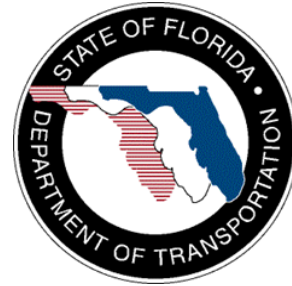


Fiscal Year 2011/2012

Total Annual 511 Calls	3
Road Ranger Stops	5
ITS Miles Managed	7
Incident Duration	11
Travel Time Reliability	16
Customer Satisfaction	38
Contact Info	40



Florida Department of Transportation



Intelligent Transportation Systems Performance Measures Annual Report

Fiscal Year 2011/2012

INTELLIGENT TRANSPORTATION SYSTEMS

PERFORMANCE MEASURES ANNUAL REPORT

The Florida Department of Transportation (FDOT) is committed to implementing statewide, fully integrated intelligent transportation systems (ITS) in a cost-efficient manner to better accommodate Florida's rapid growth in population, tourism, and commerce. ITS employs real-time information systems and advanced technologies as transportation management tools to improve the movement of people, goods, and services. ITS uses advanced technologies to remedy mobility and safety problems to efficiently build new roads and expand existing roads.

As ITS evolves in Florida, developing and reporting of operations performance measures is a high priority for FDOT to demonstrate and document the benefits of ITS. When FDOT's ITS Program began addressing performance in 2004, the Districts did not have automated data collection systems and were initially limited to measures of basic production and usage (*output*). The initial output measures reported statewide were Total Annual 511 calls, Road Ranger Stops, and centerline miles of limited-access highways managed by ITS.

The proliferation of ITS deployments and integration will allow more accurately documented and reported measures of performance and the resulting benefits (*outcome*). FDOT identified three ITS *outcome* performance measures that were subsequently approved by the Florida Transportation Commission (FTC) in 2005. These measures were incident duration, travel-time reliability, and customer satisfaction. Available data for the incident duration and customer satisfaction measures were collected and reported beginning in 2006.

For fiscal year (FY) 2011/2012, all output and outcome measures were reported. The data for these reported measures was collected for the period beginning July 1, 2011, and ending June 30, 2012.

TOTAL ANNUAL 511 CALLS

ACCURATE, REAL TIME INFORMATION FOR MOTORISTS

Travelers on Florida’s highways have an invaluable resource known as “America’s Traveler Information Telephone Number”. FDOT also provides real-time traffic information to the public in a variety of other formats: FL511.com, mobile.FL511.com, My Florida 511 personalized services, dynamic message signs on the Florida Interstate Highway System (FIHS) facilities and through mobile device applications. Additionally, FDOT sends out traffic information through third party data feeds to news media who inform the public of roadway conditions.

Background: In July 2000, the Federal Communications Commission designated 511 as the national three-digit telephone number for traveler information. In Florida, most urban areas of the state currently offer this service to travelers. In 2009, Florida’s statewide 511 services integrated all the Florida regional 511 services into one statewide system. In 2010, subscription services were added so that users could receive calls, texts and emails about their roadways of interest. In 2011, a mobile application was added for *iPhone*, *iPad* and *iPod Touch* users.

In February 2012, FDOT launched twelve regional and major roadway Twitter feeds that distribute traffic information from the 511 Traveler Information System.

Purpose: To provide accurate, real-time information on traffic and road conditions, alternate route information (during incidents), construction information, weather-related problems, and public transportation information/options.

Objective: To reduce traveler delay and improve the overall quality of trip-making as evidenced by the growth in the use of 511 related services, and maintain a high level of user satisfaction.

Report Methodology: Compilation of annual monthly (and ultimately, annual hourly) 511 calls and personalized alerts sent.



TOTAL ANNUAL 511 CALLS 2011/2012 RESULTS

Approximately 1.8 million calls to Florida 511 were made during the 12-month period from July 2011 through June 2012.

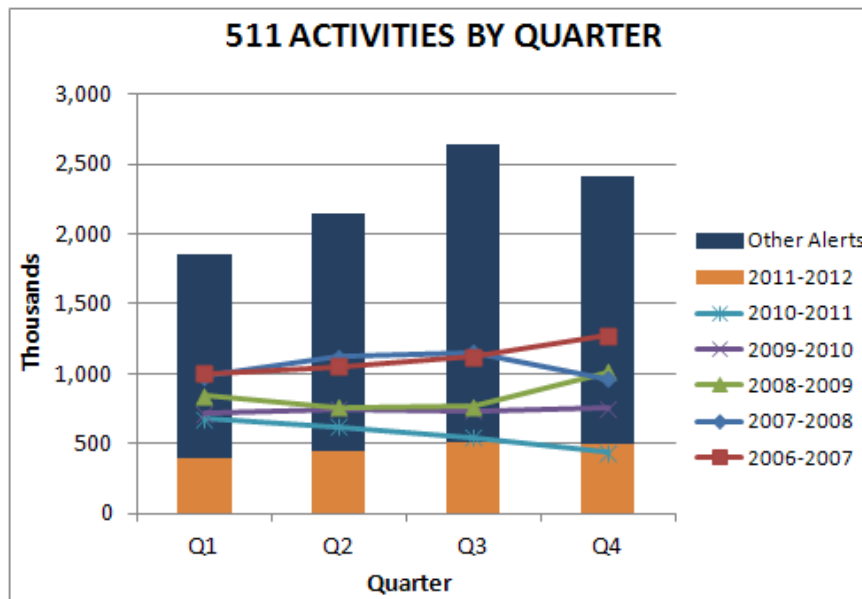
The FL511.com web site received 734,819 visitors during the fiscal year. More than 15,787 people subscribe to My Florida 511 personalized services to receive e-mail, text and phone alerts about incidents on their regularly traveled routes.

A new option for travelers is 511 Twitter feeds that launched in February 2012. At the end of June, there were 2,799 Twitter subscribers to the twelve feeds.

- FL511 Statewide
- FL511 Northeast
- FL511 Panhandle
- FL511 Central Florida
- FL511 Tampa Bay
- FL511 Southeast
- FL511 Southwest
- FL511 I-4
- FL511 I-10
- FL511 I-75
- FL511 I-95
- FL511 Florida's Turnpike



Tracking the phone calls to Florida 511 is no longer the sole indicator of system usage as more travelers use automated and mobile applications to customize their experience. Over 9 million messages, calls, visits and alerts were made in FY 2011-2012 keeping travelers on Florida's highways informed.



The gold portion of the bar indicates 511 phone calls received. The blue portion of the bar indicates all other activities including outgoing SMS text alerts, outgoing email alerts, outgoing phone alerts, and visits to the FL511 mobile app.

ROAD RANGER STOPS

QUICK RESPONSE FOR CLEARANCE OF INCIDENTS AND TO ASSIST MOTORISTS IN NEED

Road Ranger service patrols help motorists in need and thereby assist in clearing the roadway of incidents that may cause secondary incidents. The sooner an incident is removed, the sooner the highway returns to normal capacity.

Background: FDOT began funding the Road Rangers Program in December 1999. The Road Rangers service patrols are roving vehicles that patrol congested areas and high-incident locations of urban freeways, and provide highway assistance services during incidents to reduce delay and improve safety for the motoring public and responders. All Districts and Florida's Turnpike Enterprise currently operate Road Rangers Programs. However, the specific services provided, hours of operation, fleet size, and area coverage differs among these entities.

Purpose: The primary mission of the Road Rangers service patrol is to support emergency response personnel during incidents by establishing maintenance of traffic (MOT) for the incident and providing other assistance as needed. Providing quick response and clearance reduces the number of secondary incidents and returns the roadway to capacity sooner. Road Ranger service patrols also assist in hurricane evacuations by providing support to evacuees and responders. They also provide service to disabled vehicles.

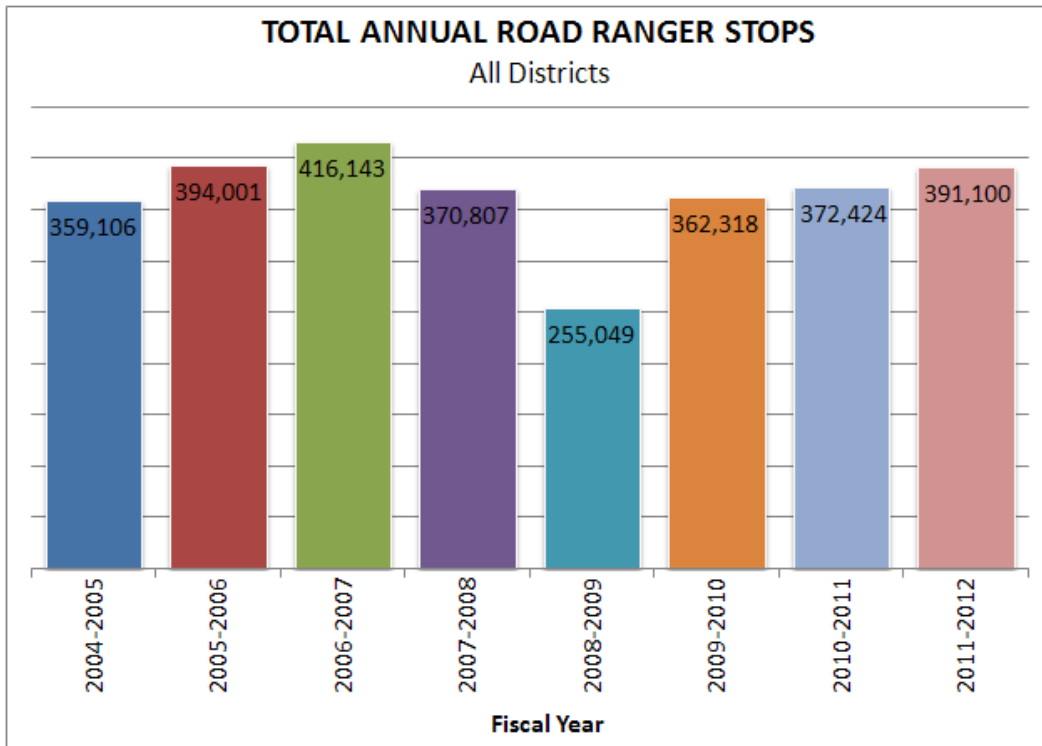
Objective: To help reduce the overall travel delay associated with incidents by providing quick response to motorists in need and assistance to other emergency responders.

Report Methodology: Compilation and summary of Road Rangers activity data is logged through the SunGuide® software in each District transportation management center (TMC). All of the Districts are now providing Road Rangers data to the Central Office on a quarterly basis.



ROAD RANGER STOPS 2011/2012 RESULTS

For July 2011 to June 2012 there were 391,100 Road Ranger stops made statewide. All seven Districts and Florida's Turnpike Enterprise provided Road Ranger services in FY 2011/2012.



ITS MILES MANAGED

SEAMLESS, OPERATIONAL, REAL-TIME DEPLOYMENT OF ITS ACROSS FLORIDA

FDOT is committed to implementing a statewide, fully integrated ITS in a cost-efficient manner, to better accommodate Florida's rapid growth in population, tourism, and commerce. ITS employs real-time information systems and advanced technologies as transportation management tools to improve the movement of people, goods, and services. ITS uses advanced technologies to remedy mobility and safety problems, to efficiently build new roads and expand existing ones.

Background: All Districts and Florida's Turnpike Enterprise are committed to the deployment of ITS; each is deploying at varying stages and pace according to FDOT's *Ten-Year ITS Cost Feasible Plan*. As a percent of the limited-access FIHS mileage in each District, the definition of "miles managed by ITS" is centerline mileage that must include ALL of the following attributes:

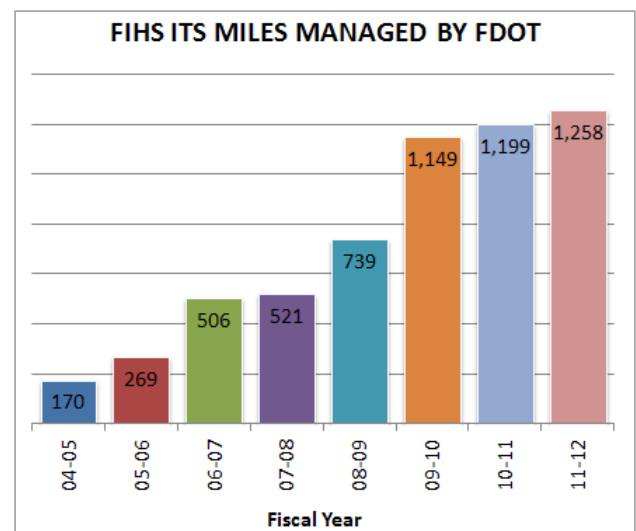
1. Traffic probes and/or sensors,
2. Real-time traffic information reporting coverage,
3. Real-time incident response capabilities, and
4. Real-time traffic data availability to FDOT.

In order to meet the definition of miles managed by ITS, all of these attributes must be continuously operated and maintained, permitting contiguous coverage of the mileage noted.

Purpose: Report progress in completing deployment of FDOT's *Ten-Year ITS Cost Feasible Plan* and beyond, as appropriate.

Objective: To initially deploy ITS across the limited-access portion of the FIHS, and to ultimately integrate all ITS and ITS-related user services across the entire state in a seamless, fully operational, real-time fashion. This deployment will help improve mobility and safety throughout the state.

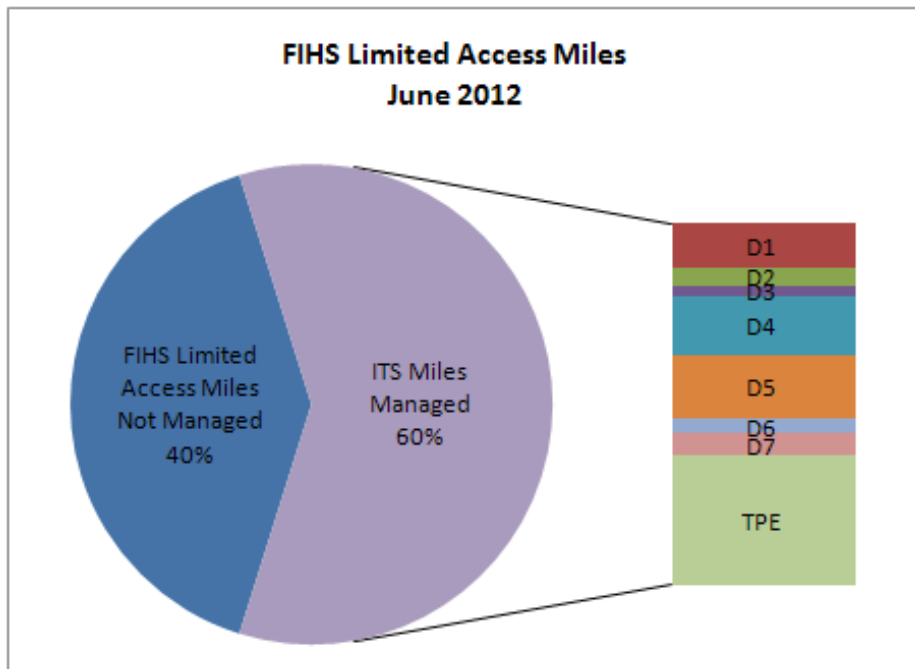
Report Methodology: Deployment progress, on an annual basis, as reported by each District and the Florida's Turnpike Enterprise. Corresponding geographic coverage is also reported and mapped in terms of mile point limits.



ITS MILES MANAGED 2011/2012 RESULTS

At the end of June 2012, 1,257.8 miles were managed by ITS. This represents 59.7 percent ITS coverage of the limited-access FIHS.

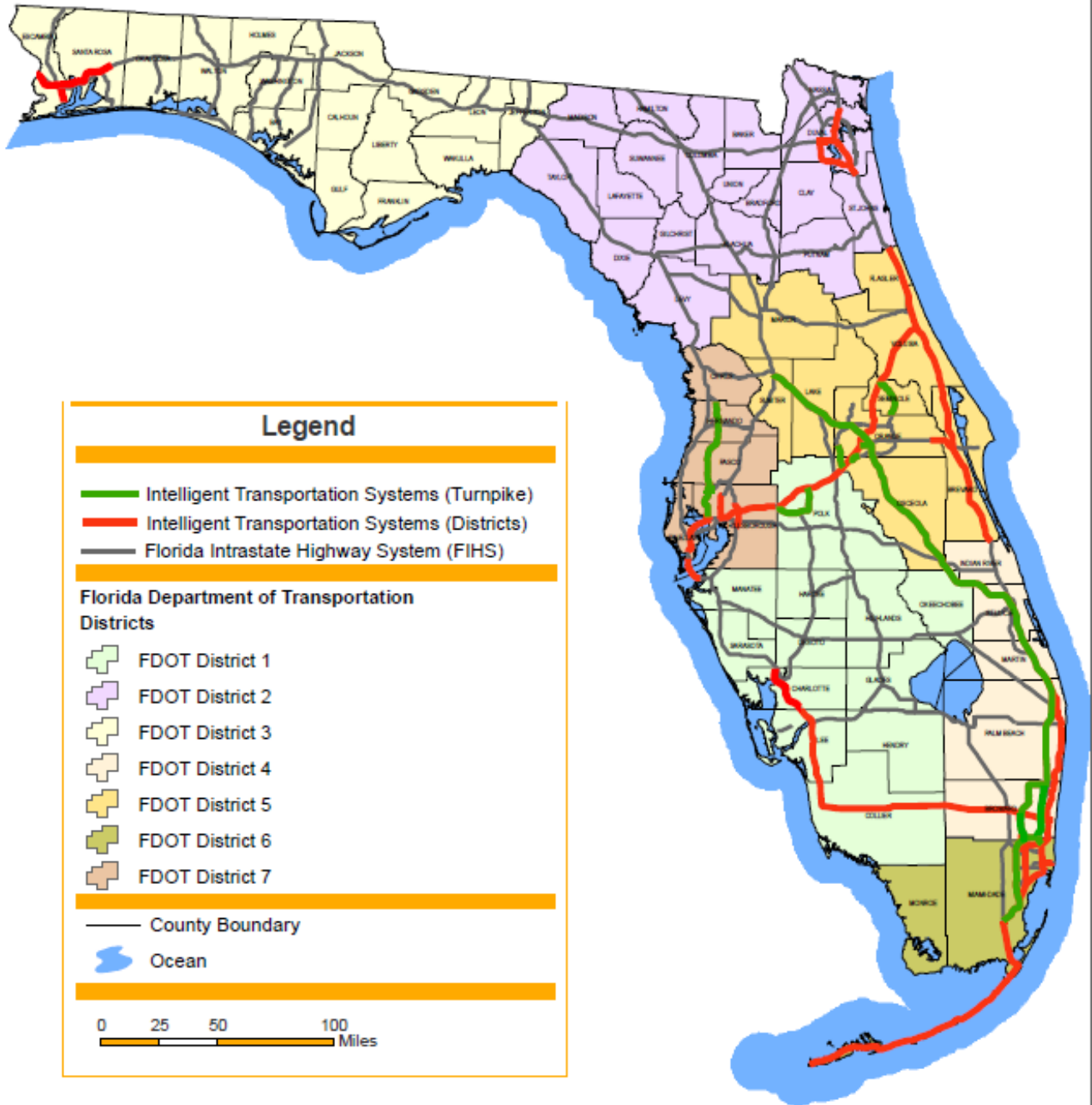
District	Amount of FIHS Miles per District (Limited Access)	Number of FIHS Miles Managed by FDOT	District Percentage of FIHS Limited Access Miles Managed
1	222.9	153.3	68.8%
2	372.3	63.1	16.9%
3	242.2	38.0	15.7%
4	203.2	202.7	99.8%
5	386.1	222.7	57.7%
6	53.5	53.5	100.0%
7	166.5	76.5	45.9%
TPE	460.0	448.0	97.4%
State Total	2,106.7	1,257.8	59.7%



**ITS Miles Managed
Roadway Segment Limits**

District	Roadway	From	To	Length
1	I-75	Broward/Collier Co. Line	Charlotte/Sarasota Co. Line	121.3
1	I-4	Hillsborough/Polk Co. Line	US 27 (managed by Dist 7)	28.4
1	I-4	US 27	Polk/Osceola Co. Line (managed by Dist 5)	3.6
2	I-95	Race Track Road	Pecan Park Rd (Duval/St. Johns Co. Line)	33.7
2	I-295	I-10	I-95 (south)	20.4
2	I-10	I-95 (Exit 363)	West of Chaffee Road (MM 354)	9.0
3	I-10	Florida/Alabama State Line	One mile east of SR 87 (MM32)	32.0
3	I-110	I-110 spur in its entirety		6.0
4	I-95	Indian River/Brevard Co. Line	Broward/Miami-Dade Co. Line	142.6
4	I-595	I-75	US 1	12.9
4	I-75	Broward/Miami-Dade Co. Line	Broward/Collier Co. Line	45.4
4	Sawgrass Expressway	North of I-75		1.9
5	I-4	SR 532 / Polk Co. Line	I-95	74.5
5	SR 528	SR 520 East	I-95	11.0
5	I-95	Flagler/St. Johns Co. Line	Brevard/Indian River Co. Line	137.2
6	I-195	NW 11 Avenue	Alton Road (SR 907A)	4.9
6	SR 826	US 1	I-95	24.6
6	I-75	SR 826	Broward/Miami-Dade Co. Line	5.4
6	I-95	Broward/Miami-Dade Co. Line	US 1	17.3
6	I-395	I-95	West end MacArthur Causeway Bridge	1.3
7	I-275	22nd Ave. South	SR 60	19
7	I-275	North Blvd.	East of Nebraska Ave. (US 41)	11.0
7	I-4	I-275	Charlie Taylor Road (MM23)	23.0
7	I-75	US 301	CR 582-A	12.5
7	Sunshine Skyway Bridge	entirety		6.0
7	SR 60	I-275	Courtney Campbell Causeway	2.0
7	SR 589	I-275	One mile south of Courtney Campbell Causeway	1.0
7	SR 600	Crosstown Expressway	North of Bay to Bay Boulevard	2.0
TPE	Sawgrass Expressway	I-595	Atlantic Blvd. in Broward Co.	22.0
TPE	Seminole Expressway (SR417)	Orange/Seminole Co. Line	I-4	17.0
TPE	Southern Connector (SR417)	I-4	International Dr.	5.0
TPE	Western Beltway (SR 429)	I-4	Seidel Rd.	10.0
TPE	Polk Parkway (SR570)	I-4	I-4	24.0
TPE	Veteran's Expressway (SR589)	SR 60	Suncoast Parkway	16.0
TPE	SR 568	Veteran's Expressway	Dale Mabry Dr.	3.0
TPE	SR 589 (Suncoast Parkway)	Veteran's Expressway	US 98	38.0
TPE	HEFT (Homestead Extension/SR821)	US 1	Turnpike Mainline	48.0
TPE	Florida's Turnpike (SR 91)	SR 826 (US 441)	Turnpike Mainline	3.0
TPE	SR 408 (East West Expressway)	Turnpike Mainline	SR 50	1.0
TPE	Florida's Turnpike (SR 91)	Sawgrass Expressway	I-75	236.0
TPE	SR 528 (Beachline Expressway)	I-4	Florida Turnpike in Orange Co.	4.0
TPE	Florida's Turnpike (SR 91)	Miramar Parkway	Griffin Road	6.0
TPE	Florida's Turnpike (SR 91)	Broward Blvd. (Broward Co.)	Palm Beach Co. Line	15.0

Florida's Intelligent Transportation Systems Program Coverage



INCIDENT DURATION

MINIMIZE TRAFFIC INCIDENT TIMELINE

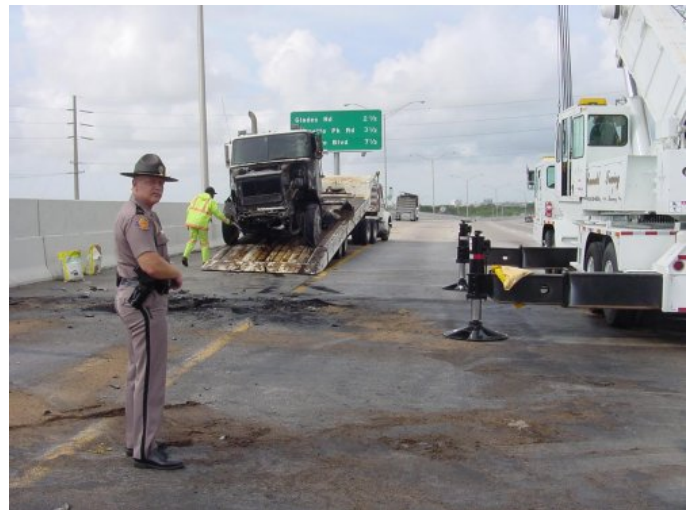
FDOT and its emergency response partners work to ensure that crashes and other incidents have minimal impact on Florida drivers by working to reduce the amount of time of each incident. Determining trends in incident clearance allows for system analysis and improvement. Quickly removing an incident allows the highway to return to normal capacity and traffic flow sooner.

Background: In 2005, the FDOT ITS Program incident duration was identified as an outcome measure to be reported to the Florida Transportation Commission. Initially, FDOT conducted an effort to collect incident timeline data from manual (paper) records. The pilot test results determined that manually collecting incident timeline data was too complex and time-consuming. In 2006, the SunGuide® was modified to include the data collection and reporting requirements for obtaining incident duration data.

In order to improve the incident duration timeline, Florida developed a very active statewide Traffic Incident Management Program. There are four major components to this program:

- *Road Ranger Service*
- *Open Roads Policy*
- Rapid Incident Scene Clearance (RISC) Program
- Traffic Incident Management (TIM) Teams

The Florida *Open Roads Policy* is an agreement between FDOT and the Florida Highway Patrol (FHP). Both agencies signed this agreement in November 2002. The agreement states that it is policy of FHP and FDOT to expedite the removal of vehicles, cargo, and debris from state highways and to restore, in an urgent manner, the safe and orderly flow of traffic on Florida's roadways. Both agencies agreed to work together to clear roadways as soon as possible. A goal was set to clear incidents from the roadway *within 90 minutes* of the arrival of the first responding officer.

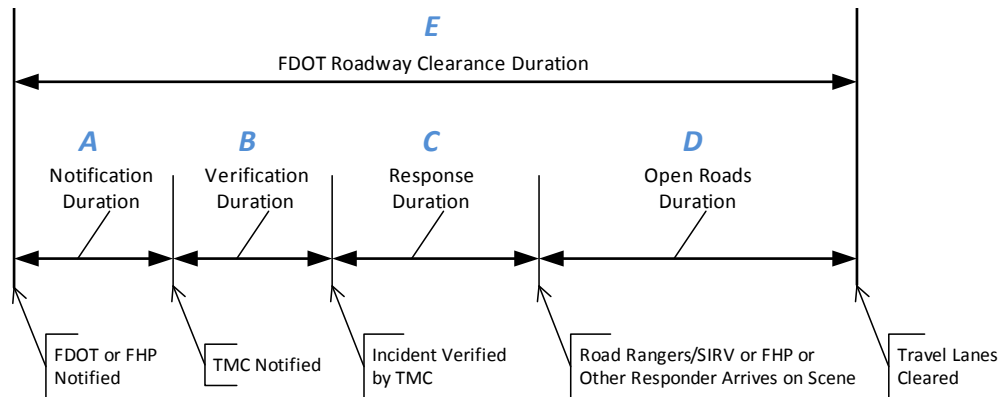


The Rapid Incident Scene Clearance (RISC) Program is a highly innovative, incentive-based program to meet the goal of safely clearing major highway incidents and truck crashes. This program pays bonuses of \$2,500 to wrecker operators with specialized heavy equipment for successful removal of all wreckage and roadway re-opening within 90 minutes of being given a notice-to-proceed. Additionally the wrecker company is paid \$1,000 if approval of additional specialty equipment for use during the incident cleanup is given. As a further incentive, if the

travel portion of the roadway is not cleared in three hours, the wrecker company can be assessed a penalty of \$10/minute (\$600/hour) until the roadway is reopened. Most of the seven FDOT Districts and the Florida's Turnpike Enterprise have adopted this program.

TIM Teams bring together all agencies involved in clearing an accident, including FHP and local law enforcement, fire departments, emergency medical personnel, towing companies, and spill response firms, along with FDOT TMC operators, Road Rangers, and maintenance crews. TIM Teams may be District-wide or they may be local to one county. These teams strive to reduce the time needed to reopen travel lanes and get traffic moving again by reviewing past response actions, exploring ways to improve incident management, and coordinating upcoming planned events or planning for unplanned events, such as hurricanes, wildfires, and floods. Most TIM Teams have four program areas: incident detection, verification, and response; incident clearance; communications; and training. TIM Teams are currently active in most of FDOT's Districts and Florida's Turnpike Enterprise.

The incident duration timeline measure is an indicator of the effectiveness of these programs.



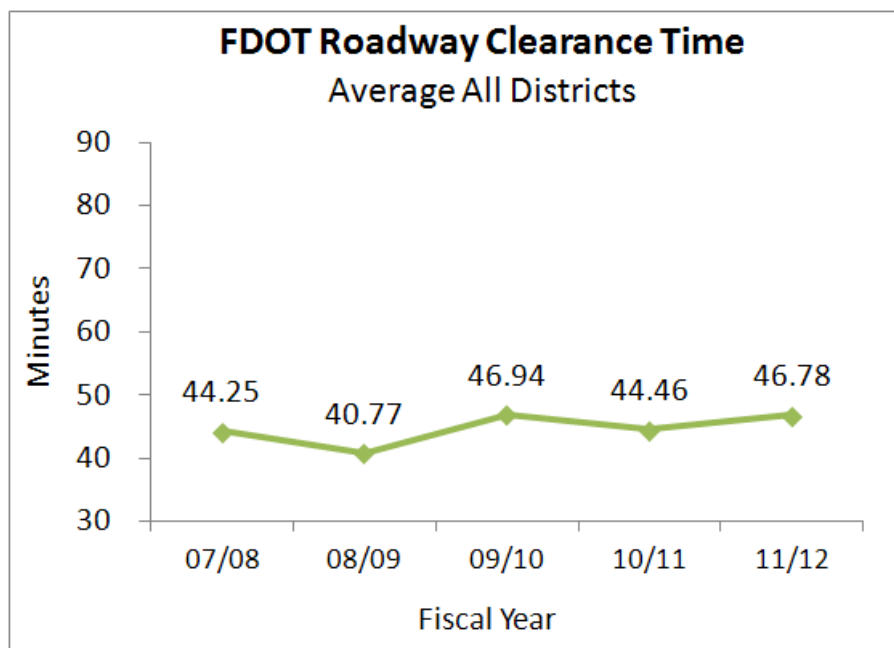
Purpose: Report the total time of impact on traffic for an incident.

Objective: To minimize the incident timeline from the time any FDOT or FHP staff is notified to the time that all travel lanes are cleared.

Methodology: The FDOT roadway clearance duration timeline includes the following components: notification duration, verification duration, response duration, and open roads duration. The definition for open roads duration is the amount of time needed to clear all mainline travel lanes, starting with the arrival of the first responder, either FHP or FDOT. The open roads clearance time is directly comparable with Florida's *Open Roads Policy* for clearing all travel lanes in 90 minutes or less. FDOT Roadway Clearance Duration is an overall component of incident duration, defined as the time between first awareness of the incident and the time all mainline travel lanes are cleared. This component includes notification, verification, and response durations, as well as the open roads duration. Although the terminology changed in 2008, the individual components of the incident duration timeline are still the same as those used for previous reporting.

INCIDENT DURATION 2011/2012 RESULTS

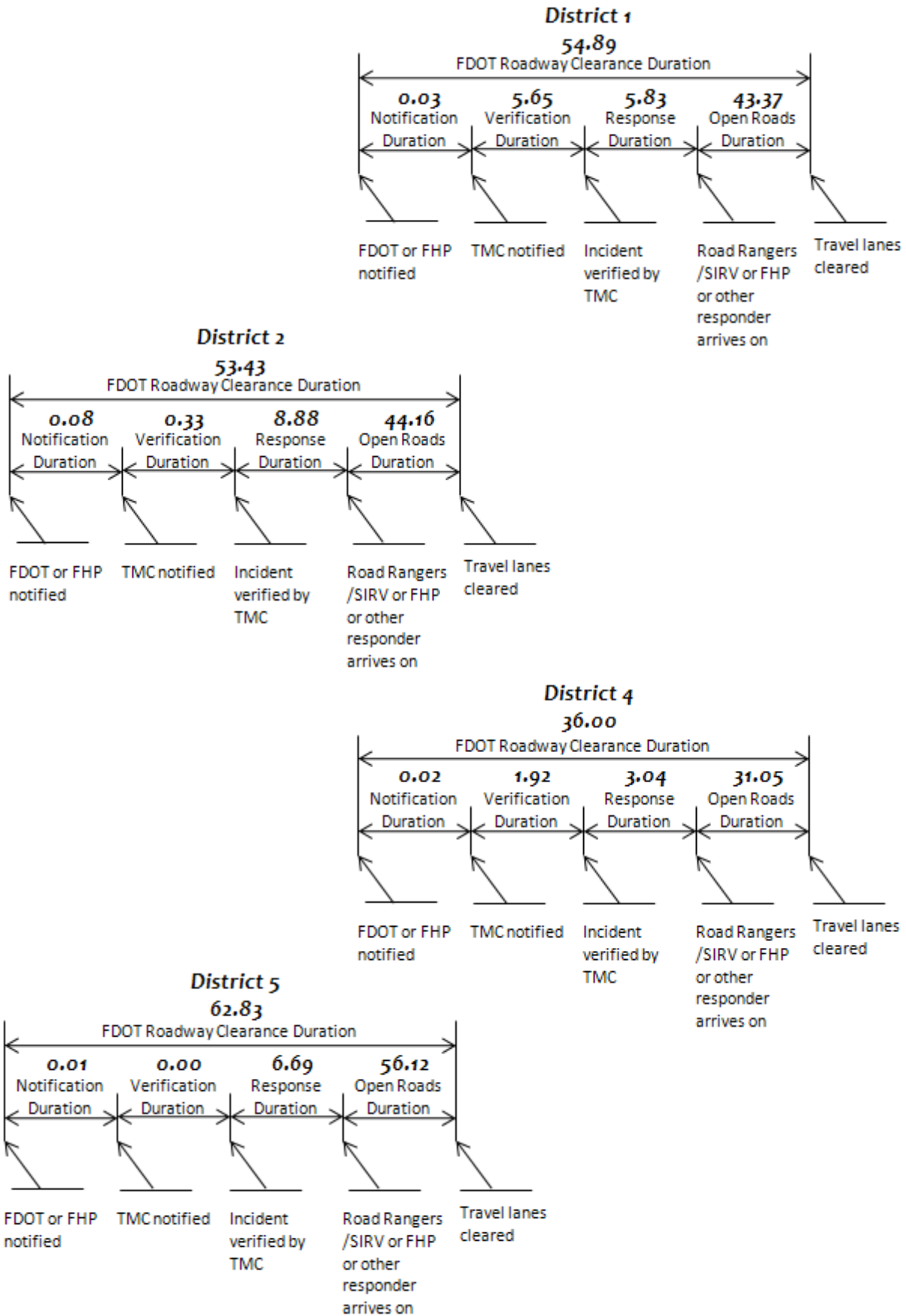
FDOT Roadway Clearance Duration varied from month to month, but the annual average time from the reporting Districts is 46.78 minutes, ranging from 27 to 62 minutes. The Open Roads Clearance Duration averages about 39 minutes for the reporting Districts. This is well under the *Open Roads Policy* target of 90 minutes. The graphics below show the averages for the six reporting Districts and Florida’s Turnpike Enterprise. The Roadway Clearance duration will not necessarily correspond to the sum of the Verification, Response, and Open Road’s averages, since they are averaged independently of one another.



District	2007/08	2008/09	2009/10	2010/11	2011/12
1	NA	NA	NA	50.48	54.89
2	46.11	43.34	59.36	40.74	53.43
4	38.77	34.26	37.16	39.47	36.00
5	50.48	38.53	57.18	55.51	62.83
6	36.20	37.62	34.34	30.53	27.55
7	48.59	40.20	49.36	46.99	45.28
TPE	45.33	50.67	44.25	47.53	47.50
AVG ALL DISTRICTS	44.25	40.77	46.94	44.46	46.78

* Some data was lost in 2010/11 in District 5.

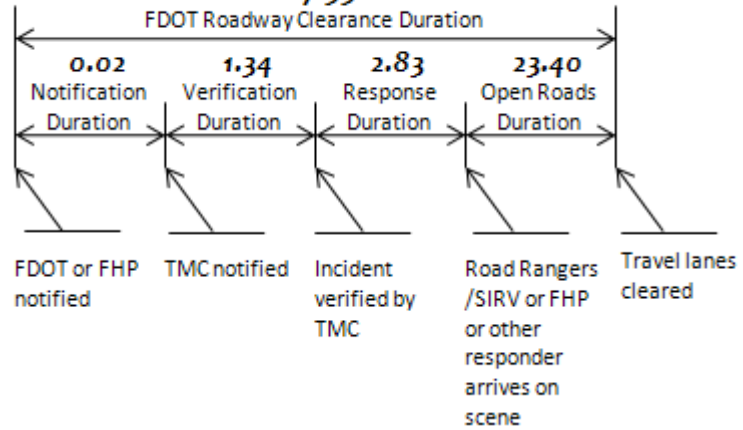
District Results (annual average in minutes):



District Results (annual average in minutes):

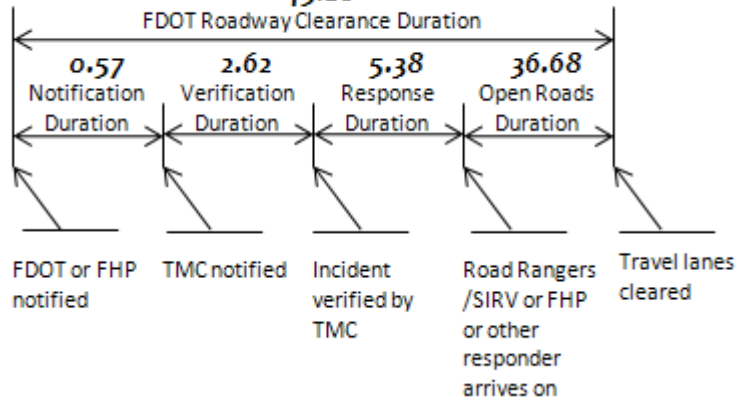
District 6

27.55



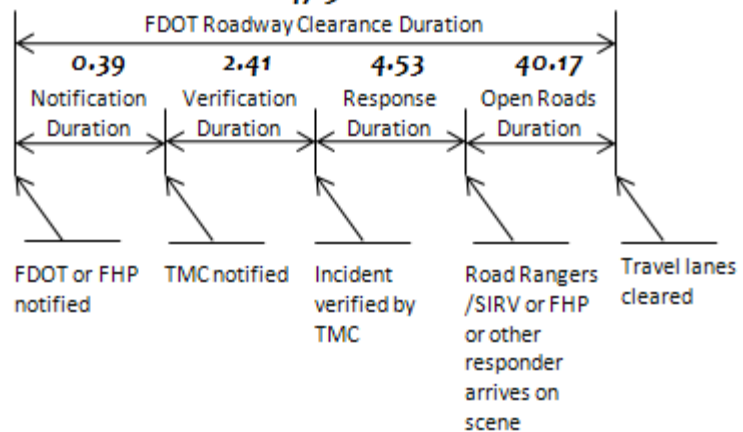
District 7

45.28



Turnpike Enterprise

47.50



TRAVEL TIME RELIABILITY

ESTIMATE TRAVEL TIMES FOR TRIP PLANNING

Background: In 2005, FDOT adopted reliability as an outcome performance measure to report to the Florida Transportation Commission on a statewide basis. FDOT identified reliability reporting definitions and data needs in FY 2006. Limited data was available for reporting reliability initially. Travel time reliability and congestion results are available for Districts 2, 4, 5, 6, and 7. These Districts provided data through the Statewide Transportation Engineering Warehouse for Archived Regional Data system at University of Florida. STEWARD was developed for FDOT by the University of Florida Transportation Research Center. STEWARD is a prototype of a data warehouse and it has been used to store speed detector data provided by FDOT Districts since 2008.

Purpose: Report a qualitative measure of the variability or uncertainty in the performance of facilities over time.

Objective: To measure and track the variability of roadway congestion, measured using the Buffer time index as well as measure and track the congestion level, measured using the Travel Time Index.



Methodology: FDOT identified two metrics for measuring travel time reliability and congestion. The Buffer time index is a measure of the reliability of travel service. The Buffer time index is calculated as the ratio between the difference of the 95th percentile travel time and the average travel time divided by the average travel time, i.e. $(95\text{th travel time} - \text{average travel time}) / \text{average travel time}$. For example, a value of 0.4 means that a traveler should budget an additional 8-minute buffer for a 20-minute average peak trip time to ensure 95 percent on-time arrival. A secondary metric is the Travel Time Index (TTI), which is a measure of traffic congestion. TTI is calculated as the ratio of average peak travel time to an off-peak (free-flow) standard, in this case 60 miles per hour (mph) for freeways. For example, a value of 1.20 means that average peak travel times are 20 percent longer than off-peak travel times. Travel time, travel speed, and volume data are the basis of these measures. Travel time and speed data are obtained from either speed data from roadside detectors that communicate in real time to TMCs or probe data from various sources that report travel time directly. Volume data are used to compute vehicle miles traveled, which are then used as weights to compute an area wide or corridor wide measure average. Only non-holiday weekdays select periods are used in index calculations. The periods are: morning (AM) peak: 6 a.m. to 9 a.m., and evening (PM) peak: 4 p.m. to 7 p.m.

Freeway Segments: A typical freeway segment is about 5 to 15 miles between key major interchanges in urban areas, and can go up to 20 miles in suburban/rural areas with less congestion and fewer interchanges. When possible, congested freeways were segmented separately from freeways that had less congestion.

TRAVEL TIME RELIABILITY

2011/2012 RESULTS

Travel time and buffer indices were calculated for ITS-managed corridors in each District (see following table on next page for segment limits). Roadway segments that consistently show congestion and unreliable travel times are tracked and reported on quarterly. The following charts summarize congestion and reliability results for instrumented segments calculated over a rolling 12-month period. The charts indicate the roadway, direction, limits, peak period, and travel time index/buffer time index.

This year Districts 1 and 3 added instruments to roadway segments on I-75, I-10, and I-110. In addition, existing segments in other Districts were reconfigured to accommodate the continued expansion of the ITS miles managed on the limited-access FHHS. Prior to this year's reconfiguration, the reported roadway segments had not been changed since the reliability data began to be collected. Logical reporting segments were created with consideration to major interchanges and freeway-to-freeway interchanges and keeping segments to a reasonable length, as well as planning for future segments to be added.

Districts 1 and 3 did not experience significant congestion on any road segments during the reporting period from July 1, 2011 to June 30, 2012, so no graphs is shown.

District 2 experienced the most congestion during the AM peak on I-10 eastbound from I-295 to I-95 with a travel time index of 1.58. The most unreliable travel times occurred during the AM peak on the same road segment with a buffer time index of 1.09.

In District 4, the most congestion occurred during the PM peak on I-95 in Broward County southbound from Hillsboro Blvd to Commercial Blvd with a travel time index of 1.17. The most unreliable travel times occurred during the PM peak on the same road segment with a buffer time index of 0.44.

In District 5 the most congestion occurred during the PM peak on I-4 eastbound from US 192 to SR 408 with a travel time index of 1.36. The most unreliable travel times occurred during the PM peak on the same road segment with a buffer time index of 0.51.

In District 6, the most congestion occurred during the PM peak on SR 826 (Palmetto Expressway) southbound from I-75 to SR 836 with a travel time index of 1.81. The most unreliable travel times occurred during the PM peak on I-195 westbound from I-95 to Alton Road with a buffer time index of 0.84.

District 7 experienced the most congestion during the PM peak on I-275 southbound from SR 60 to I-4 with a travel time index of 1.53. The most unreliable travel times occurred during the PM peak on the same road segment with a buffer time index of 0.54.

It should be noted that in some cases when the buffer time index or travel time index are 0.0 or 1.0 (indicating that there is good reliability and no congestion), respectively, the lines on the chart are printed on top of each other. This makes it seem as if data is missing, however the data is there and it is accurate.

2011/2012 Segment Limits

District	Roadway	Start	End	Approx Miles
1	I-75	Kings Highway	Bayshore Road (SR78)	26.9
1	I-75	Bayshore Road (SR78)	Corkscrew Road	20
1	I-75	Corkscrew Road	Collier Blvd	21.5
1	I-75	Collier Blvd	Broward/Charlotte Co. Line	50.3
2	I-95	Airport Road	I-10	11.8
2	I-95	I-10	Race Track Road (MM 332)	19.6
2	I-295	I-10	I-95 (south)	20.4
2	I-10	I-295	I-95	5
3	I-10	CR 191	Florida/Alabama State Line	26
3	I-110	All 6 miles in Pensacola		6
4	I-95 in Broward Co.	Hillsboro Blvd	Commercial Blvd	9.6
4	I-95 in Broward Co.	Commercial Blvd	Hallandale Beach Blvd	14.4
4	I-595	I-75	US 1	12.9
4	I-75	Broward/Miami-Dade Co. Line	I-595	12
4	I-75	I-595	Broward/Collier Co. Line	33.4
5	I-4	US 192	SR 408	18.5
5	I-4	SR 408	US 17/92	22
5	I-95 in Volusia Co.	SR 40	SR 44	19
5	I-95 in Brevard Co.	SR 520	SR 192	20.8
6	I-195	I-95	Alton Road	4.4
6	SR 826 (Palmetto Exp)	I-95	I-75	8.5
6	SR 826 (Palmetto Exp)	I-75	SR 836	10.2
6	I-75	SR 826	Broward/Miami-Dade Co. Line	5.4
6	I-95	Broward/Miami-Dade Co. Line	US 1	17.3
7	I-275	SR 60	38th Avenue N in St. Pete	14.5
7	I-275	I-4	I-75	16
7	I-4	I-275	N. Park Road in Plant City	22.4
7	I-275	SR 60	I-4	5.8
7	I-75	US 301	I-275 (North side)	20
7	I-275	38th Ave North in St. Pete	I-75	24.5
7	I-4	N. Park Road in Plant City	CR 557 in Lakeland	25.4

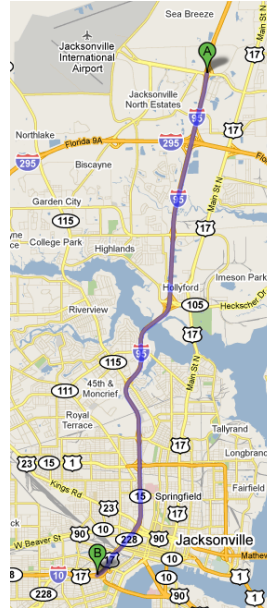
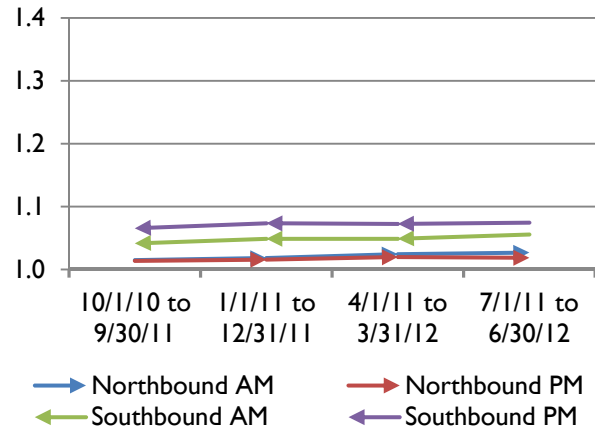
The following table shows the range of buffer time indices for all periods for the instrumented freeways within each District for FY 2011/2012. The most unreliable section calculated throughout the state is on I-10 eastbound in District 2 during the AM peak period (buffer time index of 1.09). This table summarizes the BTI for all periods. It is more meaningful to review the more specific segment and periods.

Buffer Time Index Range by District and Roadway 7/1/11 to 6/30/12										
District	I-95	I-295	I-595	I-4	SR 826	I-75	I-195	I-275	I-10	I-110
1						0				
2	.03 to .21	0 to .16							.04 to 1.09	
3									0	0
4	.09 to .44		0 to .23			0 to .17				
5	0			.04 to .51						
6	.16 to .52				.07 to .55	0 to .52	.14 to .84			
7				0 to .28		0 to .35		0 to .54		

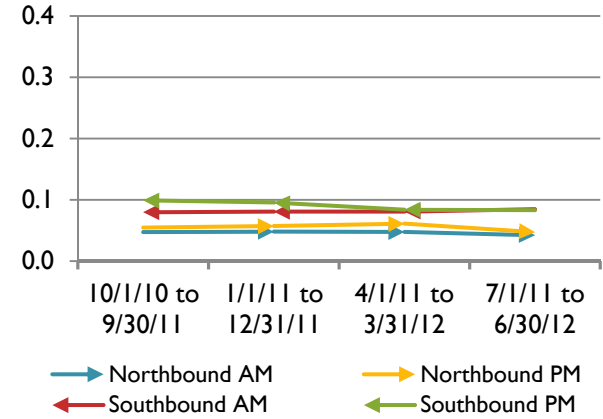
EXAMPLE: The buffer time index varies from 0.16 to 0.52 on I-95 in District Six for the segment from the Broward/Miami-Dade County line to US 1. Therefore, if the average trip peak time is 20 minutes, the extra time that must be added to ensure 95 percent on-time arrival varies from approximately 3 to 10 minutes.

District 2

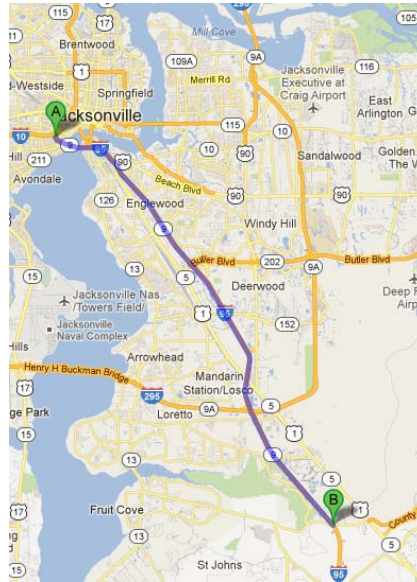
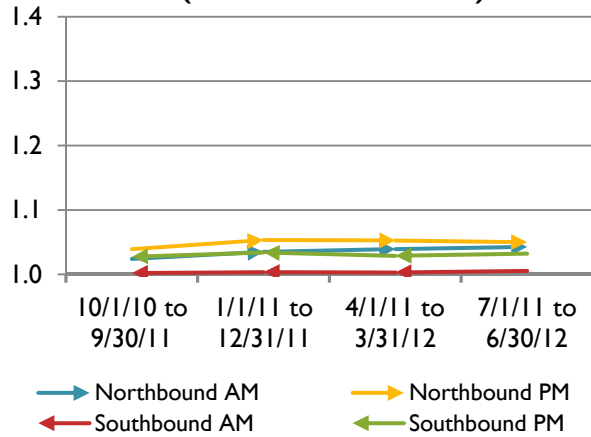
**Travel Time Index - District 2
I-95 (Airport Rd to I-10)**



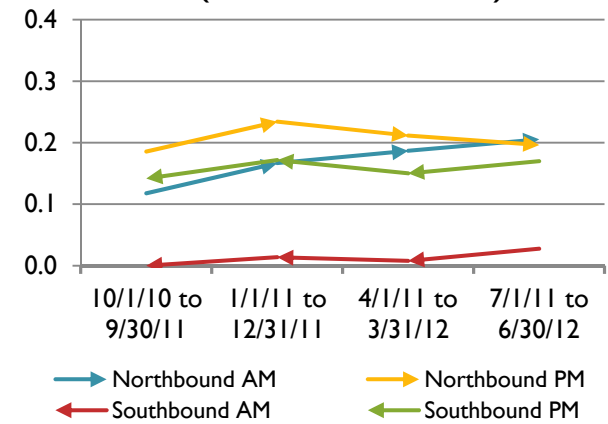
**Buffer Time Index - District 2
I-95 (Airport Rd to I-10)**



**Travel Time Index - District 2
I-95 (I-10 to Race Track Rd)**

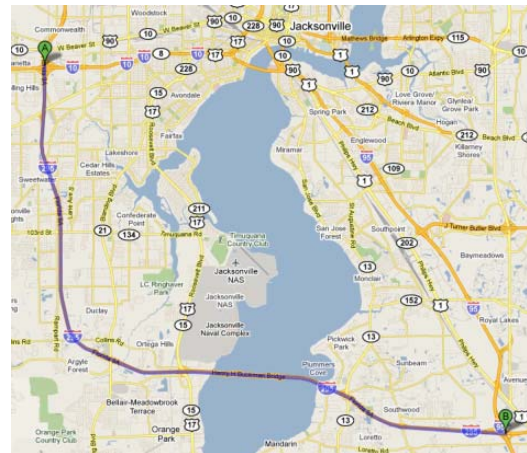
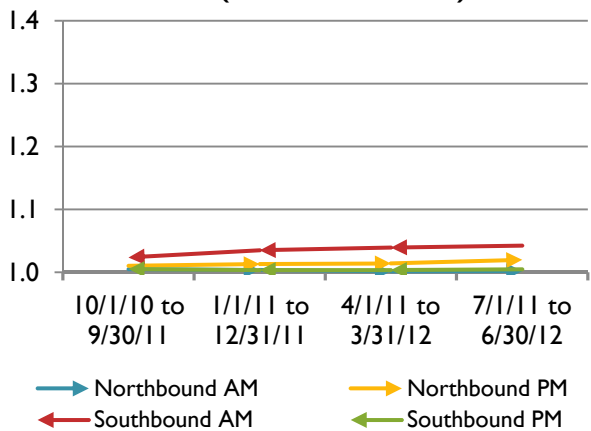


**Buffer Time Index - District 2
I-95 (I-10 to Race Track Rd)**

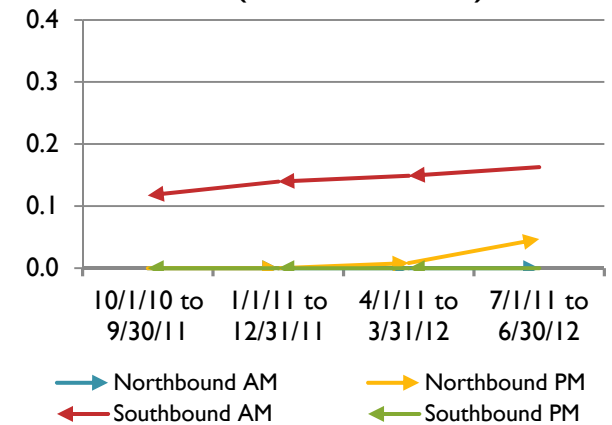


EXAMPLE: On I-95 in District 2 from I-10 to Race Track Road, during the period from 7/1/11 to 6/30/12, in the southbound lane during the PM peak (from 4 p.m. to 7 p.m.) the BTI is .17. A traveler had to budget an additional 3 ½ minutes buffer to the approximate average trip time of 20 minutes to ensure 95 percent on-time arrival.

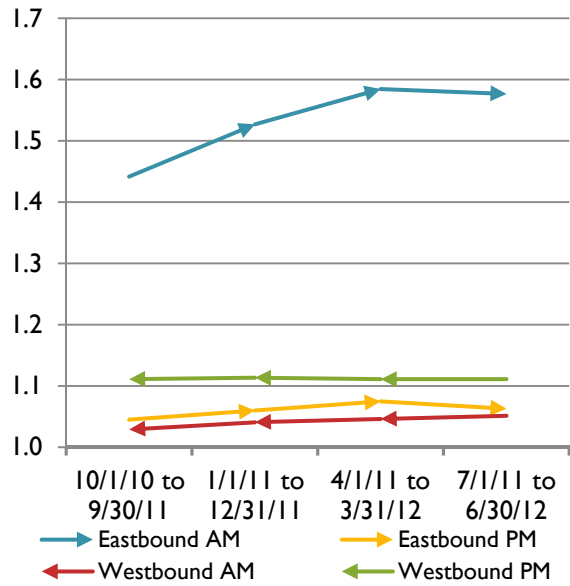
**Travel Time Index - District 2
I-295 (I-10 to I-95 South)**



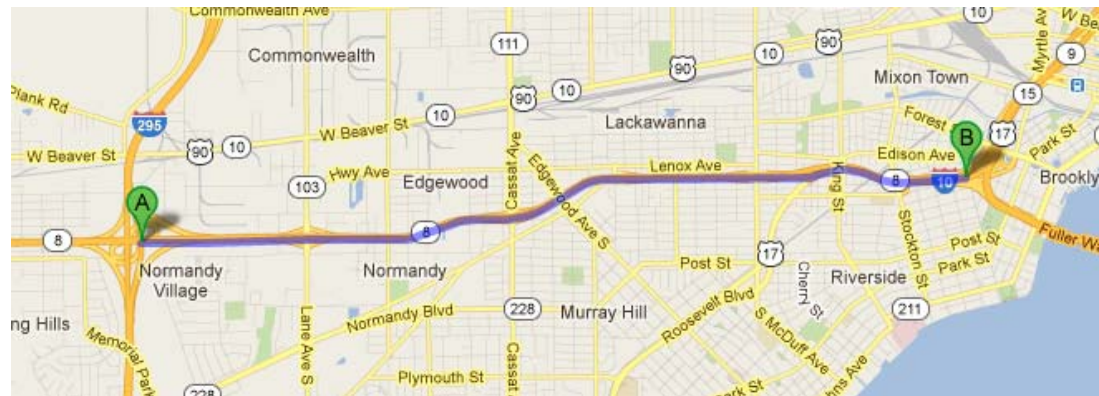
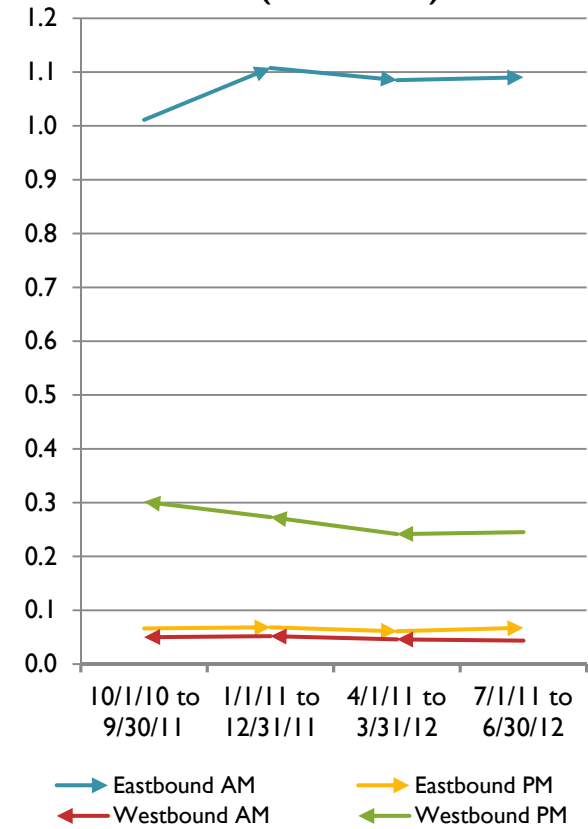
**Buffer Time Index - District 2
I-295 (I-10 to I-95 South)**



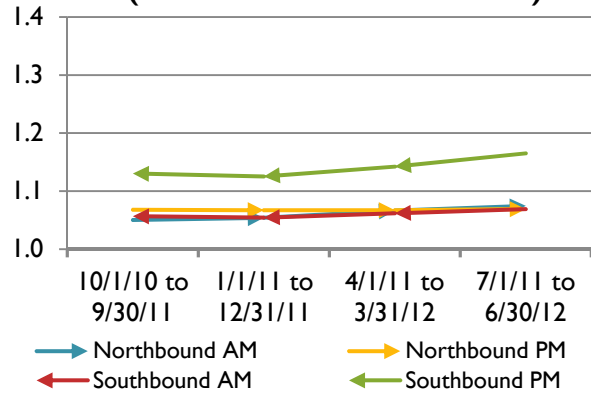
**Travel Time Index - District 2
I-10 (I-295 to I-95)**



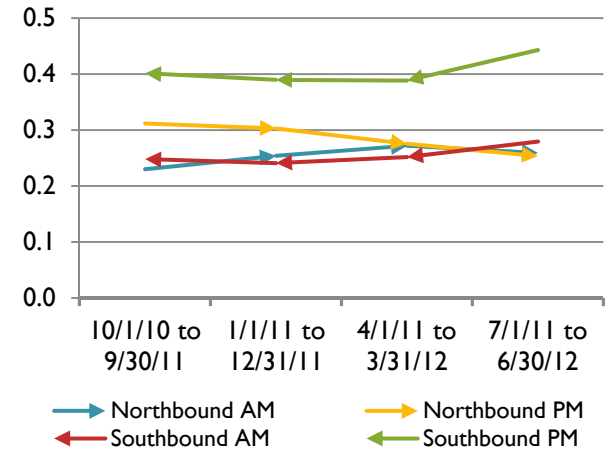
**Buffer Time Index - District 2
I-10 (I-295 to I-95)**



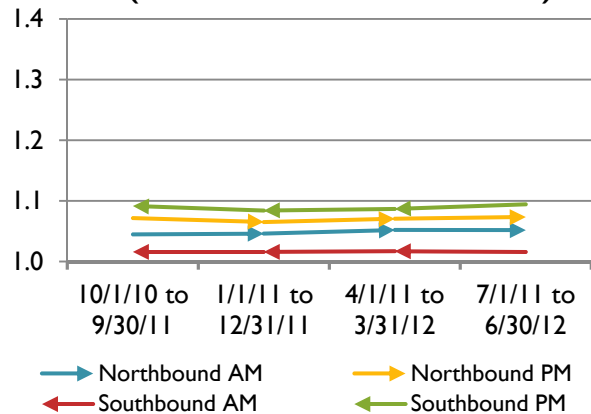
**Travel Time Index - District 4
I-95 (Hillsboro to Commercial Blvd)**



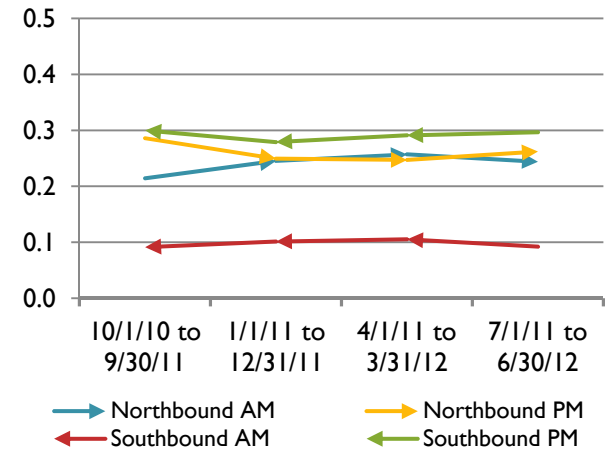
**Buffer Time Index - District 4
I-95 (Hillsboro to Commercial Blvd)**



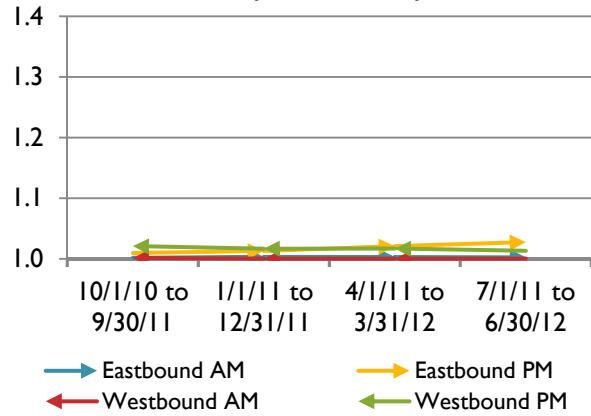
**Travel Time Index - District 4
I-95 (Commercial to Hallendale Bch Blvd)**



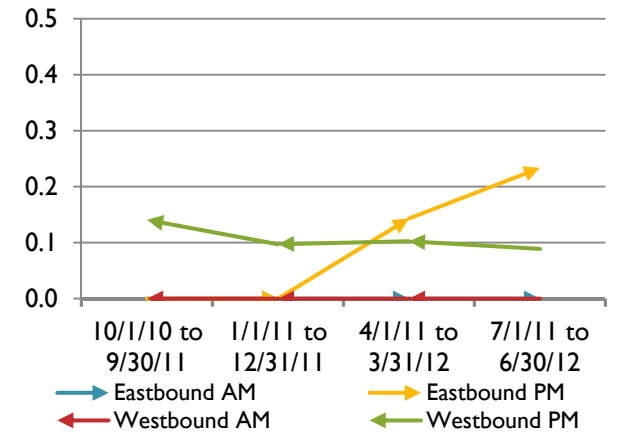
**Buffer Time Index - District 4
I-95 (Commercial to Hallendale Bch Blvd)**



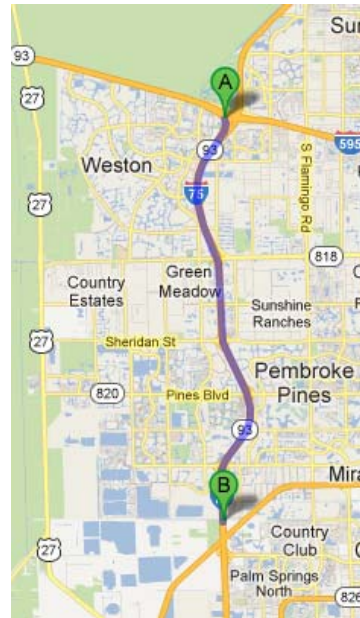
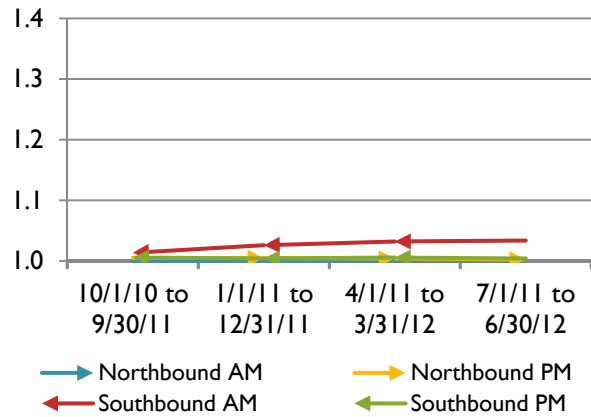
**Travel Time Index - District 4
I-595 (I-75 to US 1)**



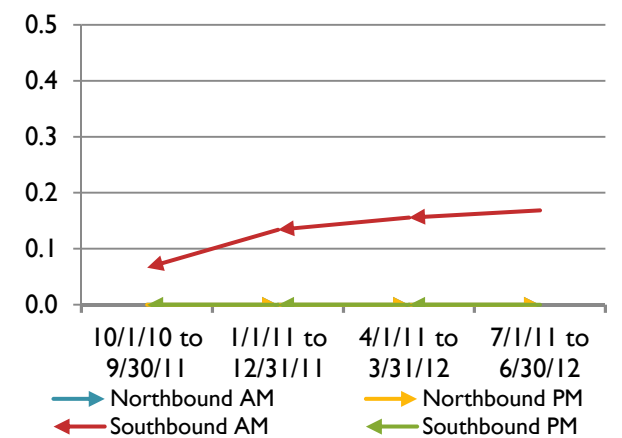
**Buffer Time Index - District 4
I-595 (I-75 to US 1)**



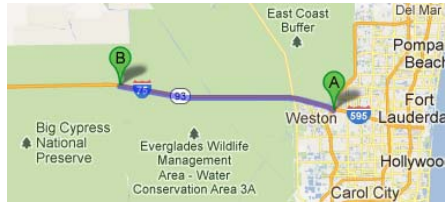
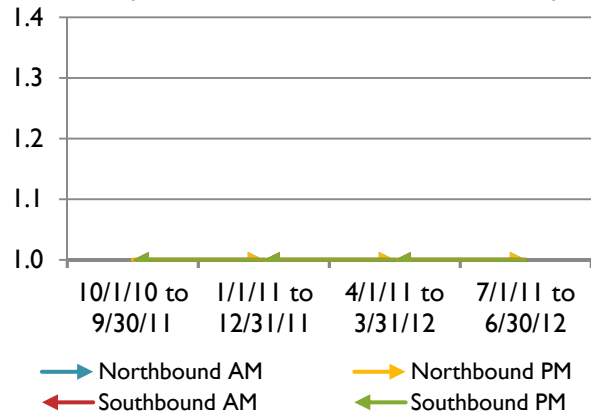
**Travel Time Index - District 4
I-75 (Broward/Miami-Dade Co. Line to I-595)**



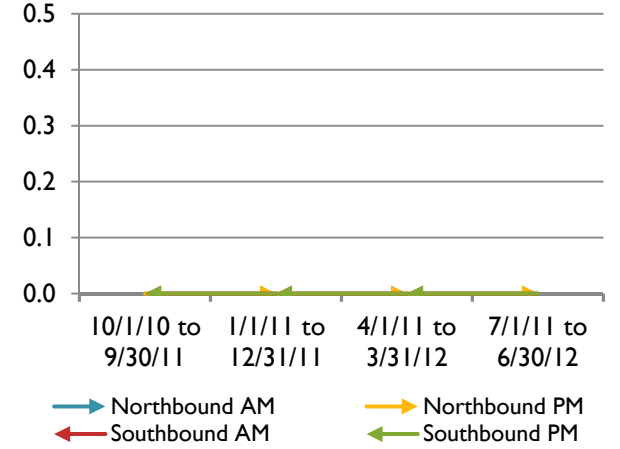
**Buffer Time Index - District 4
I-75 (Broward/Miami-Dade Co. Line to I-595)**



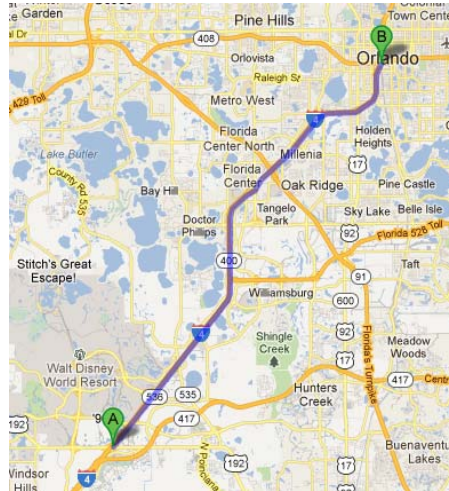
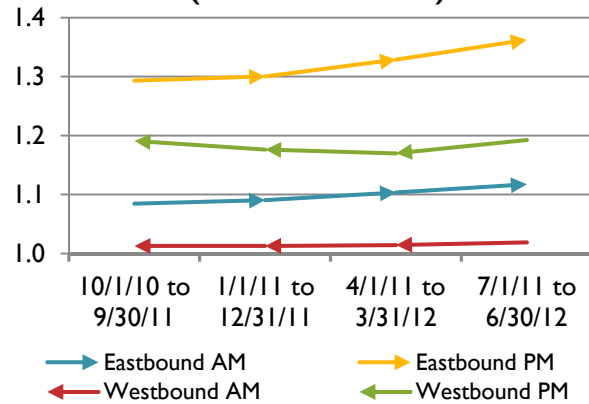
**Travel Time Index - District 4
I-75 (I-595 to Broward/Collier Co. Line)**



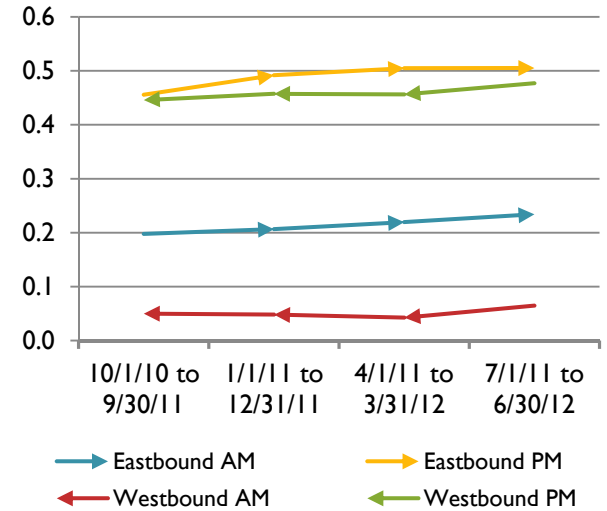
**Buffer Time Index - District 4
I-75 (I-595 to Broward/Collier Co. Line)**



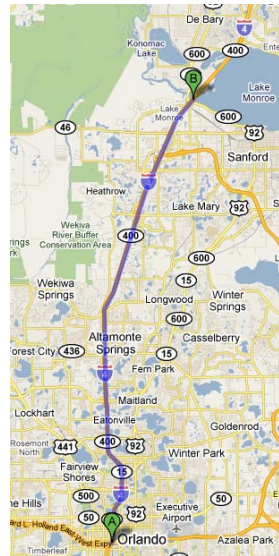
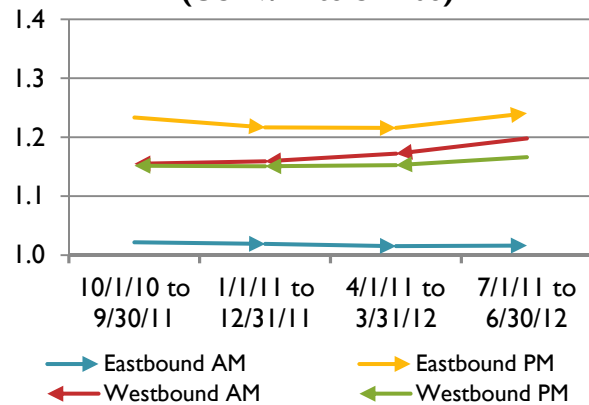
**Travel Time Index - District 5
I-4 (US 192 to SR 408)**



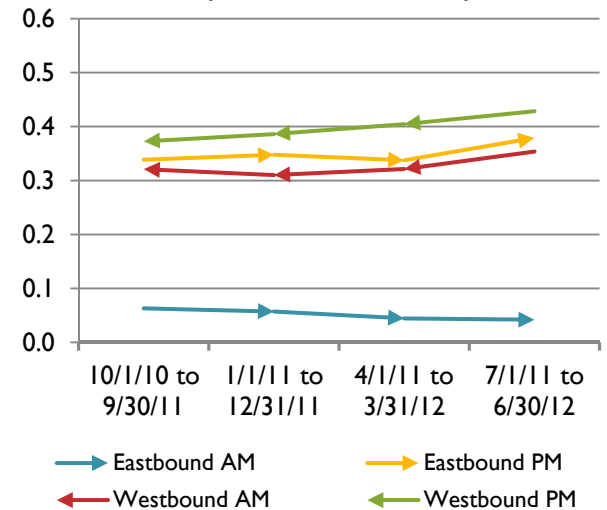
**Buffer Time Index - District 5
I-4 (US 192 to SR 408)**



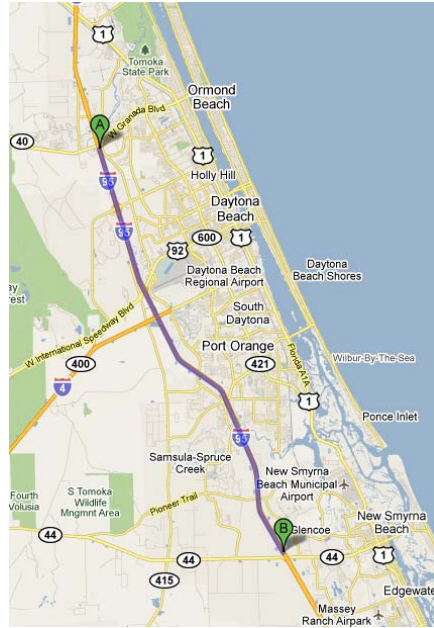
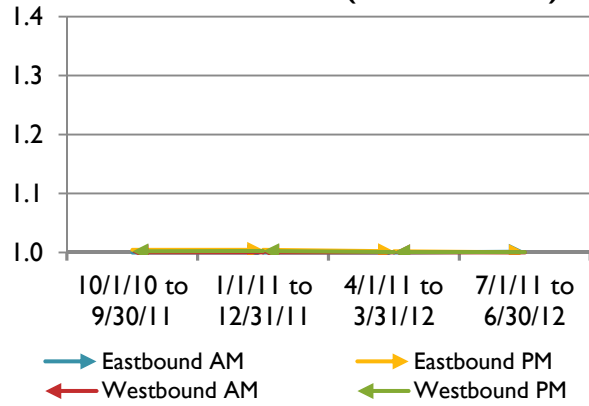
**Travel Time Index - District 5
I-4 (US 17/92 to SR 408)**



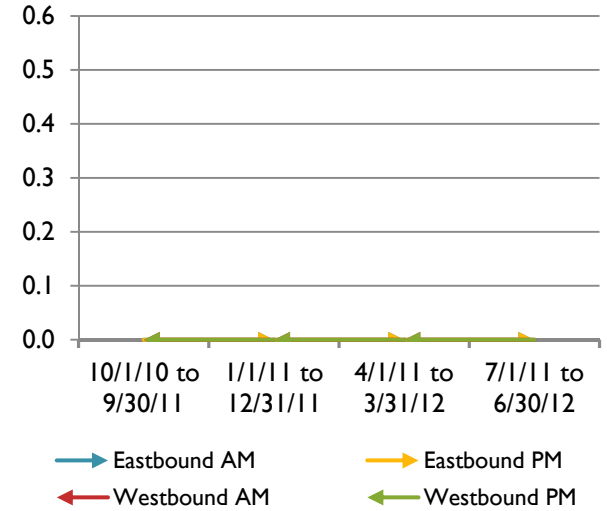
**Buffer Time Index - District 5
I-4 (US 17/92 to SR 408)**



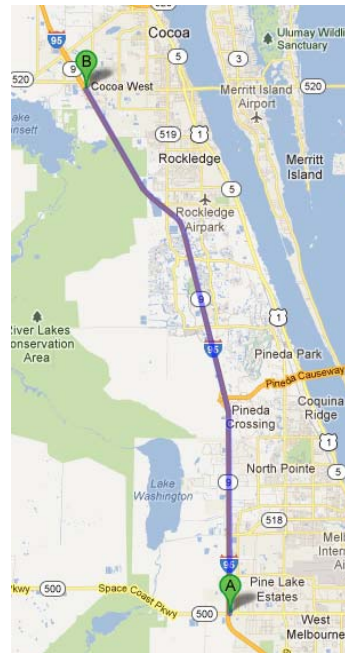
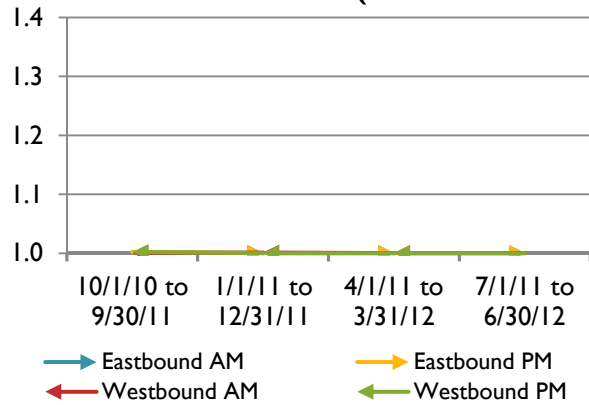
**Travel Time Index - District 5
I-95 in Volusia Co. (SR 40 to SR 44)**



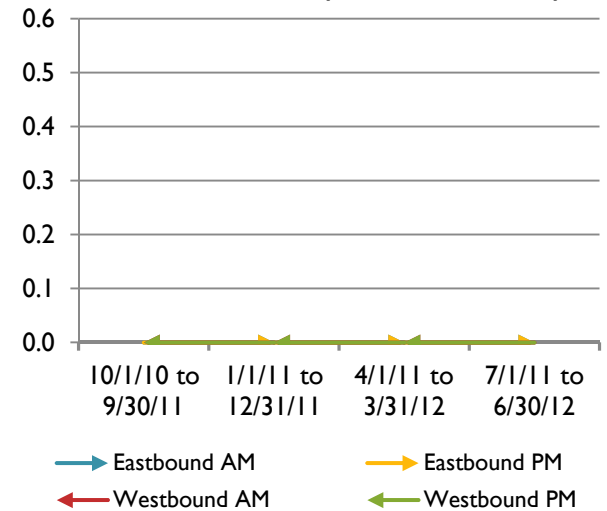
**Buffer Time Index - District 5
I-95 in Volusia Co. (SR 40 to SR 44)**



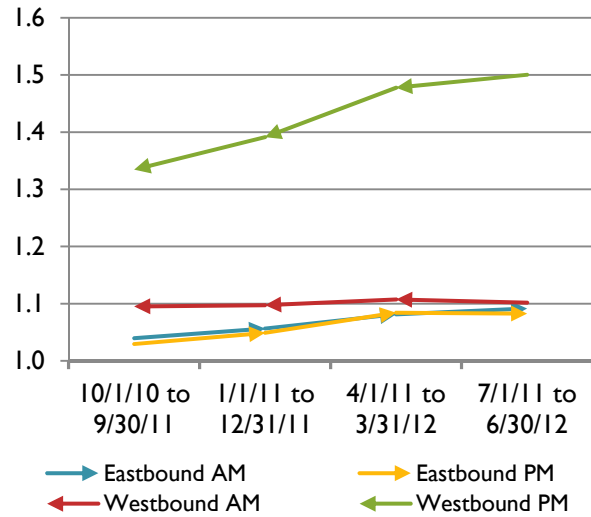
**Travel Time Index - District 5
I-95 in Brevard Co. (SR 520 to SR 192)**



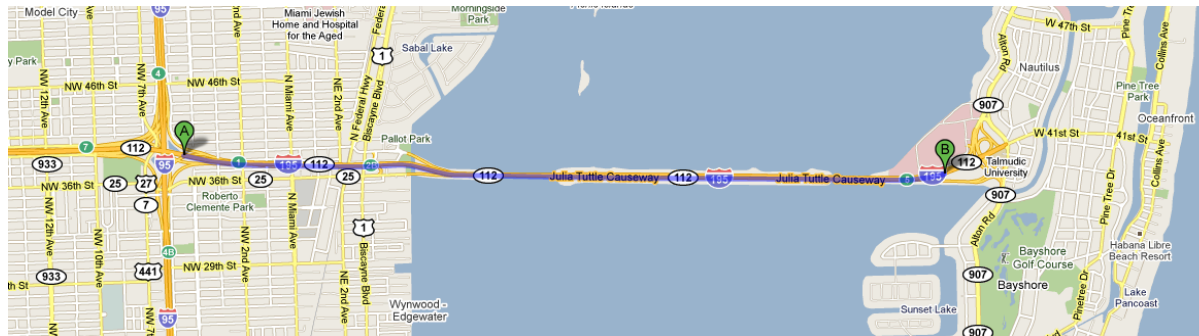
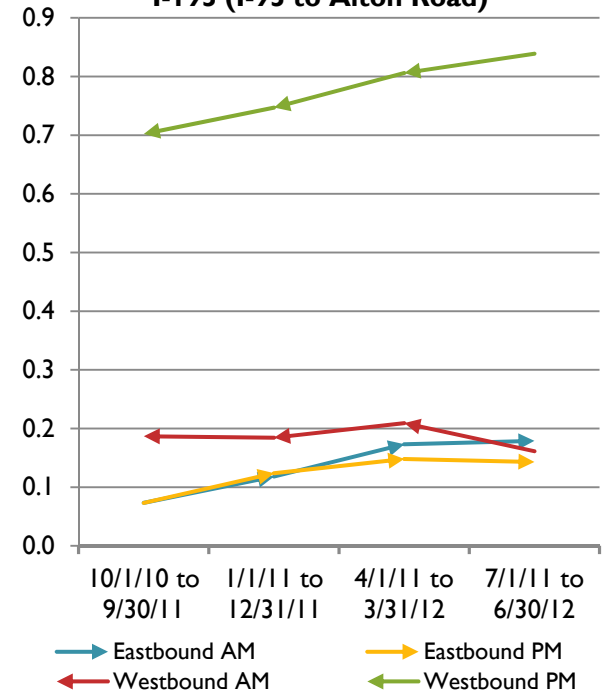
**Buffer Time Index - District 5
I-95 in Brevard Co. (SR 520 to SR 192)**



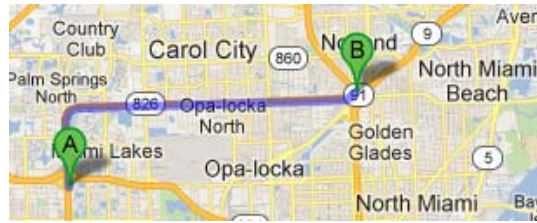
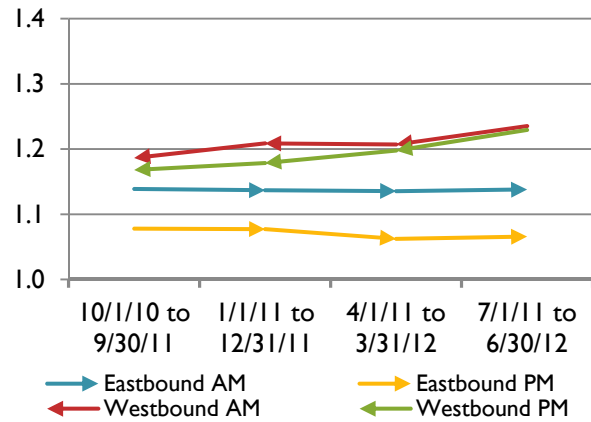
**Travel Time Index - District 6
I-195 (I-95 to Alton Road)**



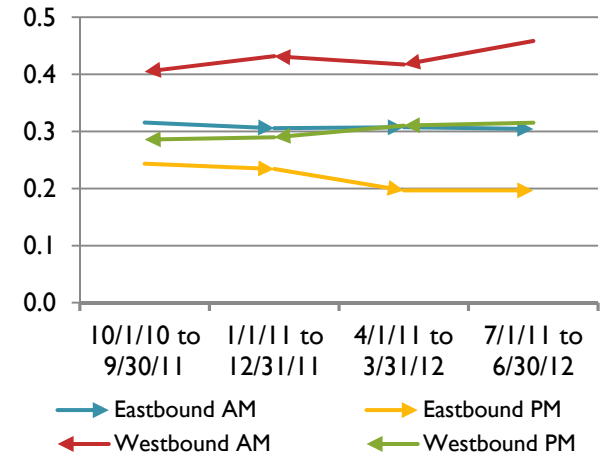
**Buffer Time Index - District 6
I-195 (I-95 to Alton Road)**



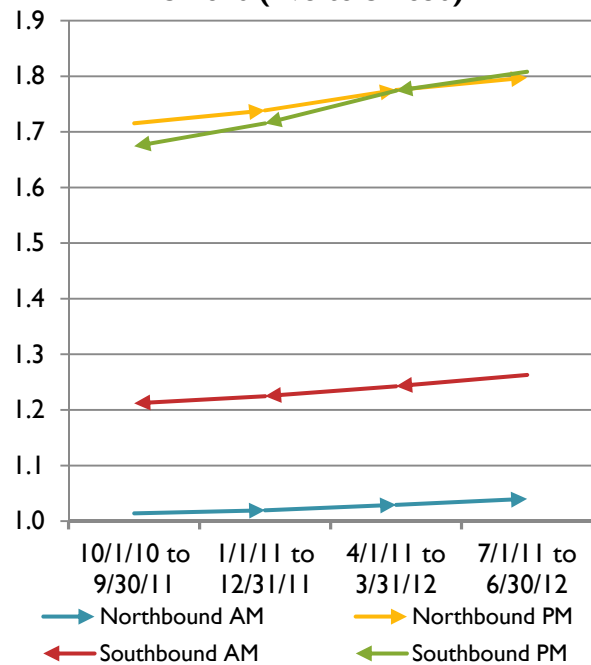
**Travel Time Index - District 6
SR 826 (I-95 to I-75)**



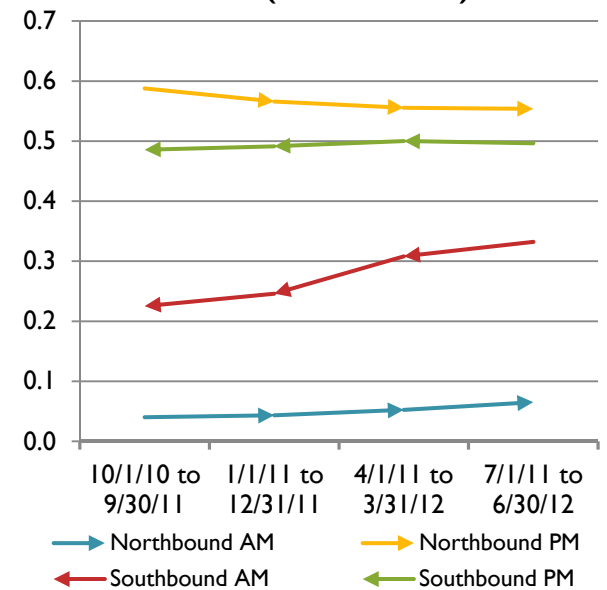
**Buffer Time Index - District 6
SR 826 (I-95 to I-75)**

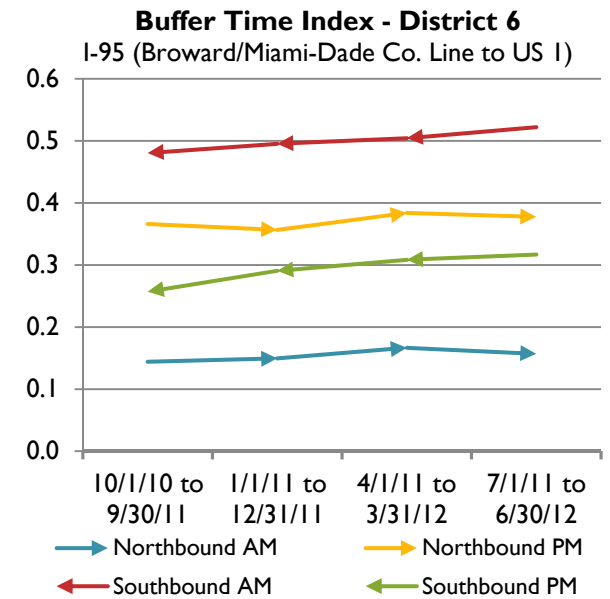
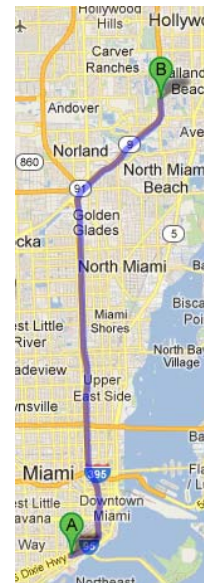
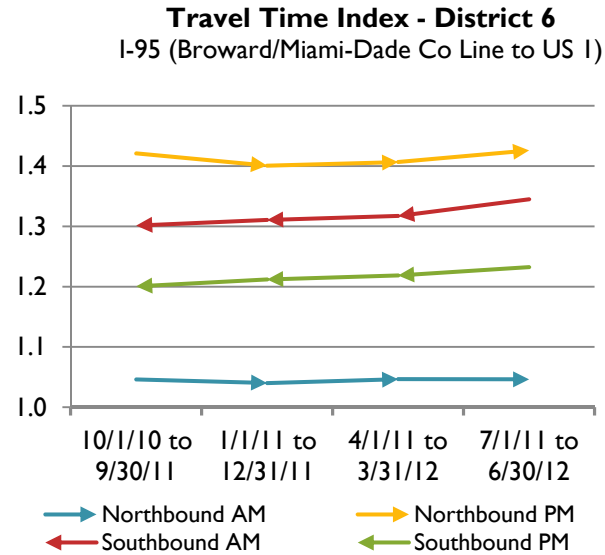
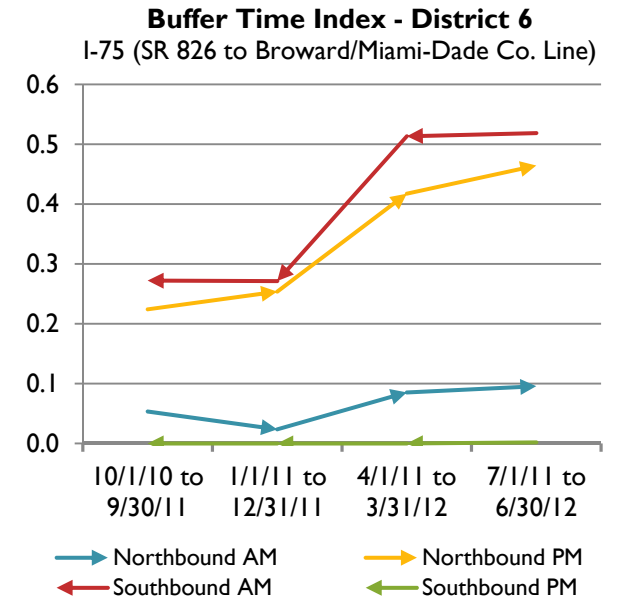
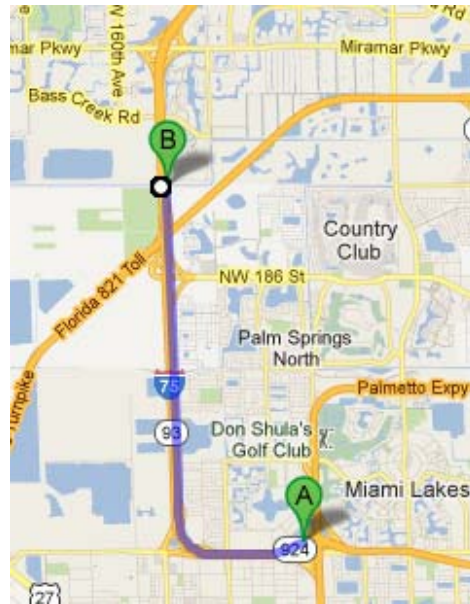
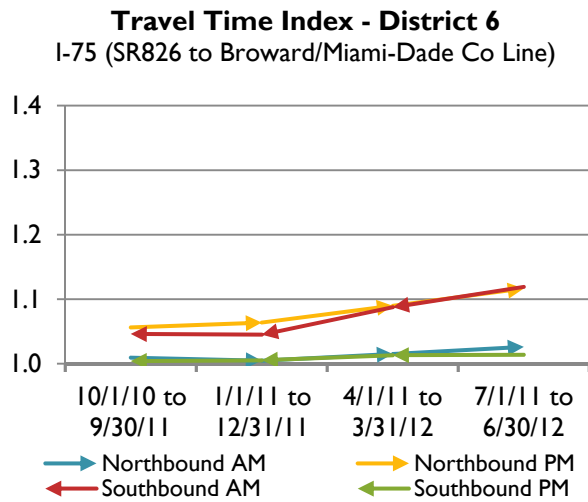


**Travel Time Index - District 6
SR 826 (I-75 to SR 836)**

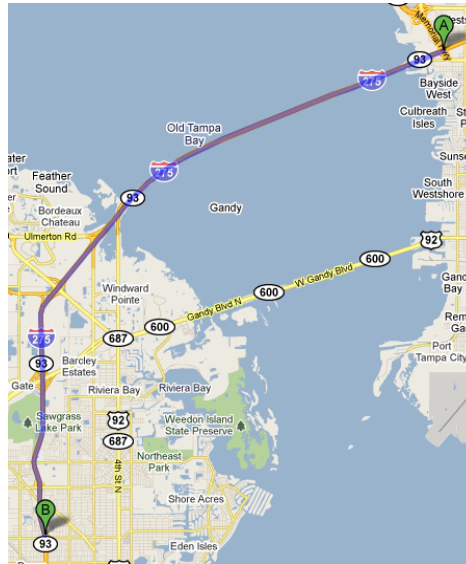
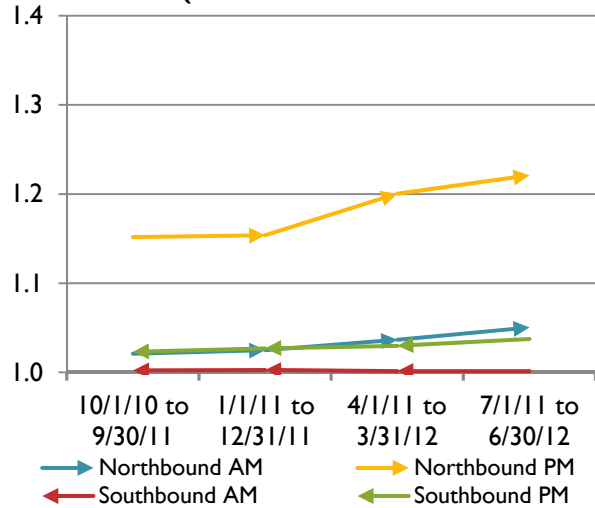


**Buffer Time Index - District 6
SR 826 (I-75 to SR 836)**

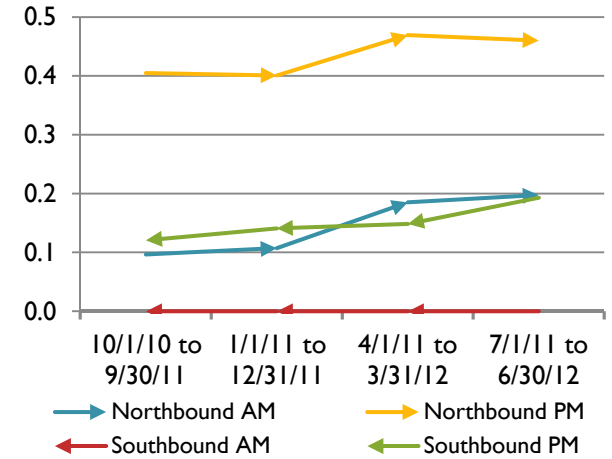




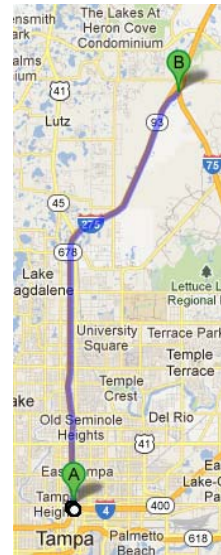
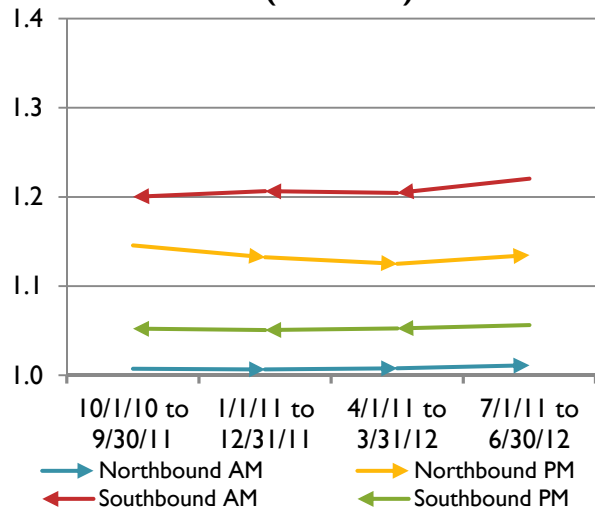
**Travel Time Index - District 7
I-275 (SR 60 to 38th Ave N in St. Pete)**



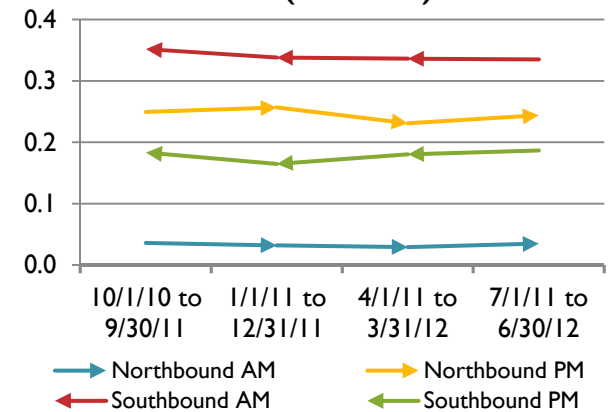
**Buffer Time Index - District 7
I-275 (SR 60 to 38th Ave N in St. Pete)**



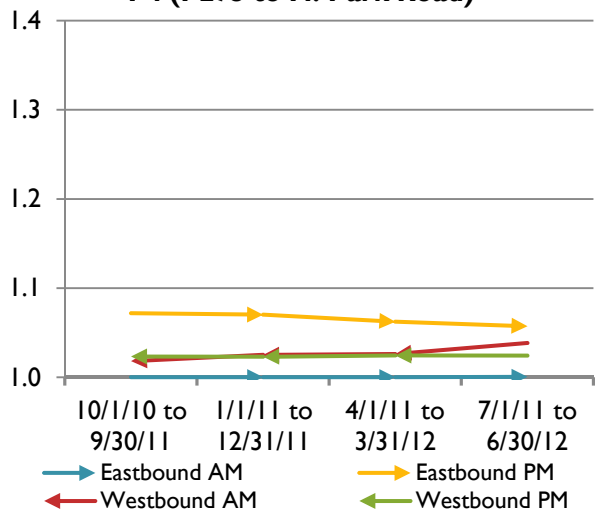
**Travel Time Index - District 7
I-275 (I-4 to I-75)**



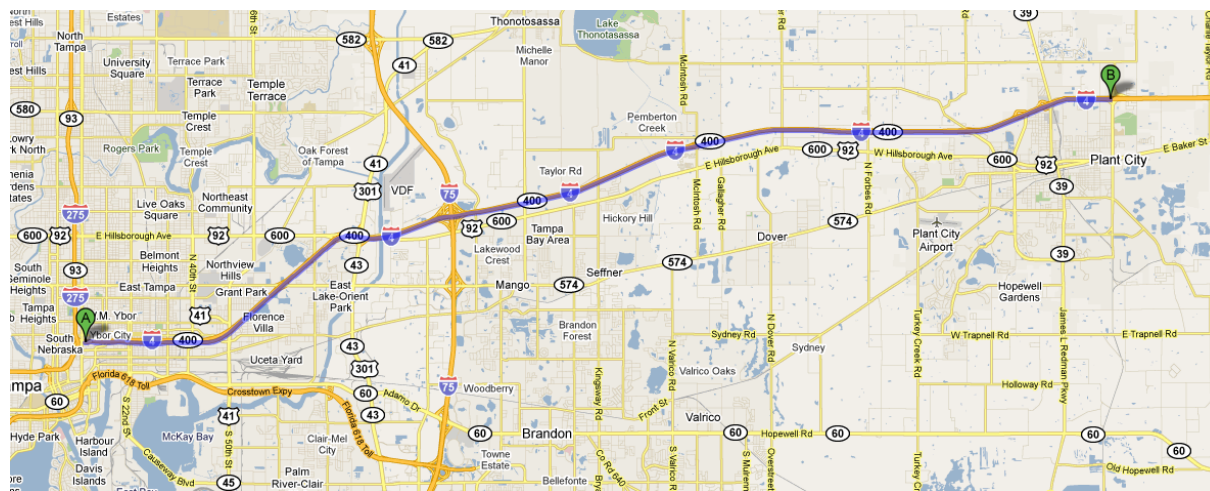
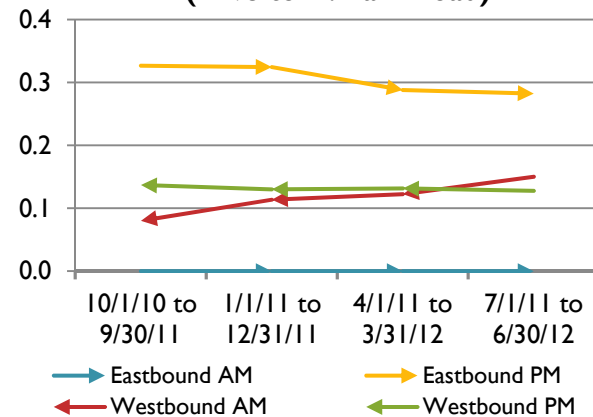
**Buffer Time Index - District 7
I-275 (I-4 to I-75)**



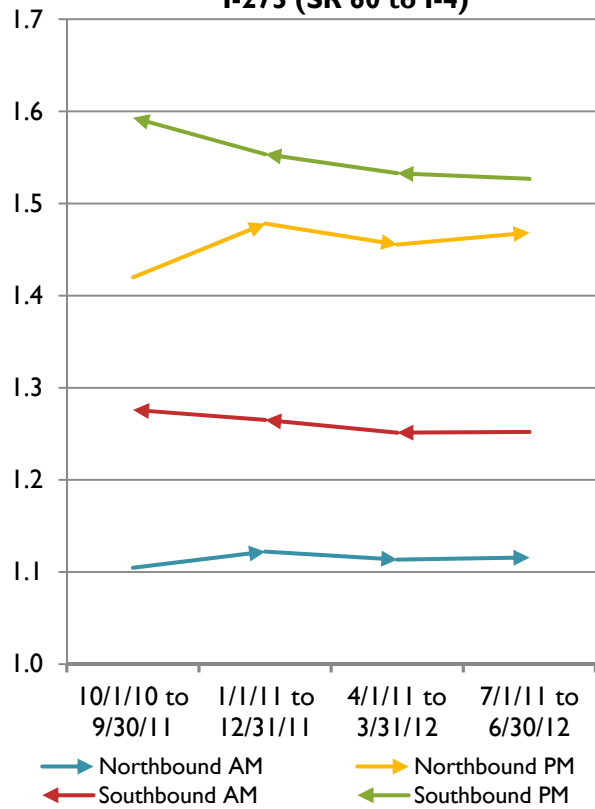
Travel Time Index - District 7 I-4 (I-275 to N. Park Road)



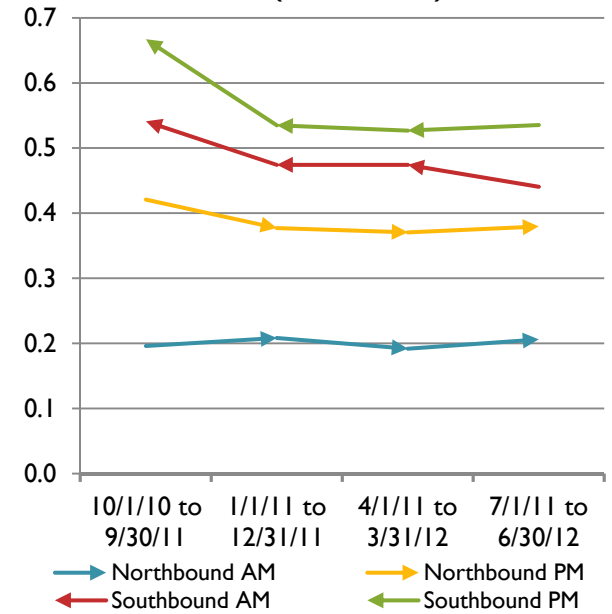
Buffer Time Index - District 7 I-4 (I-275 to N. Park Road)



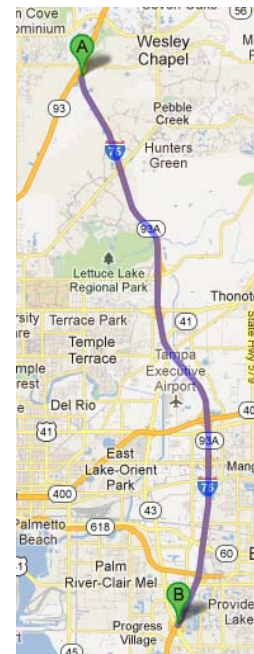
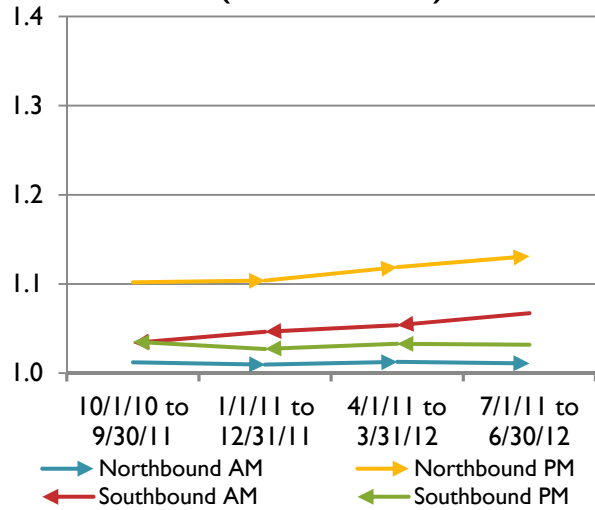
**Travel Time Index - District 7
I-275 (SR 60 to I-4)**



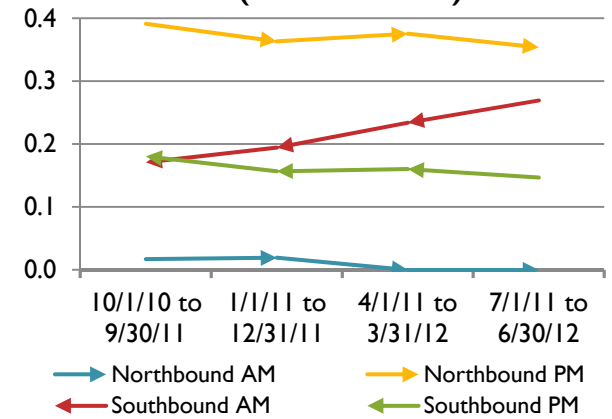
**Buffer Time Index - District 7
I-275 (SR 60 to I-4)**



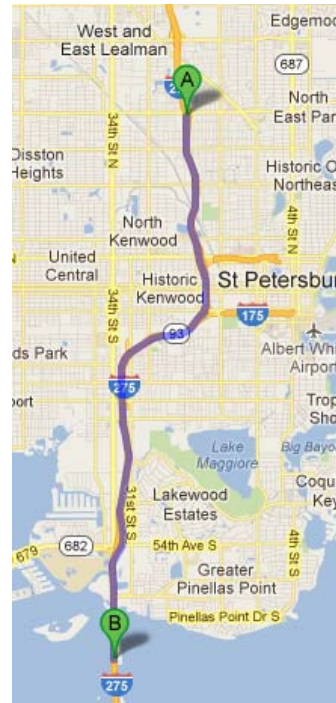
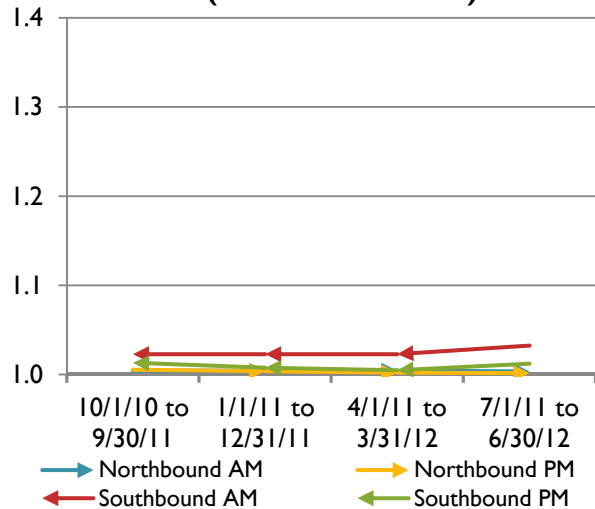
**Travel Time Index - District 7
I-75 (US 301 to I-275)**



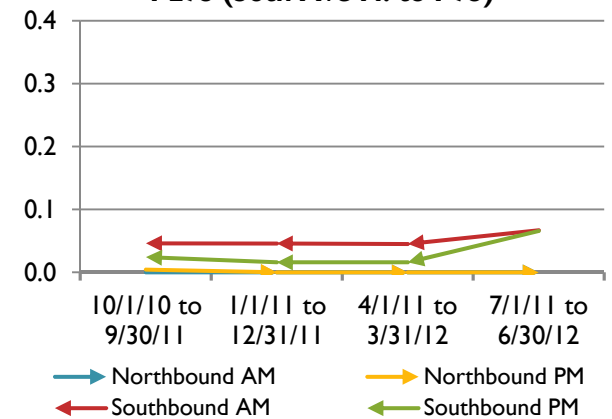
**Buffer Time Index - District 7
I-75 (US 301 to I-275)**



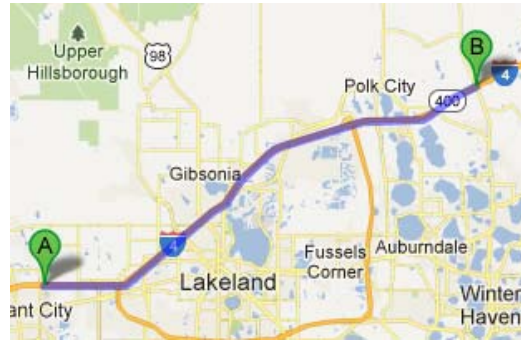
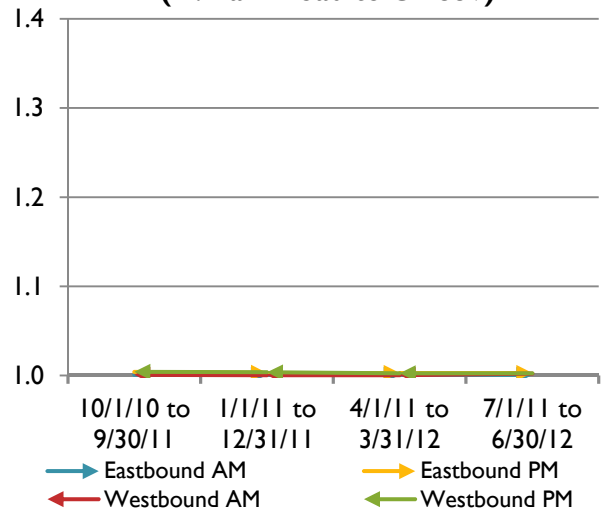
**Travel Time Index - District 7
I-275 (38th Ave N. to I-75)**



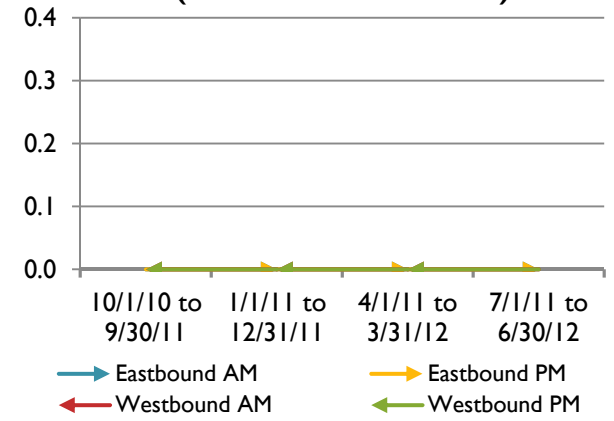
**Buffer Time Index - District 7
I-275 (38th Ave N. to I-75)**



**Travel Time Index - District 7
I-4 (N. Park Road to CR 557)**



**Buffer Time Index - District 7
I-4 (N. Park Road to CR 557)**



Peak Hour Buffer Time Index by District and Roadway
7/1/11 to 6/30/12

District	Roadway	Direction	Peak Period	BTI
2	I-95	Northbound	AM	0.12
			PM	0.12
		Southbound	AM	0.06
			PM	0.13
	I-295	Northbound	AM	0.00
			PM	0.05
		Southbound	AM	0.16
			PM	0.00
	I-10	Eastbound	AM	1.09
			PM	0.07
Westbound		AM	0.04	
		PM	0.25	
4	I-95	Northbound	AM	0.25
			PM	0.26
		Southbound	AM	0.19
			PM	0.37
	I-595	Eastbound	AM	0.00
			PM	0.23
		Westbound	AM	0.00
			PM	0.09
	I-75	Northbound	AM	0.00
			PM	0.00
Southbound		AM	0.08	
		PM	0.00	
5	I-4	Eastbound	AM	0.14
			PM	0.44
		Westbound	AM	0.21
	PM		0.45	
	I-95	Eastbound	AM	0.00
			PM	0.00
Westbound		AM	0.00	
	PM	0.00		
6	I-195	Eastbound	AM	0.18
			PM	0.14
		Westbound	AM	0.16
			PM	0.84
	SR 826	Eastbound	AM	0.18
			PM	0.38
		Westbound	AM	0.40
			PM	0.41
	I-75	Northbound	AM	0.10
			PM	0.46
Southbound		AM	0.52	
		PM	0.00	
I-95	Northbound	AM	0.16	
		PM	0.38	
	Southbound	AM	0.52	
		PM	0.32	

Peak Hour Buffer Time Index by District and Roadway 7/1/11 to 6/30/12					
District	Roadway	Direction	Peak Period	BTI	
7	I-275	Northbound	AM	0.11	
			PM	0.27	
		Southbound	AM	0.21	
			PM	0.25	
			Eastbound	AM	0.00
				PM	0.14
	I-4	Westbound	AM	0.08	
			PM	0.06	
		I-75	Northbound	AM	0.00
				PM	0.35
			Southbound	AM	0.27
				PM	0.15

CUSTOMER SATISFACTION

REPORT PUBLIC SATISFACTION WITH SERVICES PROVIDED BY THE FDOT ITS PROGRAM

Background: In late 2005, FDOT's Central Office ITS Program initiated a project to conduct a customer satisfaction survey in order to determine public attitudes toward ITS services provided by FDOT Districts. A draft questionnaire was developed and submitted for review by the Districts at the December 8, 2005 ITS Working Group meeting. Further review was conducted by FDOT's Central Office Traffic Engineering and Operations staff. Approval of the Customer Satisfaction Outcome Performance Measure questionnaire was obtained in February 2006. A statewide ITS customer satisfaction survey is conducted once every two years throughout Florida.

Purpose: Report a qualitative measure of public satisfaction with services provided by FDOT's ITS Program.

Objective: To obtain the percentage of survey respondents satisfied with ITS services including dynamic message sign (DMS) usage and performance, Road Ranger performance, and 511 and traveler information web site usage and performance.

Methodology: Customer satisfaction is measured by collecting statistically valid sample survey data from ITS users throughout the State. This task surveys via telephone a random sample of drivers in each of the seven FDOT Districts. Respondents must drive at least three times per week on freeways or the Florida Turnpike to qualify.

District	Qualifying Freeways
1	I-75, I-275, I-4, SR 570
2	I-10, I-75, I-95, I-295, SR 9A, J. Turner Butler Blvd. (SR202), Arlington Expressway (SR115), Hart Bridge Expressway (SR 228)
3	I-10, I-110 (SR 8A)
4	I-95, I-75, I-595, Sawgrass Expressway (SR 869), Florida's Turnpike (SR821)
5	I-4, I-75, I-95, East-West Expressway (SR 408), Bee Line Expressway (SR 528), Central Florida Greenway (SR 417), Western Beltway (SR 429), Florida's Turnpike (SR 821)
6	I-95, I-195, I-395, I-75, Florida's Turnpike (SR 821), Dolphin Expressway (SR 836), Palmetto Expressway (SR 826), SR 878, Don Shula Expressway (SR 874), Airport Expressway (SR 112), Gratigny Parkway (SR 924)
7	I-75 I-275, I-175, I-4, Veterans Expressway/Suncoast Parkway (SR 589), SR 568

CUSTOMER SATISFACTION

RESULTS

The Customer Satisfaction survey was conducted during June and July 2010. FDOT interviewed 2,800 drivers across Florida to explore usage of, attitudes toward, and perceptions of the FDOT's ITS services. The most significant findings of that survey are listed below.

- The days of radio and television traffic reports dominating traveler market share will eventually come to a close. This was evidenced in previous years by the generational divides in radio and television traffic information consumption. Young drivers—no matter how often, where, or when during the day they drive—were less dependent on these traditional traffic information sources and more inclined to turn to the Internet for traffic information. Use of traditional sources is generally down across all subgroups, and in-car navigation systems have already emerged as the second most popular alternative source of traffic information.
- Drivers who use 511 are effusive in their praise of it, are increasingly trusting of it, and are likely to act on the information it provides.
- There is increased interest in receiving traffic information via text message. With an increasing number of 511 users who have customized the service to meet their specific needs, drivers are less likely to call 511, and more likely to want traffic notifications sent to them.
- The Road Ranger Program and the electronic message signs continue to receive overwhelmingly positive ratings by customers and these services are highly valued and trusted by the driving public.

For more information on ITS Performance Measures:

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