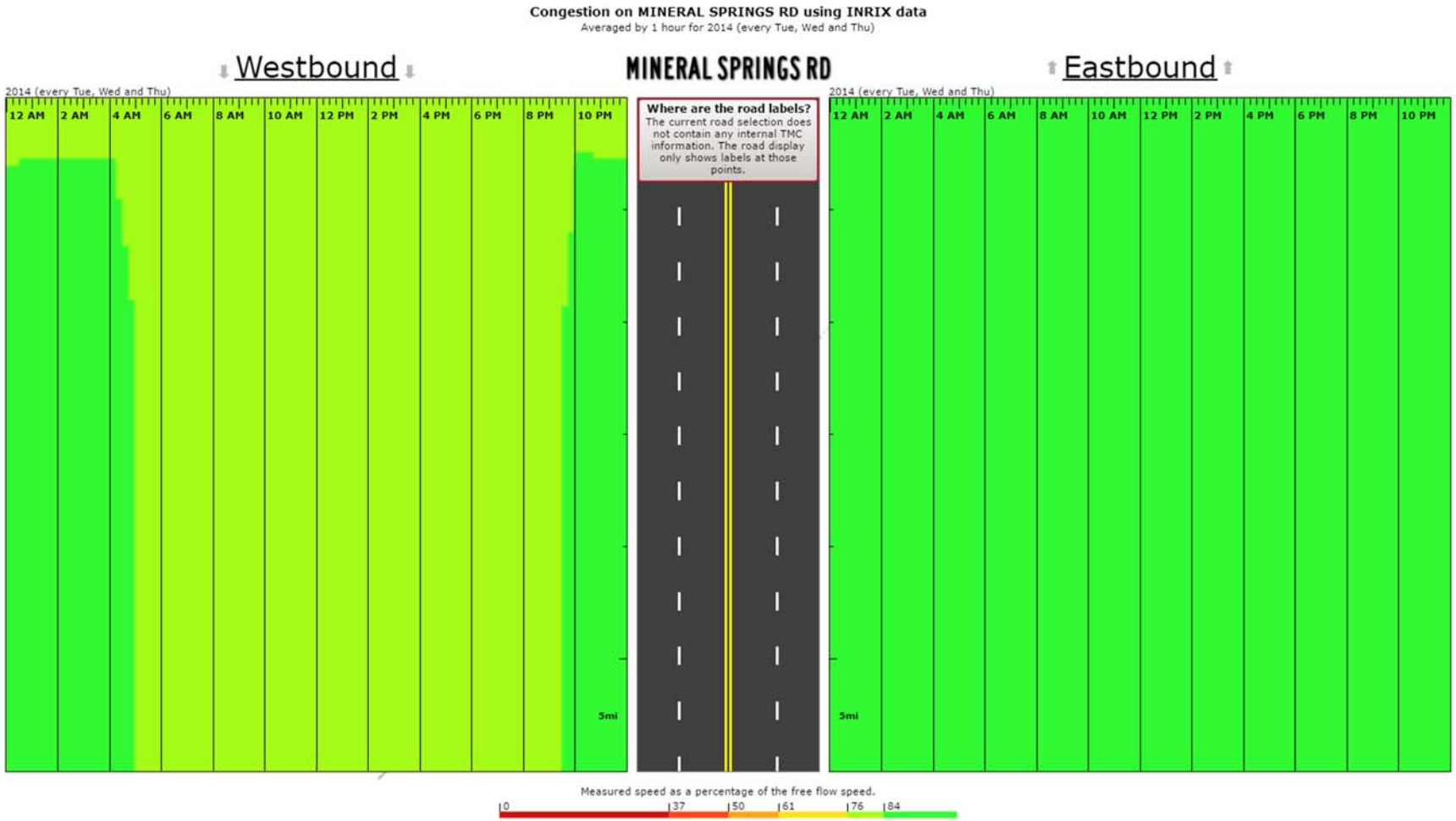


Figure A7.4: AM Peak Travel Time Index

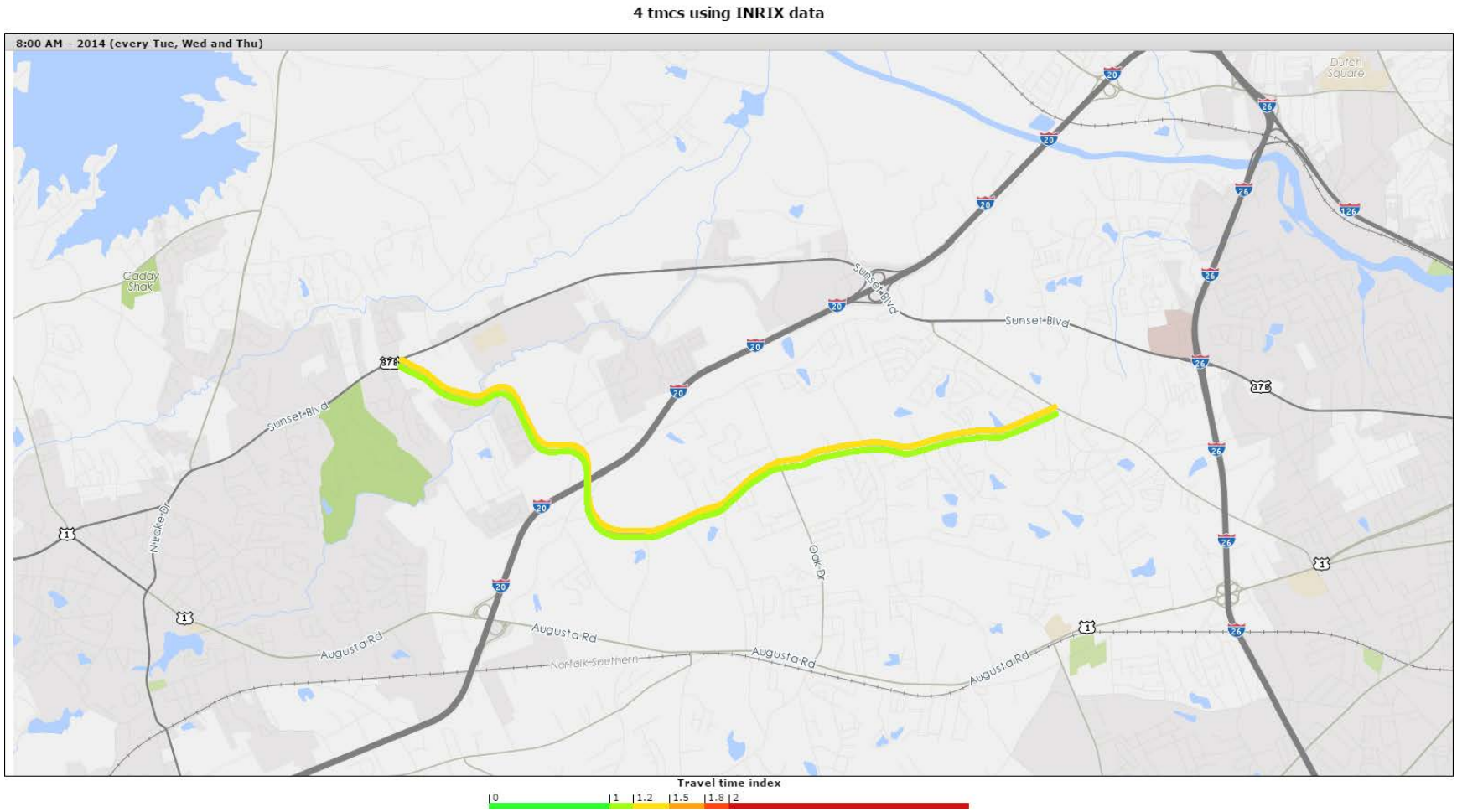
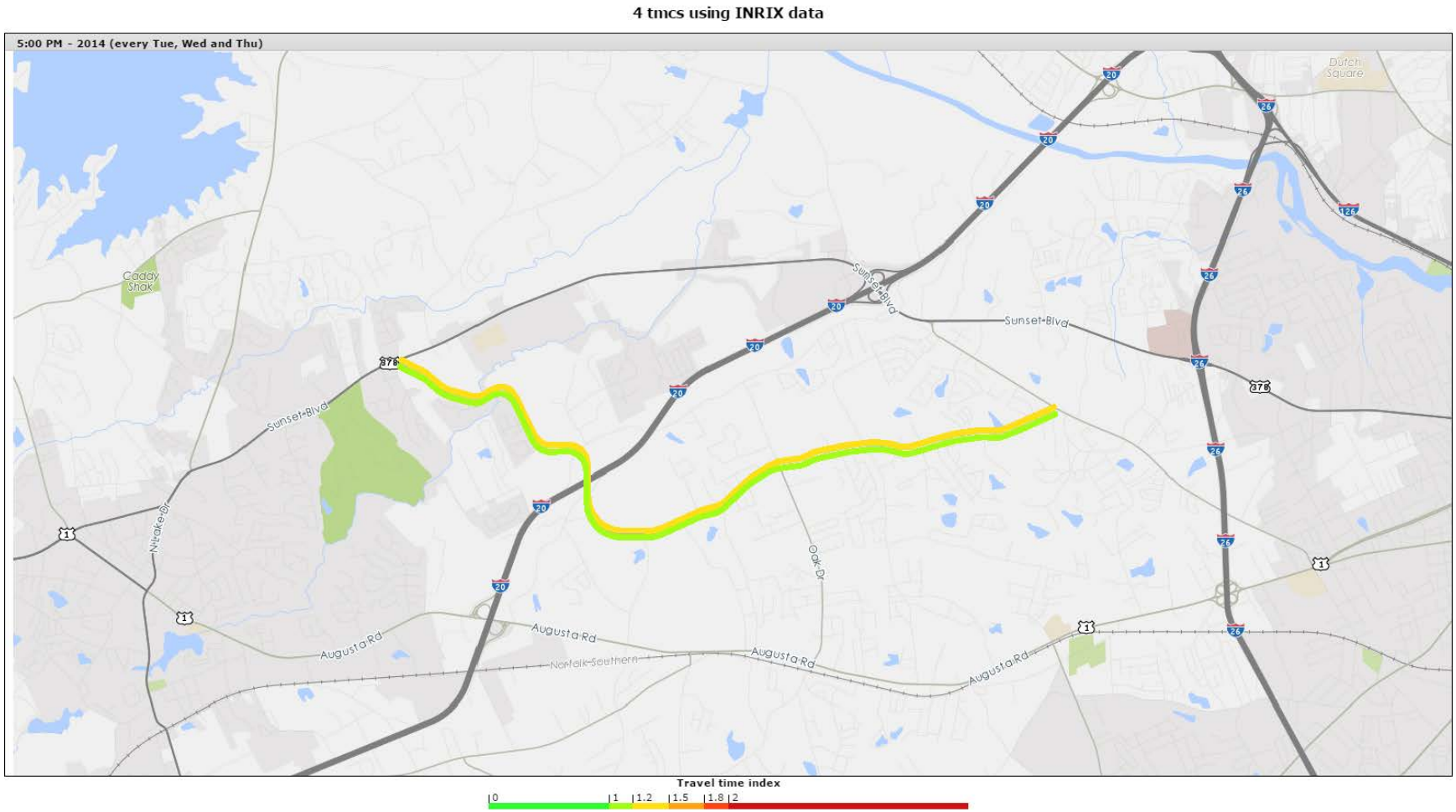


Figure A7.5: PM Peak Travel Time Index



A8. Corridor Name: Pineview Rd

Corridor ID: 1033

Route: SC 768

Start: Shop Rd S-48

End: Bluff Rd SC 48

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A8.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1033	293	SC768	PINEVIEW		6,500	5,700	5,300	8,288	2	35	3	10800	0.49	A	0.77	C

LOS E

LOS F

Figure A8.2: Average Corridor Speed

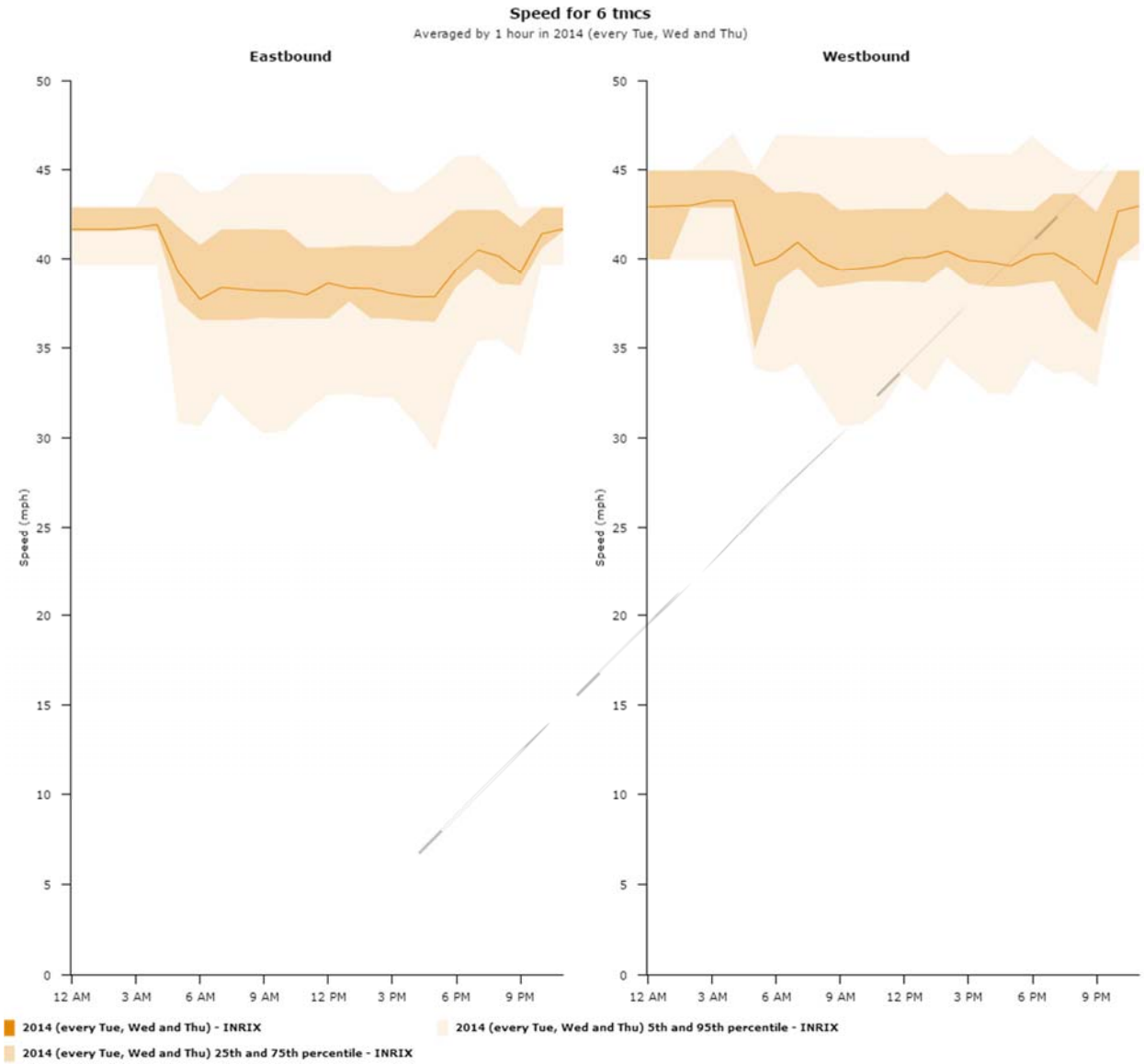


Figure A8.3: Corridor Congestion Index

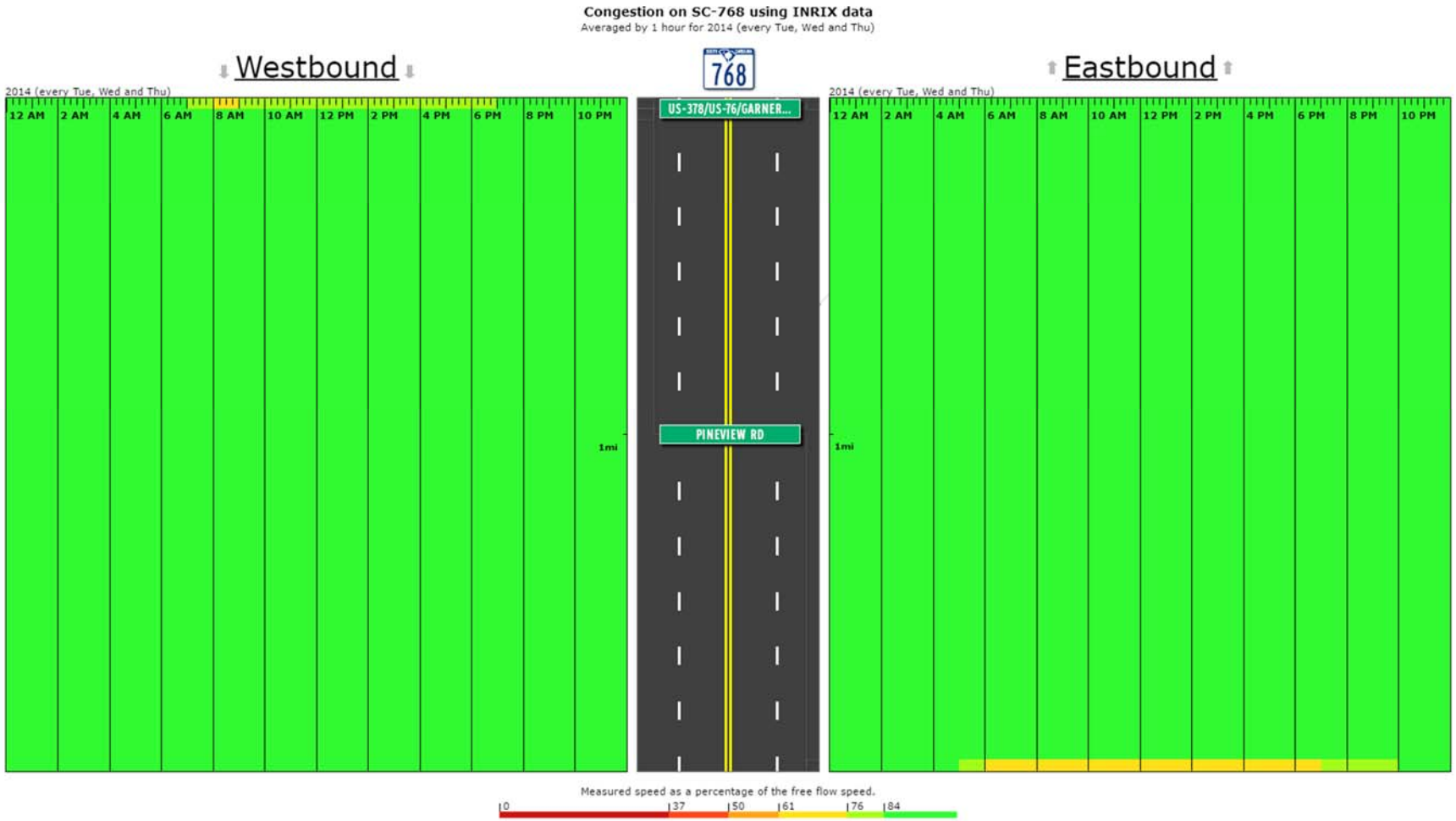


Figure A8.4: AM Peak Travel Time Index

Figure A8.5: PM Peak Travel Time Index

A9. Corridor Name: Platt Springs Road

Corridor ID: 1035

Route: SC 602

Start: S Lake Dr SC 6

End: I-26 (mm-9.2)

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A9.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1035	301	SC602	PLATT SPRINGS RD	6,500	10,900	11,800	11,400	20,915	2	35	3	10800	1.05	D	1.93	F
1035	303	SC602	PLATT SPRINGS RD	7,400	9,800	10,400	10,000	15,440	2	35	3	10800	0.93	C	1.43	F
1035	305	SC602	PLATT SPRINGS RD	12,200	13,700	16,000	15,800	22,601	5	35	3	21600	0.64	B	0.91	C
1035	307	SC602	PLATT SPRINGS RD	10,100	8,400	10,600	10,600	9,811	5	35	3	21600	0.42	A	0.39	A
1035	309	SC602	PLATT SPRINGS RD	14,500	13,600	16,000	17,200	18,481	5	35	3	21600	0.69	B	0.74	B
1035	311	SC602	PLATT SPRINGS RD	9,600	8,100	8,200	8,500	6,359	2	35	3	10800	0.78	C	0.58	B

LOS E

LOS F

Figure A9.2: Average Corridor Speed

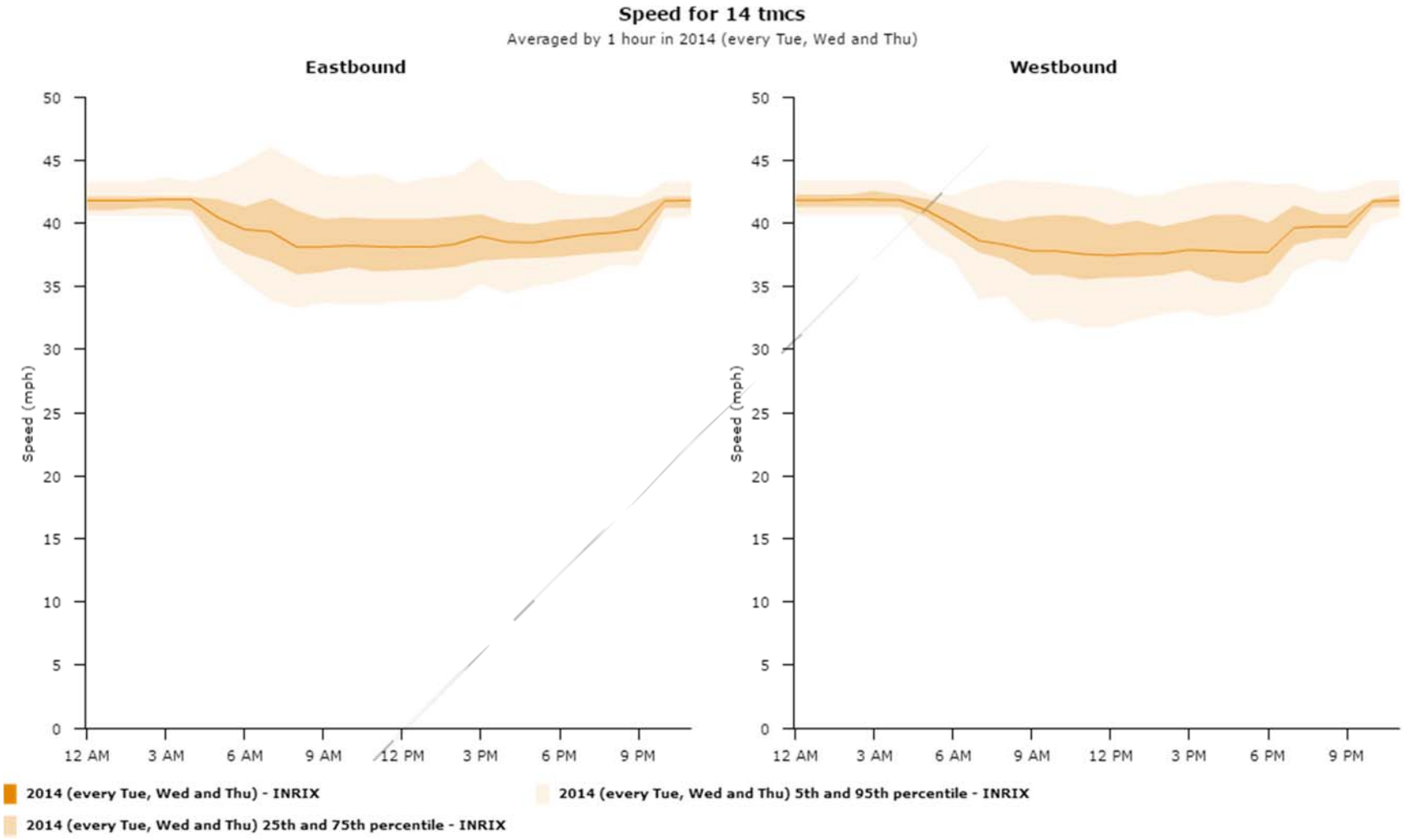


Figure A9.3: Corridor Congestion Index

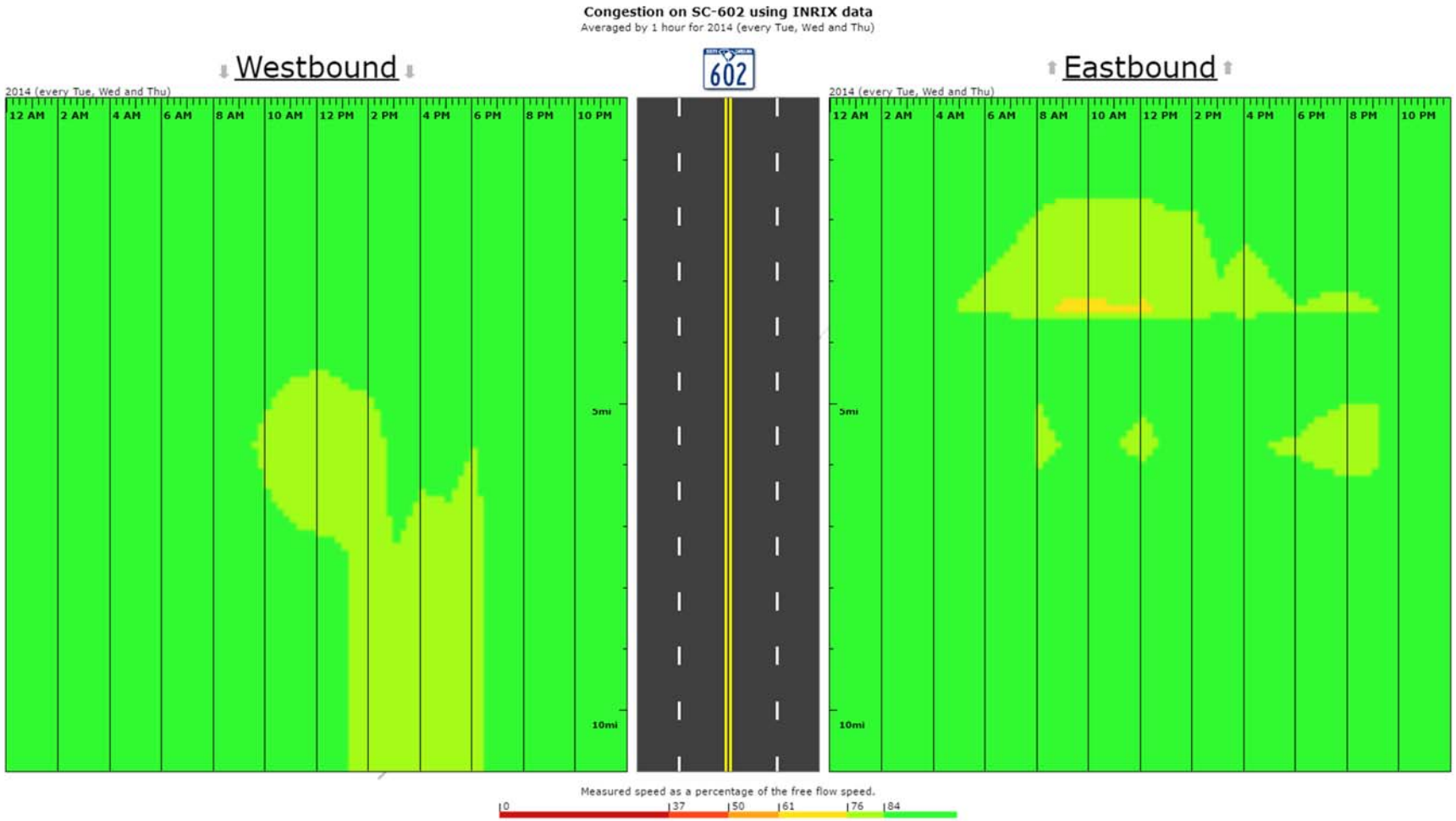


Figure A9.4: AM Peak Travel Time Index

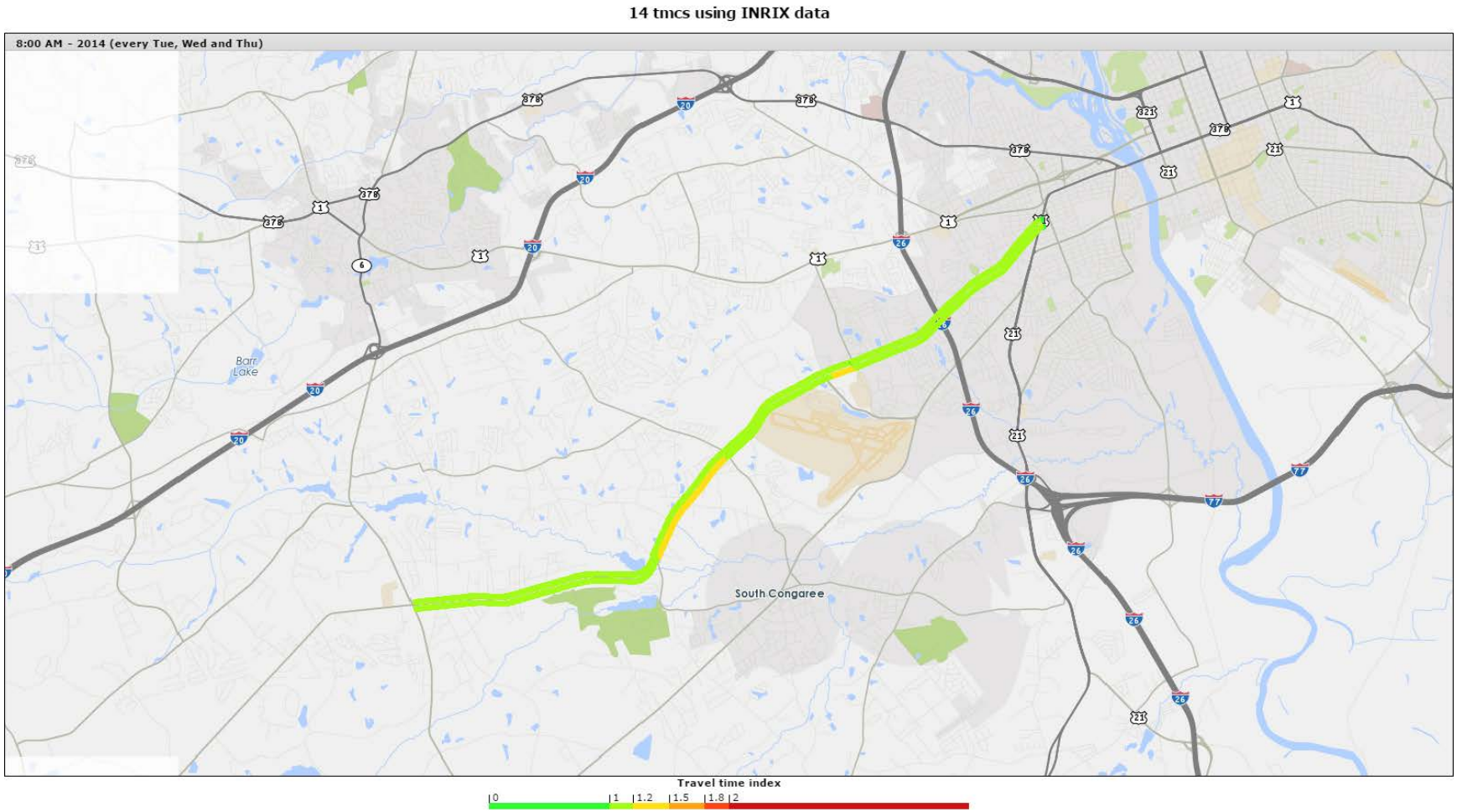
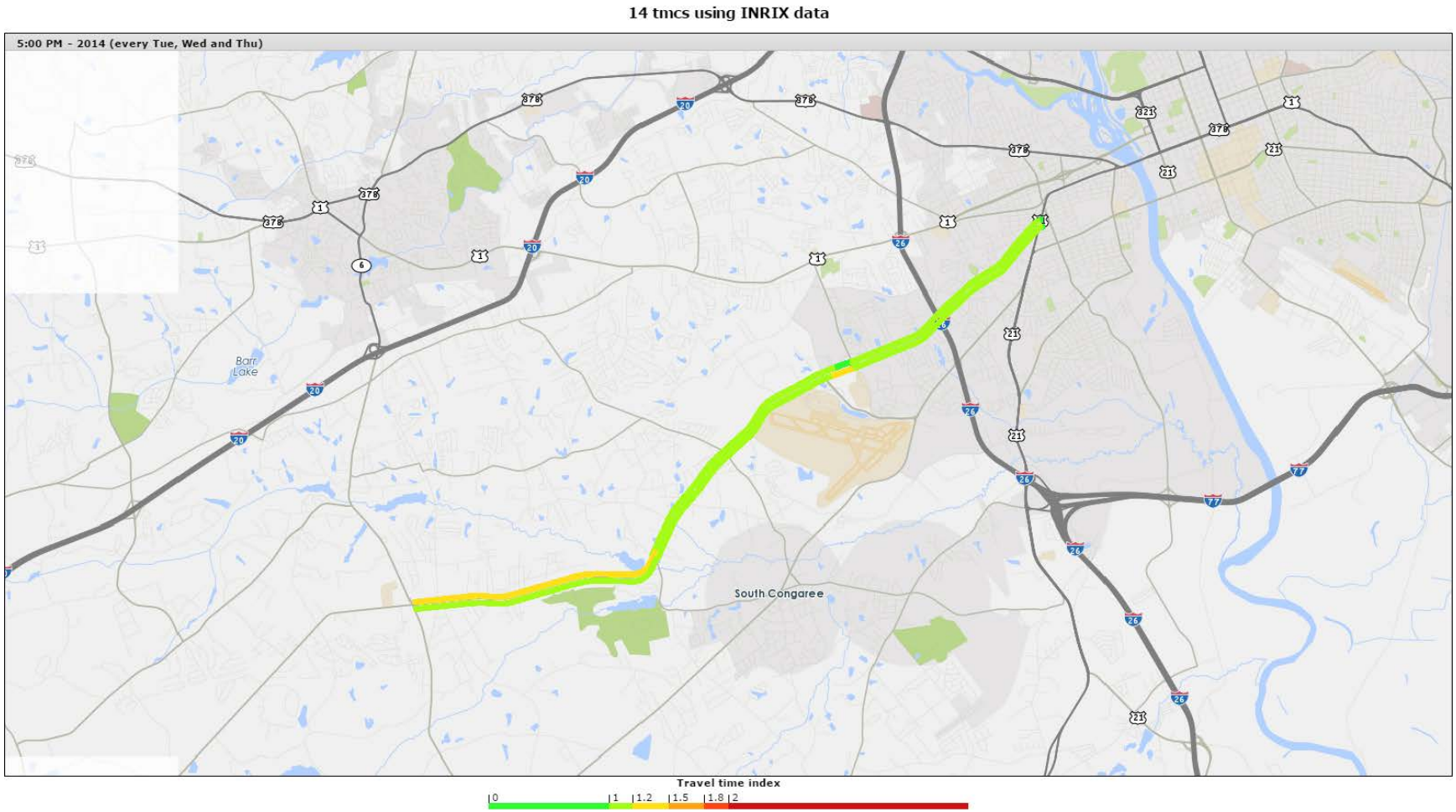


Figure A9.5: PM Peak Travel Time Index



A10. Corridor Name: Forest Drive/Percival Rd

Corridor ID: 1037

Route: SC 12

Start: Two Notch Rd (mm-3.56)

End: Kershaw County line

County: Richland / Kershaw

Functional Class: 2 Principal Arterial 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A10.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1037	100	SC12		1700	2200	2800	4,100	5,082	2	45	4	8600	0.48	A	0.59	B
1037	102	SC12		1050	1550	2700	2,900	5,038	2	45	4	8600	0.34	A	0.59	B
1037	207	SC12	TAYLOR ST	19,900	18,400	18,600	18,600	14,330	5	35	2	29200	0.55	B	0.42	A
1037	209	SC12	FOREST DR	18,800	20,200	18,400	18,400	16,814	5	35	2	29200	0.55	B	0.5	B
1037	211	SC12	FOREST DR	20,300	22,700	25,900	26,200	28,586	5	35	2	29200	0.78	C	0.85	C
1037	213	SC12	FOREST DR	16,700	22,500	25,400	23,600	34,785	5	35	2	29200	0.7	B	1.04	D
1037	214	SC12	PERCIVAL RD	10,100	8,900	9,700	12,900	8,858	2	45	3	10800	1.19	E	0.82	C
1037	215	SC12	PERCIVAL RD	14,400	10,500	14,900	14,900	15,463	5	45	3	21600	0.6	B	0.62	B
1037	216	SC12	PERCIVAL RD	4,700	6,300	11,000	12,600	15,156	2	45	3	10800	1.17	E	1.4	F
1037	217	SC12	PERCIVAL RD	5,400	7,000	9,800	10,200	16,047	2	45	3	10800	0.94	C	1.49	F

LOS E

LOS F

Figure A10.2: Average Corridor Speed

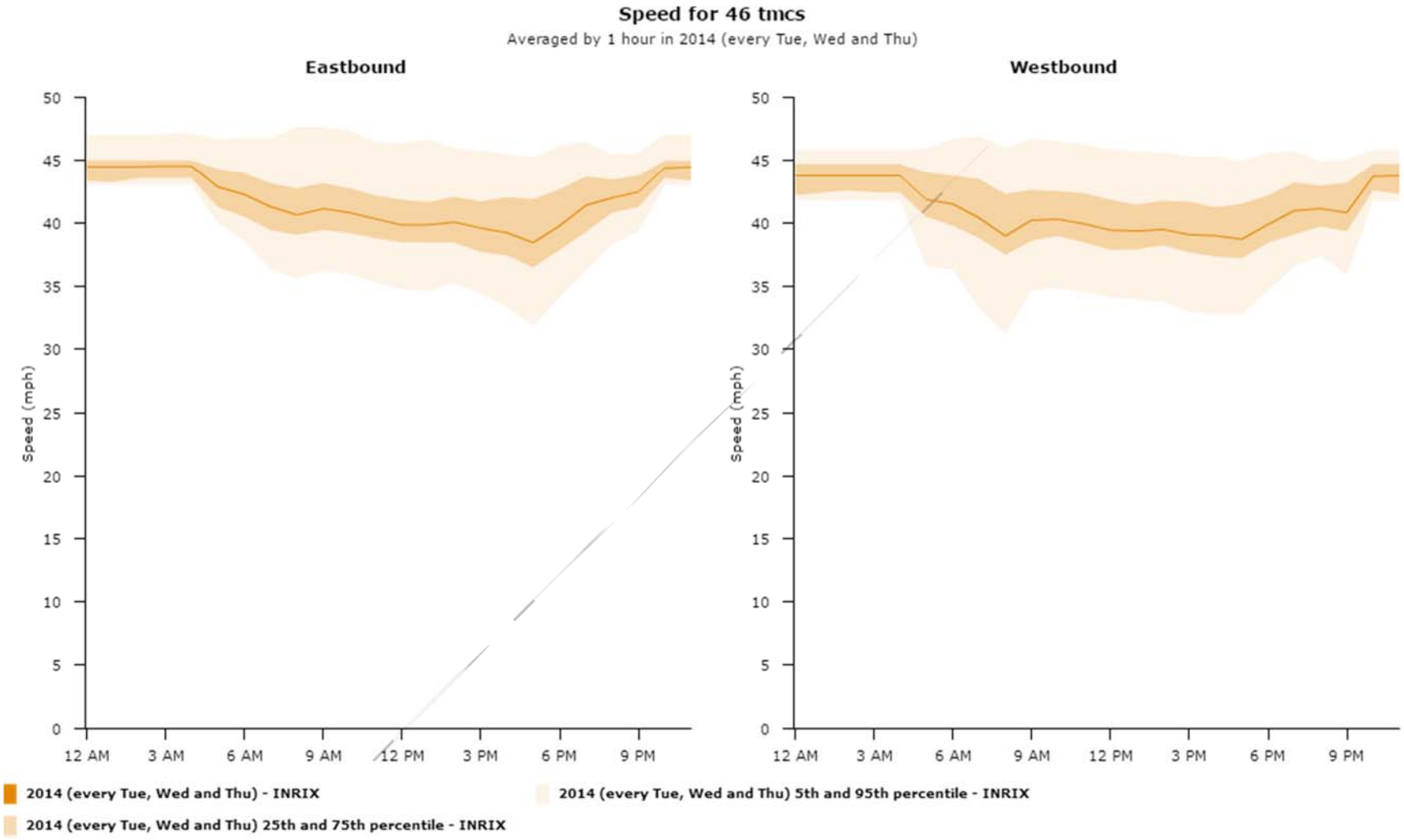


Figure A10.3: Corridor Congestion Index

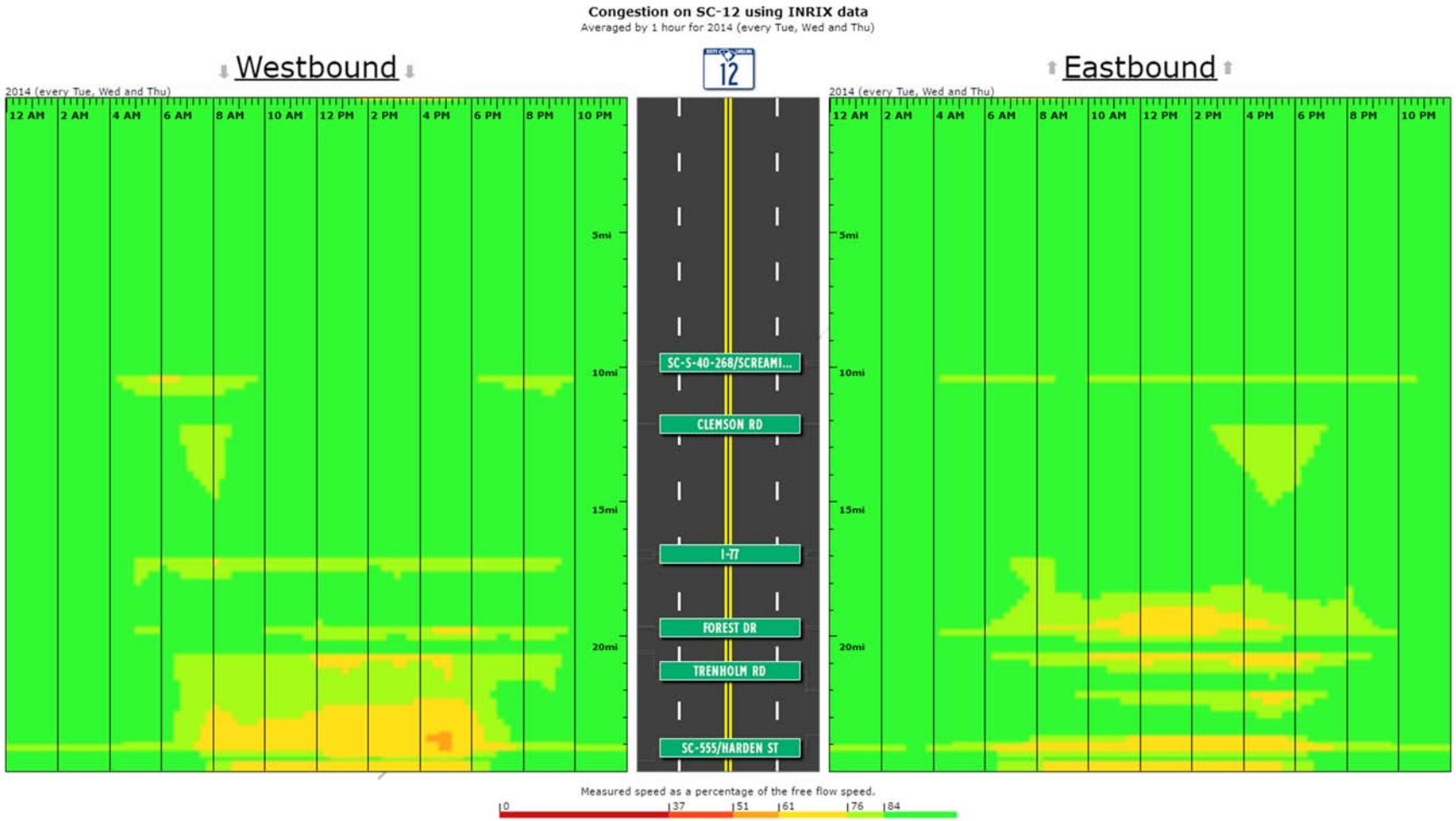


Figure A10.4: AM Peak Travel Time Index

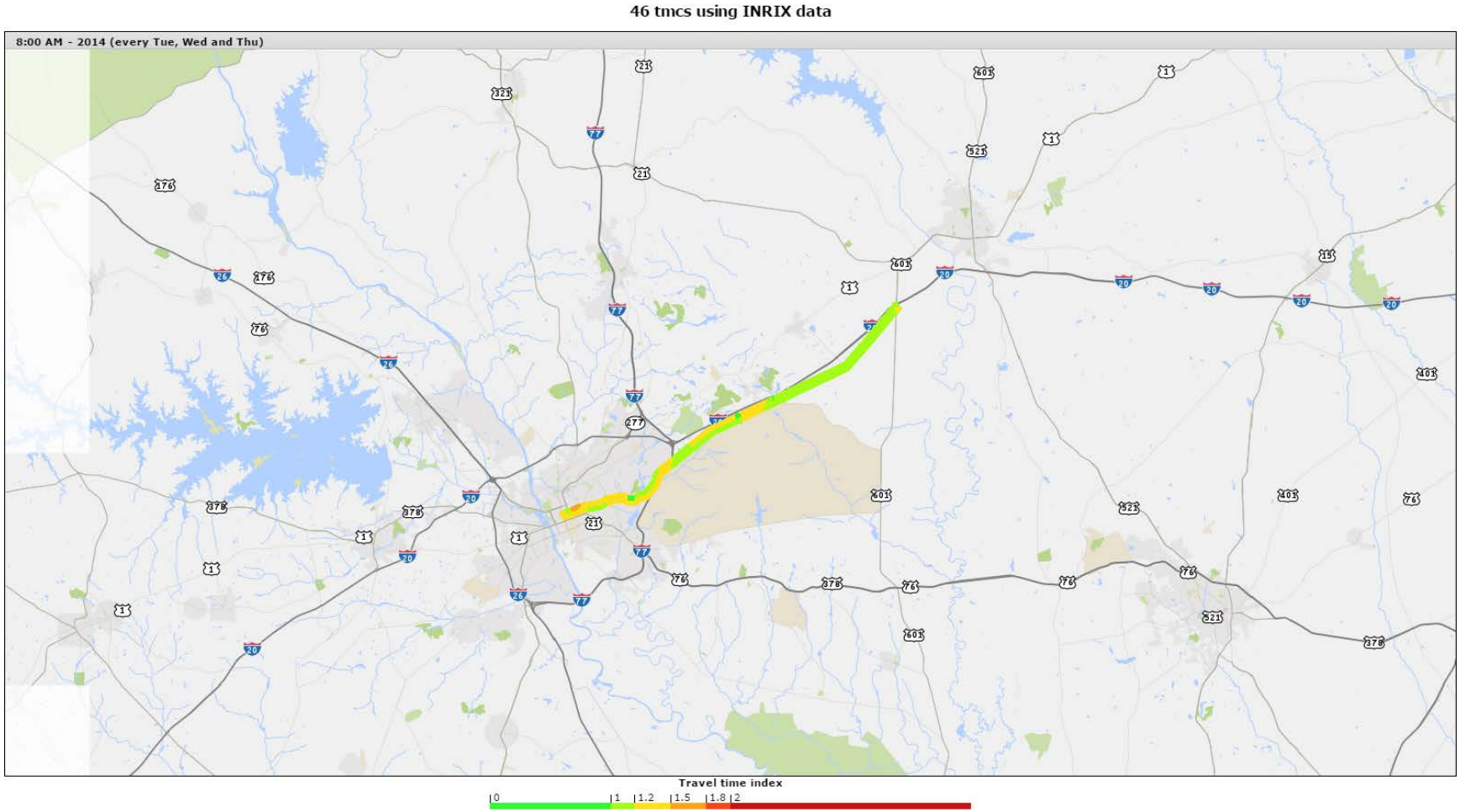
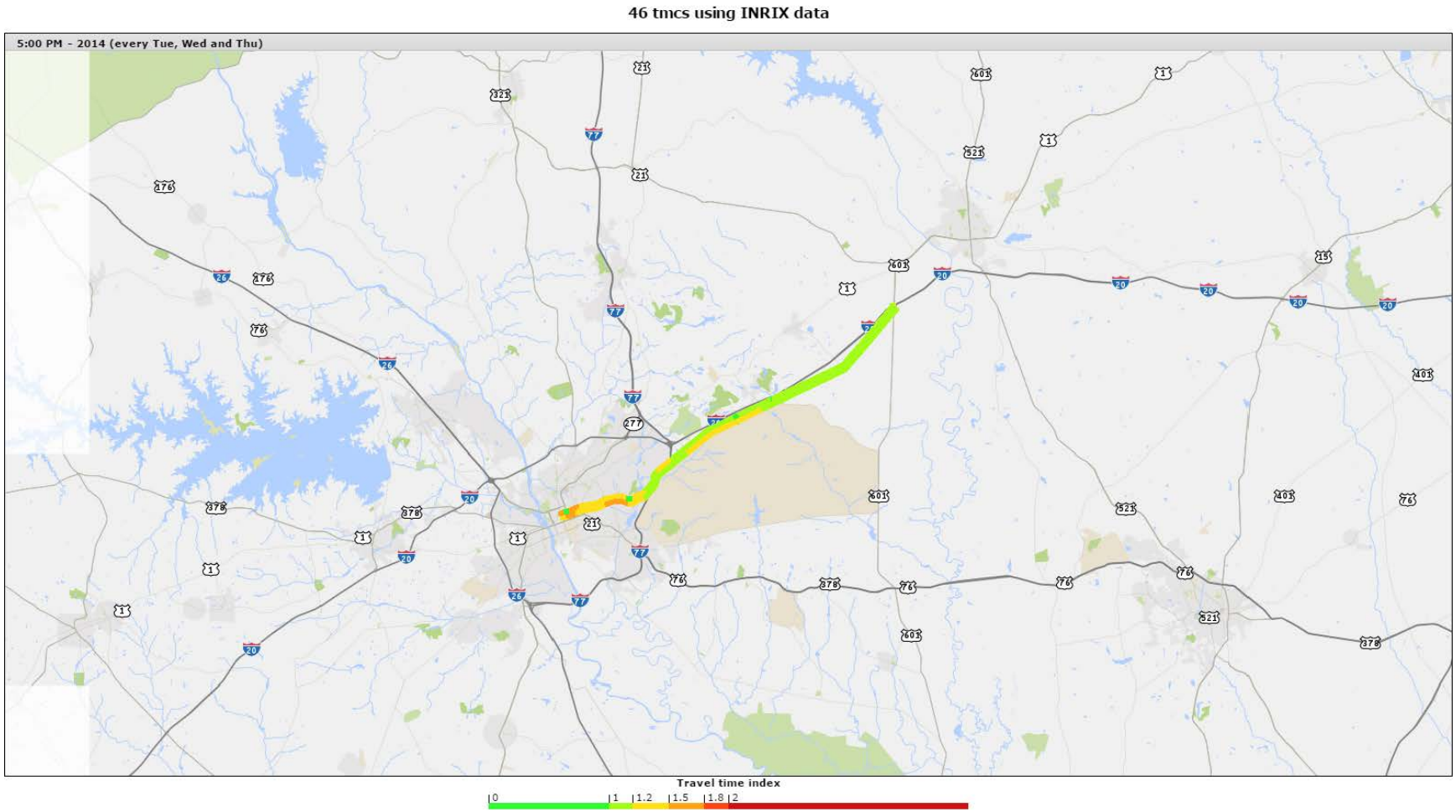


Figure A10.5: PM Peak Travel Time Index



A11. Corridor Name: Monticello Rd

Corridor ID: 1039

Route: SC 215

Start: N. Main St US 21

End: Columbia Bible College (mm-3.53)

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A11.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1039	247	SC215	MONTICELLO RD	13,800	12,200	11,500	11,800	12,709	5	35	2	29200	0.47	A	0.51	B
1039	249	SC215	MONTICELLO RD	8,300	9,400	8,200	8,700	10,430	5	45	3	21600	0.35	A	0.42	A
1039	250	SC215	MONTICELLO RD	4,100	5,400	5,000	4,700	6,363	2	45	3	10800	0.43	A	0.59	B
1039	251	SC215	MONTICELLO RD	3,000	3,400	3,200	3,600	4,615	2	55	3	10800	0.33	A	0.43	A

LOS E

LOS F

Figure A11.2: Average Corridor Speed

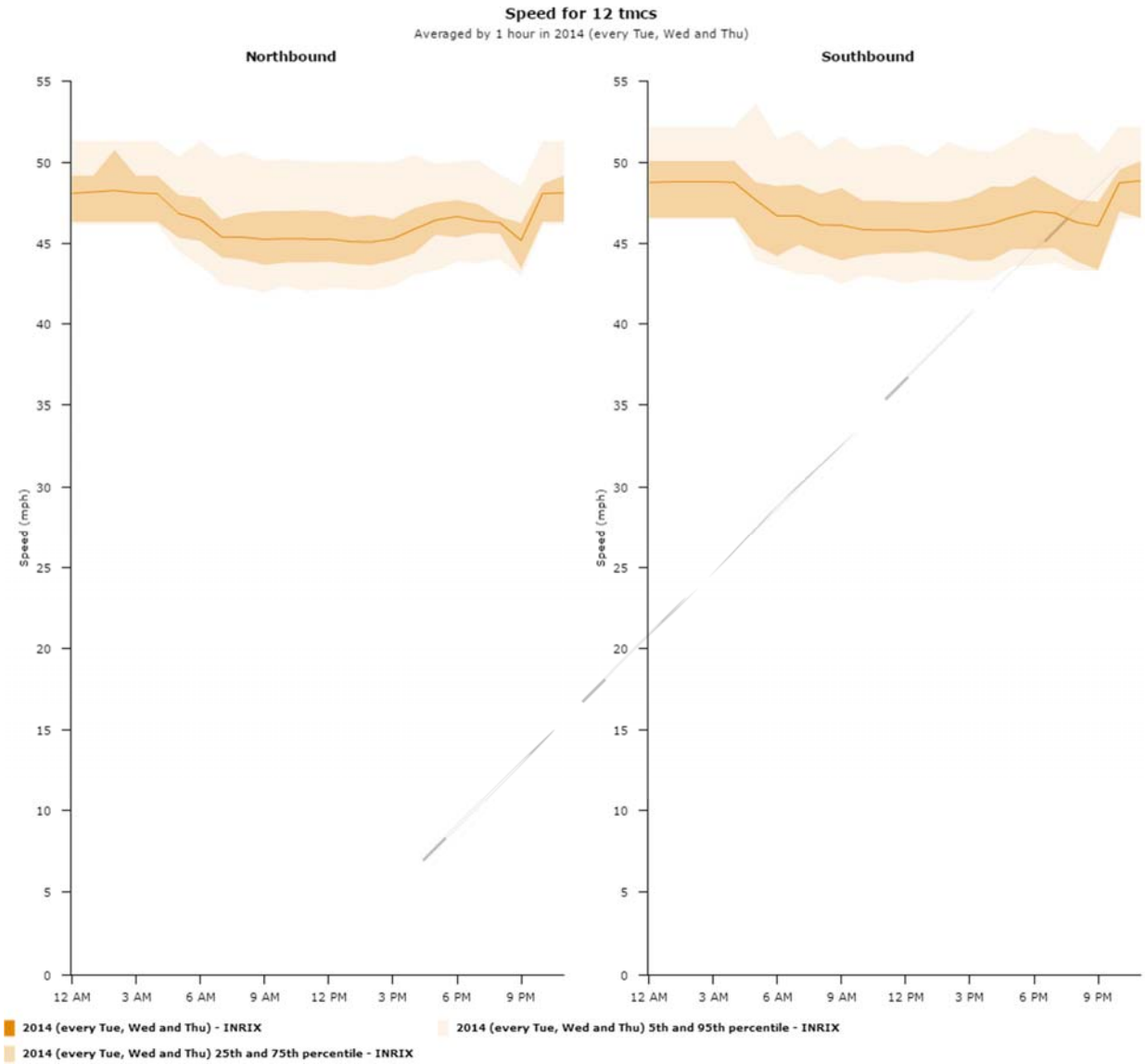


Figure A11.3: Corridor Congestion Index

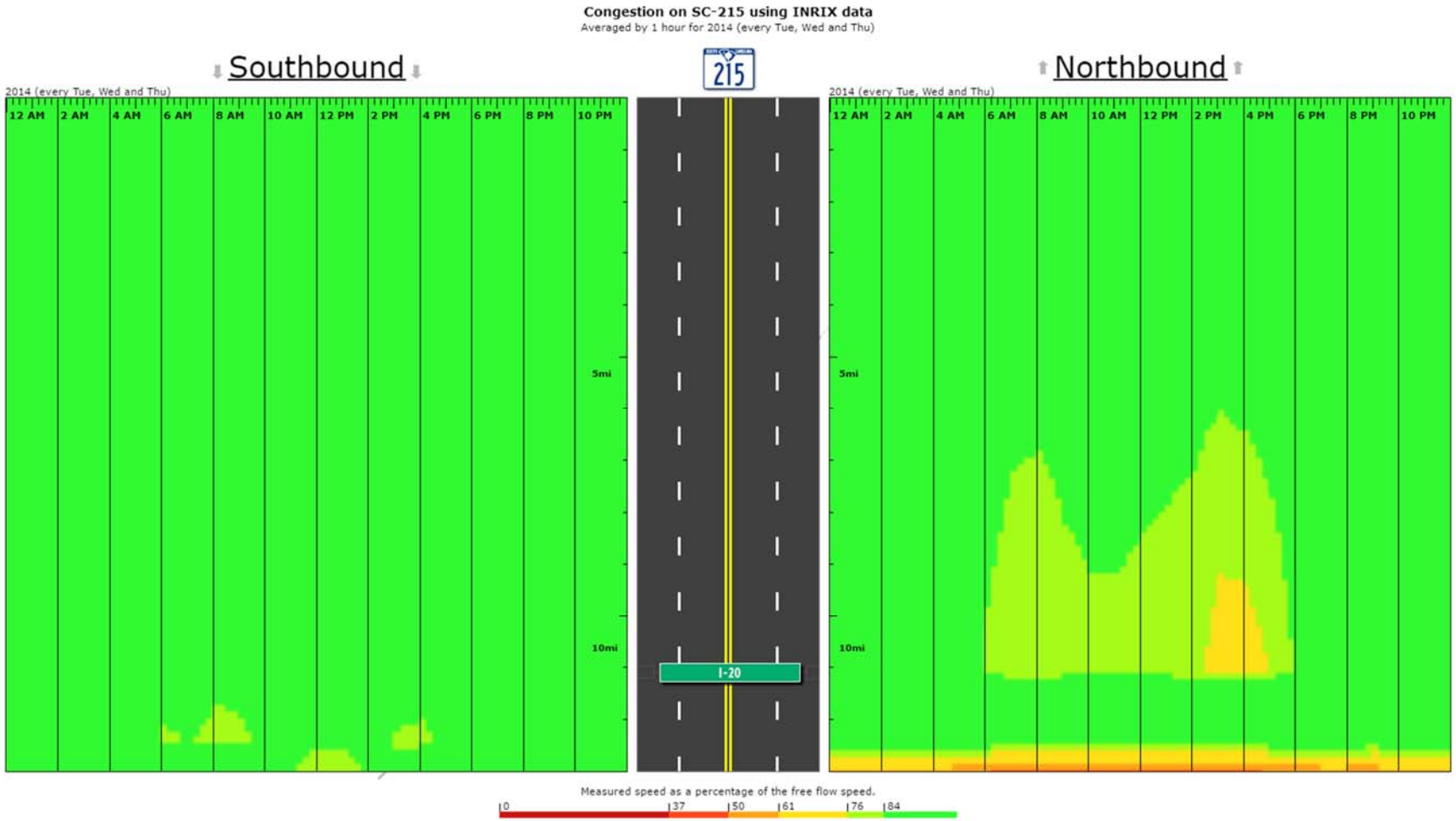


Figure A11.4: AM Peak Travel Time Index

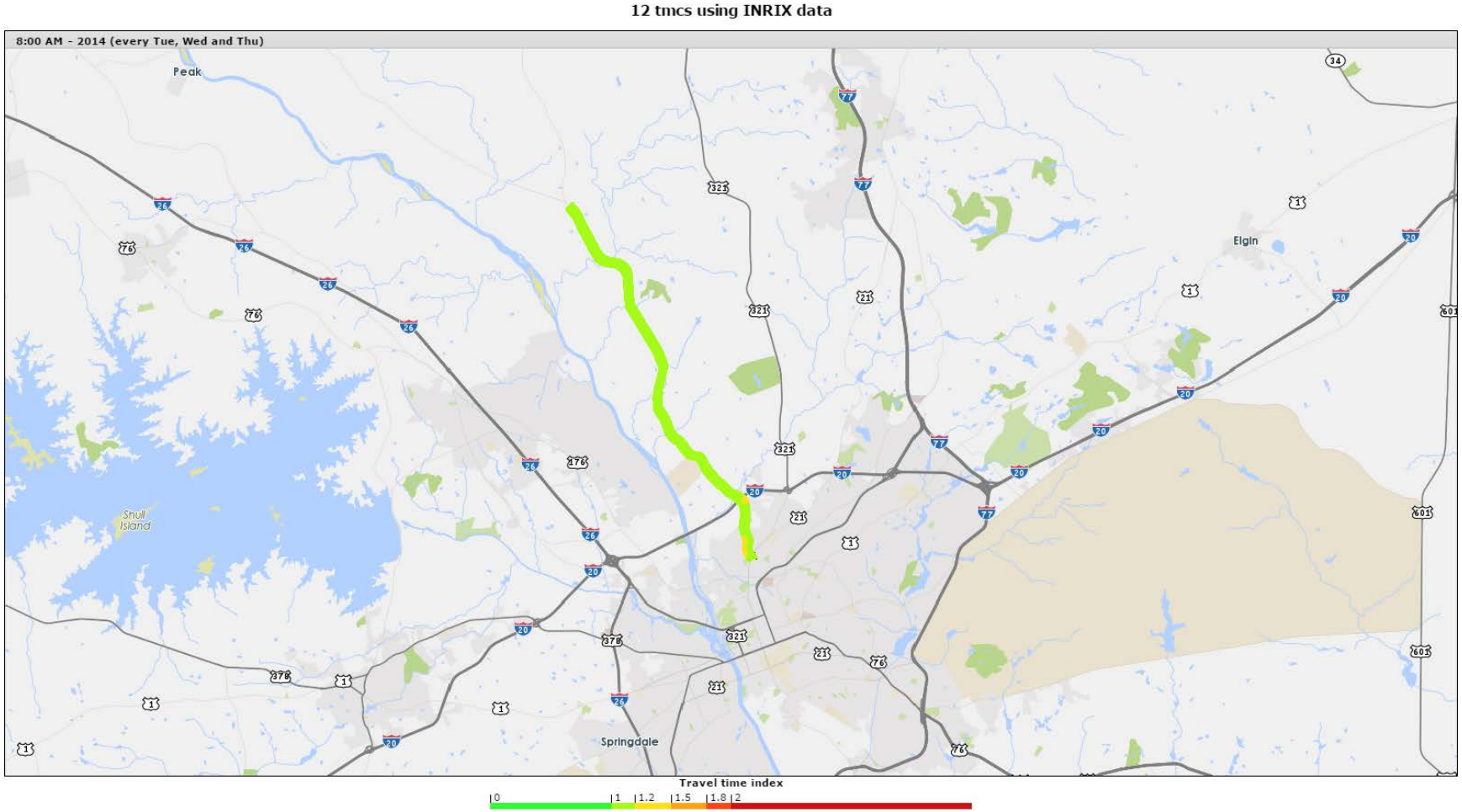
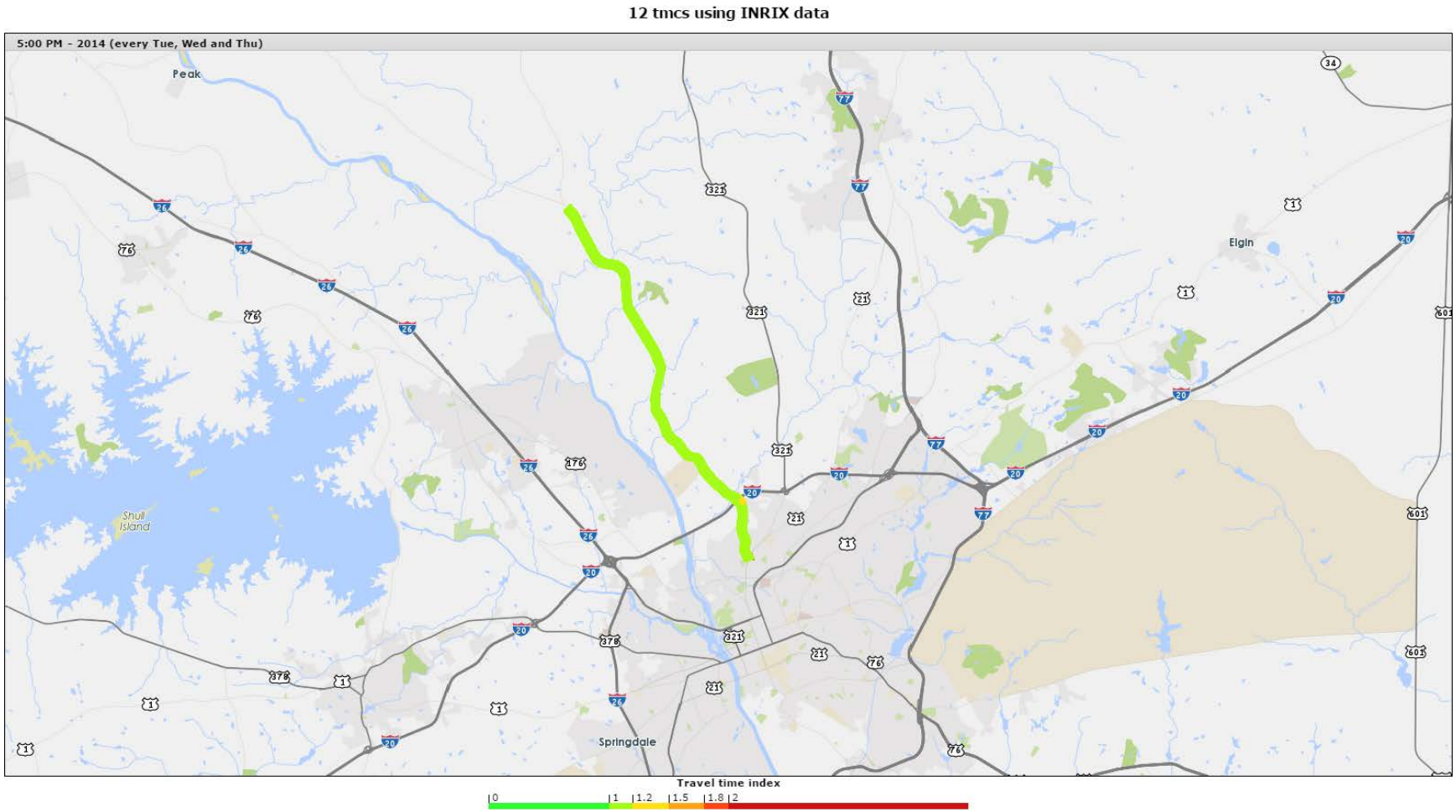


Figure A11.5: PM Peak Travel Time Index



A12. Corridor Name: Leesburg Road

Corridor ID: 1041

Route: SC 262

Start: Garners Ferry Rd US 76 / 378

End: McCords Ferry Rd US 601 (mm-14.75)

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: 6

Figure A12.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1041	255	SC262	LEESBURG RD	16,469	18,400	22,100	24,000	33,321	4	35	3	10800	0.97	C	1.34	E
1041	257	SC262	LEESBURG RD	5,700	6,600	7,300	6,200	9,424	2	45	3	10800	0.57	A	0.87	C
1041	259	SC262	LEESBURG RD	1,200	1,600	1,550	2,000	3,104	2	45	4	8600	0.18	A	0.28	A

LOS E

LOS F

Figure A12.2: Average Corridor Speed

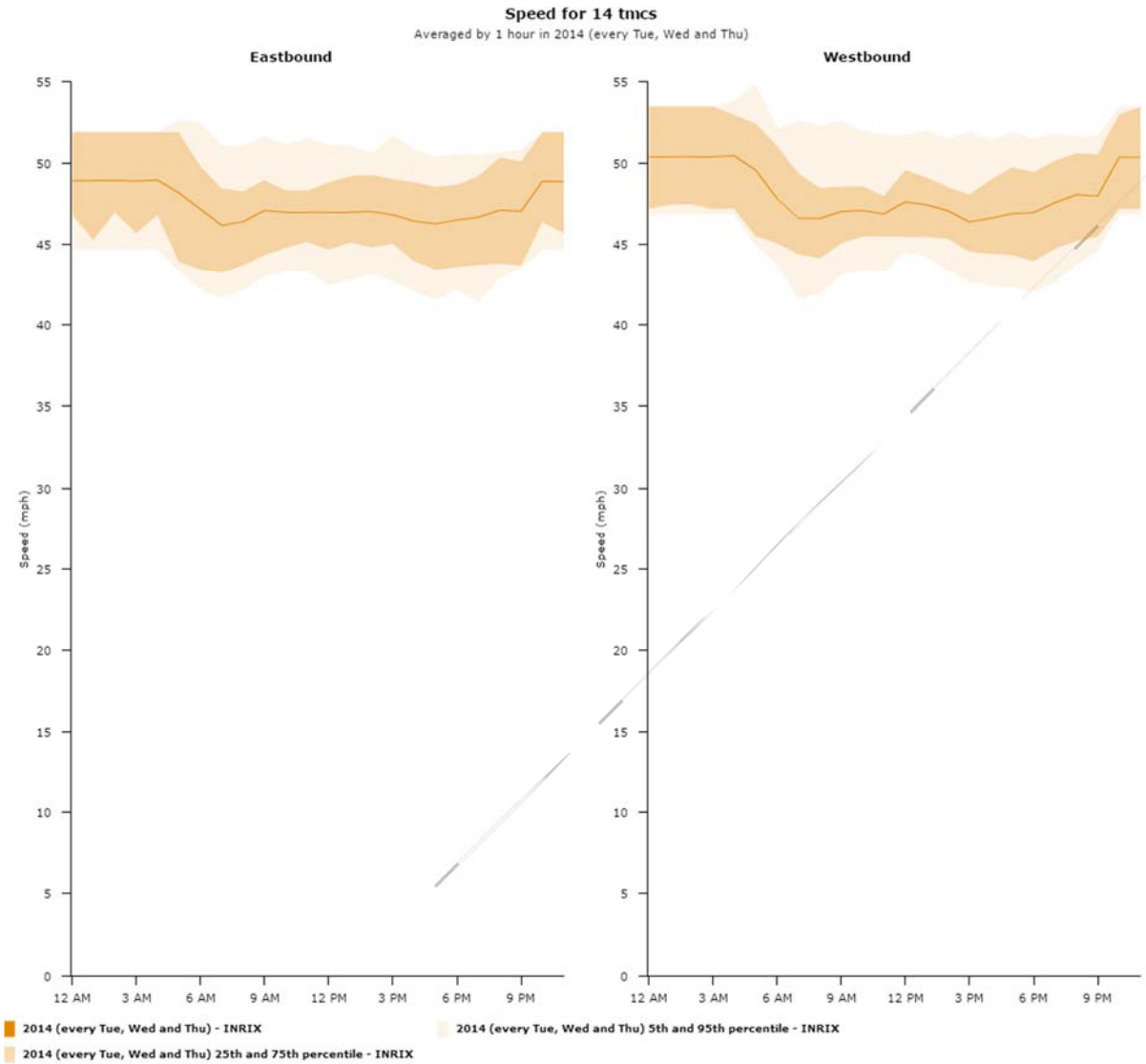


Figure A12.3: Corridor Congestion Index

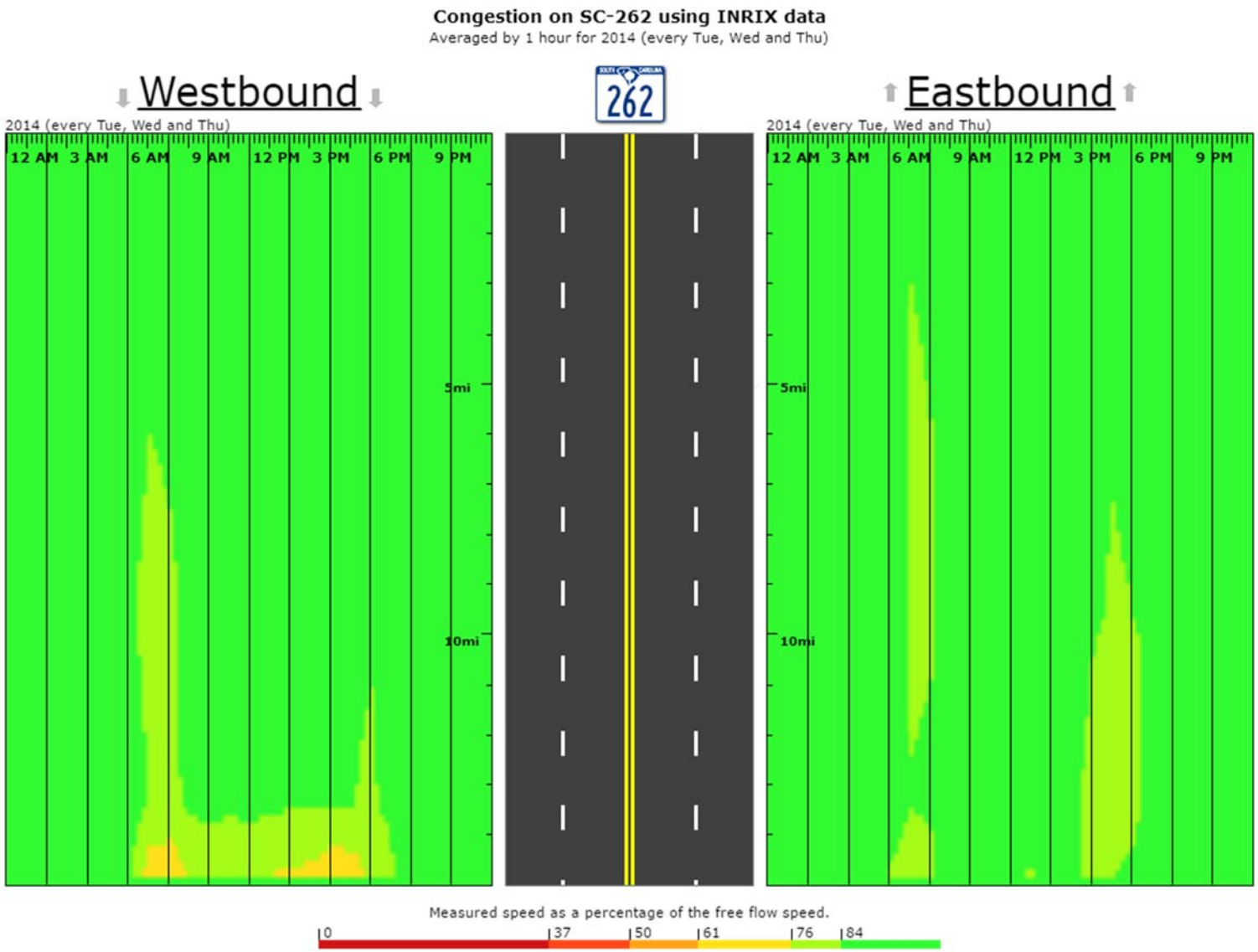


Figure A12.4: AM Peak Travel Time Index

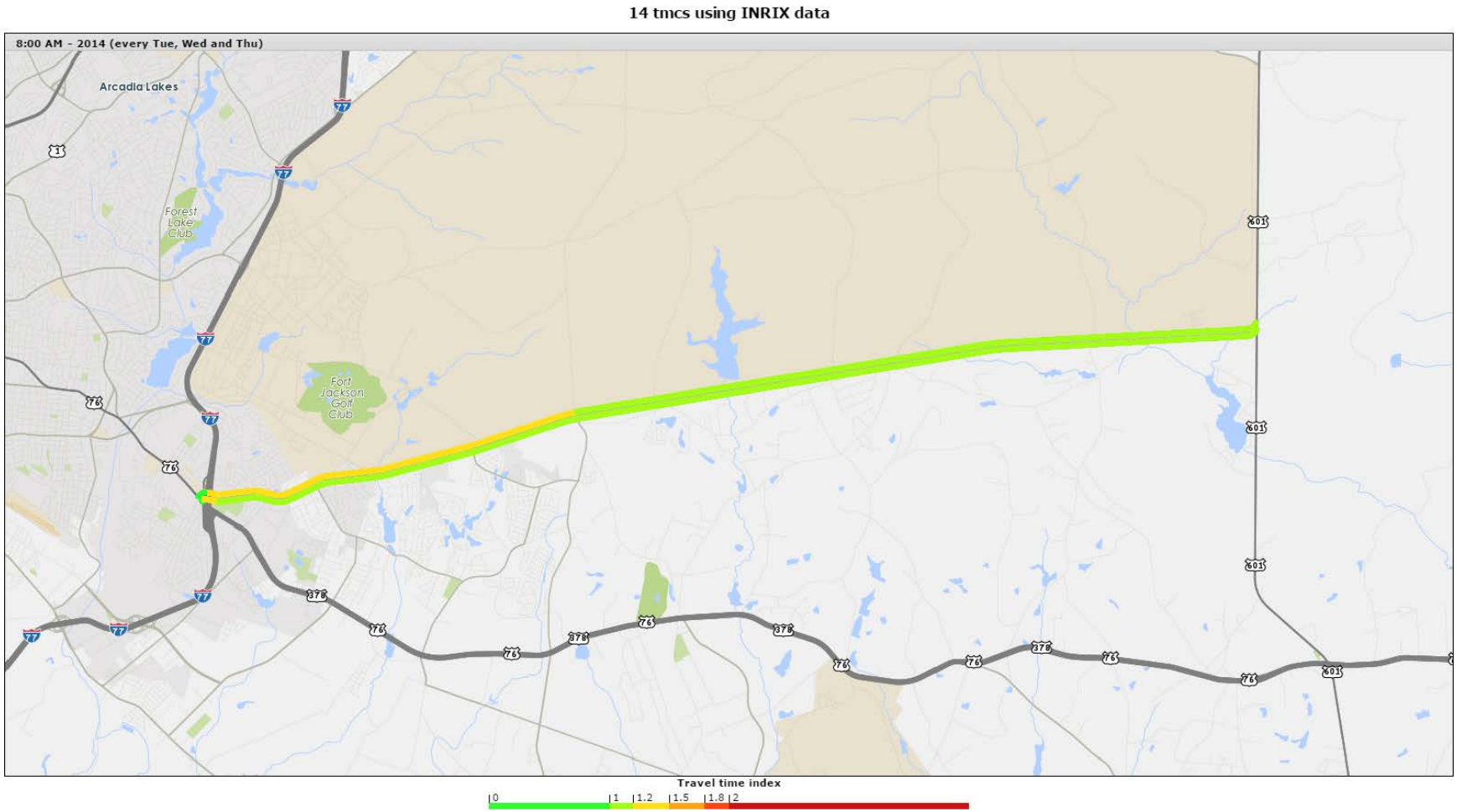
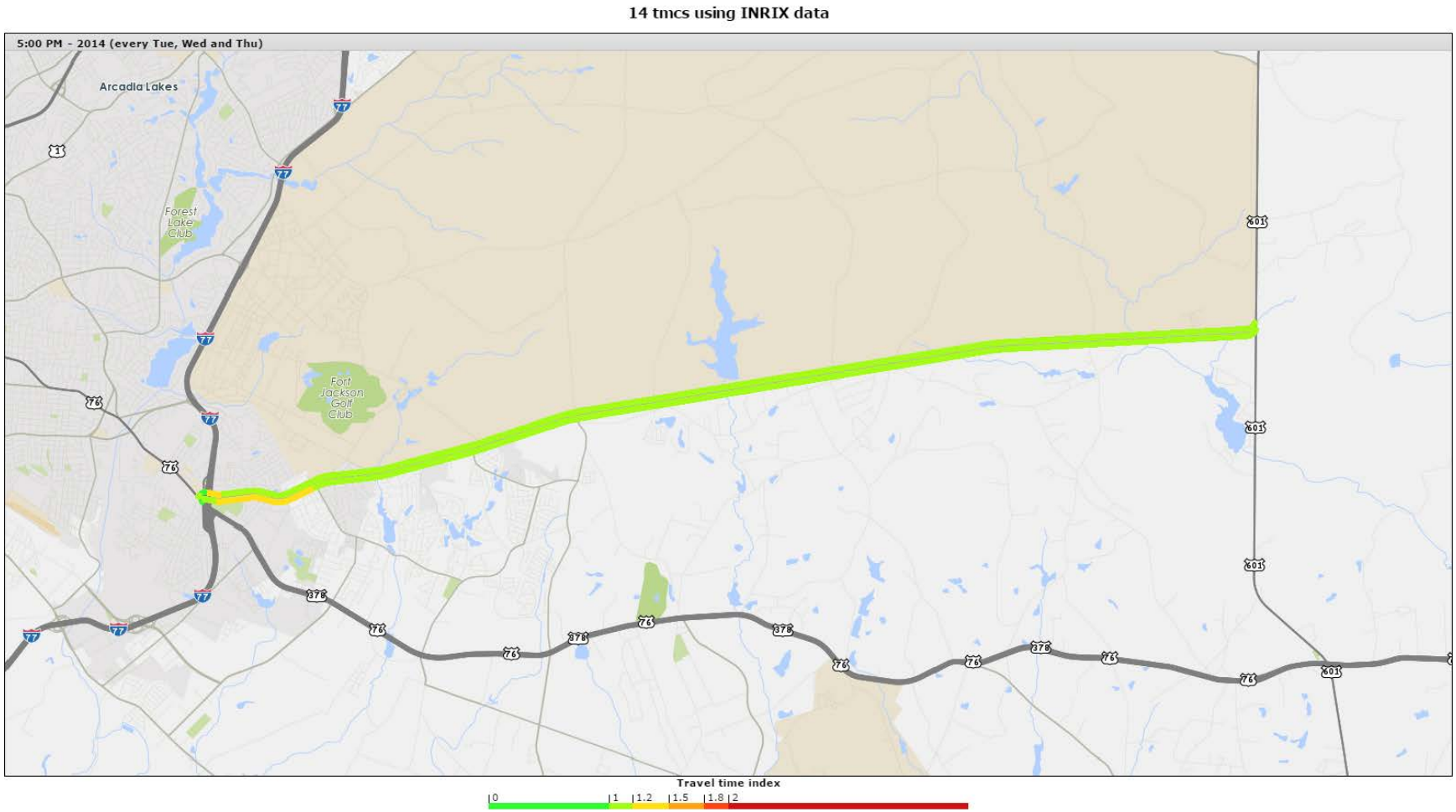


Figure A12.5: PM Peak Travel Time Index



A13a. Corridor Name: Bull Street

Corridor ID: 1043a

Route: SC 277

Start: Elmwood Avenue

End: Sunset Drive

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A13a.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1043a	821	SC277	BULL ST	38,300	36,200	39,800	34,700	47,034	4	35	2	29200	1.03	D	1.39	F

LOS E

LOS F

Figure A13a.2: Average Corridor Speed

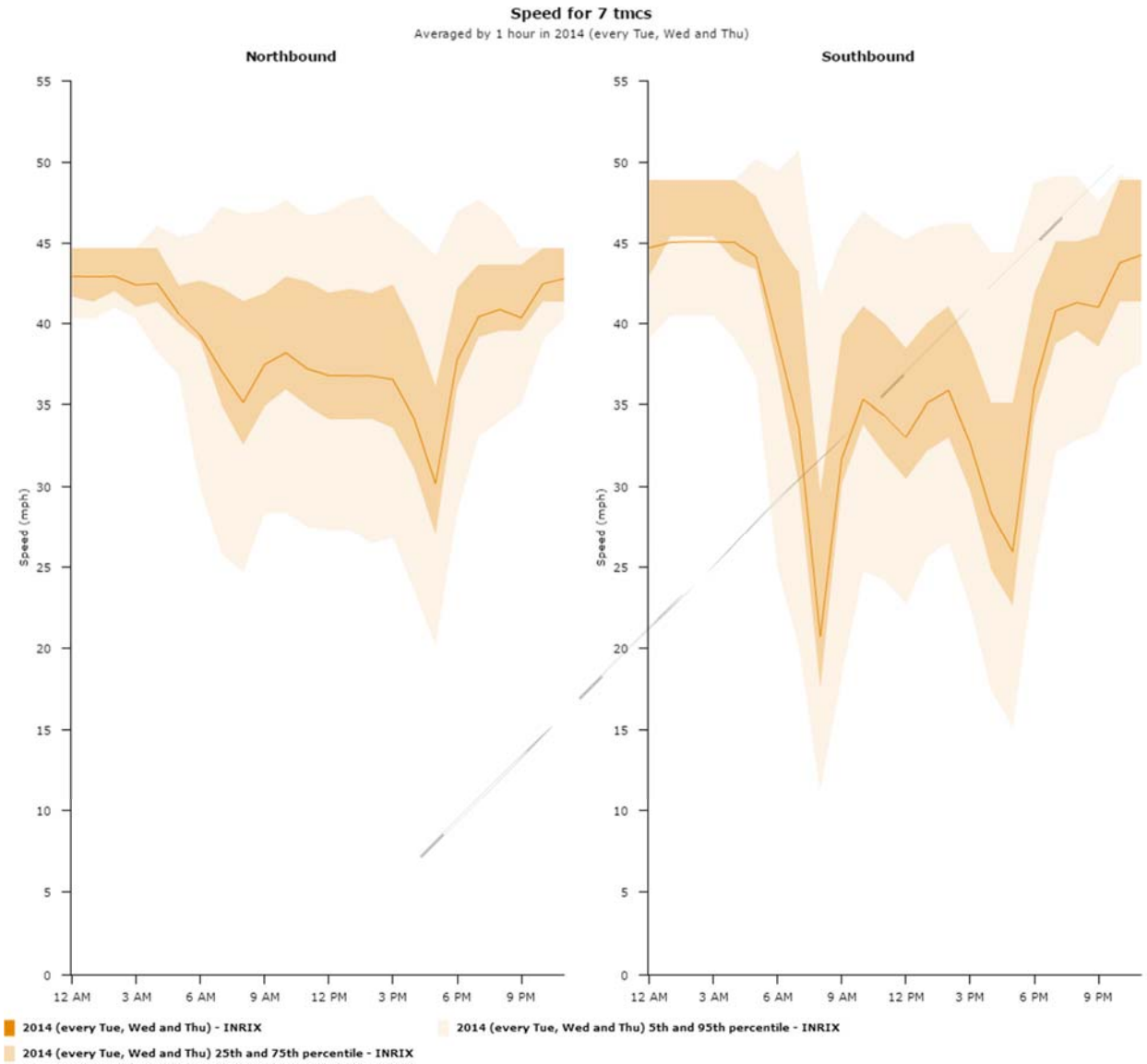


Figure A13a.3: Corridor Congestion Index

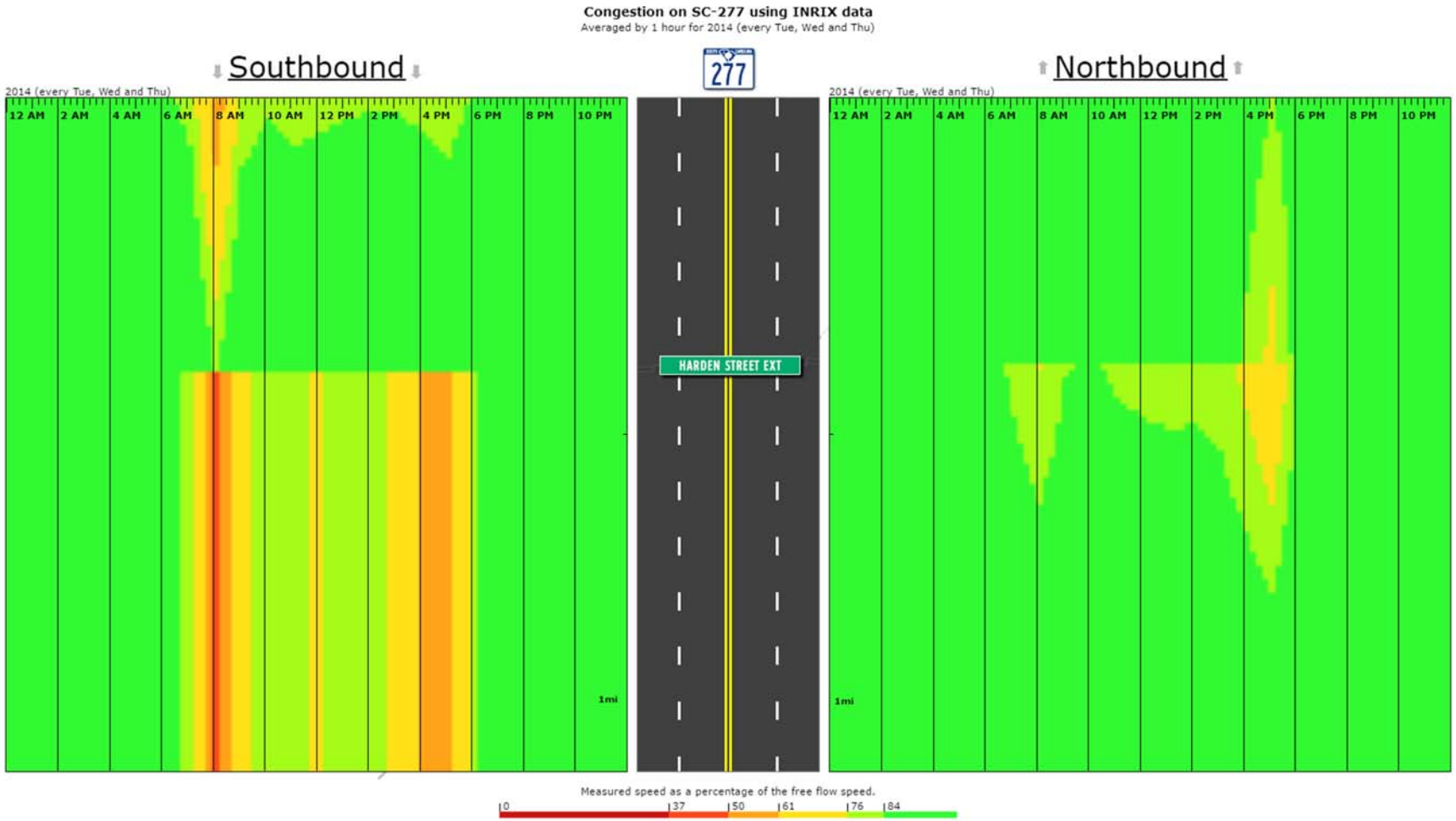


Figure A13a.4: AM Peak Travel Time Index

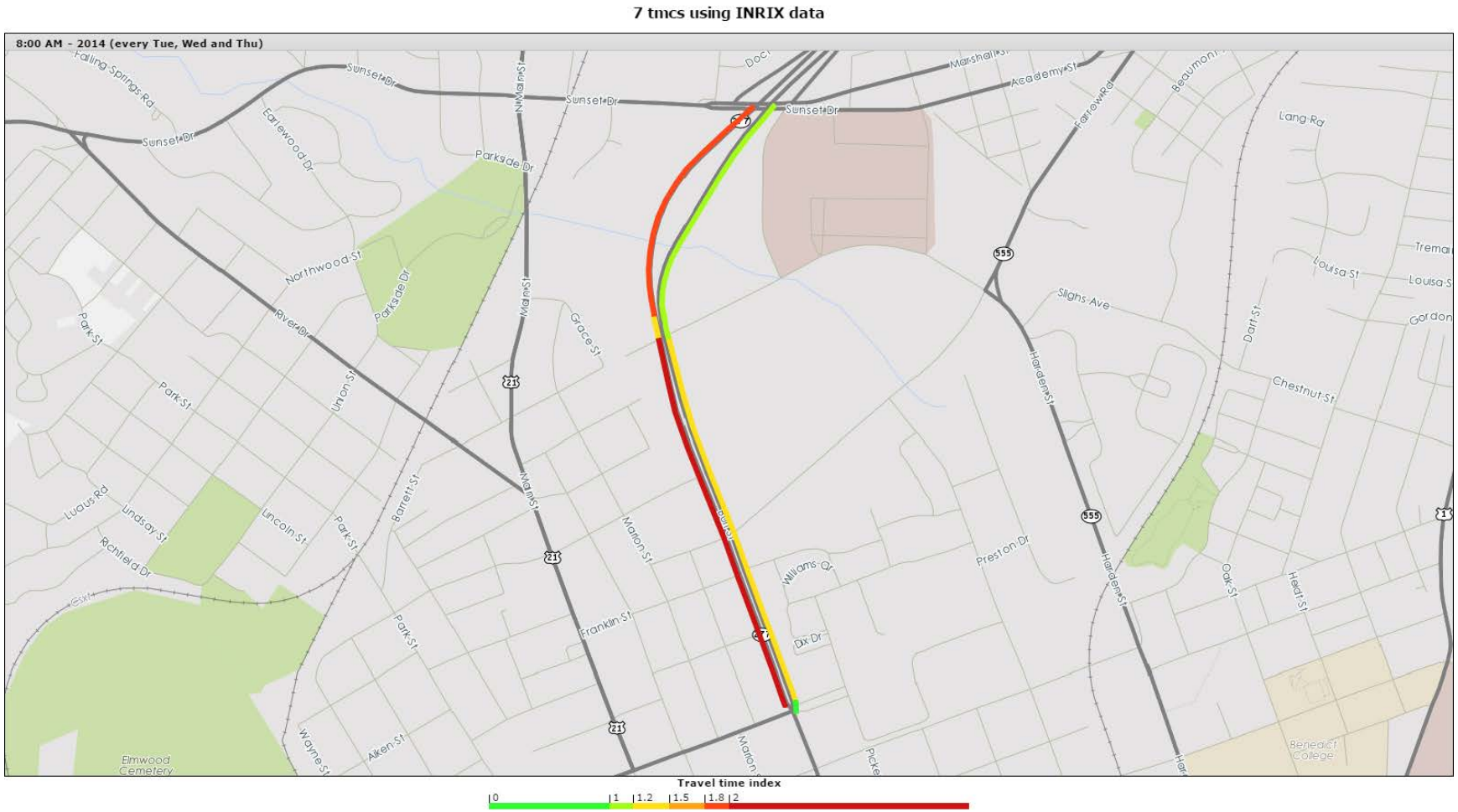


Figure A13a.5: PM Peak Travel Time Index

Travel time index

0 | 1 | 1.2 | 1.5 | 1.8 | 2

A13b. Corridor Name: Bull Street

Corridor ID: 1043b

Route: US 76

Start: Elmwood Avenue

End: Gervais Street

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A13b.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1043b	152	US76	BULL ST	21,500	20,500	22,800	20,500	27,271	5	35	2	29200	0.61	B	0.81	C

LOS E

LOS F

Figure A13b.2: Average Corridor Speed

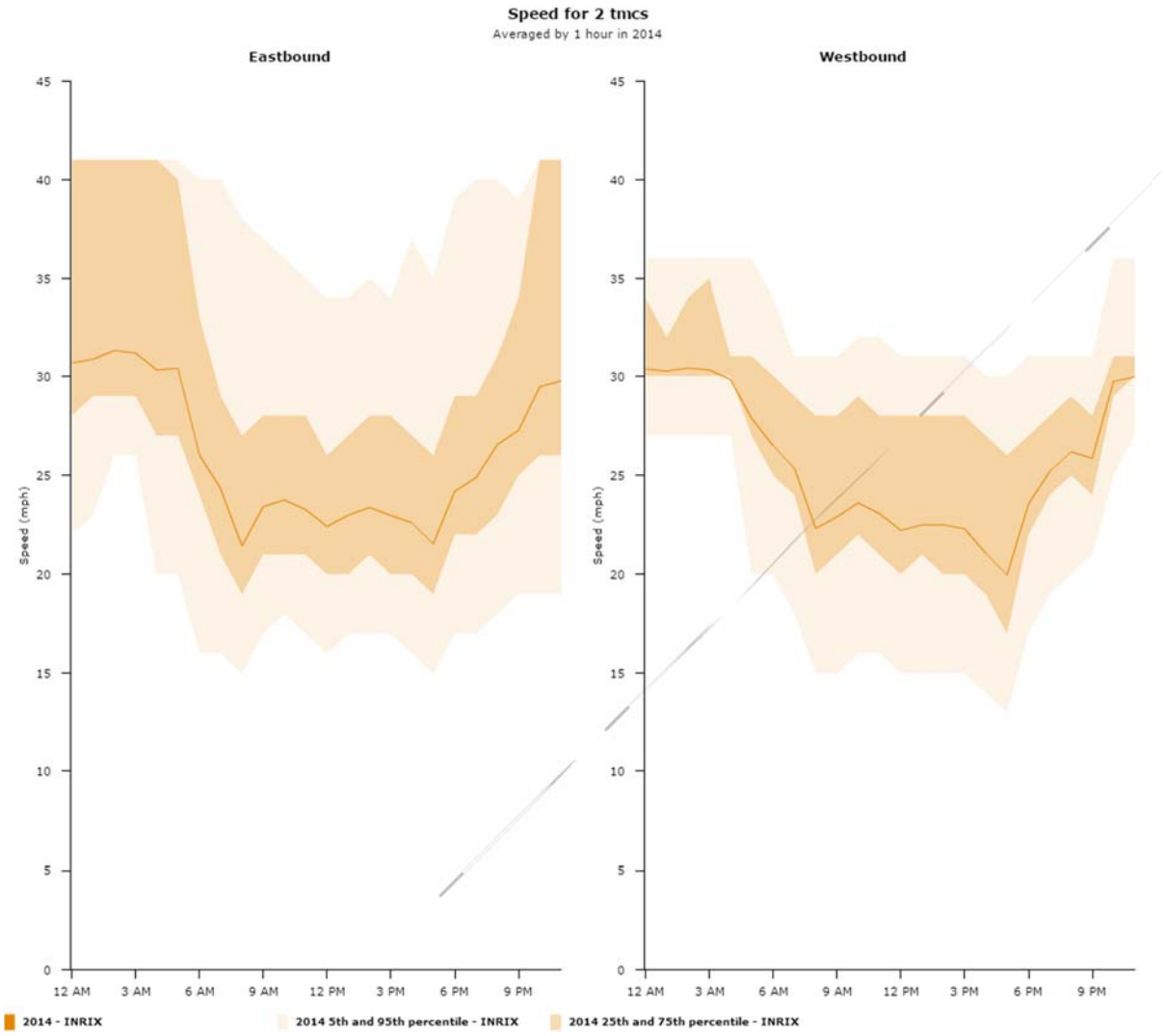


Figure A13b.3: Corridor Congestion Index

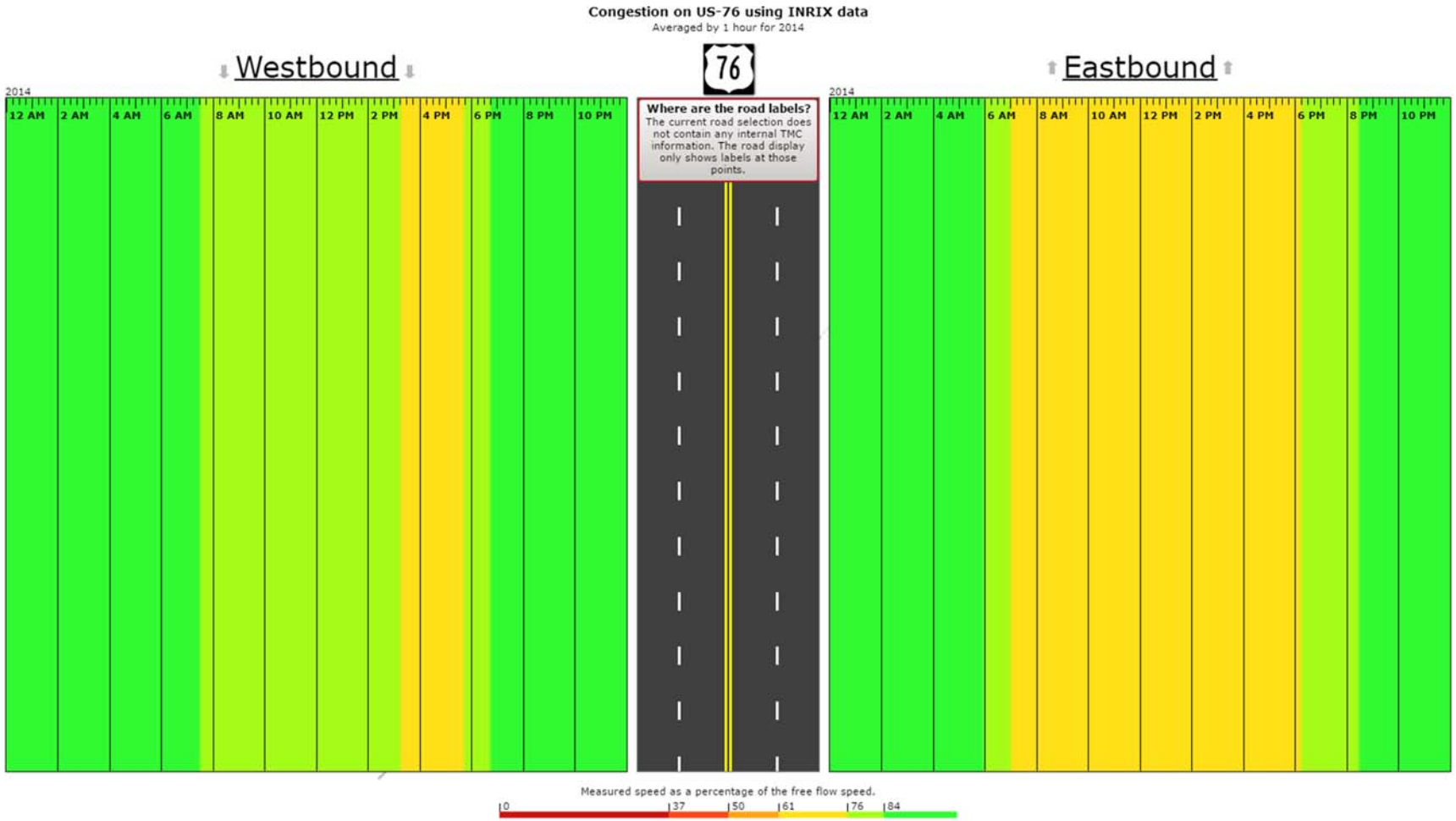


Figure A13b.4: AM Peak Travel Time Index

Figure A13b.5: PM Peak Travel Time Index

A14. Corridor Name: Bluff Road

Corridor ID: 1045

Start: Rosewood Dr SC 48 (mm-3.88)

End: US 601

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A14.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1045	238	SC48	BLUFF RD		18,100	19,800	20,900	26,035	5	45	2	29200	0.62	B	0.77	C
1045	239	SC48	BLUFF RD	11,100	11,200	9,600	10,500	13,324	2	45	3	10800	0.97	C	1.23	E
1045	241	SC48	BLUFF RD	3,900	5,200	4,100	3,400	4,731	2	55	3	10800	0.31	A	0.43	A
1045	242	SC48	BLUFF RD	11,100	11,900	10,400	11,900	13,342	5	45	3	21600	0.35	A	0.4	A
1045	243	SC48	BLUFF RD	2,400	2,800	2,400	2,100	2,938	2	55	3	10800	0.19	A	0.27	A
1045	244	SC48	BLUFF RD	3,900	7,600	6,400	5,800	10,051	2	55	3	10800	0.53	B	0.93	C
1045	246	SC48	BLUFF RD	2,400	2,900	2,300	2,300	3,108	2	55	3	10800	0.21	A	0.29	A

LOS E

LOS F

Figure A14.2: Average Corridor Speed

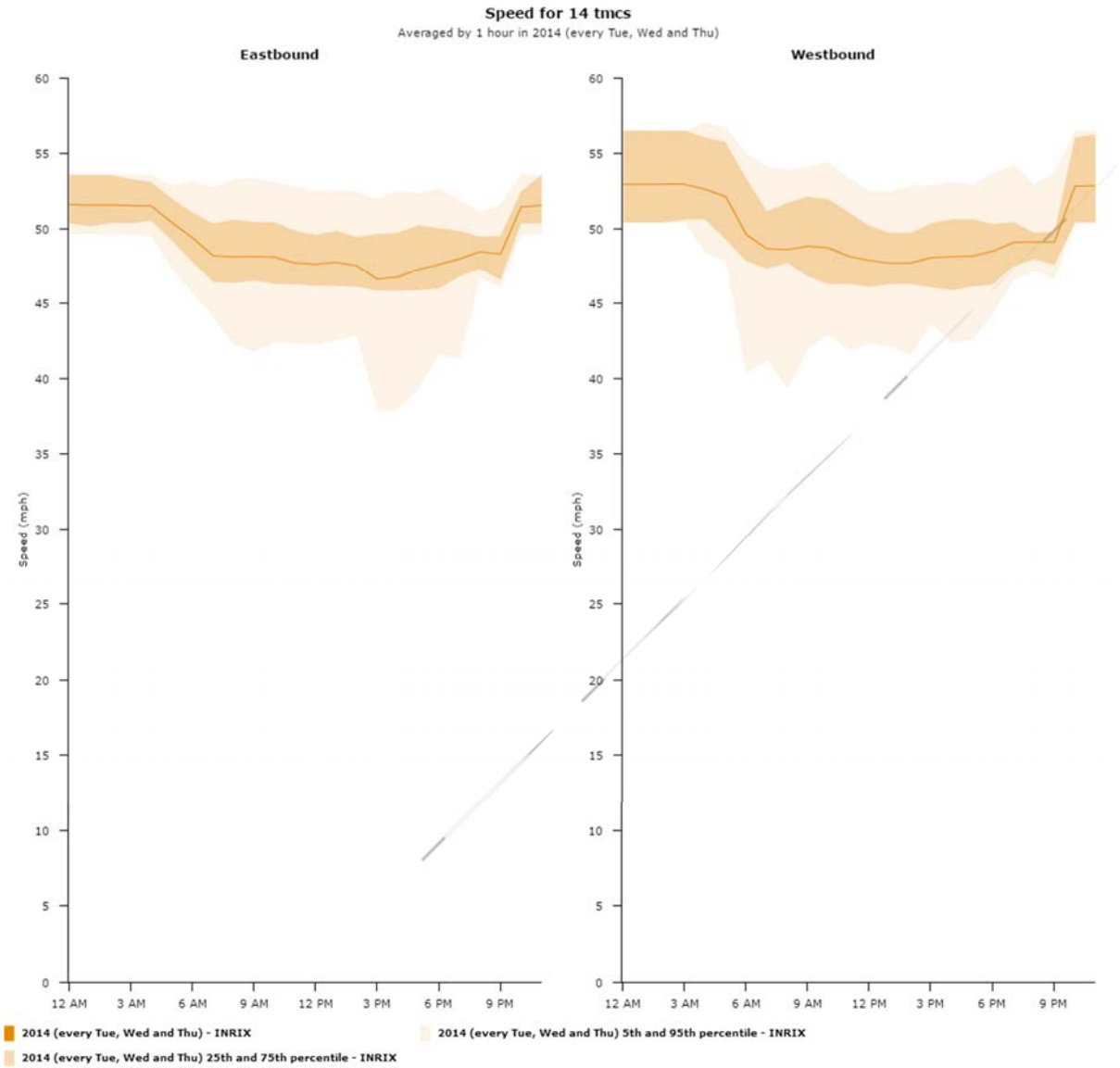


Figure A14.3: Corridor Congestion Index

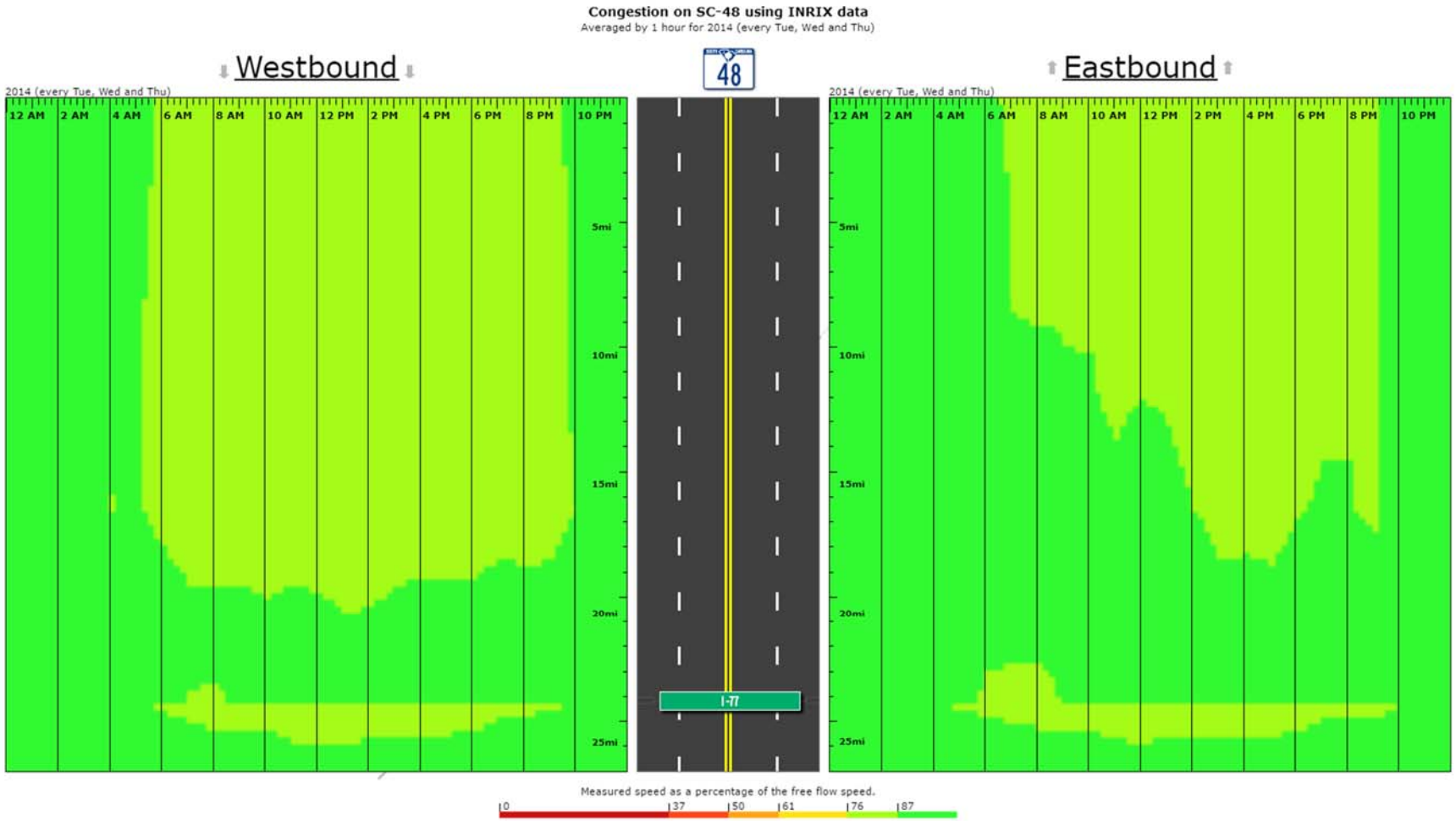


Figure A14.4: AM Peak Travel Time Index

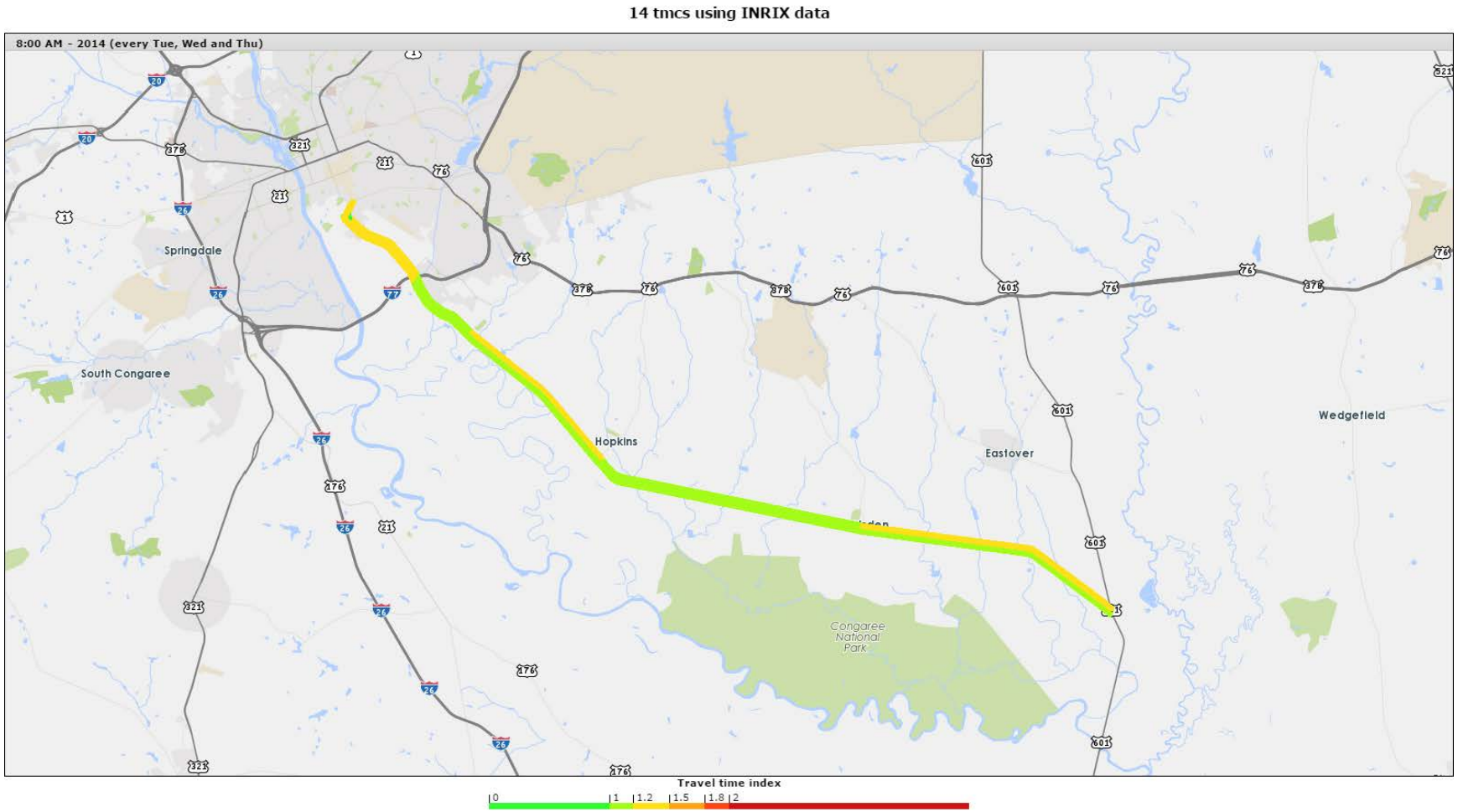
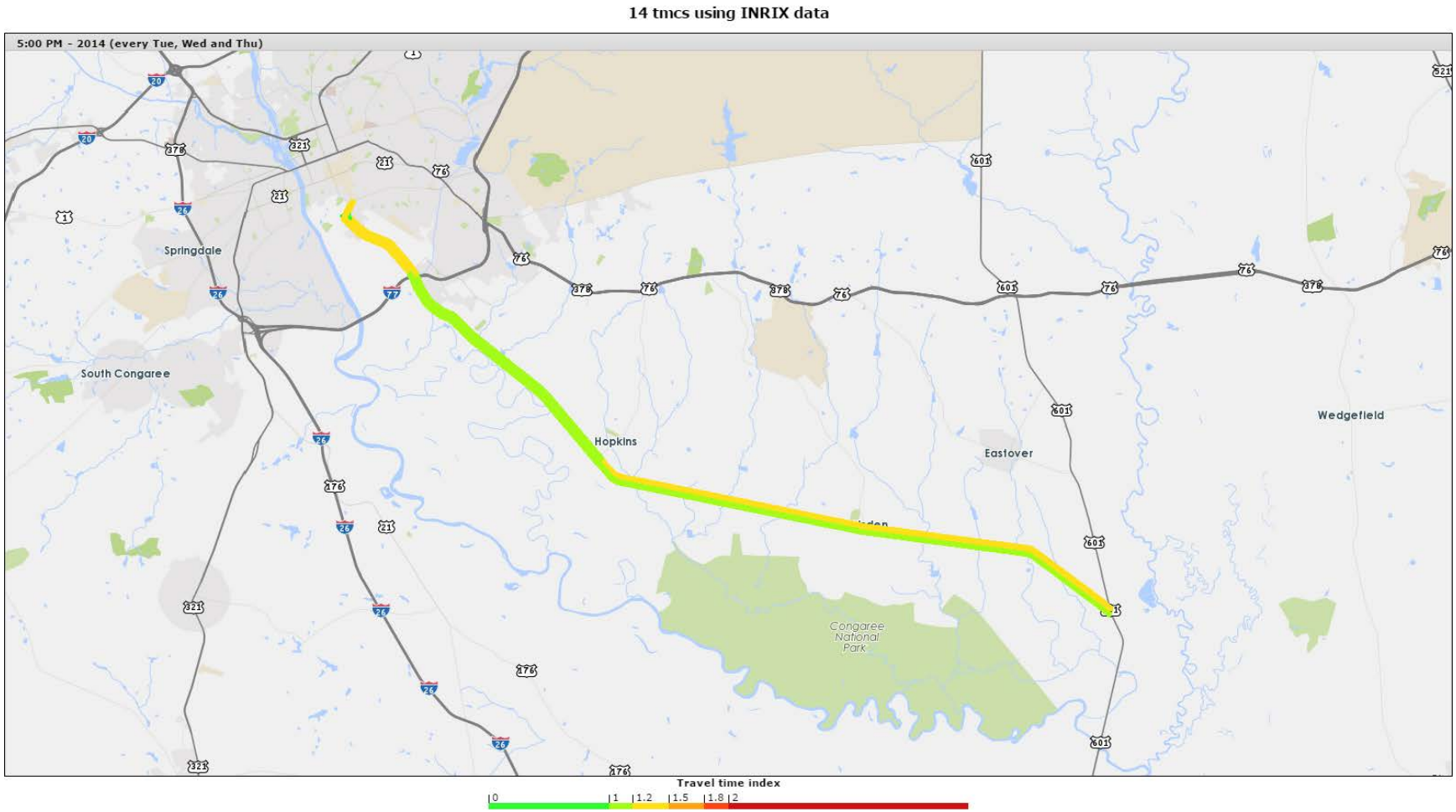


Figure A14.5: PM Peak Travel Time Index



A15. Corridor Name: SC 6/North Lake Drive/South Lake Drive

Corridor ID: 1047

Route: SC 6

Start: Broad River Rd US 76

End: Swansea

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: 8, 4

Figure A15.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1047	203	SC6	DREHER SHOALS RD	4,600	7,400	11,700	12,300	18,218	2	45	3	10800	1.14	D	1.67	F
1047	212	SC6	NORTH LAKE DR	4,400	8,000	10,700	11,900	20,345	2	55	3	10800	1.1	D	1.88	F
1047	213	SC6	N LAKE DR	9,870	18,900	20,200	21,400	38,463	4	35	3	21600	0.86	C	1.55	F
1047	215	SC6	N LAKE DR	8,422	10,900	13,600	14,800	22,406	5	35	3	21600	0.6	B	0.9	C
1047	217	SC6	N LAKE DR	9,200	11,700	11,800	12,500	19,671	2	35	3	10800	1.16	E	1.82	F
1047	219	SC6	S LAKE DR	15,880	14,300	18,600	19,900	29,427	2	35	3	10800	1.84	F	2.72	F
1047	220	SC6	SOUTH LAKE DR	8,042	13,300	19,400	22,300	39,951	5	35	3	10800	0.9	C	1.61	F
1047	221	SC6	SOUTH LAKE DR	8,042	13,300	18,100	21,500	37,088	5	35	3	10800	0.87	C	1.5	F
1047	222	SC6	HWY 6	8,042	13,300	11,600	12,800	20,708	2	35	3	10800	1.19	E	1.92	F
1047	223	SC6	HWY 6	2,618	5,000	6,100	6,900	12,617	2	55	4	8600	0.64	B	1.17	E
1047	224	SC6	HWY 6	2,618	5,000	6,100	12,800	19,584	2	55	3	10800	1.19	E	1.81	F
1047	225	SC6	HWY 6	2,300	3,400	3,700	3,600	5,073	2	55	4	8600	0.33	A	0.47	A
1047	227	SC6	WEST 2ND ST	4,200	4,700	5,100	4,900	6,943	2	55	4	8600	0.45	A	0.64	B

LOS E

LOS F

Figure A15.2: Average Corridor Speed

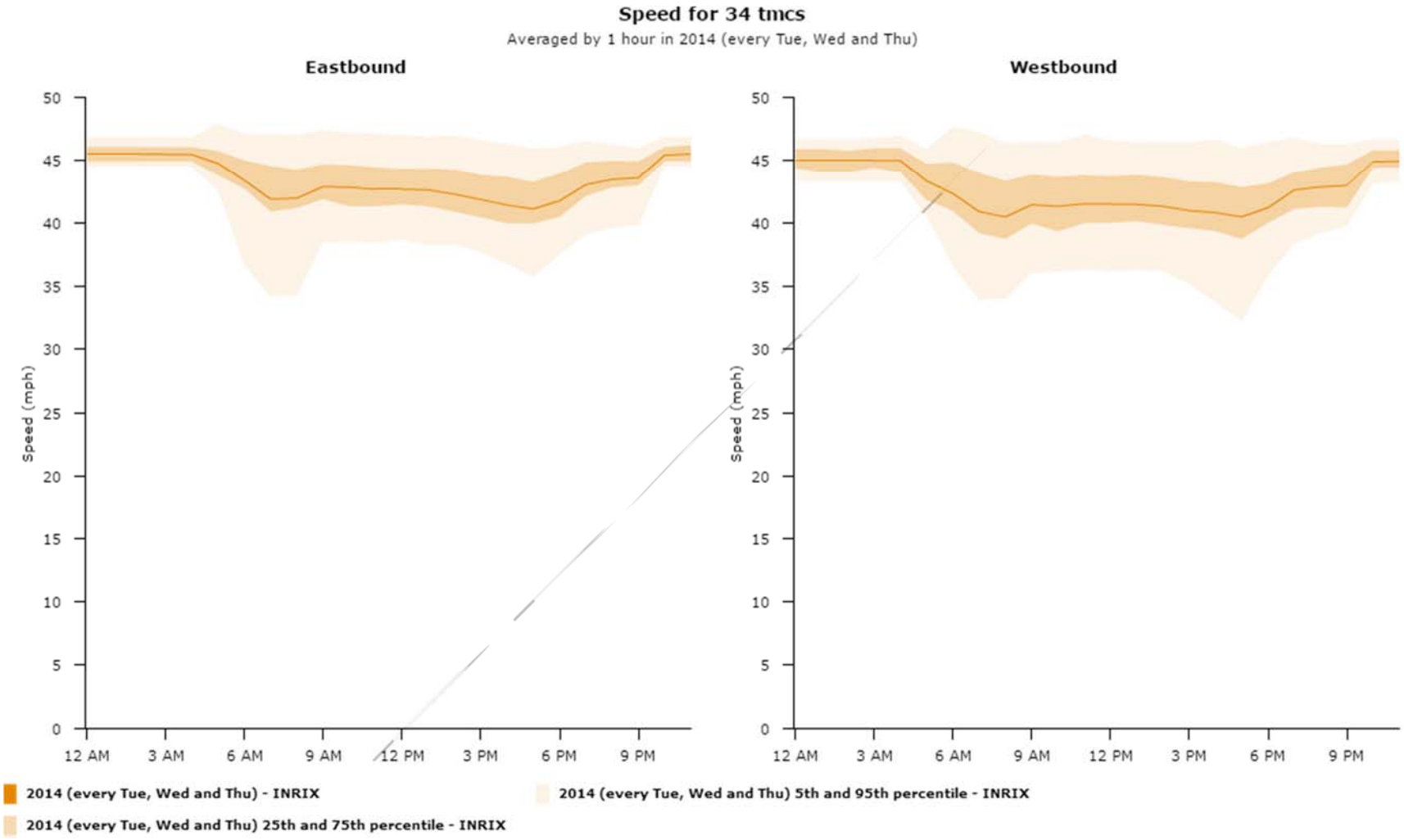


Figure A15.3: Corridor Congestion Index

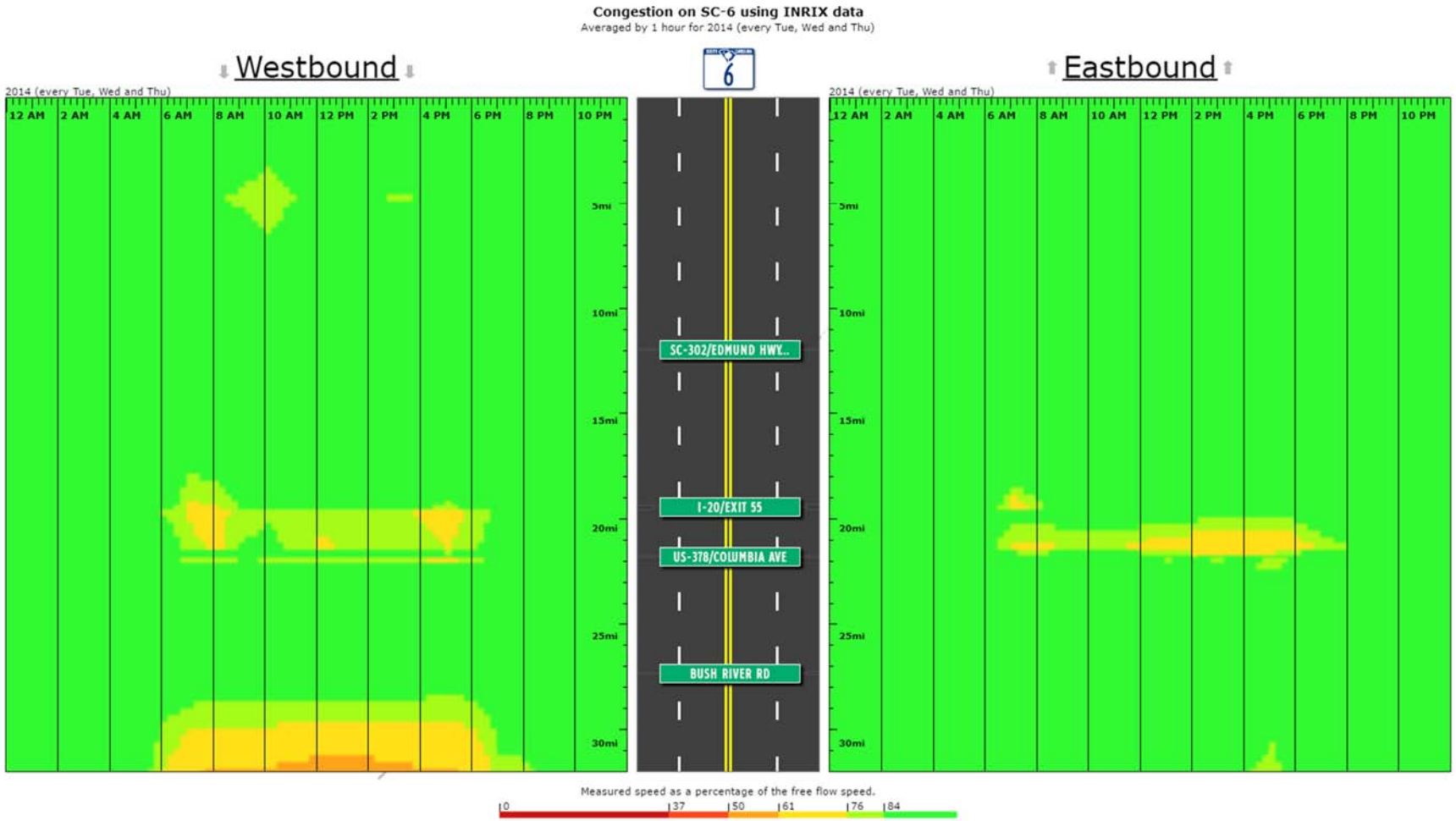


Figure A15.4: AM Peak Travel Time Index

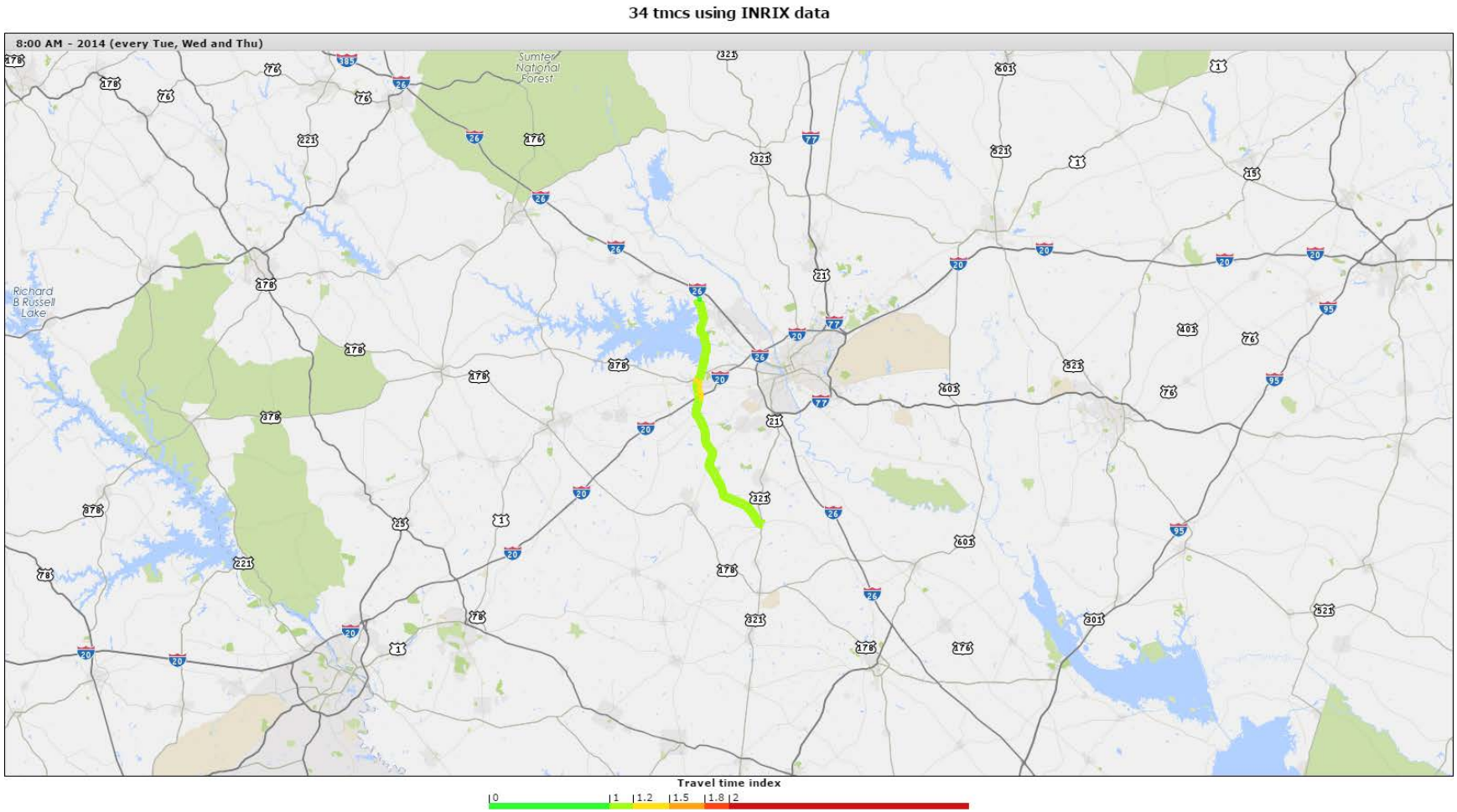
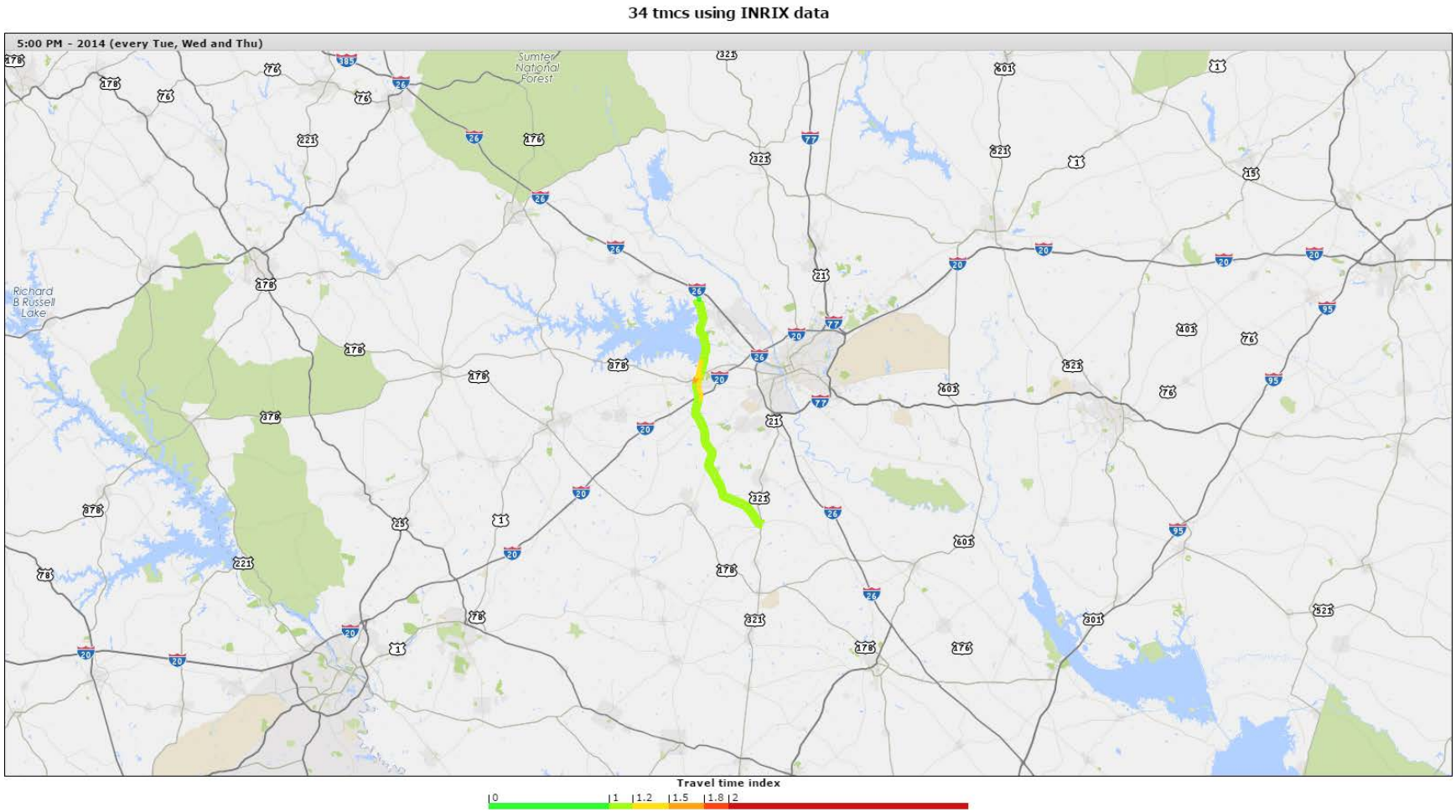


Figure A15.5: PM Peak Travel Time Index



A16. Corridor Name: Assembly Street

Corridor ID: 1049

Route: SC 48

Start: Elmwood Ave US 21

End: Rosewood Drive

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A15.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1049	234	SC48	ASSEMBLY ST	32,100	19,800	19,200	18,800	11,458	6	35	2	43800	0.37	A	0.23	A
1049	235	SC48	ASSEMBLY ST	22,000	24,300	23,800	21,400	19,893	6	35	2	43800	0.42	A	0.39	A
1049	236	SC48	ASSEMBLY ST		19,900	23,800	25,400	22,658	6	35	2	43800	0.5	B	0.44	A
1049	237	SC48	ASSEMBLY ST	17,700	20,700	22,300	24,000	29,578	5	35	3	21600	0.71	B	0.88	C
1049	290	SC768	SHOP RD EXT		23,100	25,300	23,500	43,844	4	45	3	21600	0.94	C	1.76	F
1049	292	SC768	SHOP RD EXT		15,700	16,100	18,400	29,285	4	45	3	21600	0.74	B	1.18	E
1049	295	SC768	SHOP RD EXT	10,500	17,300	16,100	15,700	25,993	4	45	3	21600	0.63	B	1.05	D

LOS E

LOS F

Figure A16.2: Average Corridor Speed

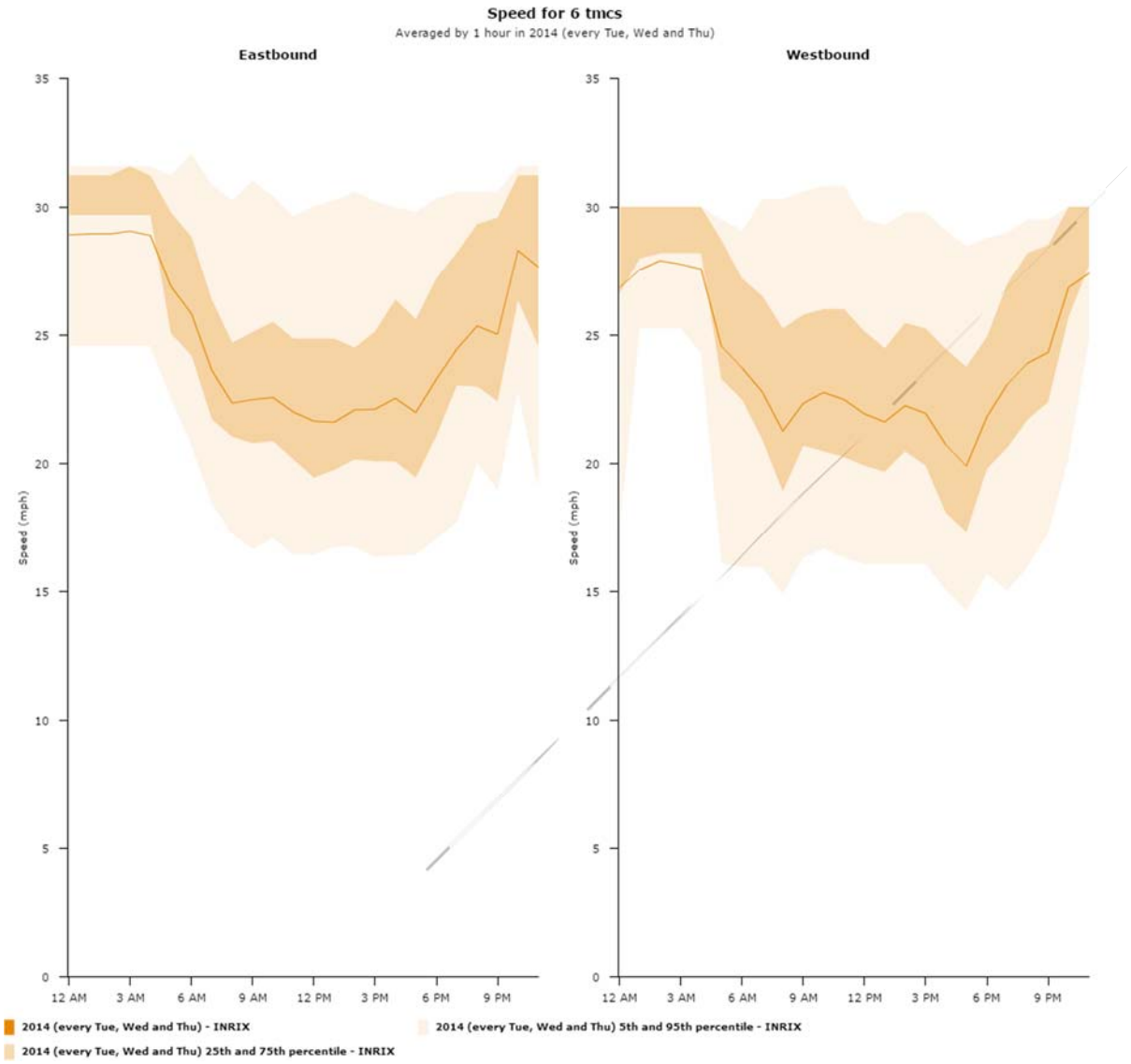


Figure A16.3: Corridor Congestion Index

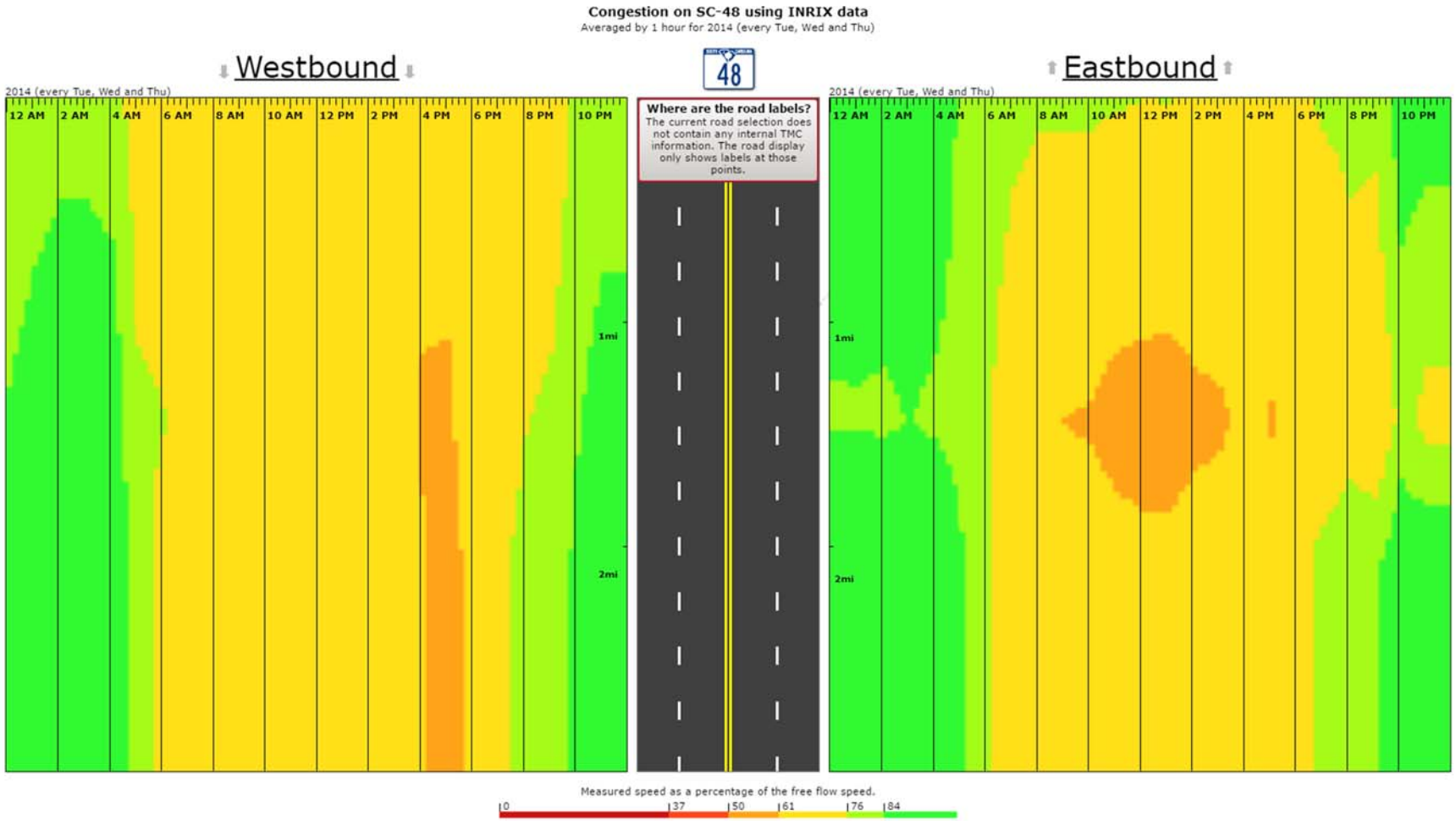


Figure A16.4: AM Peak Travel Time Index

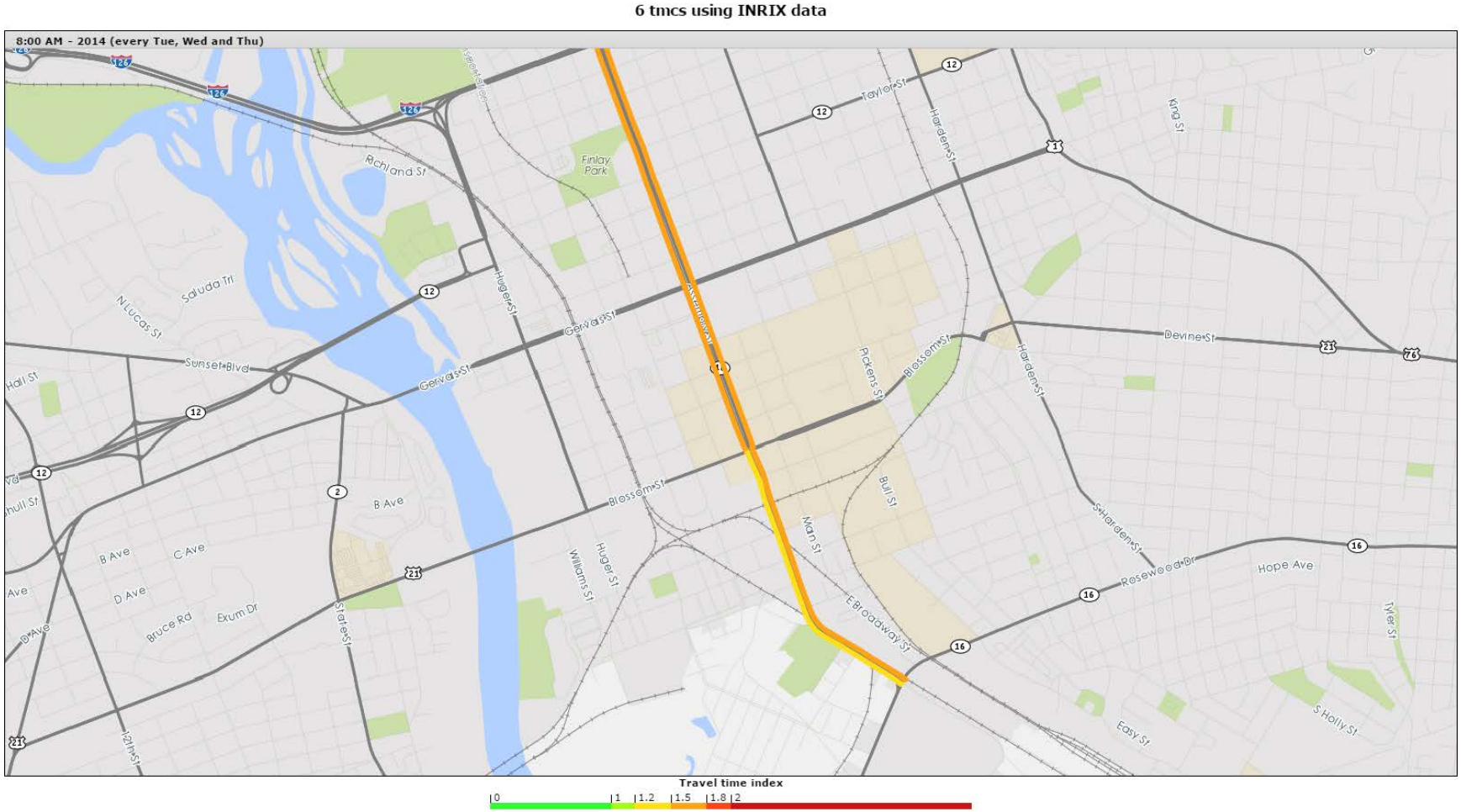
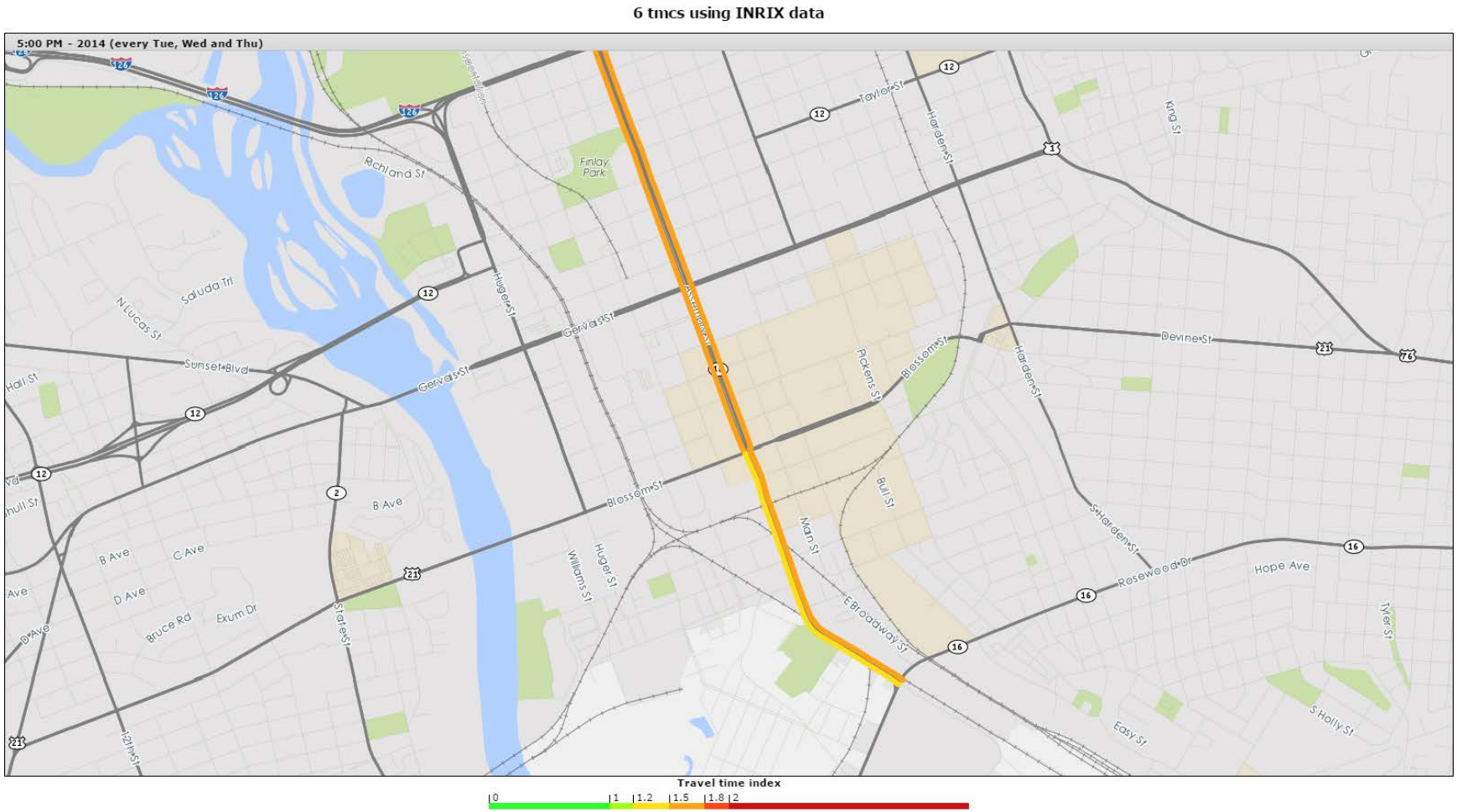


Figure A16.5: PM Peak Travel Time Index



A17. Corridor Name: St. Andrews Road

Corridor ID: 1051

Route: S-42, S-36

Start: Broad River Rd US 176

End: Woodrow Street

County: Richland/Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A17.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1051	487	S-42	ST ANDREWS RD	20,700	19,600	18,100	16,300	24,947	5	45	3	21600	0.66	B	1	C
1051	753	S-36	ST ANDREWS RD	26,700	23,400	23,000	22,100	13,309	5	45	3	21600	0.89	C	0.54	B
1051	755	S-36	ST ANDREWS RD	14,300	15,100	14,300	13,300	11,302	5	45	3	21600	0.54	B	0.46	A
1051	757	S-36	ST ANDREWS RD	17,900	23,700	23,800	21,400	22,746	5	45	3	21600	0.86	C	0.92	C
1051	759	S-36	ST ANDREWS RD	20,100	18,800	19,000	17,200	17,288	5	45	3	21600	0.69	B	0.7	B
1051	797	S-36	ST ANDREWS RD	22,500	20,000	20,900	20,900	18,157	5	45	3	21600	0.84	C	0.73	B
1051	799	S-36	ST ANDREWS RD	20,400	17,700	17,200	19,200	18,060	5	45	3	21600	0.77	C	0.72	B
1051	801	S-36	ST ANDREWS RD	10,800	12,000	11,700	11,800	10,301	2	45	9	8600	1.37	F	1.2	E

LOS E

LOS F

Figure A17.2: Average Corridor Speed

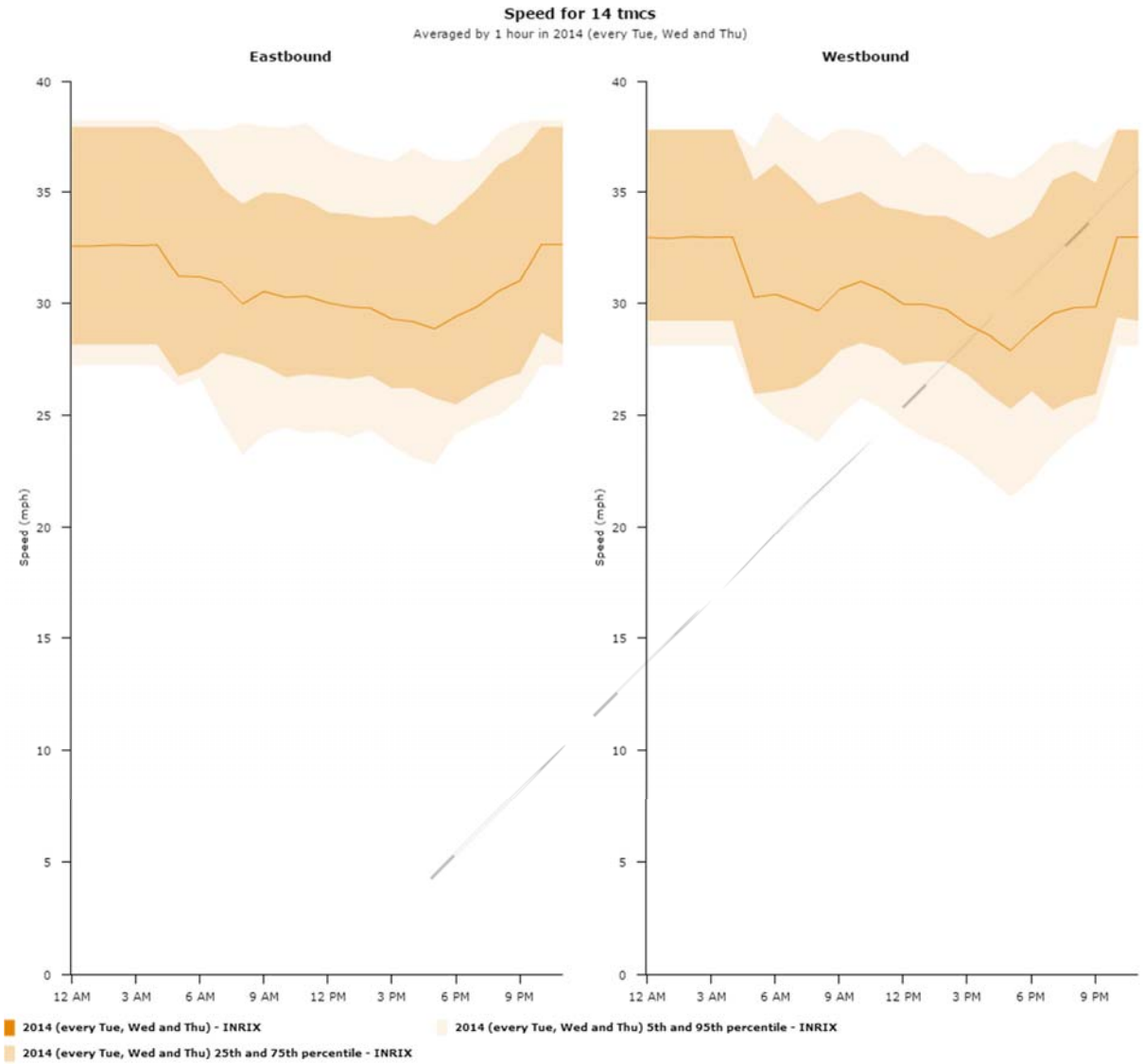


Figure A17.3: Corridor Congestion Index

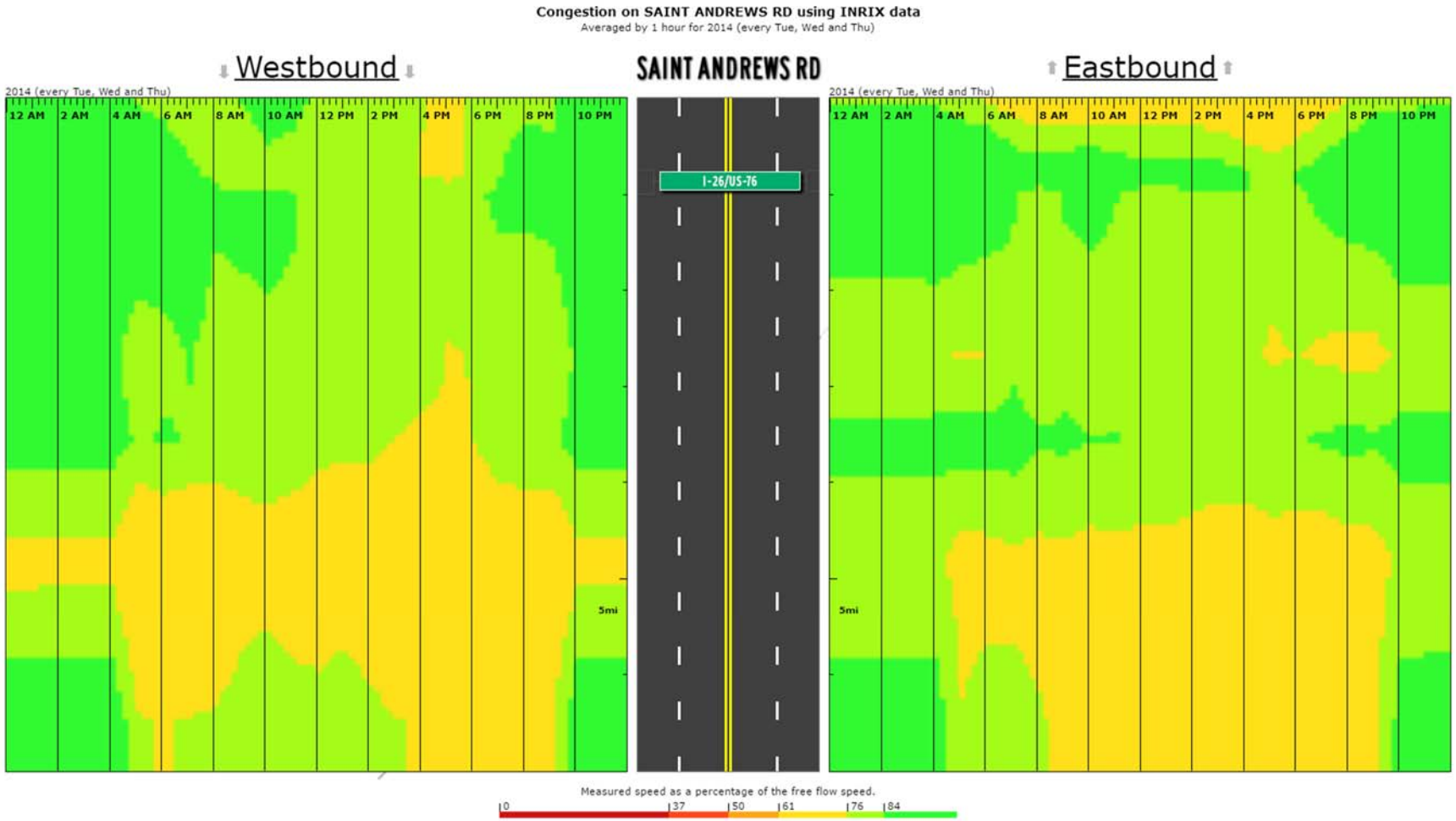


Figure A17.4: AM Peak Travel Time Index

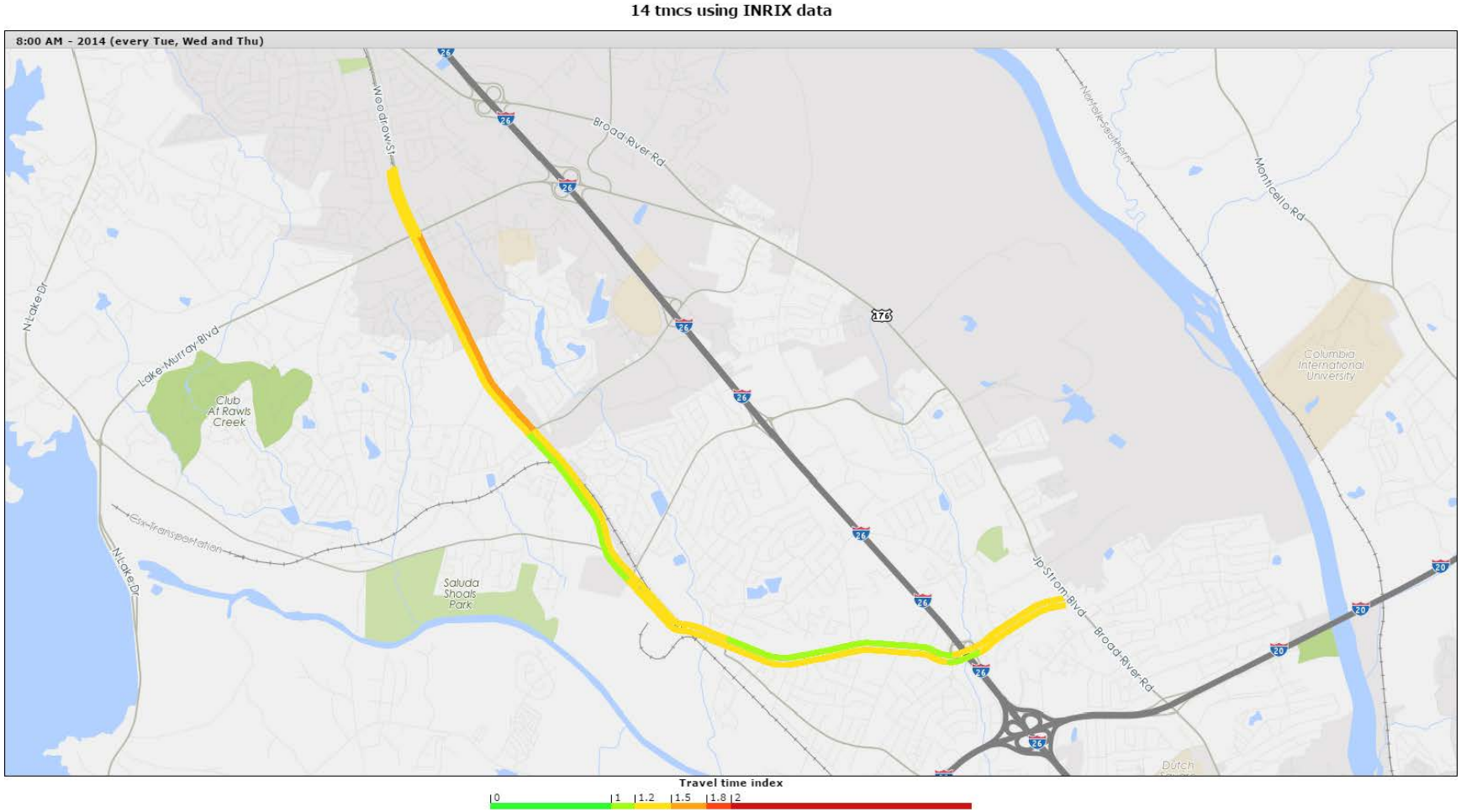
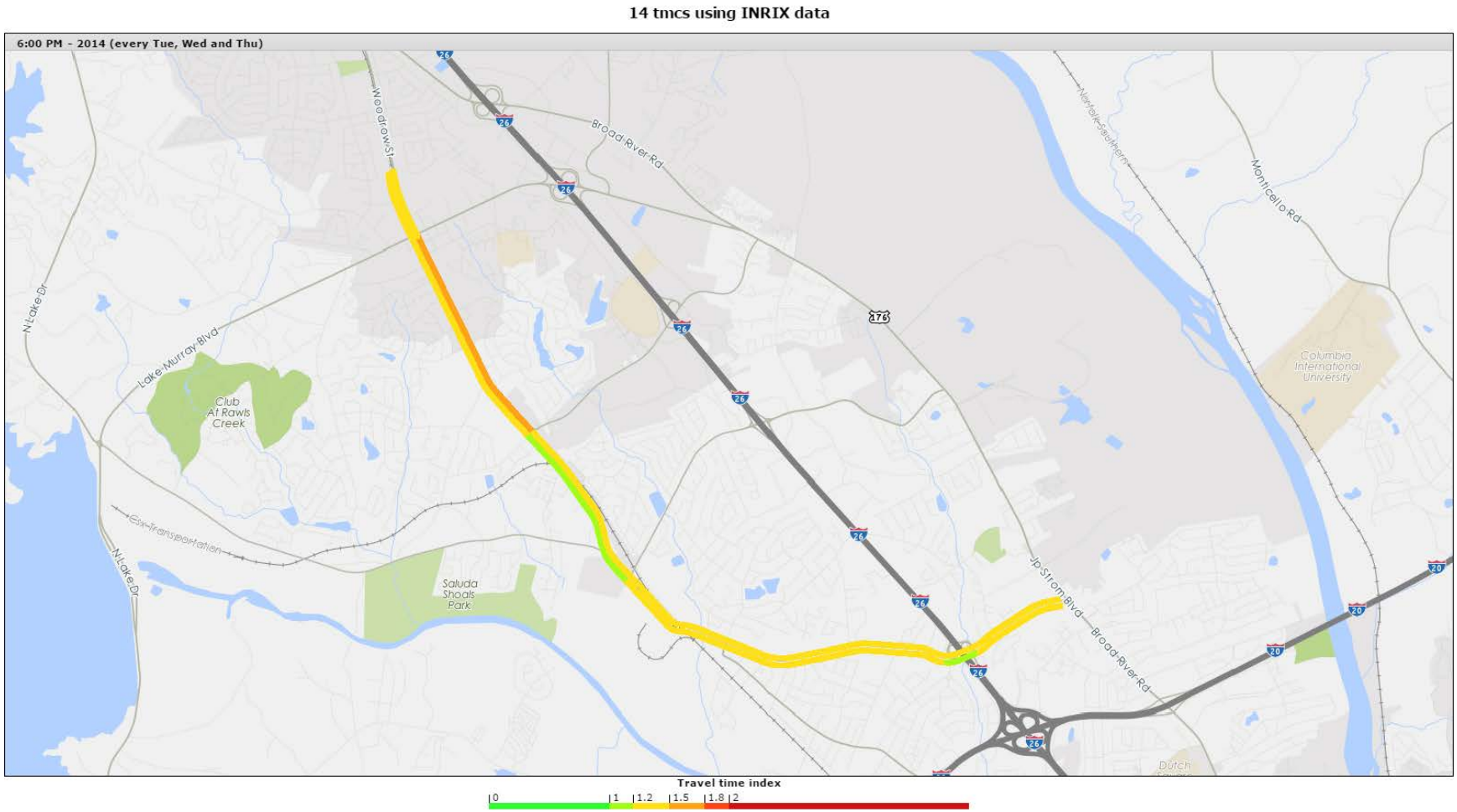


Figure A17.5: PM Peak Travel Time Index



A18. Corridor Name: Sunset Drive

Corridor ID: 1053

Route: SC 16

Start: River Dr US 176

End: SC 277 (mm-1.91)

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A18.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1053	221	SC16	SUNSET DR	19,600	19,800	19,500	18,300	19,397	2	35	3	10800	1.47	F	1.52	F
1053	223	SC16	SUNSET DR	25,500	24,200	22,300	18,700	25,663	5	35	3	21600	0.75	C	1.03	D
1053	224	SC16	Marshall St				5,500	-	5	35	3	21600	0.22	A		

LOS E

LOS F

Figure A18.2: Average Corridor Speed

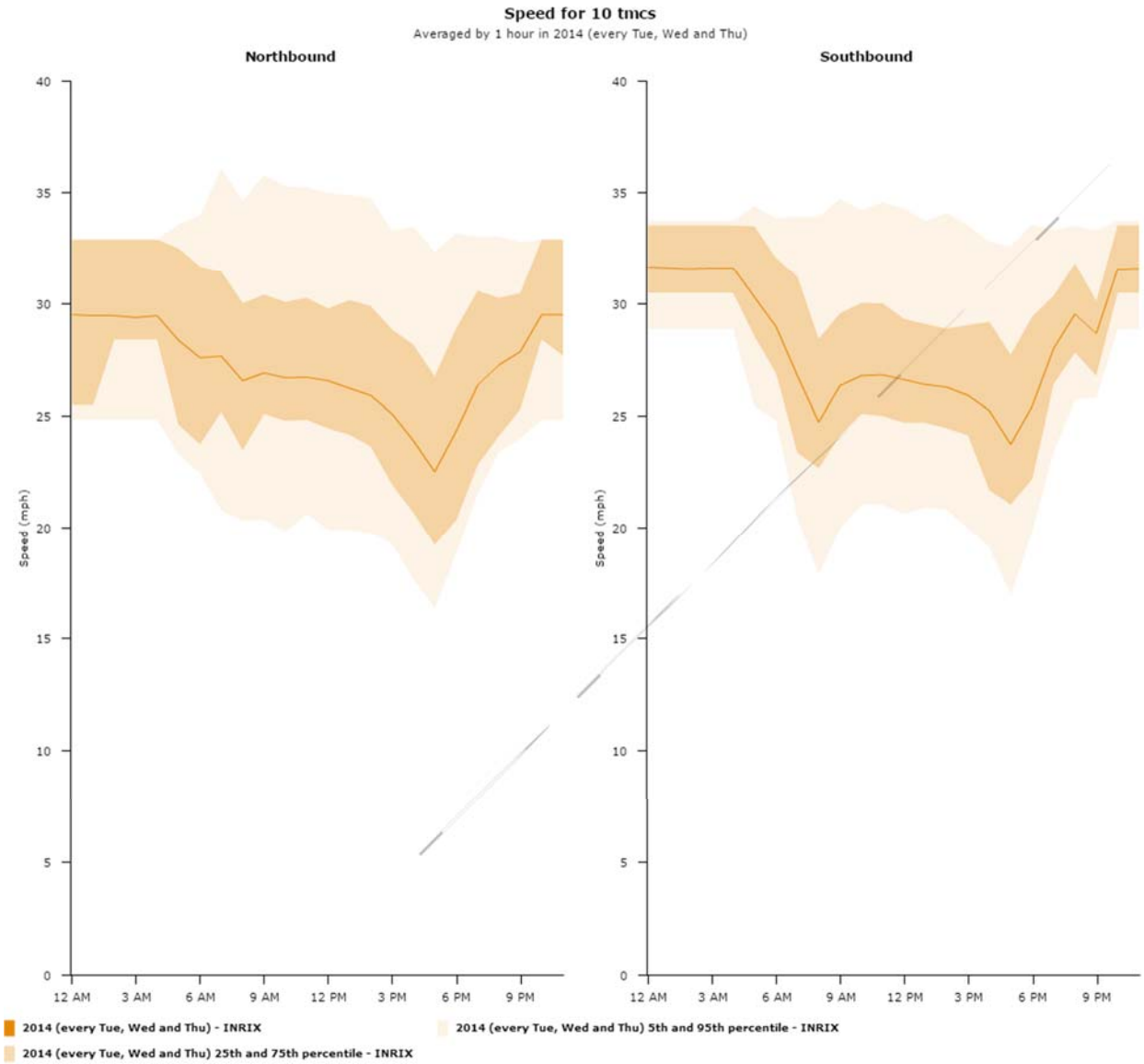


Figure A18.3: Corridor Congestion Index

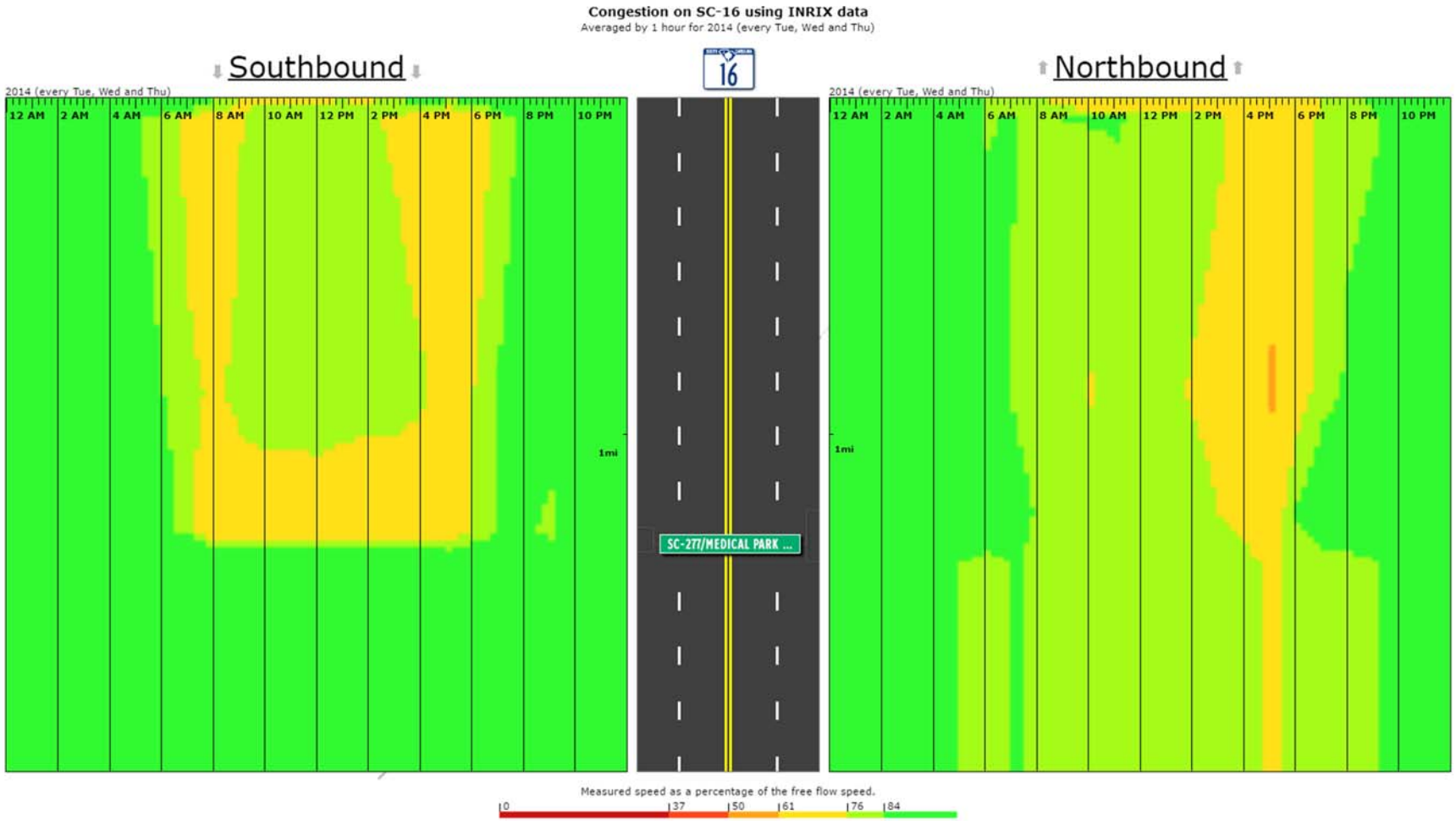


Figure A18.4: AM Peak Travel Time Index

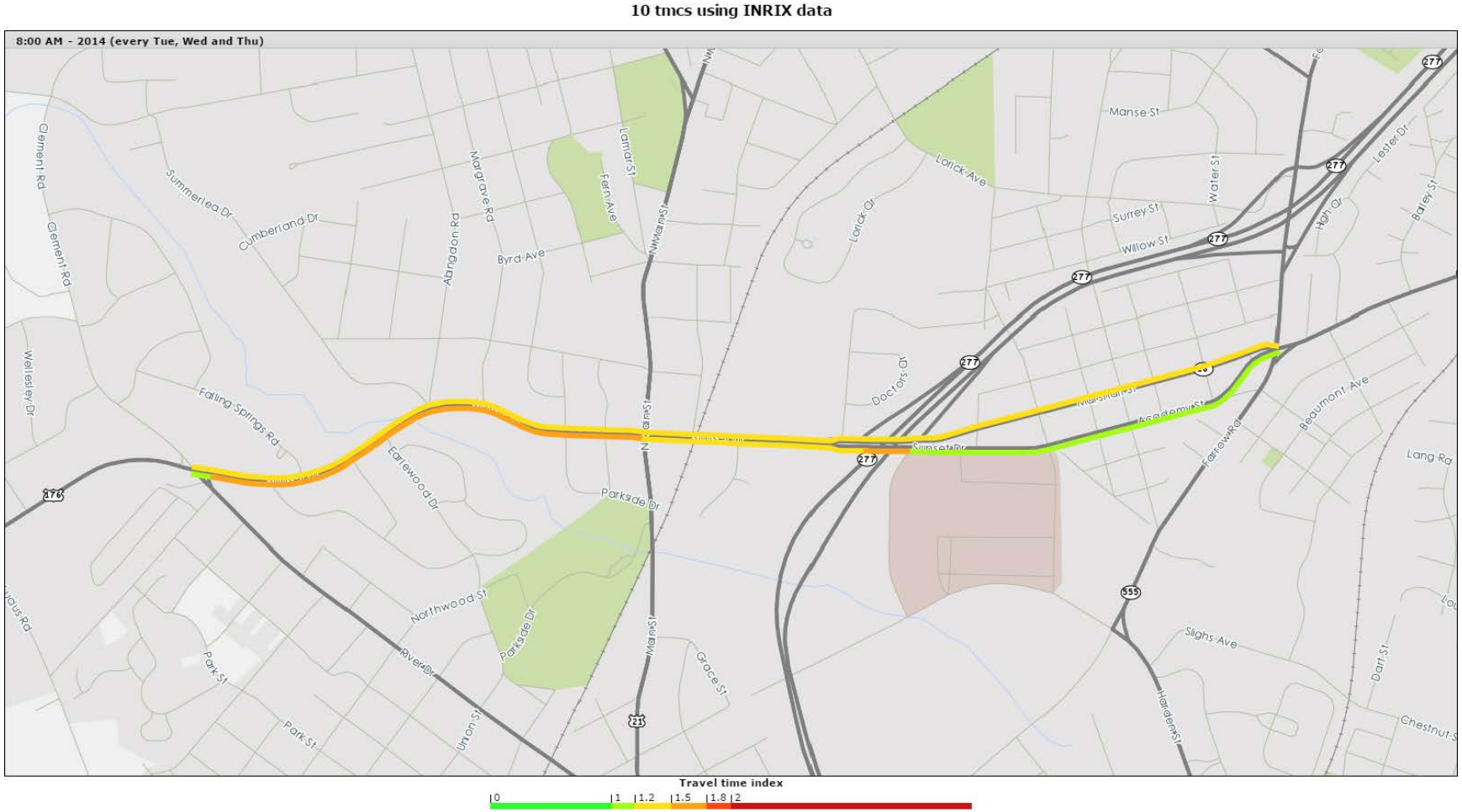
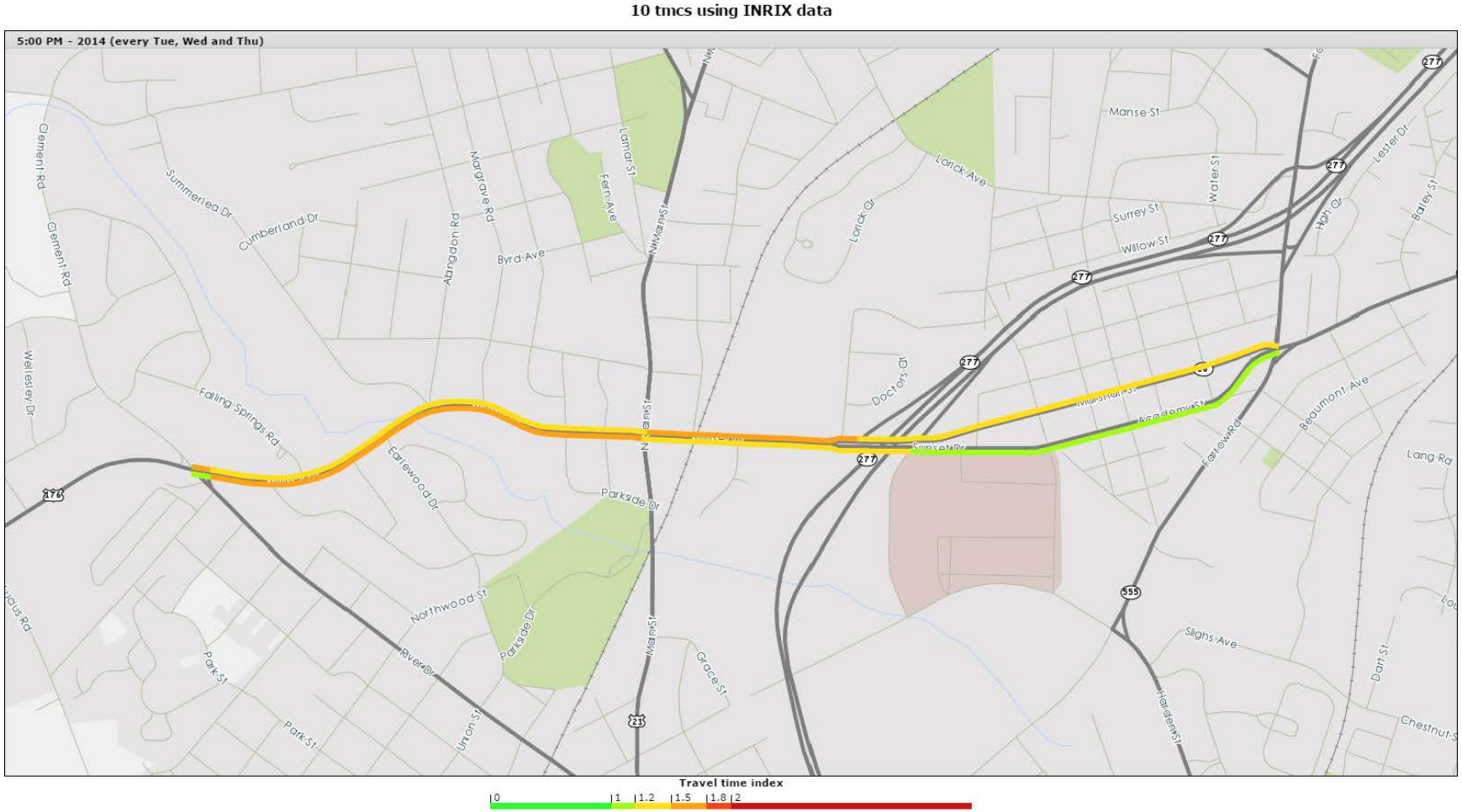


Figure A18.5: PM Peak Travel Time Index



A19. Corridor Name: Two Notch Road

Corridor ID: 1055

Route: S-70, S-77

Start:

End:

County: Lexington

Functional Class: 4 Major Collector

2040 LRTP Project Ranking: N/A

Figure A19.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1055	323	S-70	TWO NOTCH RD	3,700	3,800	4,200	4,100	5,181	2	45	4	8600	0.48	A	0.6	B
1055	325	S-70	TWO NOTCH RD	1,359	9,700	10,900	11,000	18,704	2	45	4	8600	1.26	E	2.17	F
1055	327	S-70	TWO NOTCH RD	6,000	8,100	8,900	9,300	15,158	2	45	4	8600	1.08	D	1.76	F
1055	329	S-70	TWO NOTCH RD	4,375	5,800	6,400	6,300	10,151	2	45	4	8600	0.73	B	1.18	E
1055	331	S-70	TWO NOTCH RD	3,315	5,600	7,700	7,800	13,739	2	45	4	8600	0.91	C	1.6	F
1055	351	S-77	TWO NOTCH RD	1,000	2,200	2,900	2,900	5,473	2	45	4	8600	0.33	A	0.64	B

LOS E

LOS F

Figure A19.2: Average Corridor Speed

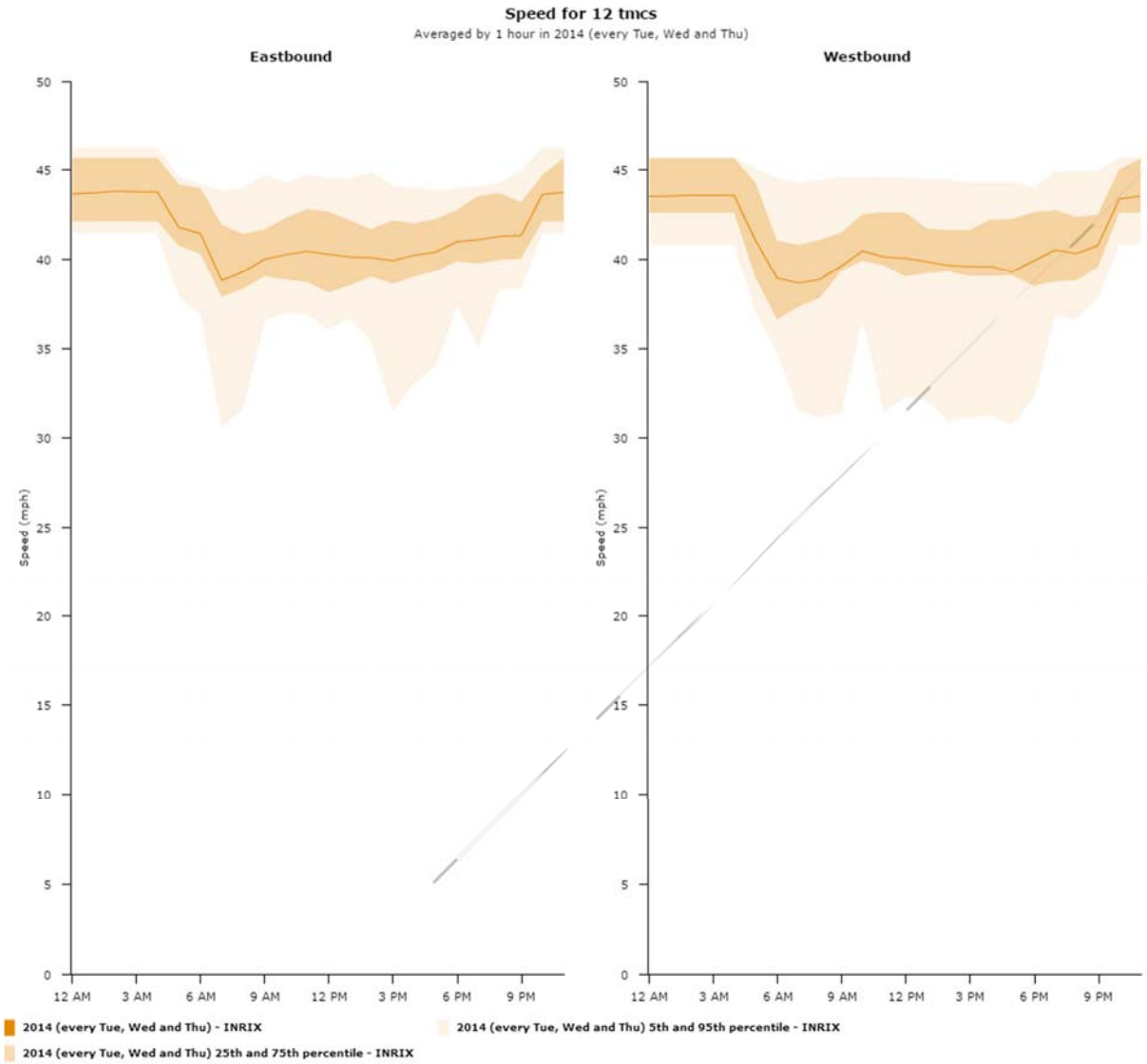


Figure A19.3: Corridor Congestion Index

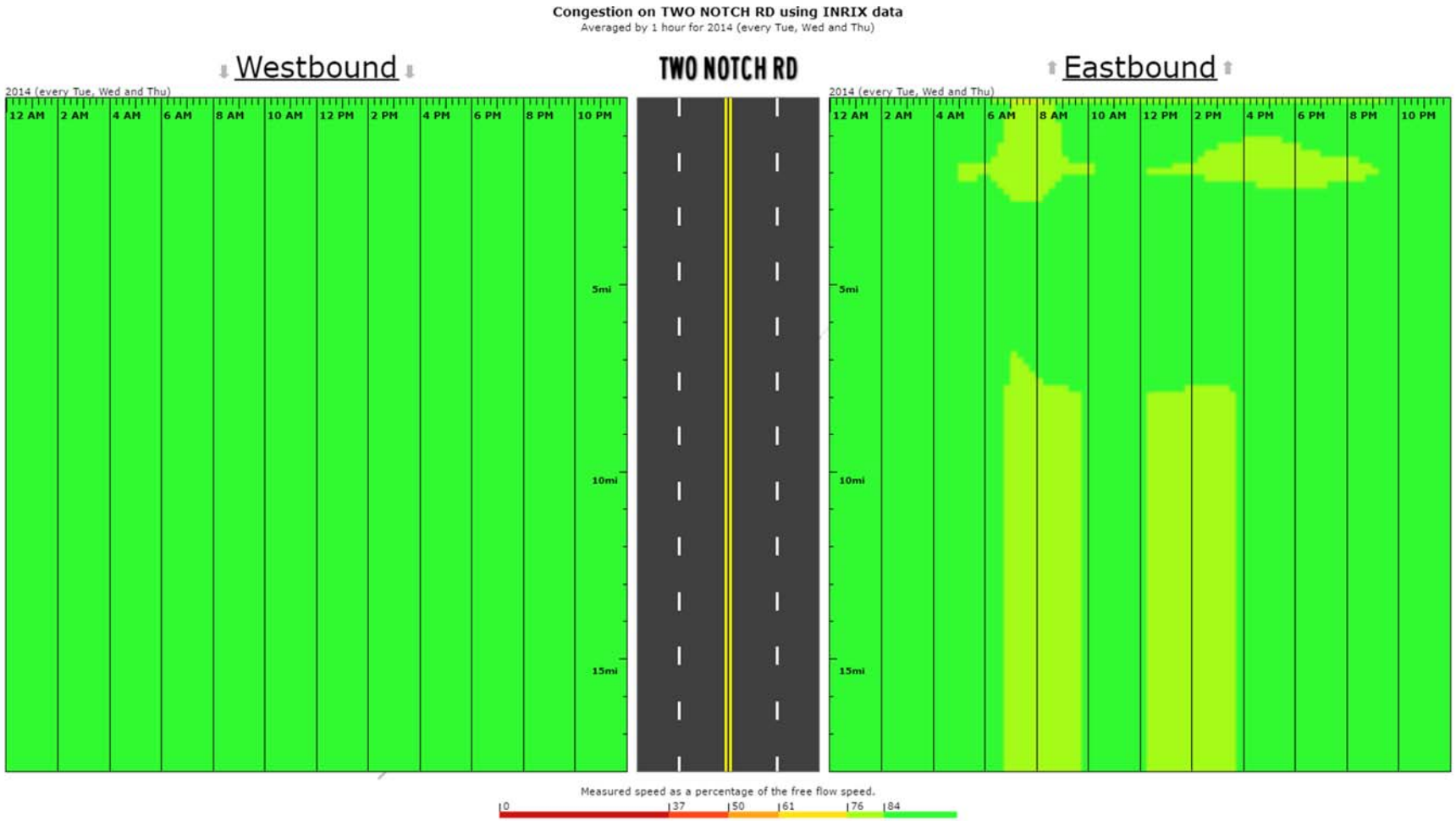


Figure A19.4: AM Peak Travel Time Index

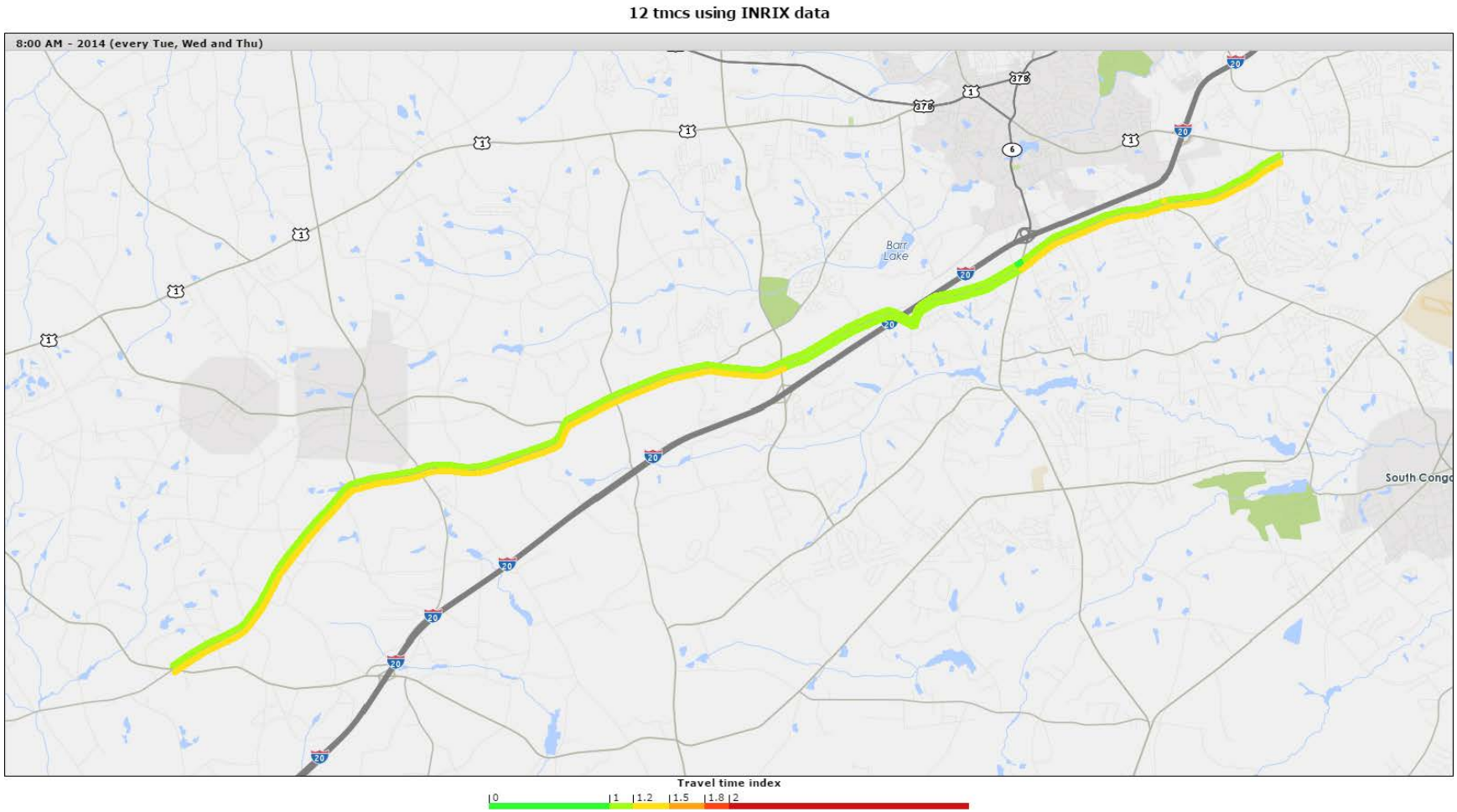
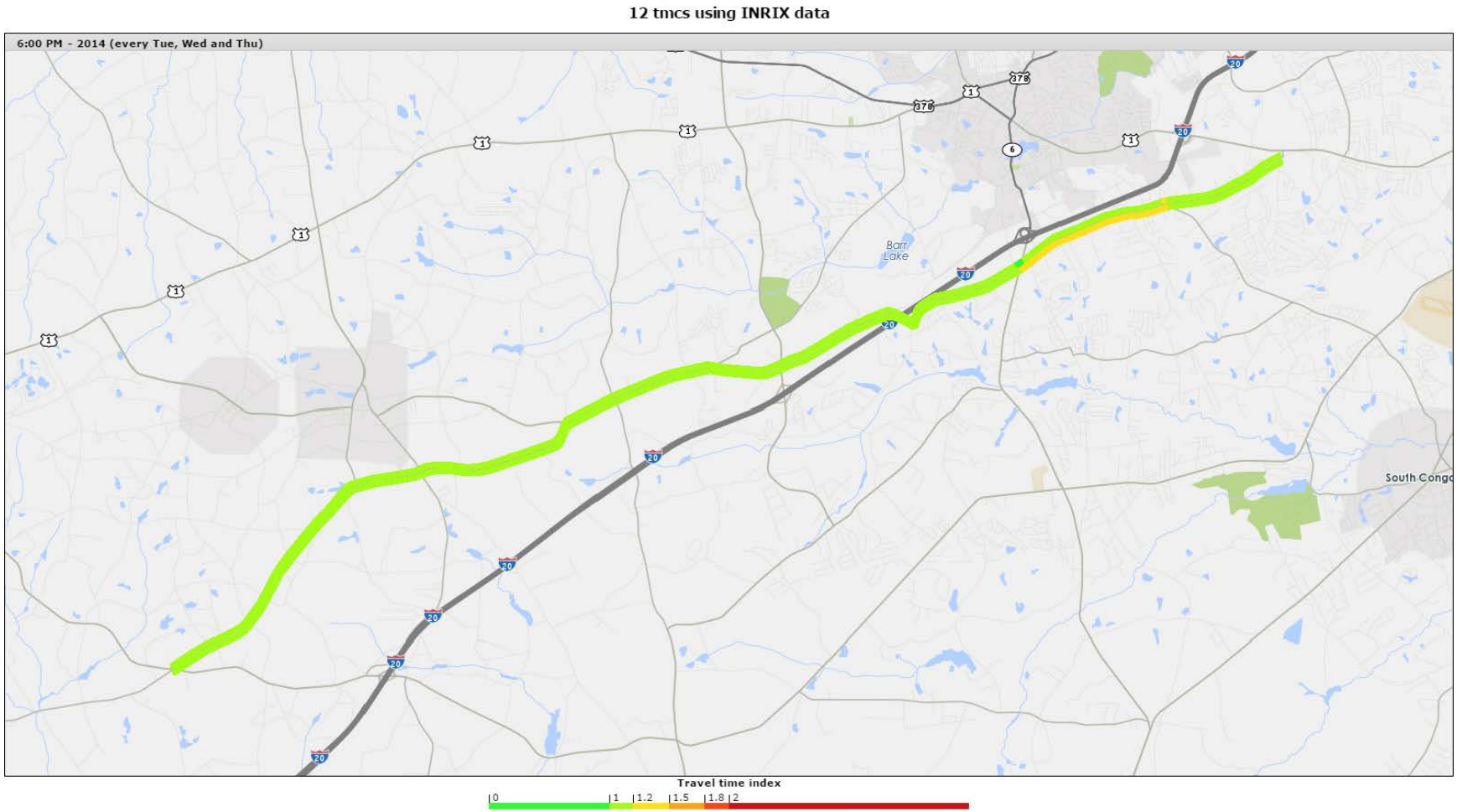


Figure A19.5: PM Peak Travel Time Index



A20. Corridor Name: Broad River Road

Corridor ID: 1059

Route: US 76 / 176

Start: Newberry County line

End: I-26

County: Lexington, Richland

Functional Class: 2 Principal Arterial , 3 Minor Arterial

2040 LRTP Project Ranking: 2, 5

Figure A20.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1059	144	US76	CHAPIN RD	4,900	8,200	10,300	11,800	19,145	2	55	3	10800	0.95	C	1.54	F
1059	145	US76	DUTCH FORK RD	10,400	13,900	20,100	21,800	32,839	2	55	3	10800	1.75	F	2.65	F
1059	147	US76	BROAD RIVER RD	9,500	12,700	17,900	18,500	29,736	2	55	3	10800	1.49	F	1.49	F
1059	149	US76	BROAD RIVER RD	14,000	19,000	24,900	22,100	38,247	3	45	3	10800	1.78	F	3.08	F
1059	150	US76	US 76	14,000	9,800	15,100	14,700	12,771	3	45	3	10800	1.01	D	0.87	C
1059	179	US176	BROAD RIVER RD	19,300	19,800	22,000	20,300	2,551	5	45	2	29200	0.6	B	0.08	A
1059	181	US176	BROAD RIVER RD	46,000	38,400	36,700	36,000	53,027	5	35	2	29200	1.07	D	1.58	F
1059	182	US176	BROAD RIVER RD	19,300	7,600	13,200	12,900	5,708	2	45	2	14600	0.88	C	0.39	A
1059	183	US176	BROAD RIVER RD	29,700	26,500	27,300	27,100	30,670	5	35	2	29200	0.8	C	0.91	C
1059	184	US176	BROAD RIVER RD	29,700	23,900	23,200	23,000	24,070	5	35	2	29200	0.68	B	0.72	B
1059	185	US176	RIVER DR	8,400	7,000	5,700	4,300	3,102	2	35	2	14600	0.29	A	0.21	A
1059	190	US176	BROAD RIVER RD	19,300	16,900	16,000	16,200	21,695	5	45	2	29200	0.48	A	0.64	B
1059	194	US176	BROAD RIVER RD	19,300	16,900	16,000	14,800	21,185	5	55	2	29200	0.44	A	0.63	B

LOS E

LOS F

Figure A20.2: Average Corridor Speed

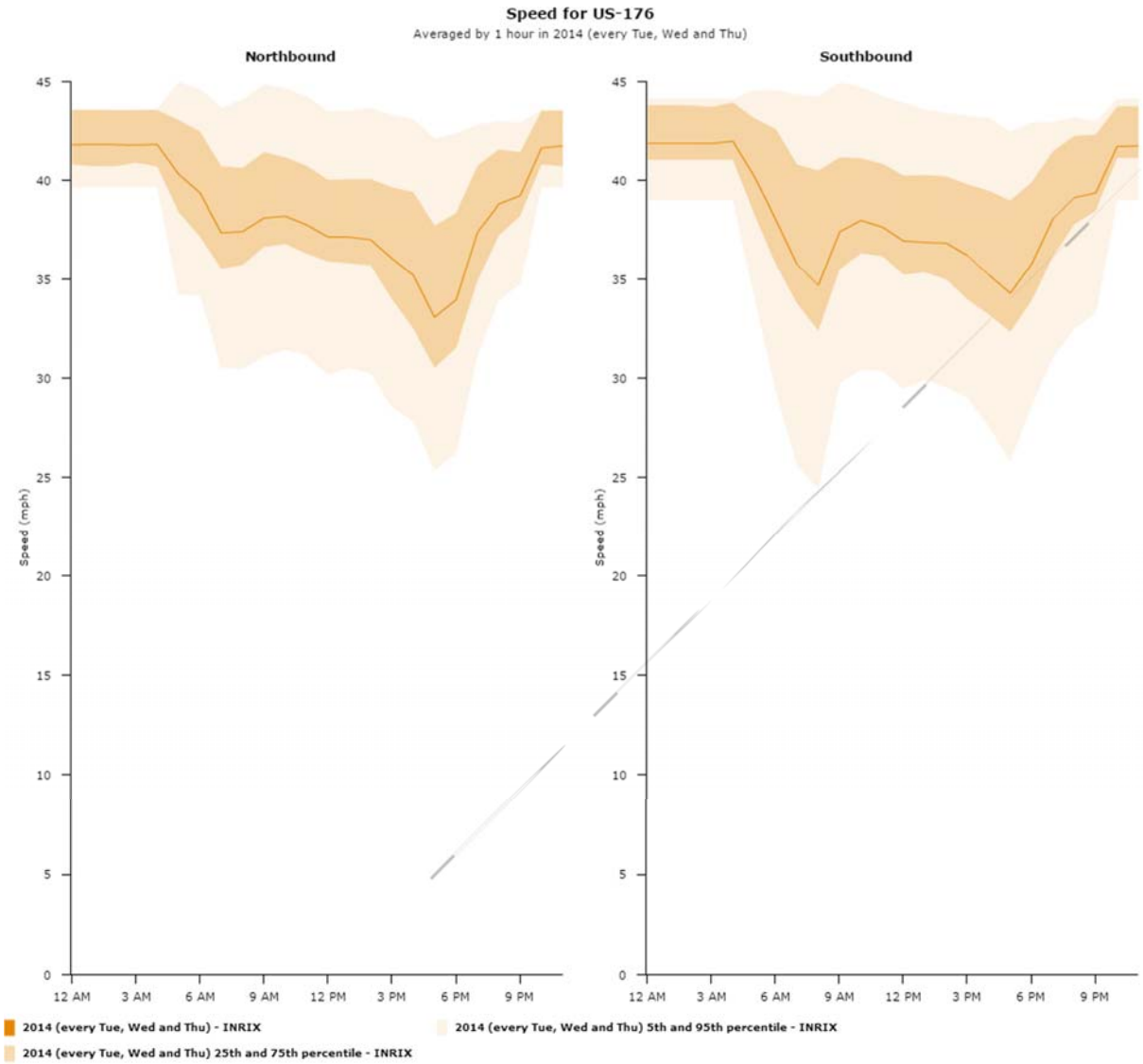


Figure A20.3: Corridor Congestion Index

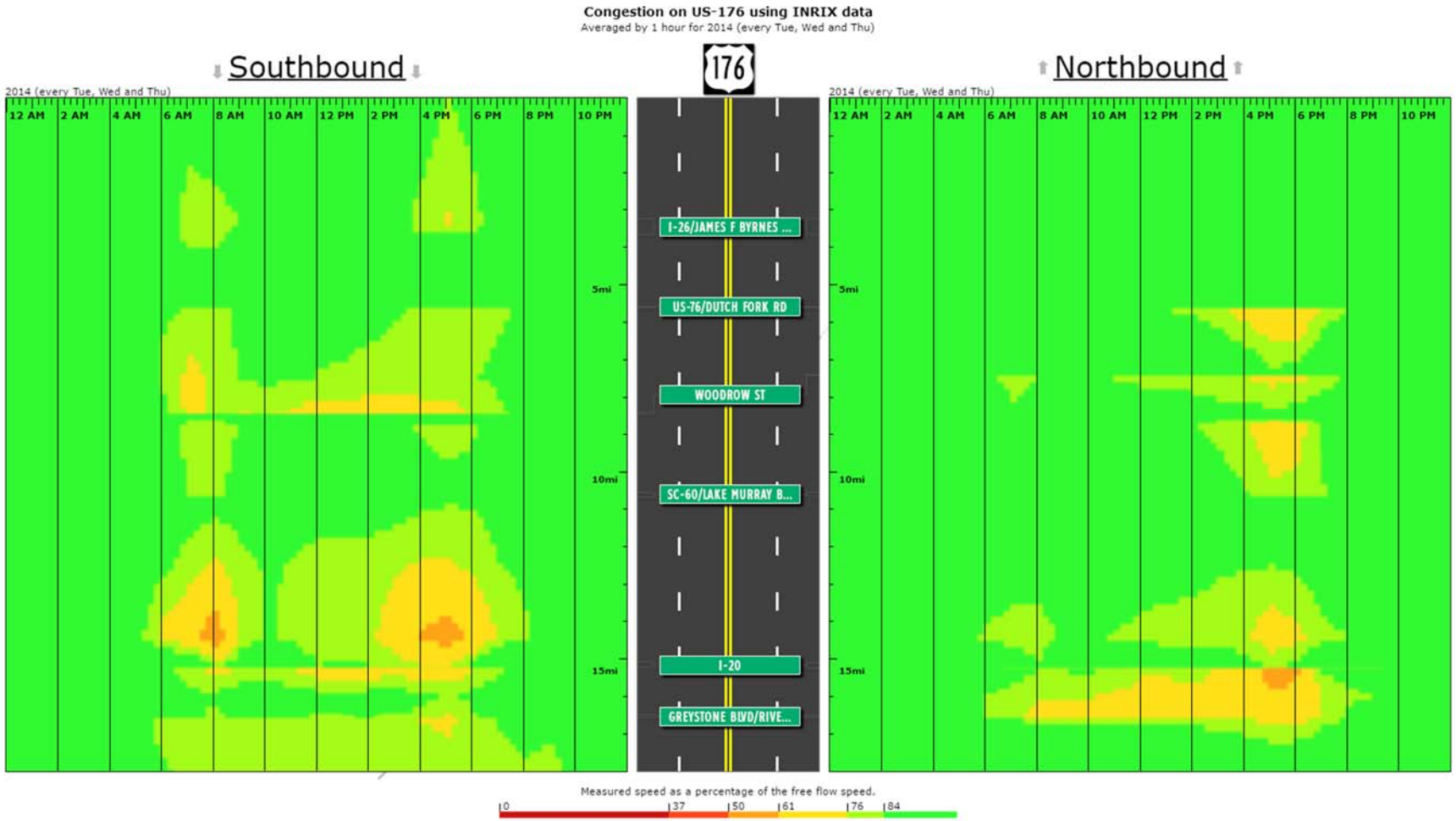


Figure A20.4: AM Peak Travel Time Index

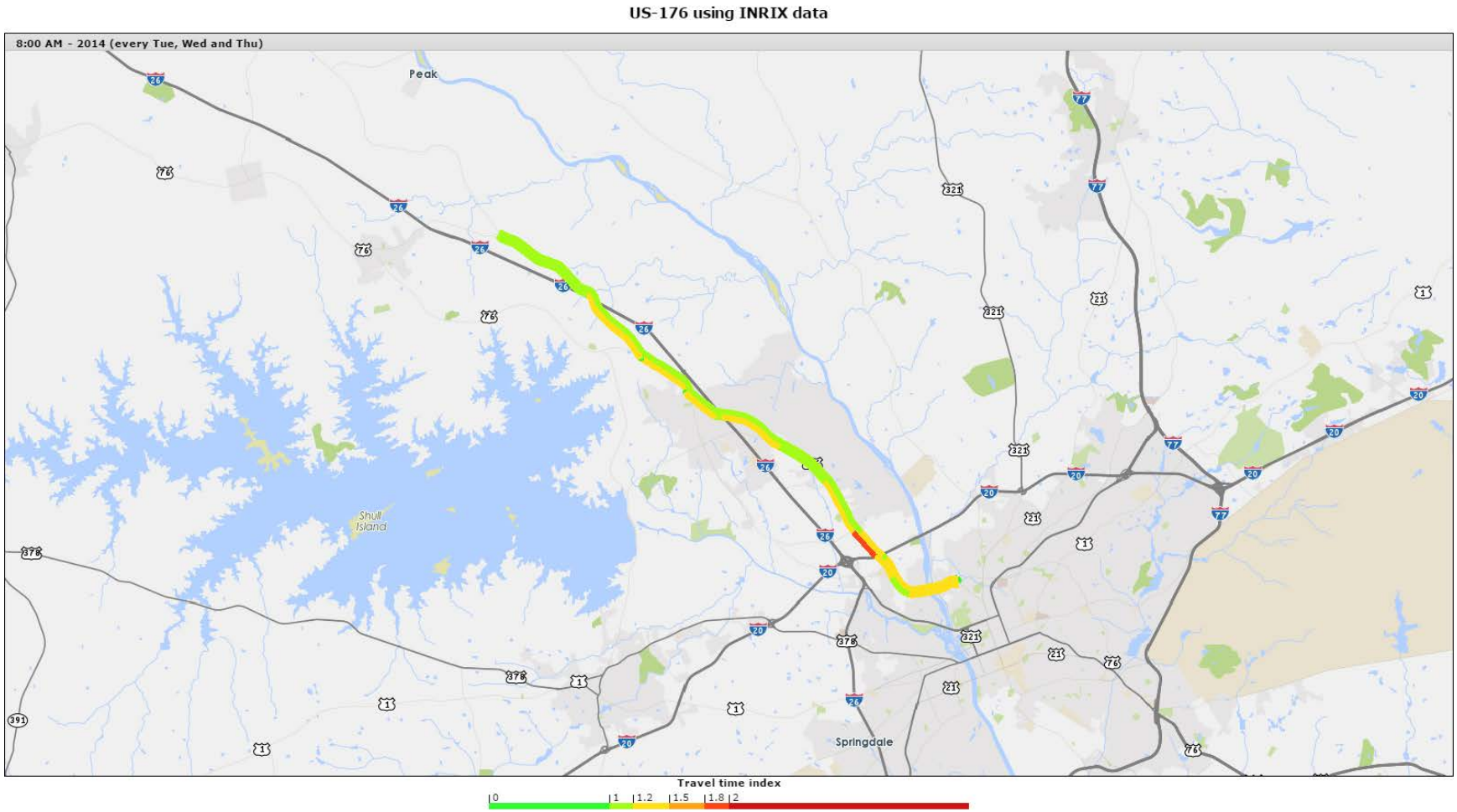
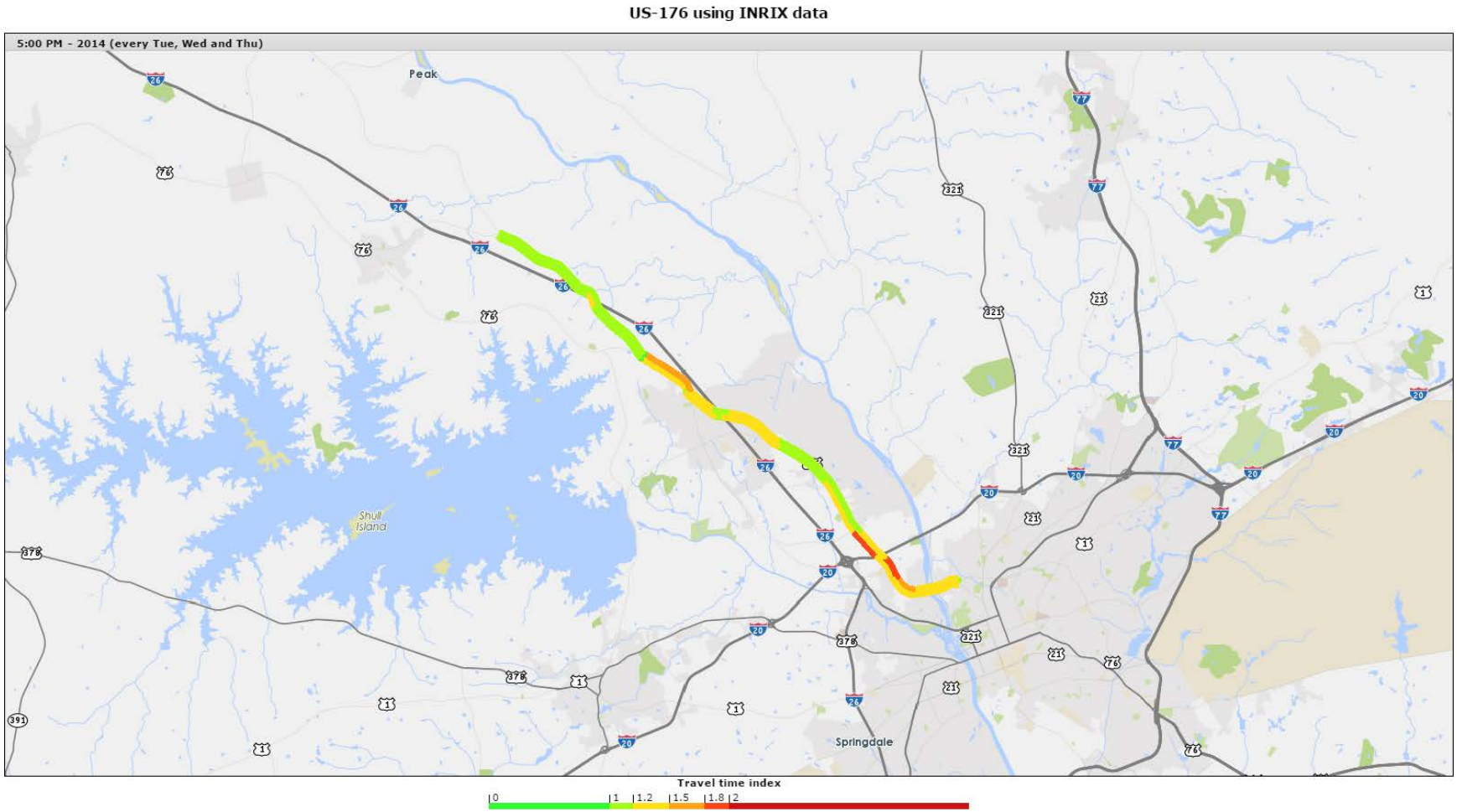


Figure A20.5: PM Peak Travel Time Index



A21. Corridor Name: US 21 Charleston Highway

Corridor ID: 1061

Route: US 21

Start: I-26

End: Assembly St SC 48

County: Lexington / Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A21.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1061	121	US21	BLOSSOM ST	27,400	27,600	26,600	26,100	21,228	4	35	2	29200	0.78	C	0.63	B
1061	126	US21	CHARLESTON HWY	4,900	3,700	5,100	6,700	6,852	5	55	2	29200	0.2	A	0.2	A
1061	128	US21	CHARLESTON HWY	17,900	24,400	23,200	22,600	34,603	5	55	2	29200	0.67	B	1.03	D
1061	132	US21	CHARLESTON HWY	24,100	27,500	20,300	21,100	16,646	5	35	2	29200	0.63	B	0.5	B
1061	133	US21	CHARLESTON HWY	14,900	14,400	11,600	12,100	4,358	5	45	2	29200	0.36	A	0.13	A
1061	134	US21	CHARLESTON HWY	22,400	32,000	30,800	32,000	41,756	5	35	2	29200	0.95	C	1.24	E
1061	135	US21	CHARLESTON HWY	30,300	28,400	23,300	24,500	11,226	5	60	2	29200	0.73	B	0.33	A
1061	137	US21	KNOX ABBOTT DR	22,200	24,400	22,200	23,000	14,702	5	35	2	29200	0.68	B	0.44	A
1061	141	US21	BLOSSOM ST	26,100	21,600	23,700	25,900	17,332	4	35	2	29200	0.77	C	0.52	B
1061	142	US21	CHARLESTON HWY	3,200	3,400	3,500	3,900	3,944	2	55	4	8600	0.26	A	0.27	A

LOS E

LOS F

Figure A21.2: Average Corridor Speed

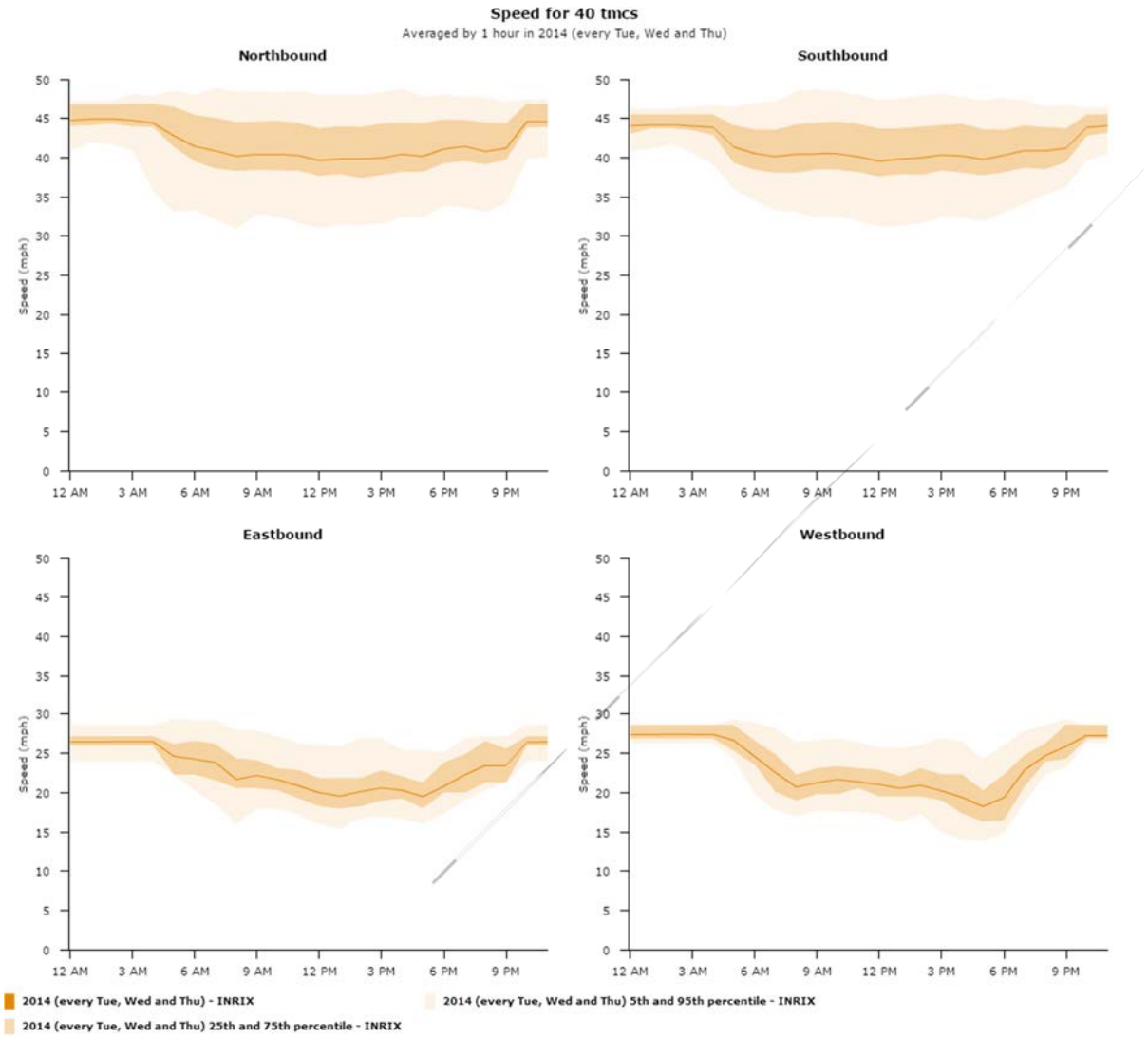


Figure A21.3: Corridor Congestion Index

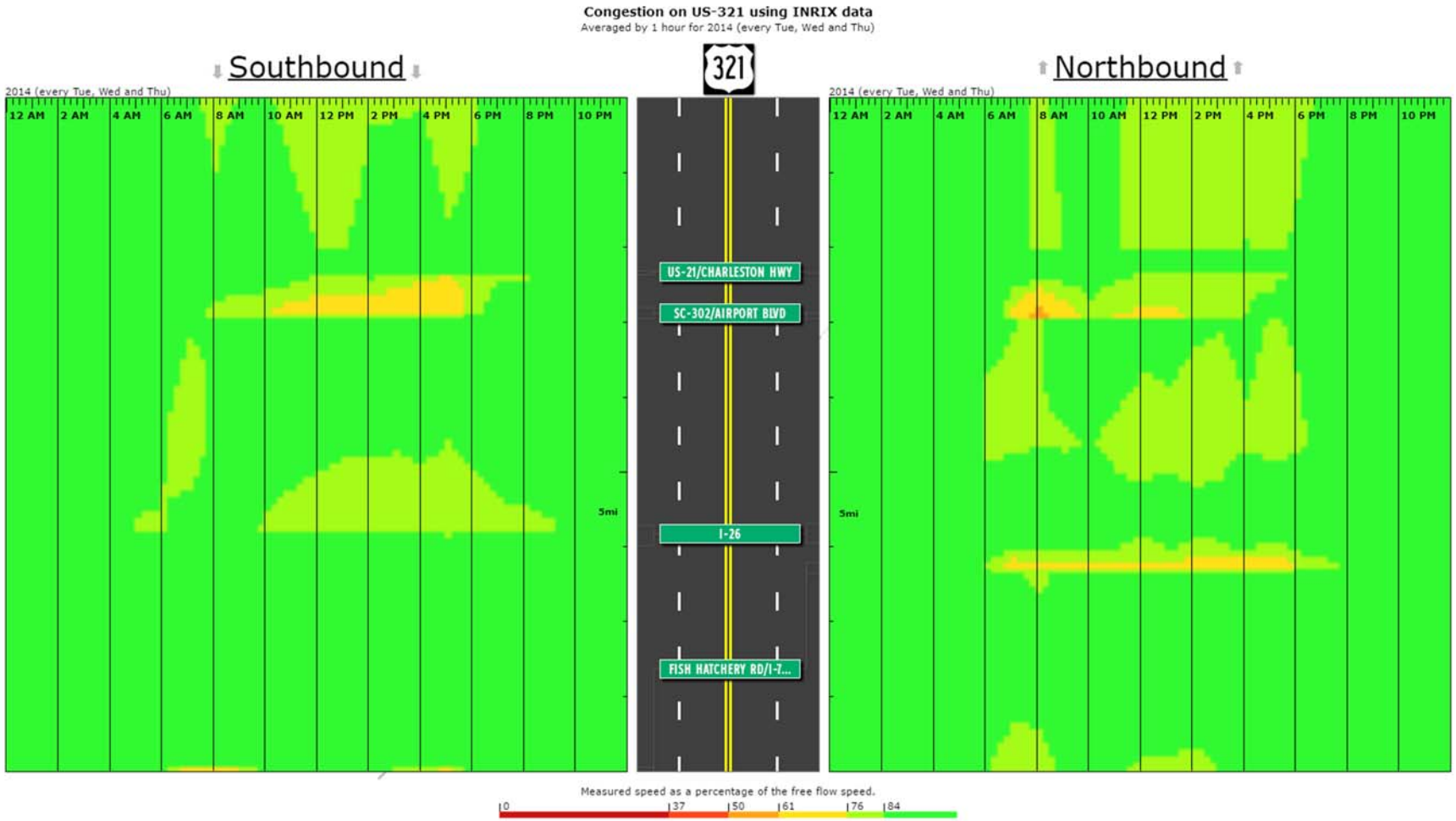


Figure A21.4: AM Peak Travel Time Index

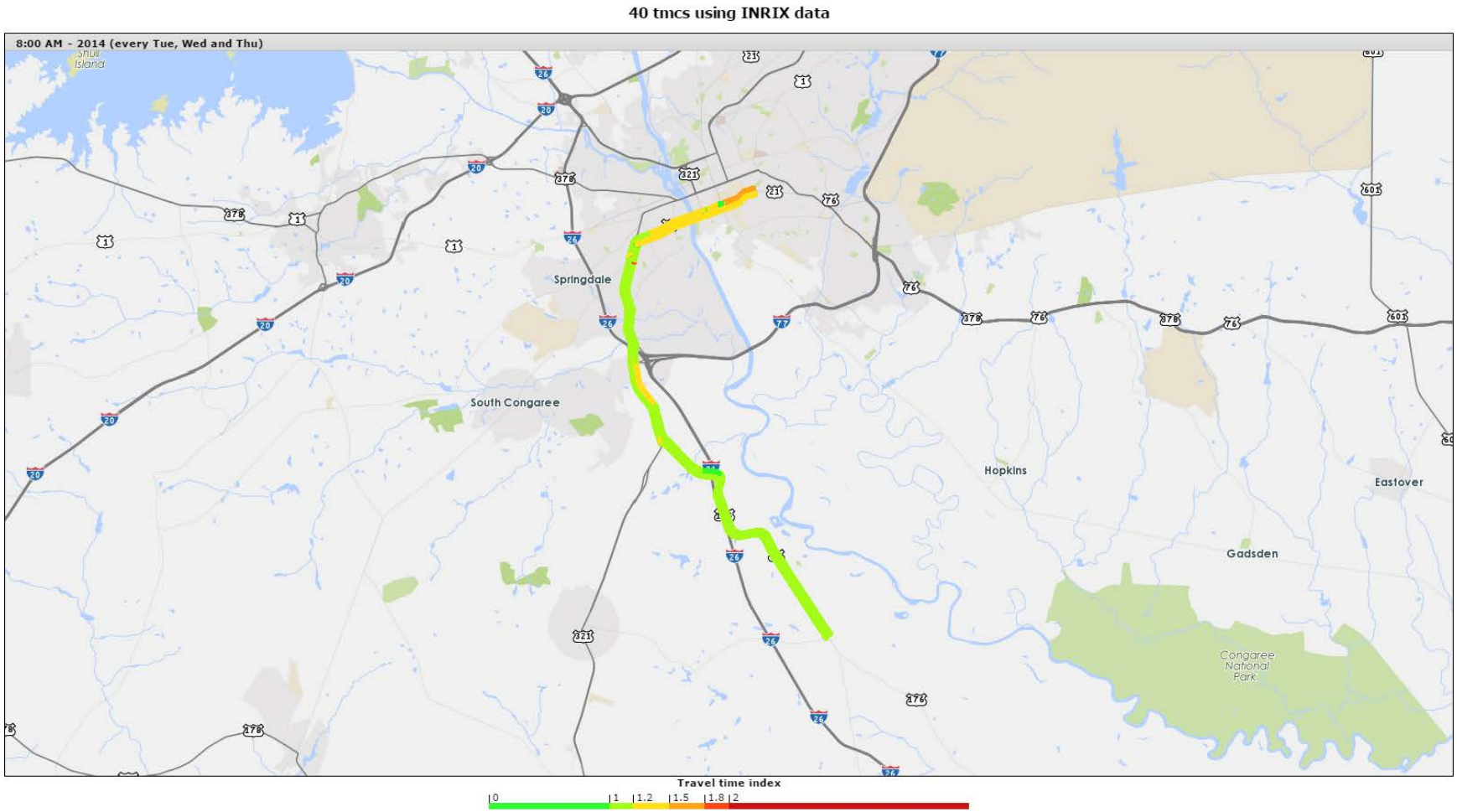
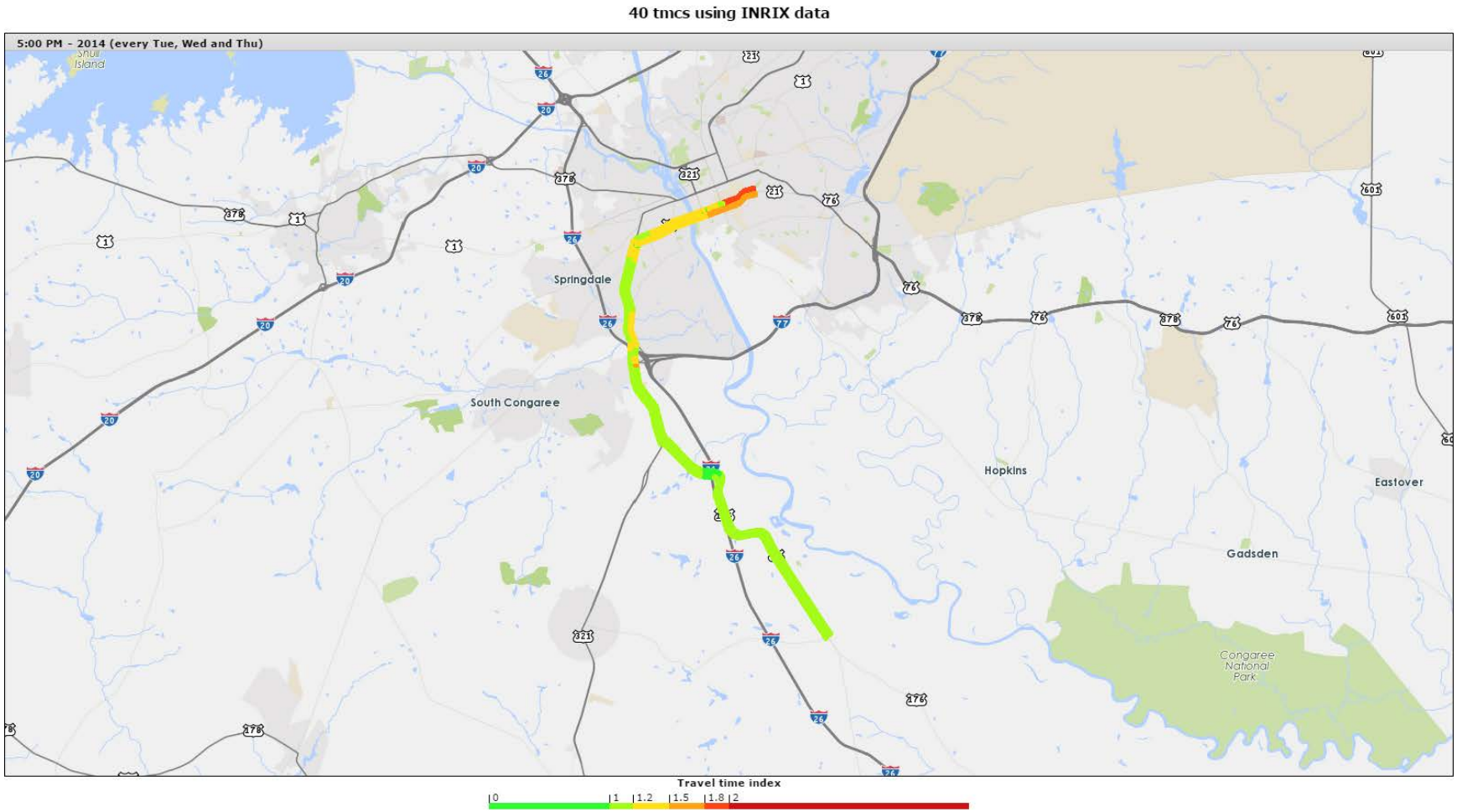


Figure A21.5: PM Peak Travel Time Index



A22. Corridor Name: Huger Street

Corridor ID: 1063

Route: US 21

Start: US 21

End: I-126

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A22.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1063	123	US21	HUGER ST	27,100	20,300	23,700	22,600	28,475	4	35	2	29200	0.67	B	0.85	C
1063	125	US21	HUGER ST	32,200	29,700	32,100	31,900	48,303	7	35	2	43800	0.72	B	1.1	D

LOS E

LOS F

Figure A22.2: Average Corridor Speed

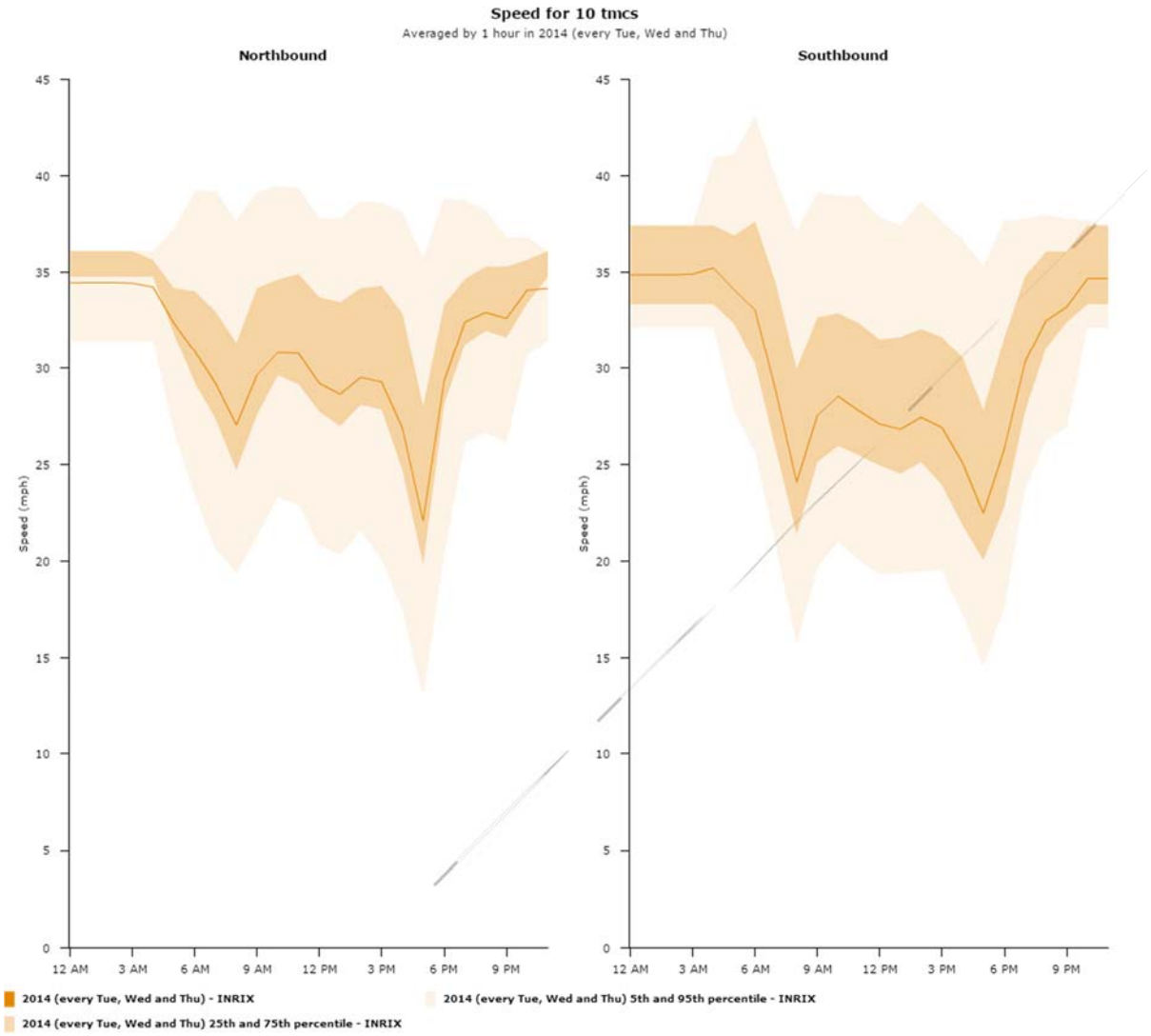


Figure A22.3: Corridor Congestion Index

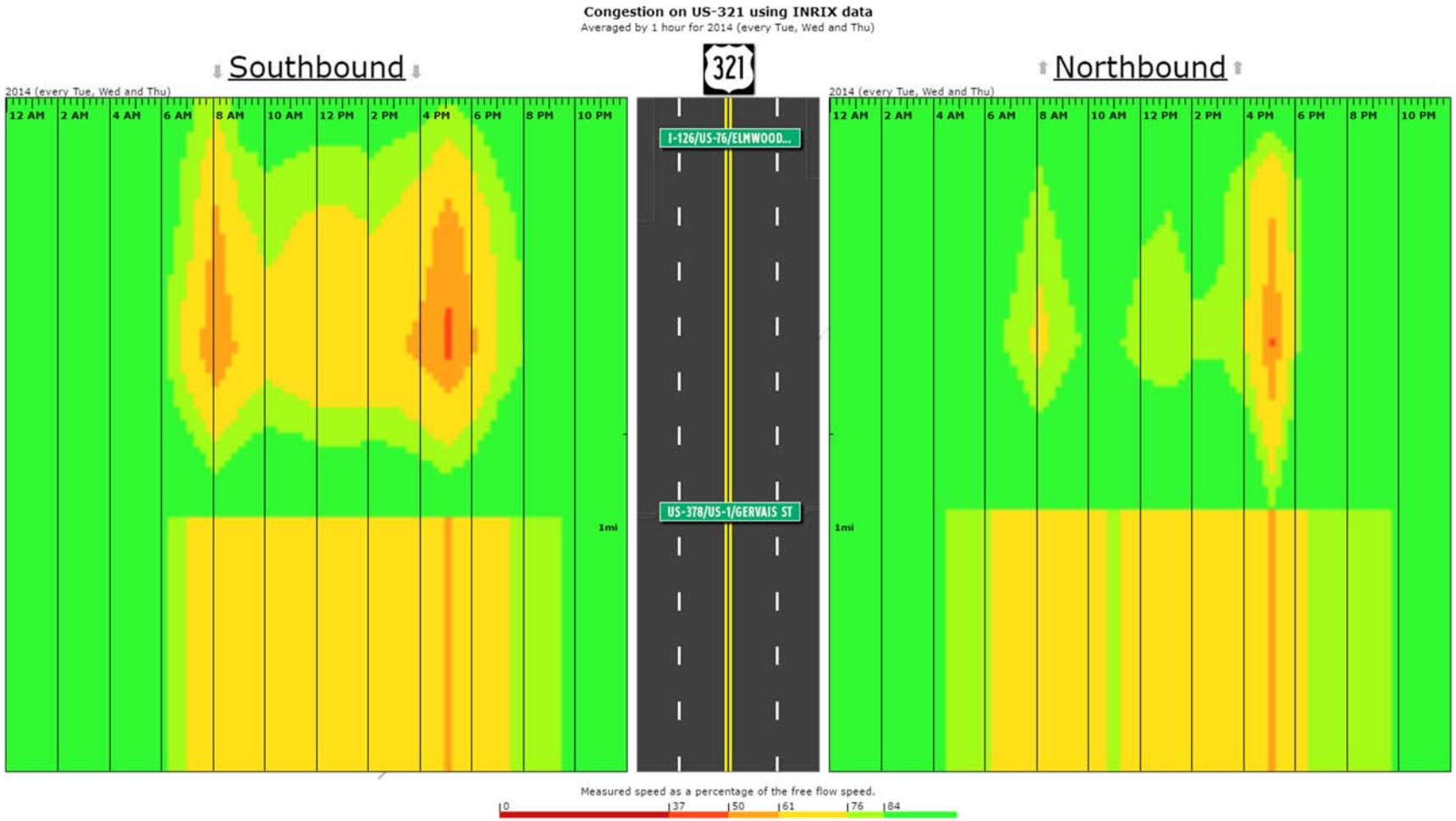


Figure A22.4: AM Peak Travel Time Index

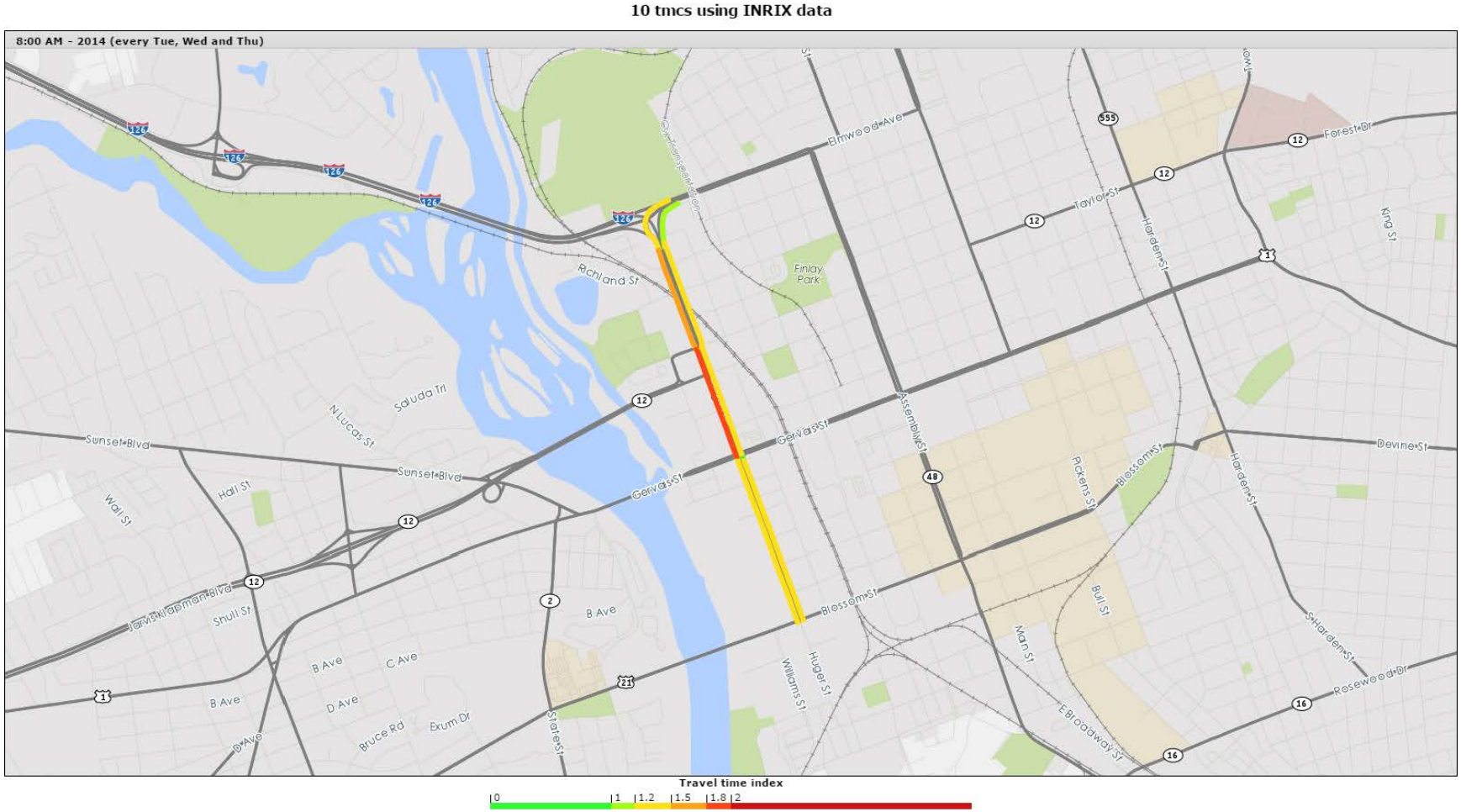
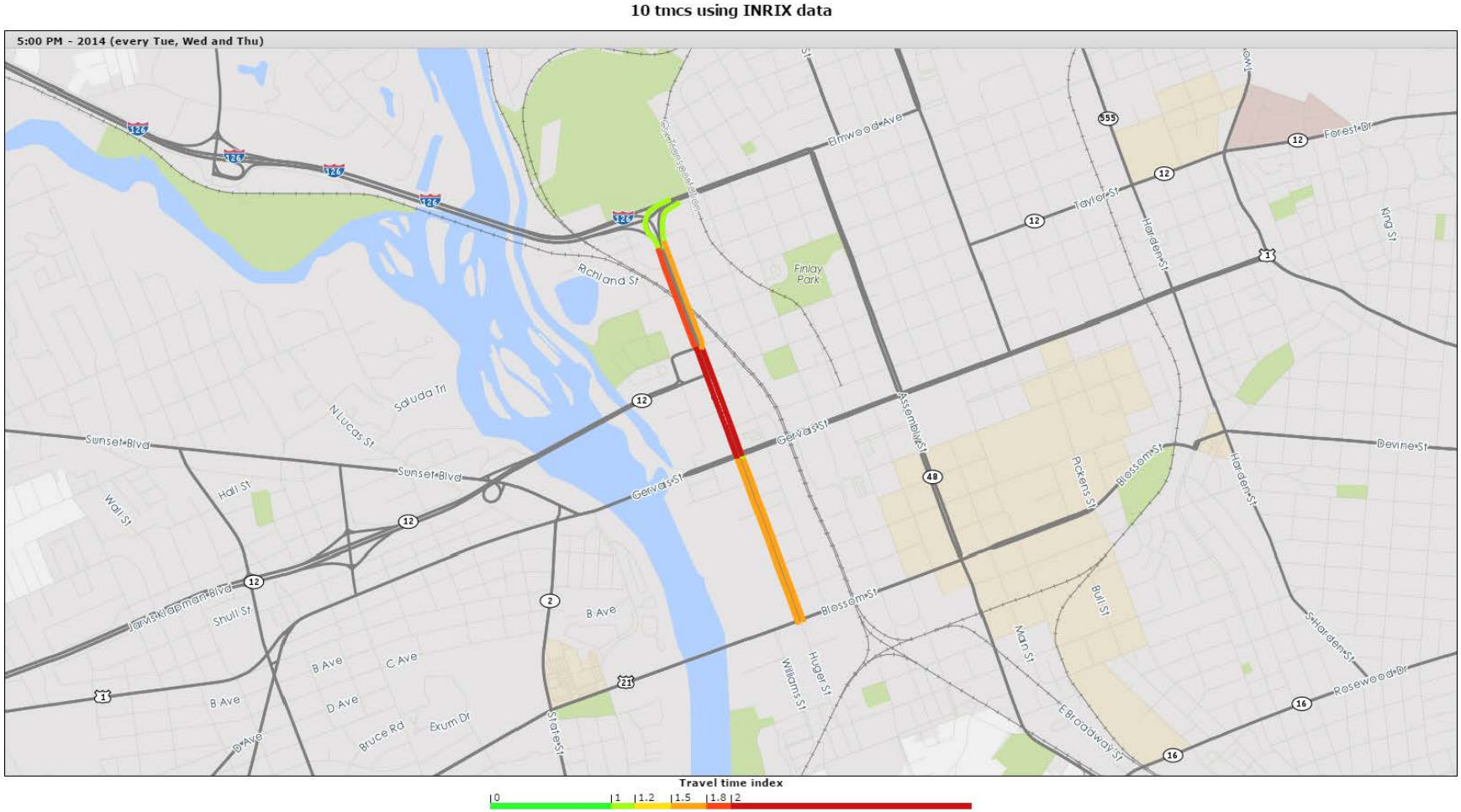


Figure A22.5: PM Peak Travel Time Index



A23. Corridor Name: Elmwood Avenue

Corridor ID: 1065

Start: Bull Street

End: I-26

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A23.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1065	2435	I126	HUGER ST	27,100	20,300	23,700	22,600	28,475	4	35	2	117200	0.67	B	0.85	C
1065	127	US21	ELMWOOD AVE	51,600	49,000	44,200	48,500	61,051	6	35	2	43800	1.01	D	1.4	F
1065	151	US76	ELMWOOD AVE	34,700	33,700	36,300	36,900	44,294	6	35	2	43800	0.84	C	1.01	D

LOS E

LOS F

Figure A23.2: Average Corridor Speed

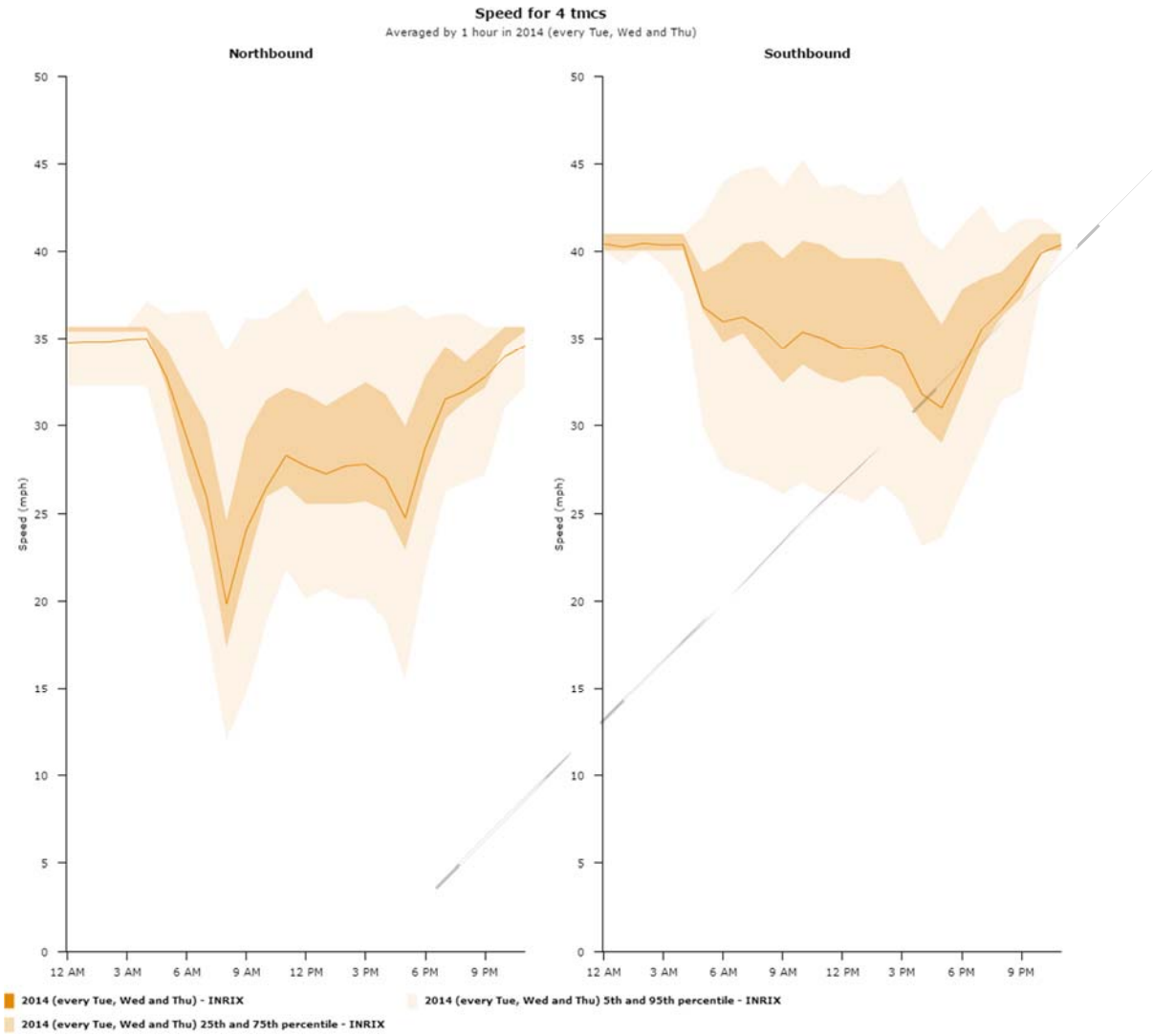


Figure A23.3: Corridor Congestion Index

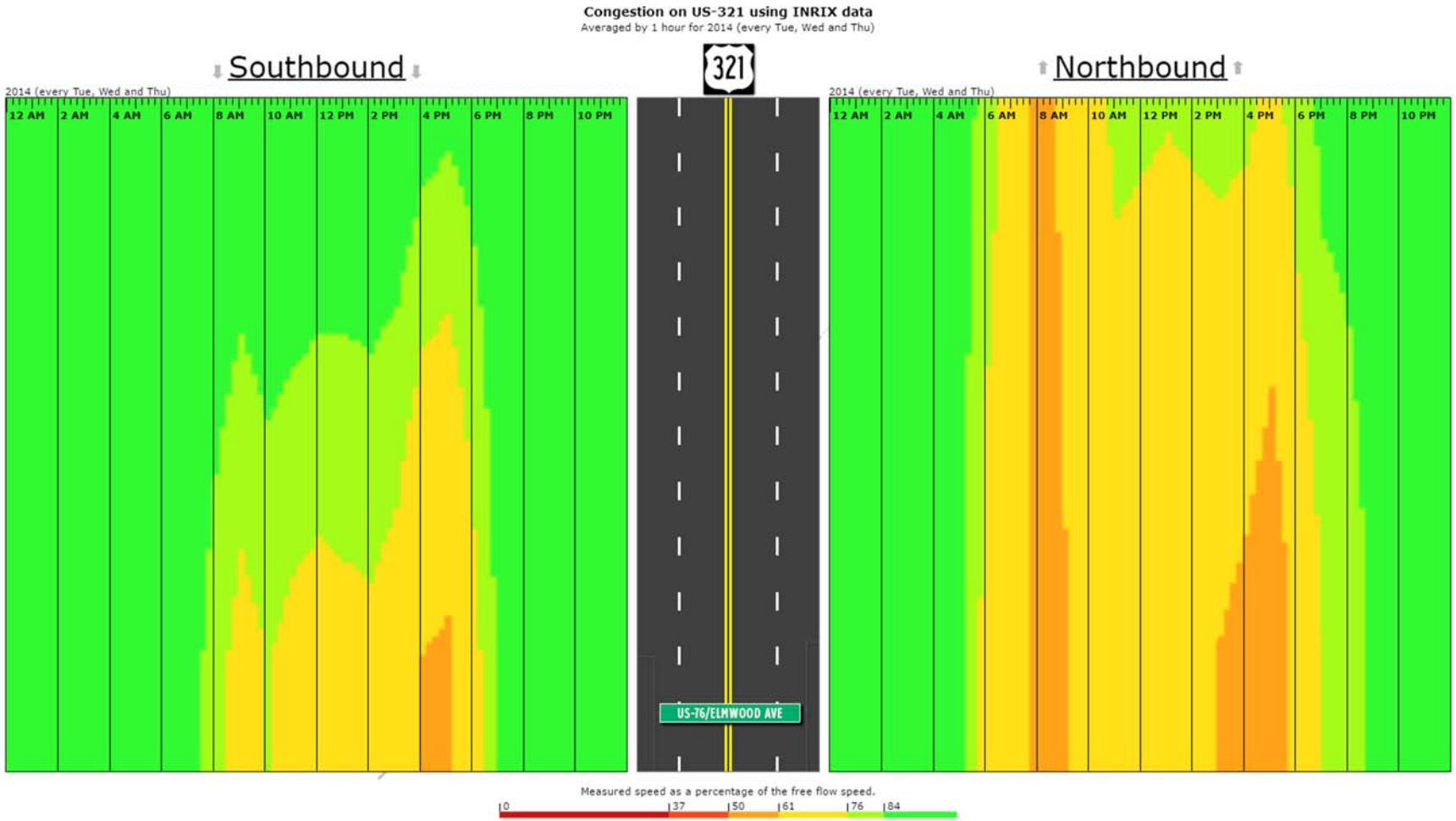


Figure A23.4: AM Peak Travel Time Index

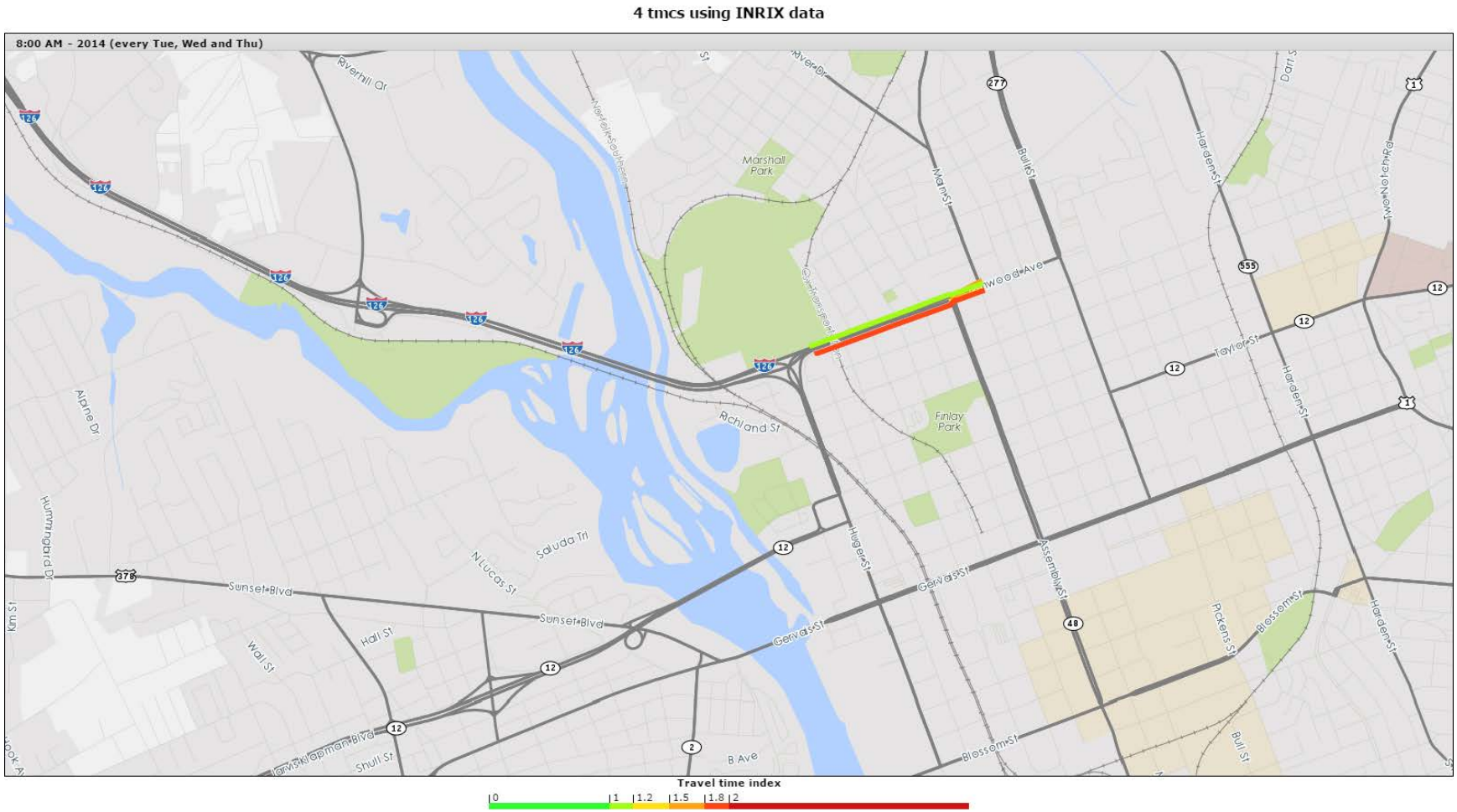
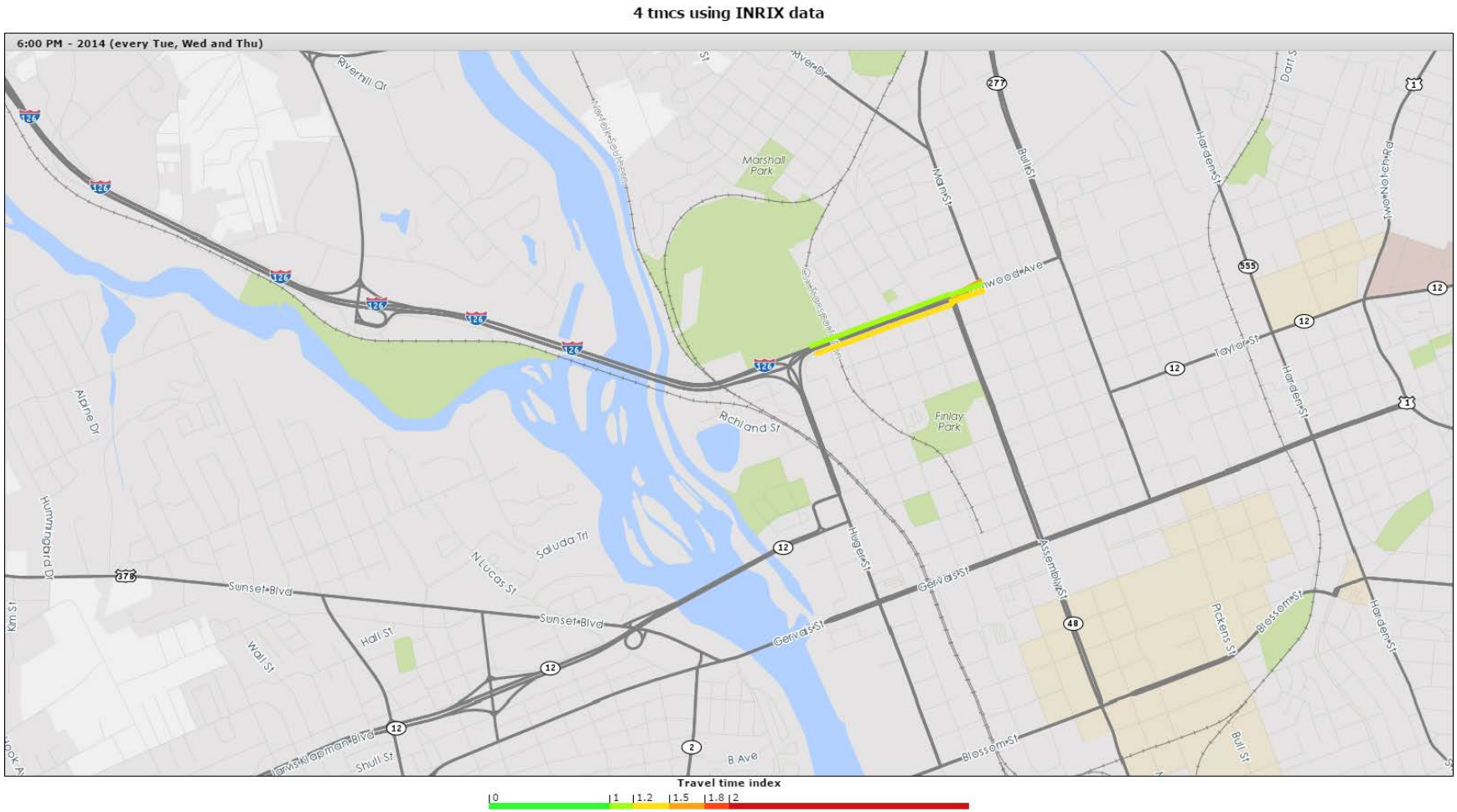


Figure A23.5: PM Peak Travel Time Index



Travel time index

0 | 1 | 1.2 | 1.5 | 1.8 | 2

A24. Corridor Name: North Main Street

Corridor ID: 1067

Route: US 21

Start: Sunset Blvd SC 16

End: I-20

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A24.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1067	128	US21	N MAIN ST	20,133	17,900	13,200	14,800	7,891	4	35	2	29200	0.44	A	0.23	A
1067	129	US21	N MAIN ST	20,133	16,300	11,900	13,100	8,896	5	35	2	29200	0.38	A	0.26	A
1067	130	US21	N MAIN ST	20,133	21,500	16,000	17,600	14,761	5	35	2	29200	0.52	B	0.44	A
1067	132	US21	N MAIN ST	10,200	16,200	12,900	13,700	10,976	5	35	2	29200	0.41	A	0.33	A

LOS E

LOS F

Figure A24.2: Average Corridor Speed

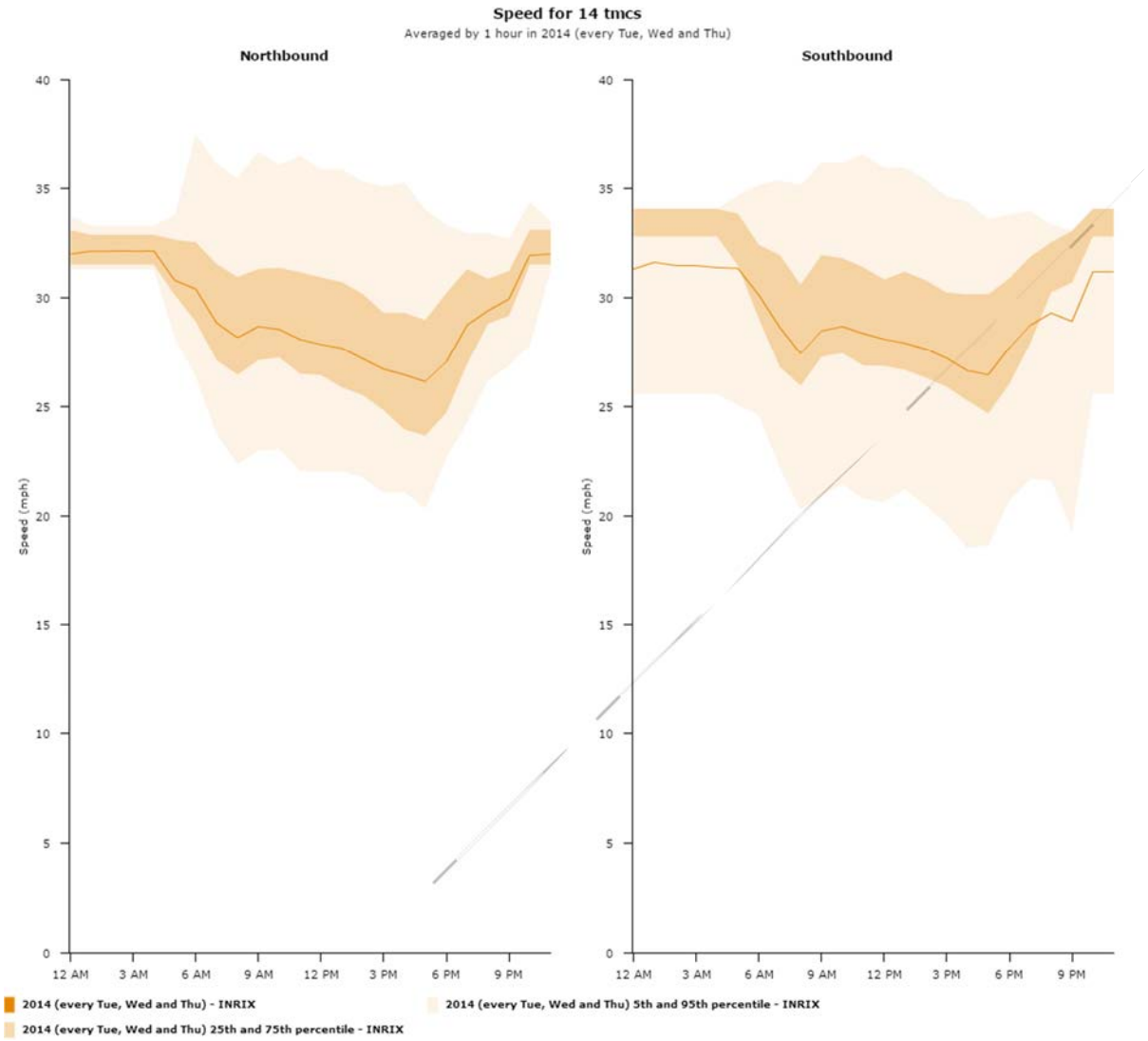


Figure A24.3: Corridor Congestion Index

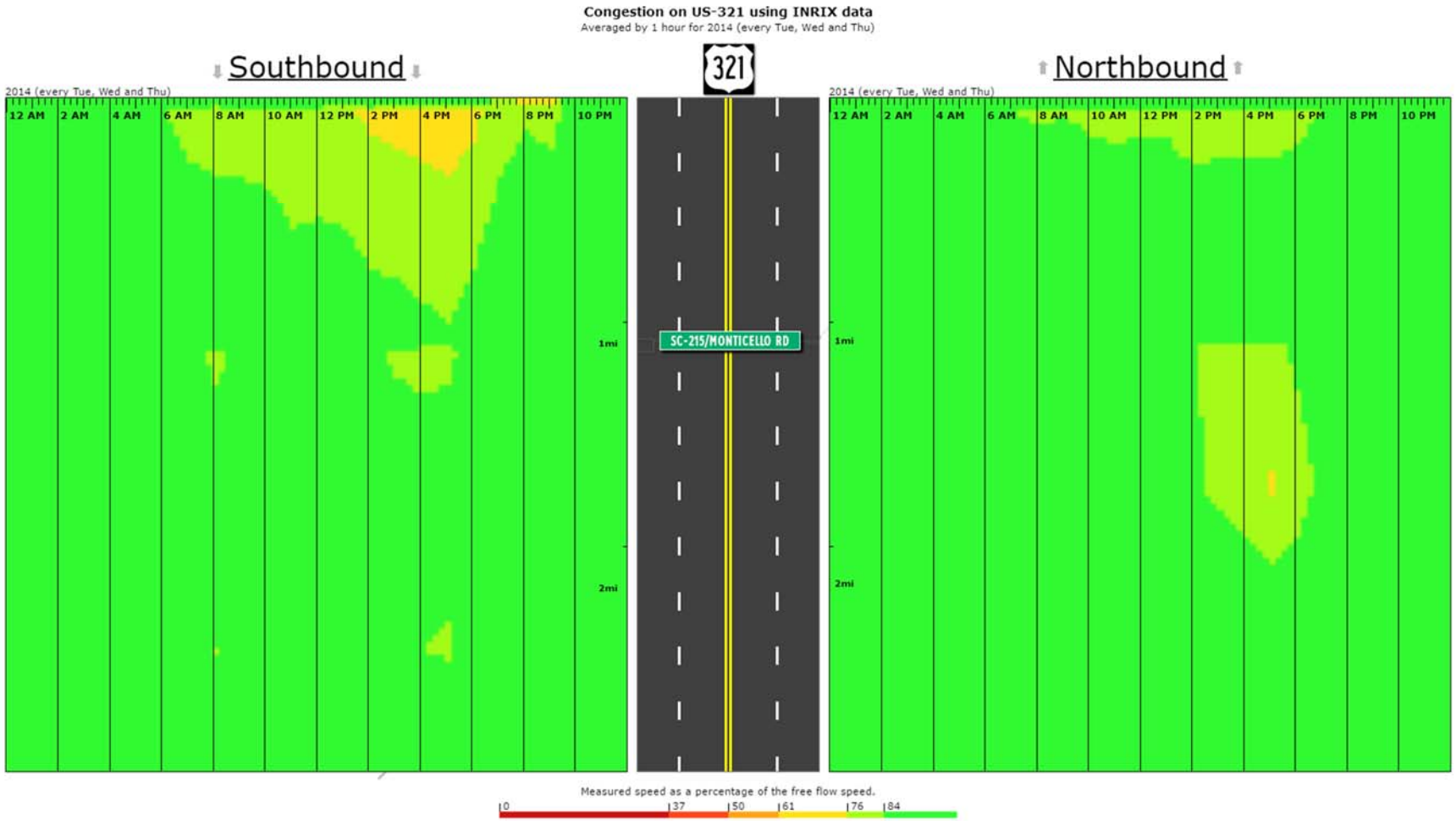


Figure A24.4: AM Peak Travel Time Index

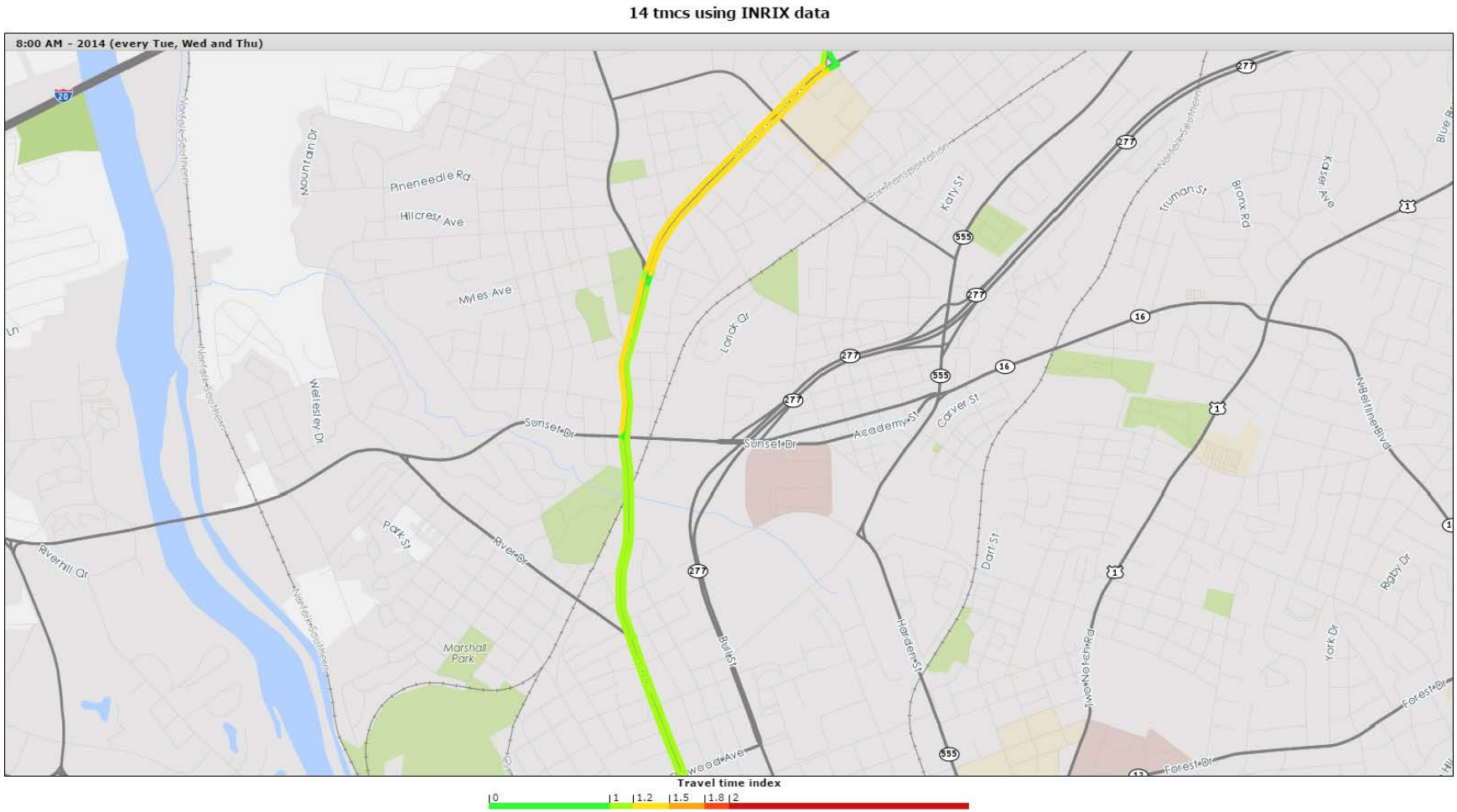
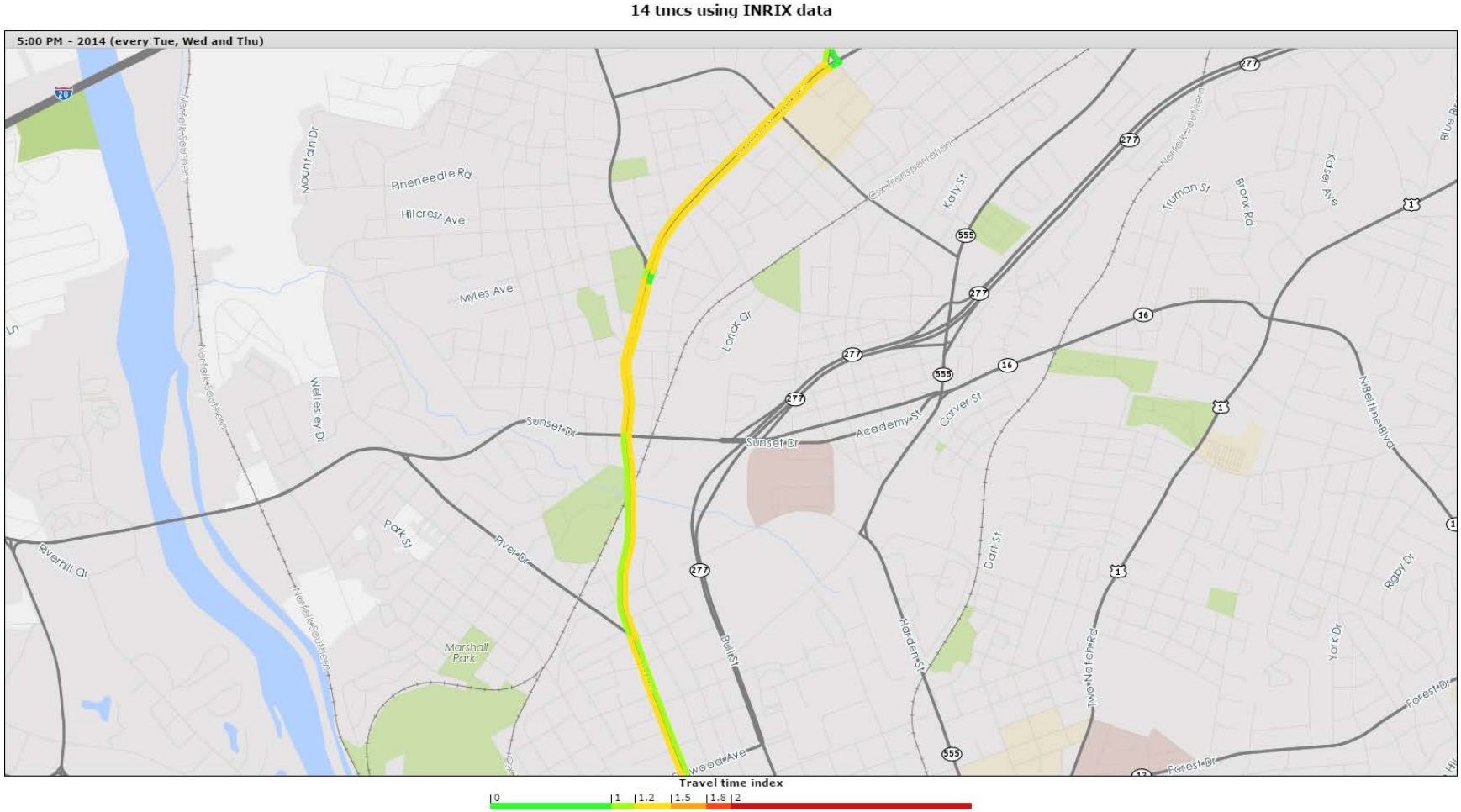


Figure A24.5: PM Peak Travel Time Index



A25. Corridor Name: US 378 Lexington/Sunset Boulevard

Corridor ID: 1069

Route: US 378

Start: Charter Oak Road

End: Gervais Street Bridge

County: Lexington

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A25.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1069	177	US378	COLUMBIA AVE	19,500	25,300	26,200	27,600	36,147	4	60	2	29200	0.82	C	1.08	D
1069	179	US378	COLUMBIA AVE	27,358	35,200	38,200	38,700	61,439	5	35	2	29200	1.15	D	1.82	F
1069	180	US378	SUNSET BLVD	22,676	28,200	31,600	33,000	55,366	5	35	2	29200	0.98	C	1.65	F
1069	181	US378	SUNSET BLVD	22,676	30,600	33,400	37,000	64,477	5	35	2	29200	1.1	D	1.92	F
1069	183	US378	SUNSET BLVD	19,400	27,200	29,600	32,400	50,744	5	45	2	29200	0.96	C	1.51	F
1069	185	US378	SUNSET BLVD	23,100	33,400	36,800	36,200	59,181	5	55	2	29200	1.08	D	1.76	F
1069	187	US378	SUNSET BLVD	22,700	24,500	26,400	27,800	41,143	5	60	2	29200	0.83	C	1.22	E
1069	189	US378	SUNSET BLVD	25,900	26,700	27,200	27,100	25,100	5	55	2	29200	0.81	C	0.75	C
1069	191	US378	SUNSET BLVD	26,100	21,200	23,000	22,700	22,475	5	45	2	29200	0.68	B	0.67	B
1069	193	US378	SUNSET BLVD	19,800	15,400	15,400	15,900	6,111	5	35	2	29200	0.47	A	0.18	A
1069	175	US378	US 378	7,600	10,600	11,700	13,900	19,295	4	60	2	29200	0.41	A	0.57	B

LOS E

LOS F

Figure A25.2: Average Corridor Speed

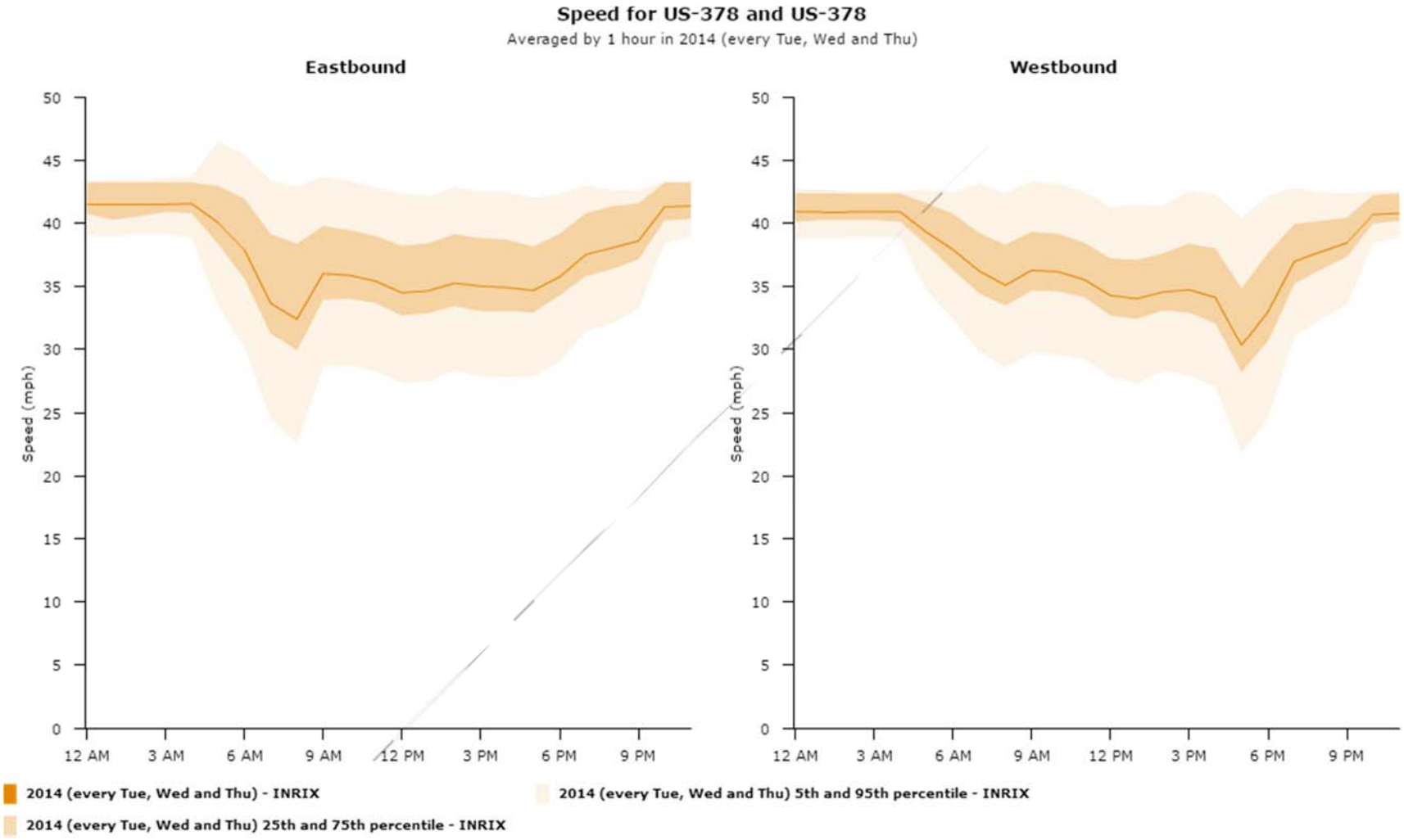


Figure A25.3: Corridor Congestion Index

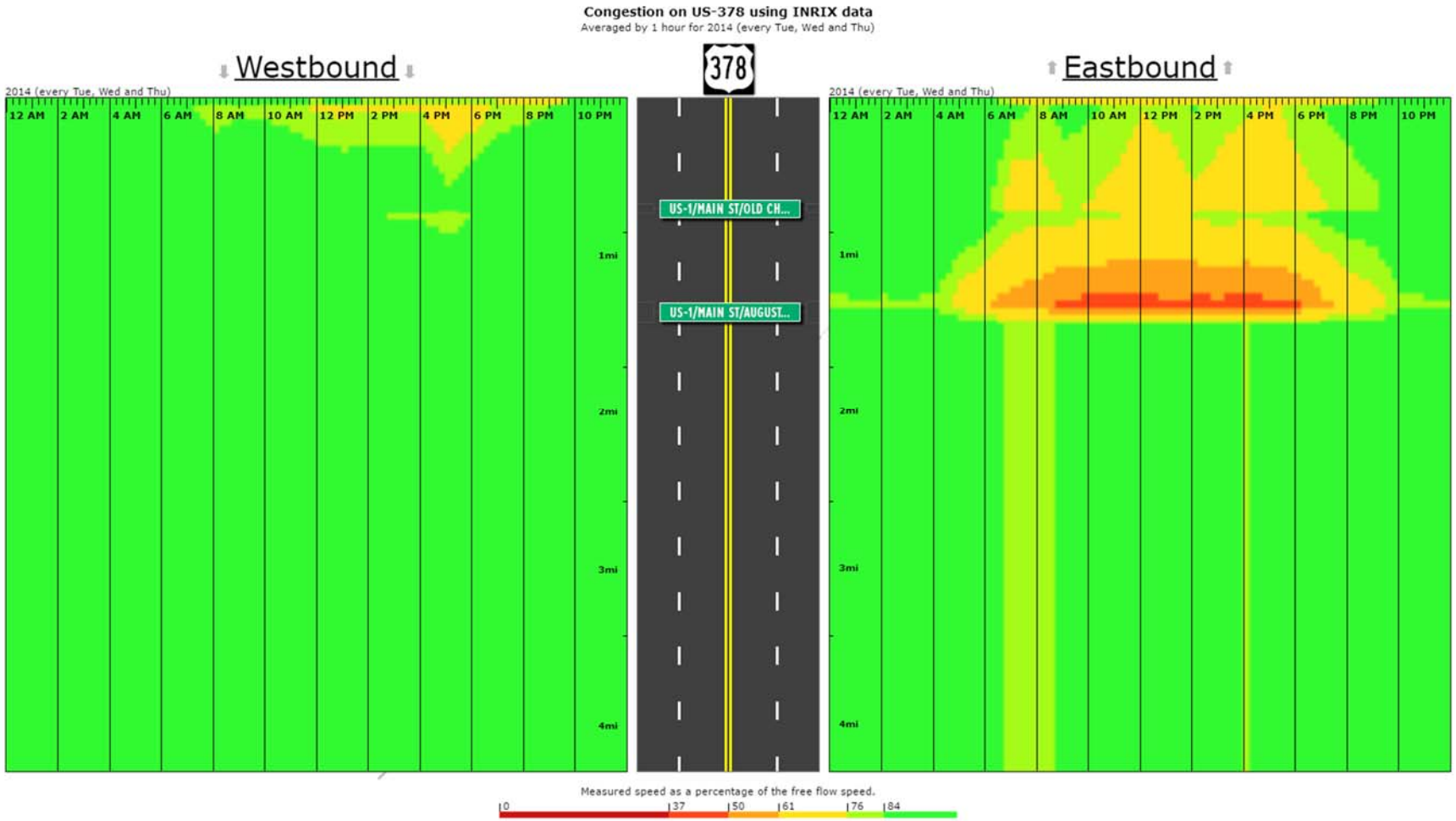


Figure A25.4: AM Peak Travel Time Index

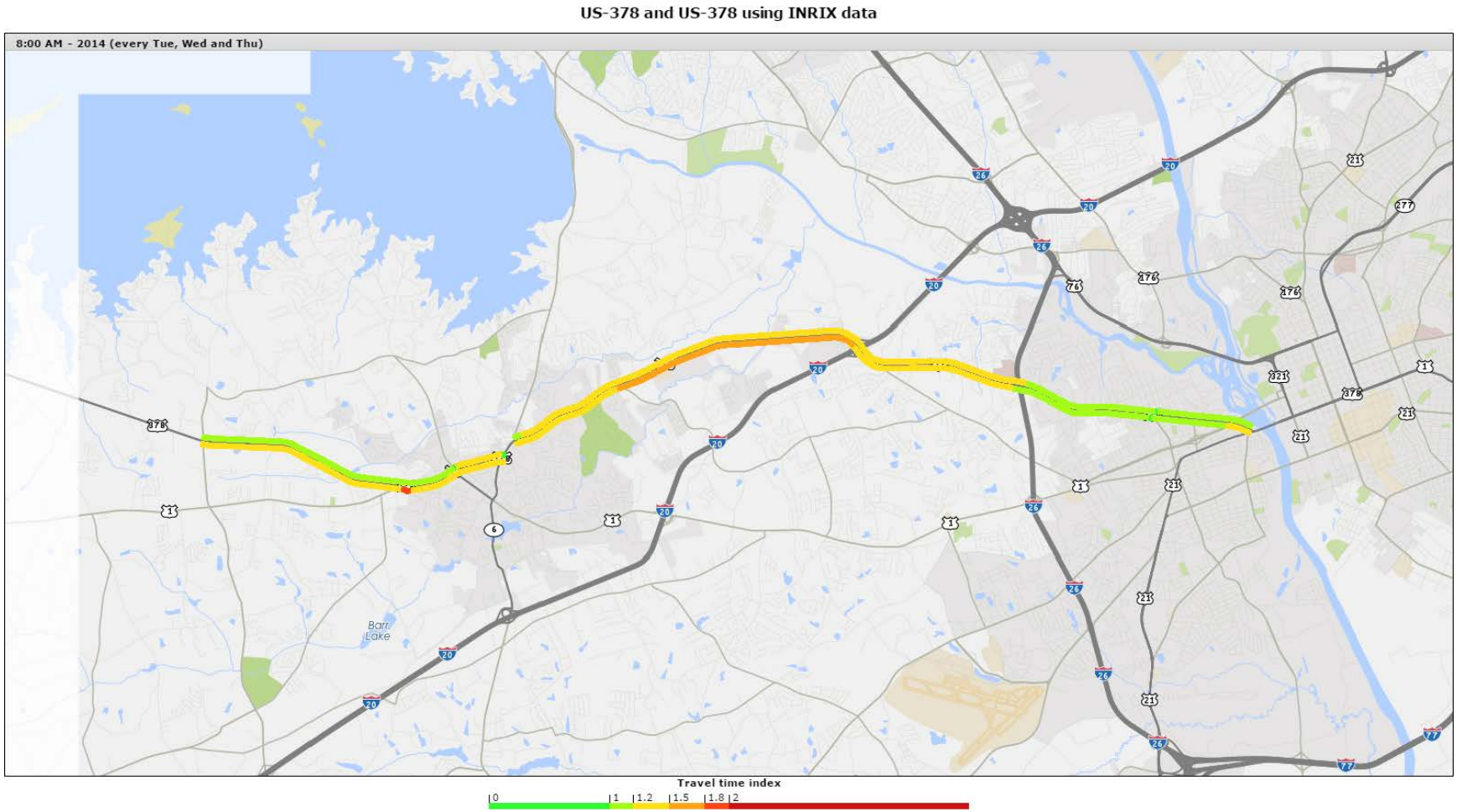
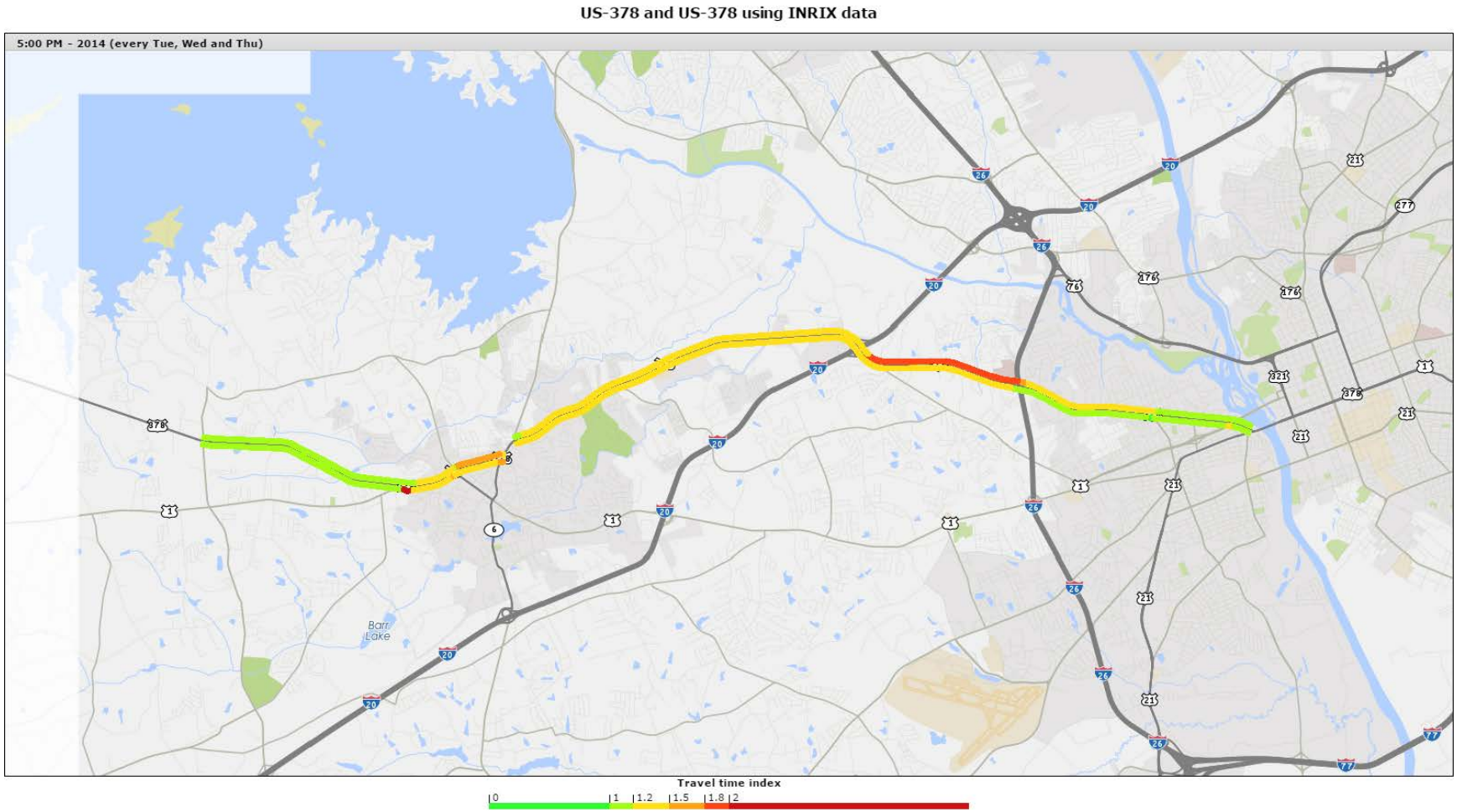


Figure A25.5: PM Peak Travel Time Index



A26. Corridor Name: Two Notch Road/Millwood Avenue

Corridor ID: 1071

Start: Beltline Blvd

End: US 601

County: Richland/Kershaw

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: 1

Figure A26.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1071	101	US1		6700	8900	11300	11,700	19,249	2		2	14600	0.8	C	1.32	E
1071	103	US1		6200	8400	12200	11,500	21,550	2		2	14600	0.78	C	1.48	F
1071	103	US1		6200	8400	12200	11,500	21,550	2		2	14600	0.78	C	1.48	F
1071	105	US1		5900	8200	10500	8,800	15,888	2		2	29200	0.6	B	1.09	D
1071	105	US1	TWO NOTCH RD	25,000	25,500	24,900	24,000	26,072	5	35	2	14600	0.71	B	0.77	C
1071	107	US1	TWO NOTCH RD	25,300	22,600	21,100	21,600	23,404	5	35	2	29200	0.64	B	0.7	B
1071	107	US1		7800	11600	11900	10,400	18,864	2		2	14600	0.71	B	1.29	E
1071	109	US1	TWO NOTCH RD	40,200	20,400	17,300	17,500	17,989	5	35	2	29200	0.52	B	0.53	B
1071	109	US1		22500	25600	21900	22,000	30,324	4		2	29200	0.65	B	0.9	C
1071	110	US1	TWO NOTCH RD	25,000	25,500	18,200	17,800	7,944	5	35	2	29200	0.52	B	0.23	A
1071	111	US1	TWO NOTCH RD	45,900	31,800	26,800	25,000	36,139	5	35	2	29200	0.74	B	1.07	D
1071	112	US1	TWO NOTCH RD	18,600	17,700	15,300	14,300	7,351	4	35	2	29200	0.42	A	0.21	A
1071	113	US1	TWO NOTCH RD	35,300	32,300	27,900	27,000	22,139	5	35	2	29200	0.8	C	0.65	B
1071	114	US1	TWO NOTCH RD	18,600	17,700	11,000	11,900	2,680	4	35	2	29200	0.35	A	0.08	A
1071	115	US1	TWO NOTCH RD	22,298	37,800	32,500	36,000	53,039	5	45	2	29200	1.07	D	1.57	F
1071	117	US1	TWO NOTCH RD	11,300	13,100	31,300	30,800	57,492	5	45	2	29200	0.91	C	1.71	F
1071	118	US1	TWO NOTCH RD	11,300	13,100	20,300	20,400	34,998	5	45	2	29200	0.6	B	1.04	D
1071	119	US1	TWO NOTCH RD	6,300	8,900	10,800	13,300	18,170	2	45	2	29200	0.91	C	1.24	E
1071	120	US1	TWO NOTCH RD	11,300	13,100	16,300	17,700	25,259	5	45	2	29200	1.21	E	1.73	F
1071	153	US76	MILLWOOD AVE	20,900	20,300	18,900	20,500	21,072	5	35	2	29200	0.61	B	0.63	B

LOS E

LOS F

Figure A26.2: Average Corridor Speed

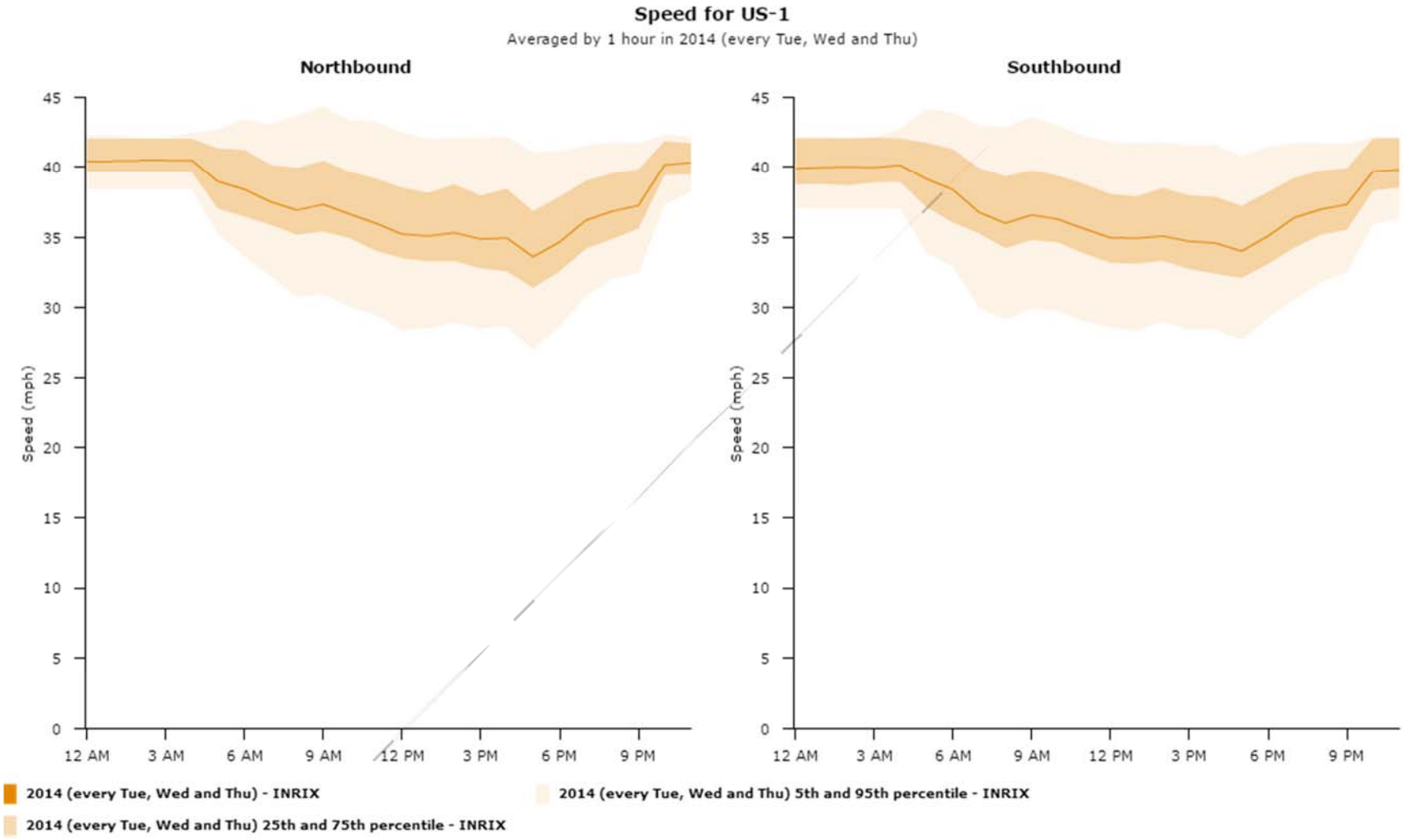


Figure A26.3: Corridor Congestion Index

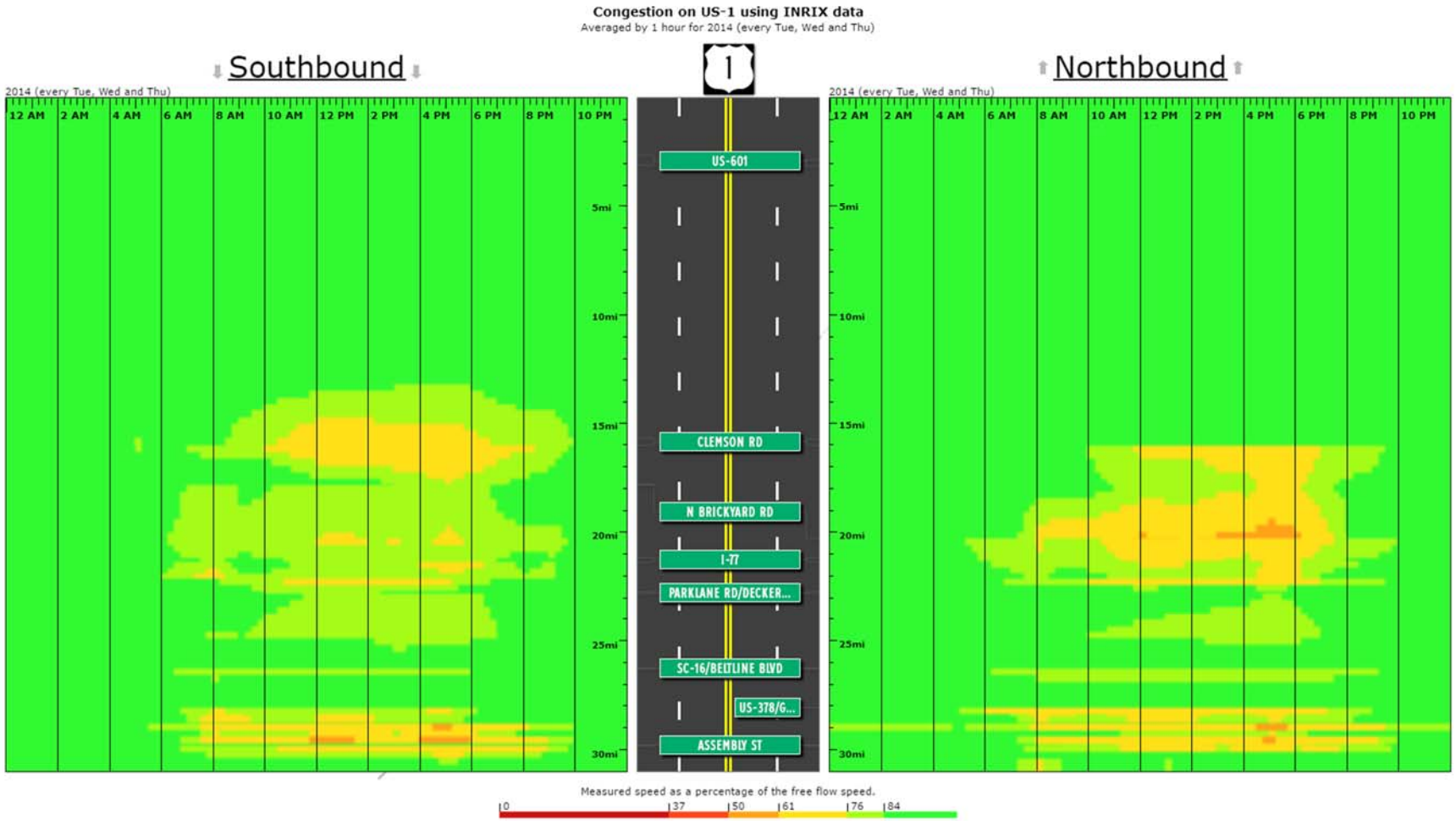


Figure A26.4: AM Peak Travel Time Index

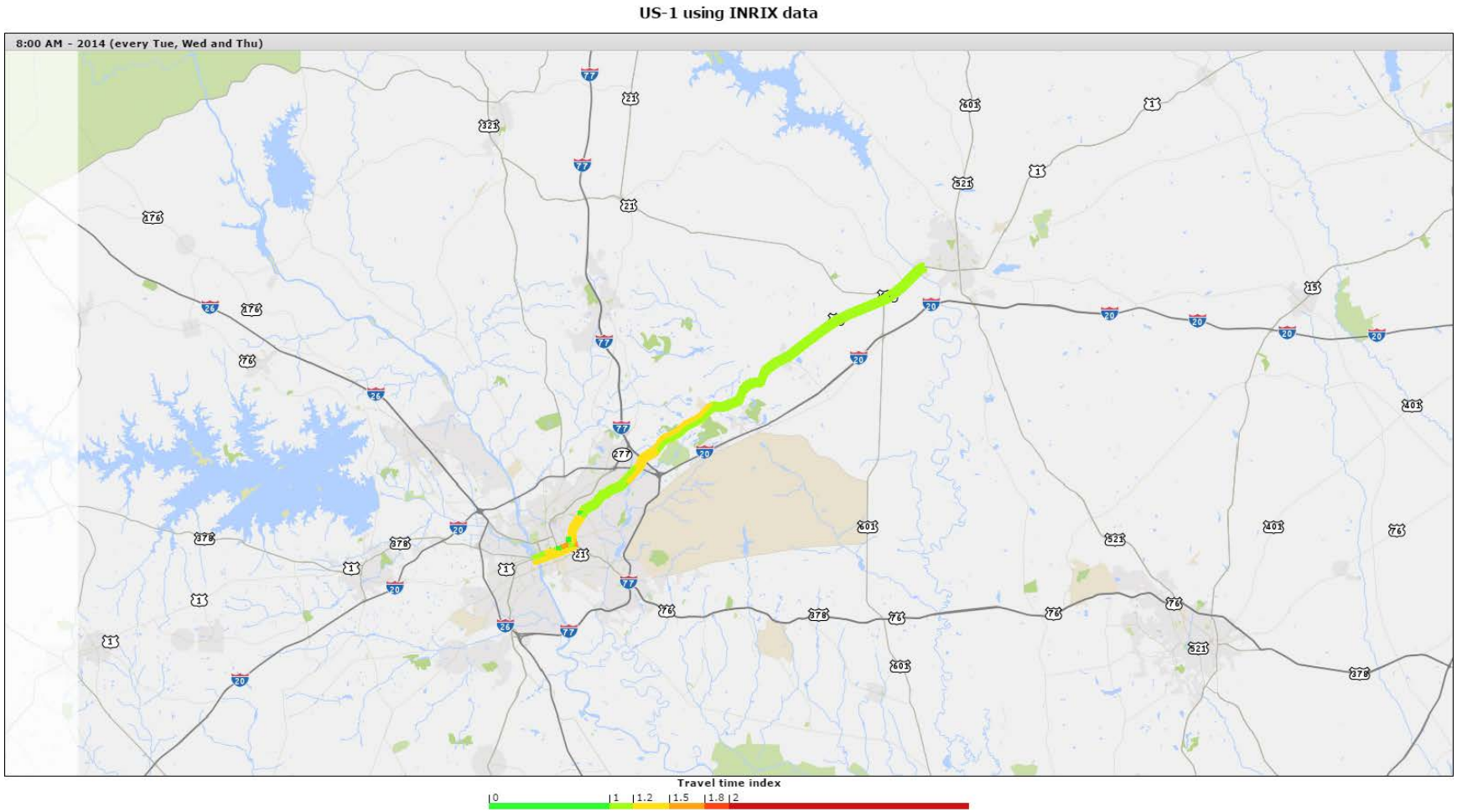
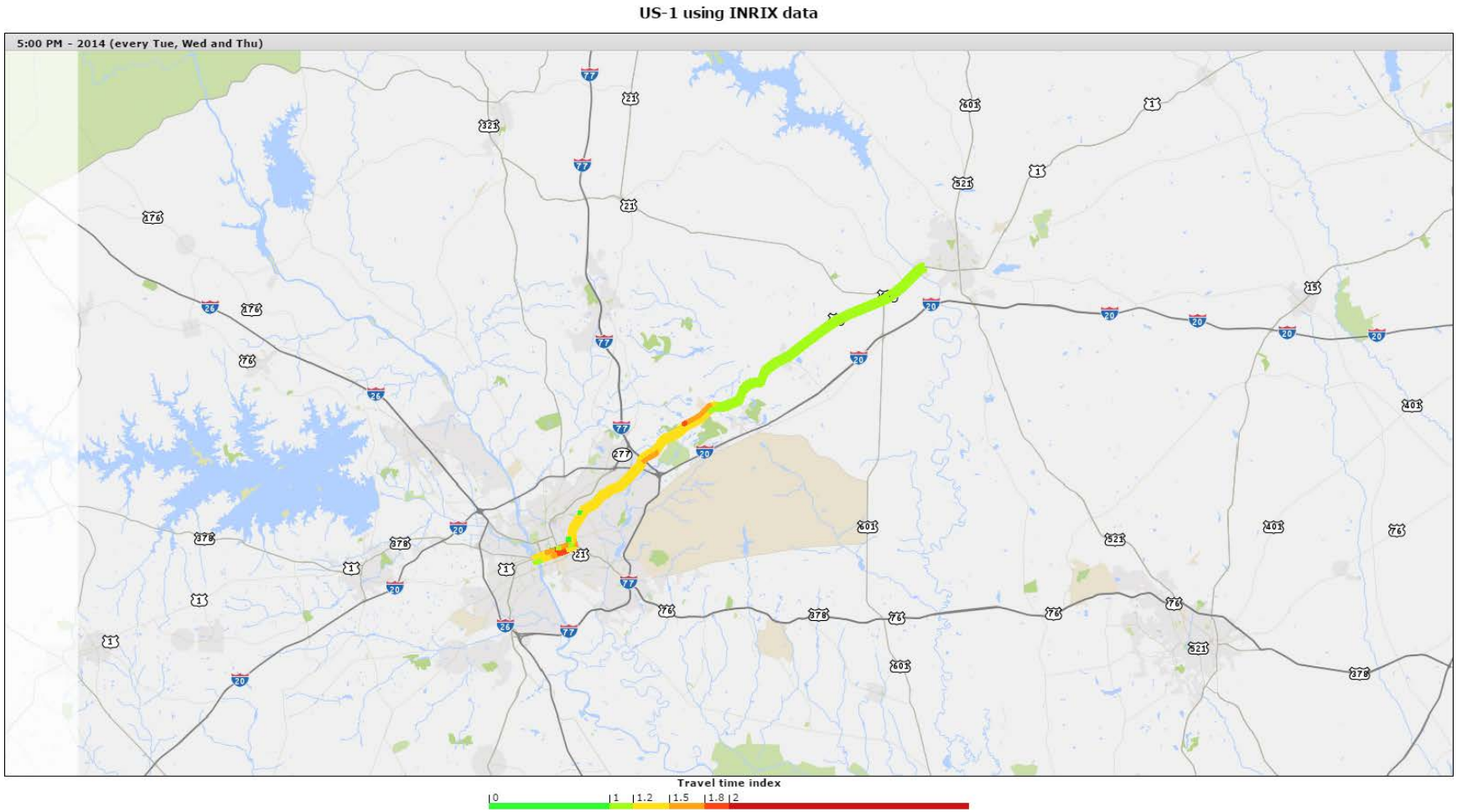


Figure A26.5: PM Peak Travel Time Index



A27. Corridor Name: US 1 Lexington/West Main Street/Meeting Street/Augusta Highway

Corridor ID: 1073

Route: US 1

Start: Pisgah Church Rd

End: Gervais Street Bridge

County: Lexington

Functional Class: 2 Principal Arterial, 3 Minor Arterial,

2040 LRTP Project Ranking: N/A

Figure A27.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1073	116	US1	AUGUSTA HWY		18,300	19,000	19,600	24,626	5	60	3	21600	0.79	C	0.99	C
1073	117	US1	W MAIN ST	24,400	28,600	32,400	34,000	46,120	5	35	2	29200	1.01	D	1.37	F
1073	119	US1	W MAIN ST	15,200	16,700	16,800	17,000	19,523	2	35	2	14600	1.16	E	1.33	E
1073	121	US1	AUGUSTA RD	17,300	22,600	25,400	26,900	40,578	2,5	35	2	14600	0.8	C	1.21	E
1073	122	US1	AUGUSTA RD		33,200	31,000	33,600	30,528	5	35	2	29200	1.15	D	1.05	D
1073	123	US1	AUGUSTA RD	20,300	25,700	28,500	27,600	42,512	5	55	2	29200	0.84	C	1.27	E
1073	125	US1	AUGUSTA RD	25,800	31,200	30,400	31,900	40,437	5	60	2	29200	0.9	C	1.2	E
1073	127	US1	AUGUSTA RD	38,000	39,900	39,100	43,200	56,704	5	55	2	14600	1.29	E	1.69	F
1073	129	US1	AUGUSTA RD	16,900	15,500	15,300	15,000	12,227	5	60	3	21600	0.51	B	0.41	A
1073	131	US1	AUGUSTA HWY	15,000	13,800	13,400	14,100	11,181	4	35	3	21600	0.48	A	0.38	A

LOS E

LOS F

Figure A27.2: Average Corridor Speed

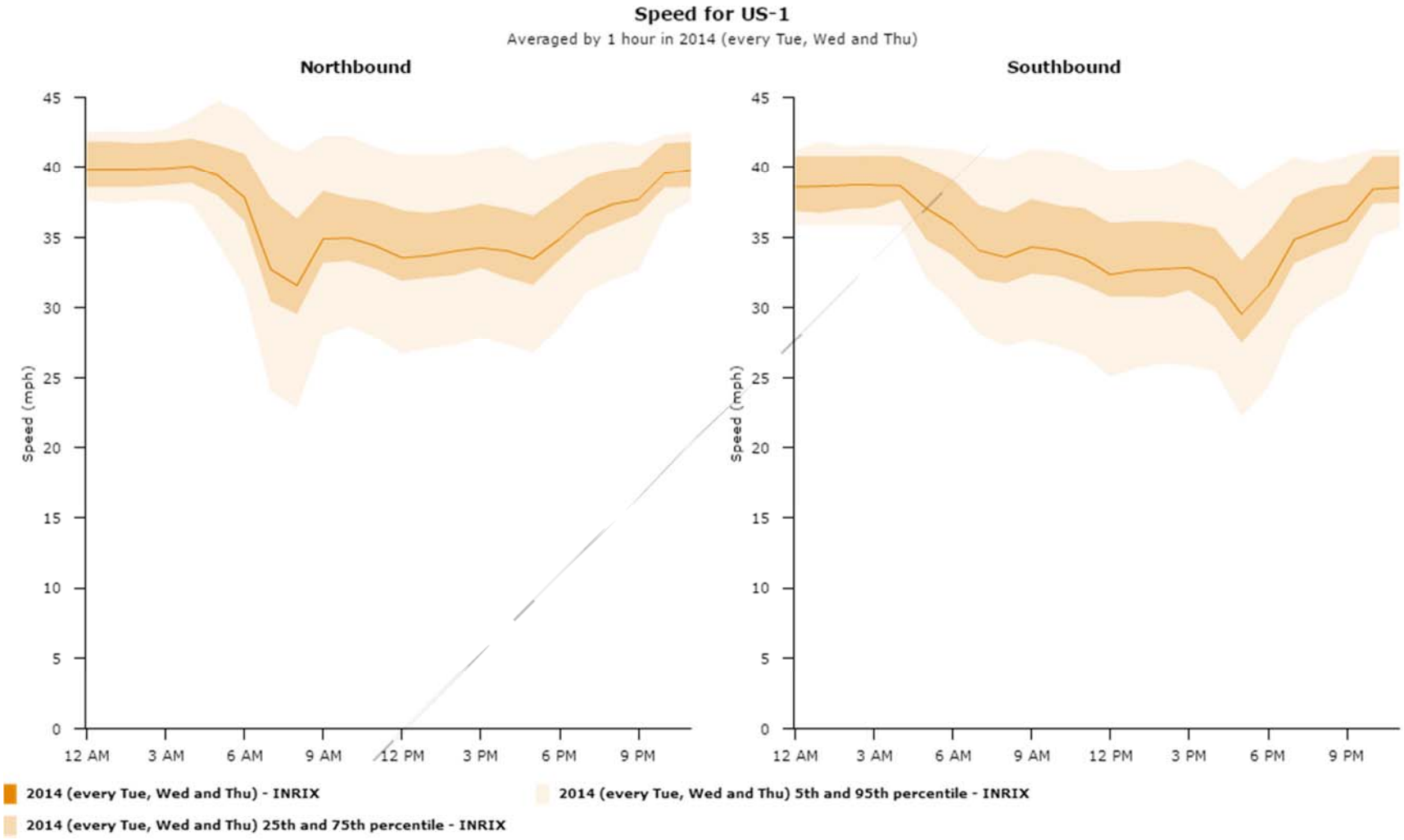


Figure A27.3: Corridor Congestion Index

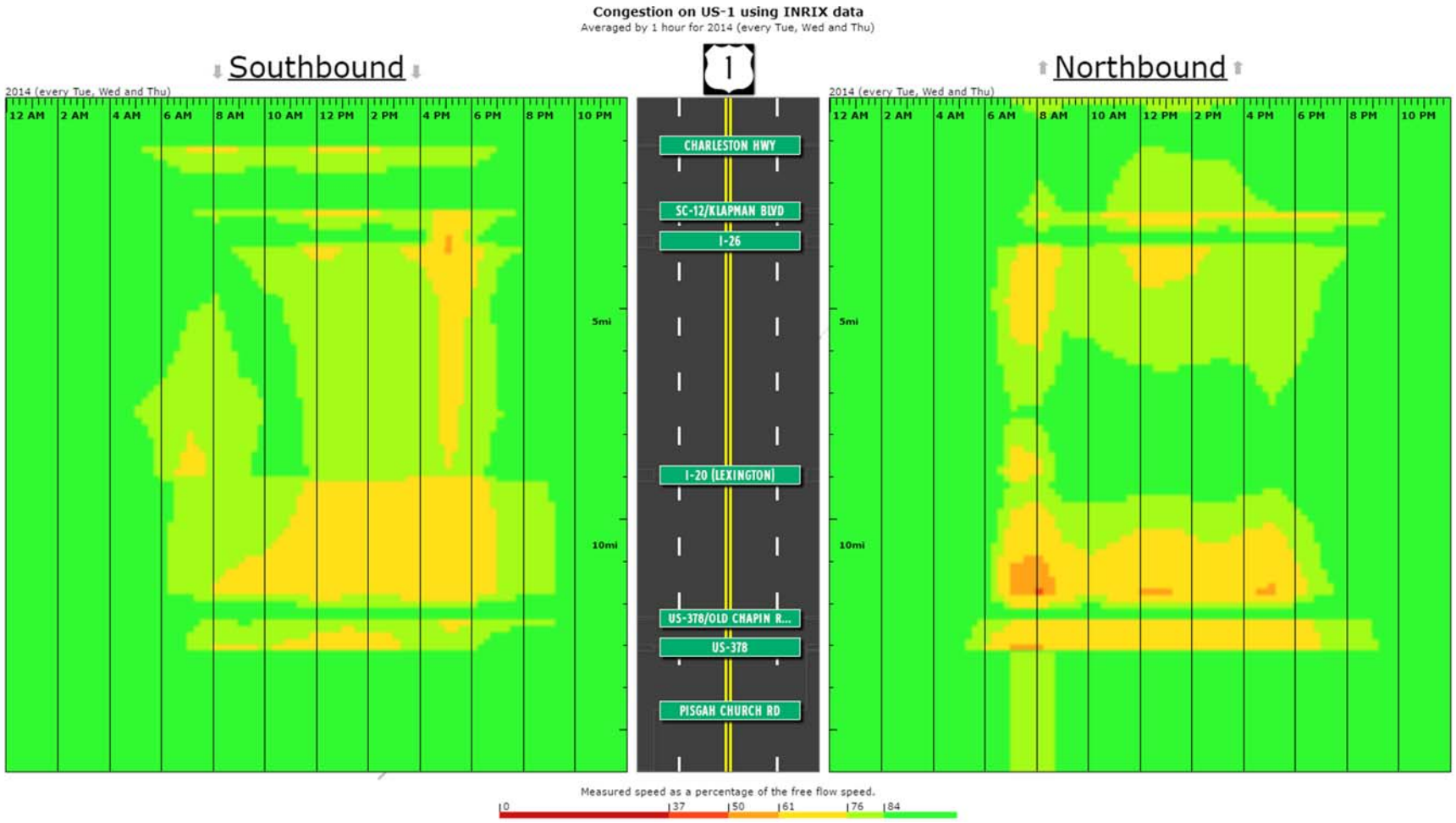


Figure A27.4: AM Peak Travel Time Index

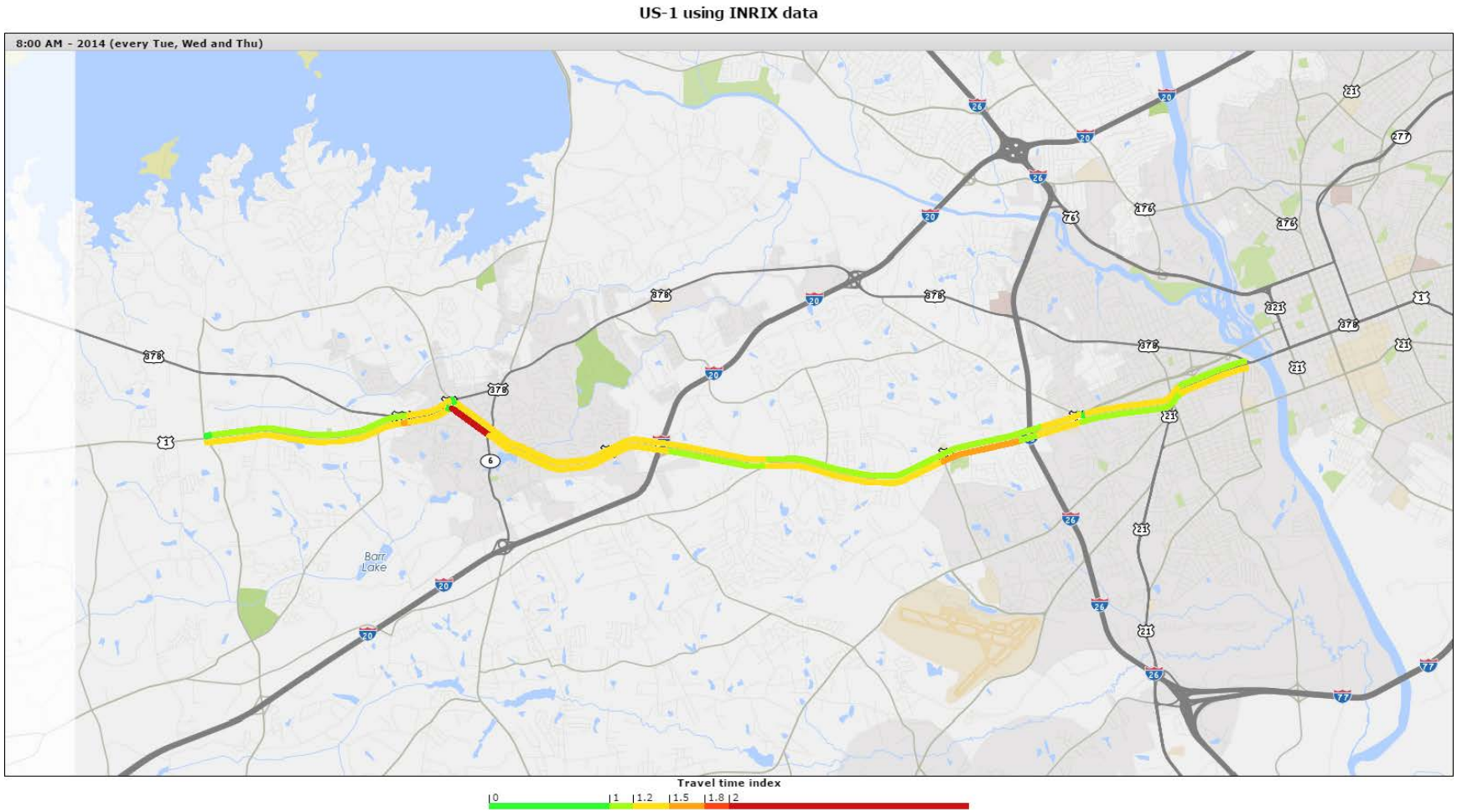
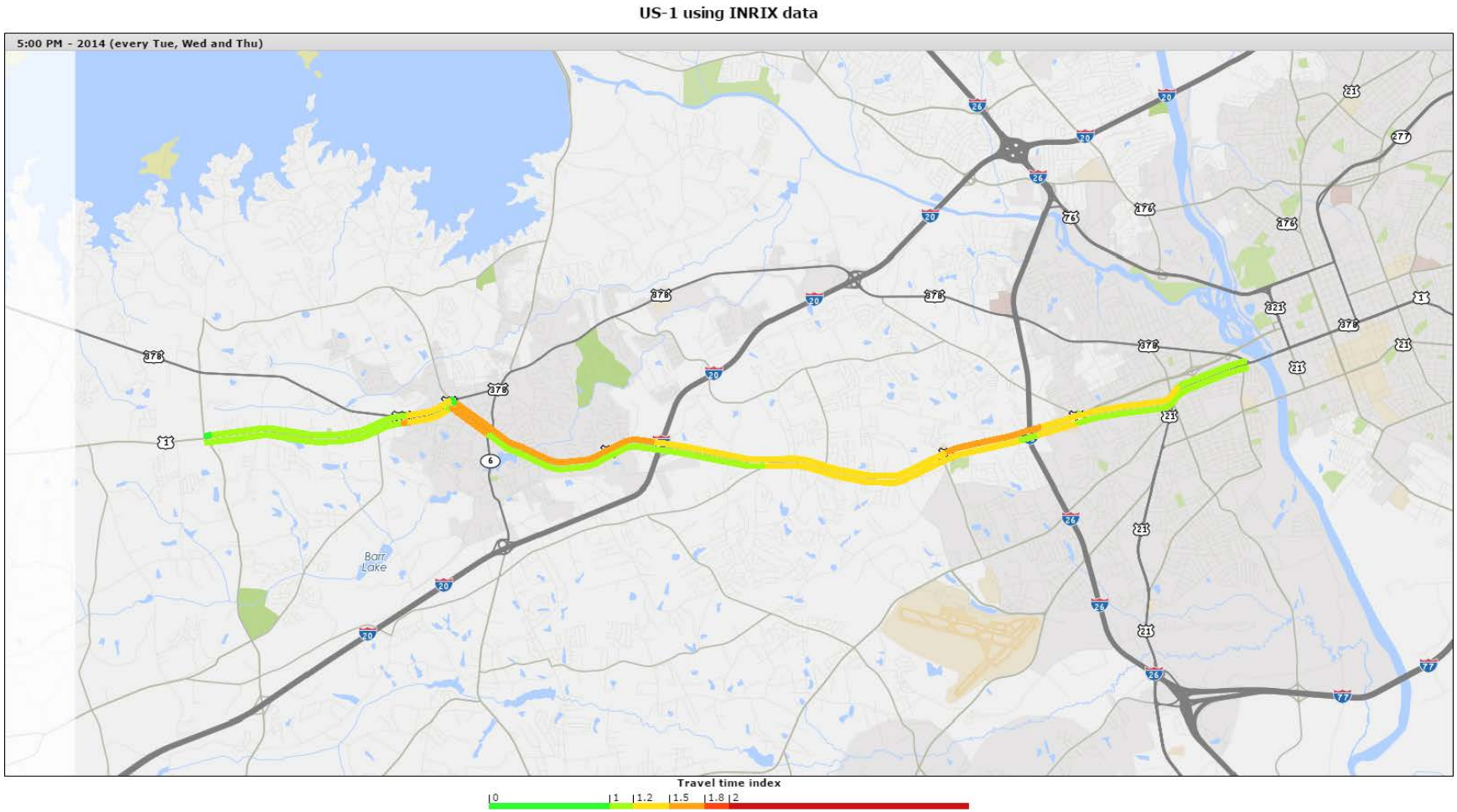


Figure A27.5: PM Peak Travel Time Index



A28. Corridor Name: US 601/McCords Ferry Road

Corridor ID: 1075

Start: Bluff Rd

End: US 1

County: Richland/Kershaw

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A28.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1075	165	US601		11800	17400	15200	14,600	22,692	4	45	2	29200	0.43	A	0.68	B
1075	197	US601	MCCORDS FERRY RD	3,500	2,700	2,800	3,500	4,253	2	55	2	14600	0.24	A	0.29	A
1075	199	US601	MCCORDS FERRY RD	6,700	4,300	3,900	4,300	4,805	2	55	2	14600	0.29	A	0.33	A
1075	201	US601	MCCORDS FERRY RD	4,000	3,500	4,200	4,700	5,847	2	55	2	14600	0.32	A	0.4	A

LOS E

LOS F

Figure A28.2: Average Corridor Speed

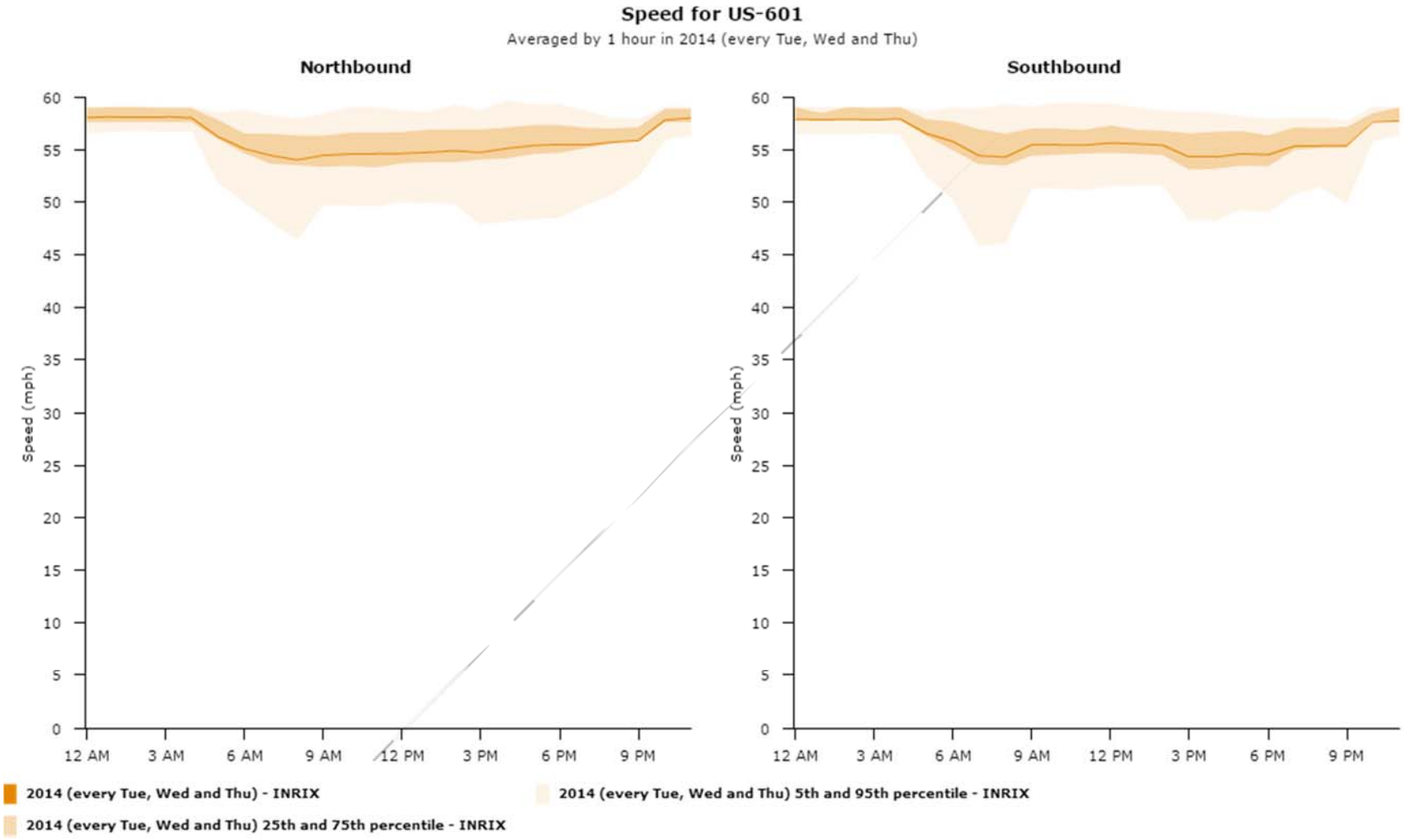


Figure A28.3: Corridor Congestion Index

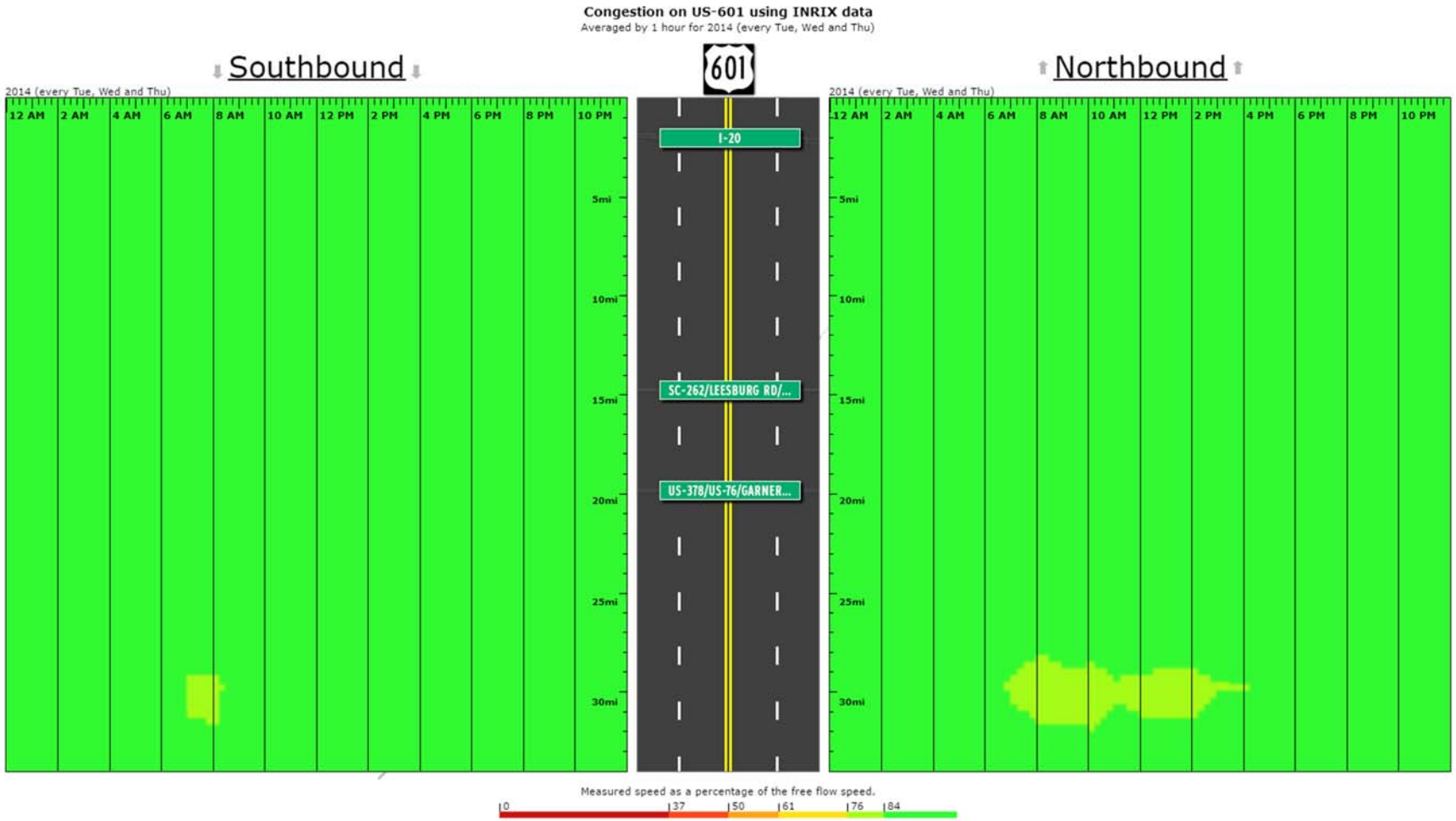


Figure A28.4: AM Peak Travel Time Index

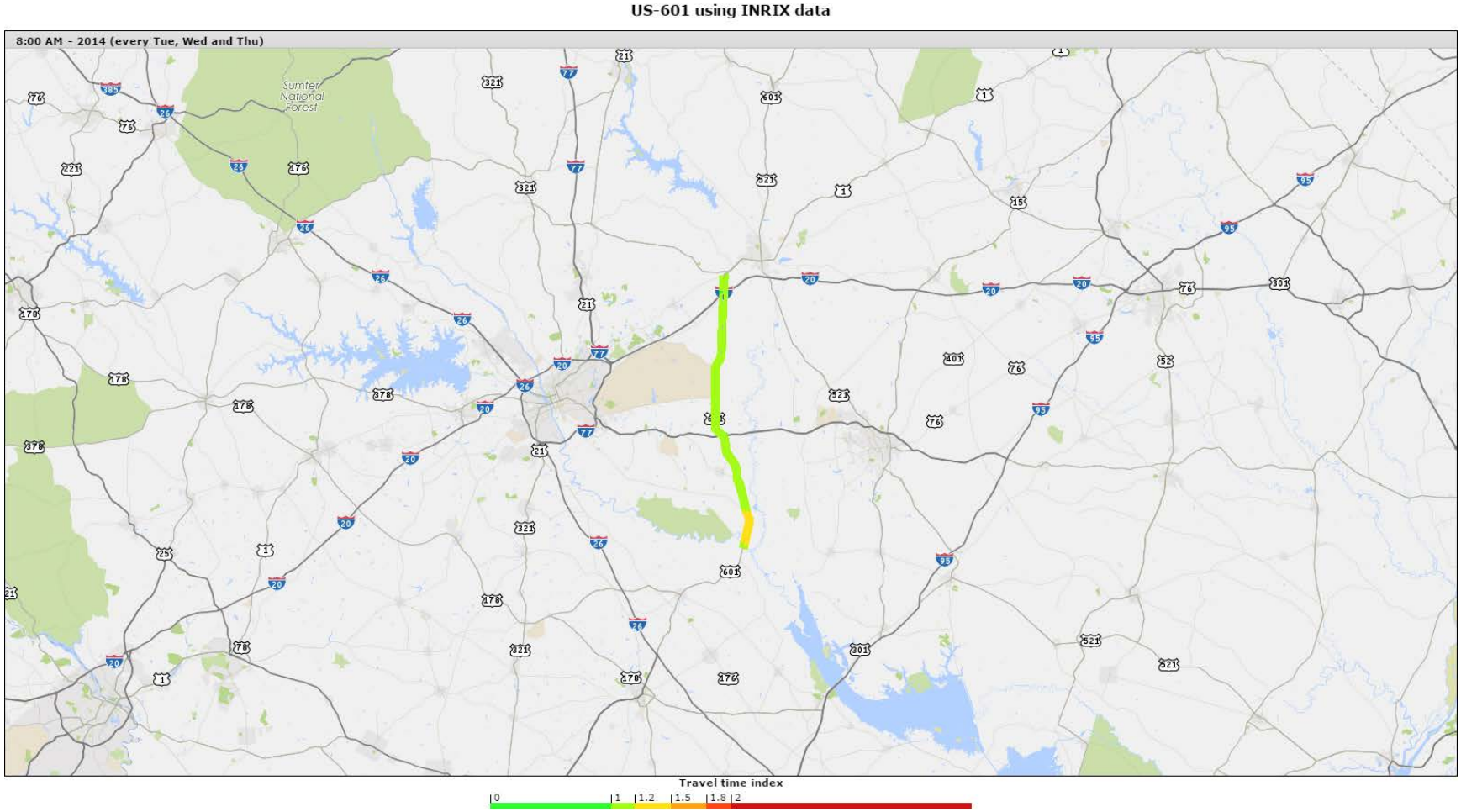


Figure A28.5: PM Peak Travel Time Index

A29. Corridor Name: Devine St, Garners Ferry Rd

Corridor ID: 1077

Route: US 21, US 76, US 378

Start: US 601

End: Devine Street

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A29.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1077	155	US76	DEVINE ST	25,900	26,100	24,600	26,700	27,668	4	35	2	29200	0.79	C	0.82	C
1077	157	US76	GARNERS FERRY RD	27,800	27,600	29,800	25,700	19,957	5	35	2	29200	0.76	C	0.59	B
1077	159	US76	GARNERS FERRY RD	46,900	36,300	39,100	41,600	44,368	7	35	2	43800	0.82	C	0.88	C
1077	163	US76	GARNERS FERRY RD	30,900	36,500	38,500	40,600	63,151	6	35	2	43800	0.93	C	1.44	F
1077	165	US76	GARNERS FERRY RD	28,200	34,600	36,300	36,400	56,762	6	35	2	43800	0.83	C	1.3	E
1077	167	US76	GARNERS FERRY RD	24,900	31,900	29,700	32,000	47,073	5	45	2	29200	0.73	B	1.4	F
1077	169	US76	GARNERS FERRY RD	27,200	35,000	34,500	39,400	54,868	4	55	2	29200	0.9	C	1.63	F
1077	170	US76	GARNERS FERRY RD	25,400	32,200	25,300	24,700	40,323	4	55	2	29200	0.74	B	1.2	E
1077	171	US76	GARNERS FERRY RD	27,200	35,000	31,500	29,300	48,297	4	55	2	29200	0.87	C	1.43	F
1077	172	US76	GARNERS FERRY RD	25,400	32,200	23,100	22,600	38,339	4	55	2	29200	0.67	B	1.14	E
1077	173	US76	GARNERS FERRY RD	13,900	17,000	16,300	17,200	23,683	4	60	2	29200	0.51	B	0.7	B

LOS E

LOS F

Figure A29.2: Average Corridor Speed

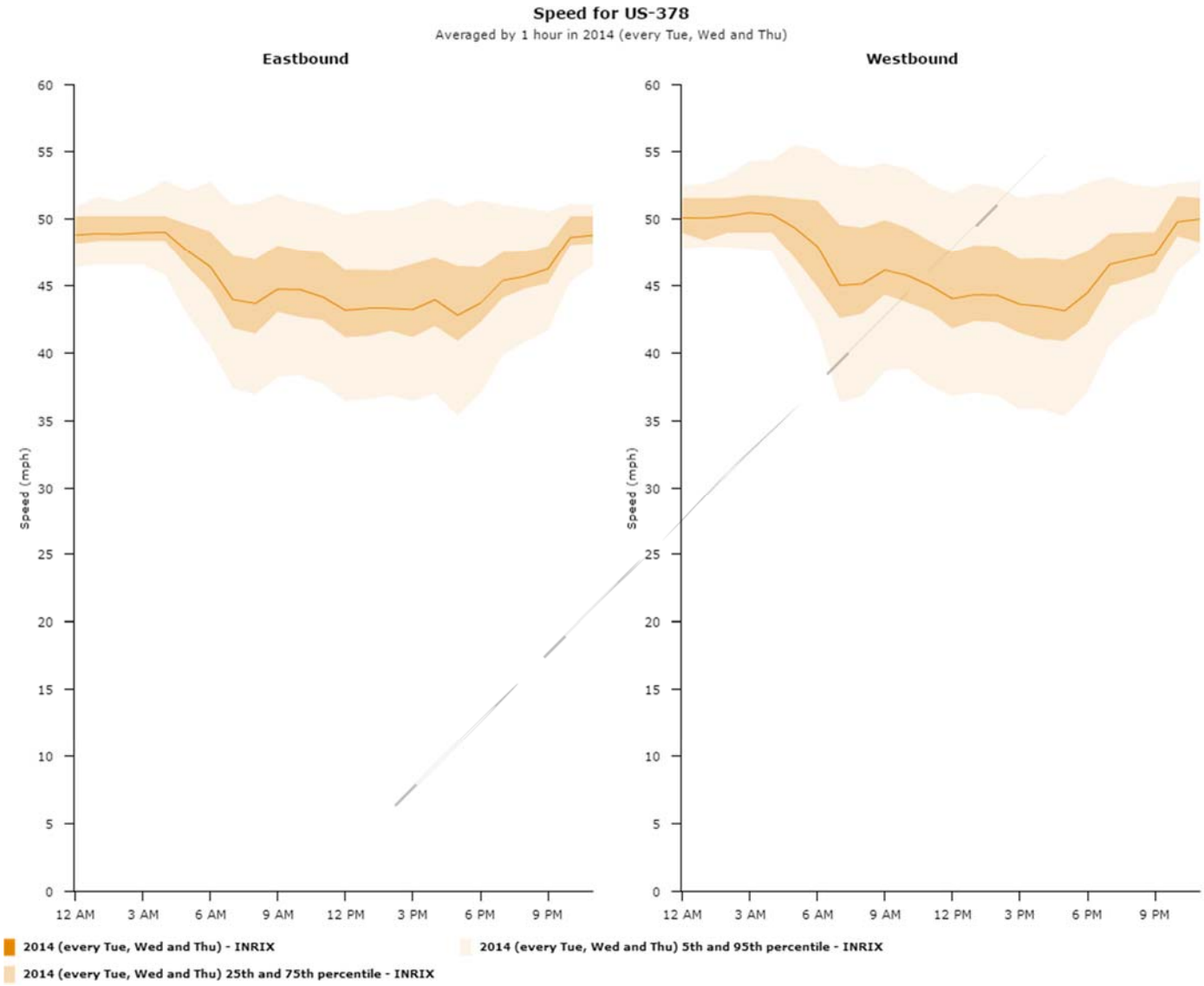


Figure A29.3: Corridor Congestion Index

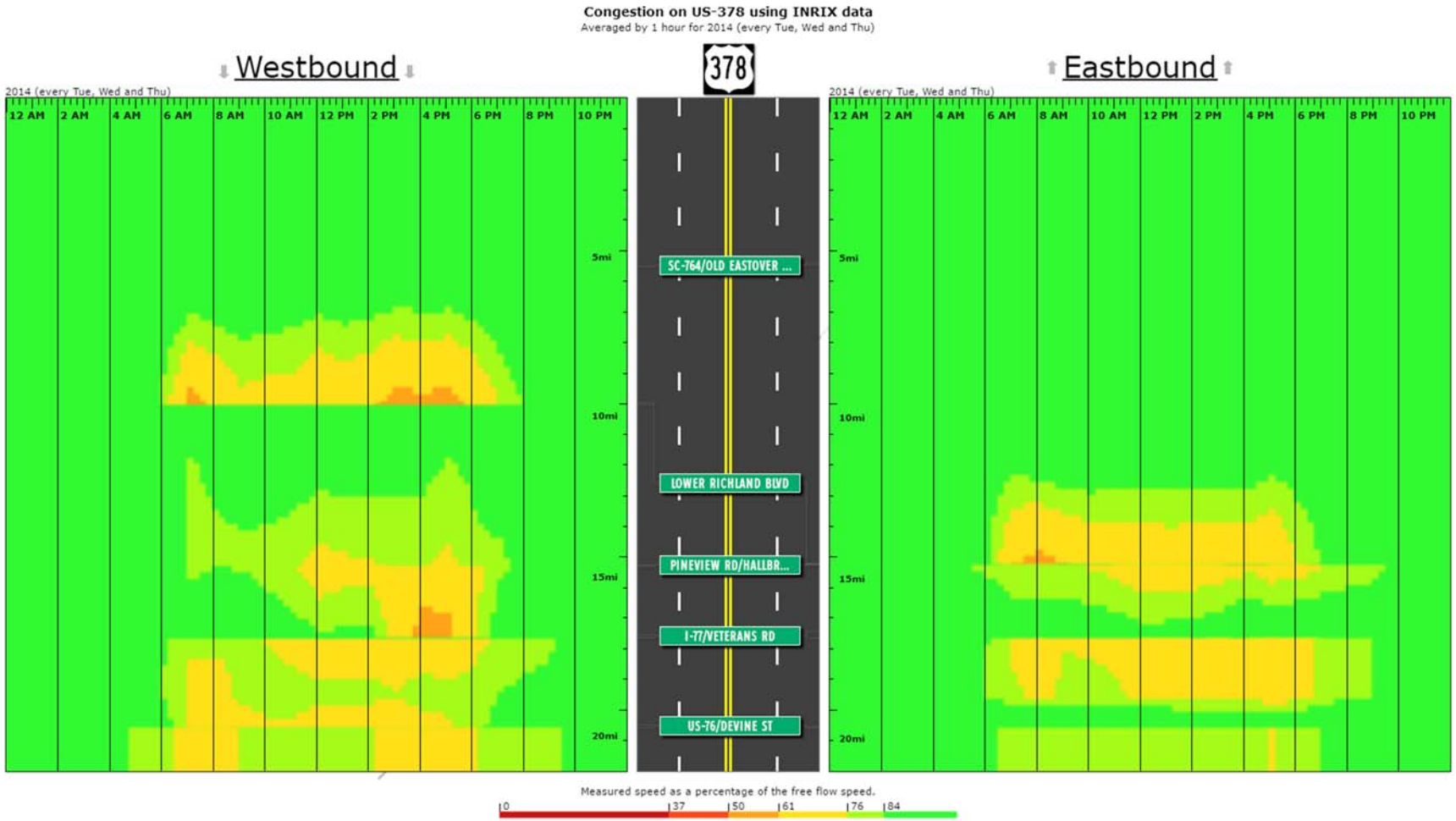


Figure A29.4: AM Peak Travel Time Index

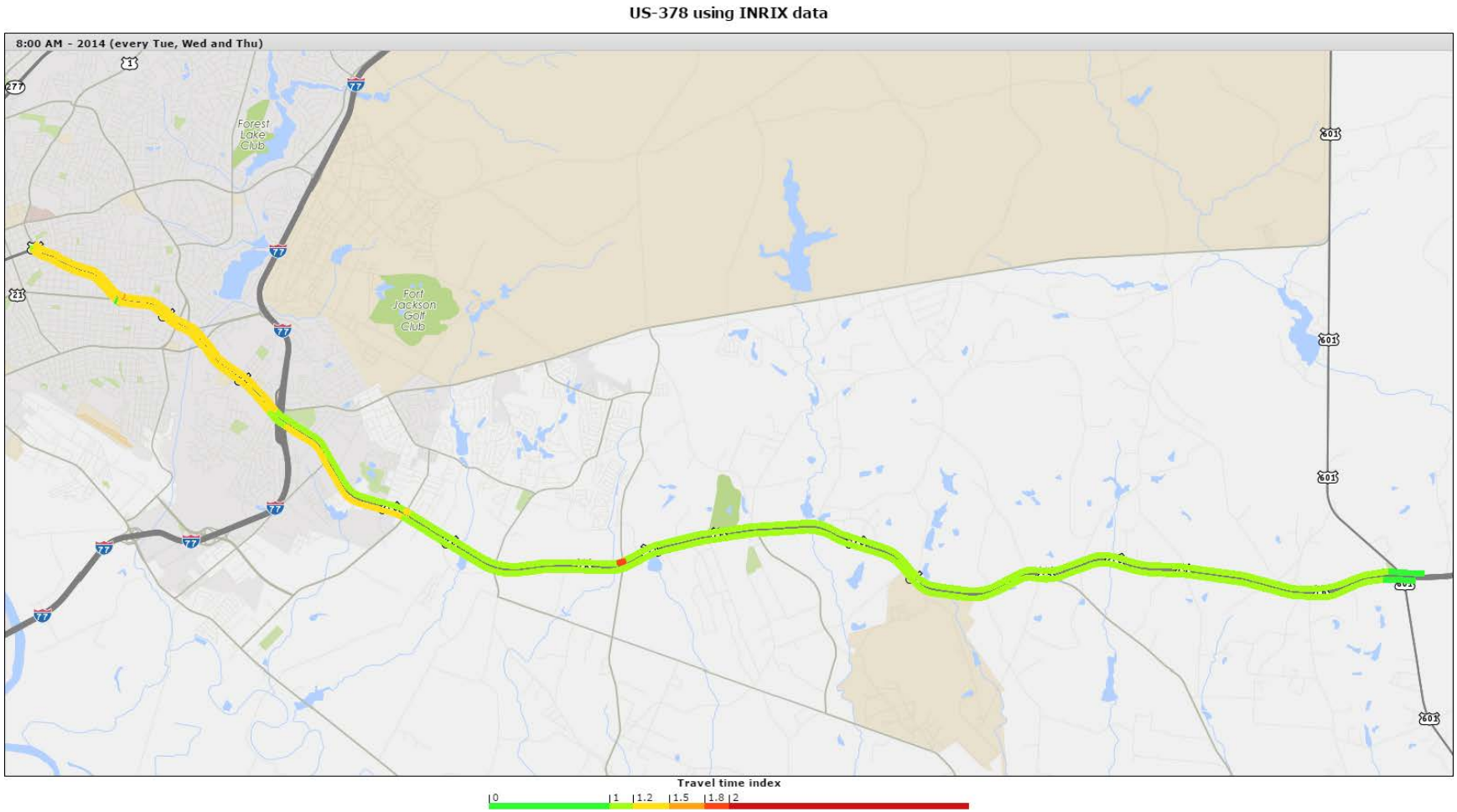
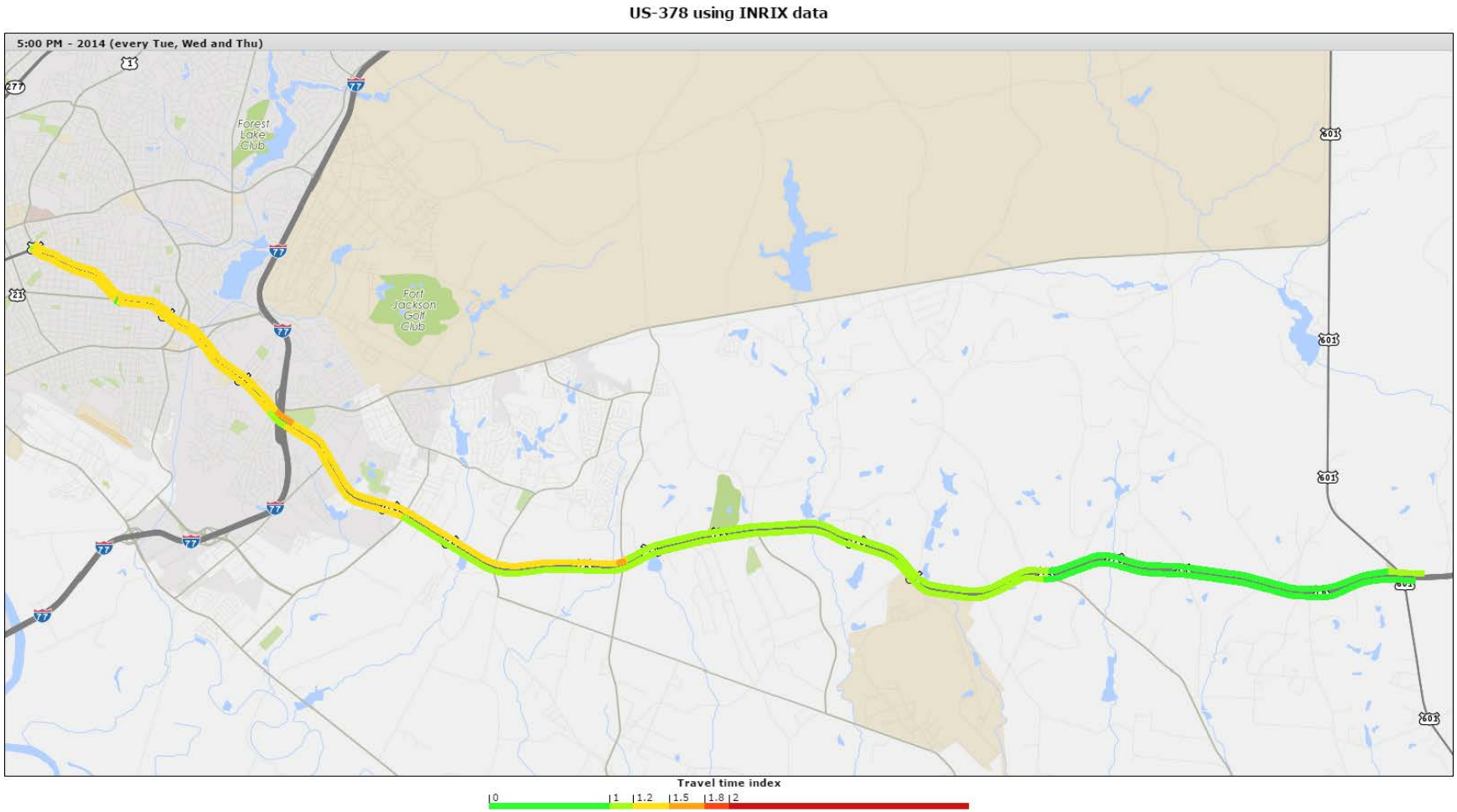


Figure A29.5: PM Peak Travel Time Index



A30. Corridor Name: White Pond Road

Corridor ID: 1079

Route: S-47

Start: Main St. US 1

End: Ft. Jackson Rd SC 12

County: Kershaw

Functional Class: 4 Major Collector

2040 LRTP Project Ranking: N/A

Figure A30.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1079	281	S-47	WHITE POND RD	1200	2500	2900	3,200	6,392	2	45	4	8600	0.37	A	0.74	B

LOS E

LOS F

Figure A30.2: Average Corridor Speed

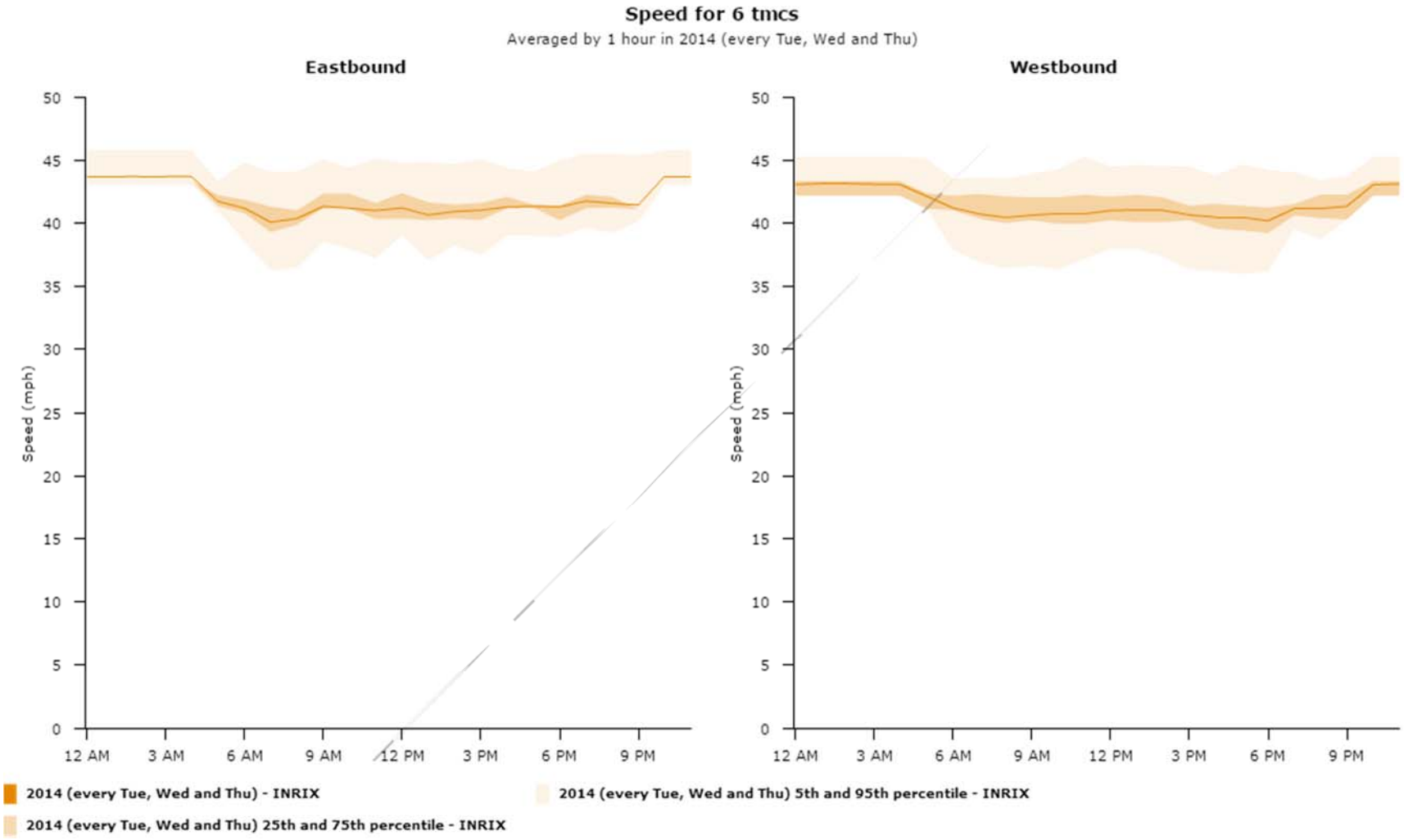


Figure A30.3: Corridor Congestion Index

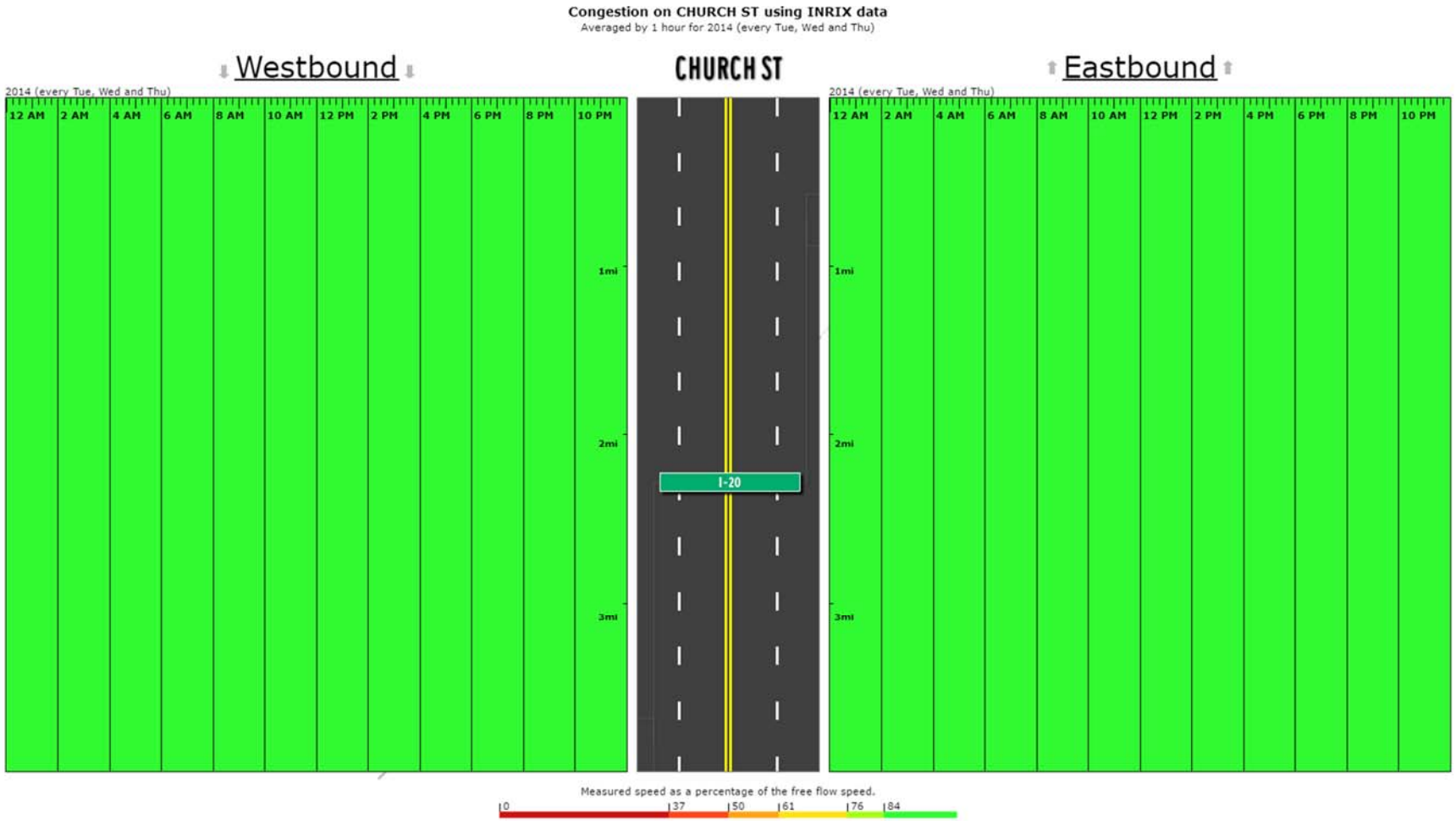


Figure A30.4: AM Peak Travel Time Index

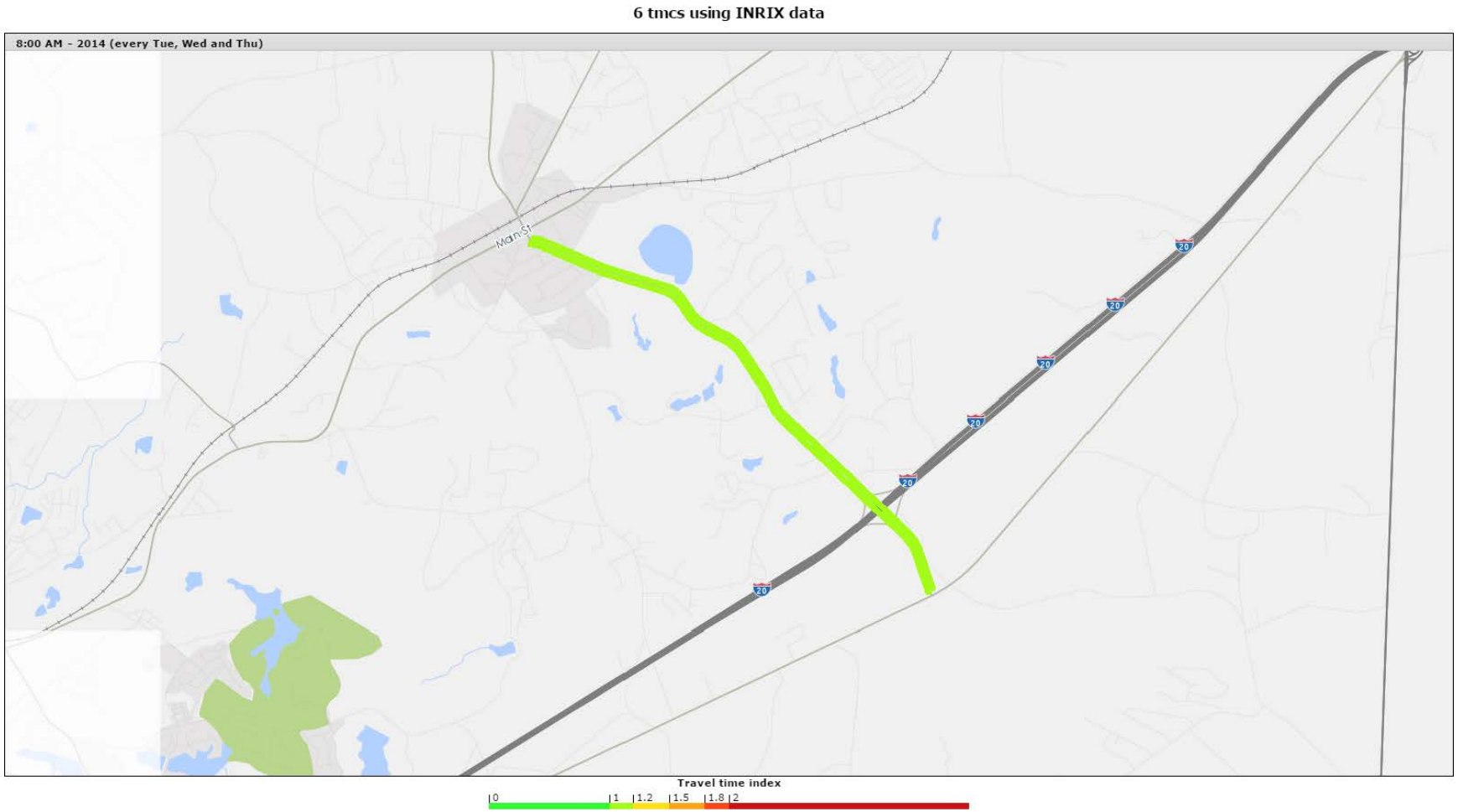
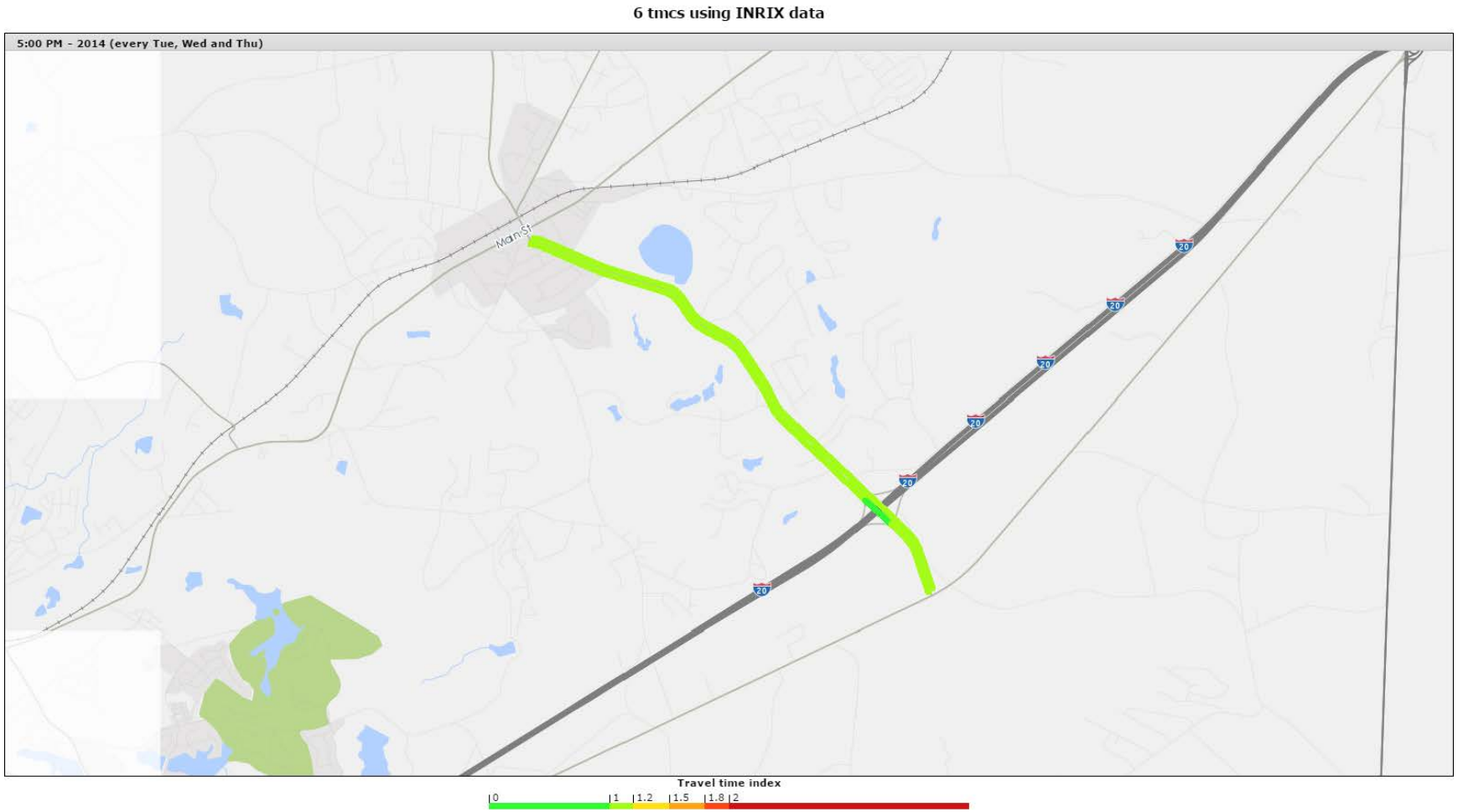


Figure A30.5: PM Peak Travel Time Index



A31. Corridor Name: Hampton St / Jarvis Klapman Blvd

Corridor ID: 1081

Route: SC 12

Start: US 1

End: Assembly Street

County: Lexington/Richland

Functional Class: 6 Other Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A31.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1081	205	SC12	HAMPTON ST	31,100	26,700	21,900	18,400	11,220	5	45	6	42000	0.55	B	0.33	A
1081	233	SC12	JARVIS KLAPMAN BLVD	14,000	12,700	12,000	12,400	9,468	4	35	6	17200	0.37	A	0.28	A
1081	235	SC12	JARVIS KLAPMAN BLVD	22,800	18,200	15,600	16,000	8,237	4	45	6	17200	0.48	A	0.24	A
1081	236	SC12	JARVIS KLAPMAN BLVD	27,500	25,200	22,800	22,500	11,128	5	45	6	17200	0.67	B	0.33	A

LOS E

LOS F

Figure A31.2: Average Corridor Speed

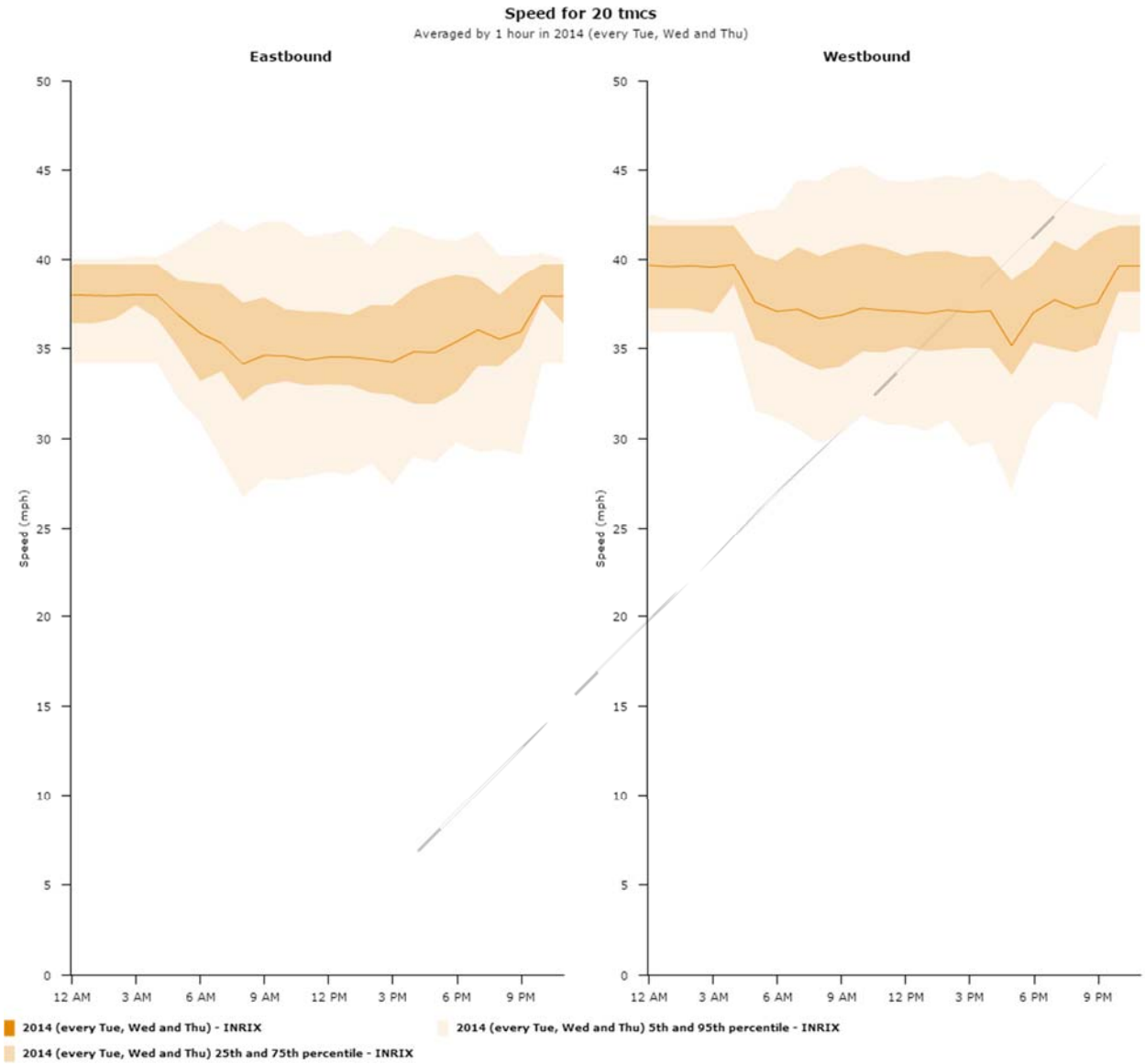


Figure A31.3: Corridor Congestion Index

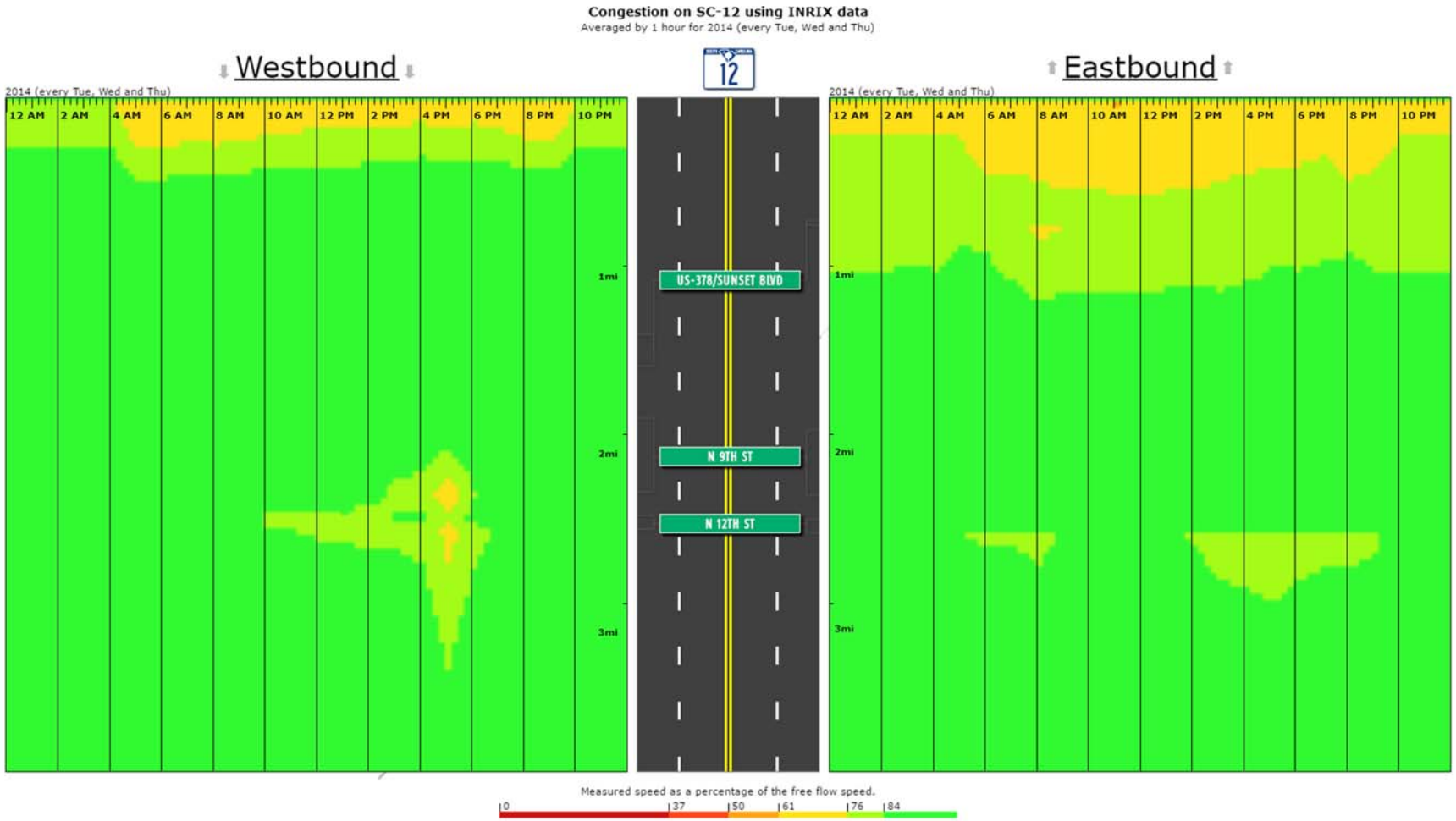


Figure A31.4: AM Peak Travel Time Index

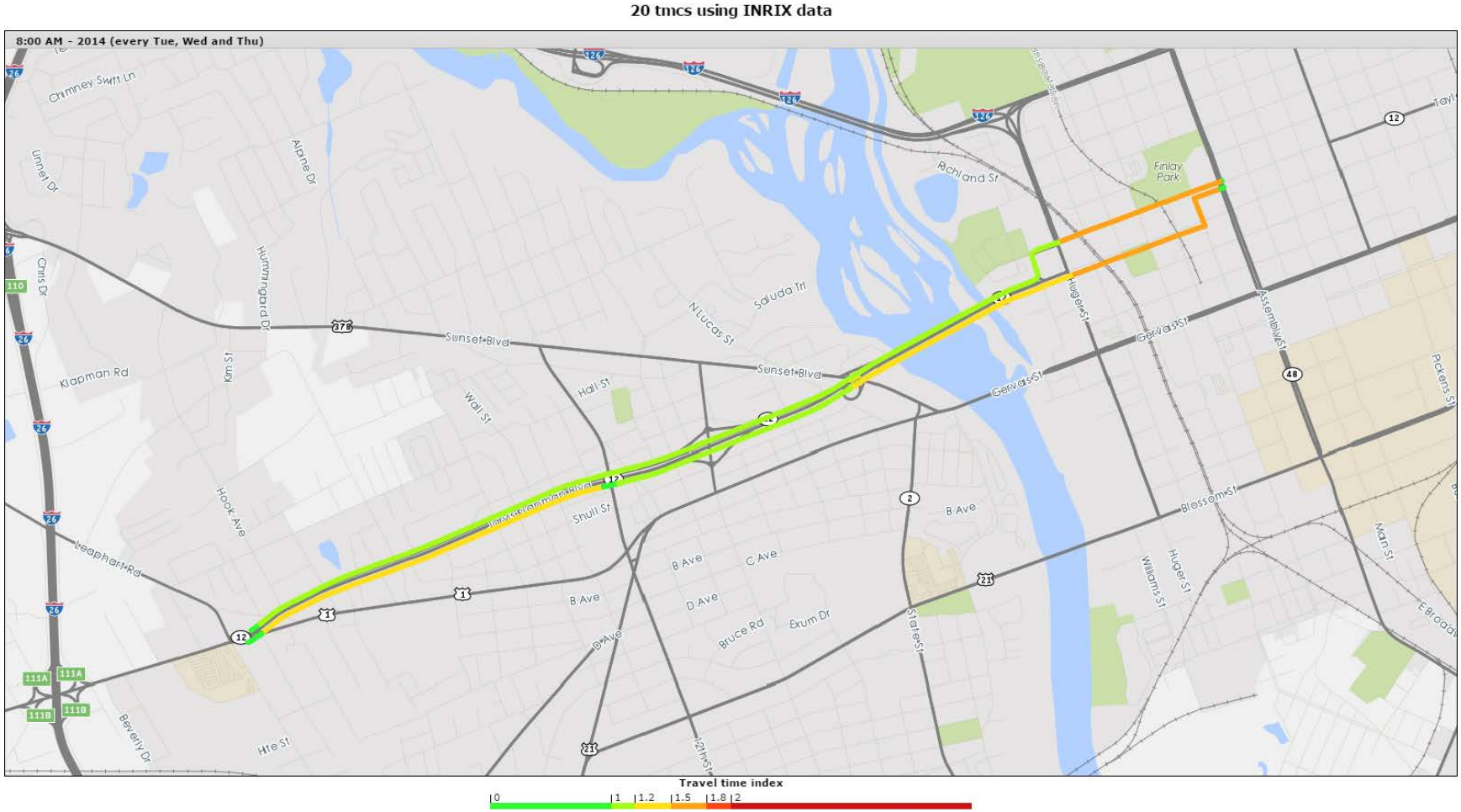
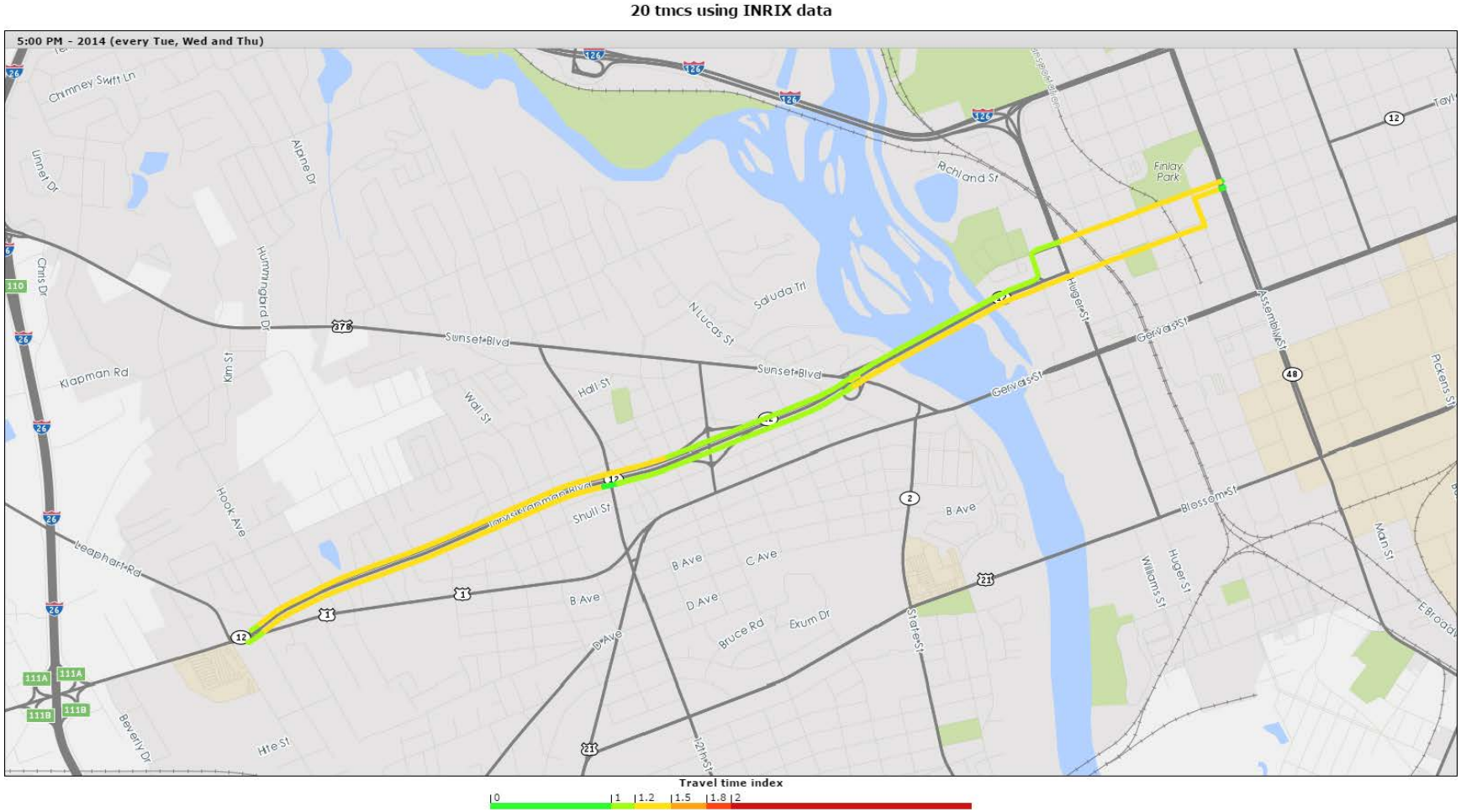


Figure A31.5: PM Peak Travel Time Index



A32. Corridor Name: Lake Murray Boulevard

Corridor ID: 1083

Route: SC60

Start: SC 6

End: Broad River Rd US 176

County: Richland / Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A32.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1083	245	SC60	LK MURRAY BLVD	14,000	29,600	29,300	31,800	54,430	4	45	3	21600	1.28	E	2.19	F
1083	248	SC60	LK MURRAY BLVD		4,300	5,400	7,800	10,035	2	45	3	10800	0.72	B	0.93	C
1083	261	SC60	LAKE MURRAY BLVD	12,800	22,100	25,000	24,700	42,172	5	35	3	21600	1	C	1.7	F
1083	262	SC60	LAKE MURRAY BLVD	7,800	10,900	12,800	13,100	19,501	5	35	3	21600	0.53	B	0.79	C

LOS E

LOS F

Figure A32.2: Average Corridor Speed

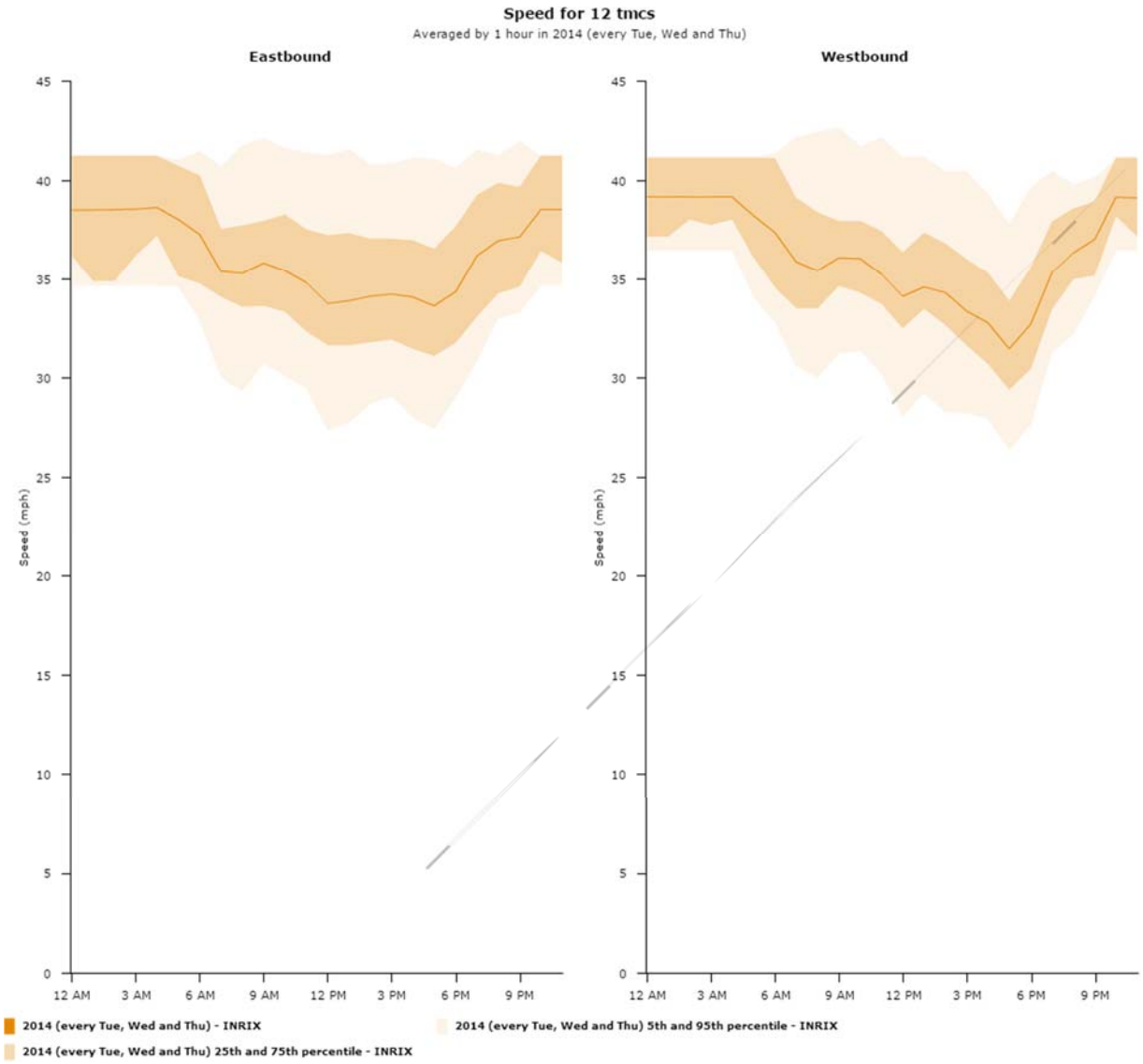


Figure A32.3: Corridor Congestion Index

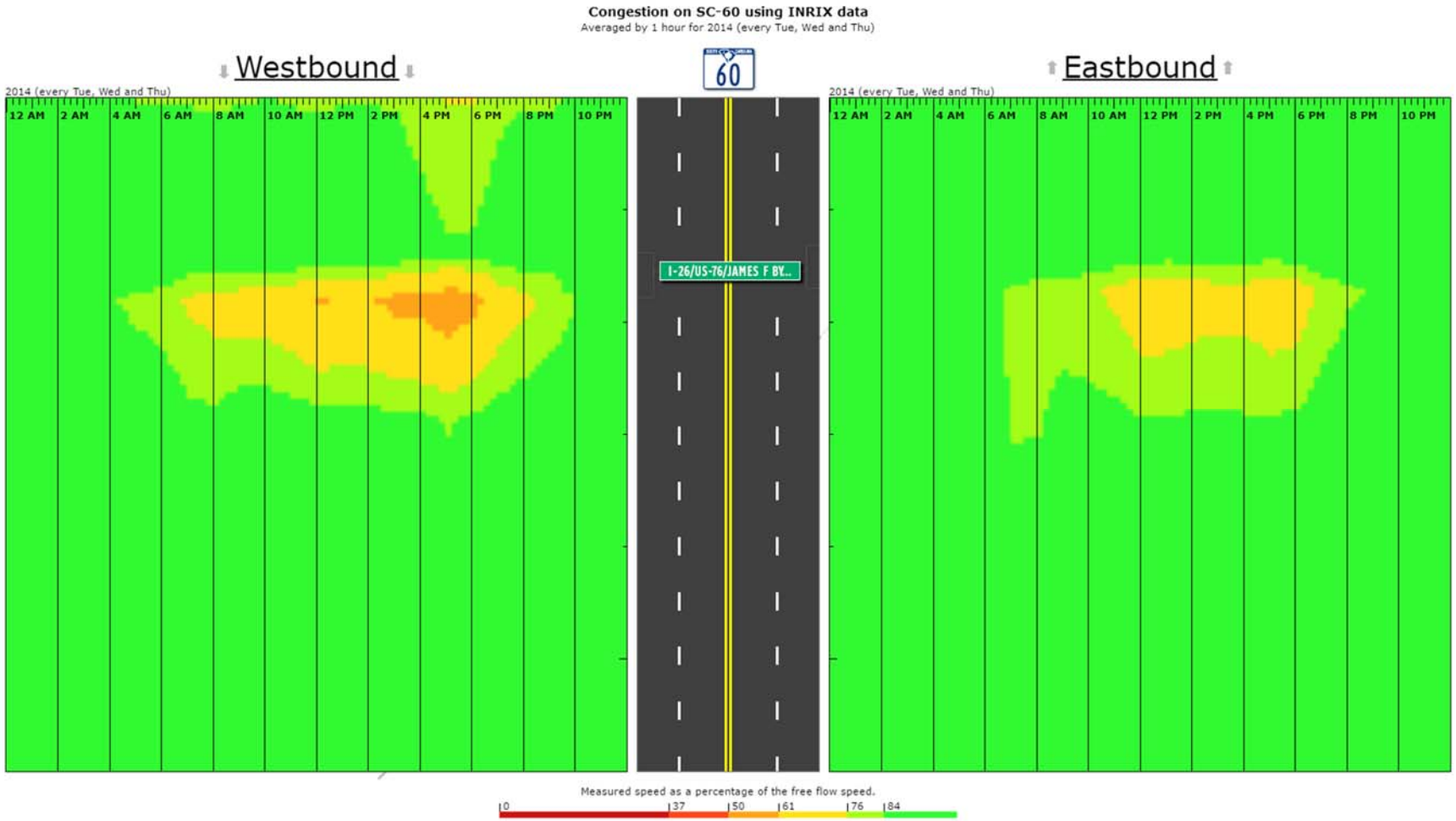


Figure A32.4: AM Peak Travel Time Index

Figure A32.5: PM Peak Travel Time Index

A33. Corridor Name: Leaphart Road

Corridor ID: 1085

Route: S-30

Start: Sunset Blvd US 378

End: Augusta Hwy US 1

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A33.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1085	581	S-30	LEAPHART RD	8,500	7,700	10,200	10,800	13,565	2	45	3	10800	1	C	1.26	E
1085	583	S-30	LEAPHART RD	7,100	9,000	9,100	10,300	13,525	2	45	3	10800	0.95	C	1.25	E
1085	795	S-30	LEAPHART RD	6,100	6,800	7,200	7,800	9,917	2	45	3	10800	0.72	B	0.92	C

LOS E

LOS F

Figure A33.2: Average Corridor Speed

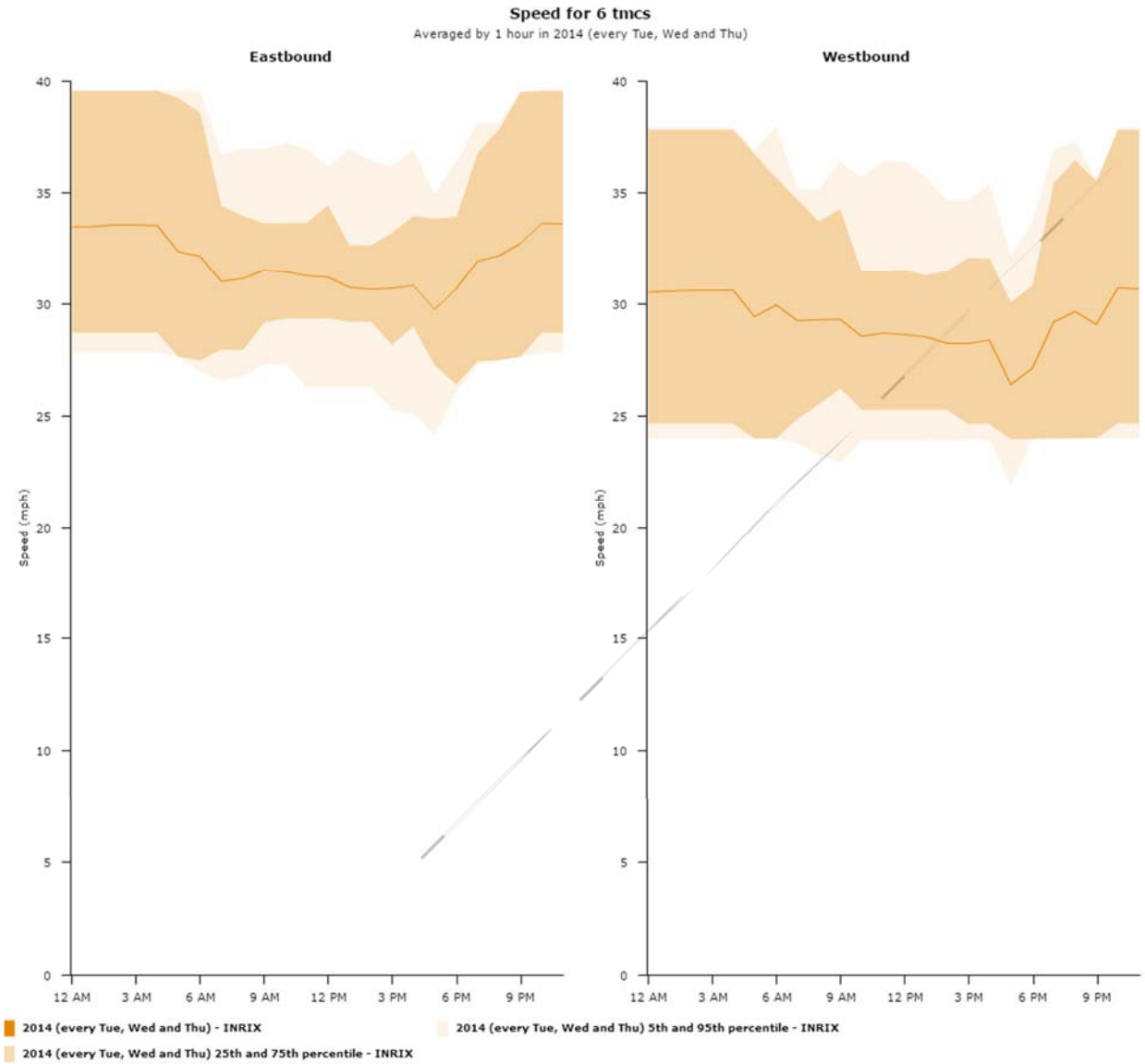


Figure A33.3: Corridor Congestion Index

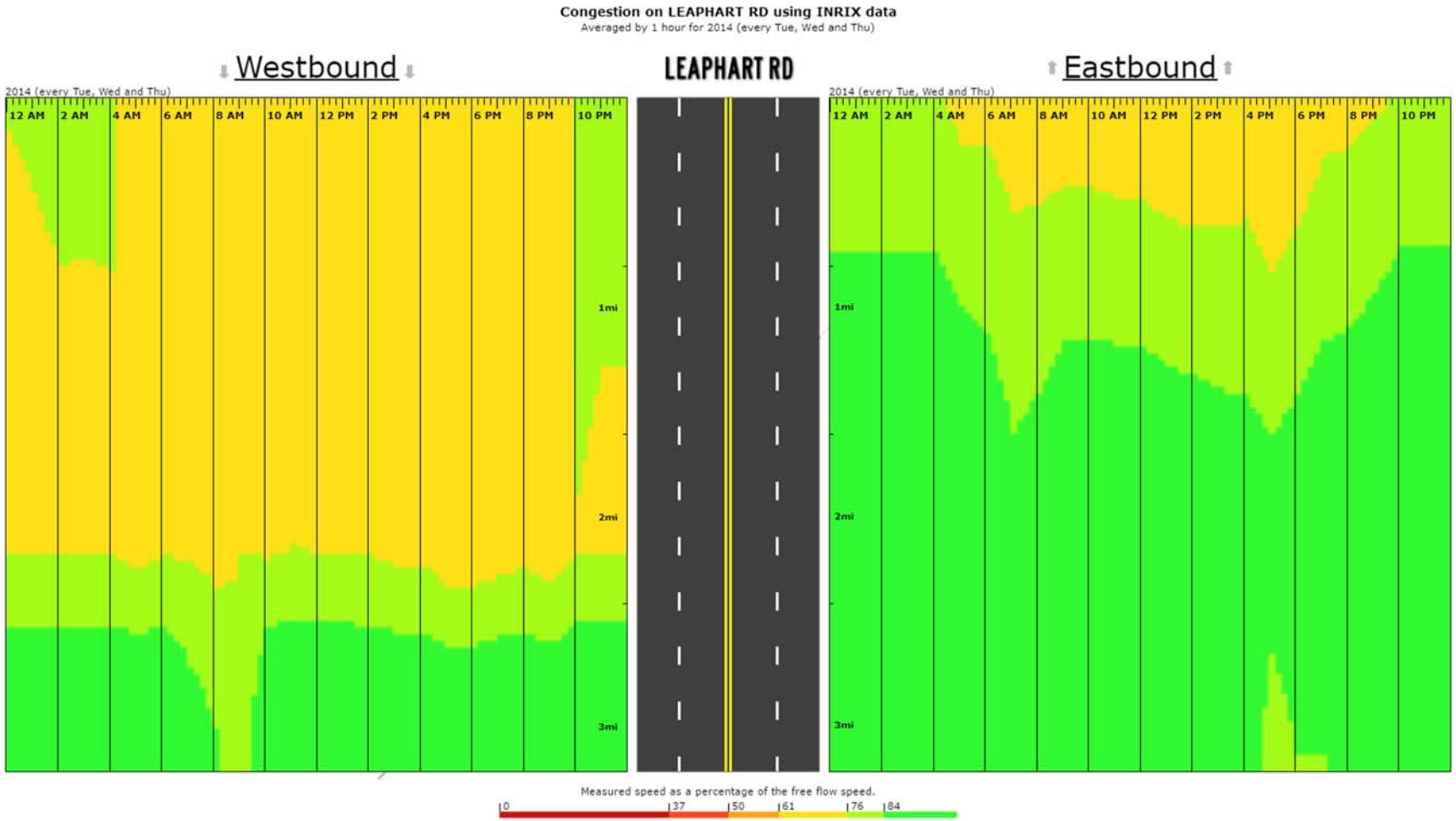


Figure A33.4: AM Peak Travel Time Index

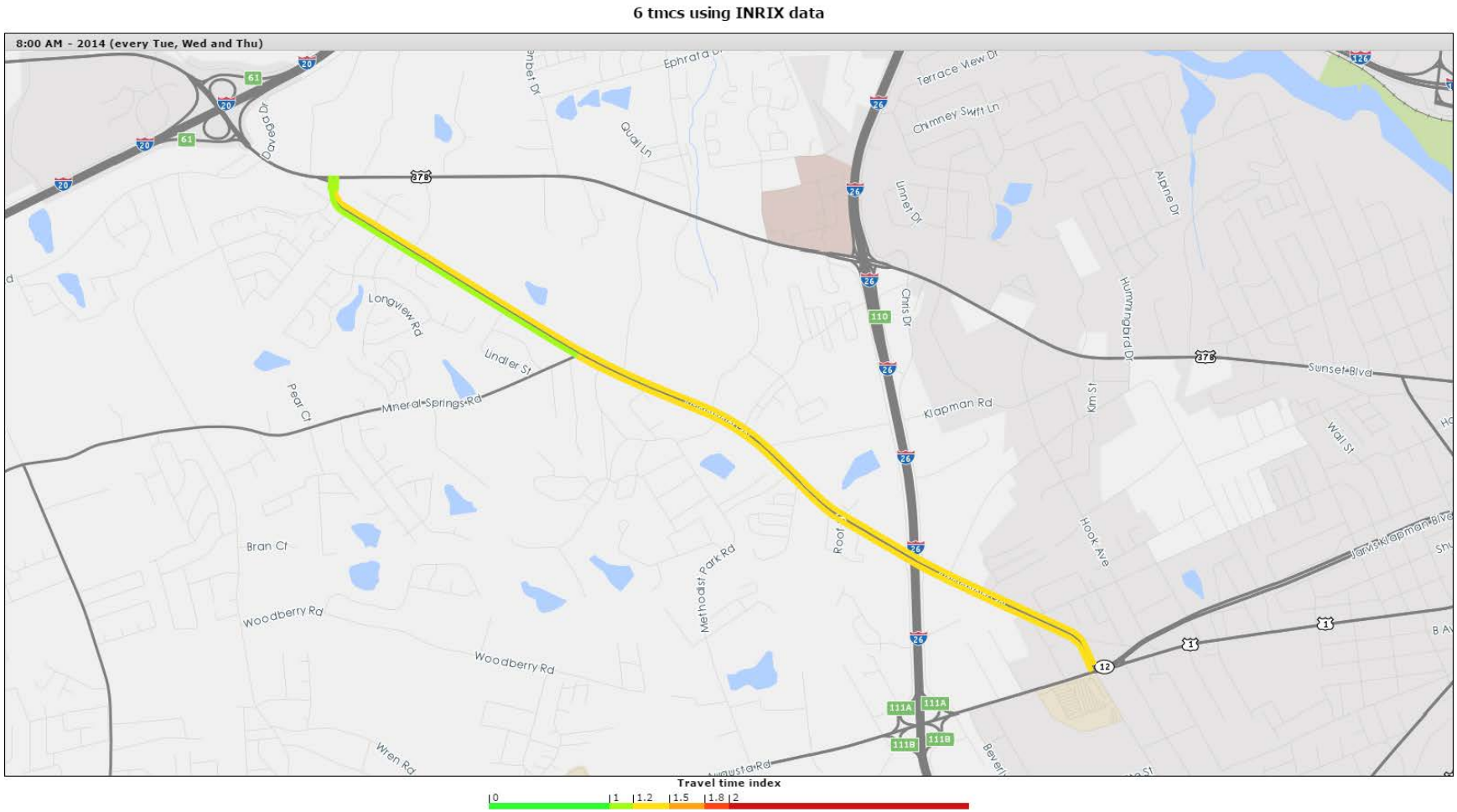


Figure A33.5: PM Peak Travel Time Index

A34. Corridor Name: 12th Street West Columbia/Cayce

Corridor ID: 1087

Route: SC 35

Start: Frink St SC 2

End: Sunset Blvd US 378

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A34.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1087	251	SC35	12TH ST	6,900	5,800	9,200	9,300	13,786	5	35	3	21600	0.38	A	0.56	B
1087	253	SC35	12TH ST	10,800	7,700	12,000	11,800	13,709	5	35	3	21600	0.48	A	0.55	B
1087	255	SC35	12TH ST	13,400	11,300	11,600	10,700	8,061	5	35	3	21600	0.43	A	0.33	A
1087	257	SC35	12TH ST	17,200	13,100	12,600	12,800	9,611	4	35	3	21600	0.52	B	0.39	A
1087	259	SC35	12TH ST	14,200	8,300	8,500	8,700	6,660	4	35	3	21600	0.35	A	0.27	A

LOS E

LOS F

Figure A34.2: Average Corridor Speed

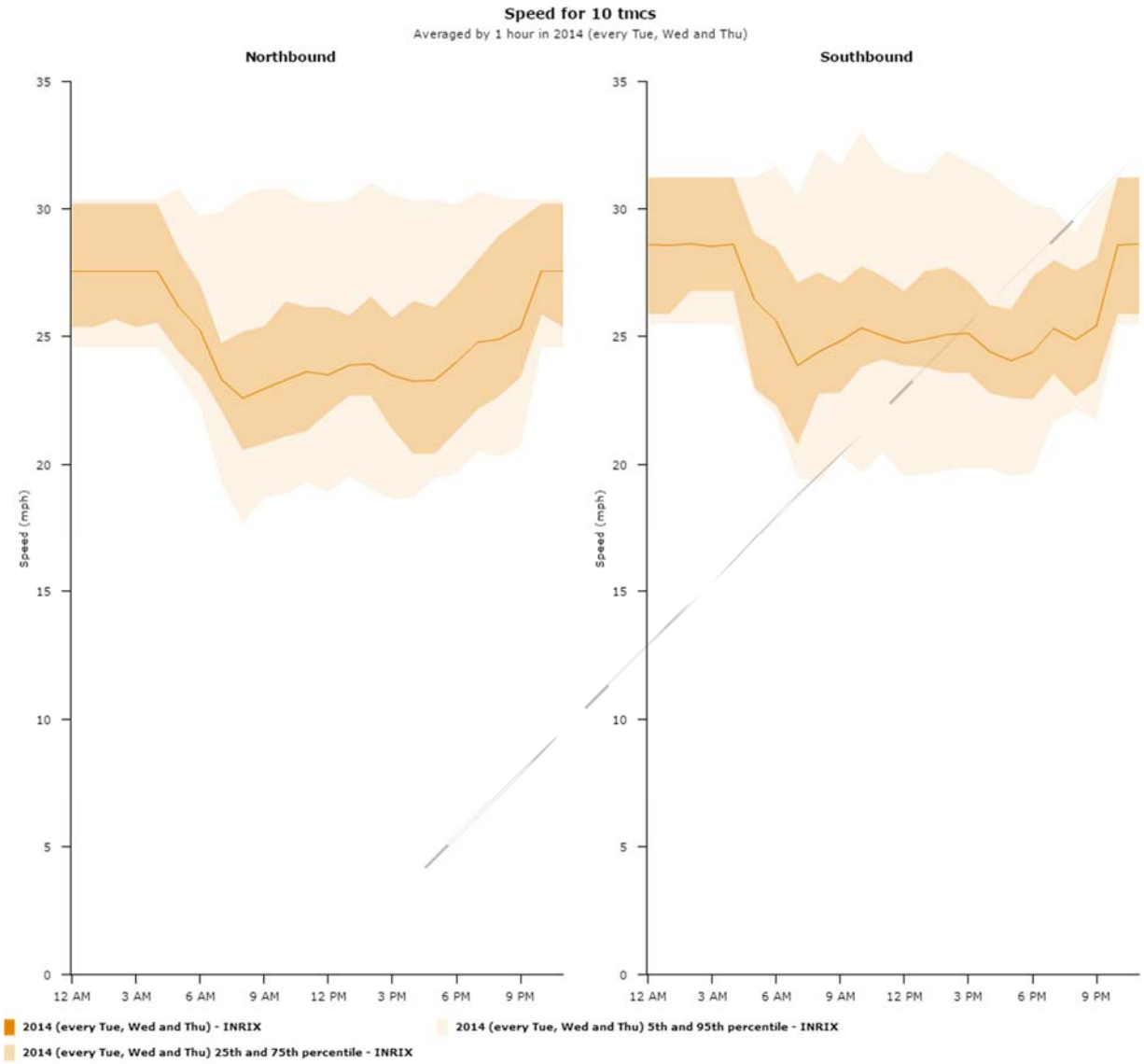


Figure A34.3: Corridor Congestion Index

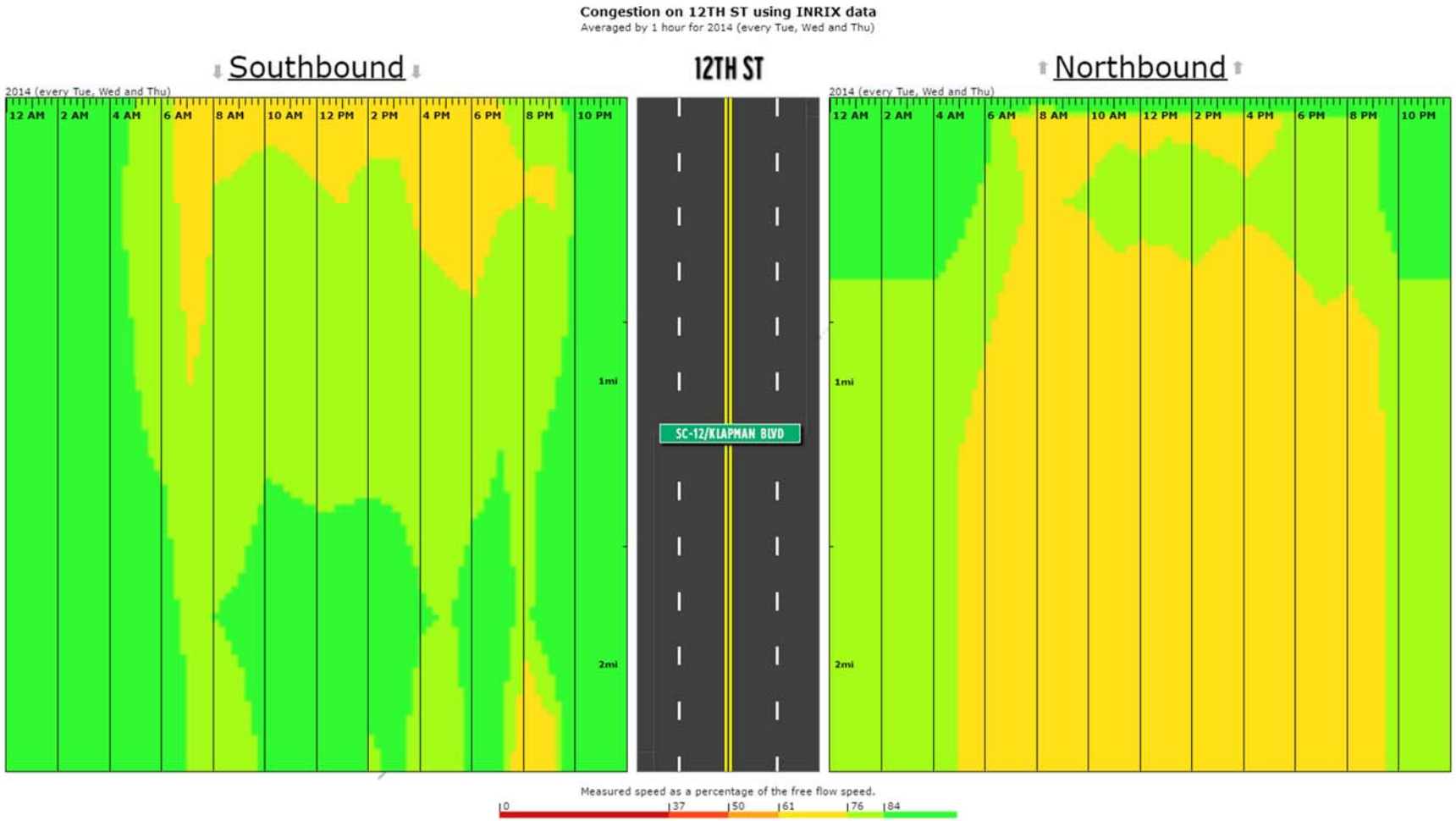


Figure A34.4: AM Peak Travel Time Index

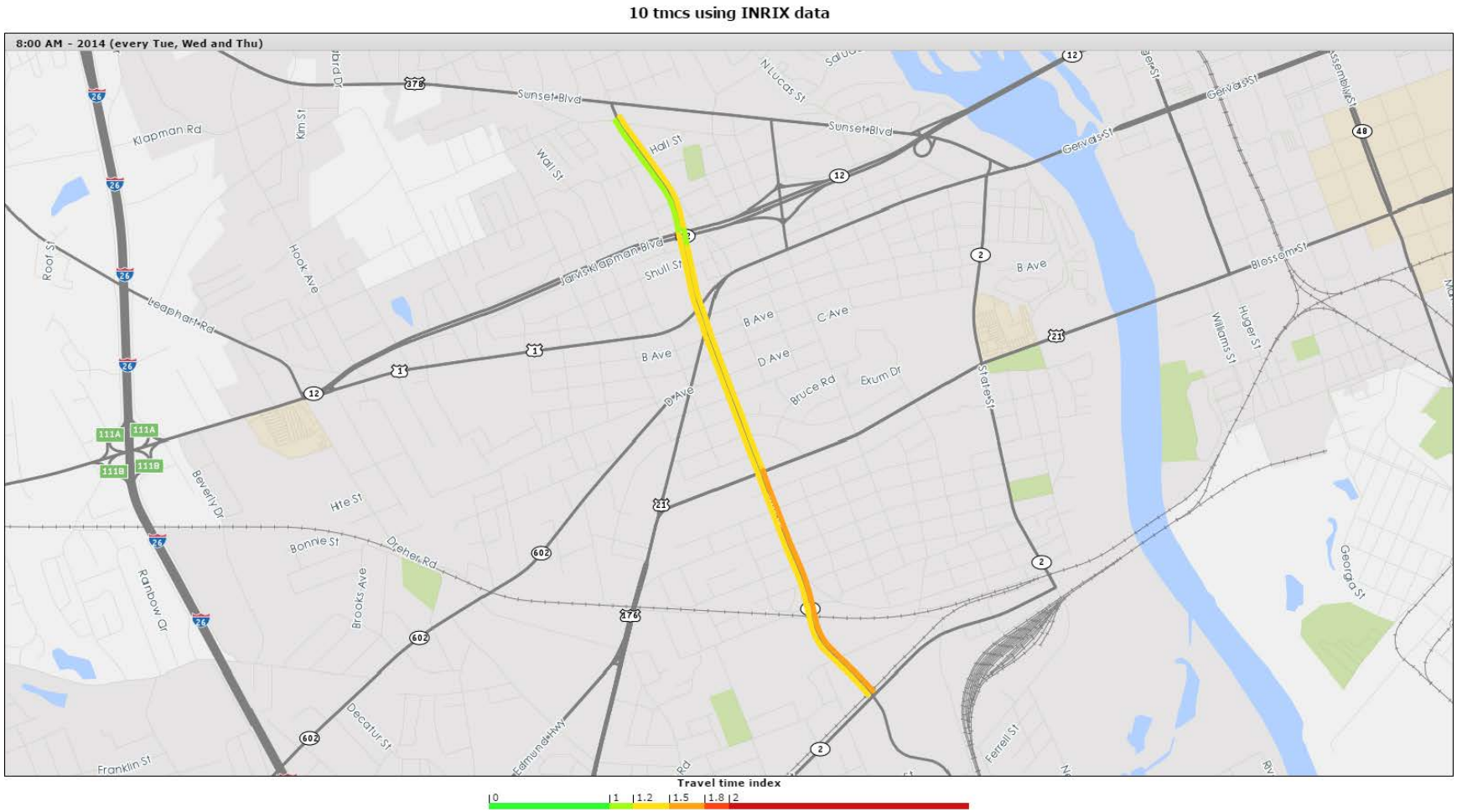
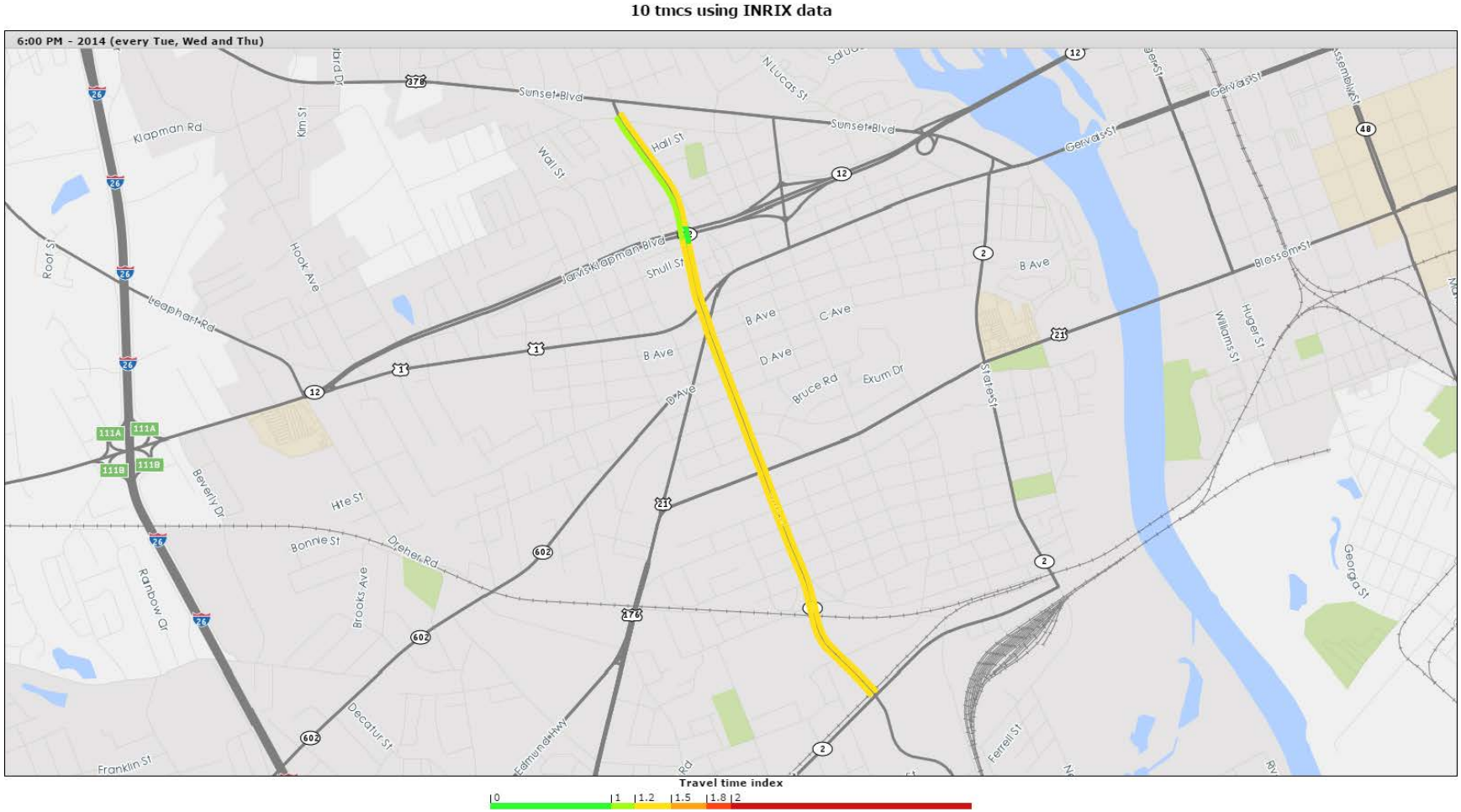


Figure A34.5: PM Peak Travel Time Index



A35. Corridor Name: State Street/Frink Street

Corridor ID: 1089

Route: SC 2

Start: US 378

End: US 321

County: Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A35.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1089	201	SC2	STATE ST	10,200	5,700	4,100	5,200	-	3	35	3	10800	0.48	A		
1089	203	SC2	STATE ST	9,600	9,600	7,200	6,900	4,241	2	35	3	10800	0.64	B	0.39	A
1089	205	SC2	STATE ST	9,400	11,400	8,200	8,500	6,723	2	35	3	10800	0.79	C	0.62	B
1089	207	SC2	STATE ST	8,600	9,900	7,300	7,200	4,354	3	35	3	10800	0.67	B	0.4	A

LOS E

LOS F

Figure A35.2: Average Corridor Speed

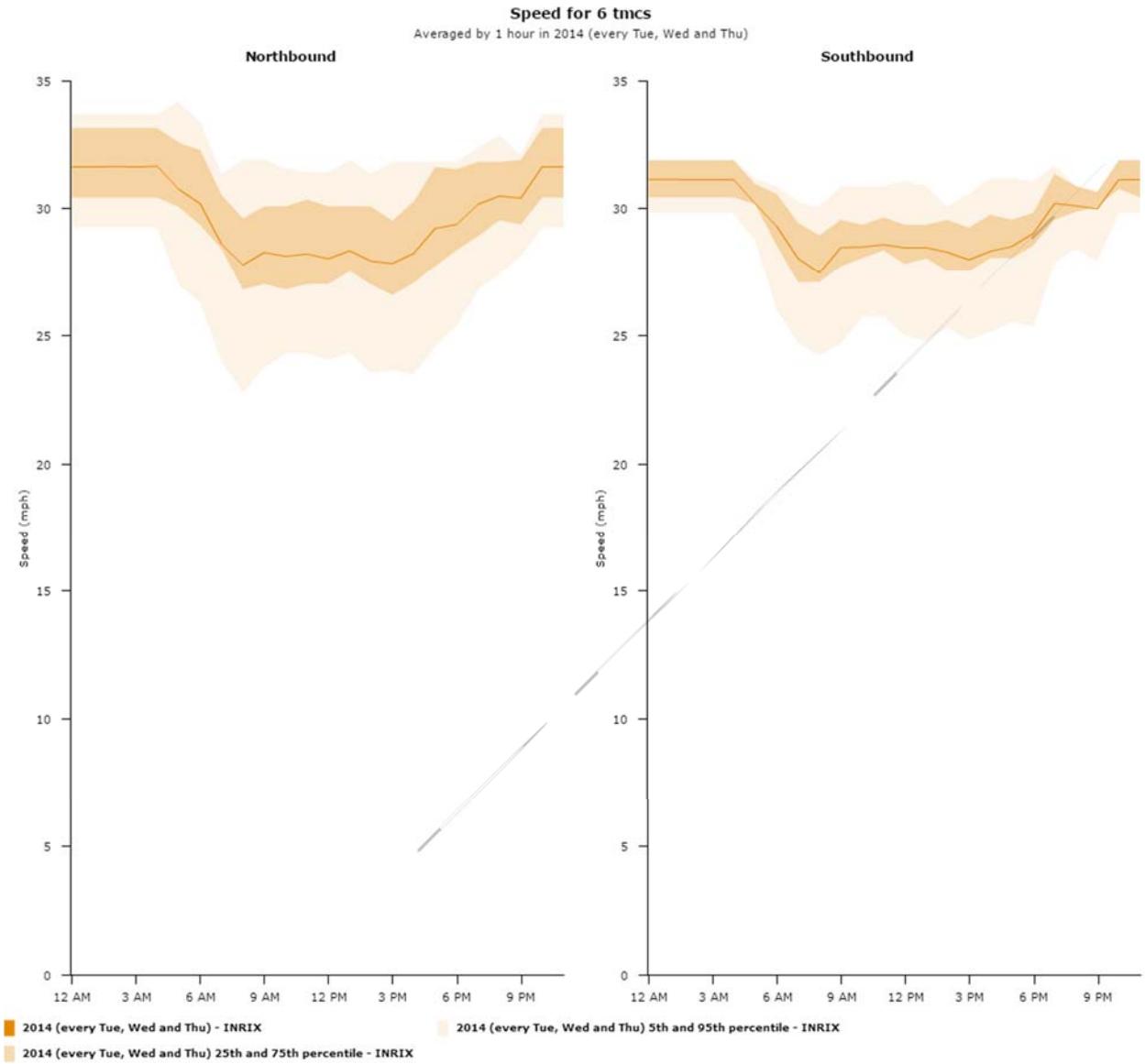


Figure A35.3: Corridor Congestion Index

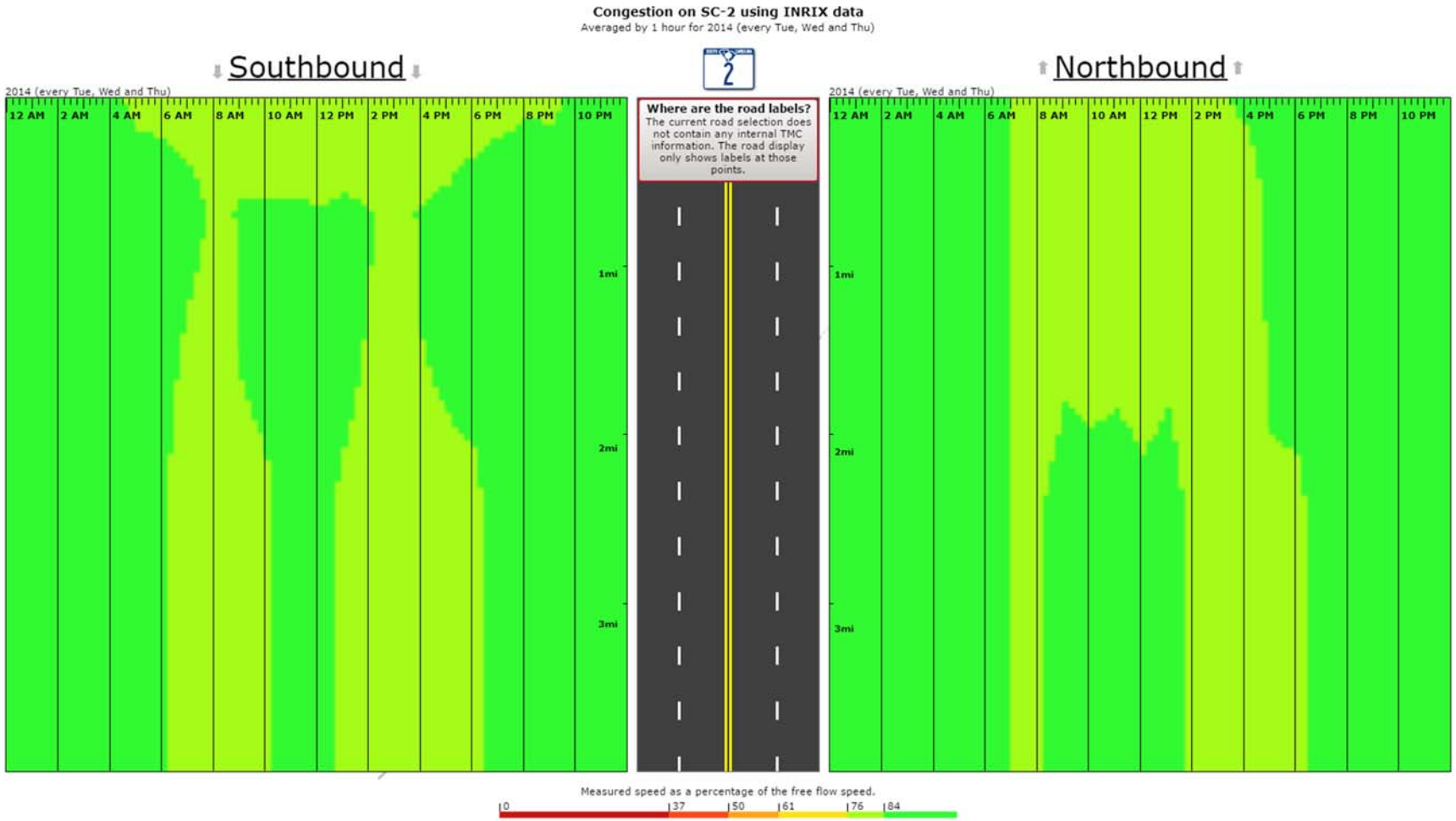


Figure A35.4: AM Peak Travel Time Index

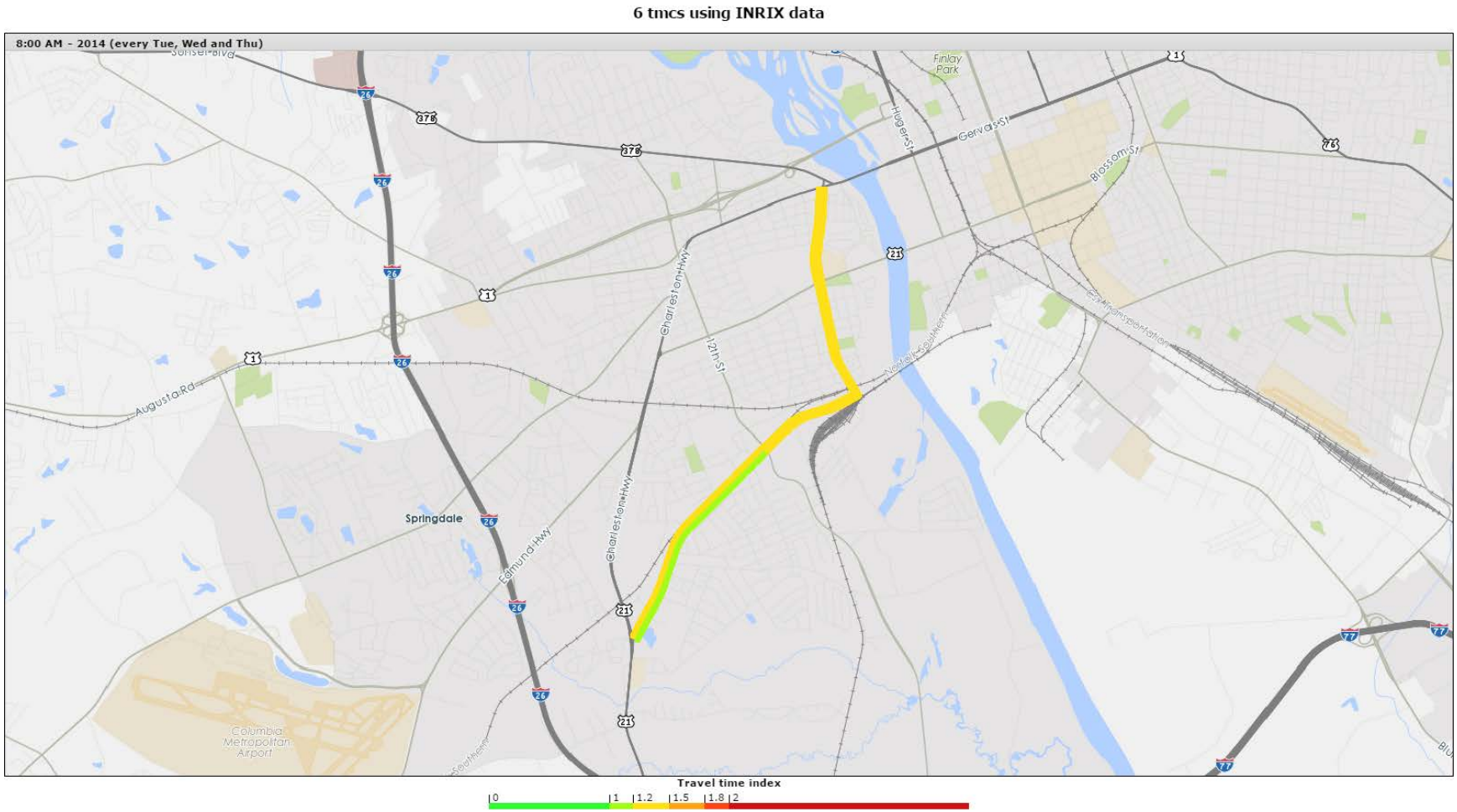
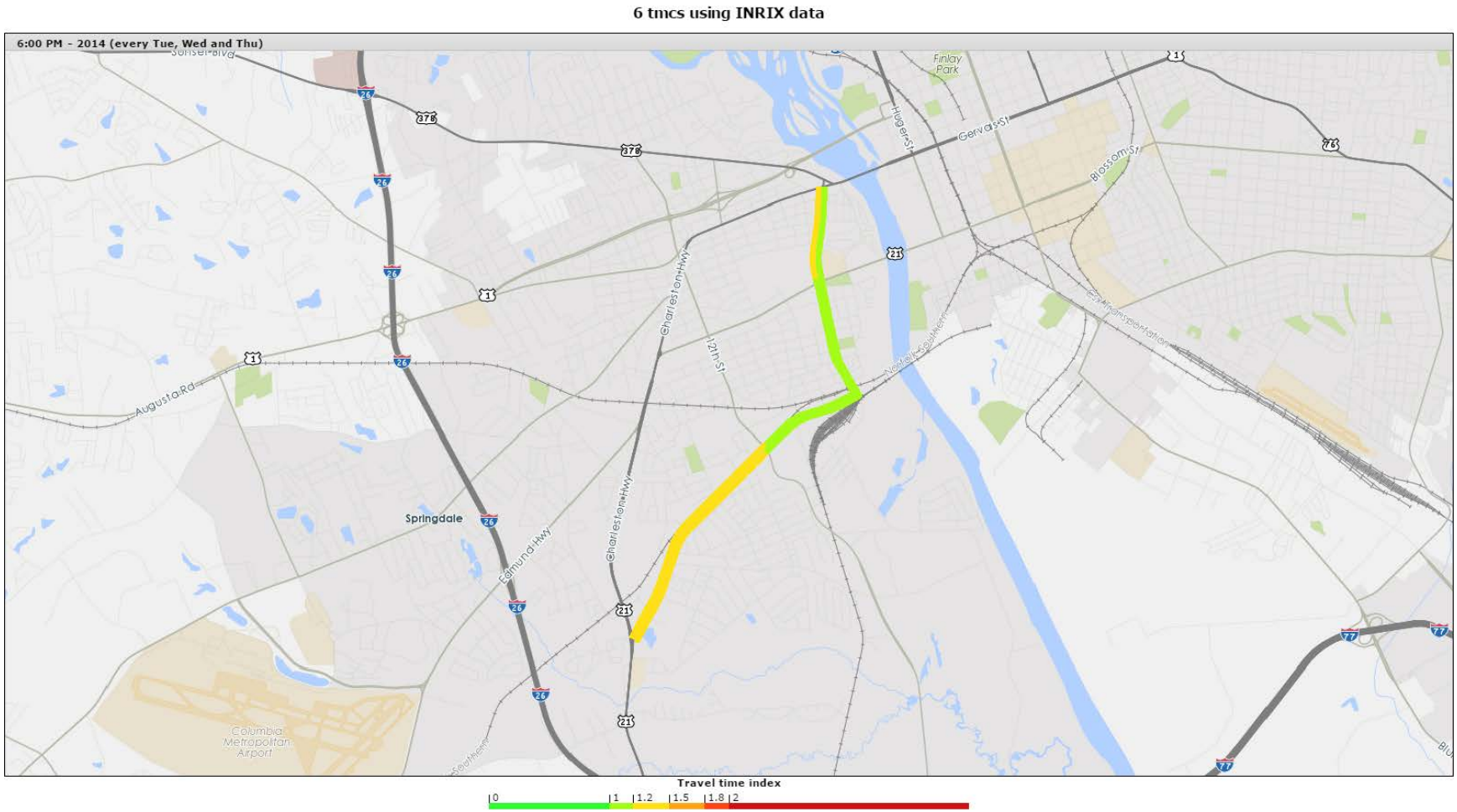


Figure A35.5: PM Peak Travel Time Index



A36. Corridor Name: Bush River Road

Corridor ID: 1093

Route: S-273

Start: St. Andrews Road

End: Broad River Road

County: Richland/Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: 20

Figure A36.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1093	469	S-31	BUSH RIVER RD	33,000	31,800	32,100	31,500	48,275	5	35	3	21600	1.27	E	1.94	F
1093	479	S-31	BUSH RIVER RD		18,900	24,200	23,700	13,574	5	35	3	21600	0.96	C	0.55	B
1093	765	S-273	BUSH RIVER RD	22,600	19,500	17,600	17,700	10,723	5	45	3	21600	1.64	F	0.99	C
1093	767	S-273	BUSH RIVER RD	14,000	13,200	14,500	14,800	12,374	2	45	3	10800	1.37	F	1.14	D
1093	769	S-273	BUSH RIVER RD	11,300	9,200	9,700	9,600	8,958	2	45	3	10800	0.89	C	0.83	C

LOS E

LOS F

Figure A36.2: Average Corridor Speed

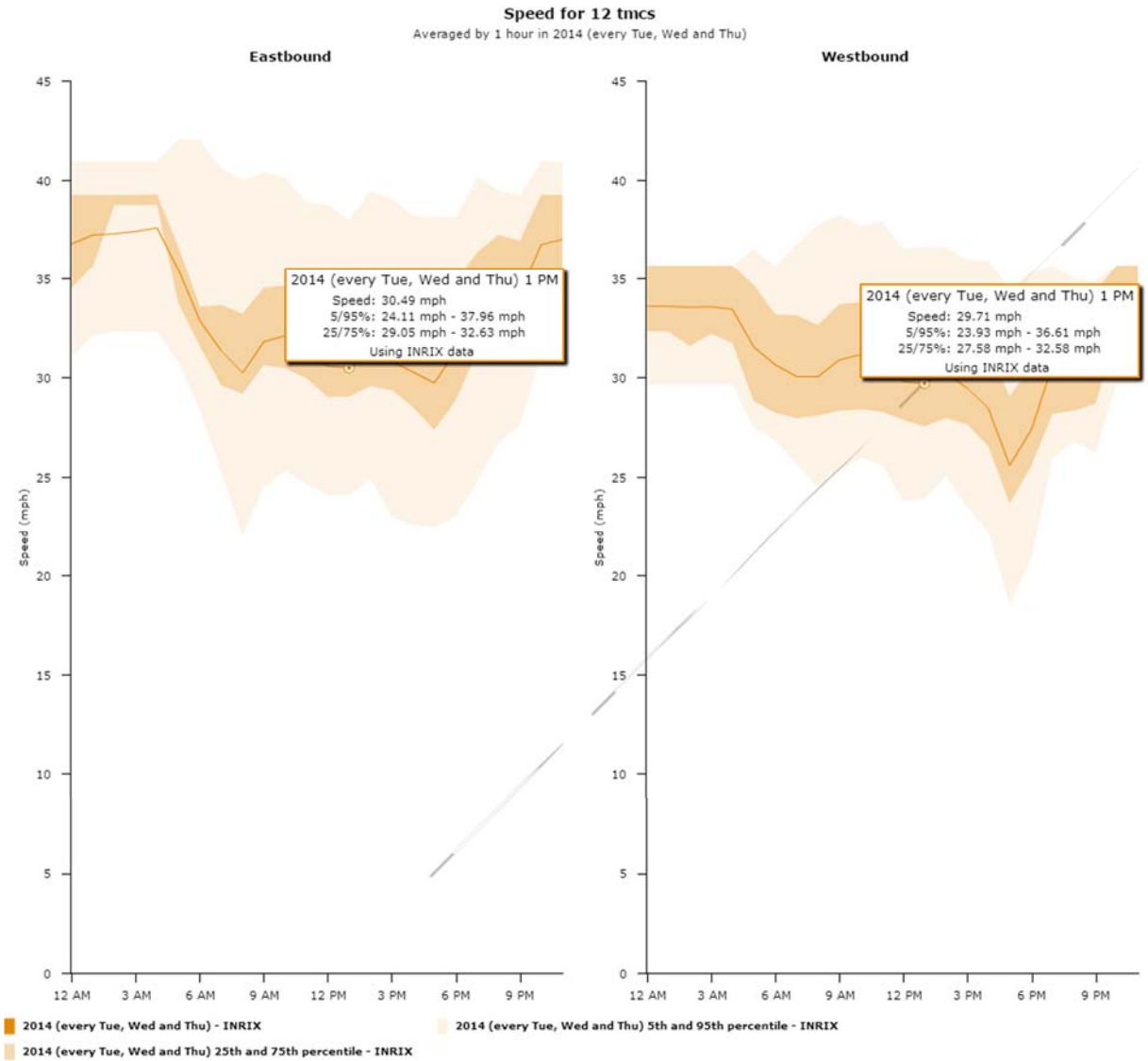


Figure A36.3: Corridor Congestion Index

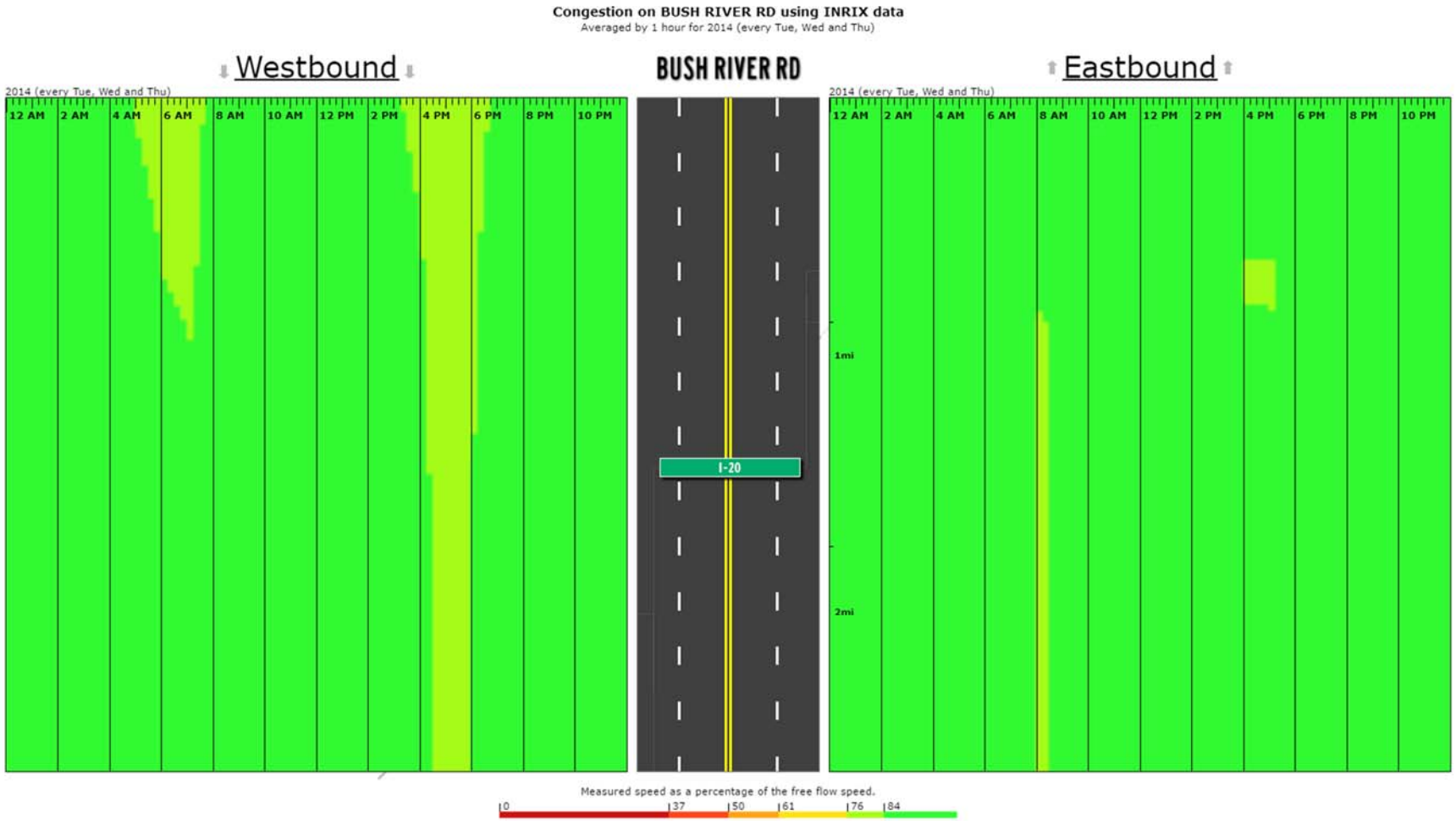


Figure A36.4: AM Peak Travel Time Index

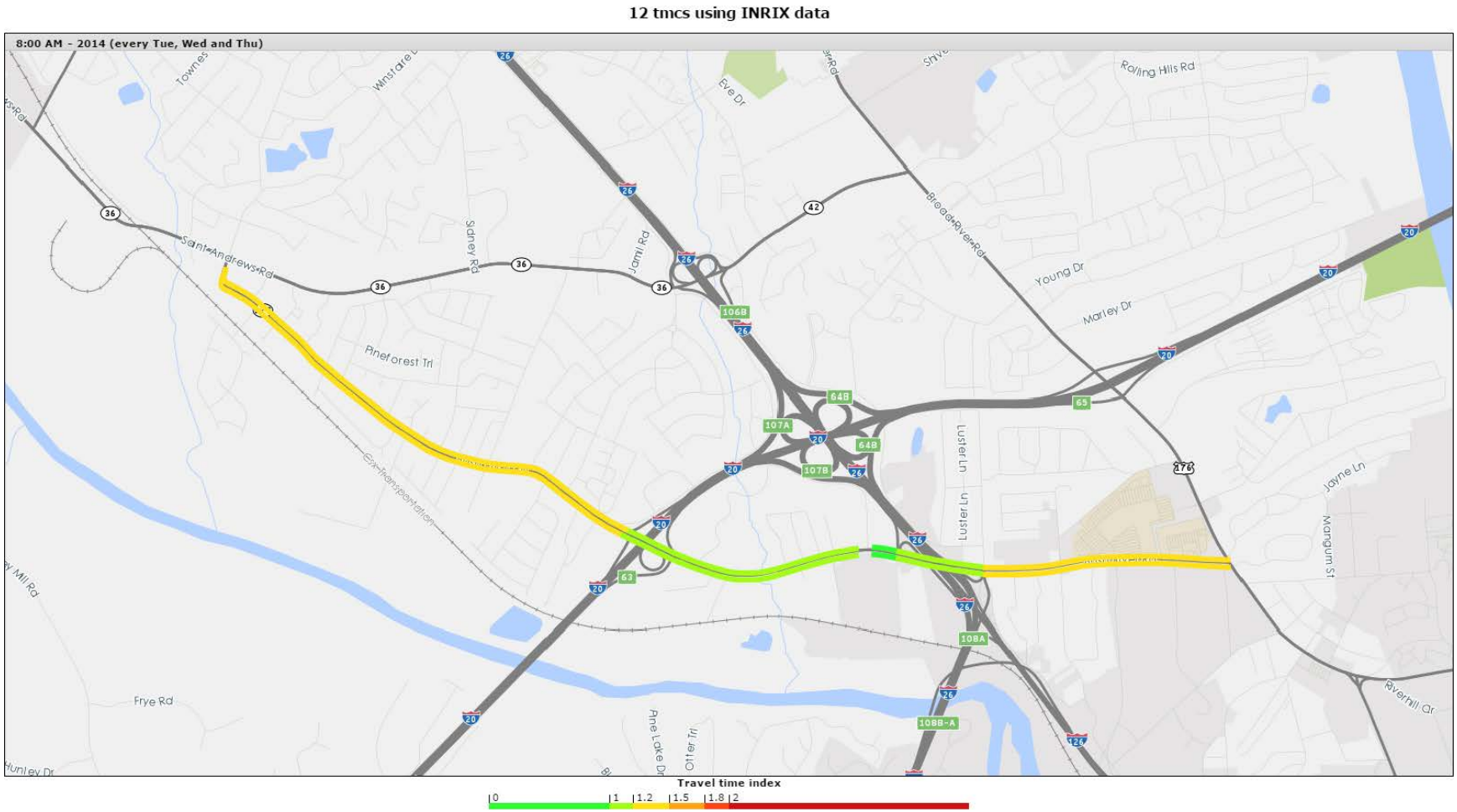
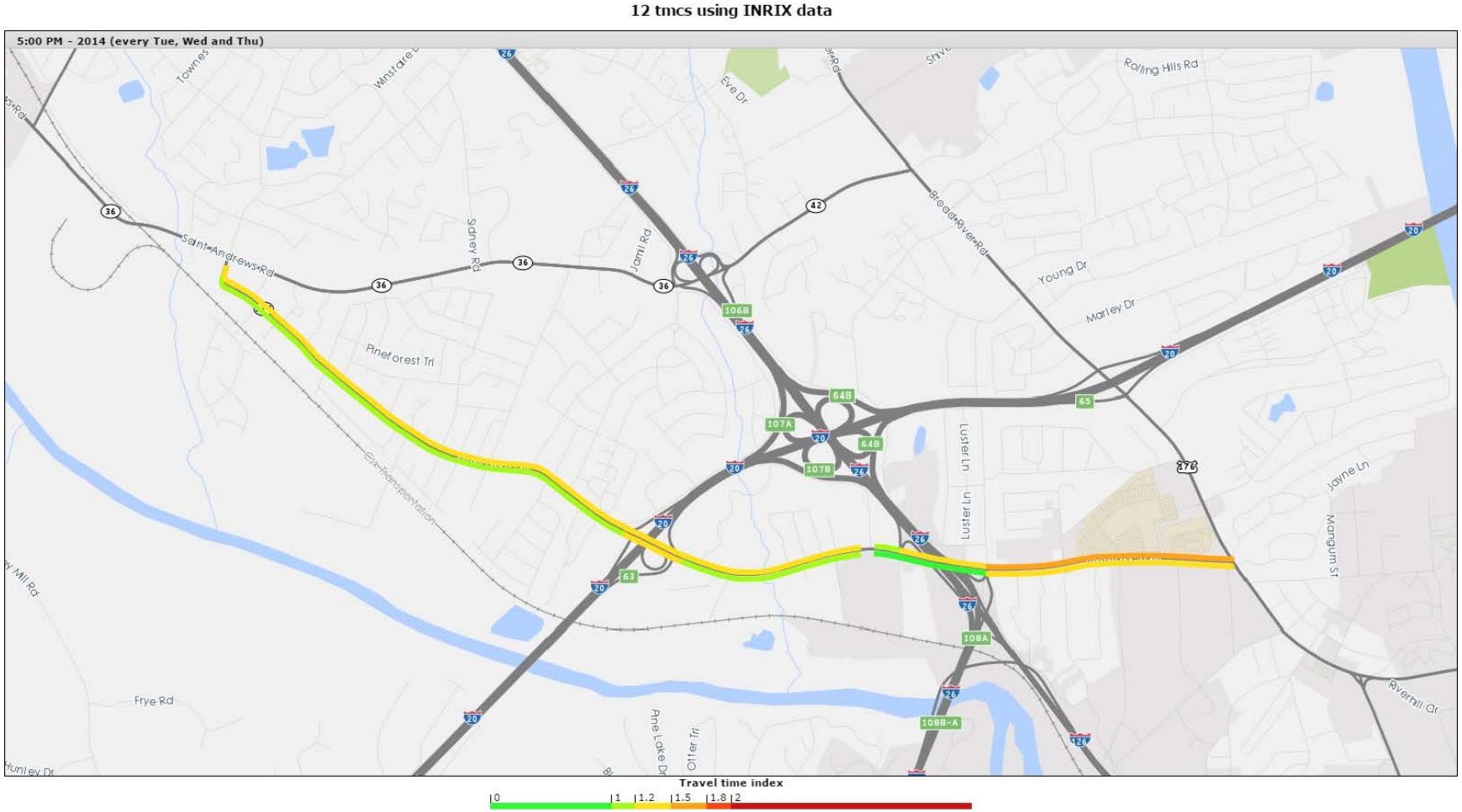


Figure A36.5: PM Peak Travel Time Index



A37. Corridor Name: Piney Grove Road

Corridor ID: 1095

Route: S-1080, S-671

Start: Broad River Rd US 176

End: St. Andrews Rd S-36

County: Richland / Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A37.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1095	465	S-1280	PINEY GROVE RD	5,300	6,100	5,900	4,700	7,495	2	45	3	10800	0.43	B	0.69	B
1095	761	S-671	PINEY GROVE RD	10,000	11,800	10,700	10,900	13,176	2	45	3	10800	1.01	D	1.22	E

LOS E

LOS F

Figure A37.2: Average Corridor Speed

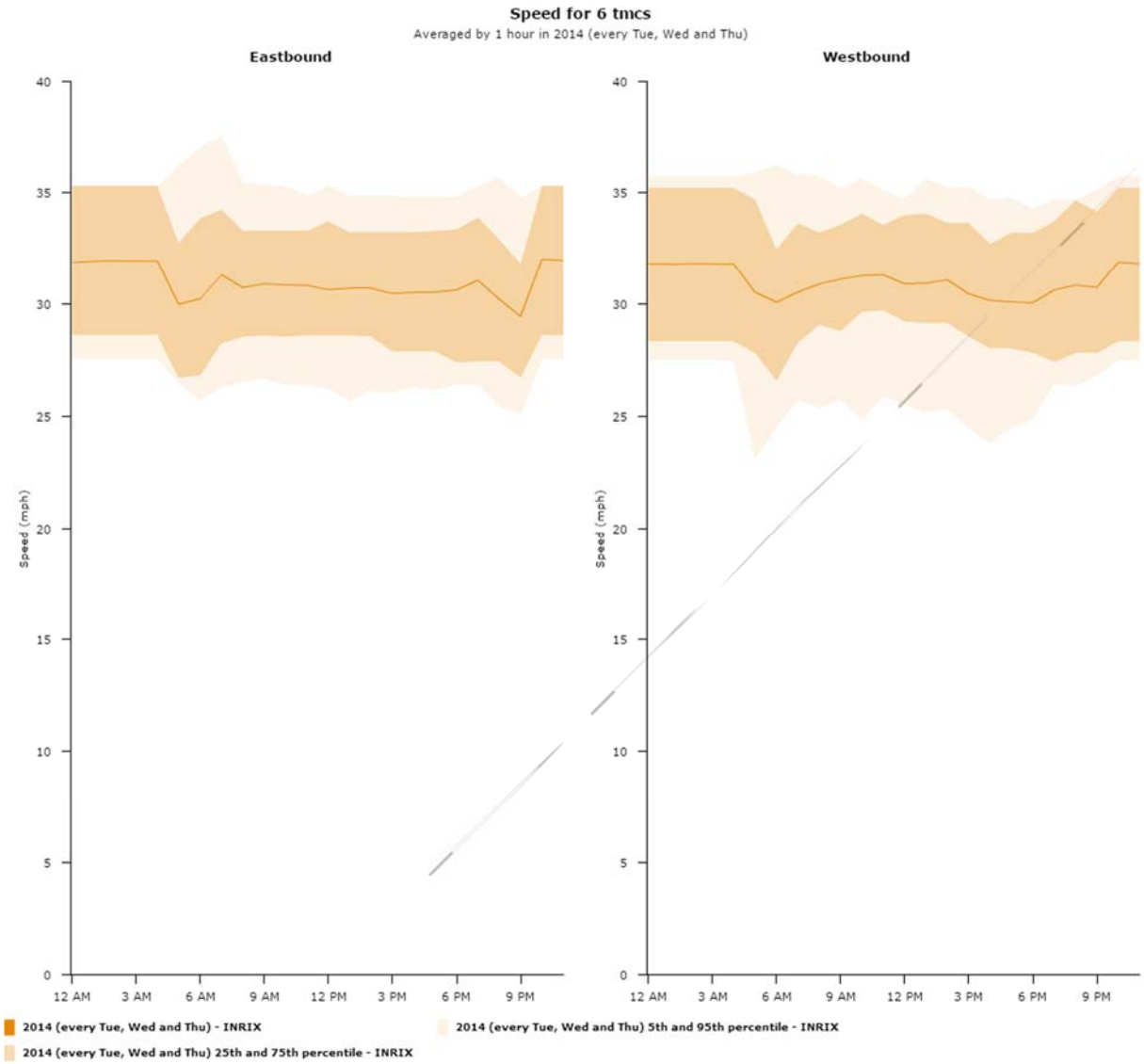


Figure A37.3: Corridor Congestion Index

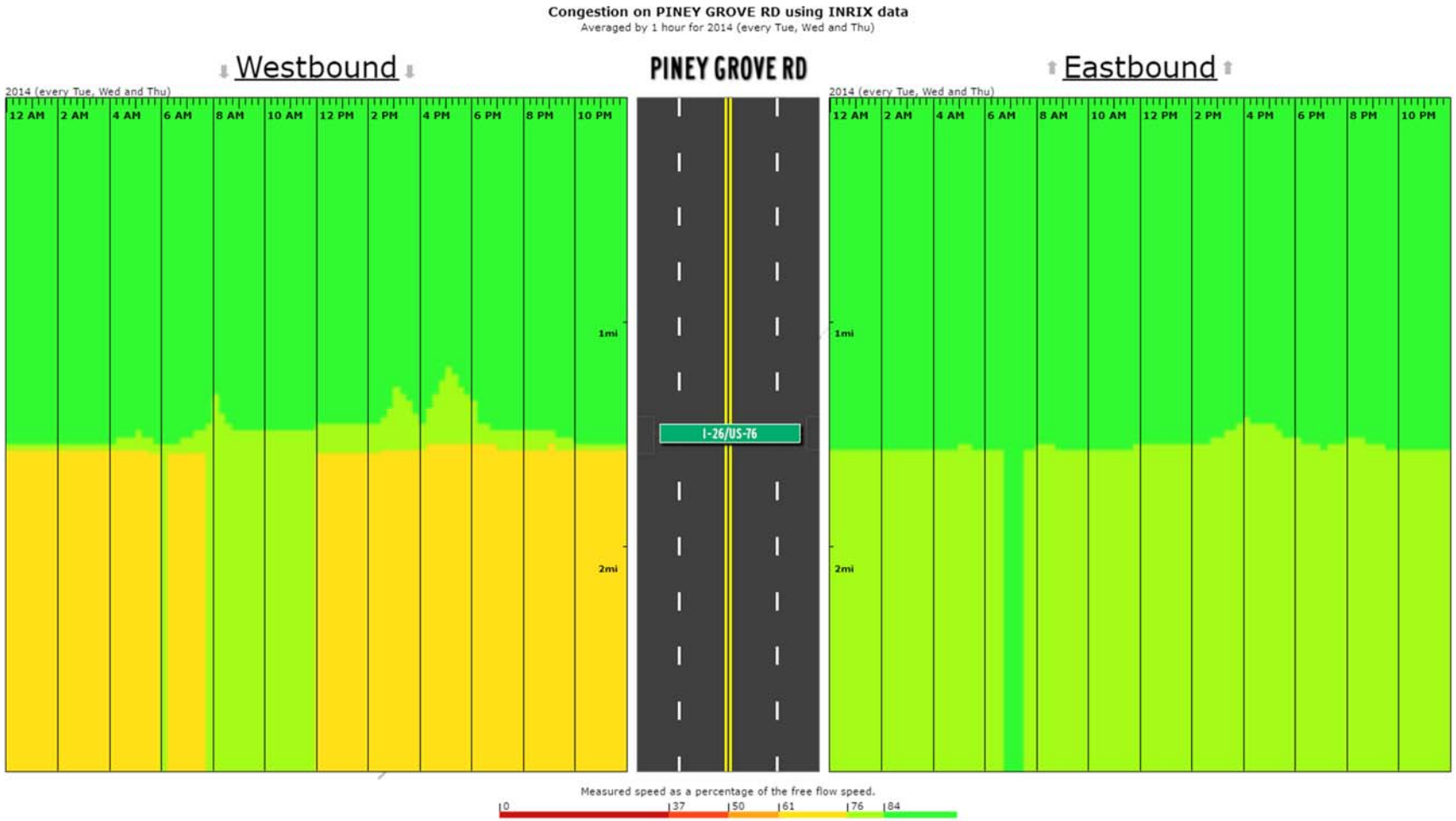


Figure A37.4: AM Peak Travel Time Index

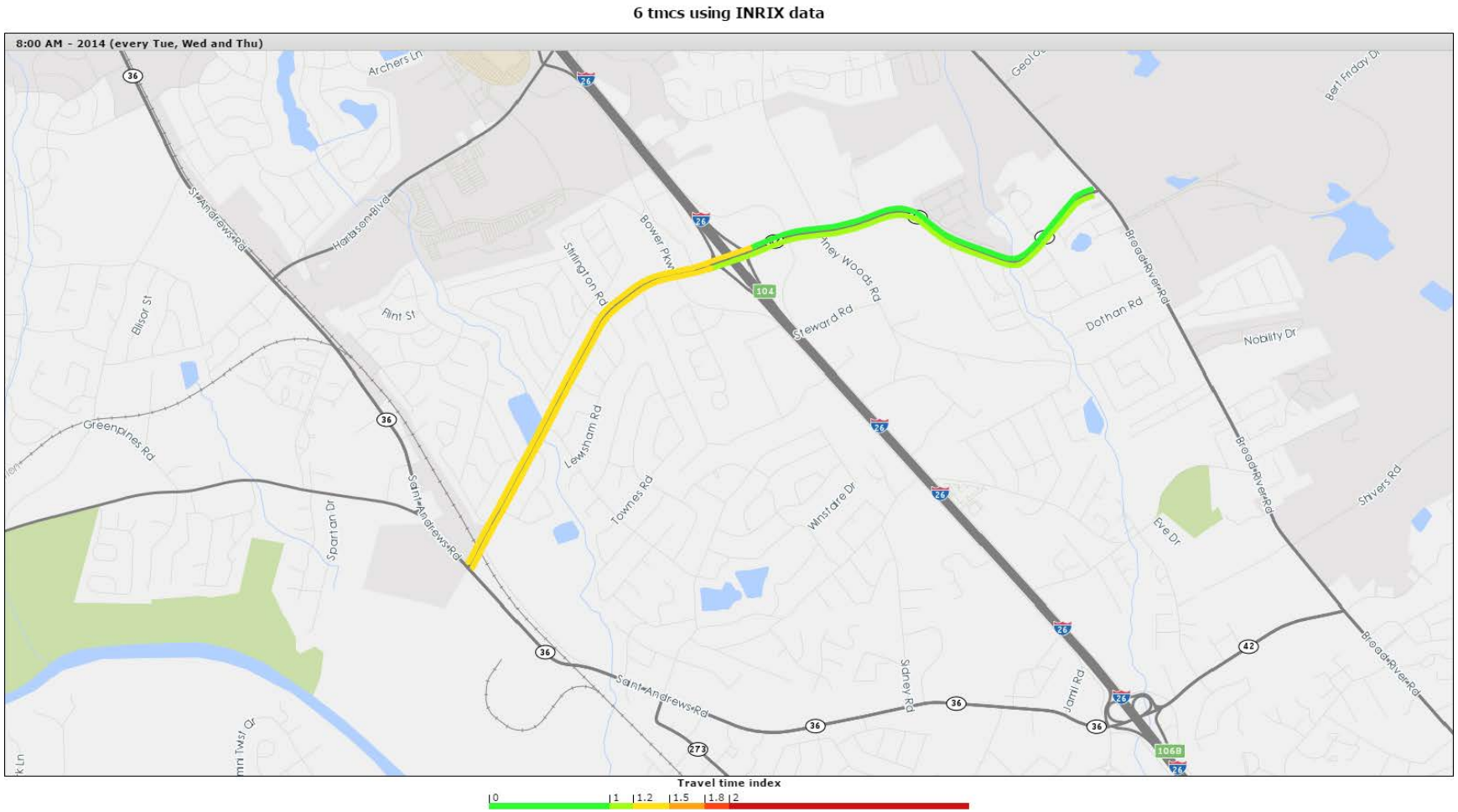
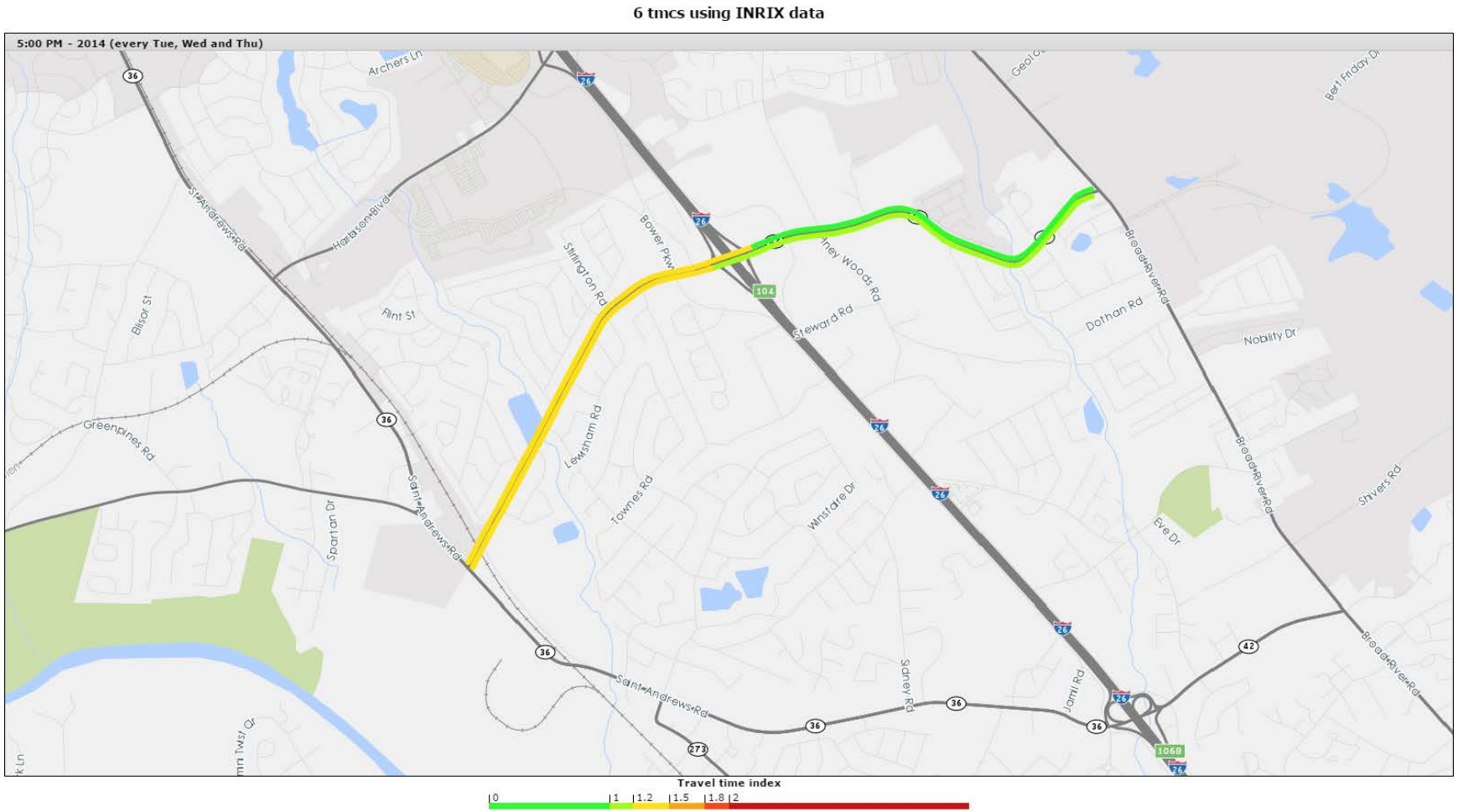


Figure A37.5: PM Peak Travel Time Index



A38. Corridor Name: Harbison Boulevard

Corridor ID: 1097

Route: S-757

Start: Broad river Rd US 176

End: St. Andrews Rd S-36

County: Richland/Lexington

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A38.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1097	749	S-757	HARBISON BLVD	19,300	38,600	35,500	34,700	57,454	5	45	3	21600	1.4	F	2.32	F
1097	750	S-757	HARBISON BLVD		17,800	18,000	16,900	15,316	5	45	3	21600	0.68	B	0.62	B
1097	752	S-757	HARBISON BLVD	19,300	38,600	35,500	24,700	53,823	5	45	3	21600	1	C	2.14	F

LOS E

LOS F

Figure A38.2: Average Corridor Speed

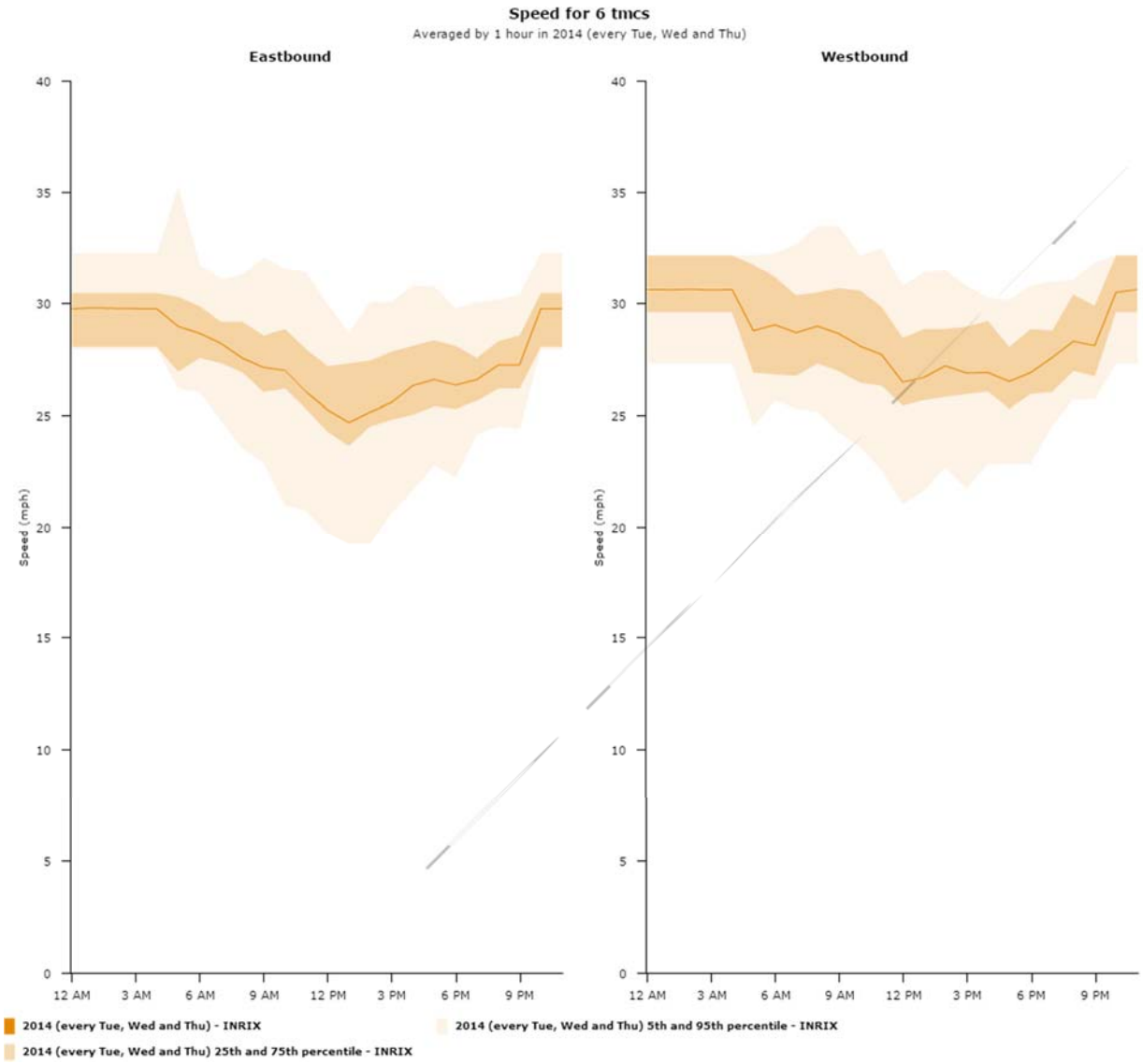


Figure A38.3: Corridor Congestion Index

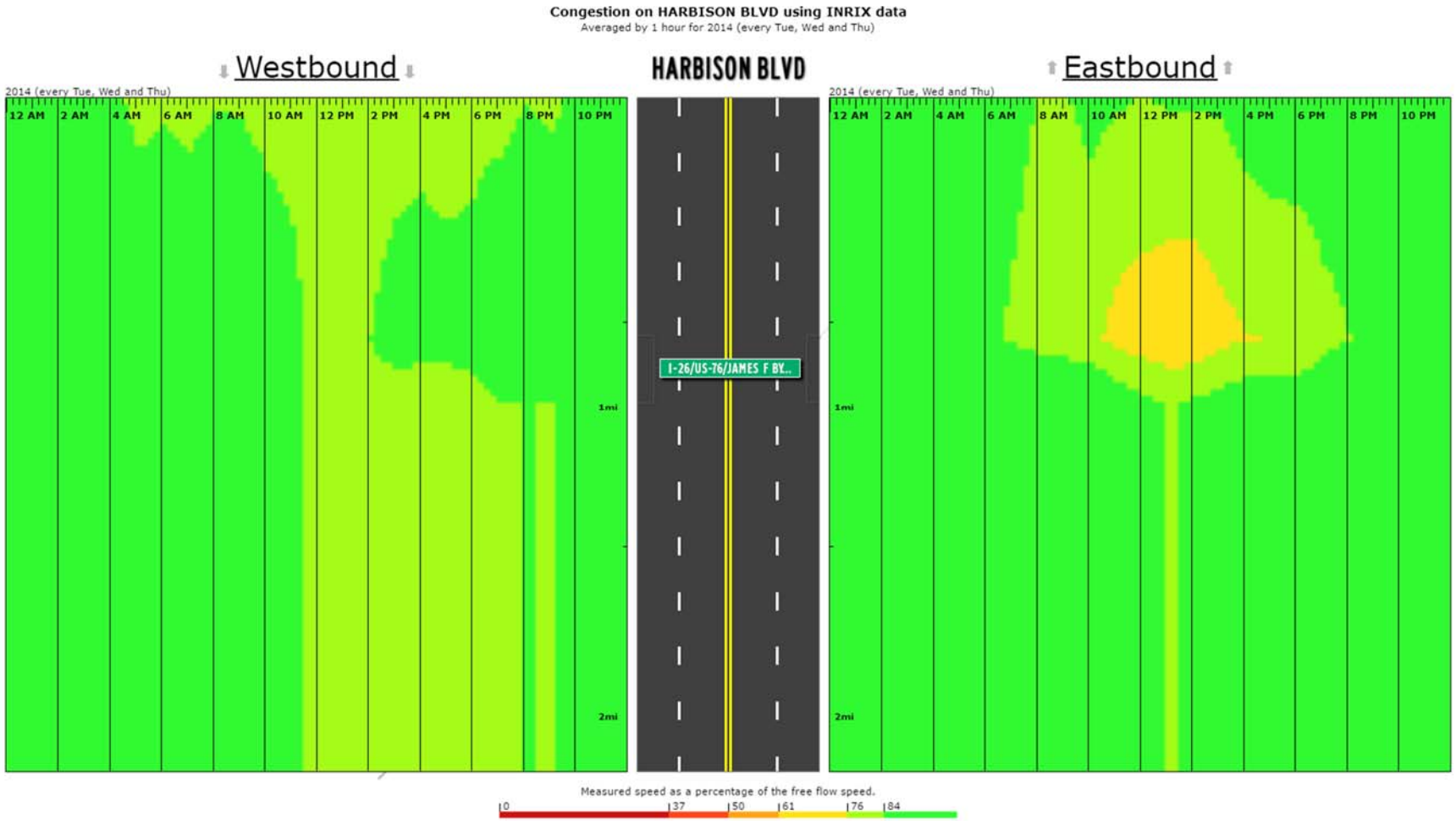


Figure A38.4: AM Peak Travel Time Index

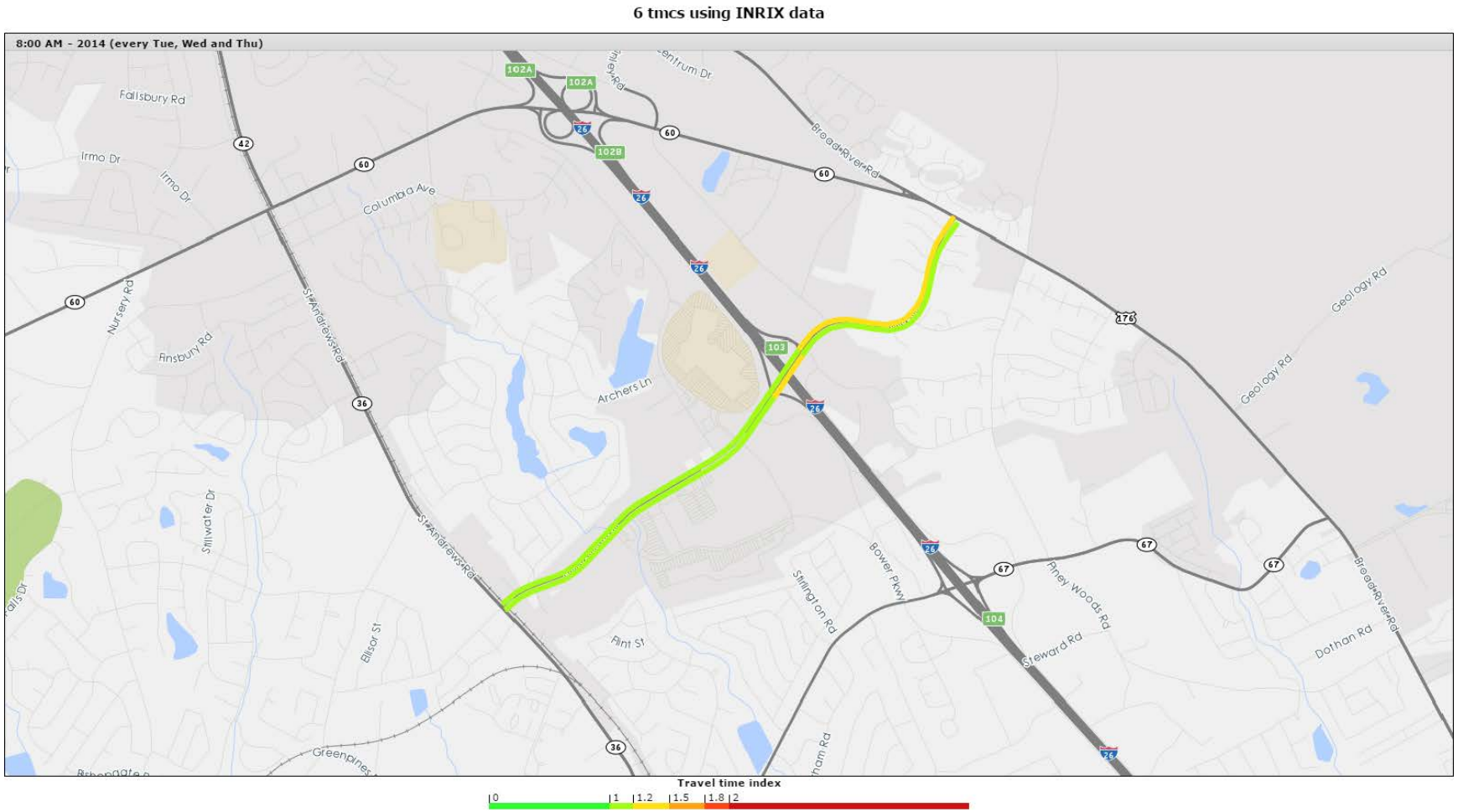
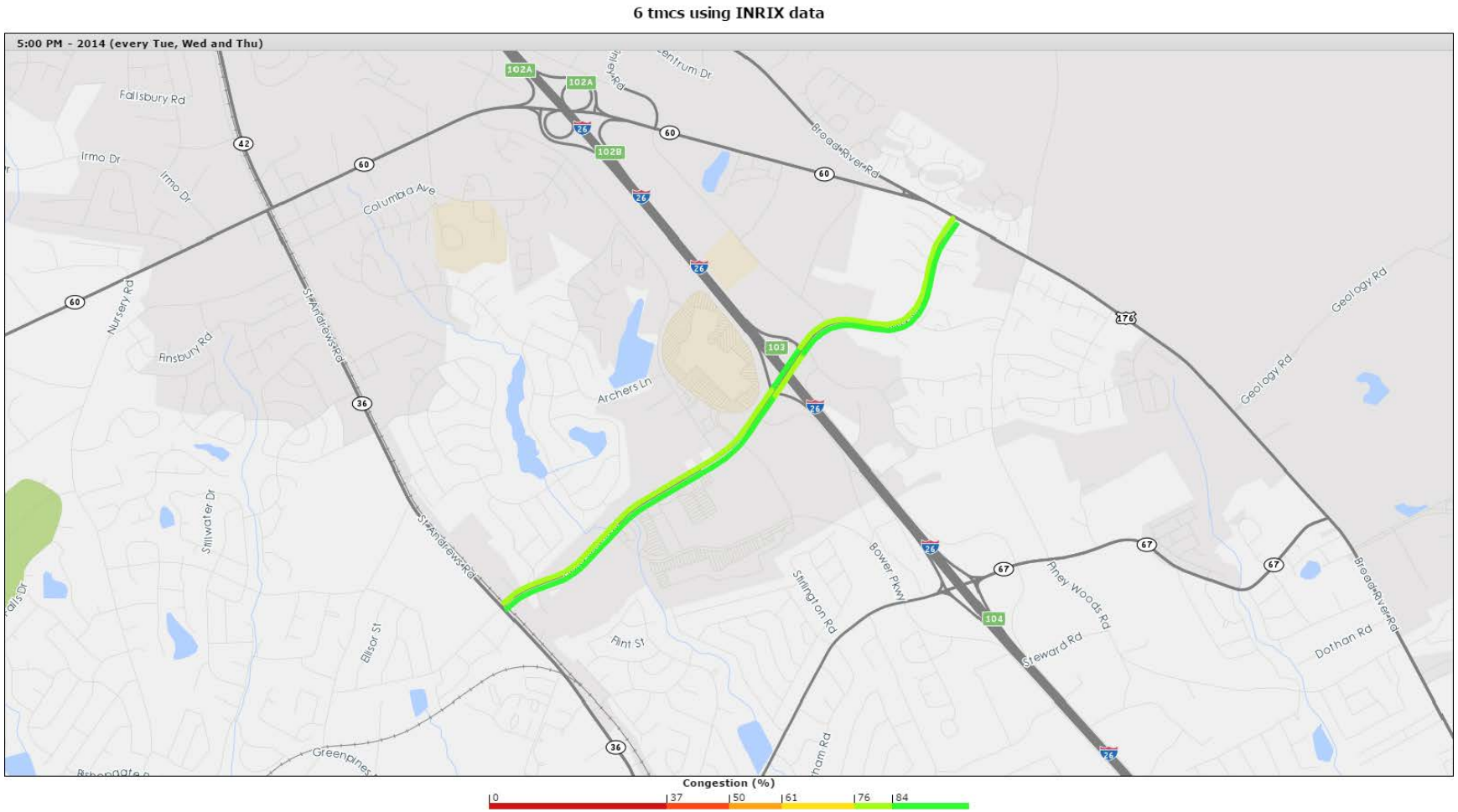


Figure A38.5: PM Peak Travel Time Index



A39. Corridor Name: Greystone Boulevard

Corridor ID: 1103

Route: S-3020

Start: I-126

End: Broad River Rd

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A39.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1103	299	S-3020	GREYSTONE BLVD	16,400	19,600	15,300	16,000	14,831	5	45	3	21600	0.65	B	0.6	B

LOS E

LOS F

Figure A39.2: Average Corridor Speed

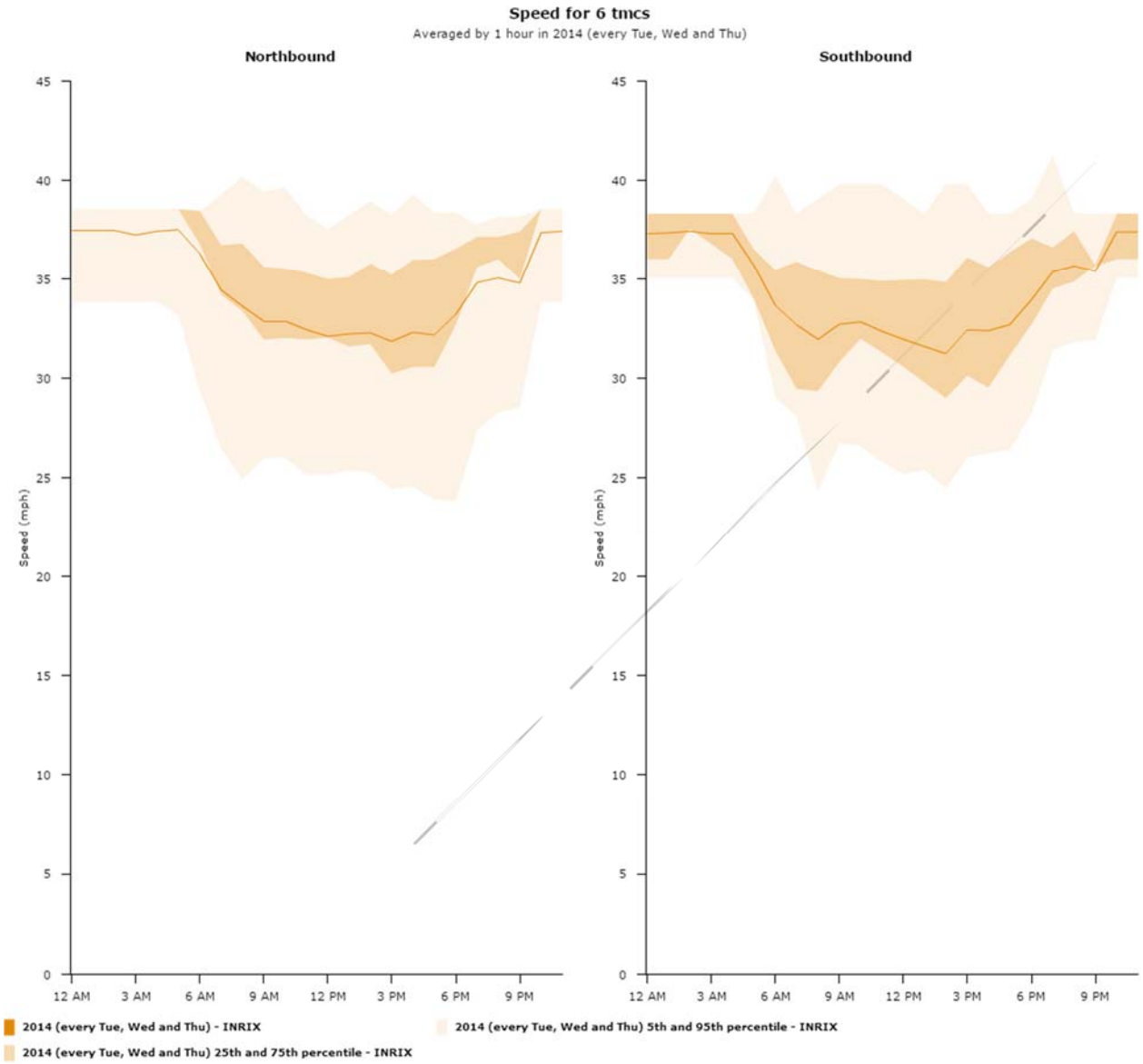


Figure A39.3: Corridor Congestion Index

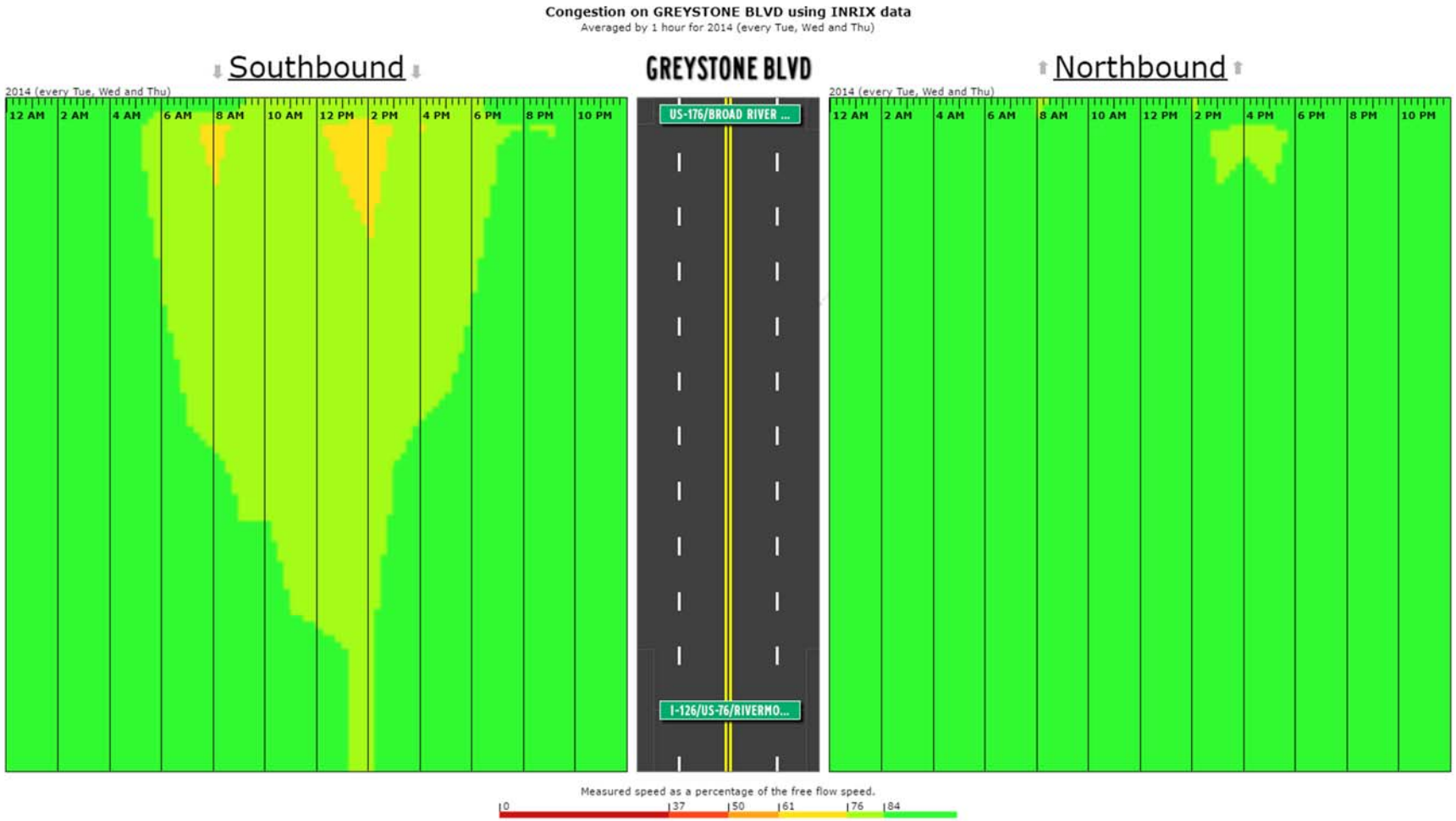


Figure A39.4: AM Peak Travel Time Index

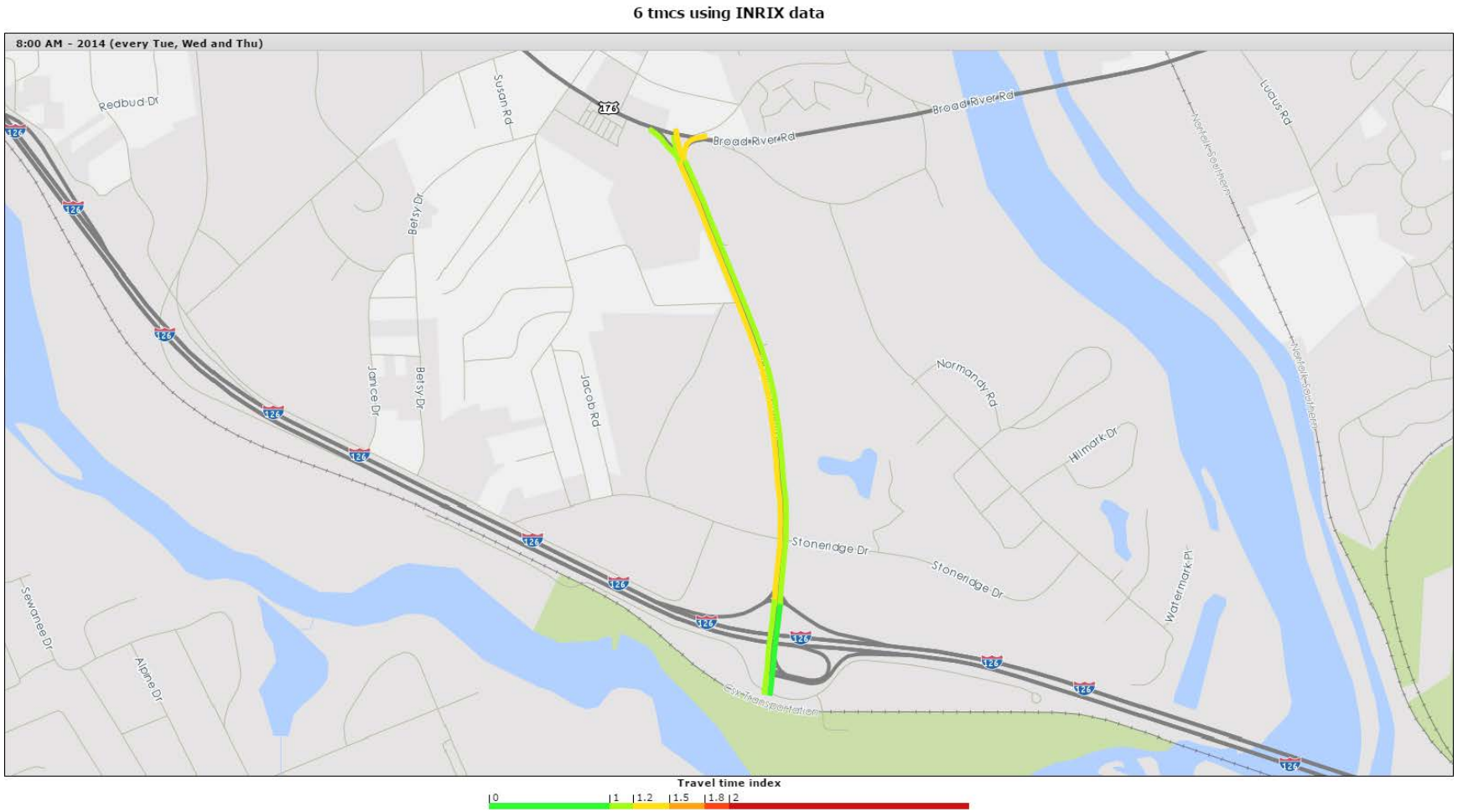
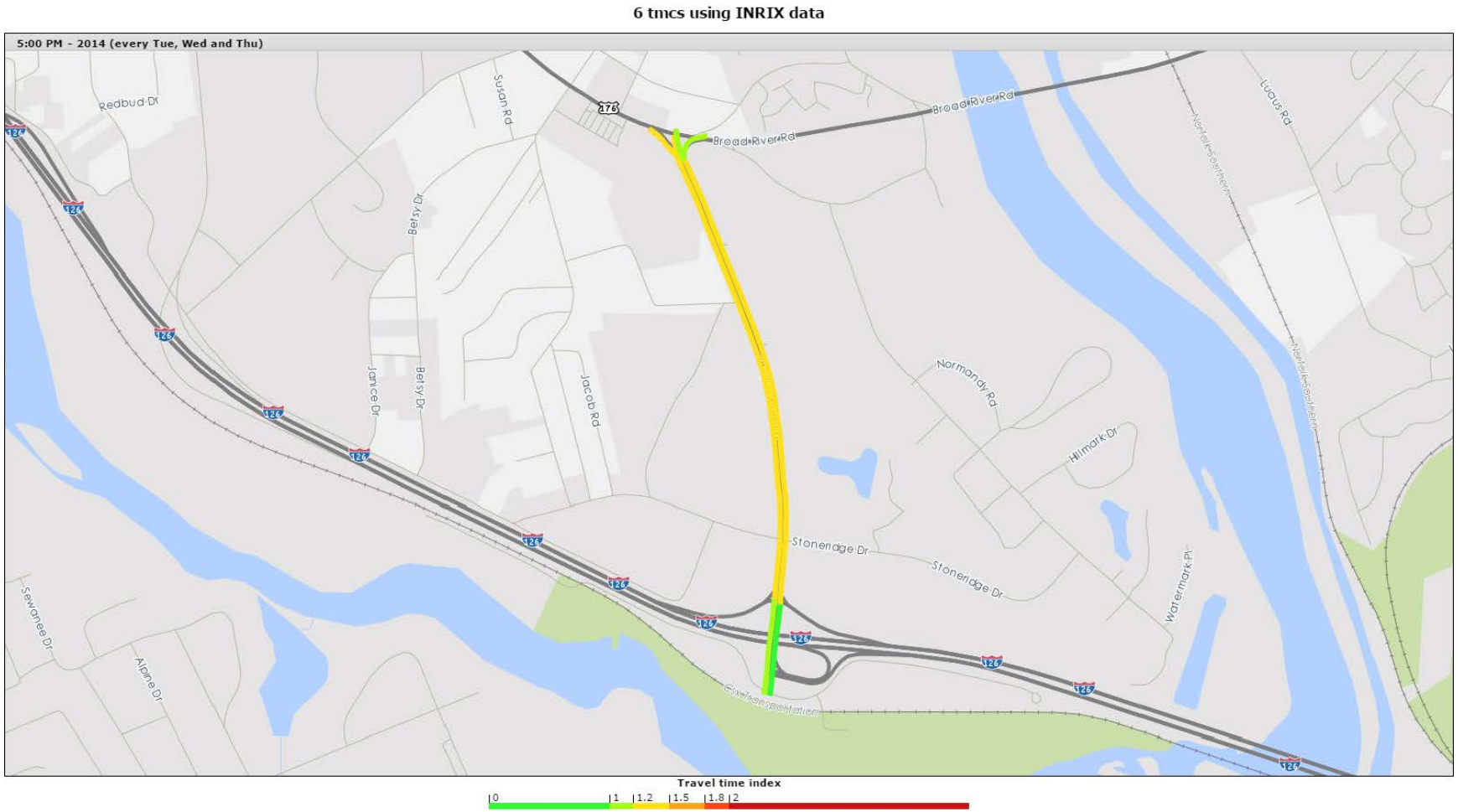


Figure A39.5: PM Peak Travel Time Index



A40. Corridor Name: Harden Street

Corridor ID: 1105

Start:

End:

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking:

Figure A40.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1105	275	SC555	HARDEN ST	22,200	23,300	21,400	20,000	21,275	5	35	3	21600	0.81	C	0.86	C
1105	473	S-10	HARDEN ST	26,000	23,800	21,300	22,400	22,590	5	35	3	21600	0.9	C	0.91	C
1105	889	L-3493	HARDEN ST		8,500	7,700	8,000	7,824	2	35	3	10800	0.74	B	0.72	B
1105	891	L-3493	HARDEN ST		11,500	9,100	10,900	6,214	2	35	3	10800	1.01	D	0.58	

LOS E

LOS F

Figure A40.2: Average Corridor Speed

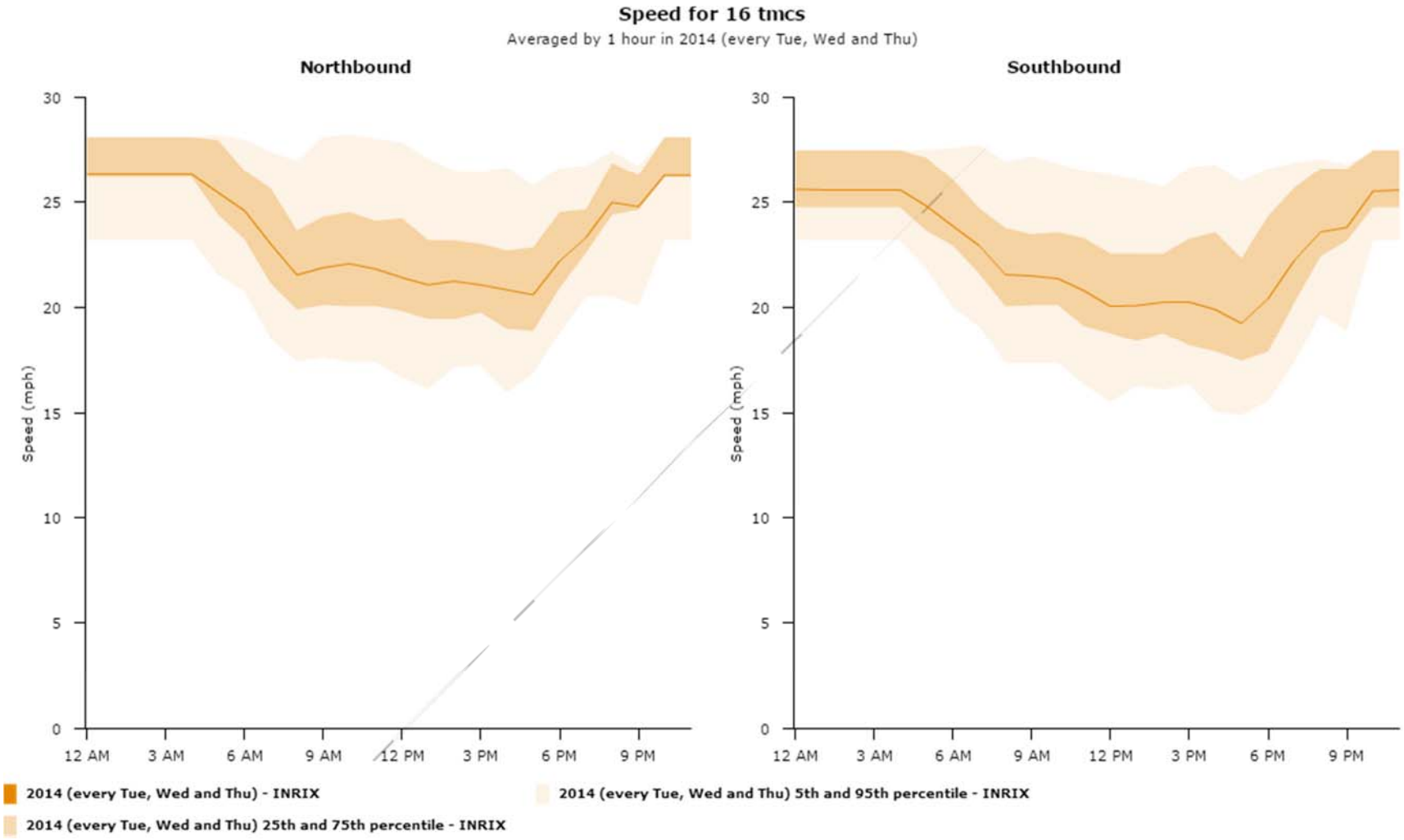


Figure A40.3: Corridor Congestion Index

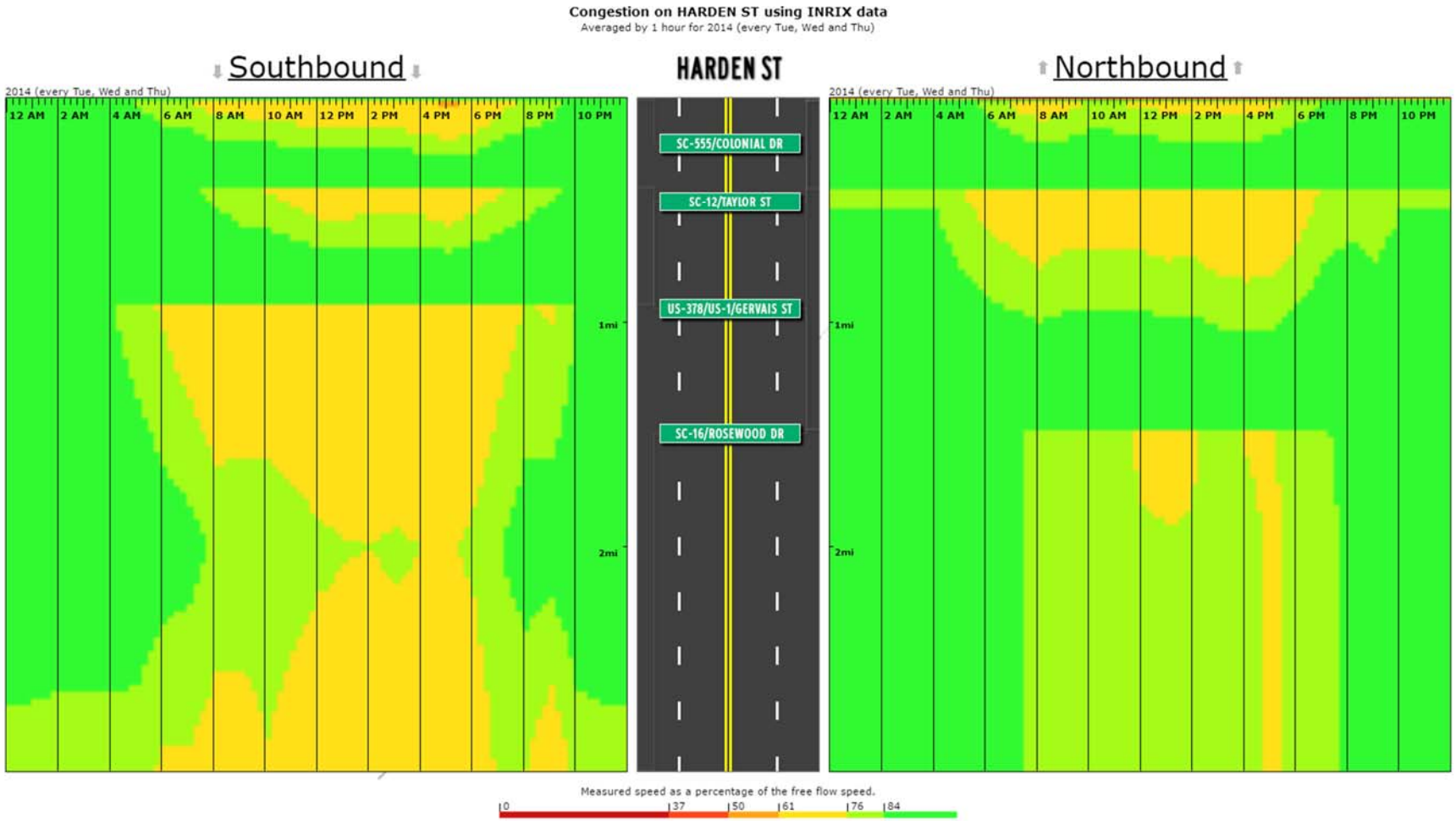


Figure A40.4: AM Peak Travel Time Index

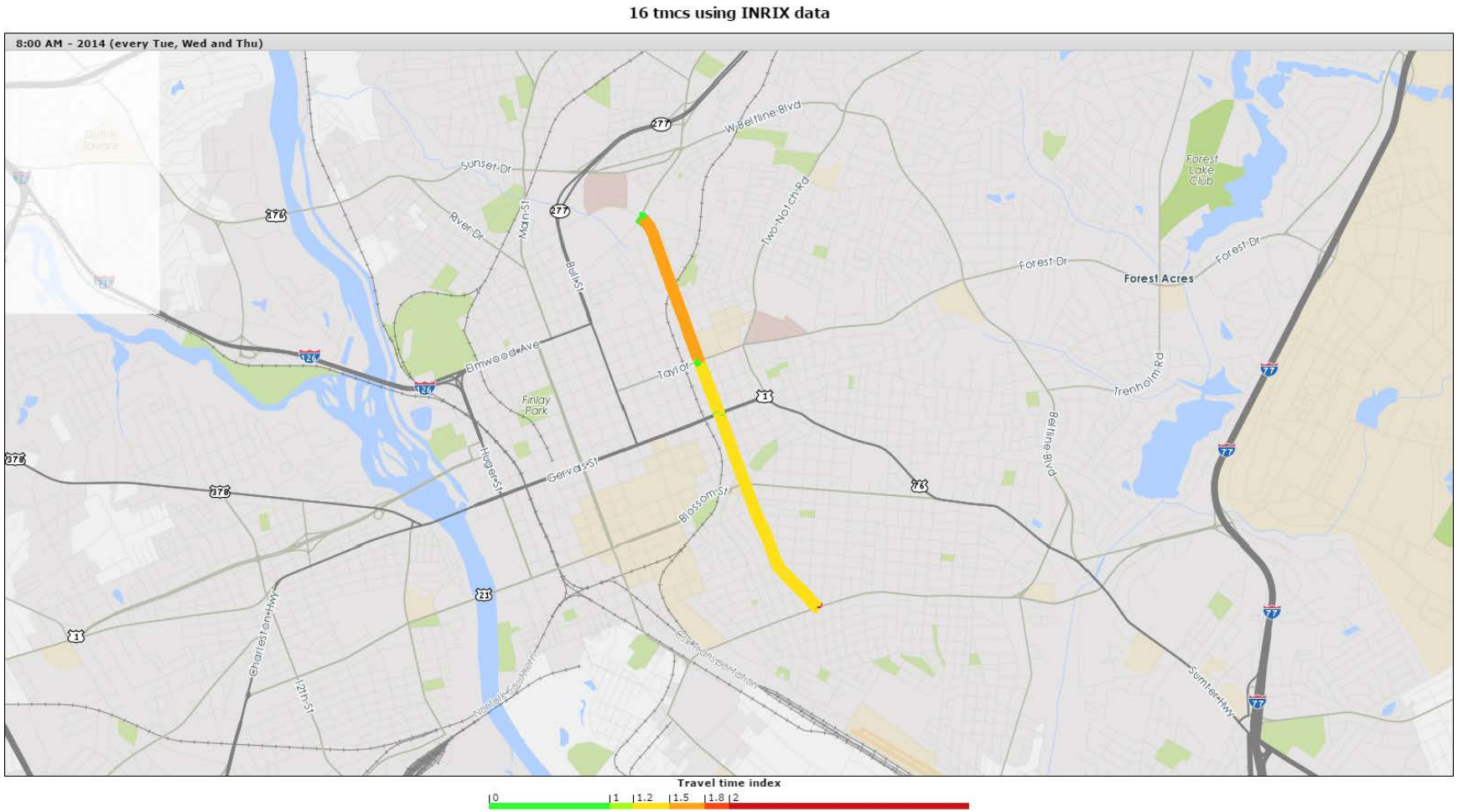
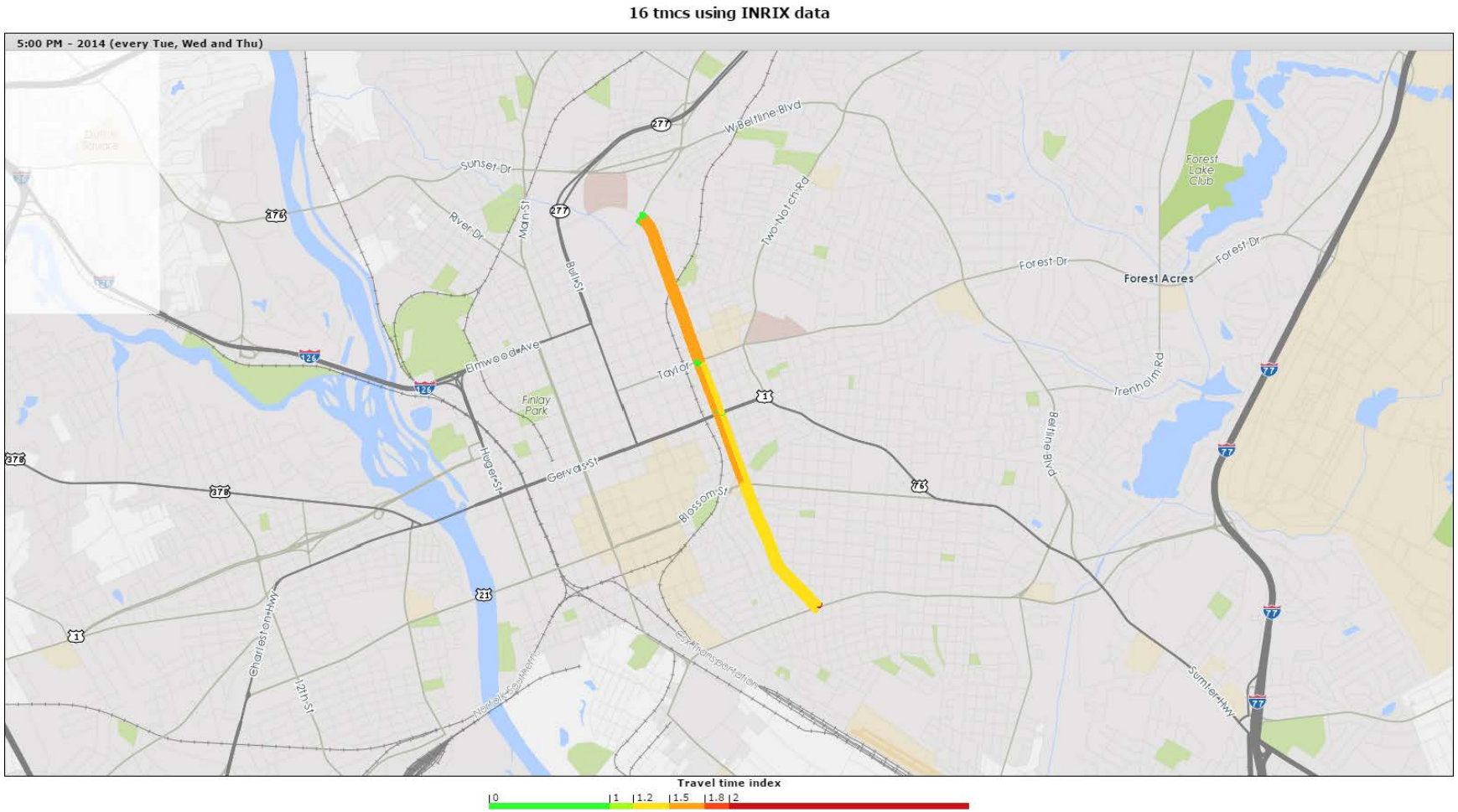


Figure A40.5: PM Peak Travel Time Index



A41. Corridor Name: Beltline Boulevard

Corridor ID: 1107

Route: SC 16

Start: SC 277

End: Assembly St SC 48

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A41.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1107	225	SC16	BELTLINE BLVD	23,800	24,500	24,600	27,000	15,132	5	35	3	21600	1.09	D	0.61	B
1107	227	SC16	BELTLINE BLVD	20,800	17,500	16,000	16,900	16,489	5	35	3	21600	0.68	B	0.66	B
1107	229	SC16	BELTLINE BLVD	30,200	23,000	23,100	24,600	26,964	5	35	3	21600	0.99	C	1.09	D
1107	230	SC16	BELTLINE BLVD	12,300	6,400	6,000	6,100	-	5	35	3	21600	0.24	A		
1107	231	SC16	ROSEWOOD DR	21,300	15,900	18,400	18,000	20,398	5	35	3	21600	0.73	B	0.82	C

LOS E

LOS F

Figure A41.2: Average Corridor Speed

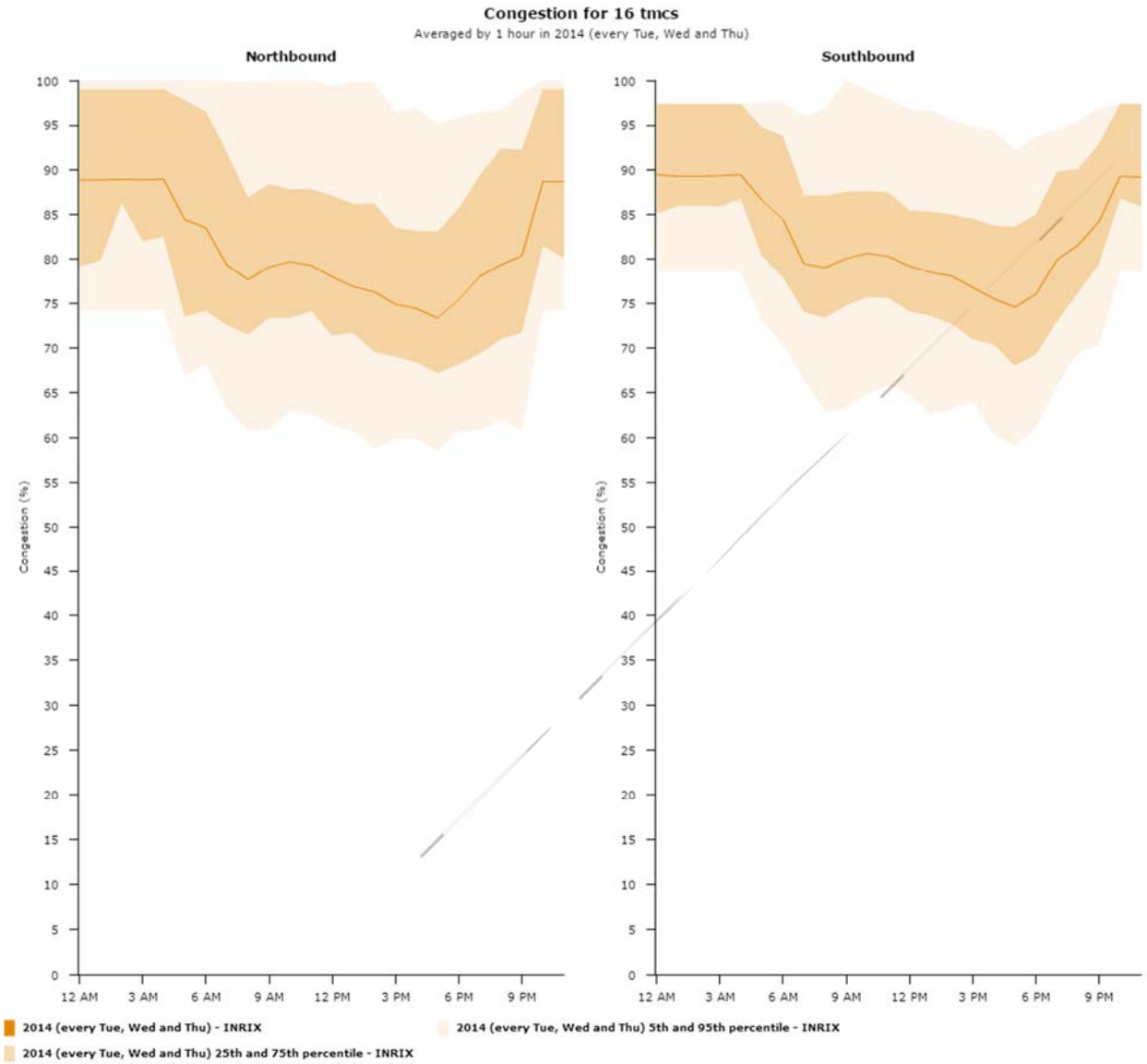


Figure A41.3: Corridor Congestion Index

Figure A41.4: AM Peak Travel Time Index

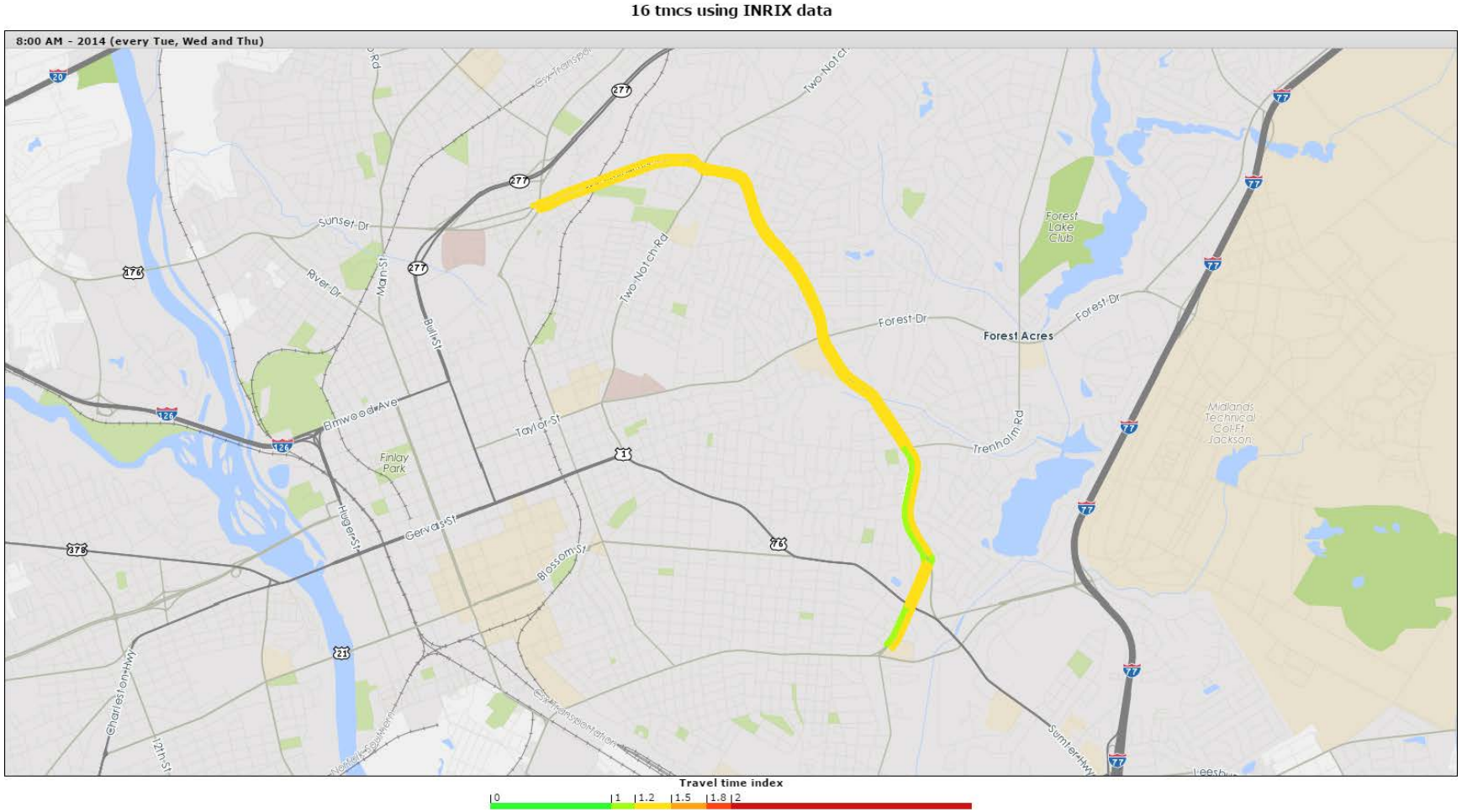
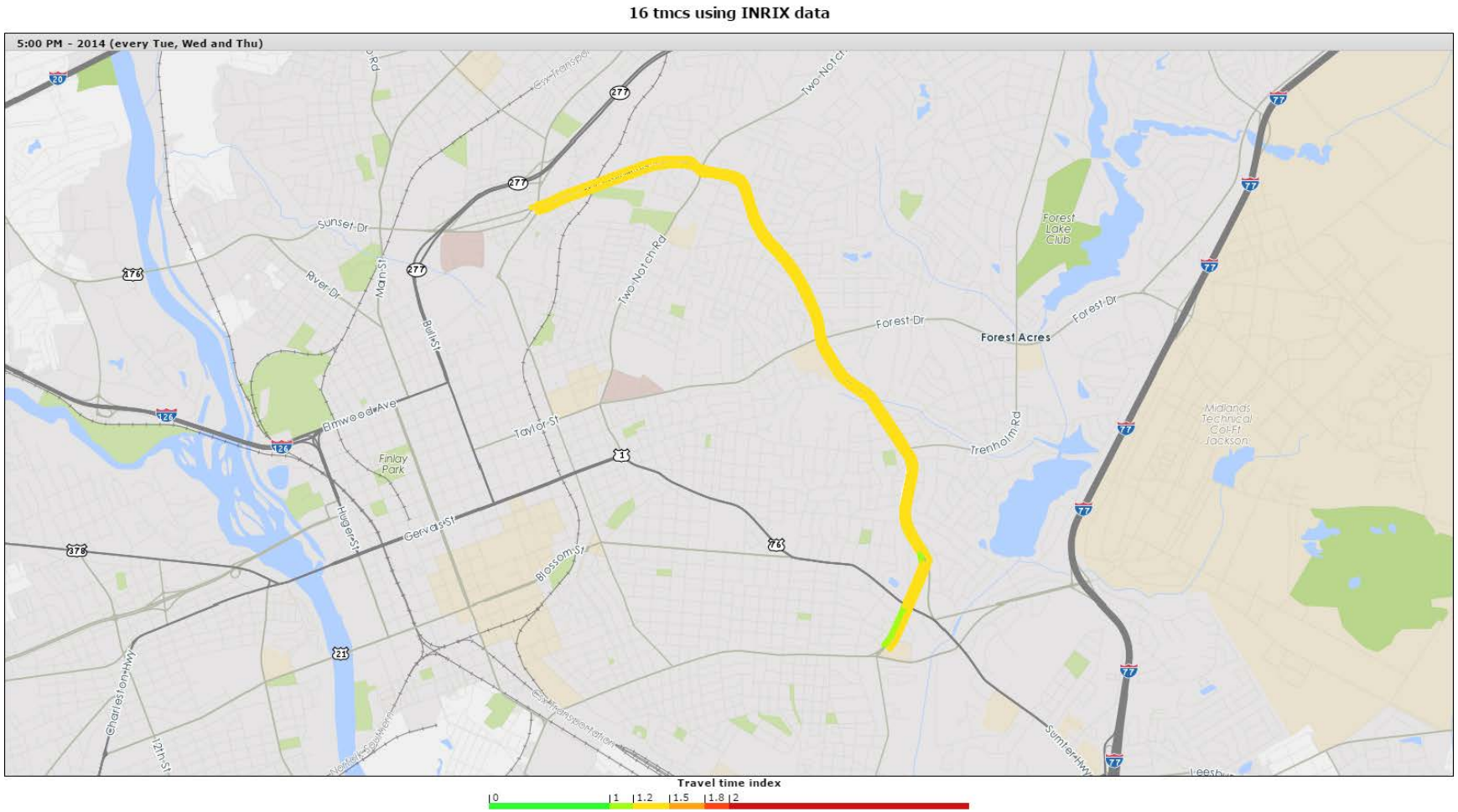


Figure A41.5: PM Peak Travel Time Index



A42. Corridor Name: Rosewood Drive

Corridor ID: 1109

Route: SC 16

Start: S-48

End: South Beltline Boulevard

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking:

Figure A42.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1109	232	SC16	ROSEWOOD DR	21,300	15,900	18,400	18,000	20,398	5	35	3	21600	0.53	B	0.61	B
1109	233	SC16	ROSEWOOD DR	21,300	21,600	21,500	20,300	28,128	5	35	3	21600	0.6	B	0.84	C
1109	240	SC48	ROSEWOOD DR		7,900	8,600	10,000	-	5	35	3	21600	0.3	A		

LOS E

LOS F

Figure A42.2: Average Corridor Speed

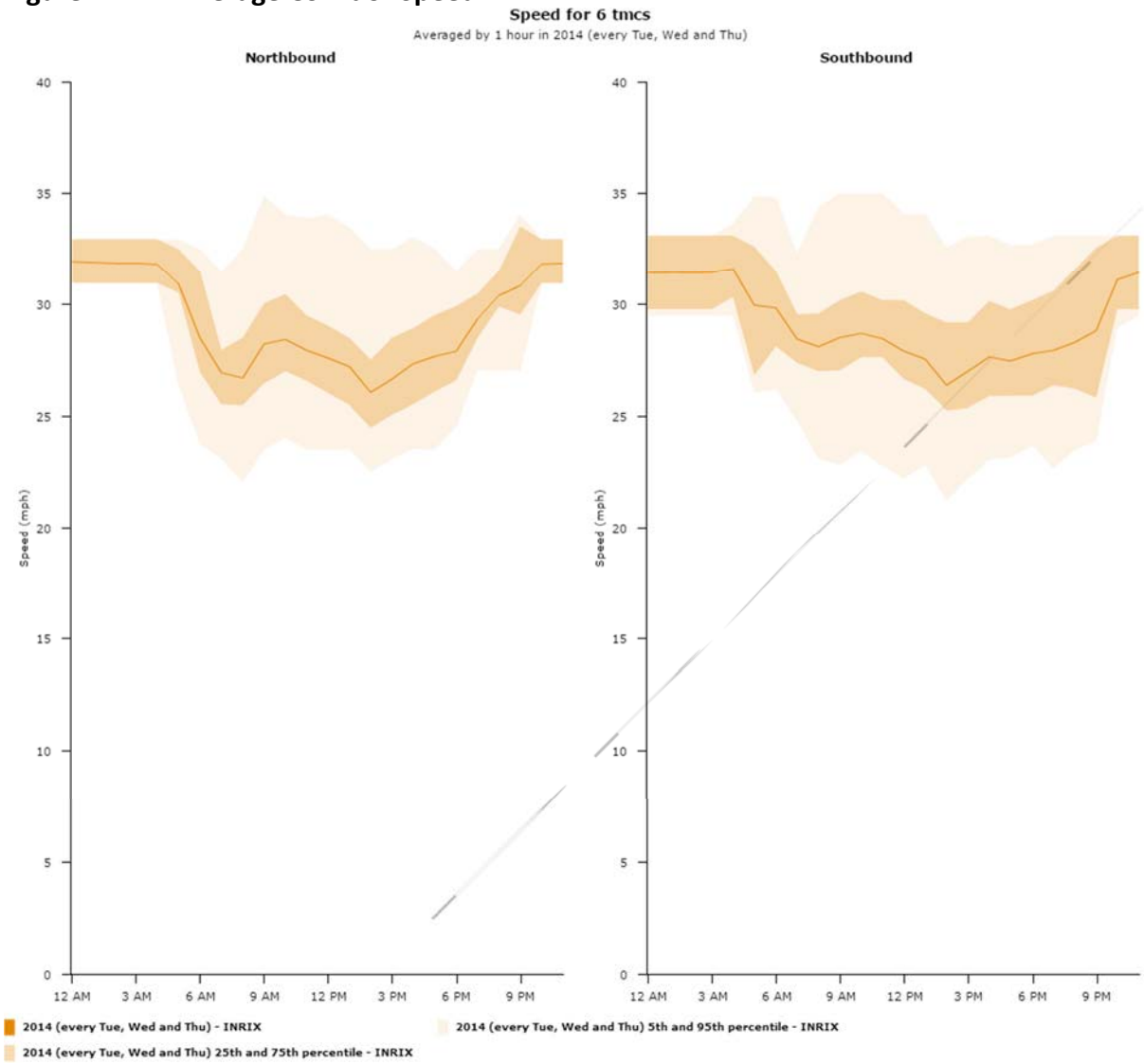


Figure A42.3: Corridor Congestion Index

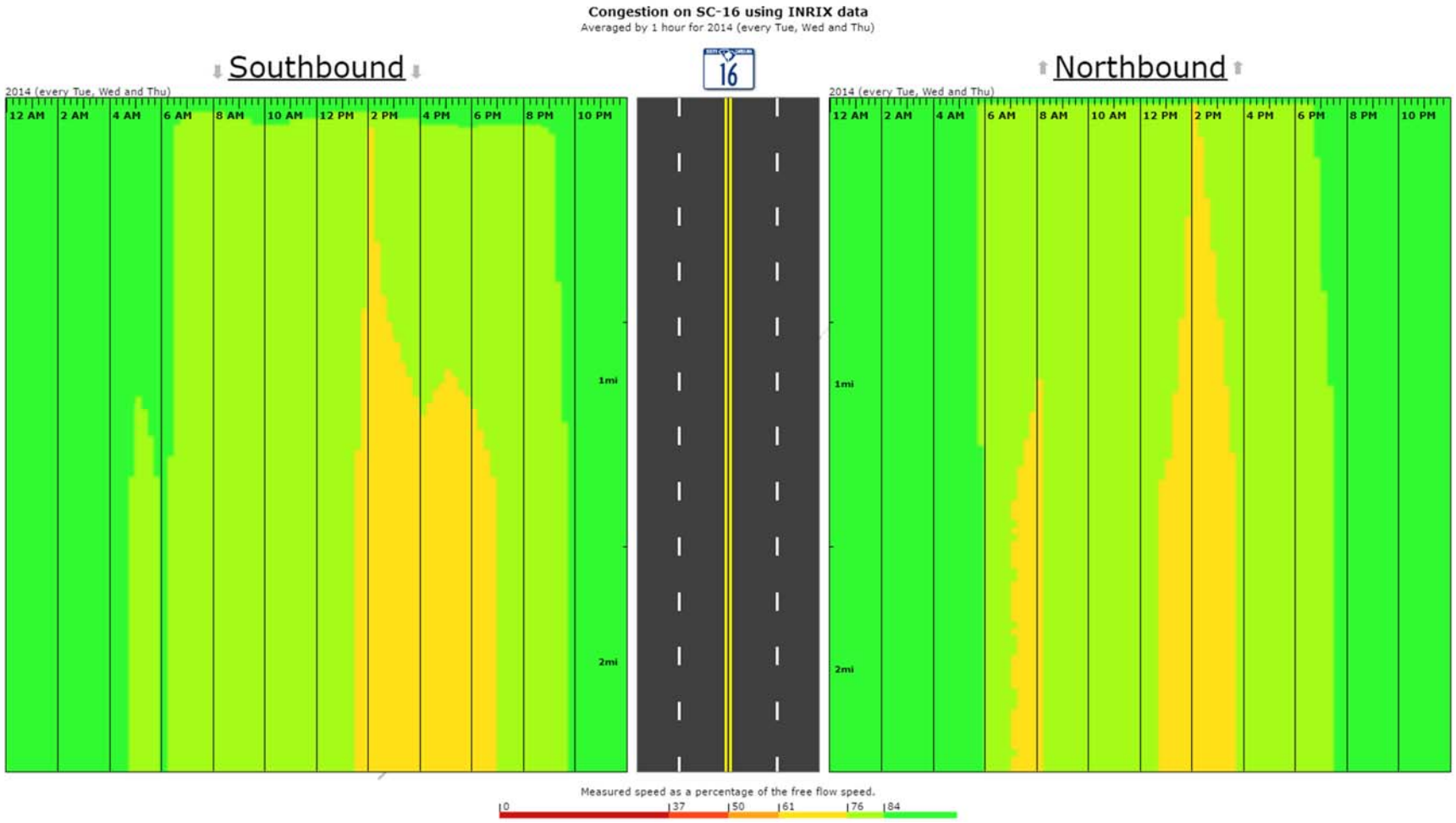


Figure A42.4: AM Peak Travel Time Index

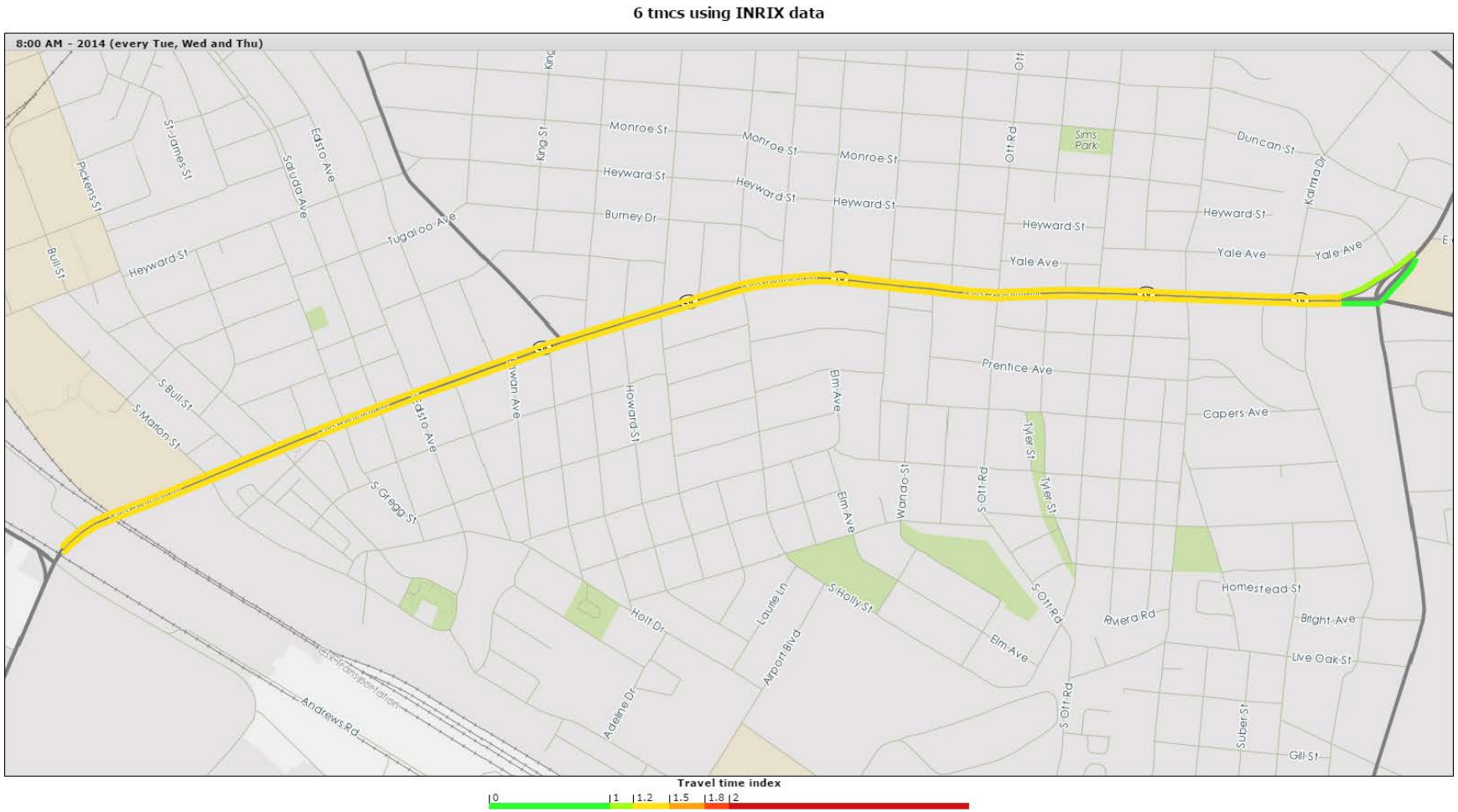
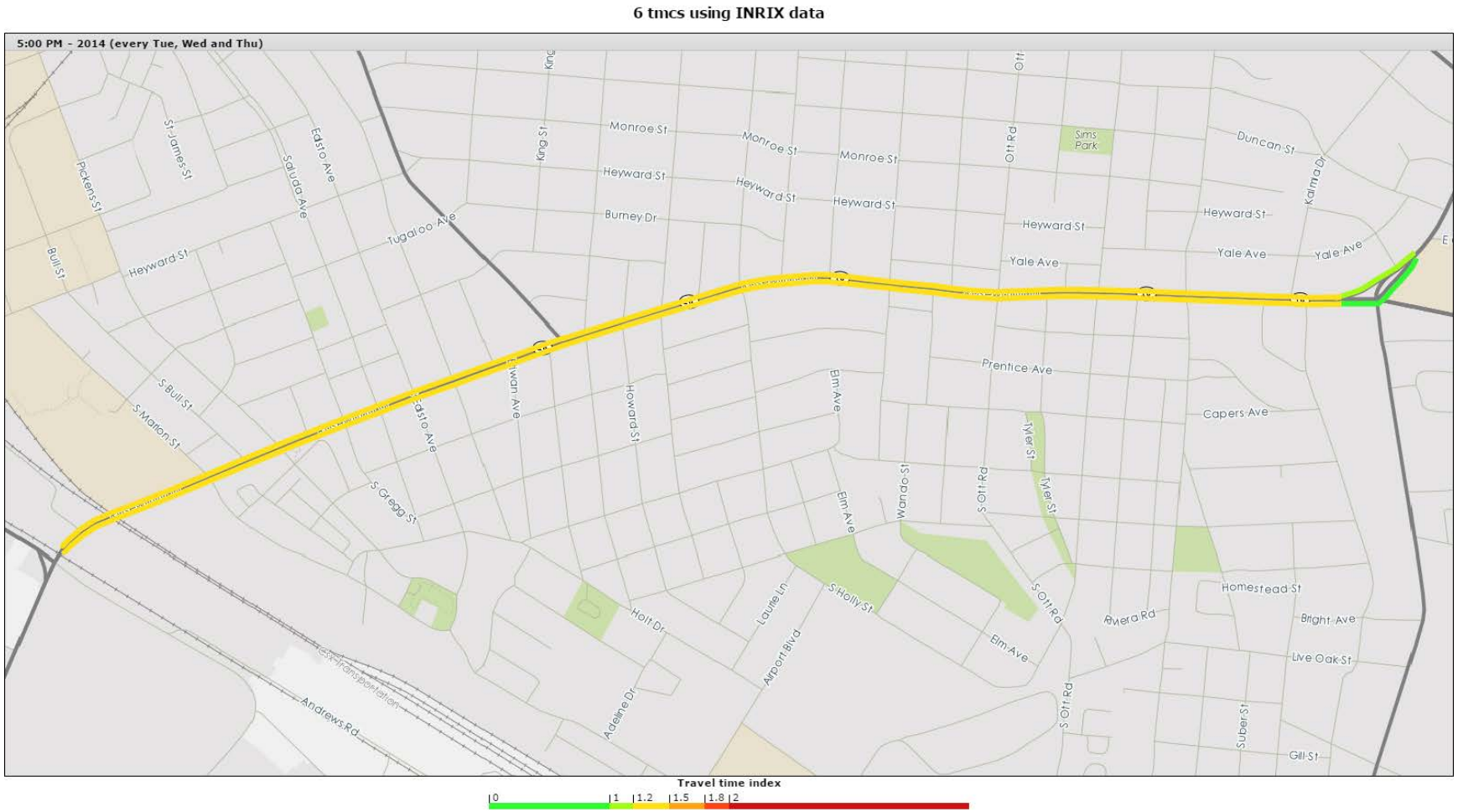


Figure A42.5: PM Peak Travel Time Index



A43. Corridor Name: South Beltline Boulevard

Corridor ID: 1111

Route: S-48, SC 768

Start: Rosewood Dr SC 16

End: Bluff Rd SC 48

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A43.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1111	296	SC768	S BELTLINE BLVD		6,500	5,700	5,300	8,288	2	35	3	10800	0.49	A	0.77	C
1111	354	S-48	S BELTLINE BLVD		8,900	8,400	7,400	12,013	2	35	3	10800	0.69	B	1.11	D
1111	355	S-48	S BELTLINE BLVD	8,600	7,900	7,300	6,900	8,057	2	35	3	10800	0.64	B	0.75	C

LOS E

LOS F

Figure A43.2: Average Corridor Speed

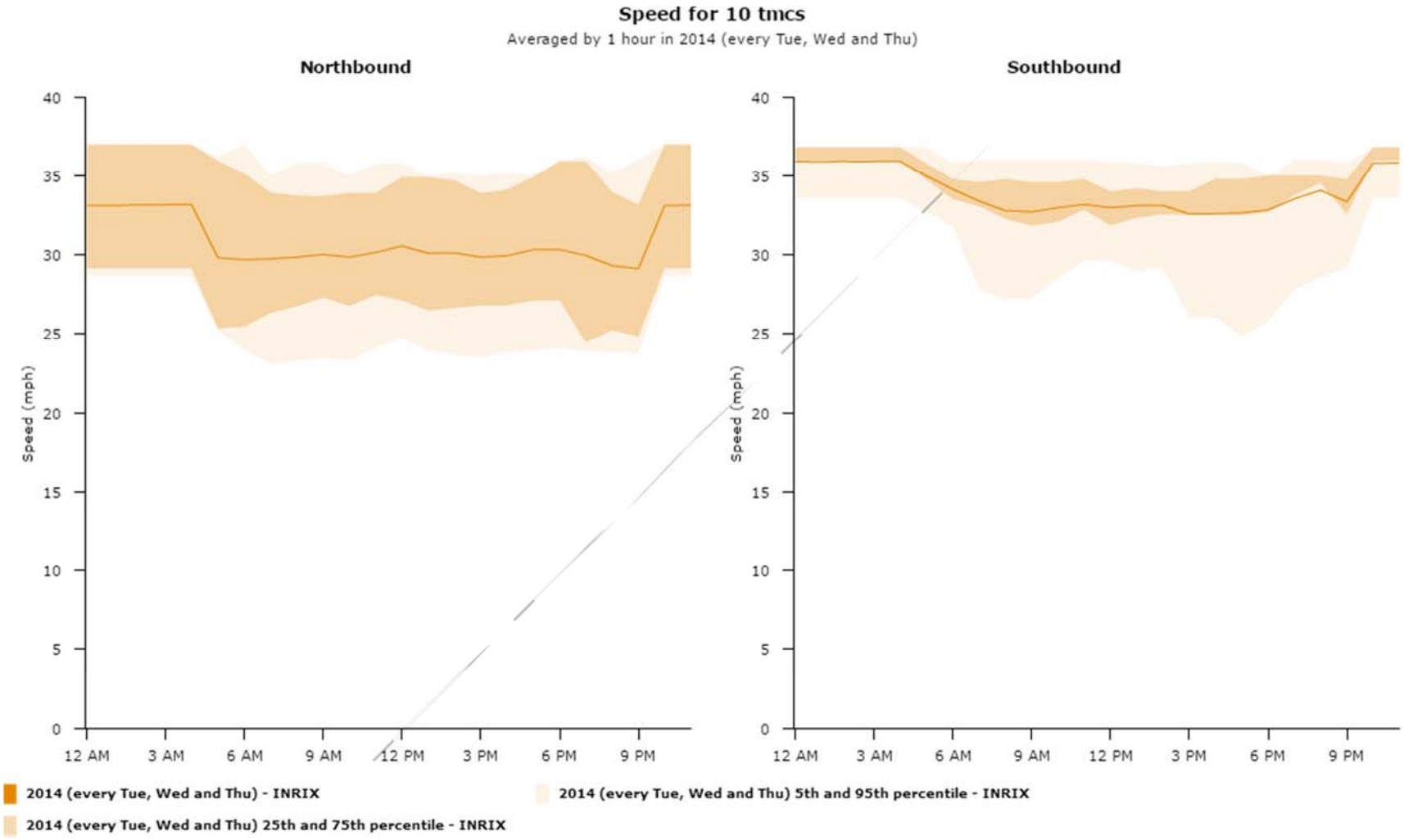


Figure A43.3: Corridor Congestion Index

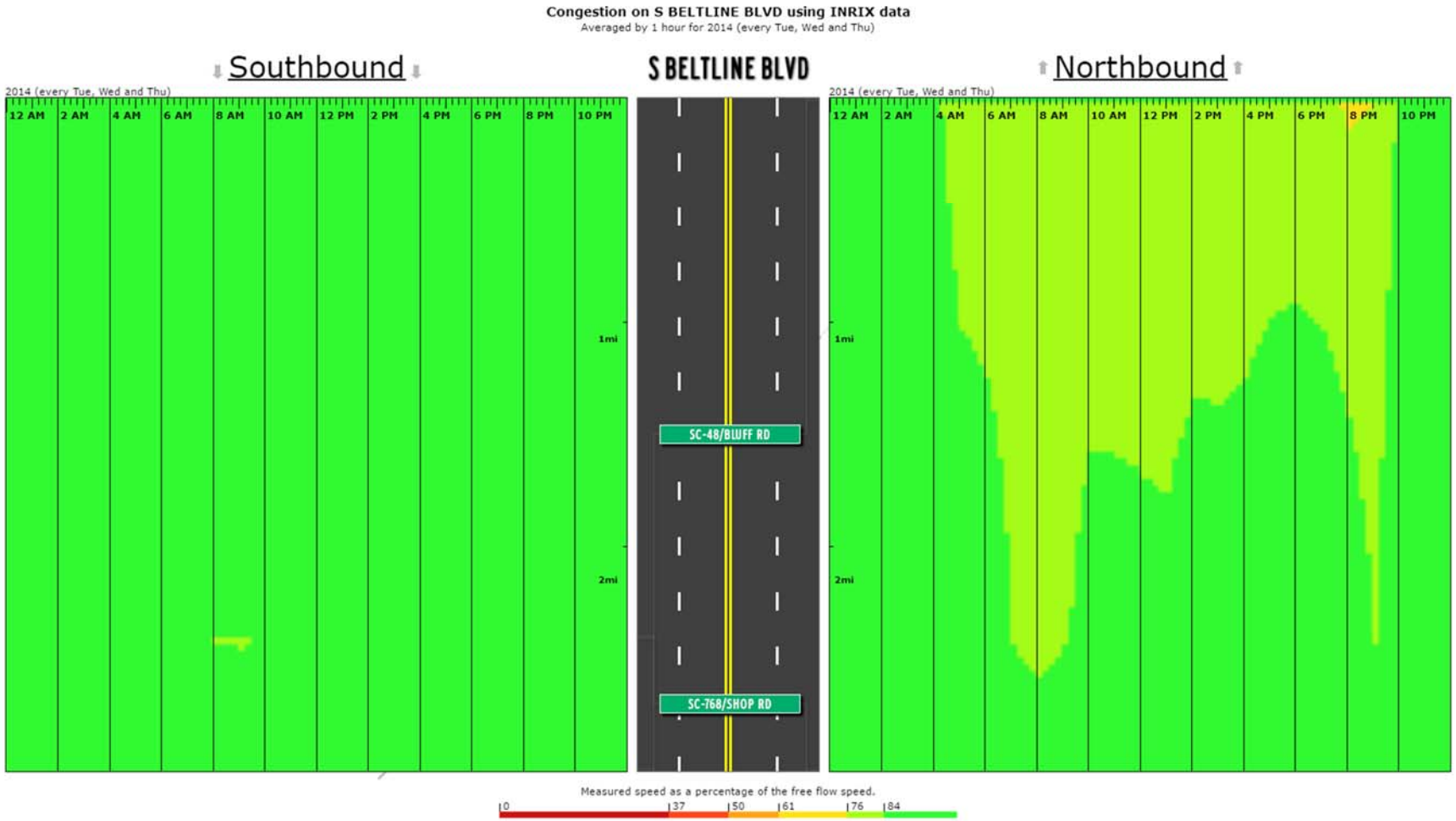


Figure A43.4: AM Peak Travel Time Index

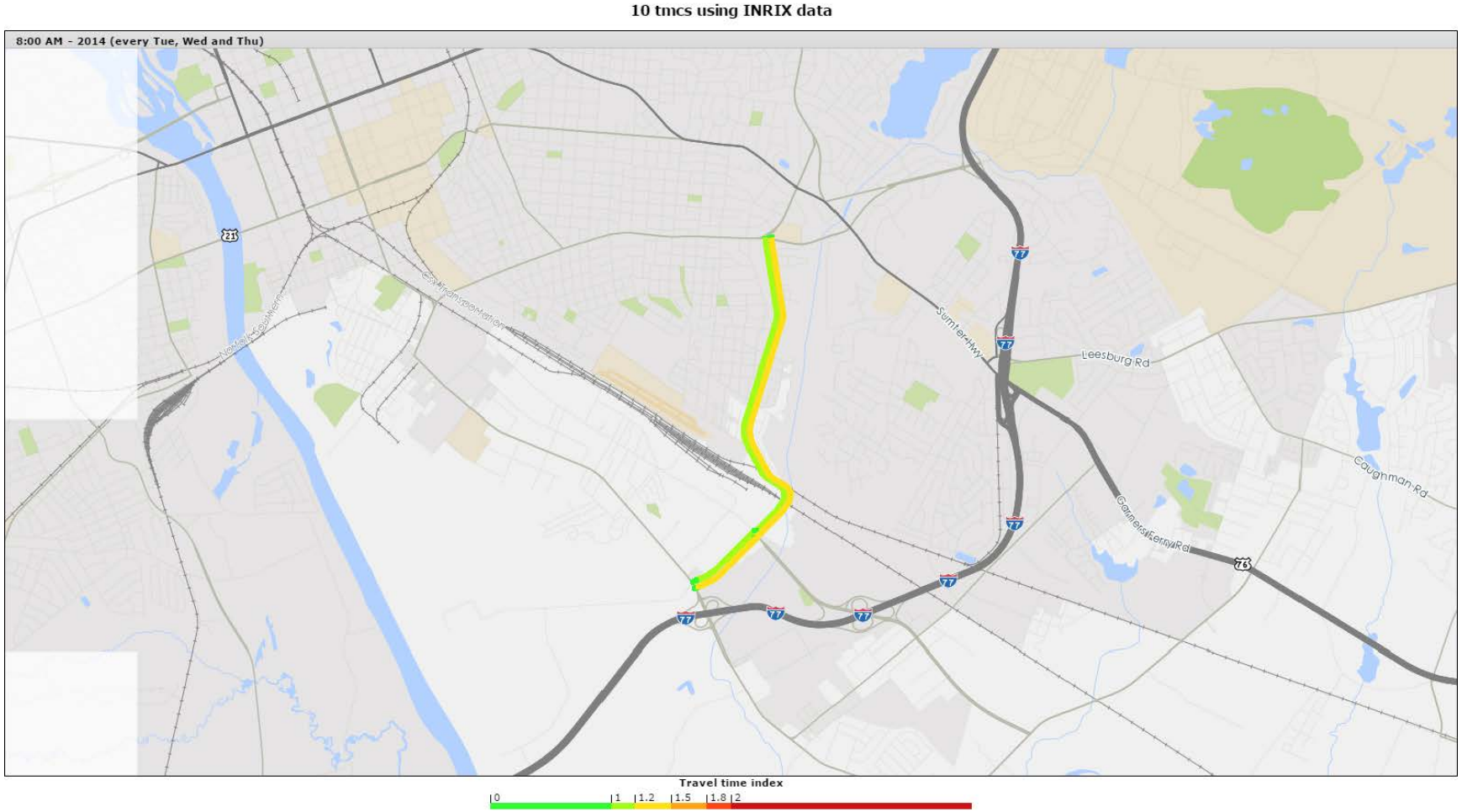
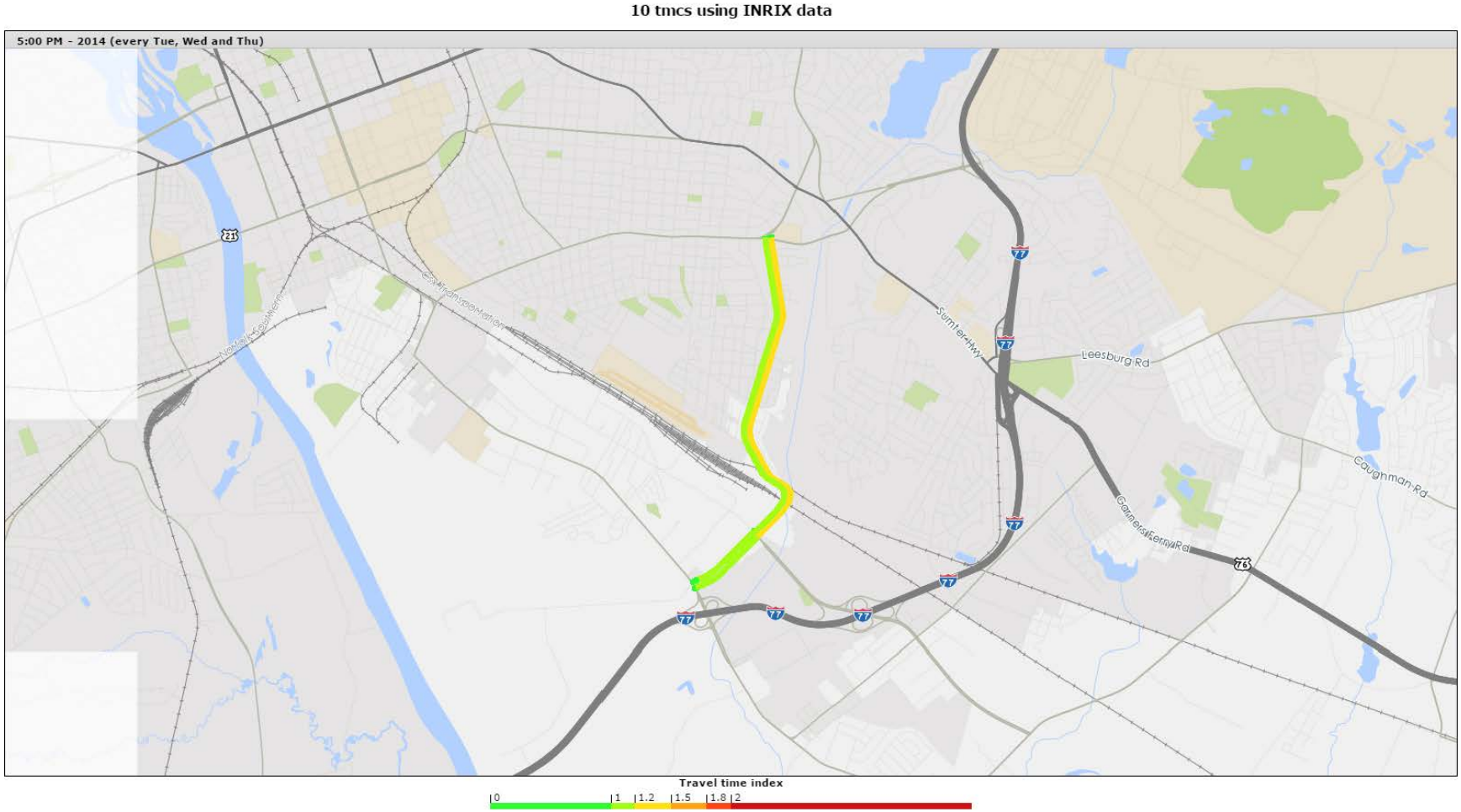


Figure A43.5: PM Peak Travel Time Index



A44. Corridor Name: Trenholm Road

Corridor ID: 1113

Route: S-33

Start: Decker Blvd S-151

End: Beltline Blvd

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A44.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1113	316	S-33	TRENHOLM RD		12,000	11,300	8,600	11,847	5	40	3	21600	0.35	A	0.48	A
1113	317	S-33	TRENHOLM RD	17,500	15,700	14,200	15,600	15,302	5	40	3	21600	0.63	B	0.62	B
1113	319	S-33	TRENHOLM RD	21,800	19,800	18,100	19,200	24,365	5	40	3	21600	0.77	C	0.98	C
1113	321	S-33	TRENHOLM RD	22,700	15,200	13,400	14,900	13,971	5	40	3	21600	0.6	B	0.56	B
1113	323	S-33	TRENHOLM RD	12,300	14,500	11,400	11,200	15,137	3	35	3	10800	0.9	C	1.22	E

LOS E

LOS F

Figure A44.2: Average Corridor Speed

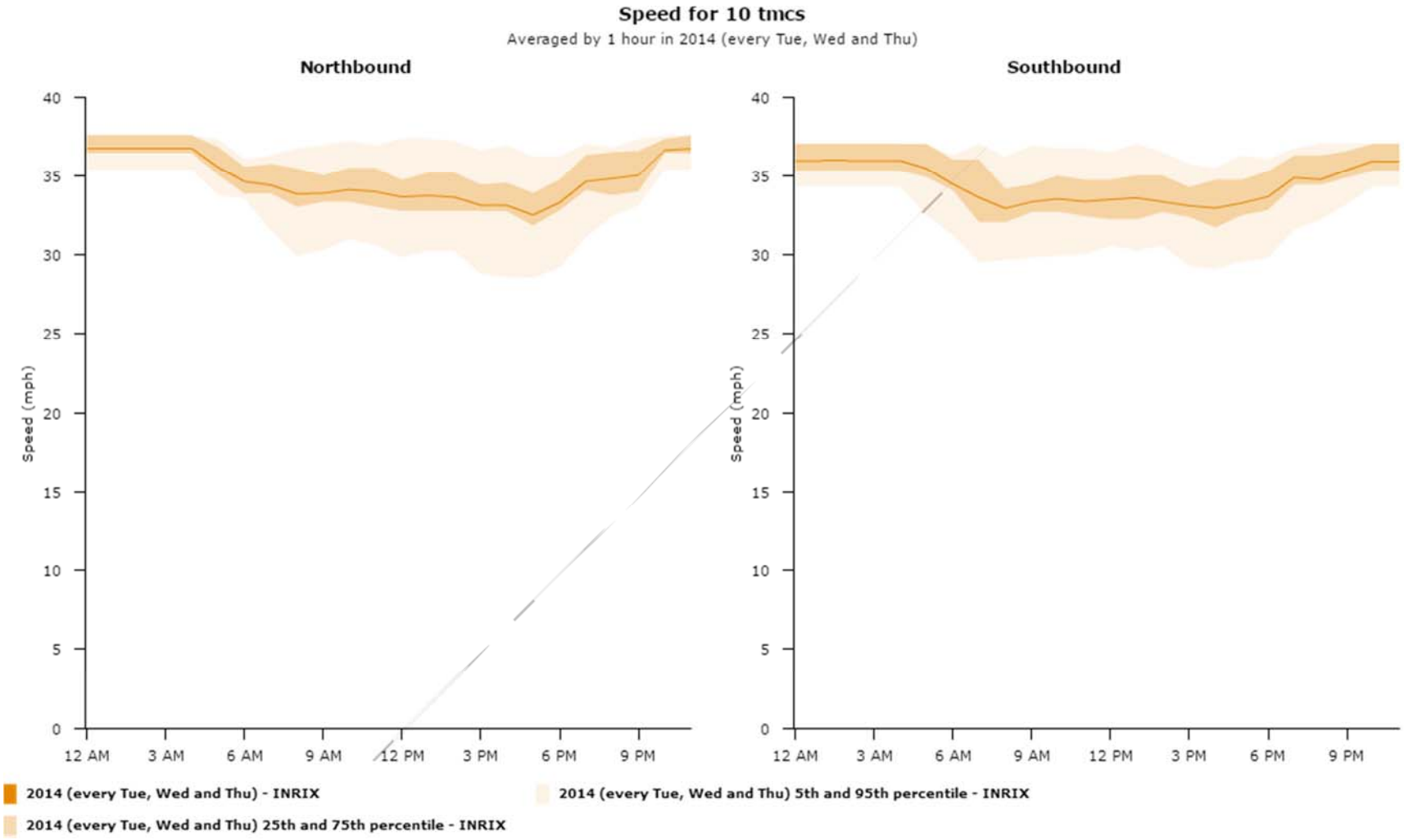


Figure A44.3: Corridor Congestion Index

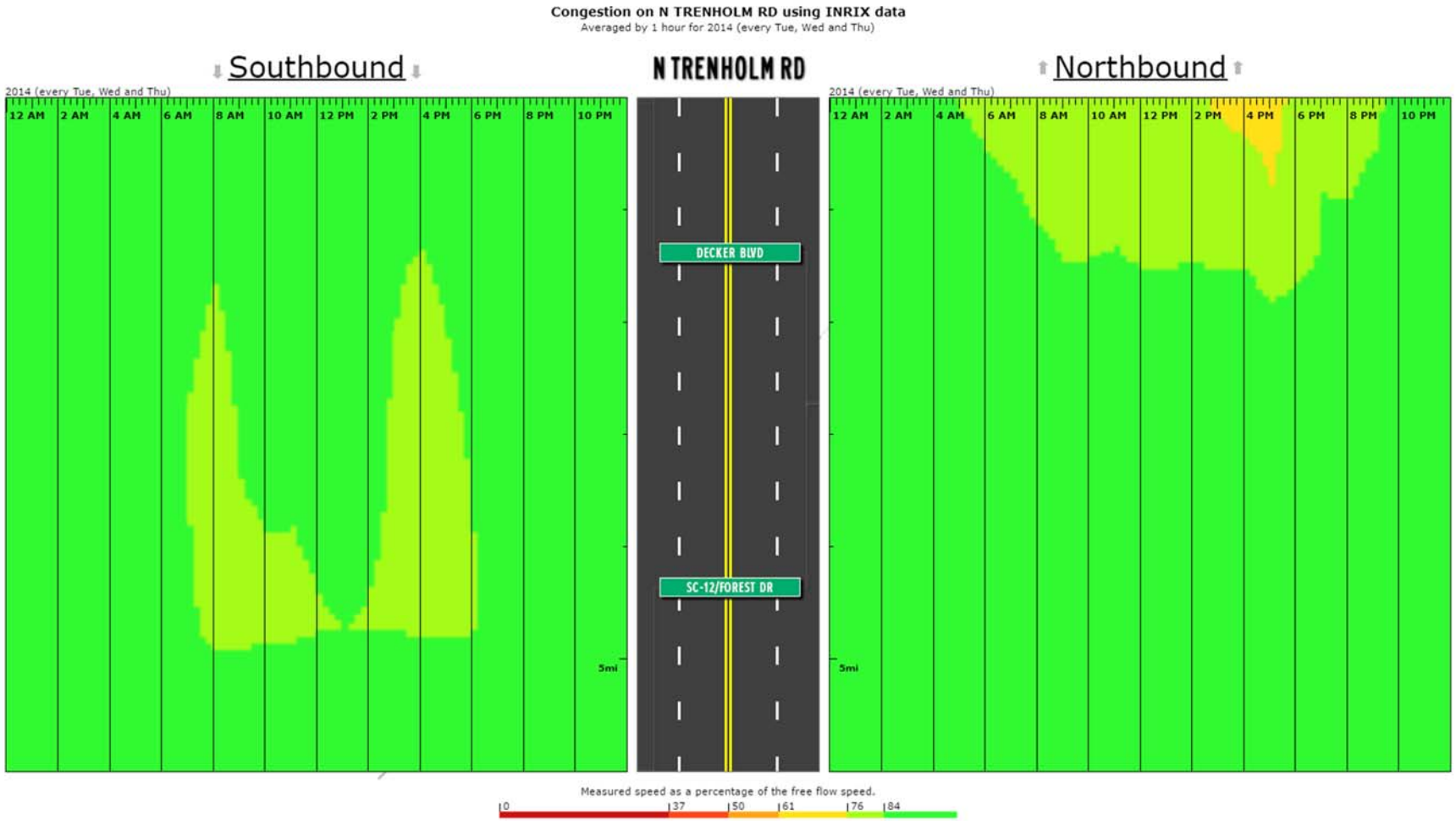


Figure A44.4: AM Peak Travel Time Index

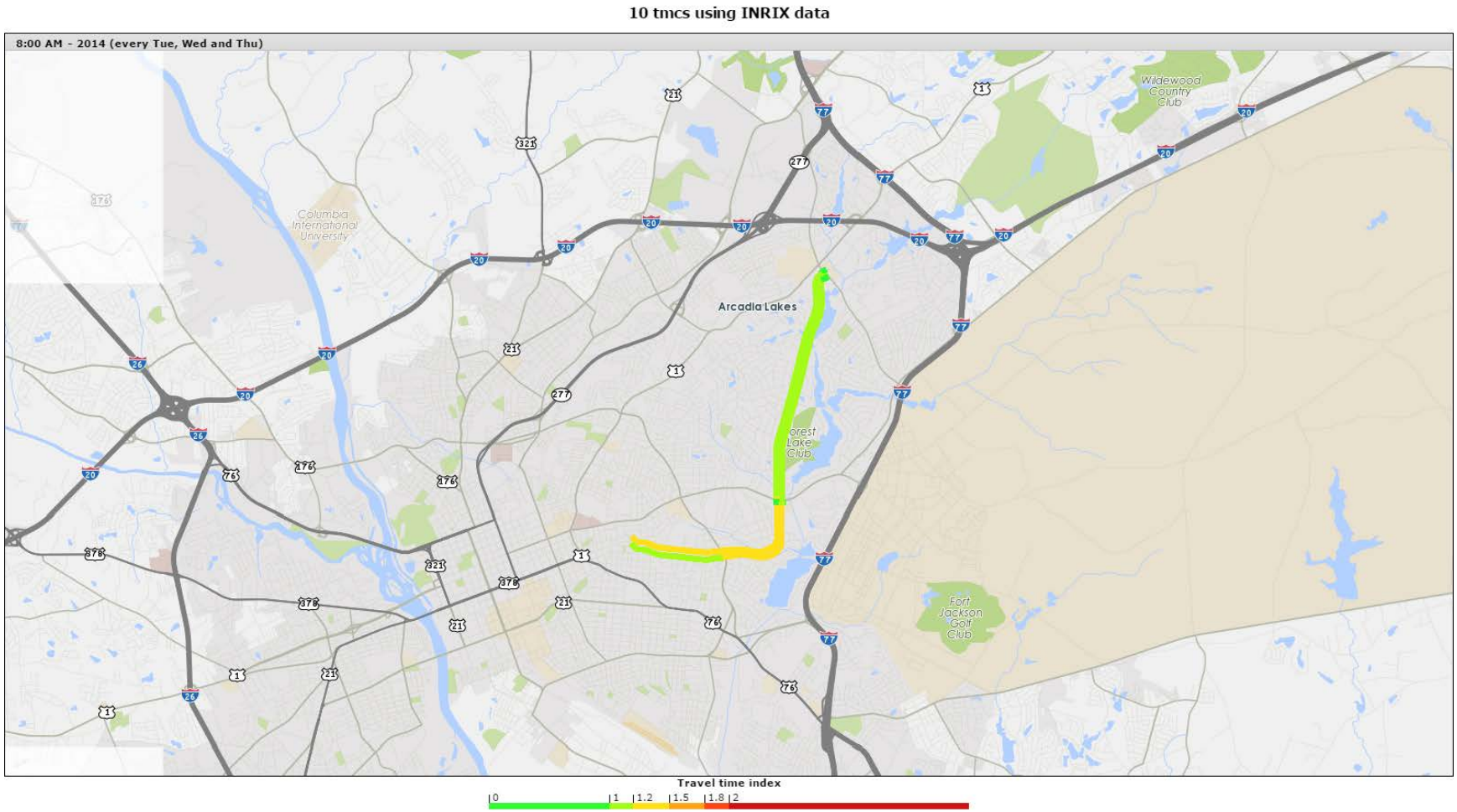
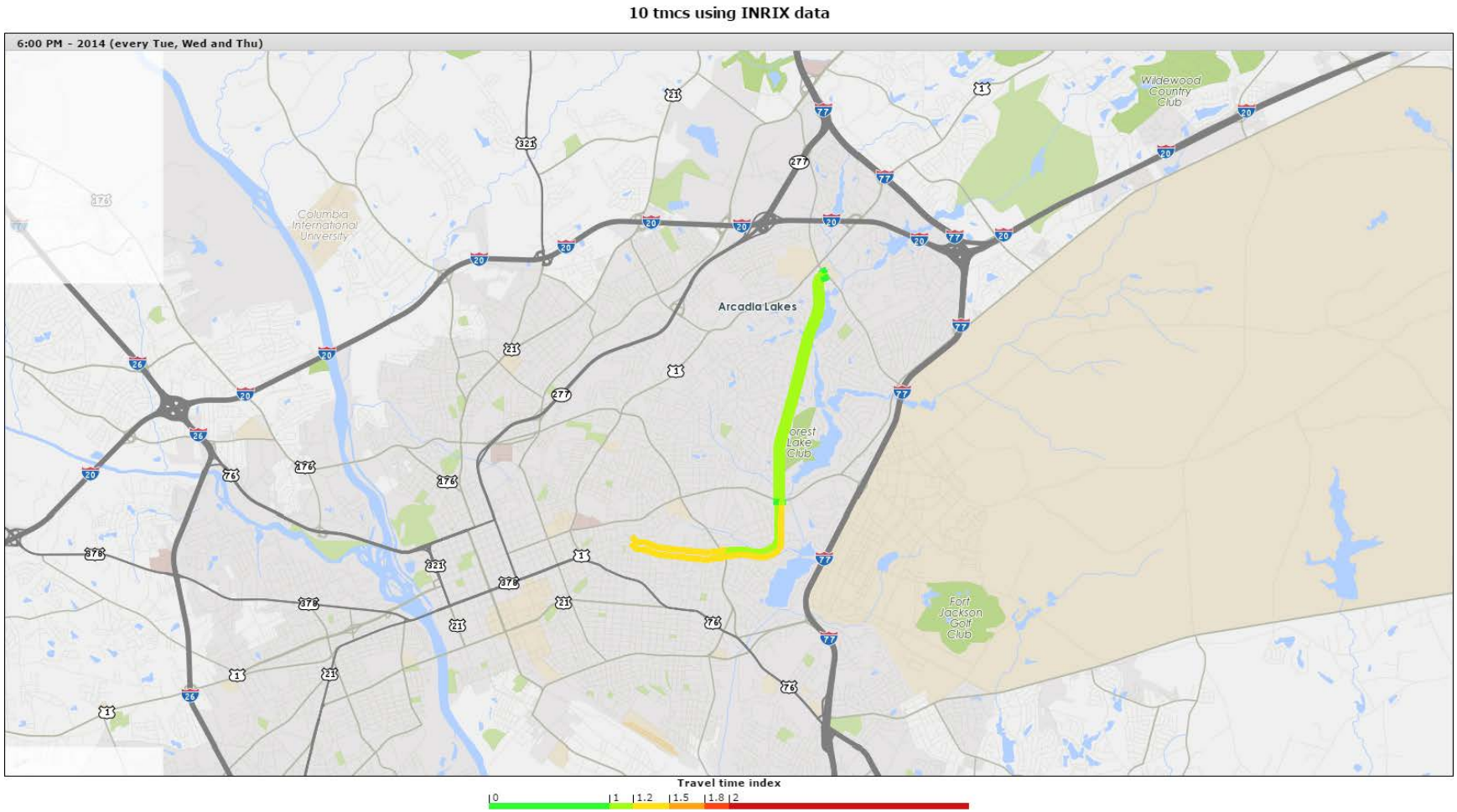


Figure A44.5: PM Peak Travel Time Index



A45. Corridor Name: Decker Boulevard/Parklane Rd

Corridor ID: 1115

Route: S-1036, S-151

Start: Farrow Rd SC 555

End: Percival Rd SC 12

County: Richland

Functional Class:

2040 LRTP Project Ranking: 3 Minor Arterial

Figure A45.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1115	298	S-1036	PARKLANE RD		14,600	14,400	15,000	20,855	5	45	3	21600	0.6	B	0.84	C
1115	308	S-151	DECKER BLVD		29,100	28,500	26,100	21,663	6	45	3	21600	0.8	C	0.67	B
1115	310	S-151	DECKER BLVD		22,400	21,400	21,000	31,600	5	45	3	21600	0.84	C	1.27	E
1115	313	S-1036	PARKLANE RD	25,800	26,600	24,100	24,300	35,629	5	45	3	21600	0.98	C	1.43	F
1115	315	S-151	DECKER BLVD	21,100	29,200	29,700	26,200	43,631	5	45	3	21600	1.06	D	1.76	F

LOS E

LOS F

Figure A45.2: Average Corridor Speed

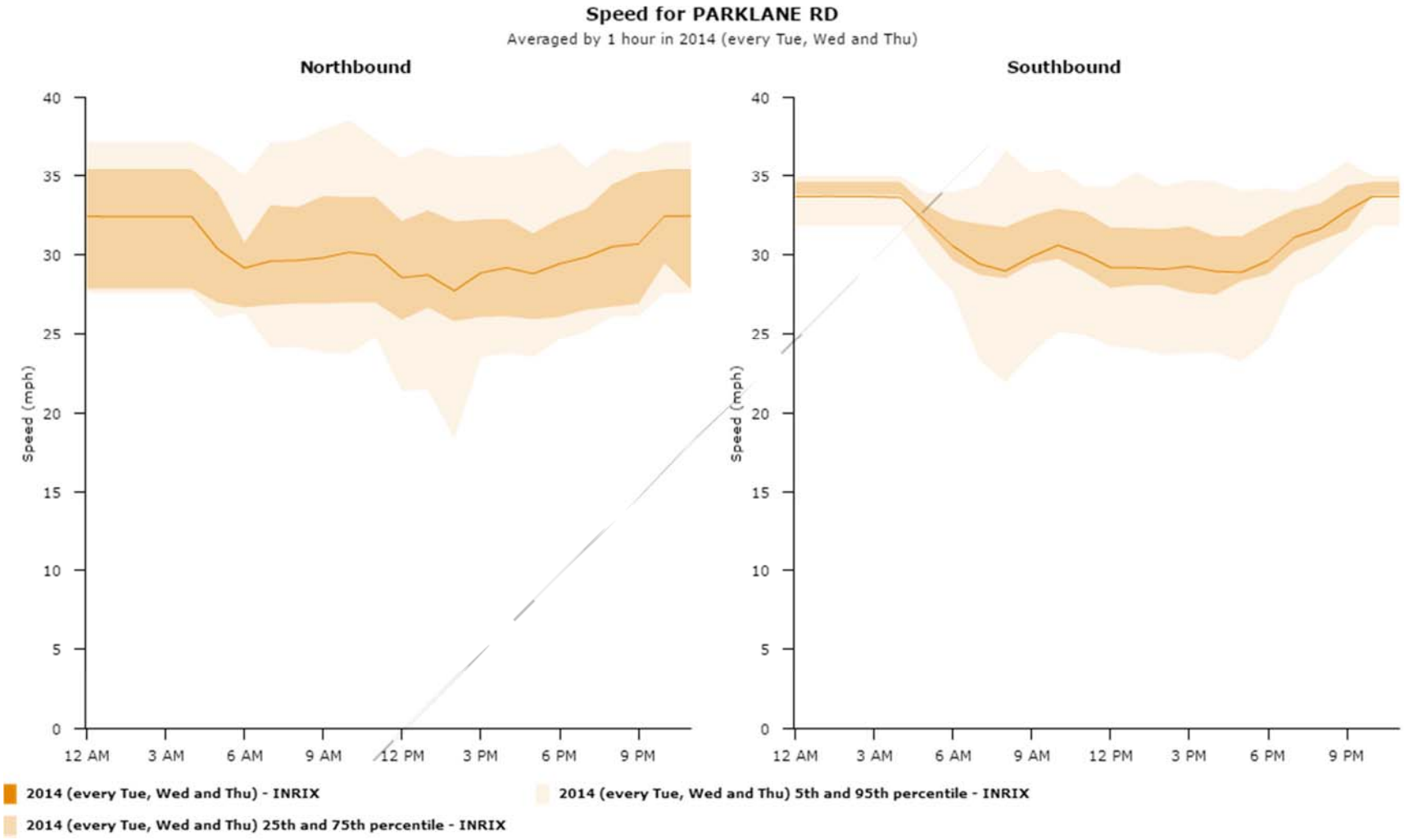


Figure A45.3: Corridor Congestion Index

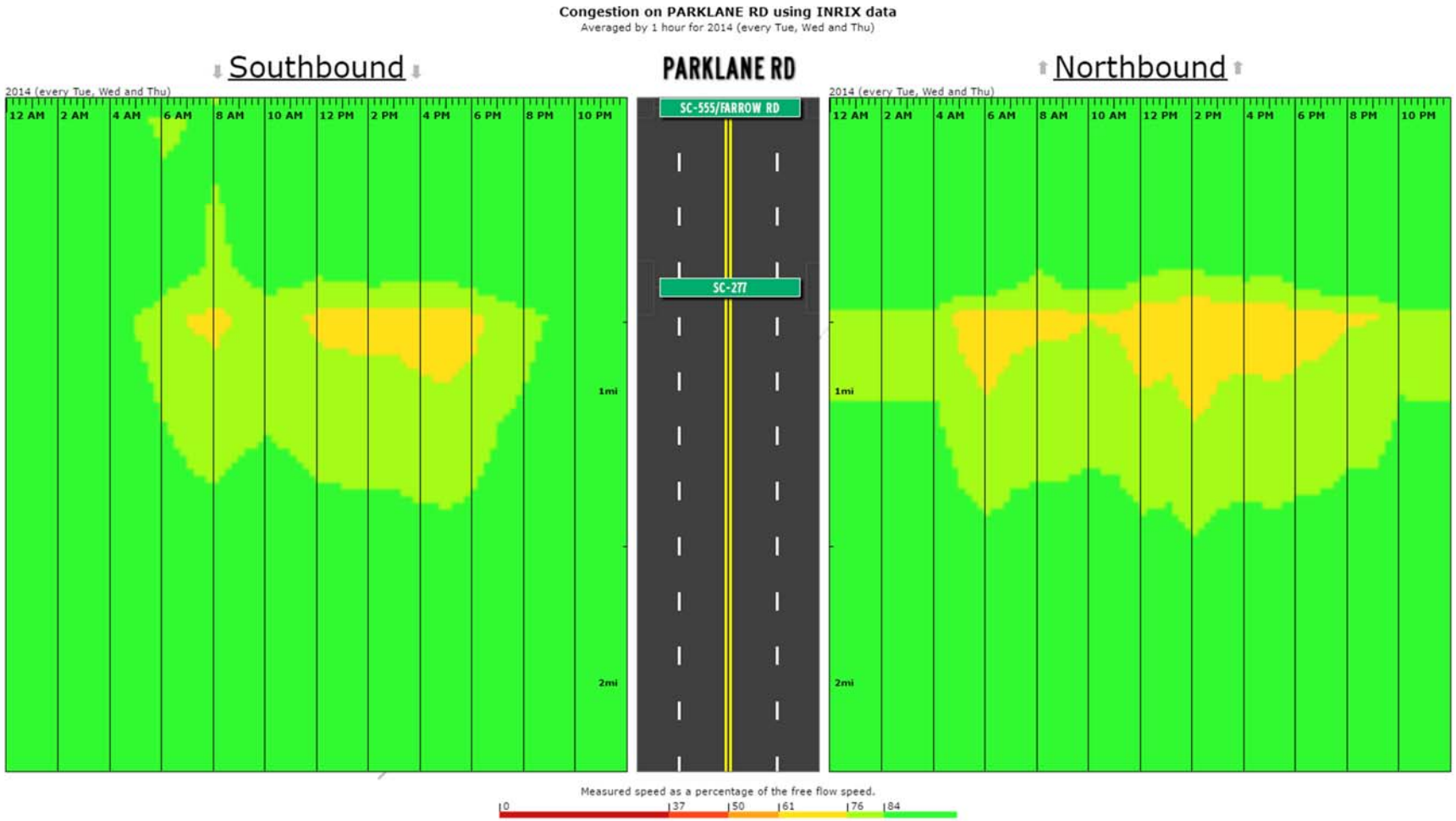


Figure A45.4: AM Peak Travel Time Index

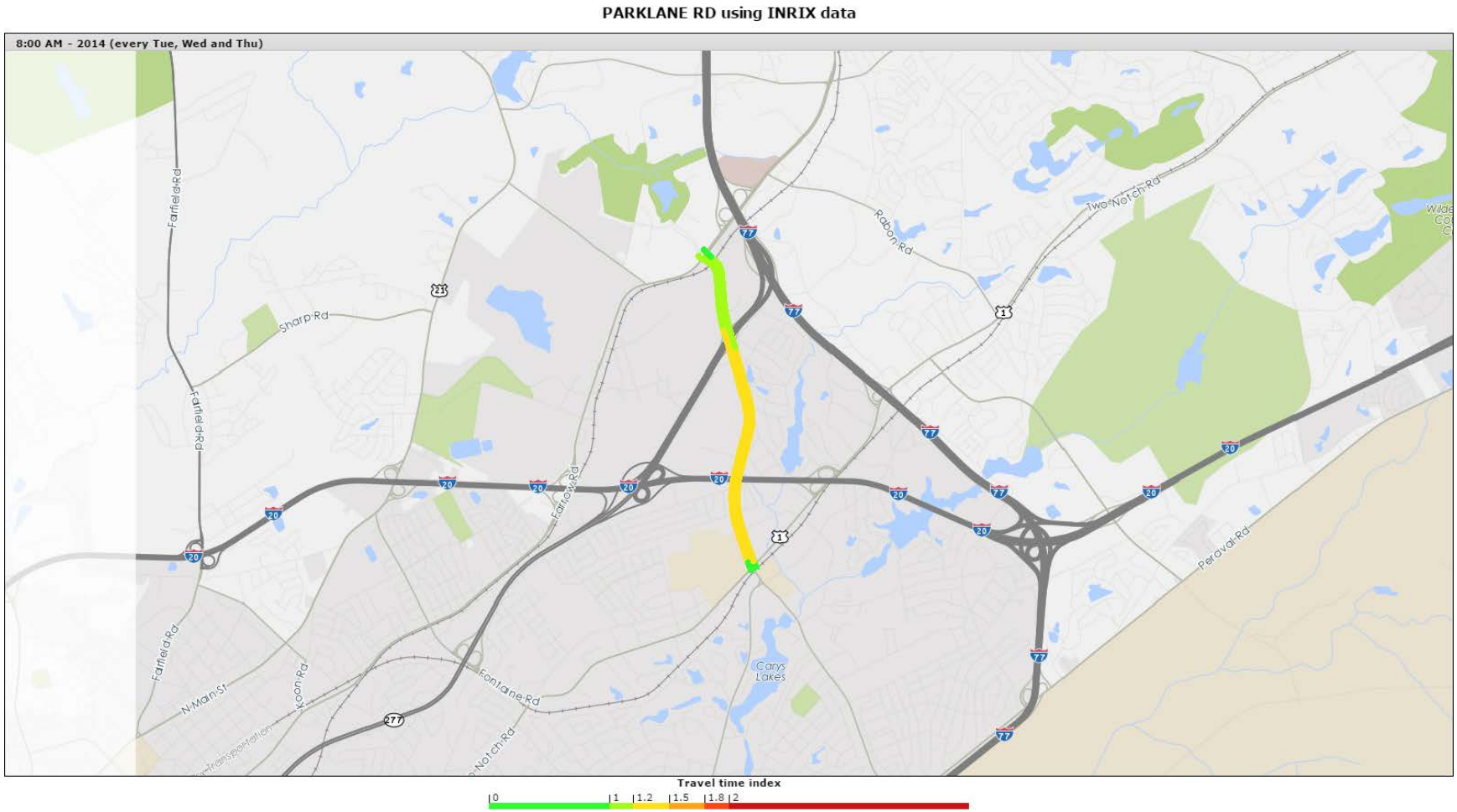
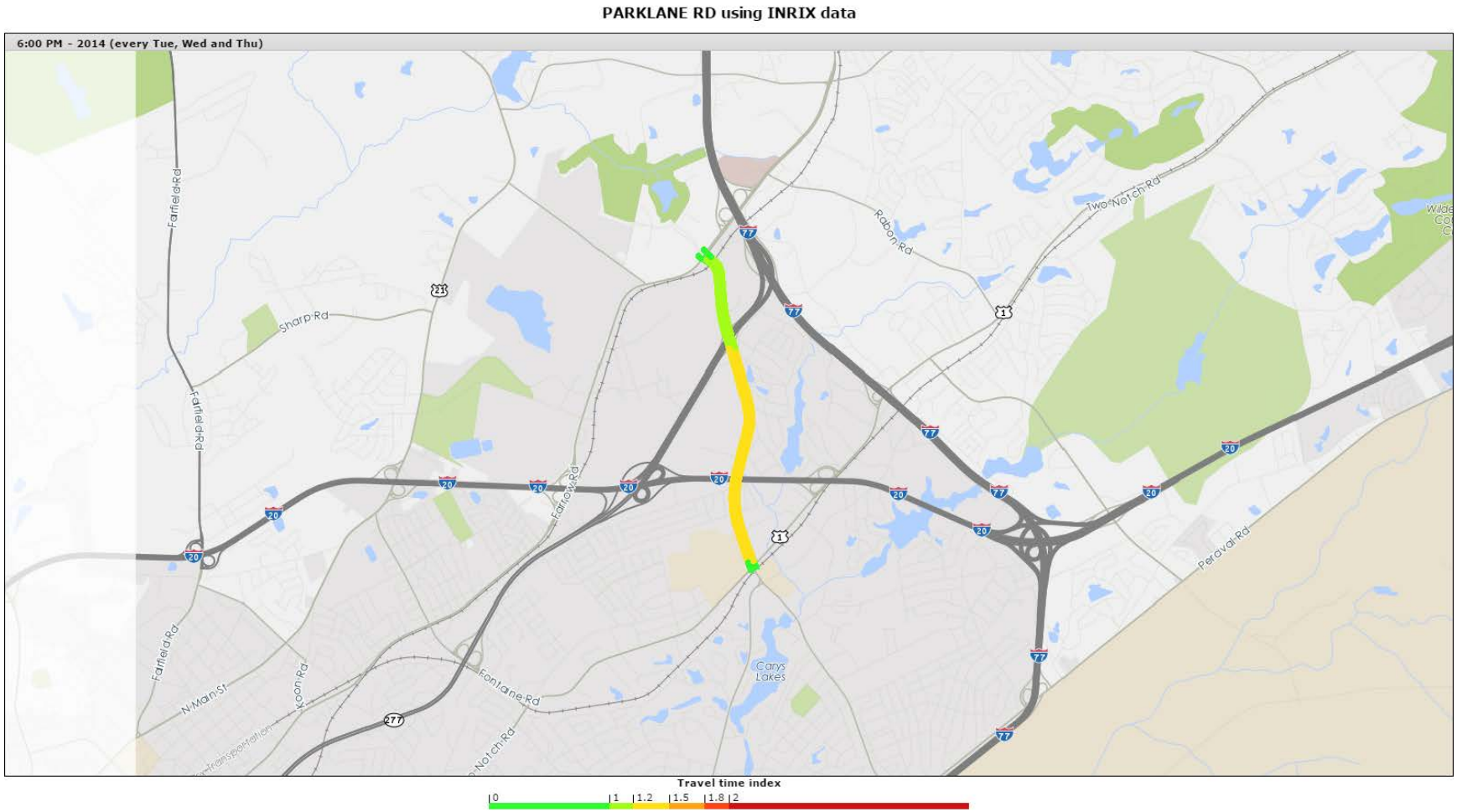


Figure A45.5: PM Peak Travel Time Index



A46. Corridor Name: Alpine Rd

Corridor ID: 1117

Route: S-63

Start: Percival Rd SC 16

End: Two Notch Rd US 1

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A46.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1117	498	S-63	ALPINE RD	9,300	13,100	11,800	13,600	19,272	2	45	3	10800	1.26	E	1.78	F
1117	499	S-63	ALPINE RD	5,300	8,800	8,600	8,100	12,034	2	45	3	10800	0.75	C	1.11	D

LOS E

LOS F

Figure A46.2: Average Corridor Speed

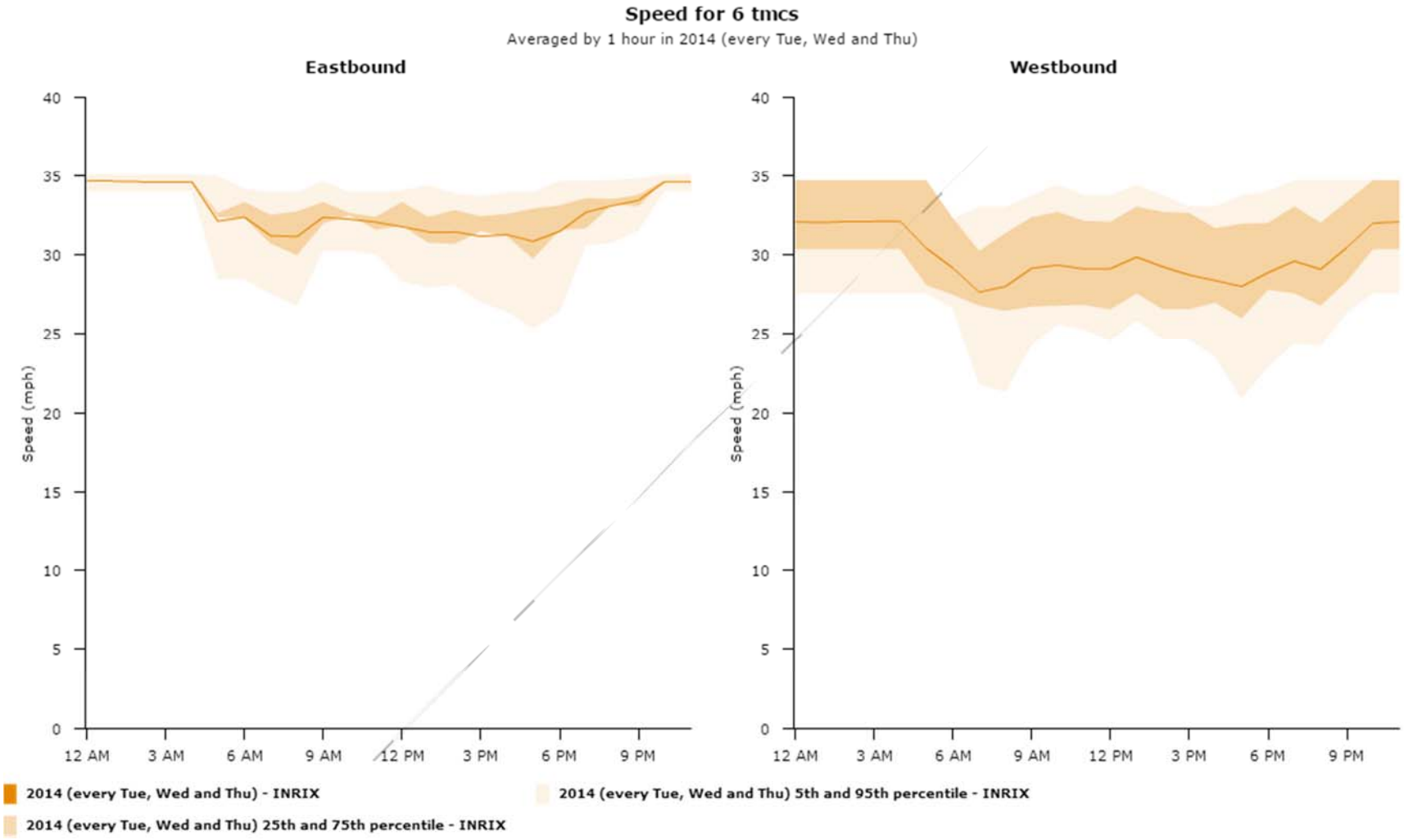


Figure A46.3: Corridor Congestion Index

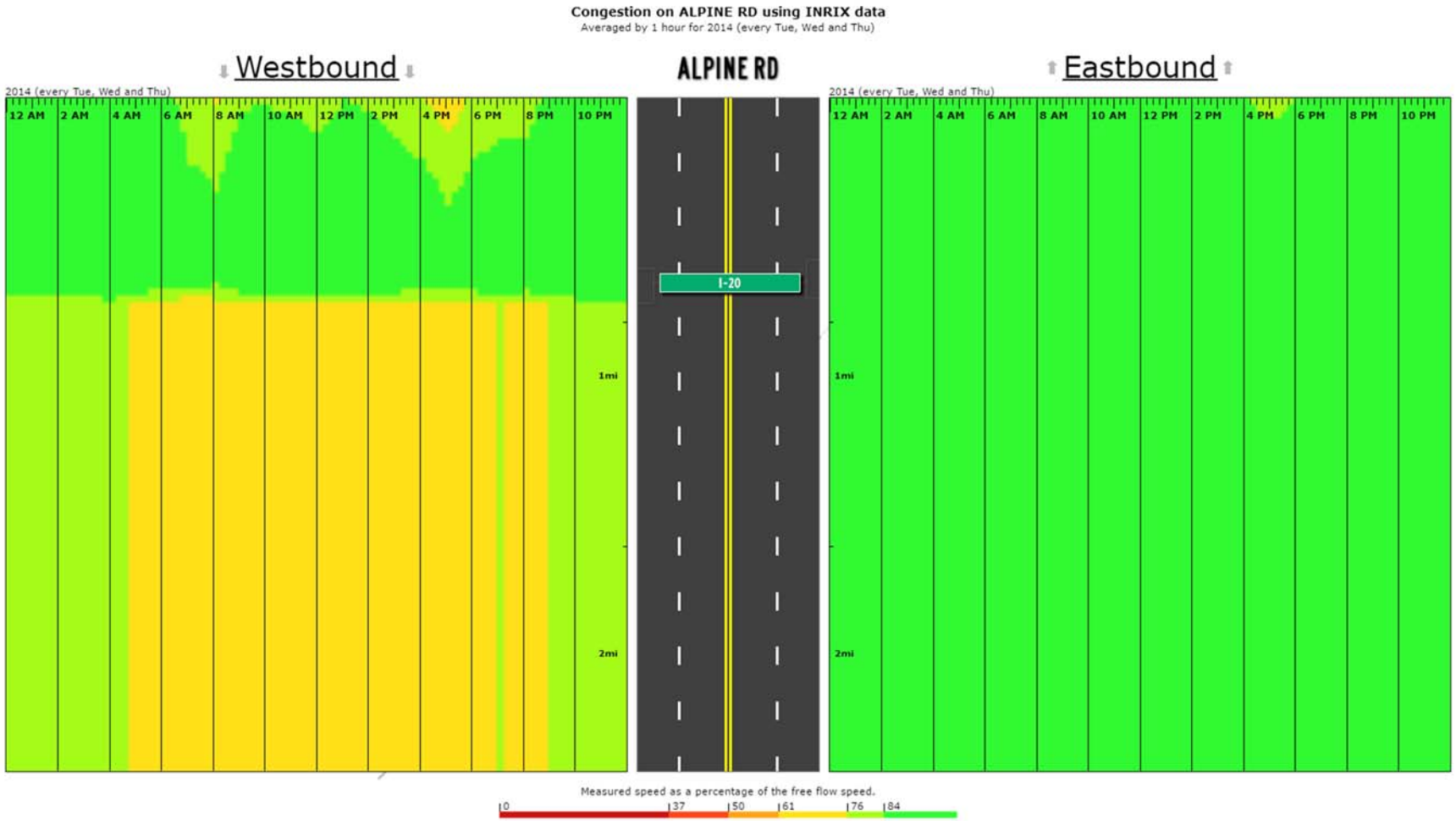


Figure A46.4: AM Peak Travel Time Index

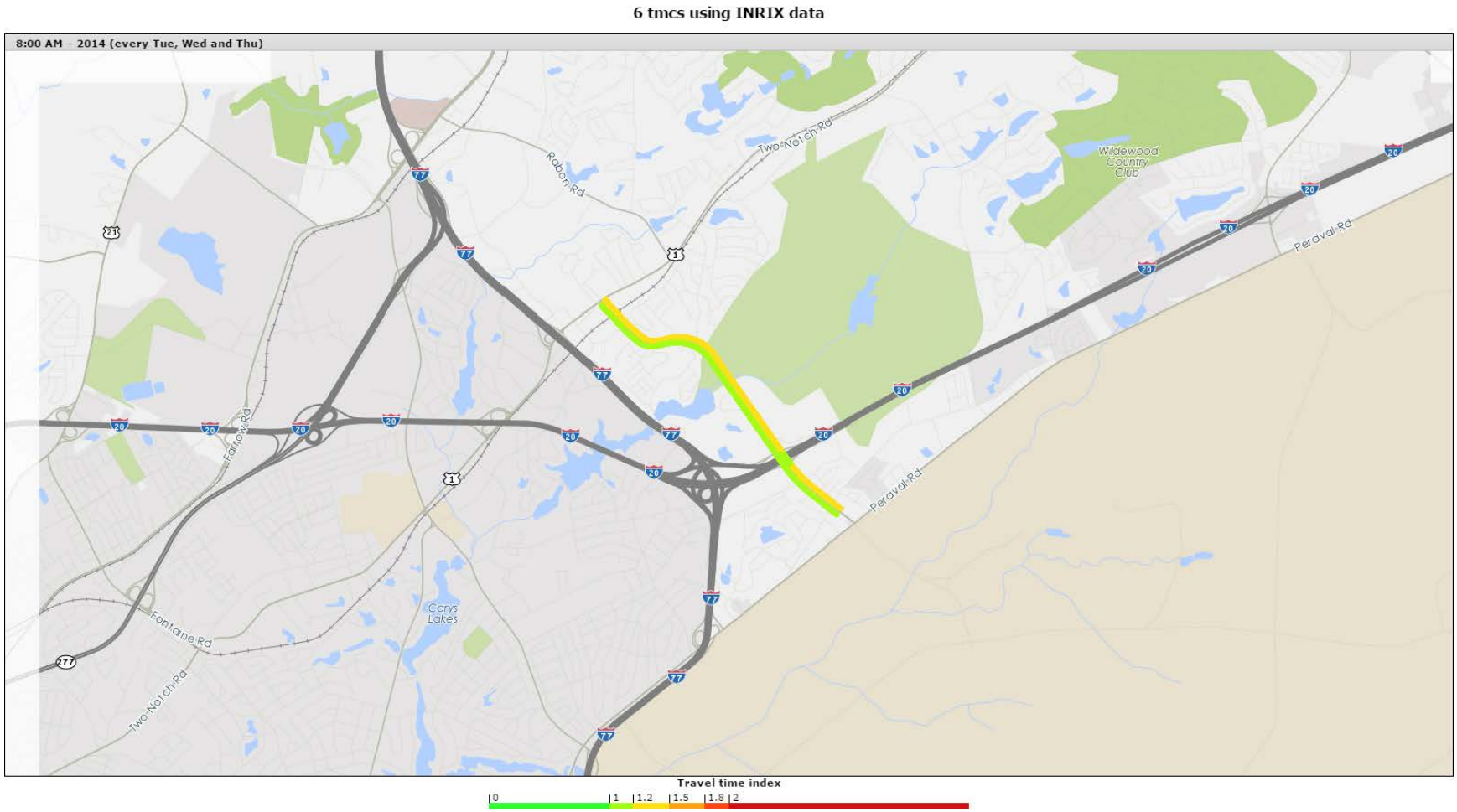
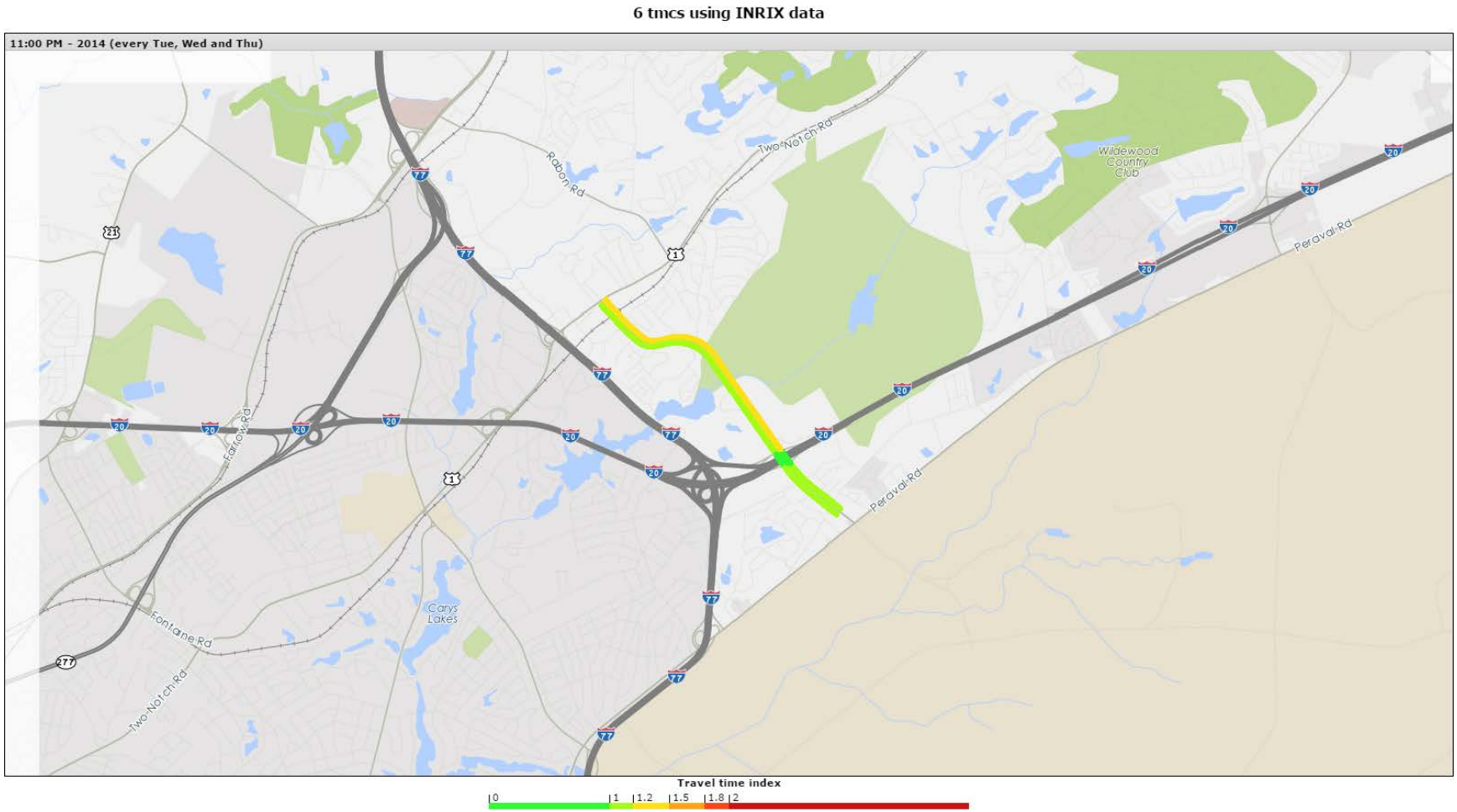


Figure A46.5: PM Peak Travel Time Index



A47. Corridor Name: Spears Creek/Bookman Rd

Corridor ID: 1119

Route: S-53

Start: I-20

End:

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A47.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1119	451	S-53	SPEARS CREEK RD	2,900	6,100	10,300	10,200	19,948	2	45	3	10800	0.94	C	1.84	F
1119	449	S-53	BOOKMAN RD	5,300	7,000	9,500	11,600	16,081	2	45	4	8600	1.07	D	1.48	F

LOS E

LOS F

Figure A47.2: Average Corridor Speed

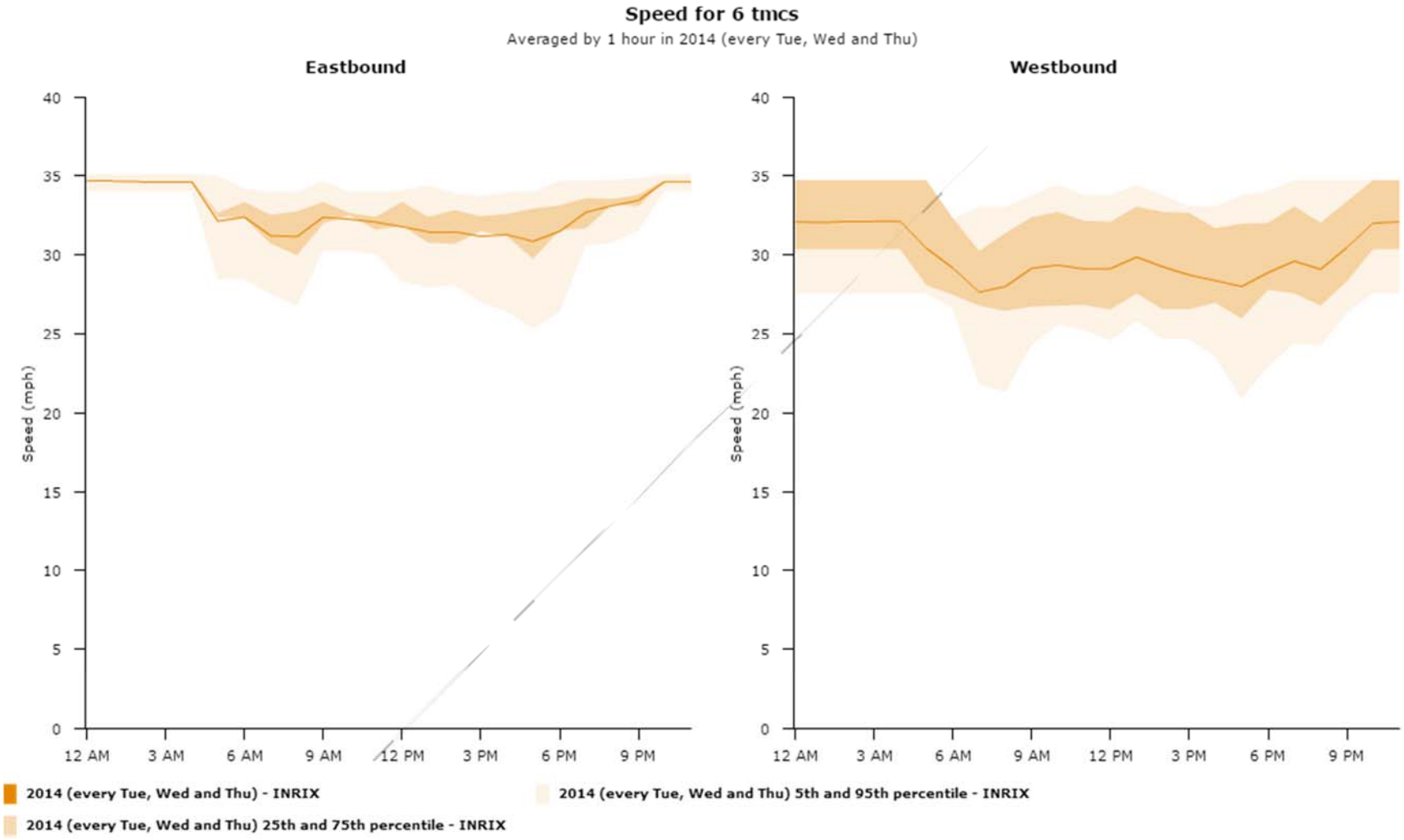


Figure A47.3: Corridor Congestion Index

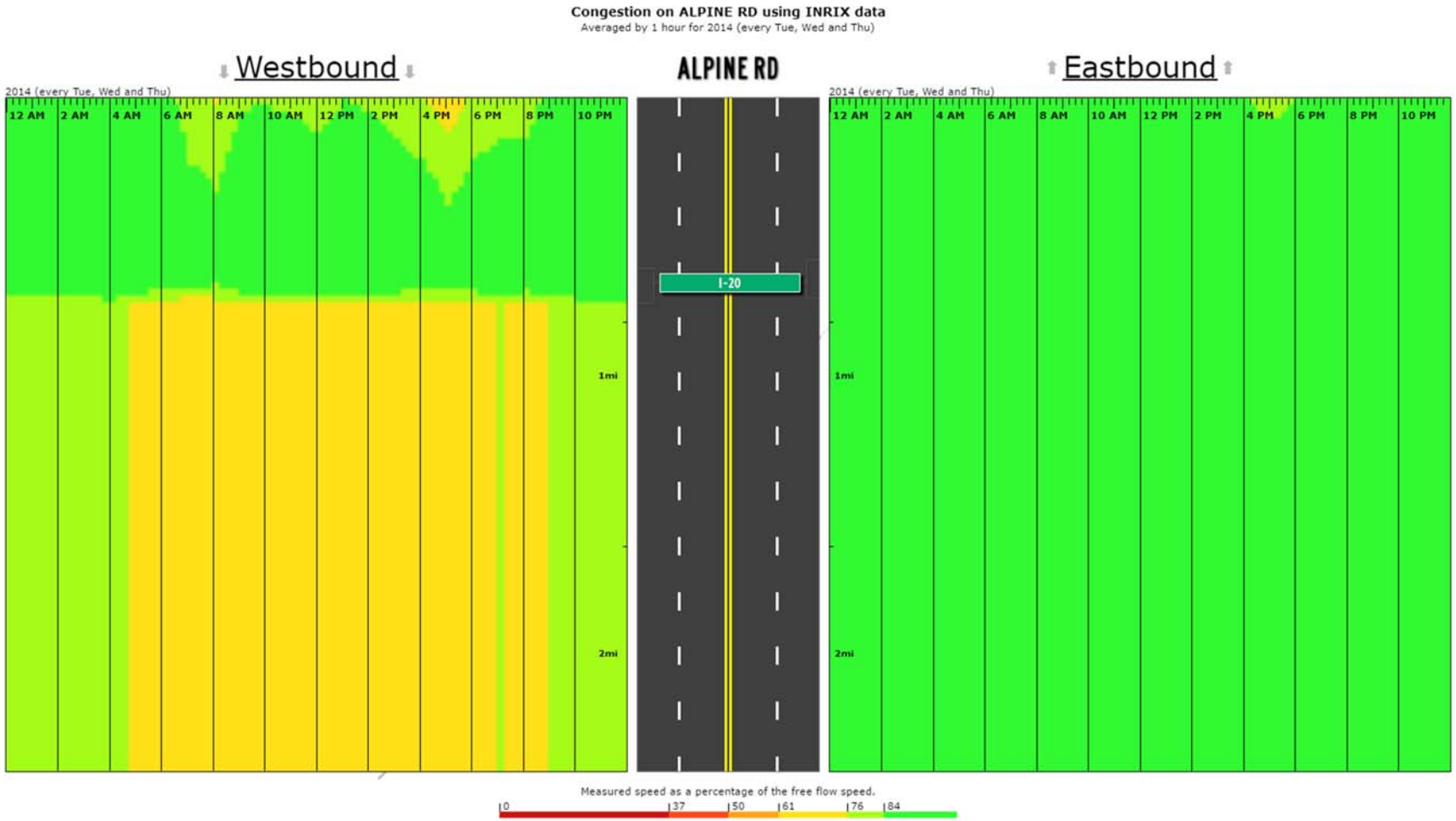


Figure A47.4: AM Peak Travel Time Index

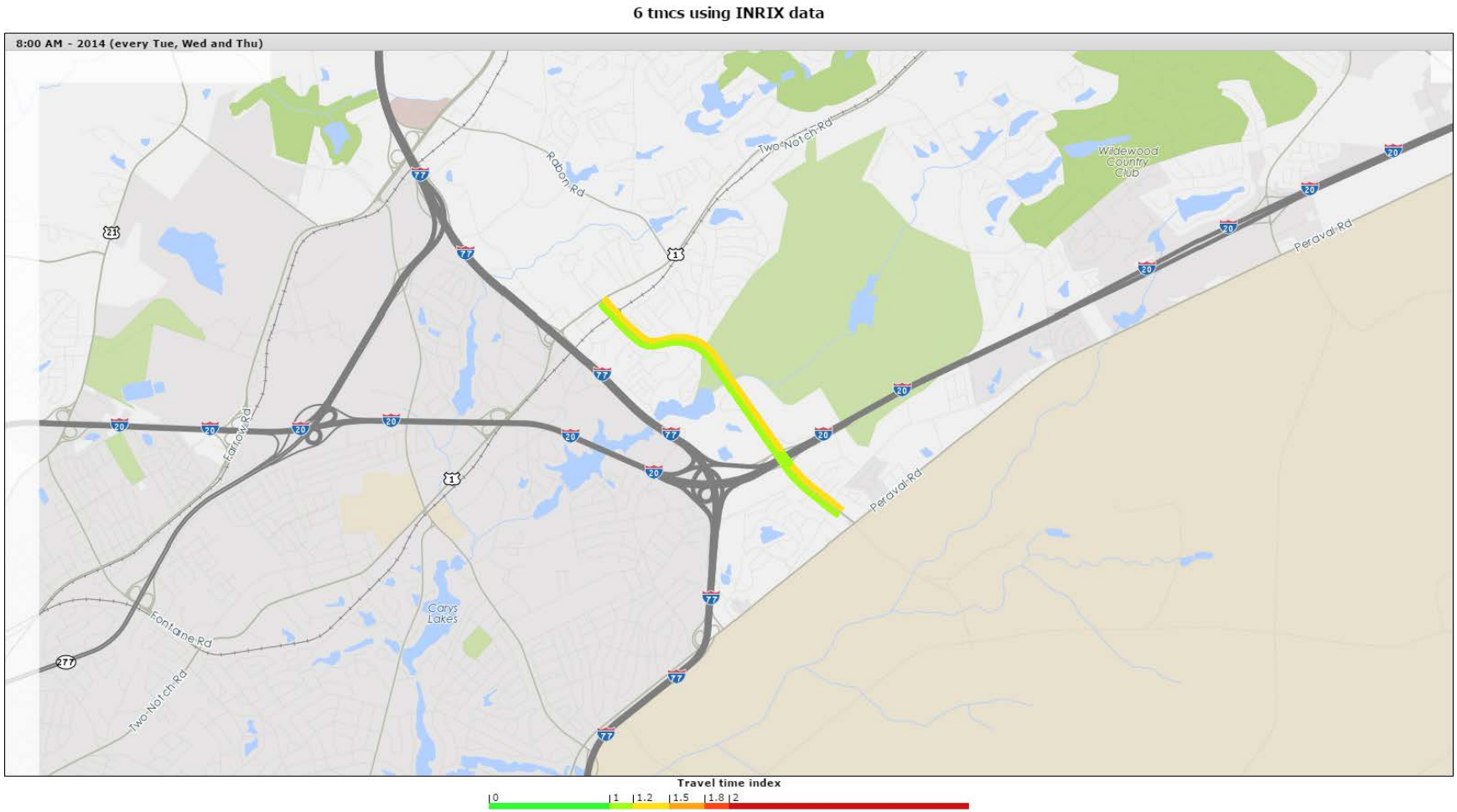
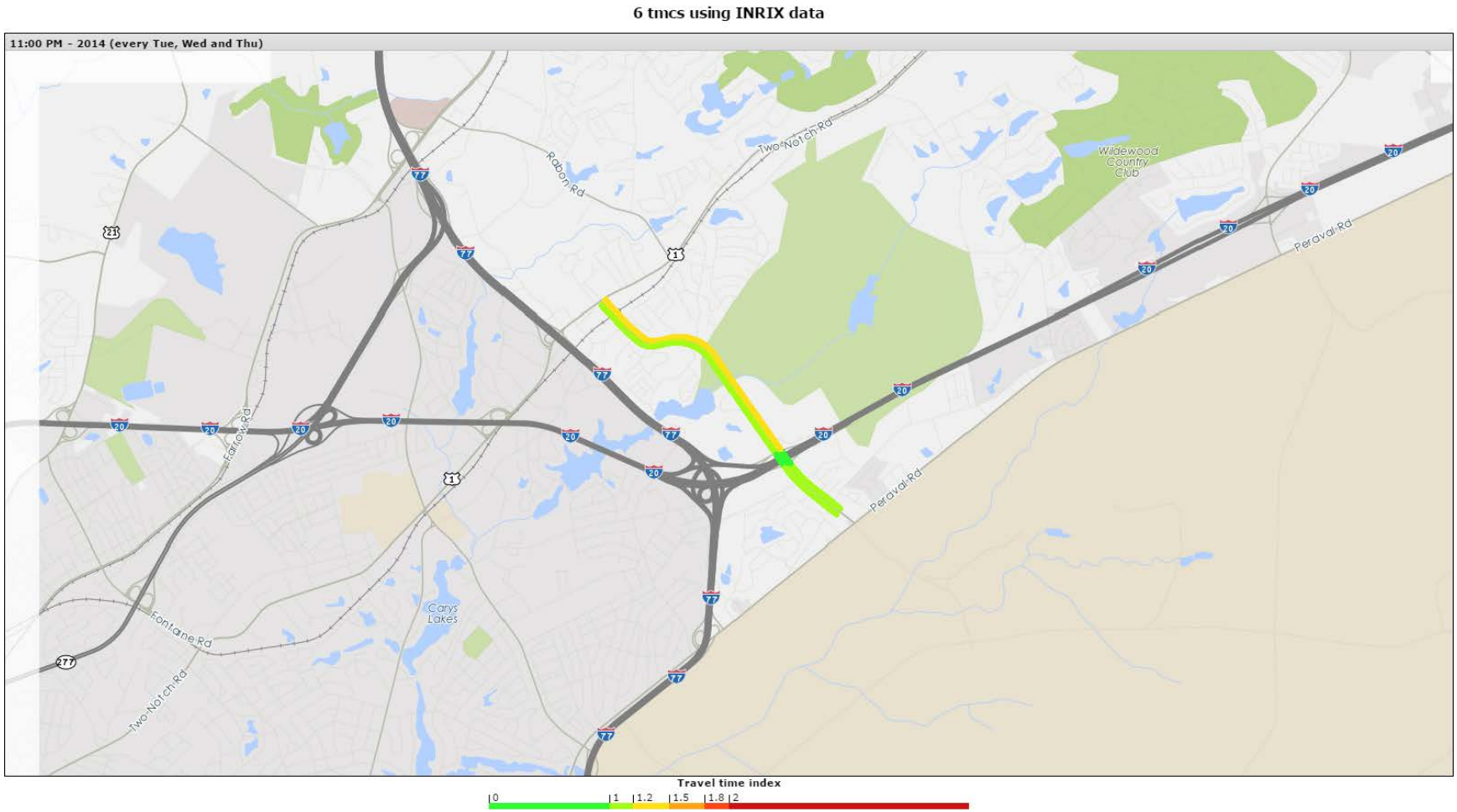


Figure A47.5: PM Peak Travel Time Index



A48. Corridor Name: Farrow Rd

Corridor ID: 1121

Start:

End:

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A48.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1121	277	SC555	FARROW RD	14,300	13,700	12,100	13,000	12,211	5	35	3	21600	0.52	B	0.49	A
1121	279	SC555	FARROW RD	10,700	13,000	12,200	13,900	17,732	5	45	3	21600	0.56	B	0.72	B
1121	280	SC555	FARROW RD	8,500	15,500	15,200	15,900	23,819	2	45	3	10800	1.47	F	2.21	F
1121	281	SC555	FARROW RD	9,000	26,900	29,900	24,600	56,277	5	45	3	21600	0.99	C	2.27	F
1121	282	SC555	FARROW RD	9,000	23,300	25,100	21,900	46,877	5	45	3	21600	0.88	C	1.89	F
1121	284	SC555	FARROW RD	3,300	8,300	9,600	10,100	18,385	2	45	3	10800	0.94	C	1.7	F
1121	285	SC555	FARROW RD	3,300	5,000	7,700	8,500	12,639	2	45	4	8600	0.99	C	1.46	F

LOS E

LOS F

Figure A48.2: Average Corridor Speed

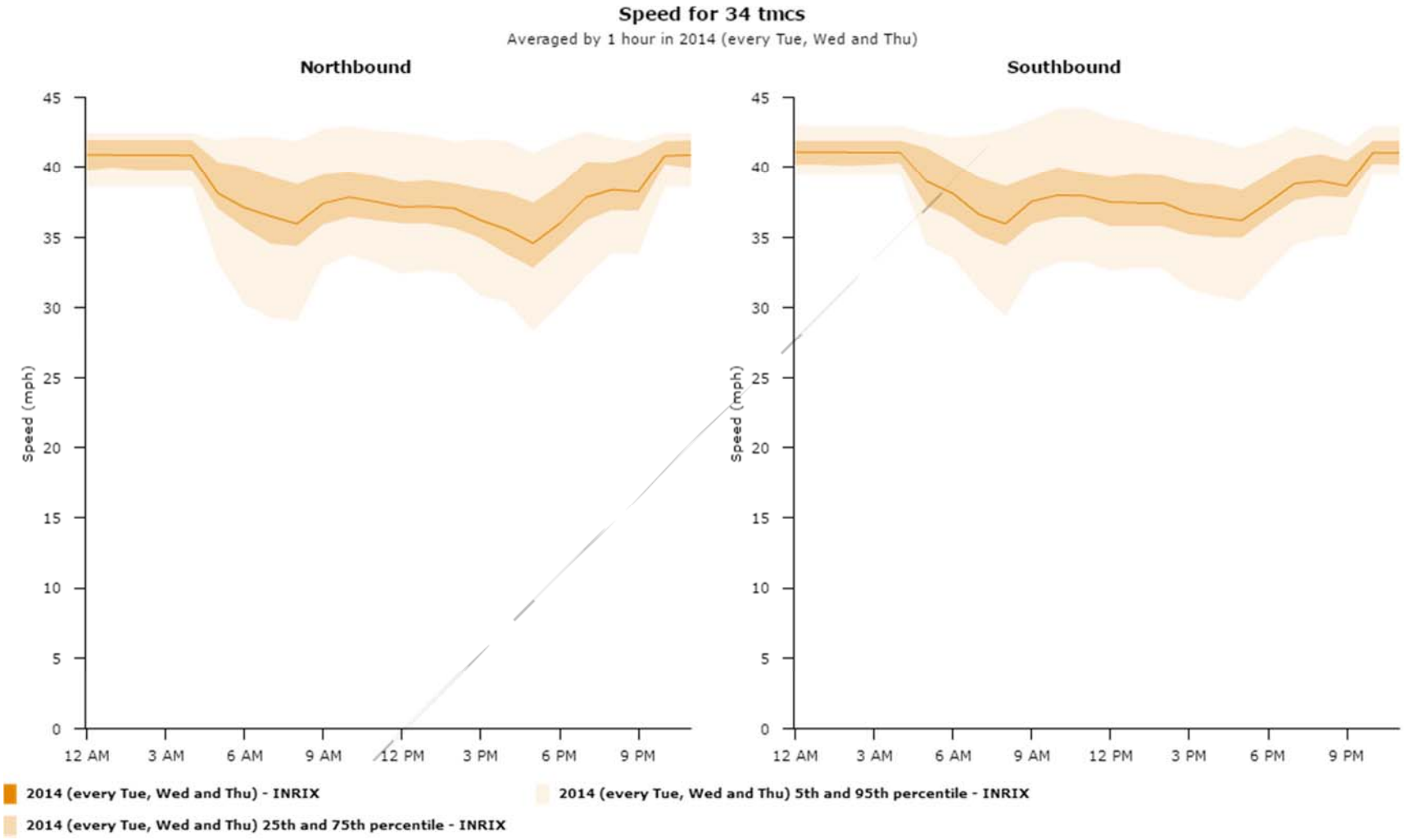


Figure A48.3: Corridor Congestion Index

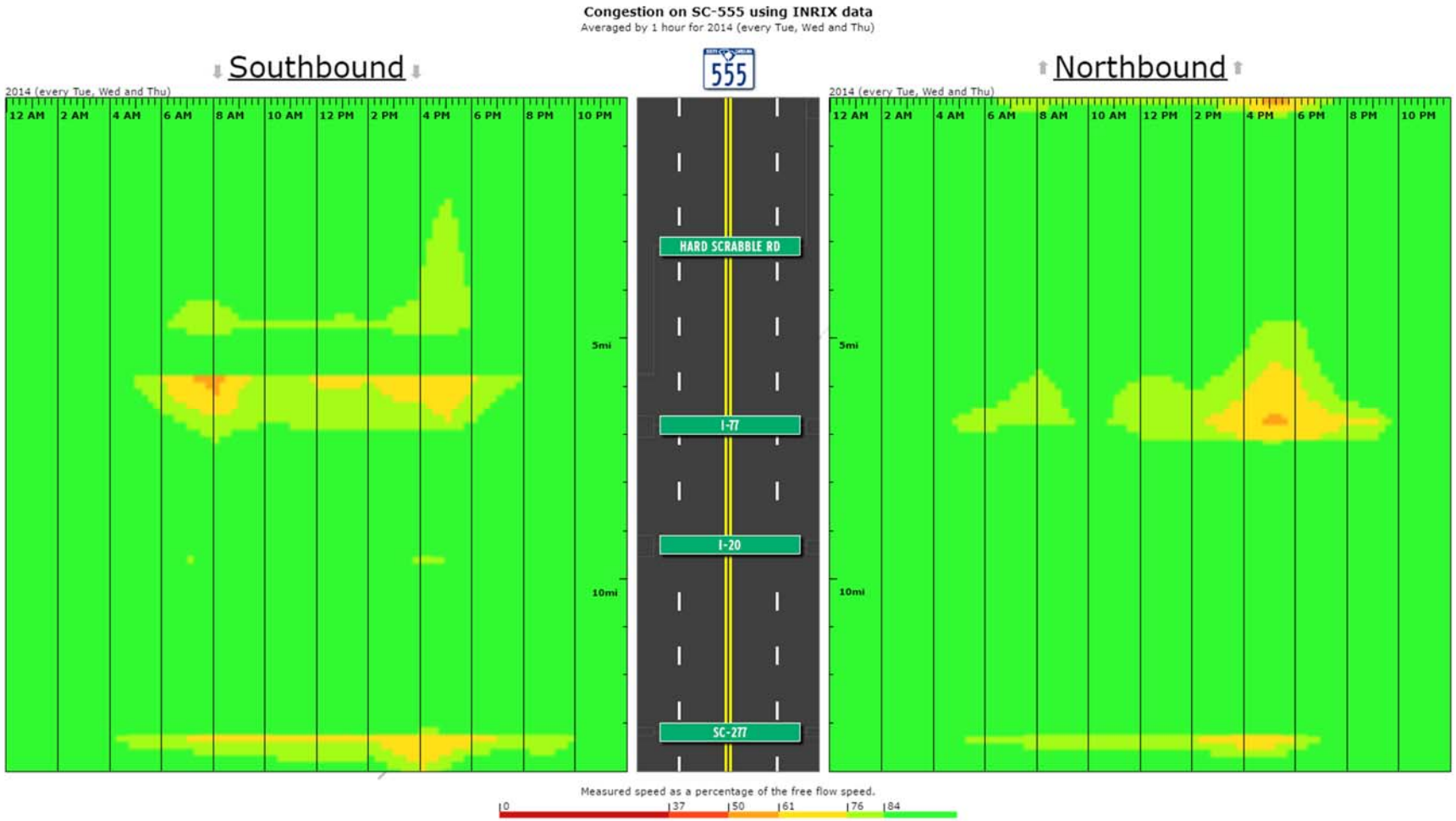


Figure A48.4: AM Peak Travel Time Index

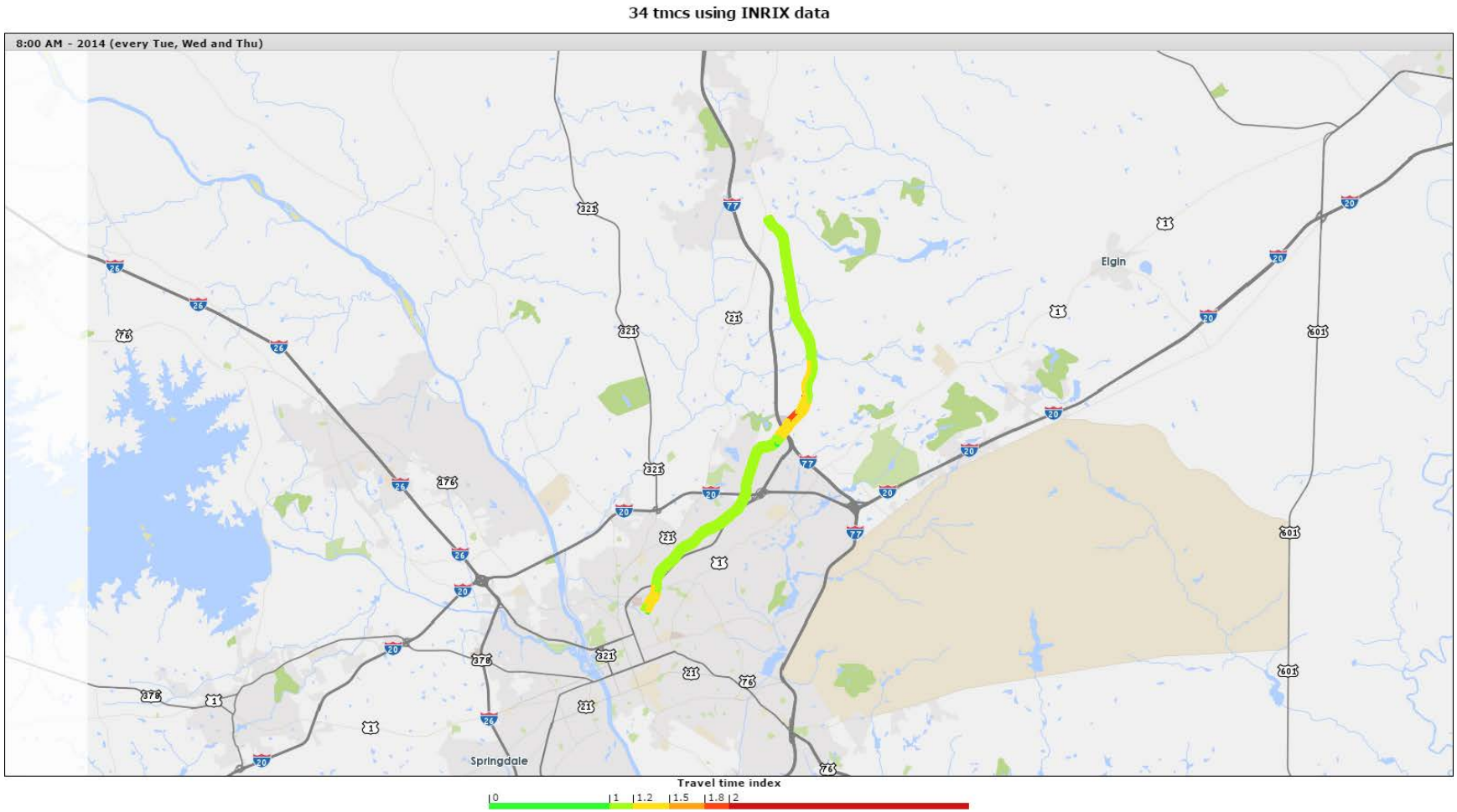
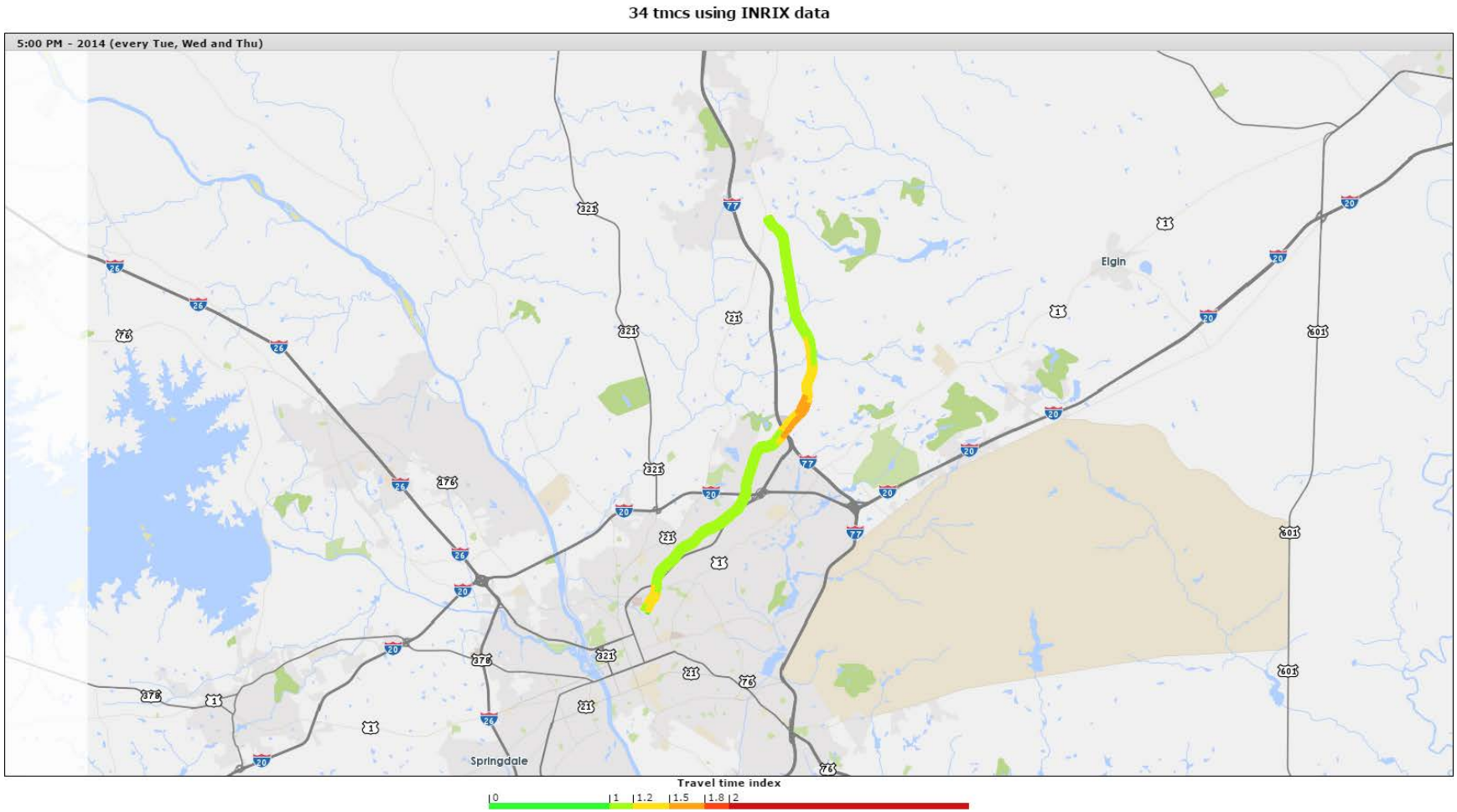


Figure A48.5: PM Peak Travel Time Index



A49. Corridor Name: US 321 Fairfield Rd

Corridor ID: 1123

Route: US 321

Start: US 21 N Main St

End:

County: Richland

Functional Class: 2 Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A49.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1123	186	US321	FAIRFIELD RD	18,800	11,100	8,300	8,300	6,645	5	35	2	29200	0.25	A	0.2	A
1123	187	US321	FAIRFIELD RD	13,500	10,700	8,500	7,800	7,690	5	35	2	29200	0.23	A	0.23	A
1123	188	US321	FAIRFIELD RD	14,900	13,600	13,000	13,100	17,692	5	45	3	21600	0.52	B	0.71	B
1123	189	US321	FAIRFIELD RD	6,400	7,500	6,200	6,400	7,501	2	55	3	10800	0.44	A	0.51	B
1123	191	US321	WINNSBORO RD	3,500	4,100	3,300	3,200	2,956	2	55	3	10800	0.3	A	0.27	A

LOS E

LOS F

Figure A49.2: Average Corridor Speed

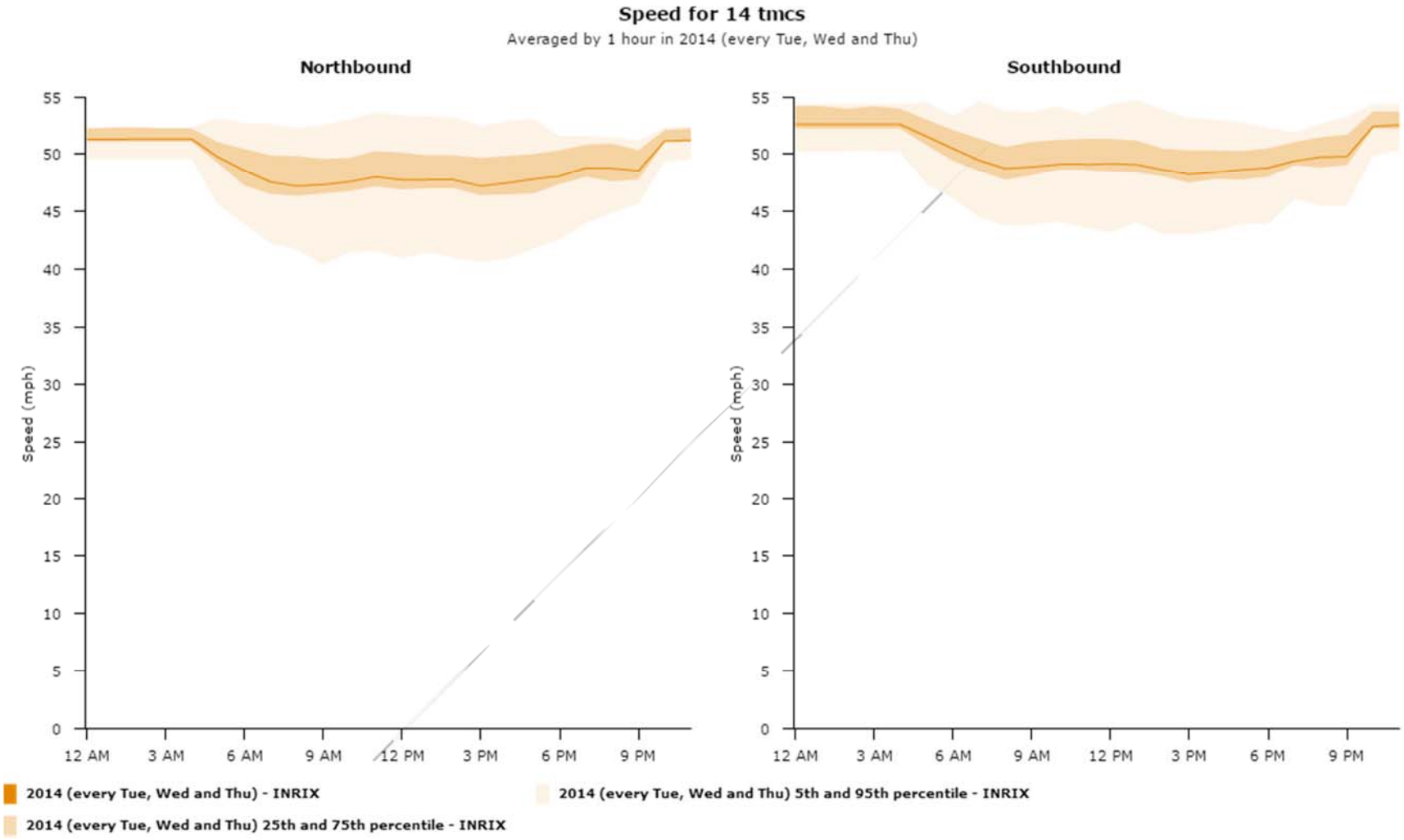


Figure A49.3: Corridor Congestion Index

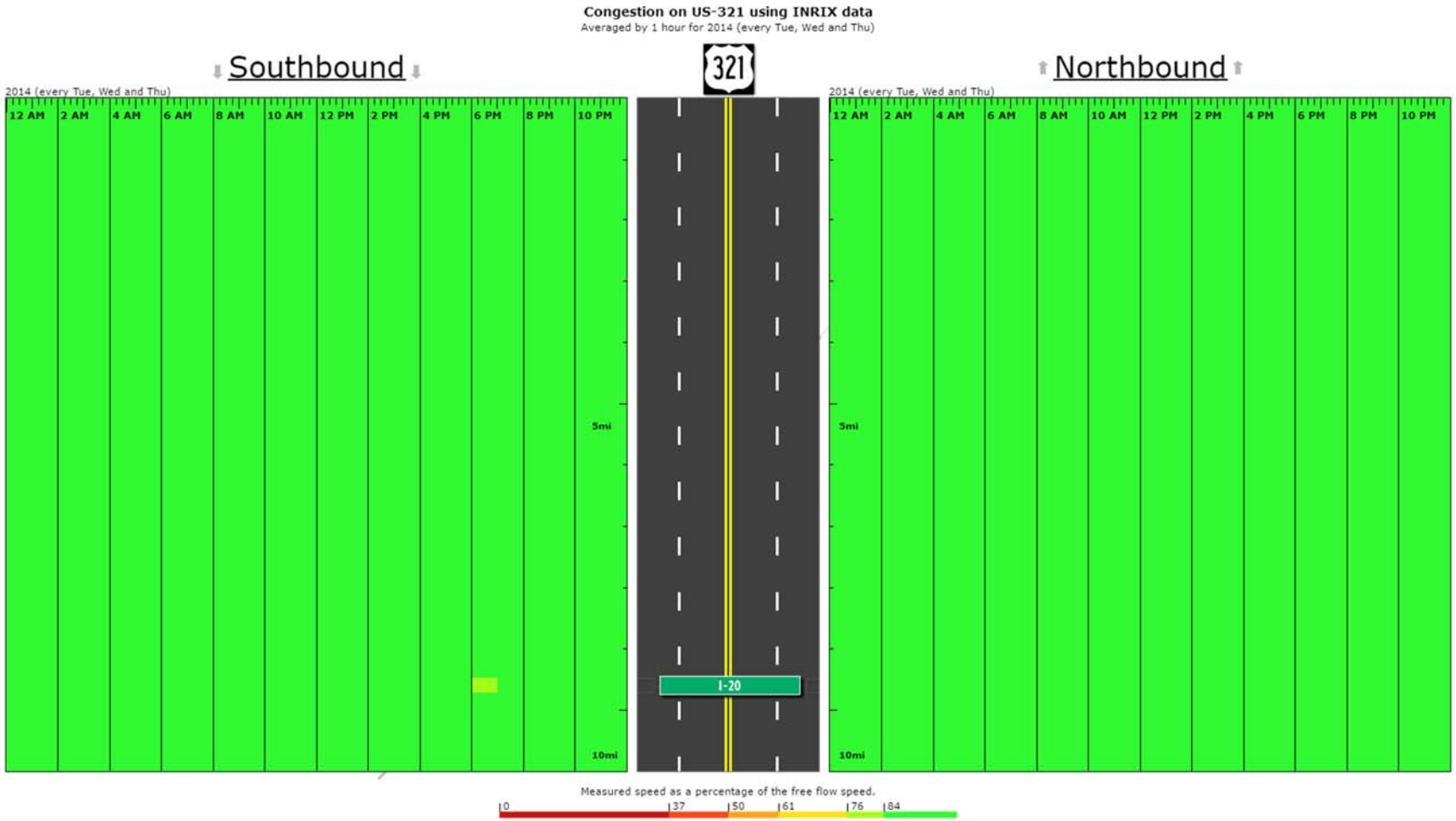


Figure A49.4: AM Peak Travel Time Index

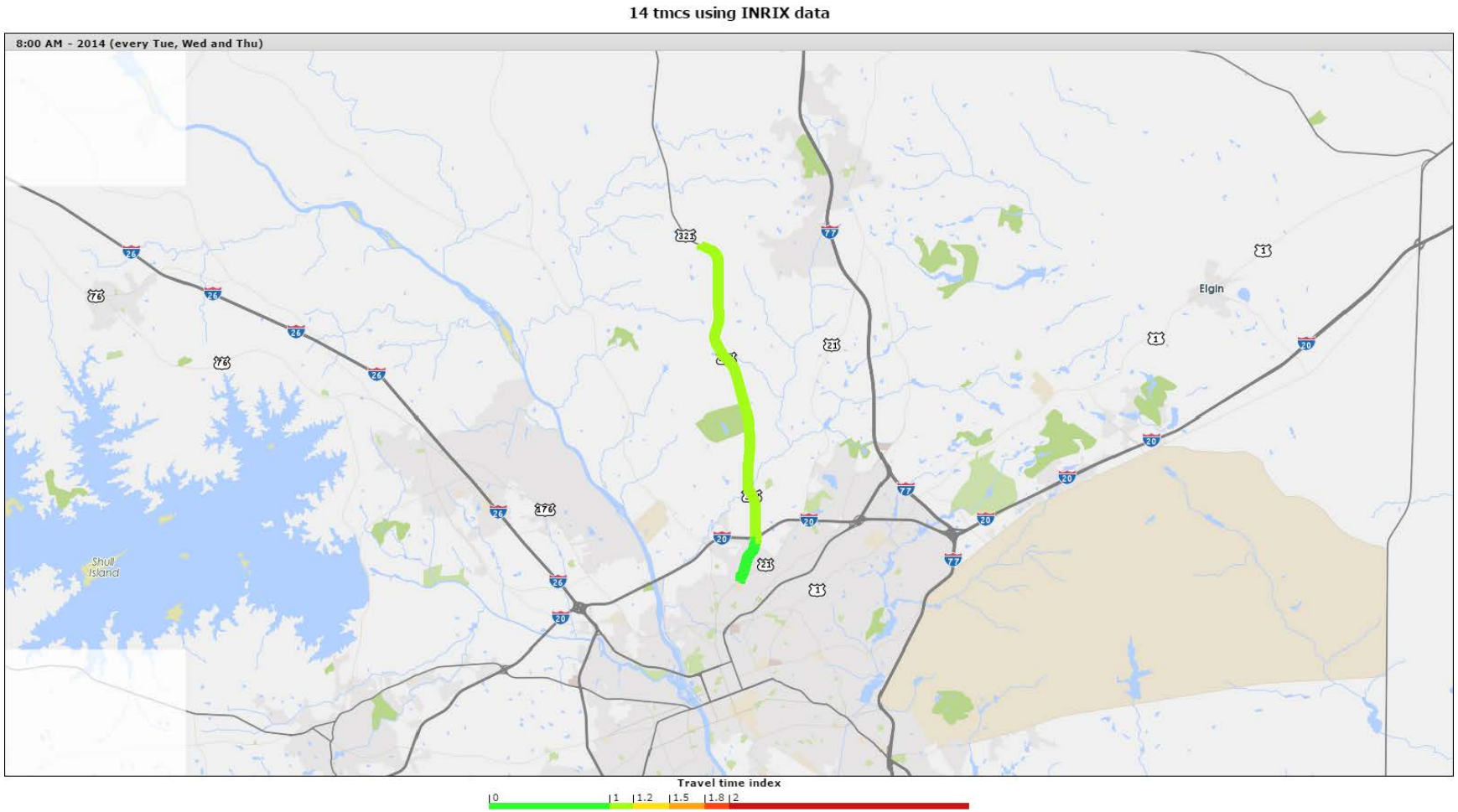
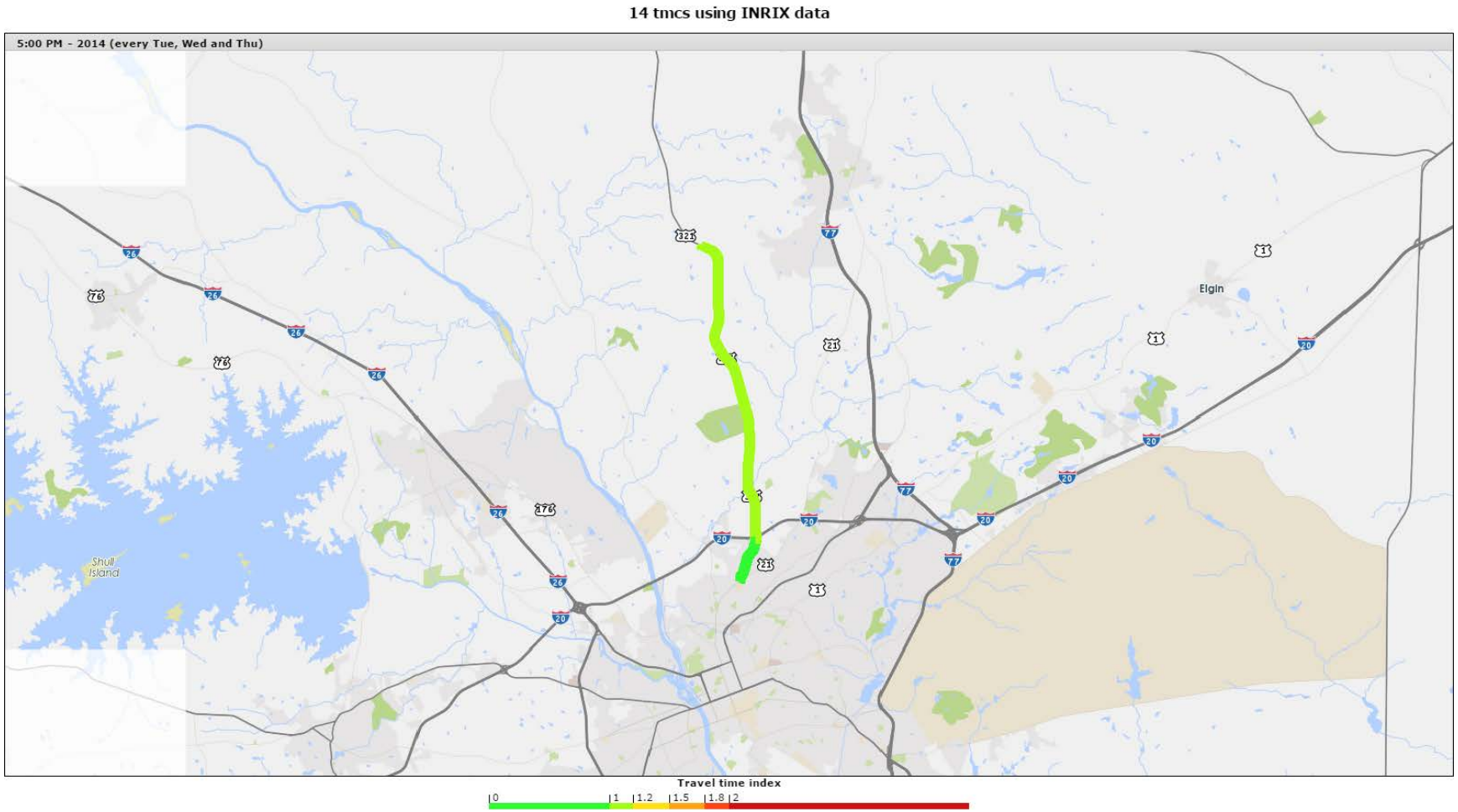


Figure A49.5: PM Peak Travel Time Index



A50. Corridor Name: Blythewood Road

Corridor ID: 1125

Route: S-59/S-2200

Start: Main St US 21

End: Winnsboro Rd US 321

County: Richland

Functional Class: 4 Major Collector

2040 LRTP Project Ranking: 19

Figure A50.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1125	490	S-59	BLYTHEWOOD RD		5,800	6,600	7,500	11,851	2	35	4	8600	0.87	C	1.38	F
1125	494	S-59	BLYTHEWOOD RD		8,000	10,600	11,000	17,282	3	35	4	8600	1.28	E	2.01	F
1125	799	S-2200	BLYTHEWOOD RD	1,250	2,400	2,700	2,300	4,966	2	45	4	8600	0.27	A	0.57	B

LOS E

LOS F

Figure A50.2: Average Corridor Speed

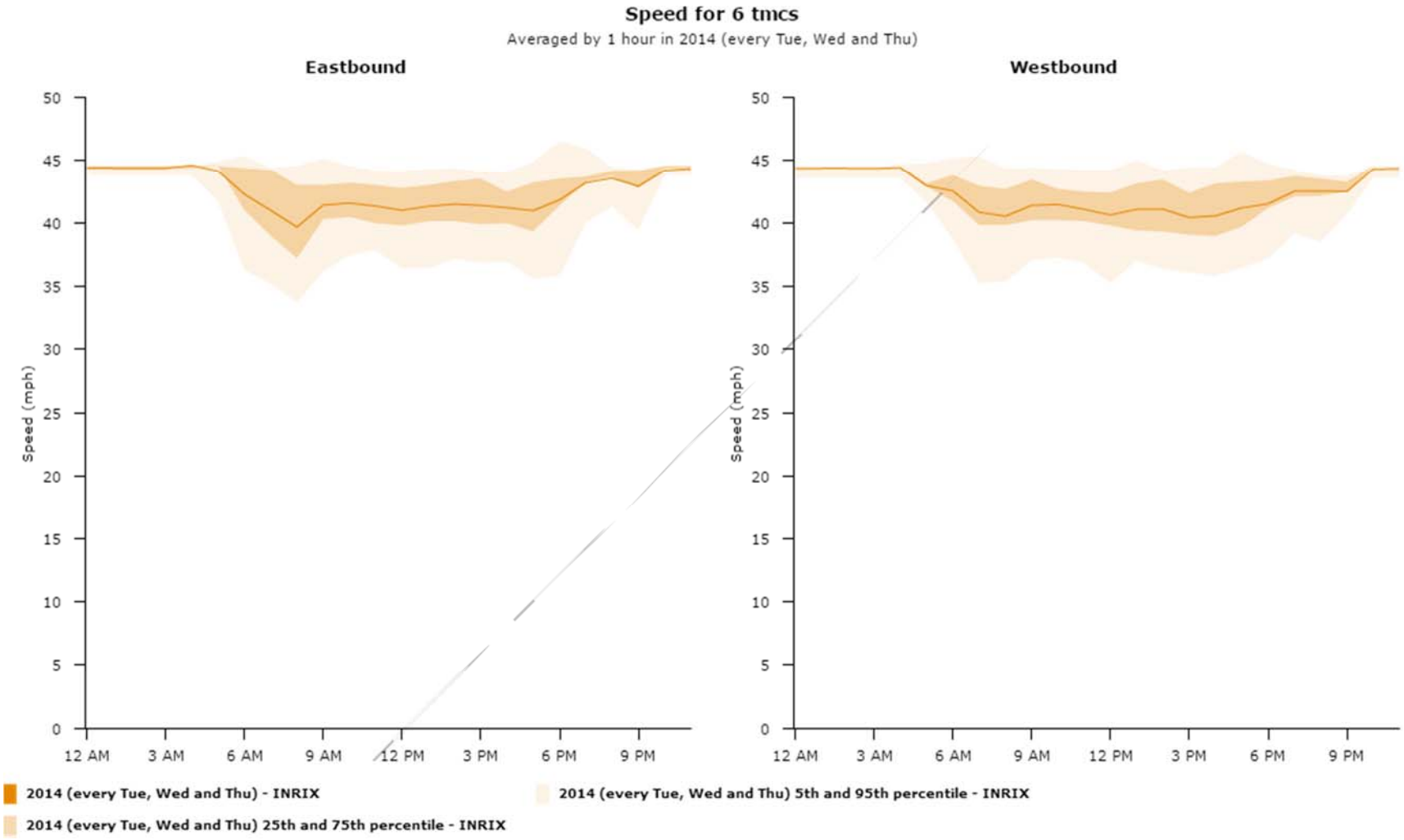


Figure A50.3: Corridor Congestion Index

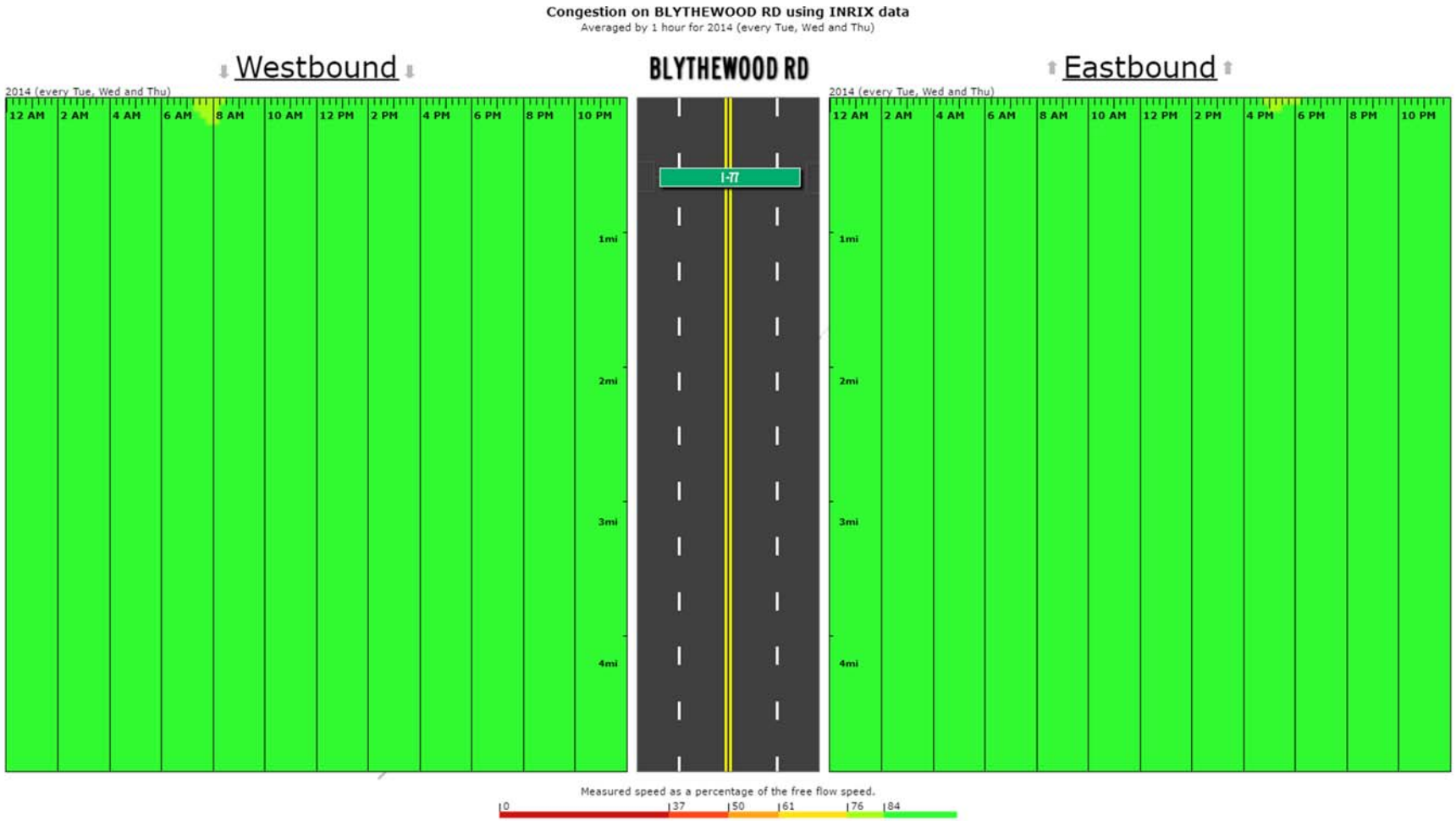


Figure A50.4: AM Peak Travel Time Index

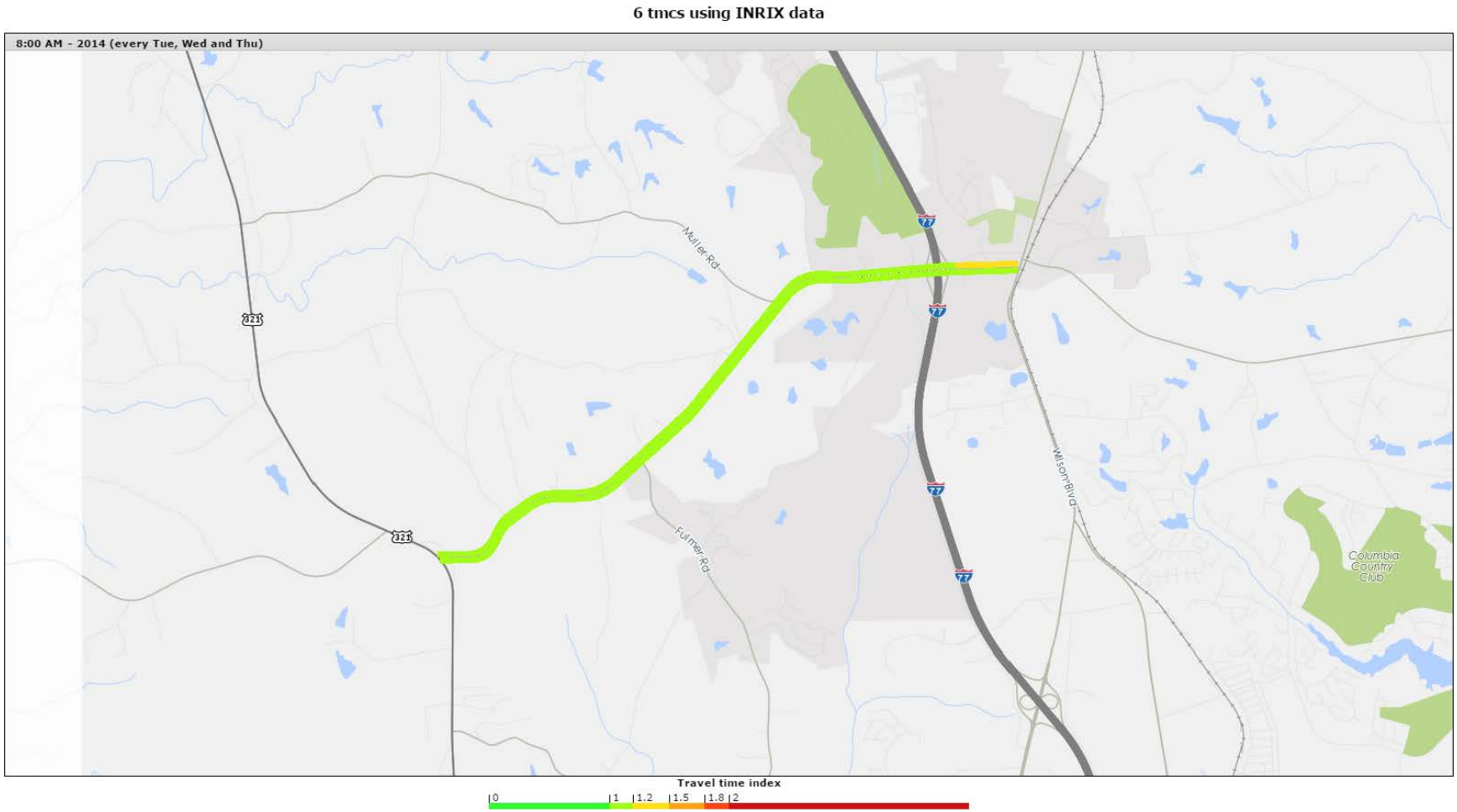
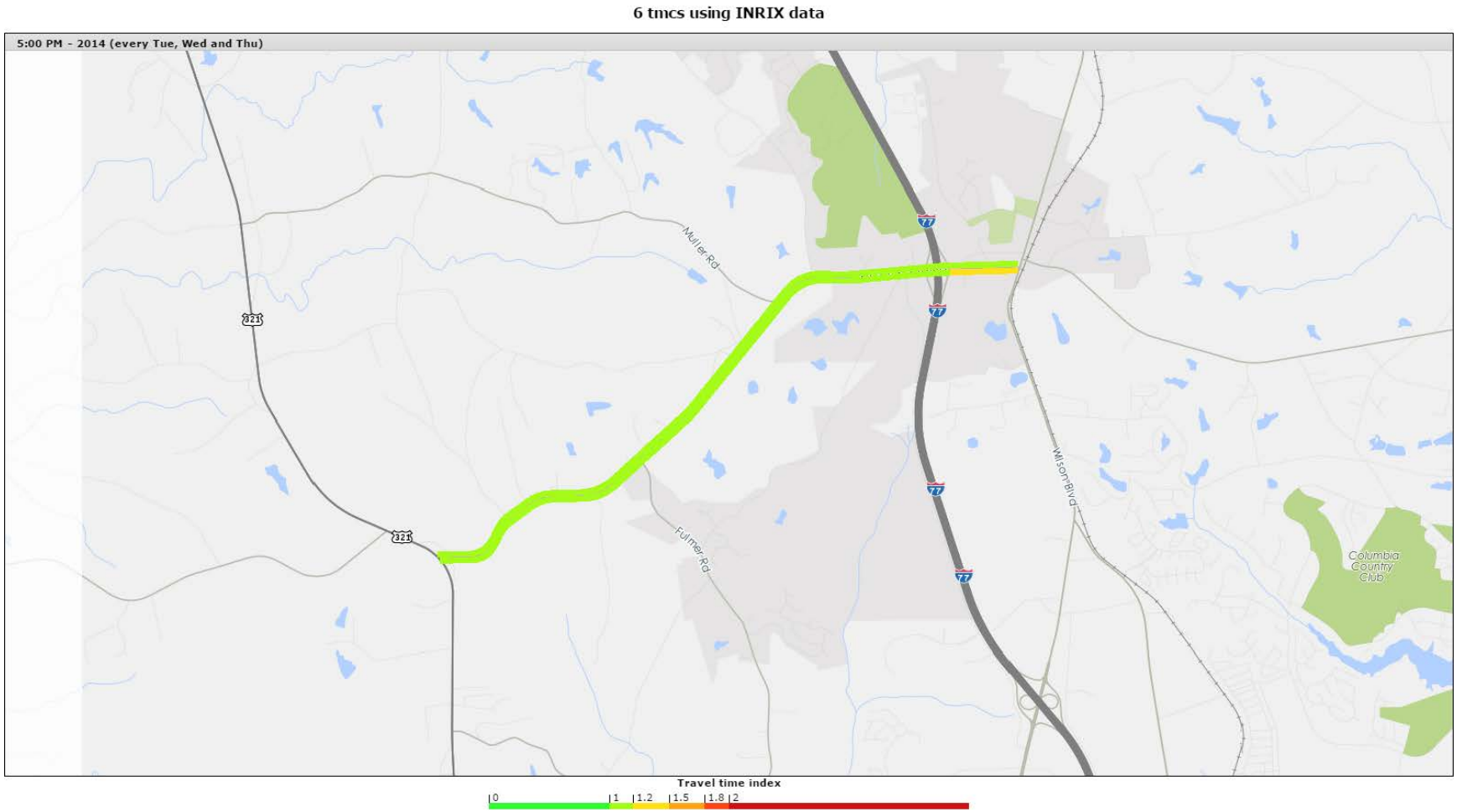


Figure A50.5: PM Peak Travel Time Index



A51. Corridor Name: Lower Richland Boulevard

Corridor ID: 1127

Route: S-37

Start: Garners Ferry Rd US 76 / 378

End: Leesburg Rd SC 262

County: Richland

Functional Class: 3 Minor Arterial

2040 LRTP Project Ranking: N/A

Figure A51.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1127	405	S-37	LOWER RICHLAND BLVD	2,200	2,200	2,000	1,850	2,805	2	45	4	8600	0.17	A	0.26	A
1127	481	S-37	LOWER RICHLAND BLVD	2,100	2,100	2,000	1,850	1,801	2	45	3	10800	0.17	A	0.17	A

LOS E

LOS F

Figure A51.2: Average Corridor Speed

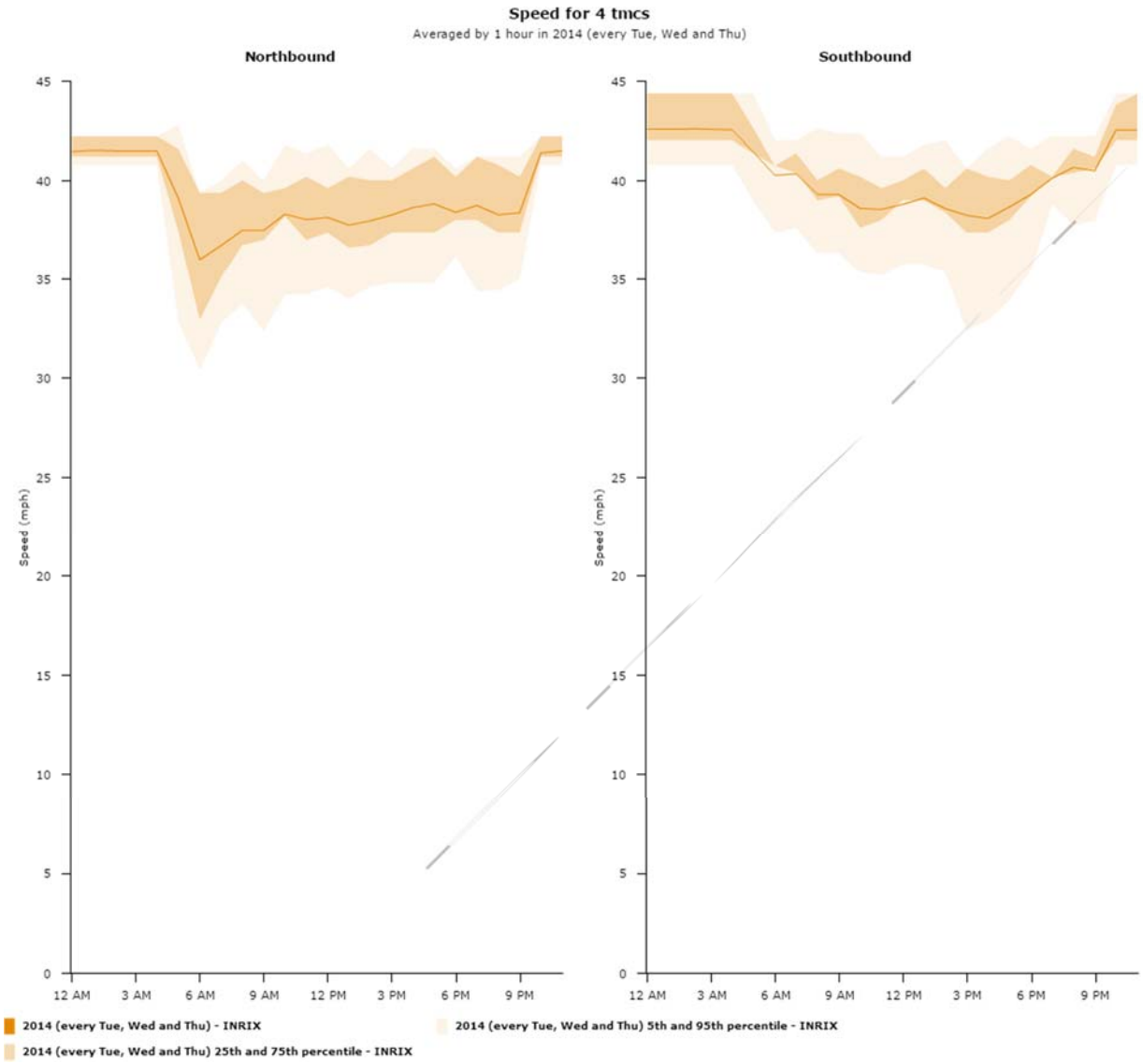


Figure A51.3: Corridor Congestion Index

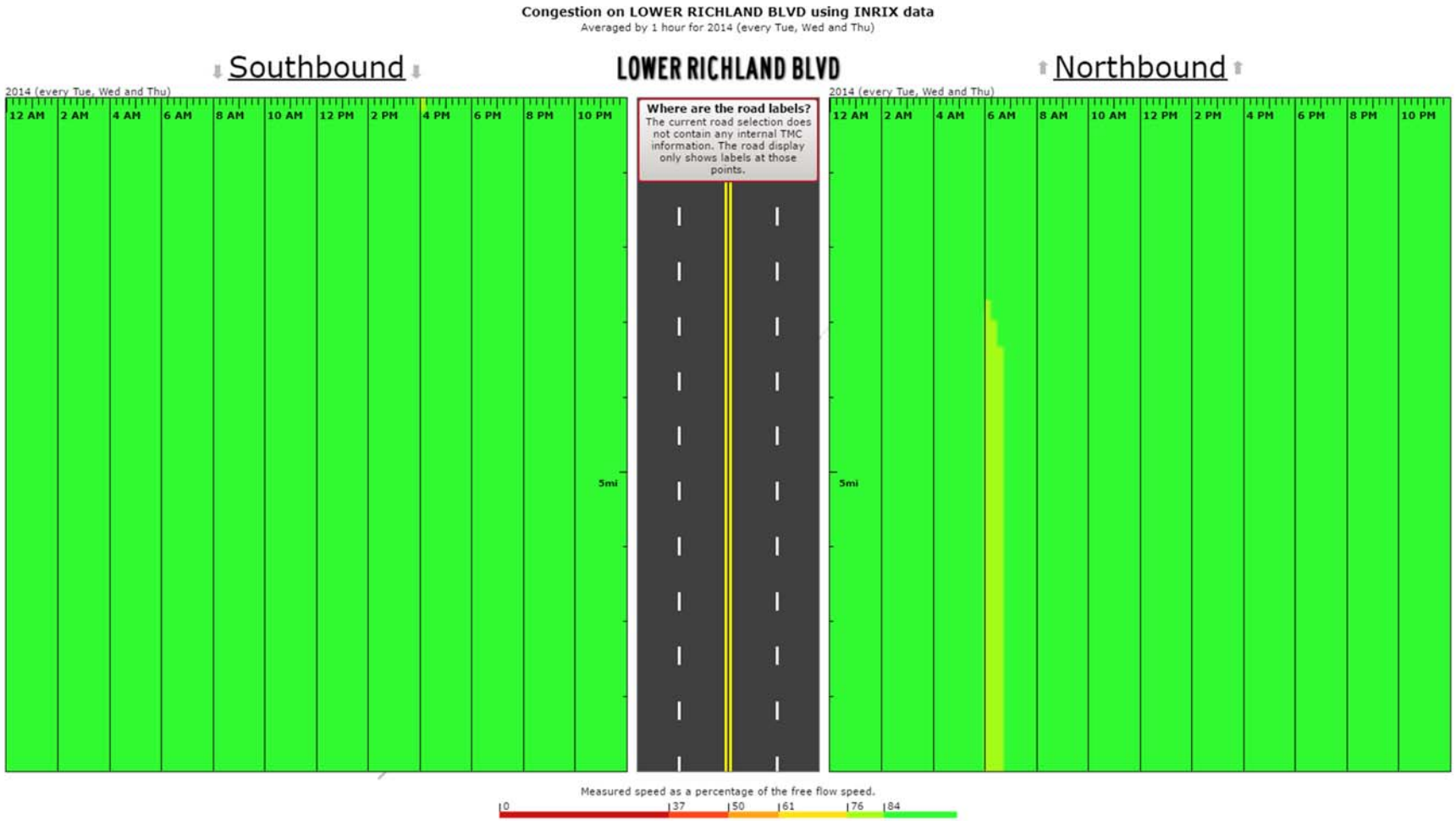


Figure A51.4: AM Peak Travel Time Index

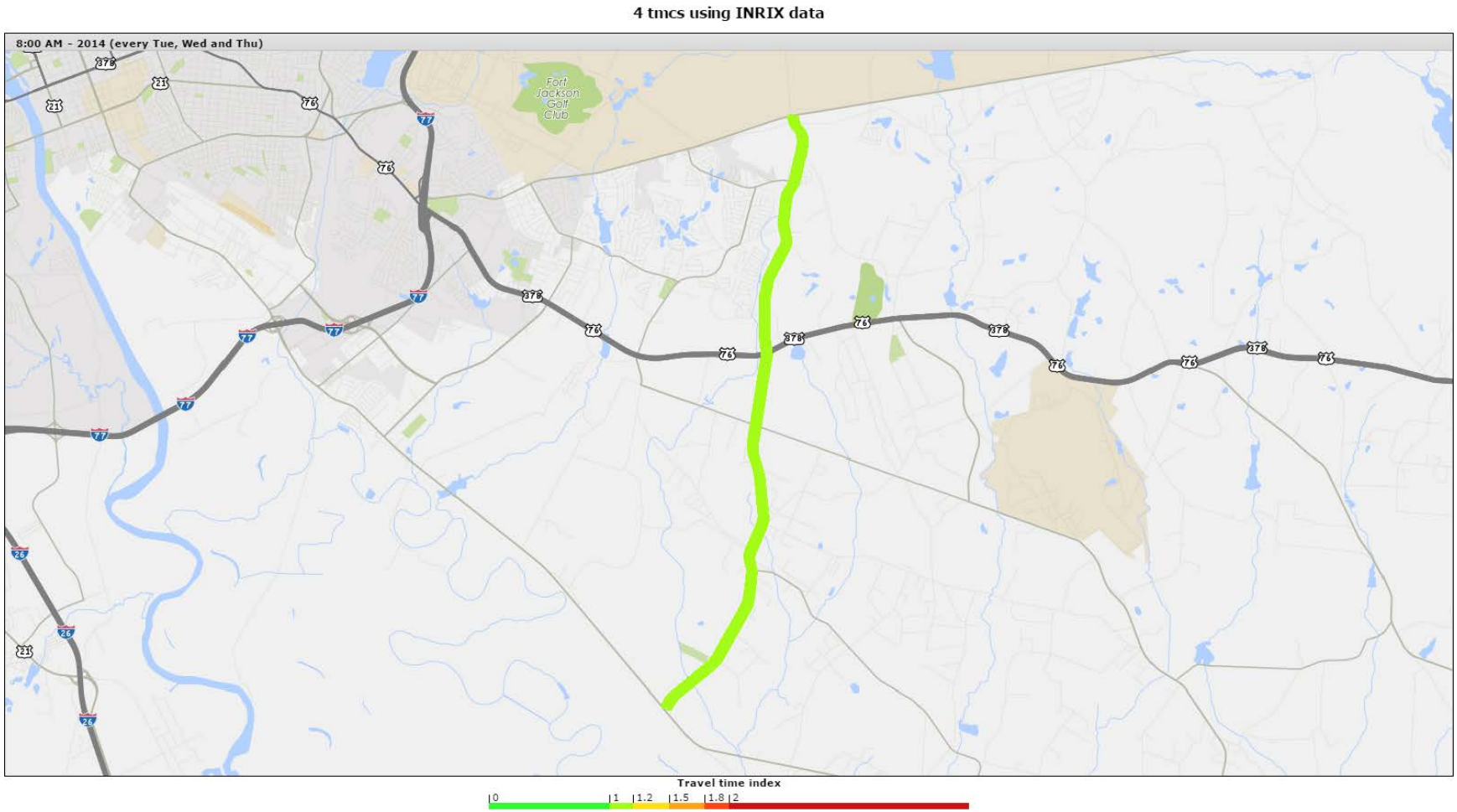
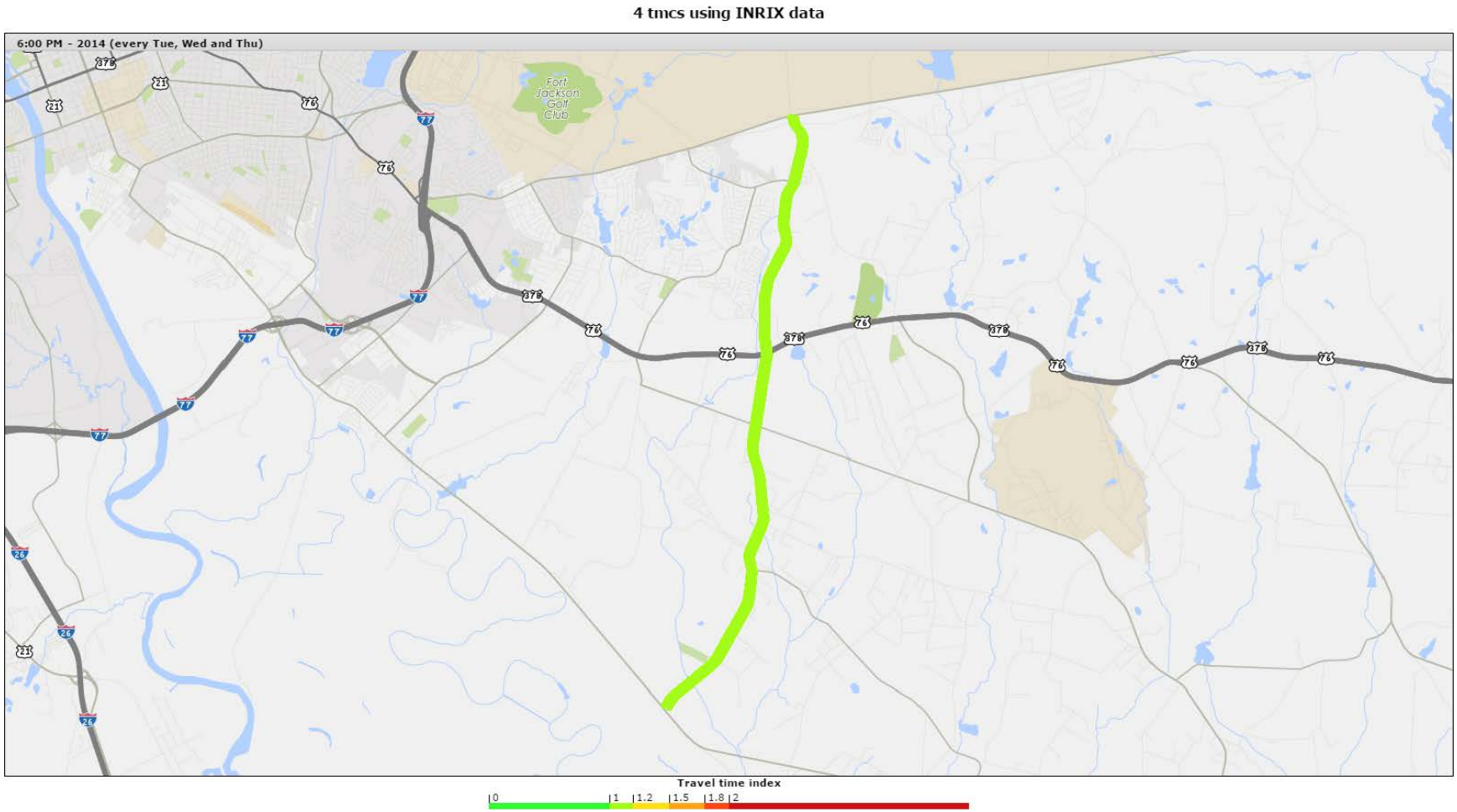


Figure A51.5: PM Peak Travel Time Index



A52. Corridor Name: SC 277

Corridor ID: 1129

Route: SC 277

Start: Harden Street

End: I-77

County: Richland

Functional Class: Interstate, 6 Other Principal Arterial

2040 LRTP Project Ranking: N/A

Figure A52.1: AADT and Level of Service

Corridor ID	Traffic Count Station	RT Number	Route Name	AADT 1990	AADT 2000	AADT 2010	AADT 2014	Projected 2040	Number Lanes	Posted Speed	Functional Class	SCDOT LOS C Capacity	V/C 2014	LOS 2014	V/C 2040	LOS 2040
1129	2217	I-77	I-77	25,900	45,300	70,000	74,900	133,154	6	60	1	87900	0.85	C	1.51	F
1129	265	SC277	SC 277	33,500	35,100	35,500	40,000	42,295	4	55	6	42000	0.68	B	0.72	B
1129	267	SC277	SC 277		40,900	40,500	39,700	50,646	4	60	6	42000	0.68	B	0.86	C
1129	269	SC277	SC 277	33,613	41,400	44,200	44,000	62,848	4	60	6	42000	0.75	C	1.07	D
1129	271	SC277	SC 277	25,300	37,300	45,500	44,200	69,930	4	60	6	42000	0.75	C	1.19	E
1129	273	SC277	SC 277	25,296	29,500	41,800	44,500	64,220	4	60	6	42000	0.75	C	1.10	D

LOS E

LOS F

Figure A52.2: Average Corridor Speed

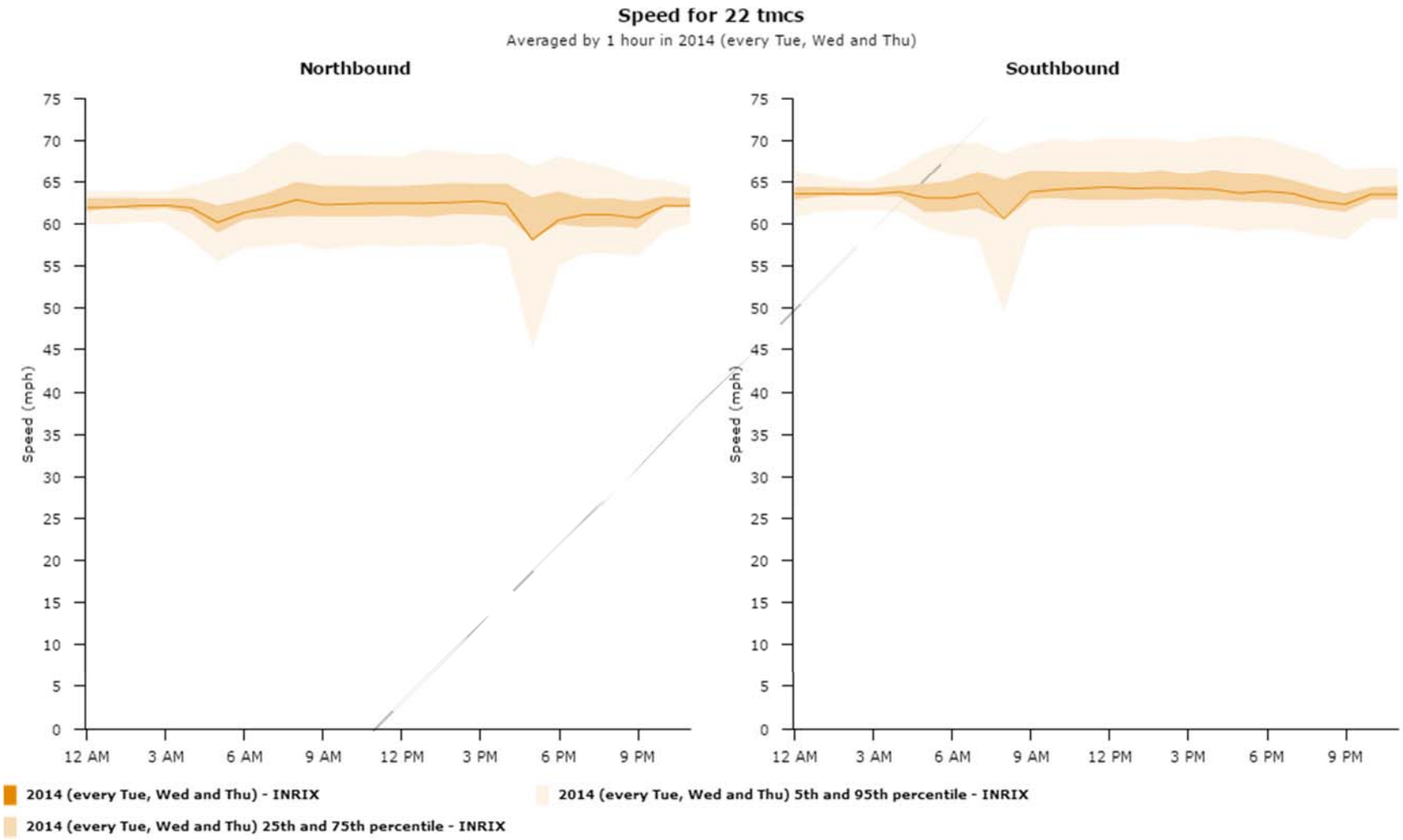


Figure A52.3: Corridor Congestion Index

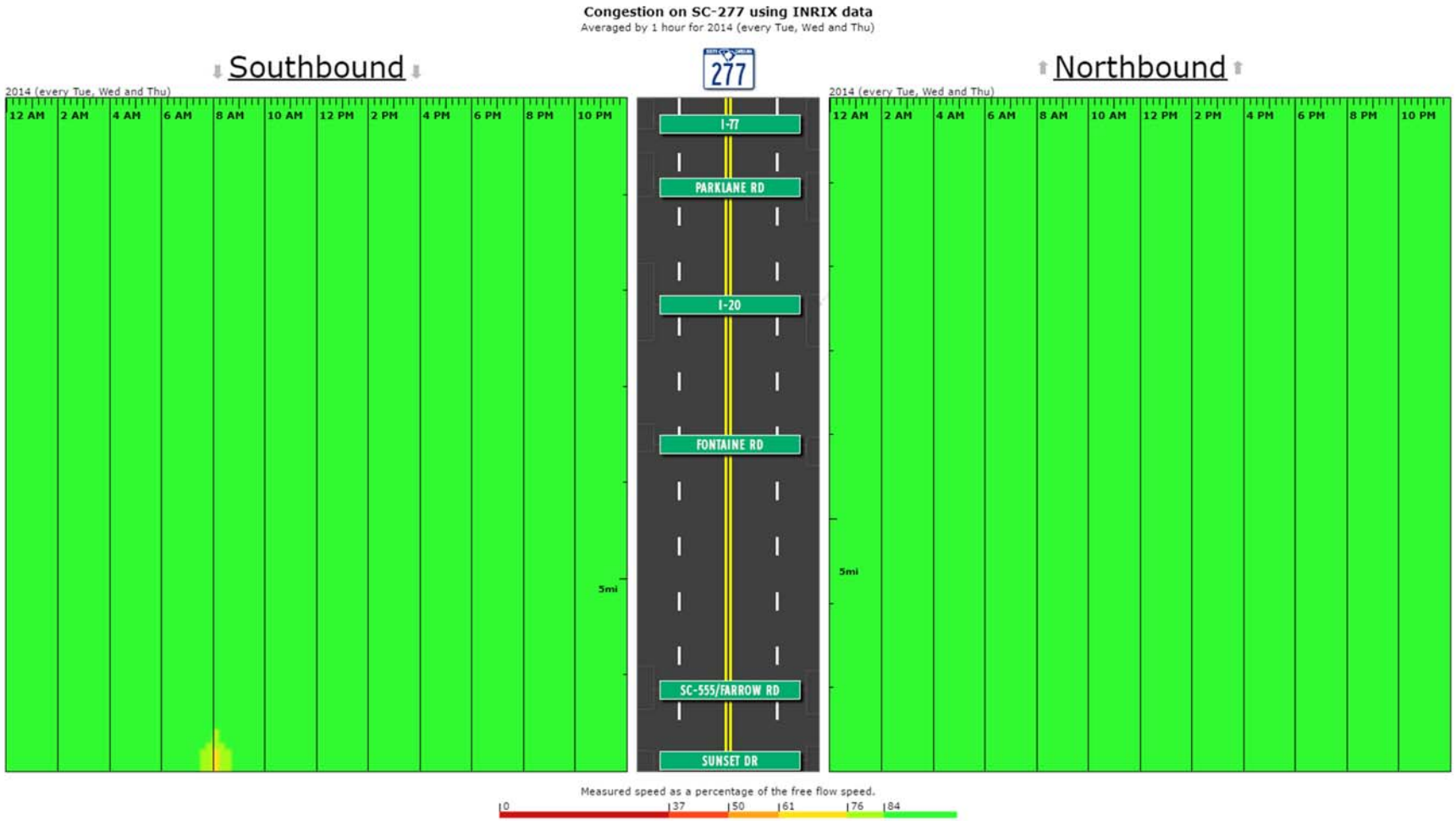


Figure A52.4: AM Peak Travel Time Index

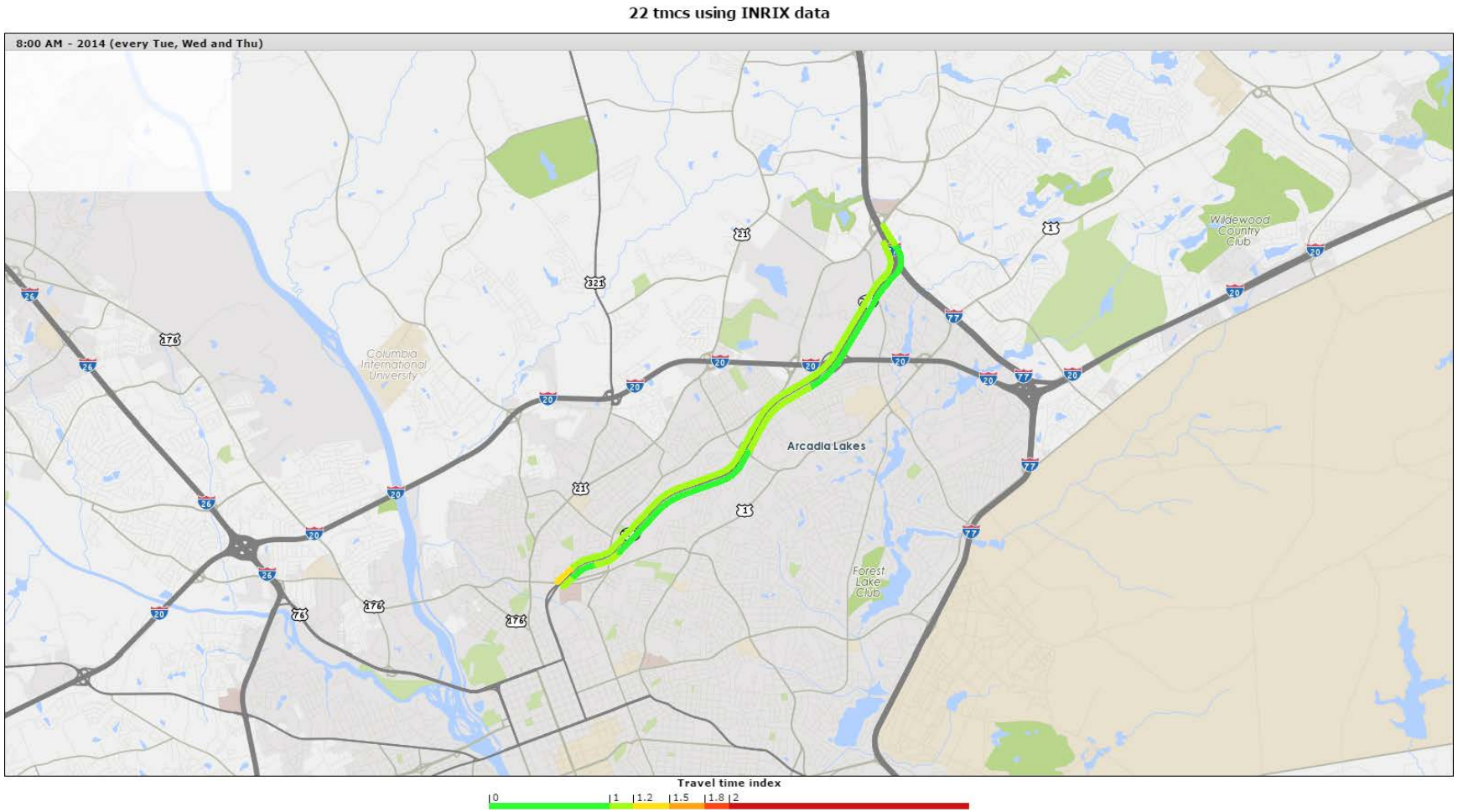
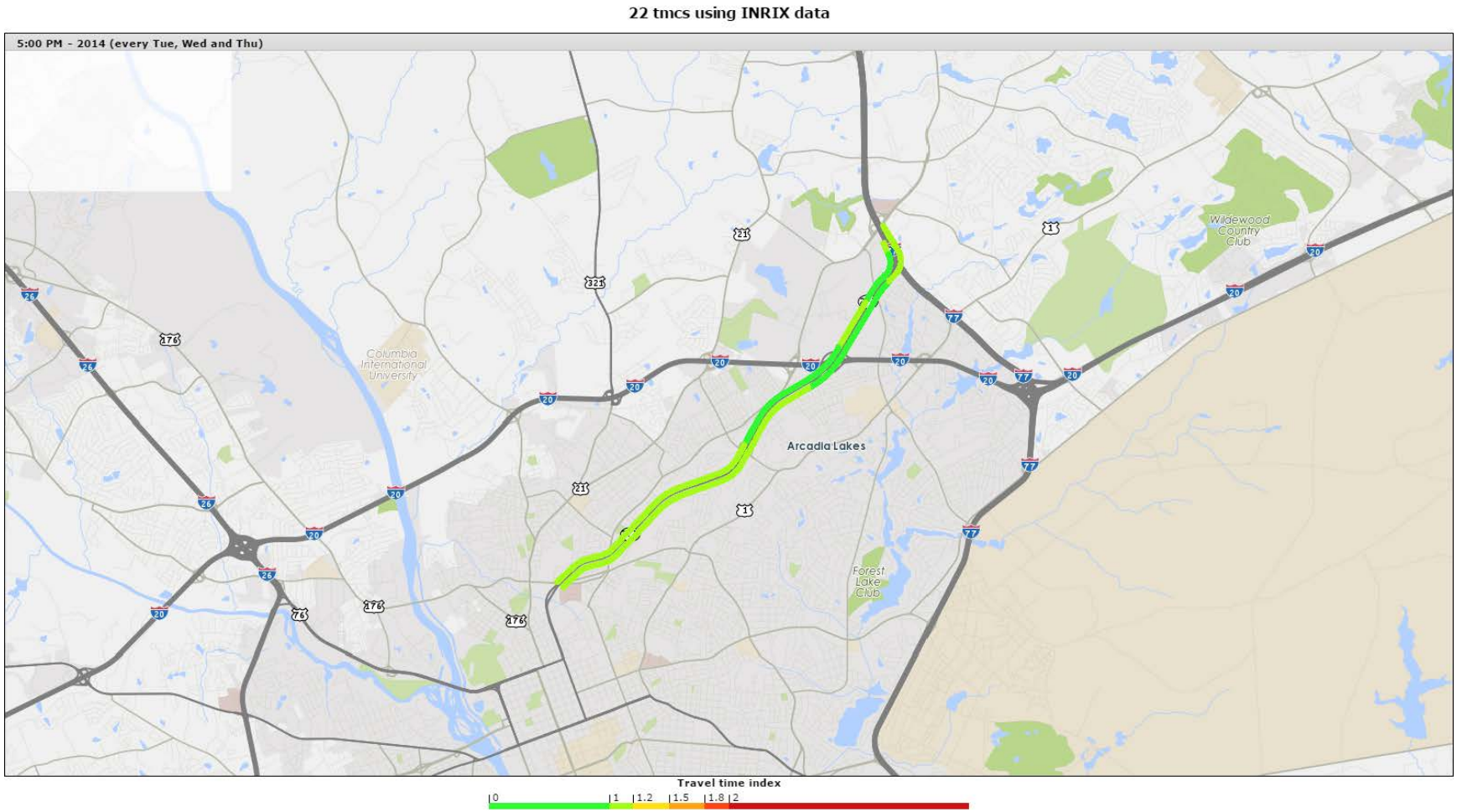



Figure A52.5: PM Peak Travel Time Index