

## Fiscal Year 2012/2013

Total Annual 511 Calls	3
Road Ranger Stops	5
ITS Miles Managed	7
Incident Duration	12
Travel Time Reliability	17
Customer Satisfaction	39
Contact Info	41



# Florida Department of Transportation



## Intelligent Transportation Systems Performance Measures Annual Report

Fiscal Year 2012/2013

## 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) 2012/2013, all output and outcome measures were reported. The data for these reported measures was collected for the period beginning July 1, 2012, and ending June 30, 2013.

## 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 2012/2013 RESULTS

Approximately 1.8 million calls to Florida 511 were made during the 12-month period from July 2012 through June 2013.

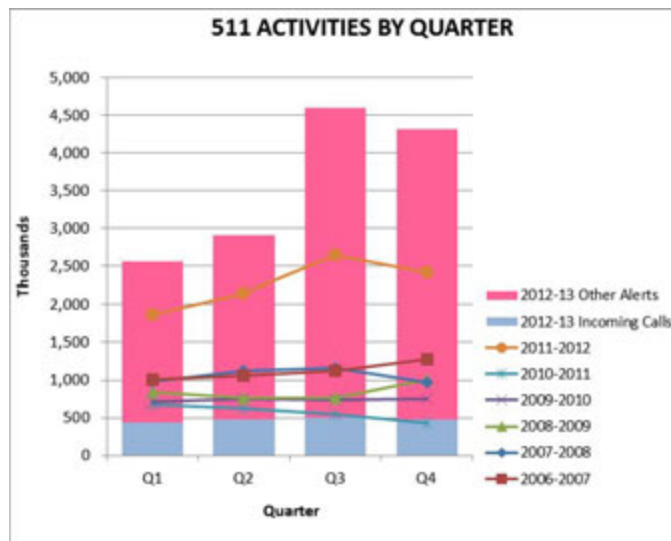
The FL511.com web site received 726,649 visitors during the fiscal year. There were 631,821 visits to the 511 mobile applications in the past year, which is a large increase over past years.

At the end of June, there were 9,308 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 14 million messages, calls, visits, and alerts were made in FY 2012-2013 keeping travelers on Florida’s highways informed.



*The blue portion of the bar indicates 511 phone calls received. The pink 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.

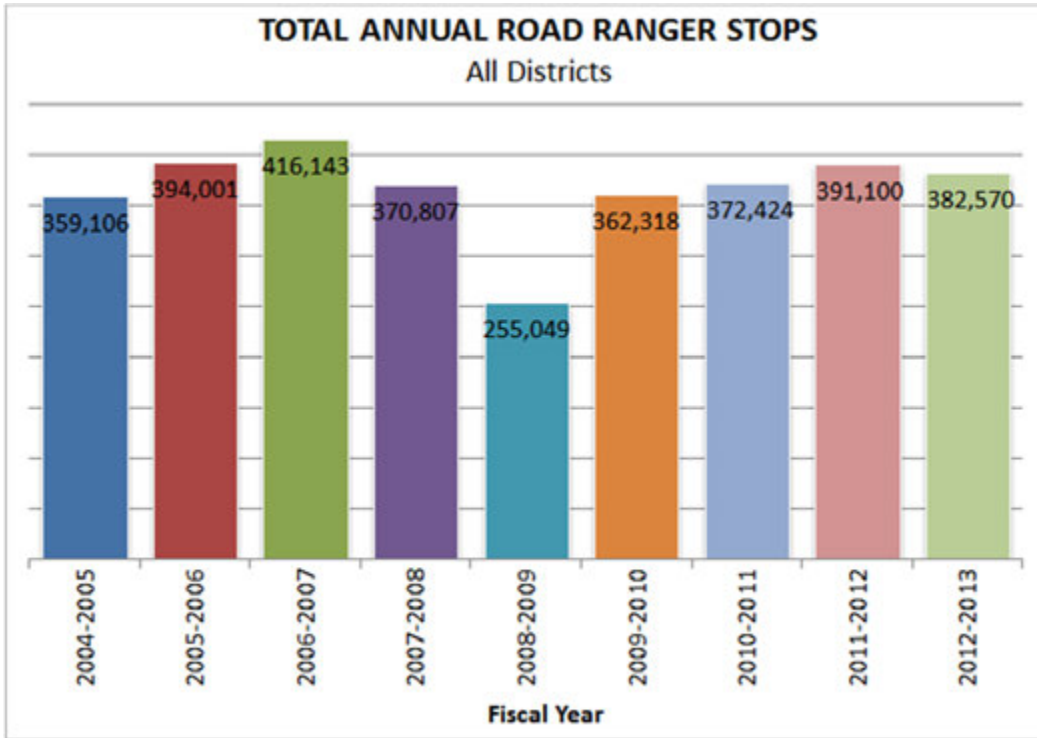
**Objective:** To help reduce the overall travel delay associated with incidents by providing quick response to motorists in need and assistance to other emergency responders.

**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 2012/2013 RESULTS

For July 2012 to June 2013 there were 382,570 Road Ranger stops made statewide. All seven Districts and Florida's Turnpike Enterprise provided Road Ranger services in FY 2012/2013.



## 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.

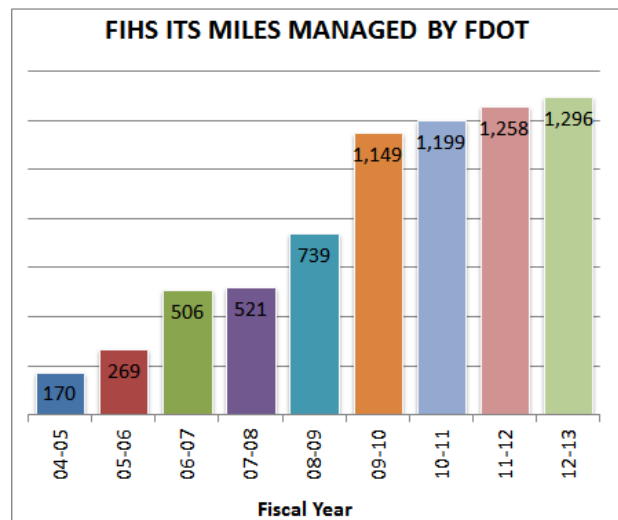
In order to meet the definition of miles managed by ITS, all of these attributes must be continuously operated and maintained, permitting contiguous coverage of the mileage noted.

**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.

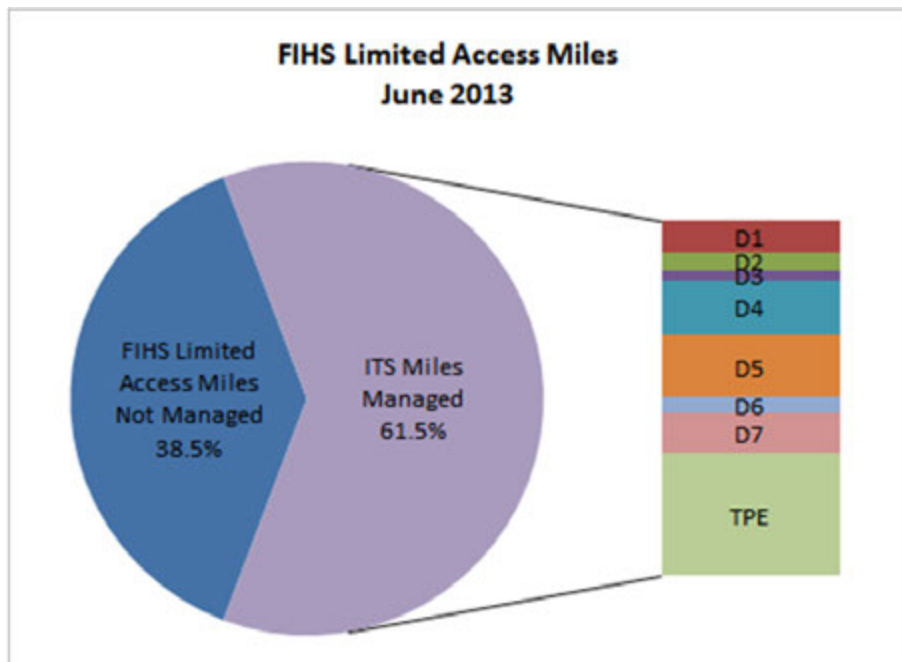
*Note: FDOT no longer recognizes the Florida Intrastate Highway System (FIHS); it has been replaced with the Strategic Intermodal System (SIS). However, for the sake of consistency, this report still reports the ITS miles managed in terms of the FIHS.*



## ITS MILES MANAGED 2012/2013 RESULTS

At the end of June 2013, 1,295.9 miles were managed by ITS. This represents 61.5% 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	115.5	51.8%
2	372.3	63.1	16.9%
3	242.2	38.0	15.7%
4	203.2	202.7	99.8%
5	386.1	226.3	58.6%
6	53.5	53.5	100.0%
7	166.5	148.8	89.4%
Turnpike	460.0	448.0	97.4%
<b>State Total</b>	<b>2,106.7</b>	<b>1,295.9</b>	<b>61.5%</b>





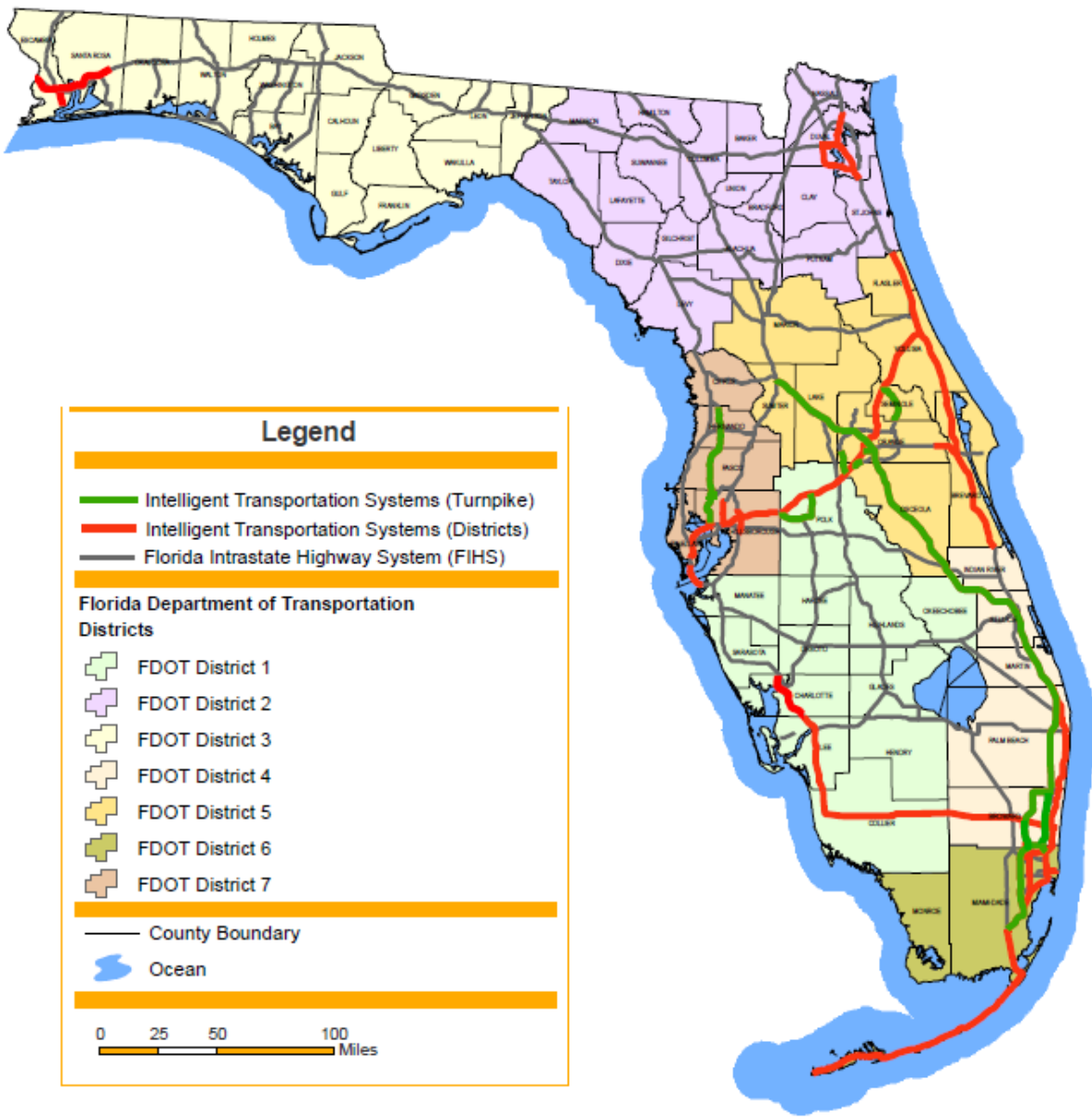
### ITS Miles Managed, Roadway Segment Limits

Managing District *	Roadway	From	To	Length
1	I-75	Broward/Collier Co. Line	Charlotte/Sarasota Co. Line	115.5
2	I-95	Race Track Road	Pecan Park Rd (Duval/St. Johns Co. Line)	33.7
	I-295	I-10	I-95 (south)	20.4
	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 (MM 32)	32.0
	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
	I-595	I-75	US 1	12.9
	I-75	Broward/Miami-Dade Co. Line	Broward/Collier Co. Line	45.4
	Sawgrass Expressway	North of I-75		1.9
5	I-4	SR 532 / Polk Co. Line	I-95	74.5
	I-4	US 27	Polk/Osceola Co. Line	3.6
	SR 528	SR 520 East	I-95	11.0
	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
	SR 826	US 1	I-95	24.6
	I-75	SR 826	Broward/Miami-Dade Co. Line	5.4
	I-95	Broward/Miami-Dade Co. Line	US 1	17.3
	I-395	I-95	West end MacArthur Causeway Bridge	1.3
7	I-275	Skyway Bridge South Toll Plaza	I-75 Apex (Pasco Co Line)	53.2
	I-4	I-275	Hillsborough/Polk Co. Line	25.7
	I-4	Hillsborough/Polk Co. Line	US 27	29.2
	I-75	South of Progress Boulevard	Pasco/Hernando Co Line	40.7
Turnpike	Sawgrass Expressway	I-595	Atlantic Blvd. in Broward Co.	22.0
	Seminole Expressway (SR 417)	Orange/Seminole Co. Line	I-4	17.0
	Southern Connector (SR 417)	I-4	International Dr.	5.0
	Western Beltway (SR 429)	I-4	Seidel Rd.	10.0
	Polk Parkway (SR 570)	I-4	I-4	24.0
	Veteran's Expressway (SR 589)	SR 60	Suncoast Parkway	16.0
	SR 568	Veteran's Expressway	Dale Mabry Dr.	3.0
	SR 589 (Suncoast Parkway)	Veteran's Expressway	US 98	38.0
	HEFT (Homestead Extension/SR 821)	US 1	Turnpike Mainline	48.0
	Florida's Turnpike (SR 91)	SR 826 (US 441)	Turnpike Mainline	3.0
	SR 408 (East West Expressway)	Turnpike Mainline	SR 50	1.0
	Florida's Turnpike (SR 91)	Sawgrass Expressway	I-75	236.0
	SR 528 (Beachline Expressway)	I-4	Florida Turnpike in Orange Co.	4.0

<b>Managing District *</b>	<b>Roadway</b>	<b>From</b>	<b>To</b>	<b>Length</b>
	Florida's Turnpike (SR 91)	Miramar Parkway	Griffin Road	6.0
	Florida's Turnpike (SR 91)	Broward Blvd. (Broward Co.)	Palm Beach Co. Line	15.0

\* Districts 5 and 7 manage miles that exist in District 1.

# Florida's Intelligent Transportation Systems Program Coverage



## INCIDENT DURATION

### *MINIMIZE TRAFFIC INCIDENT TIMELINE*

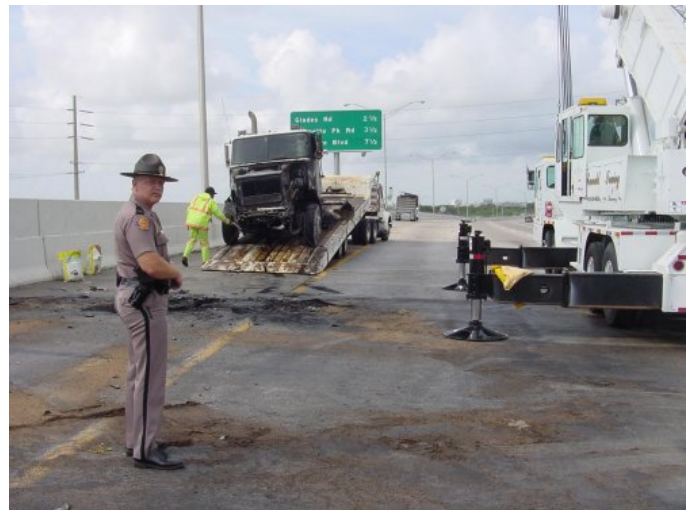
FDOT and its emergency response partners work to ensure that crashes and other incidents have minimal impact on Florida drivers by working to reduce the amount of time of each incident. Determining trends in incident clearance allows for system analysis and improvement. Quickly removing an incident allows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



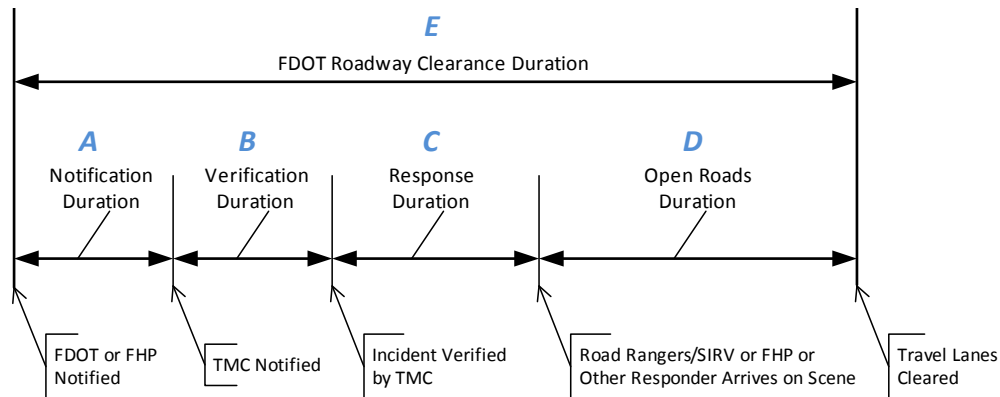
vehicles, cargo, and debris from state highways and to restore, in an urgent manner, the safe and orderly flow of traffic on Florida's roadways. Both agencies agreed to work together to clear roadways as soon as possible. A goal was set to clear incidents from the roadway *within 90 minutes* of the arrival 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.



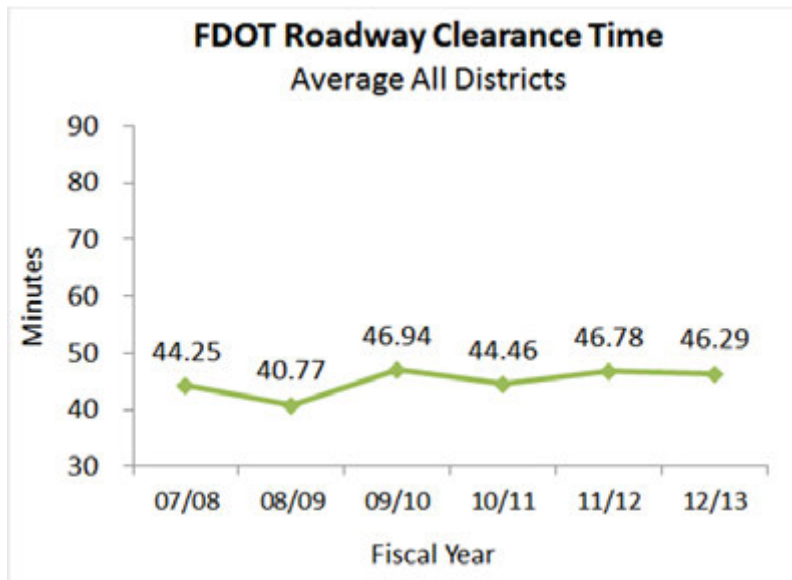
**Purpose:** Report the total time of impact on traffic for an incident.

**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 2012/2013 RESULTS

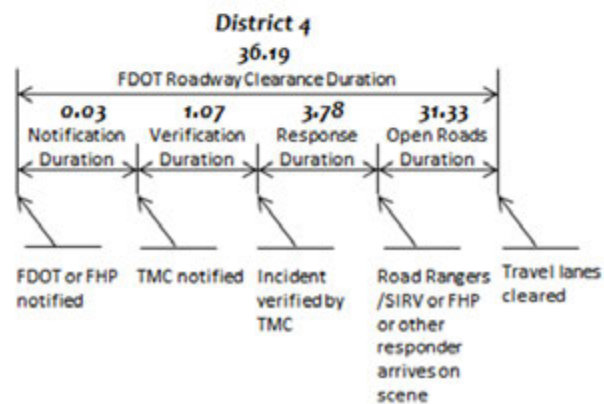
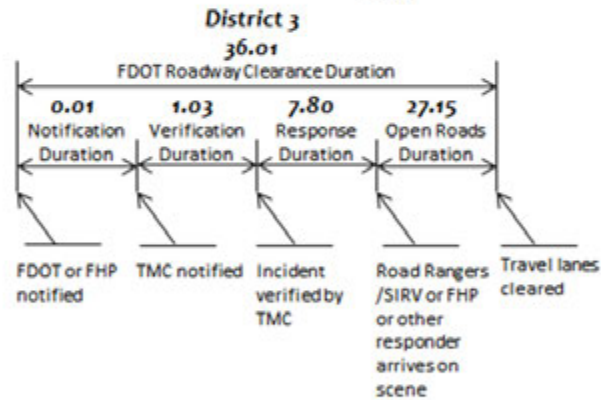
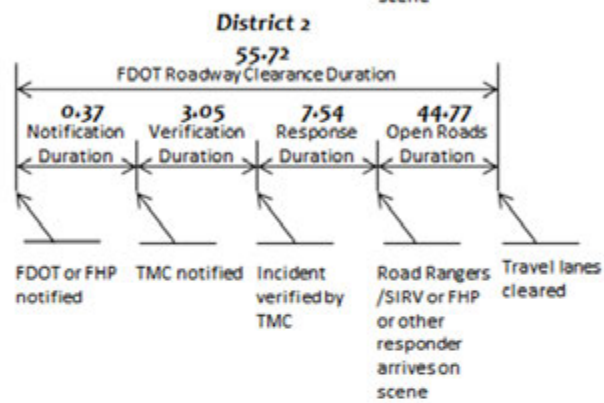
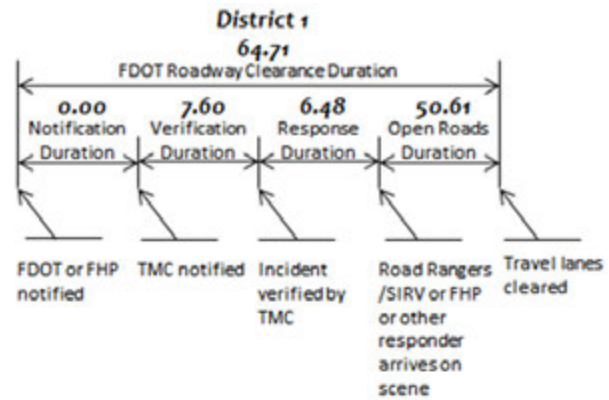
FDOT Roadway Clearance Duration varied from month to month, but the annual average time from the reporting Districts is 46.29 minutes, ranging from 29 to 64 minutes. The Open Roads Clearance Duration averages about 38 minutes for the reporting Districts. This is well under the *Open Roads Policy* target 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.



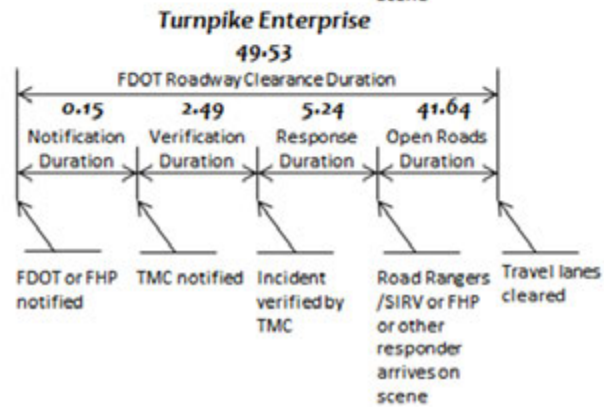
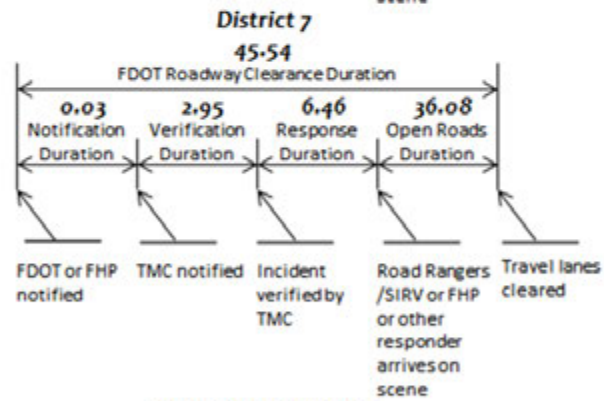
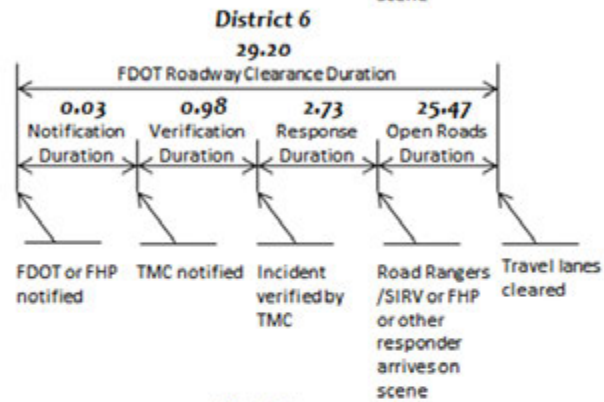
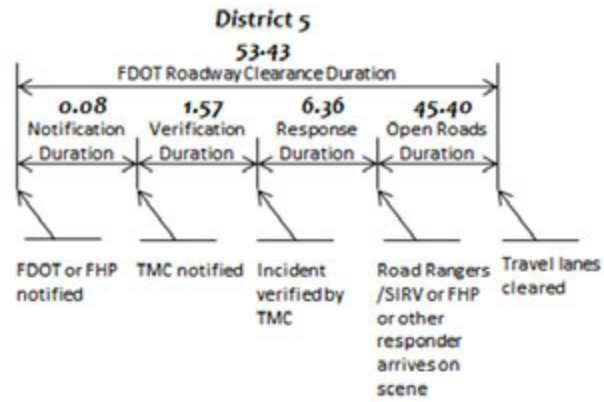
District	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
1	NA	NA	NA	50.48	54.89	64.71
2	46.11	43.34	59.36	40.74	53.43	55.72
3	NA	NA	NA	NA	NA	36.01
4	38.77	34.26	37.16	39.47	36.00	36.19
5	50.48	38.53	57.18	55.51	62.83	53.43
6	36.20	37.62	34.34	30.53	27.55	29.20
7	48.59	40.20	49.36	46.99	45.28	45.54
TPE	45.33	50.67	44.25	47.53	47.50	49.53
<b>AVG ALL DISTRICTS</b>	<b>44.25</b>	<b>40.77</b>	<b>46.94</b>	<b>44.46</b>	<b>46.78</b>	<b>46.29</b>

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

District Results (annual average in minutes):



District Results (annual average in minutes):





## TRAVEL TIME RELIABILITY

### ESTIMATE TRAVEL TIMES FOR TRIP PLANNING

**Background:** In 2005, FDOT adopted travel time reliability as an outcome performance measure to report to the Florida Transportation Commission on ITS miles managed segments. 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 presently available for Districts 1 through 7. FDOT has recently set up RITIS to be the production data warehouse for ITS data. Beginning in late 2013 or 2014 the travel time reliability will be collected from RITIS.

**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 *planning 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 *planning time index* (PTI) is also called the 95<sup>th</sup> percentile travel time index and is the 95th percentile travel time divided by free flow travel time. For example, PTI of 1.60 means that for a trip that takes 15 minutes in light traffic a traveler should budget a total of 24 minutes to ensure on-time arrival 95 percent of the time. The PTI is now being used instead of the buffer time index (BTI).

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 used in this analysis 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

### *2012/2013 RESULTS*

Travel time and planning time 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/planning time index.

Districts 1 and 3 did not experience significant congestion on any road segments during the reporting period from July 1, 2012 to June 30, 2013, so no graphs are shown.

In District 2, the most unreliable segment was I-10 between I-295 and I-95 with a PTI of 3.11 in the eastbound lane during the AM peak. The most congestion occurs on the same road segment with a TTI of 1.53 in the eastbound lane during the AM peak.

In District 4, the most unreliable segment was I-95 in Broward County between Hillsboro Boulevard and Commercial Boulevard with a PTI of 1.78 in the southbound lane during the PM peak. The most congestion occurs on the same road segment with a TTI of 1.19 in the southbound lane during the PM peak.

In District 5, the most unreliable segment was I-4 between US 192 and SR 408 with a PTI of 2.17 in the eastbound lane during the PM peak. The most congestion occurs on the same road segment with a TTI of 1.45 in the eastbound lane during the PM peak.

In District 6, the most unreliable segment was SR 826 (Palmetto Expressway) between I-75 and SR 836 with a PTI of 2.93 in the southbound lane during the AM peak. The most congestion occurs on the same road segment with a TTI of 1.98 in the southbound lane during the PM peak.

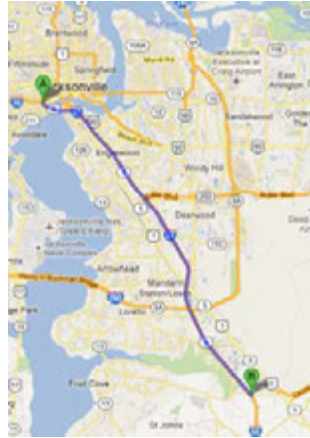
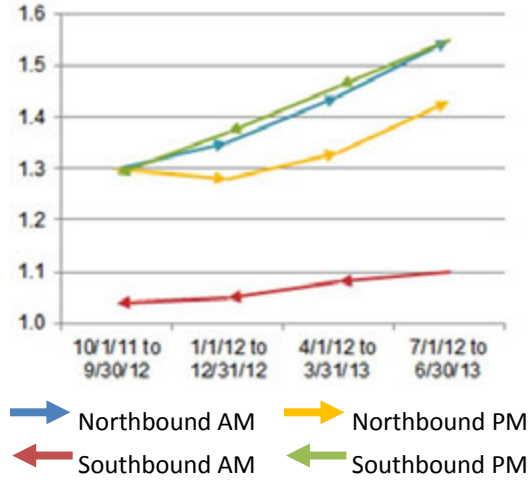
In District 7, the most unreliable segment was I-275 between SR 60 and I-4 with a PTI of 2.23 in the southbound lane during the PM peak. The most congestion occurs on the same road segment with a TTI of 1.49 in the southbound lane during the PM peak.

It should be noted that in some cases when the planning 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.

2012/2013 Reliability Segment Limits				
District	Roadway	Start	End	Approx Miles
1	I-75	Kings Highway	Bayshore Road (SR78)	26.9
	I-75	Bayshore Road (SR78)	Corkscrew Road	20
	I-75	Corkscrew Road	Collier Blvd	21.5
	I-75	Collier Blvd	Broward/Charlotte Co. Line	50.3
2	I-95	Airport Road	I-10	11.8
	I-95	I-10	Race Track Road (MM 332)	19.6
	I-295	I-10	I-95 (south)	20.4
	I-10	I-295	I-95	5
3	I-10	CR 191	Florida/Alabama State Line	26
	I-110	All 6 miles in Pensacola		6
4	I-95 in Broward Co.	Hillsboro Blvd	Commercial Blvd	9.6
	I-95 in Broward Co.	Commercial Blvd	Hallandale Beach Blvd	14.4
	I-595	I-75	US 1	12.9
	I-75	Broward/Miami-Dade Co. Line	I-595	12
	I-75	I-595	Broward/Collier Co. Line	33.4
5	I-4	US 192	SR 408	18.5
	I-4	SR 408	US 17/92	22
	I-95 in Volusia Co.	SR 40	SR 44	19
	I-95 in Brevard Co.	SR 520	SR 192	20.8
6	I-195	I-95	Alton Road	4.4
	SR 826 (Palmetto Exp)	I-95	I-75	8.5
	SR 826 (Palmetto Exp)	I-75	SR 836	10.2
	I-75	SR 826	Broward/Miami-Dade Co. Line	5.4
	I-95	Broward/Miami-Dade Co. Line	US 1	17.3
	SR 826	SR 836	US 1	7.0
7	I-275	SR 60	38th Avenue N in St. Pete	14.5
	I-275	I-4	I-75	16
	I-4	I-275	N. Park Road in Plant City	22.4
	I-275	SR 60	I-4	5.8
	I-75	US 301	I-275 (North side)	20
	I-275	38th Ave North in St. Pete	I-75	24.5
	I-4	N. Park Road in Plant City	CR 557 in Lakeland	25.4

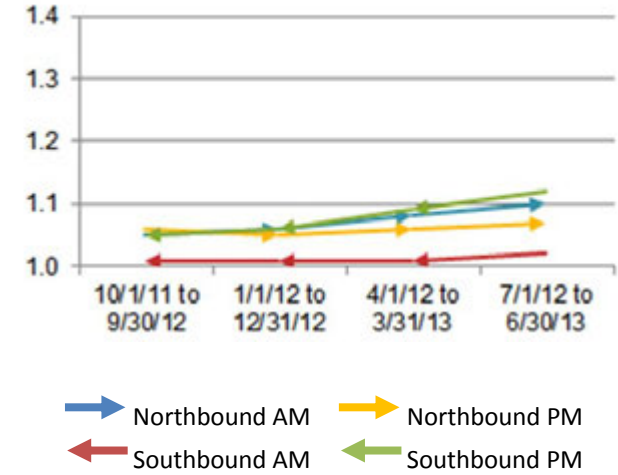
**Planning Time Index (PTI)**

**I-95 (I-10 to Racetrack Road)**

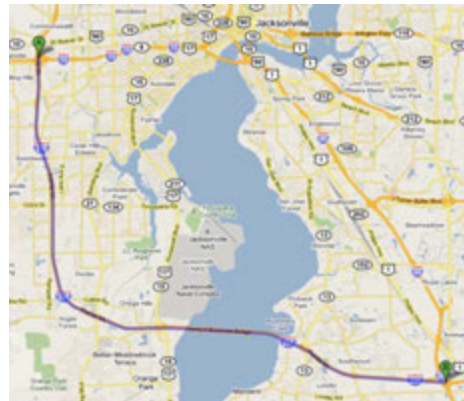
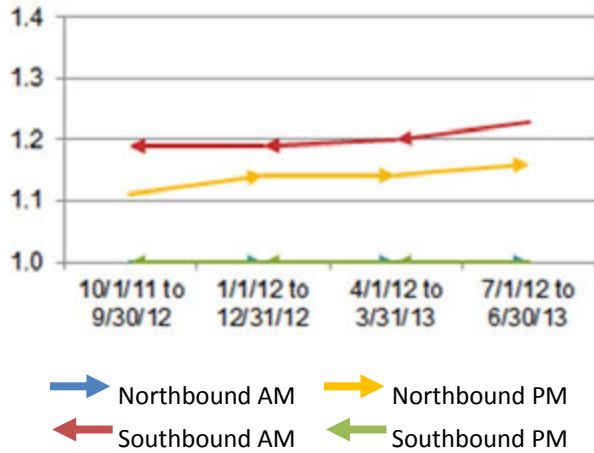


**Travel Time Index (TTI)**

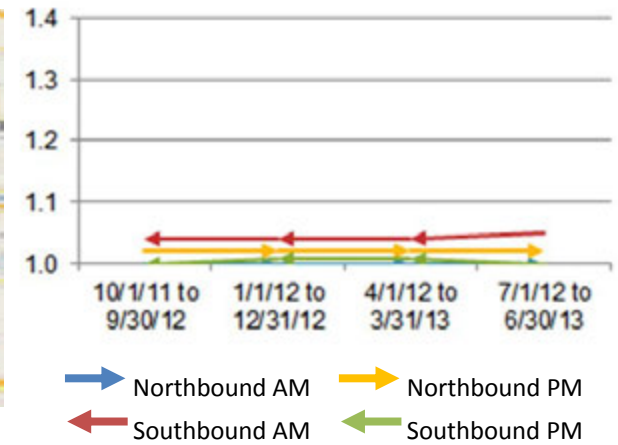
**I-95 (I-10 to Racetrack Road)**



**I-295 (I-10 to I-95 South)**

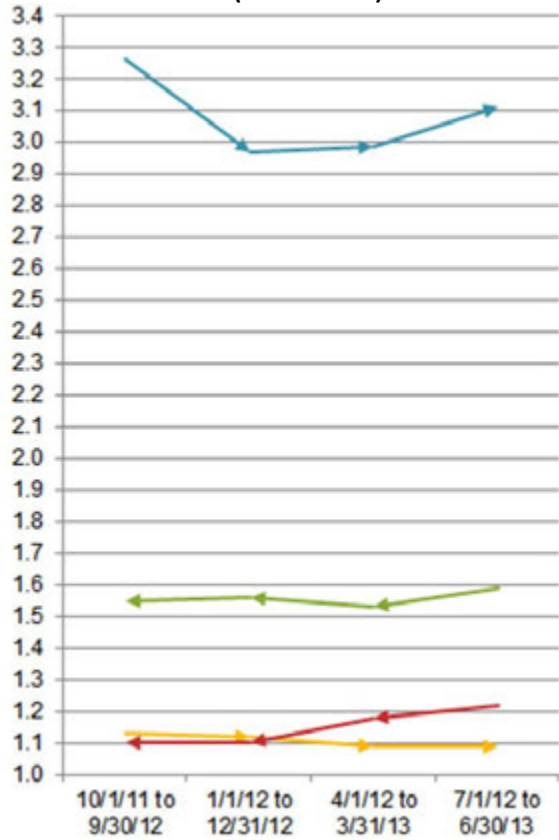


**I-295 (I-10 to I-95 South)**



Planning Time Index (PTI)

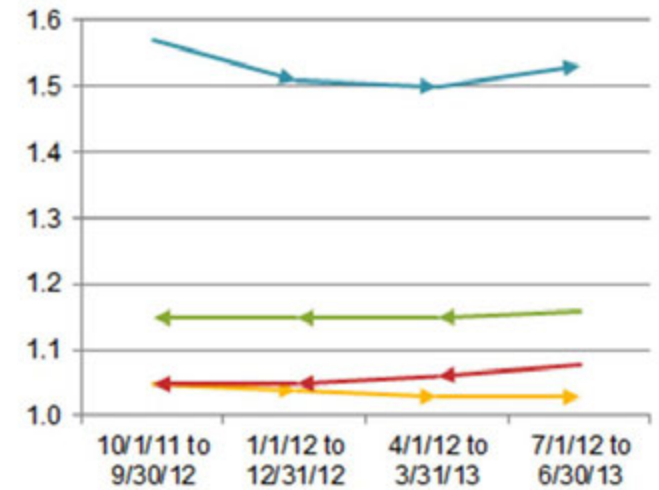
I-10 (I-295 to I-95)



➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM

Travel Time Index (TTI)

I-10 (I-295 to I-95)

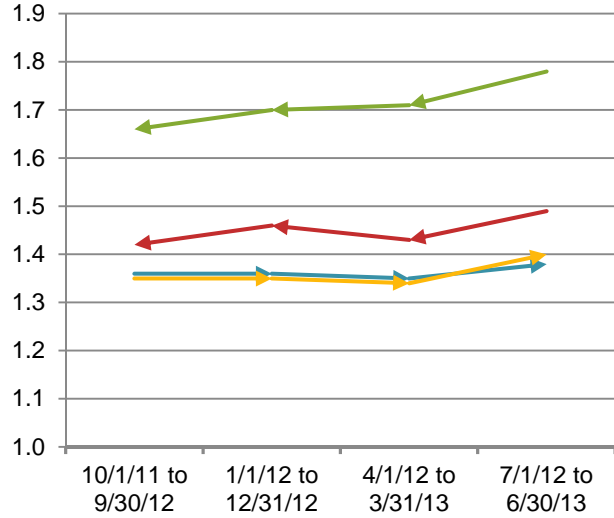


➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM

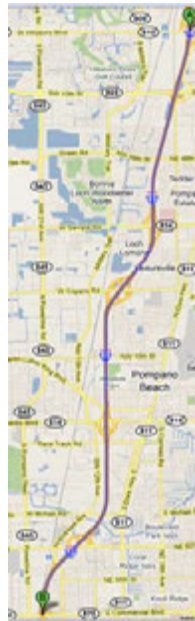


**Planning Time Index (PTI)**

**I-95 (Hillsboro to Commercial Blvd)**

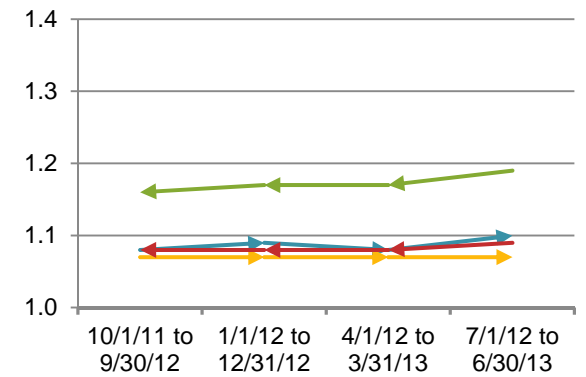


➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM



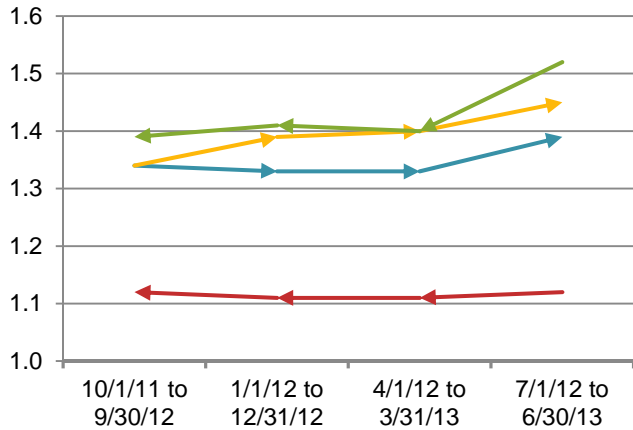
**Travel Time Index (TTI)**

**I-95 (Hillsboro to Commercial Blvd)**



➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM

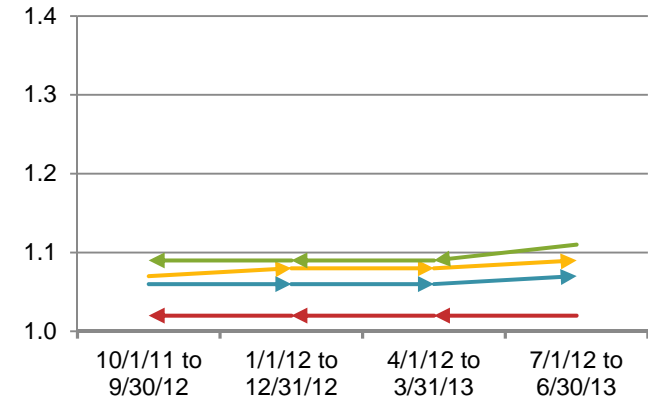
**I-95 (Commercial to Hallendale Bch Blvd)**



➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM



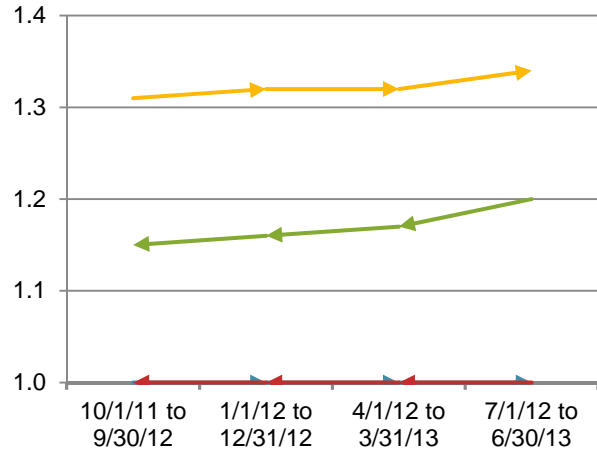
**I-95 (Commercial to Hallendale Bch Blvd)**



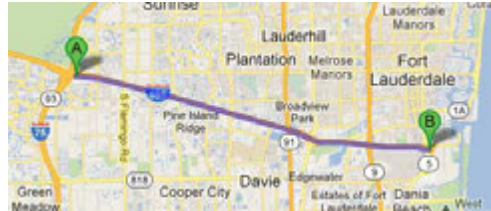
➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM

**Planning Time Index (PTI)**

**I-595 (I-75 to US 1)**

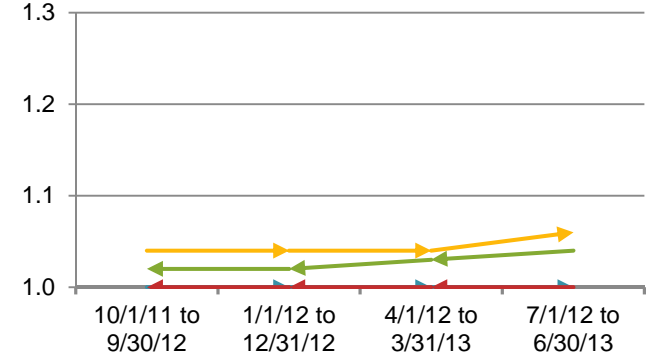


➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM



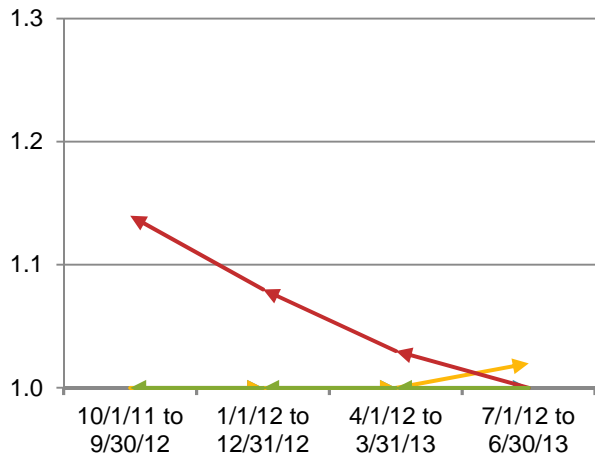
**Travel Time Index (TTI)**

**I-595 (I-75 to US 1)**



➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM

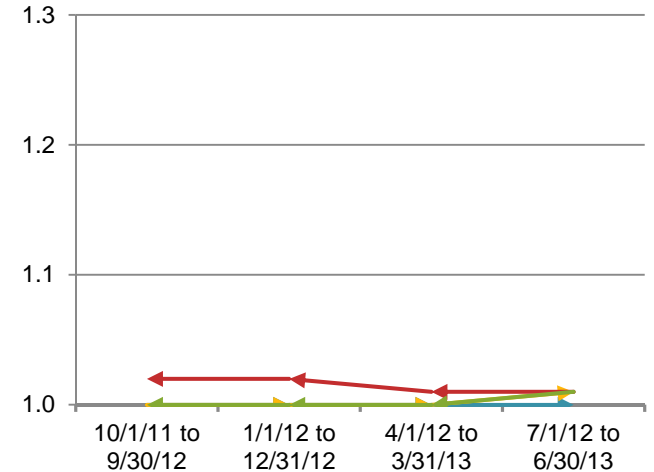
**I-75 (Broward/Miami-Dade Co. Line to I-595)**



➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM



**I-75 (Broward/Miami-Dade Co. Line to I-595)**



➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM

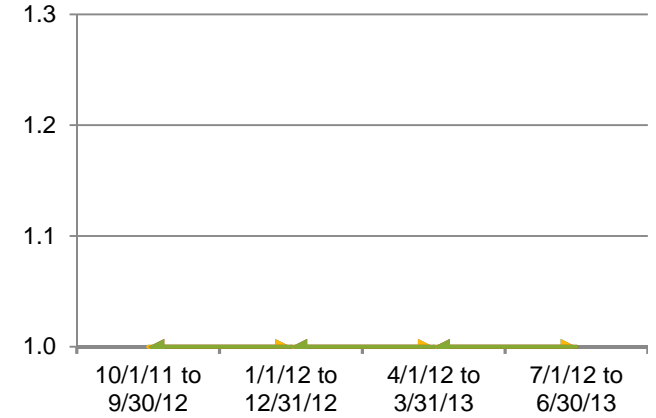
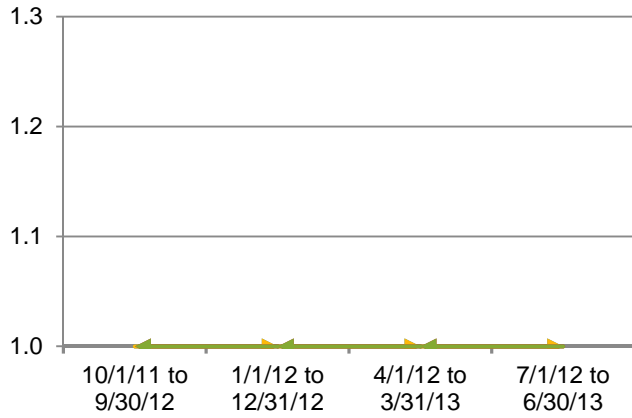


**Planning Time Index (PTI)**

**Travel Time Index (TTI)**

**I-75 (I-595 to Broward/Collier Co. Line)**

**I-75 (I-595 to Broward/Collier Co. Line)**



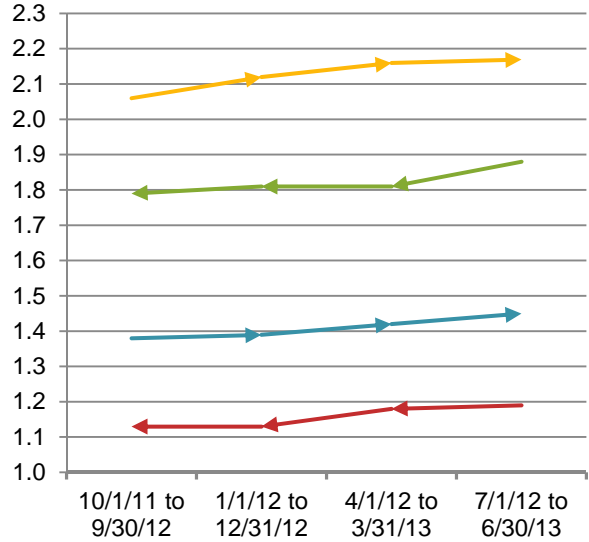
➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM

➔ Northbound AM    ➔ Northbound PM  
➔ Southbound AM    ➔ Southbound PM

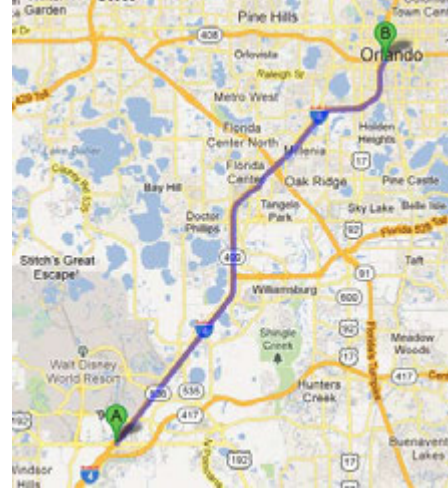


**Planning Time Index (PTI)**

**I-4 (US 192 to SR 408)**

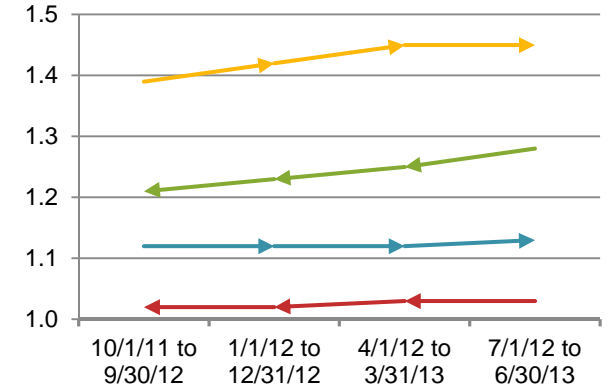


➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM



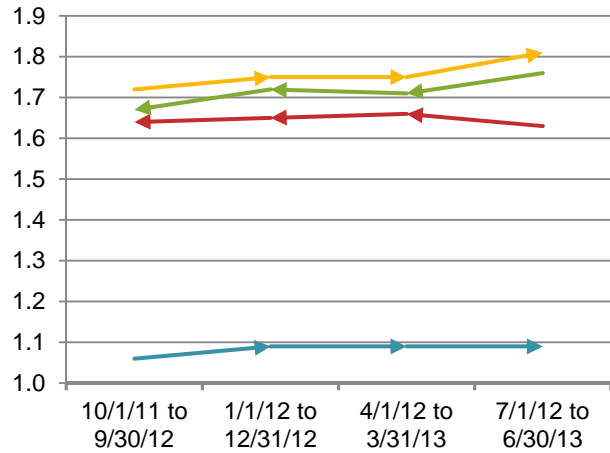
**Travel Time Index (TTI)**

**I-4 (US 192 to SR 408)**

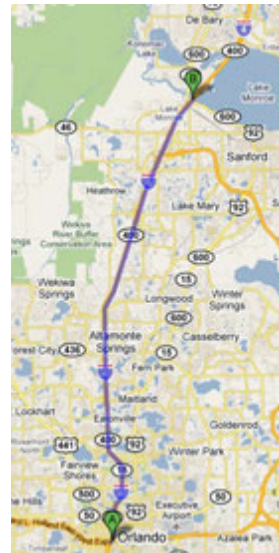


➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM

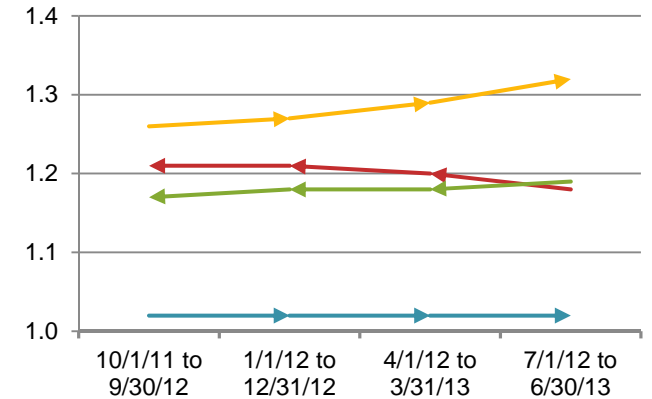
**I-4 (US 17/92 to SR 408)**



➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM



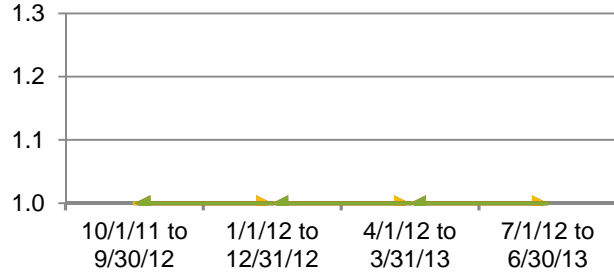
**I-4 (US 17/92 to SR 408)**



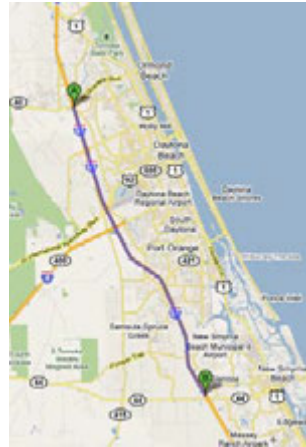
➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM

**Planning Time Index (PTI)**

**I-95 in Volusia Co. (SR 40 to SR 44)**

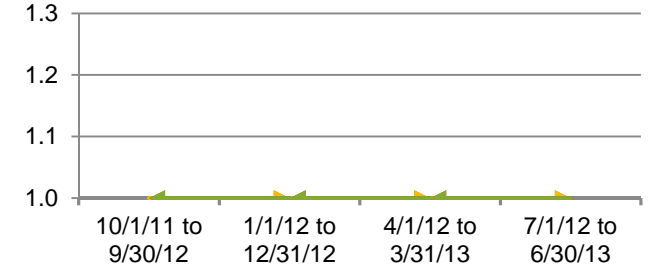


→ Eastbound AM    → Eastbound PM  
← Westbound AM    ← Westbound PM



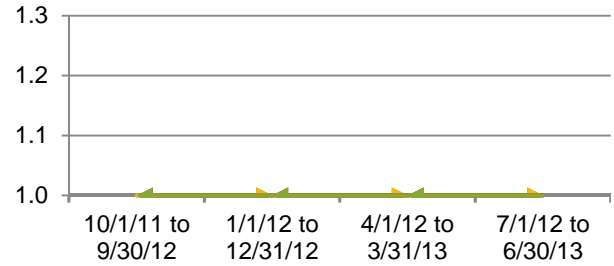
**Travel Time Index (TTI)**

**I-95 in Volusia Co. (SR 40 to SR 44)**

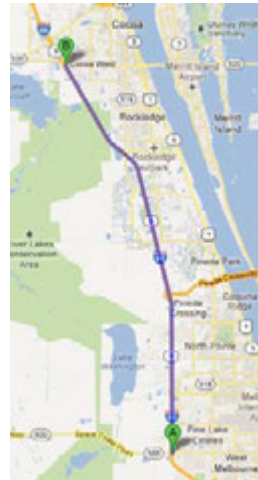


→ Eastbound AM    → Eastbound PM  
← Westbound AM    ← Westbound PM

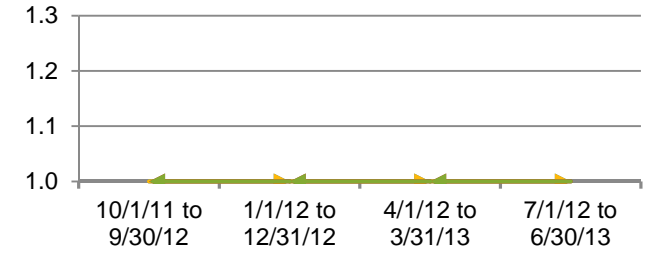
**I-95 in Brevard Co. (SR 520 to SR 192)**



→ Eastbound AM    → Eastbound PM  
← Westbound AM    ← Westbound PM



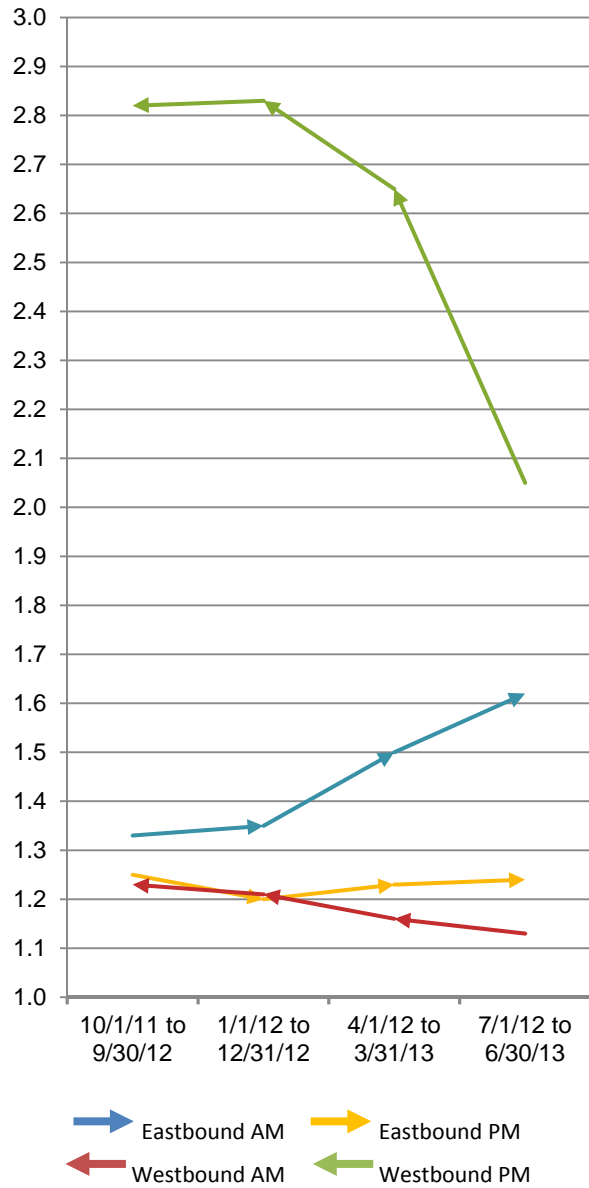
**I-95 in Brevard Co. (SR 520 to SR 192)**



→ Eastbound AM    → Eastbound PM  
← Westbound AM    ← Westbound PM

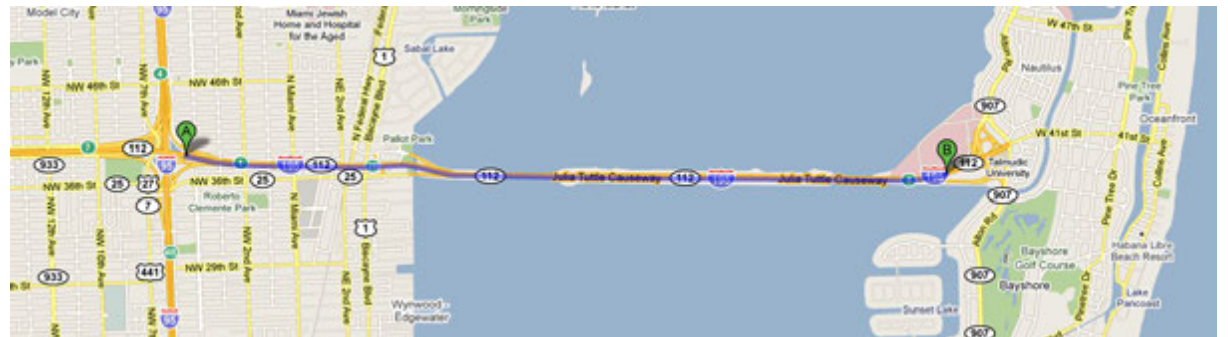
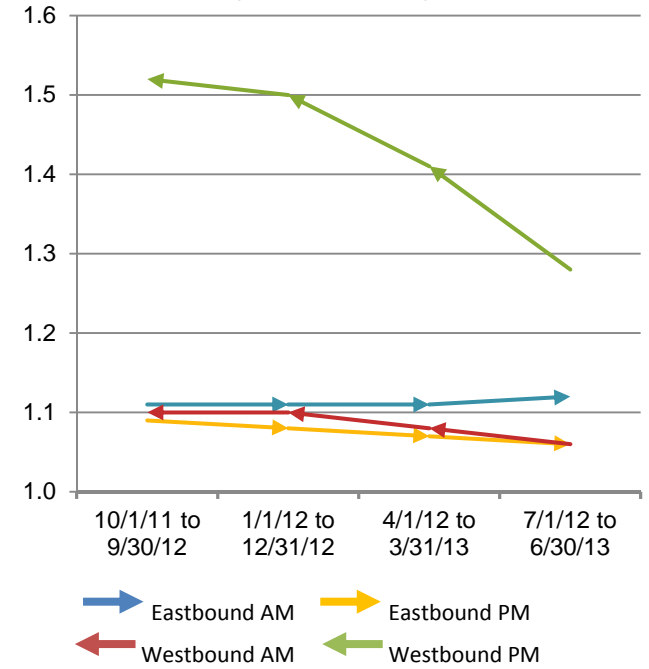
Planning Time Index (PTI)

I-195 (I-95 to Alton Road)



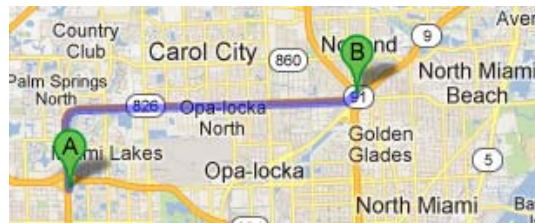
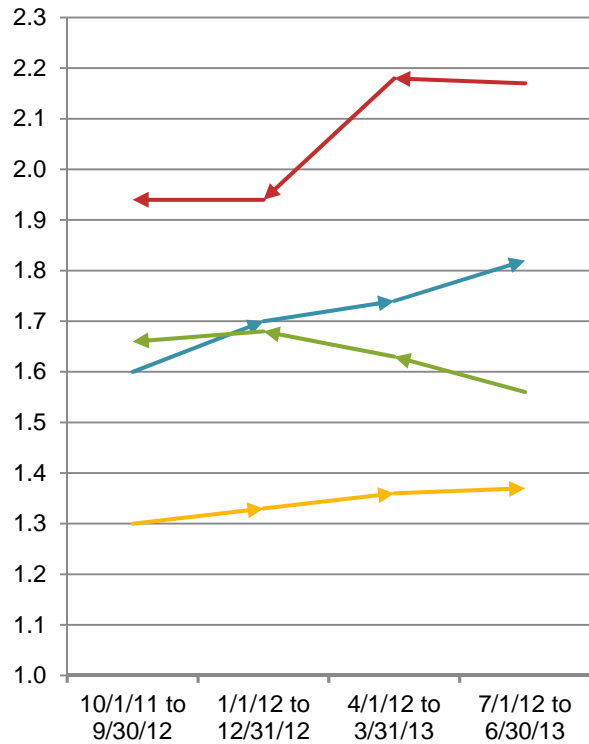
Travel Time Index (TTI)

I-195 (I-95 to Alton Road)



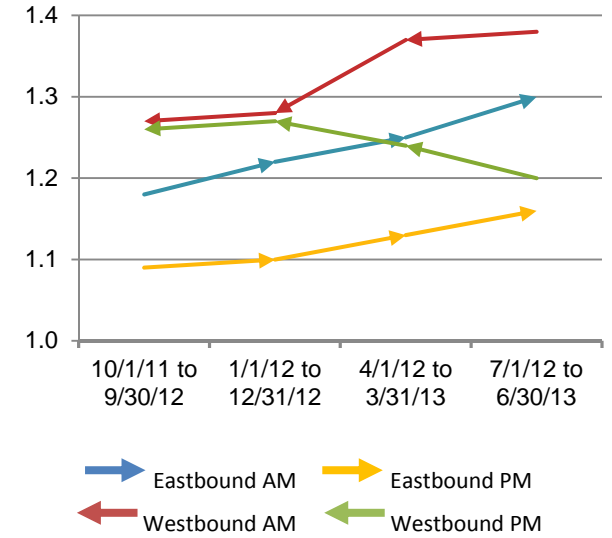
**Planning Time Index (PTI)**

**SR 826 (I-95 to I-75)**



**Travel Time Index (TTI)**

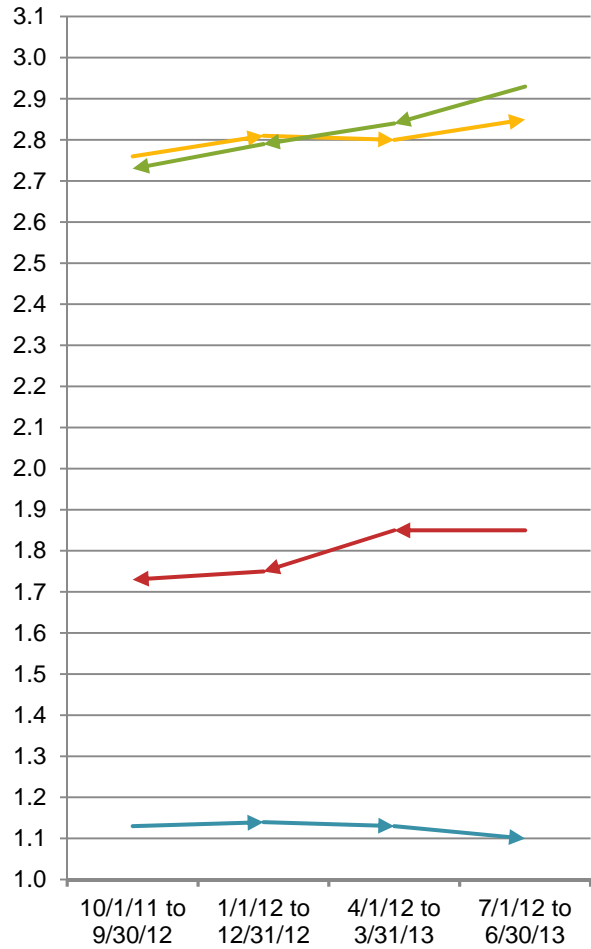
**SR 826 (I-95 to I-75)**



➔ Eastbound AM    ➔ Eastbound PM  
➔ Westbound AM    ➔ Westbound PM

Planning Time Index (PTI)

SR 826 (I-75 to SR 836)

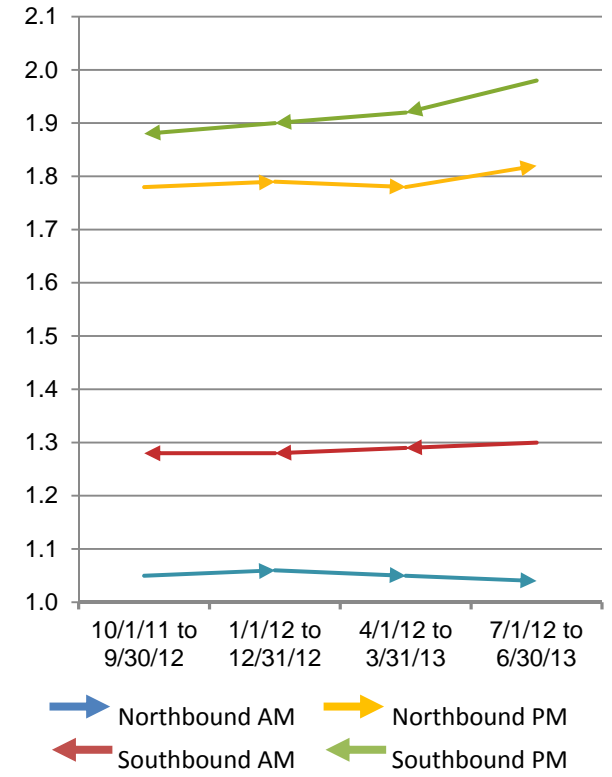


- ➔ Northbound AM
 ➔ Northbound PM
- ➔ Southbound AM
 ➔ Southbound PM



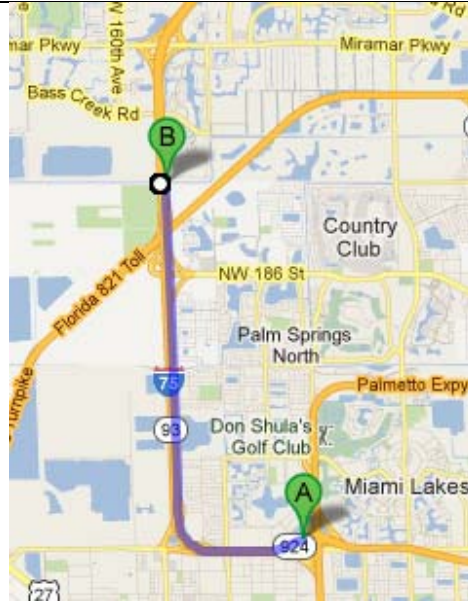
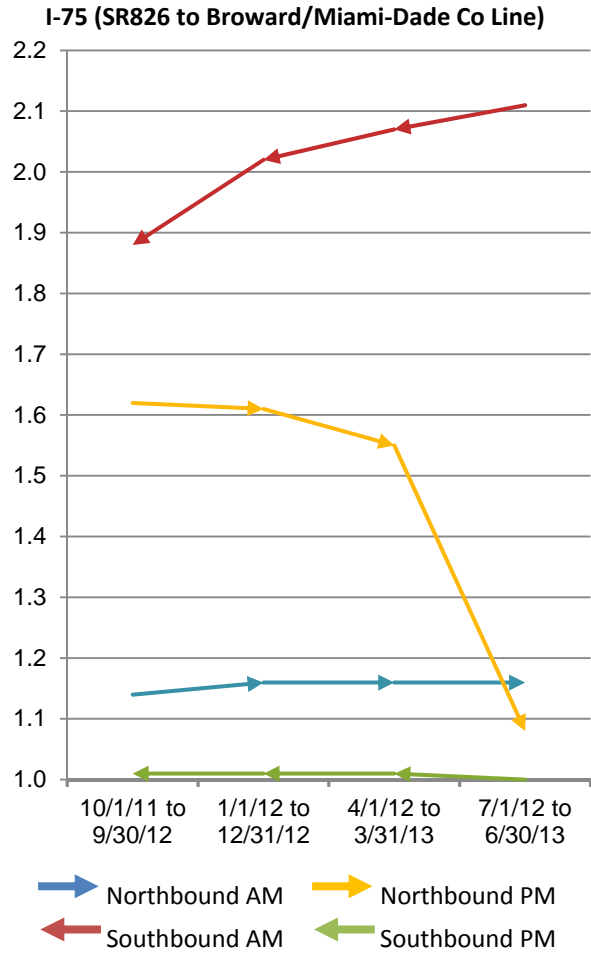
Travel Time Index (TTI)

SR 826 (I-75 to SR 836)

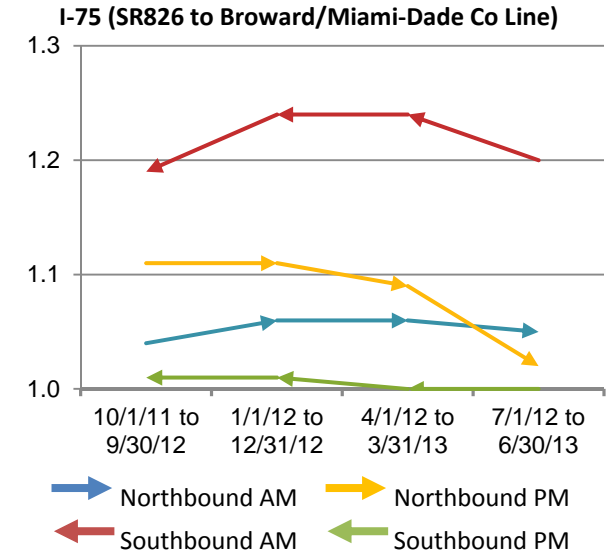


- ➔ Northbound AM
 ➔ Northbound PM
- ➔ Southbound AM
 ➔ Southbound PM

Planning Time Index (PTI)

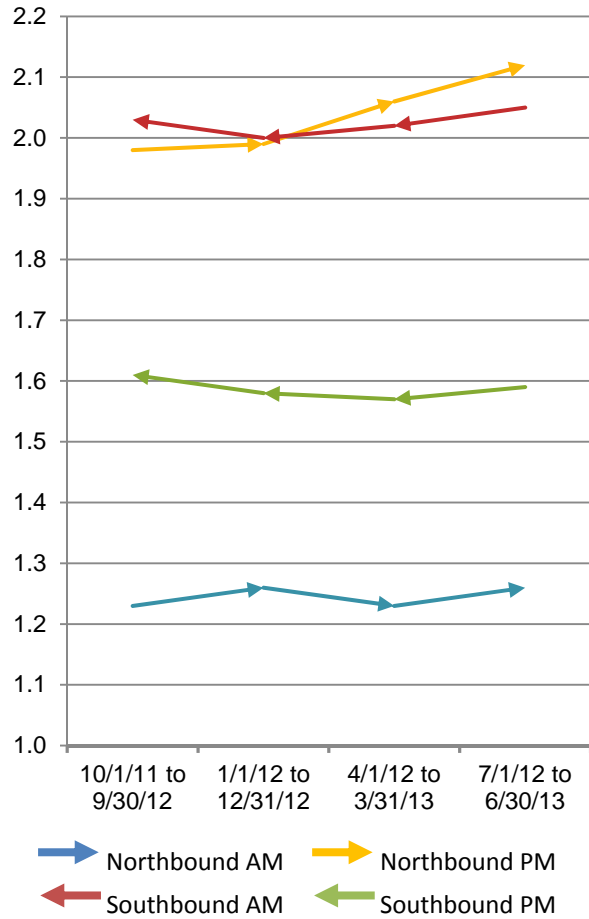


Travel Time Index (TTI)



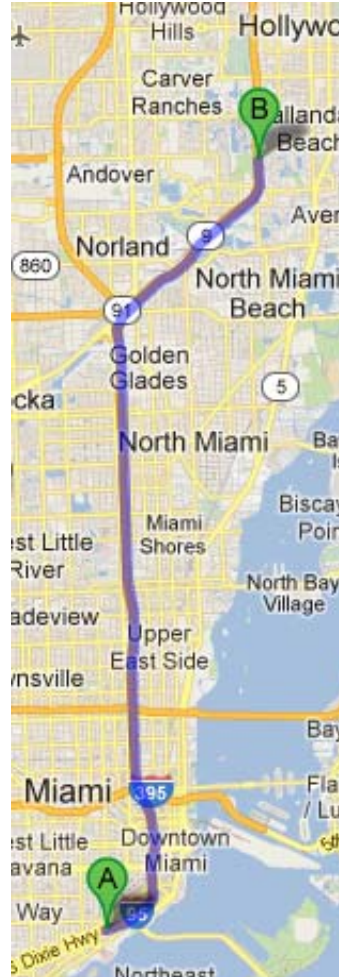
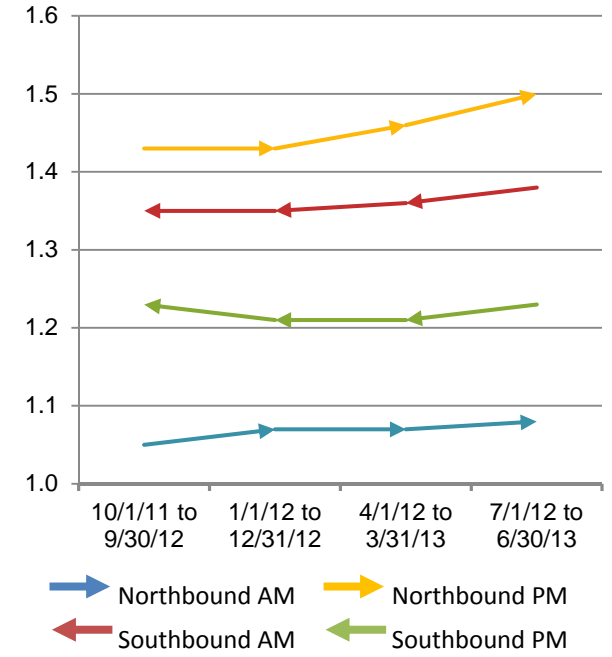
Planning Time Index (PTI)

I-95 (Broward/Miami-Dade Co Line to US 1)



Travel Time Index (TTI)

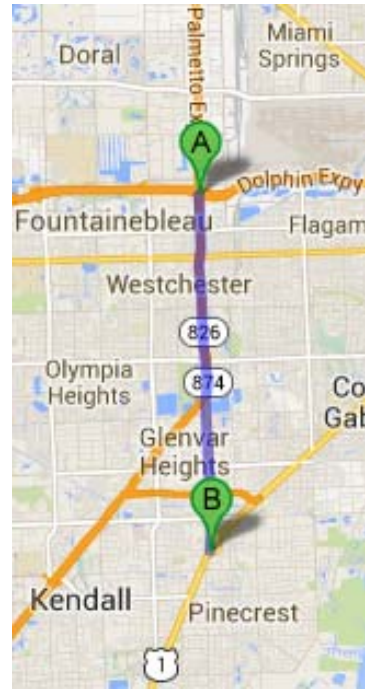
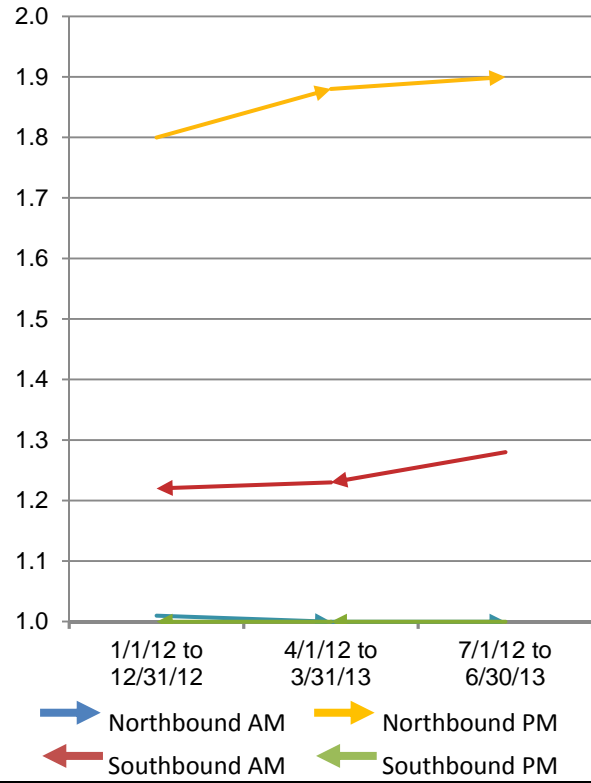
I-95 (Broward/Miami-Dade Co Line to US 1)





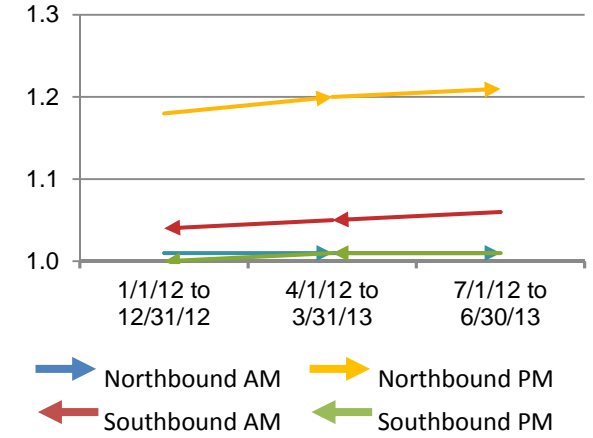
Planning Time Index (PTI)

SR 826 (SR836 to US 1)



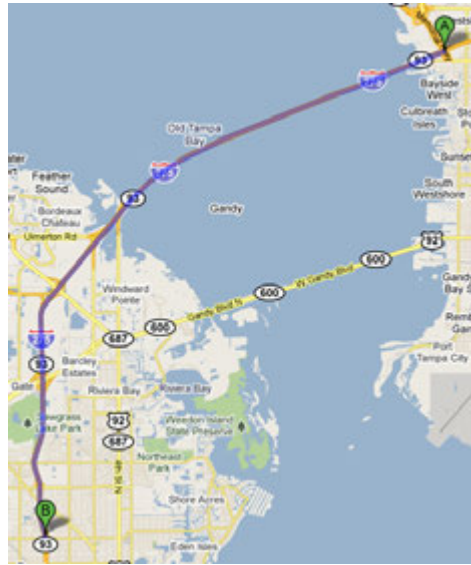
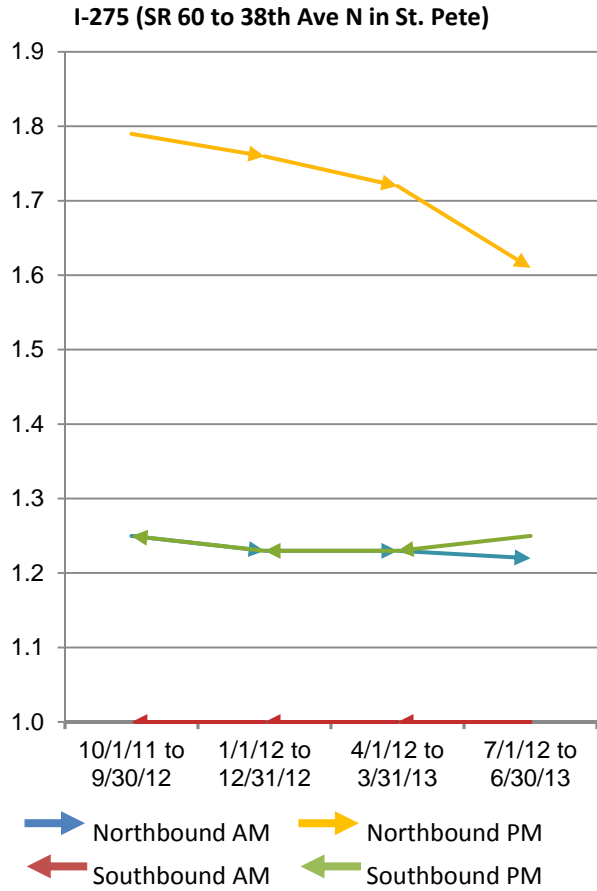
Travel Time Index (TTI)

SR 826 (SR836 to US 1)

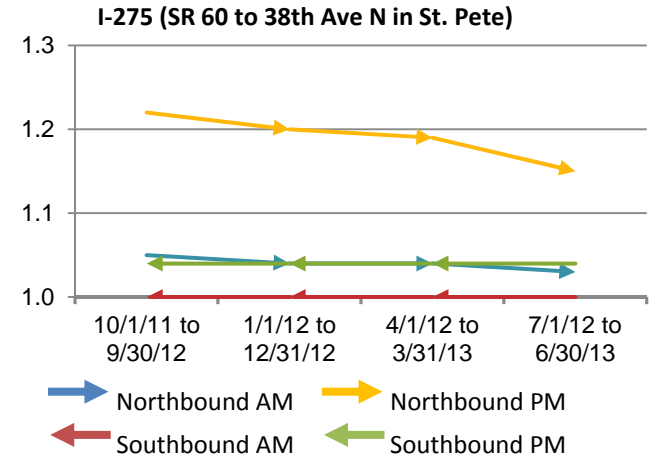




**Planning Time Index (PTI)**

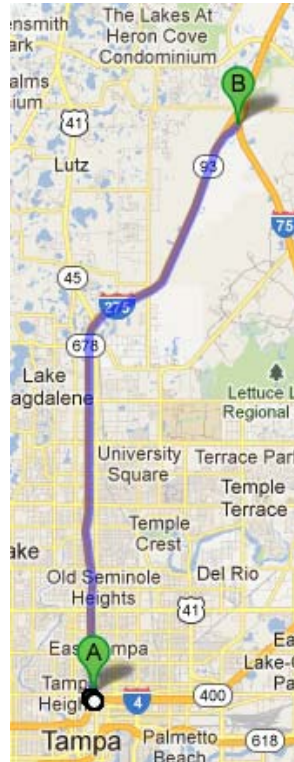
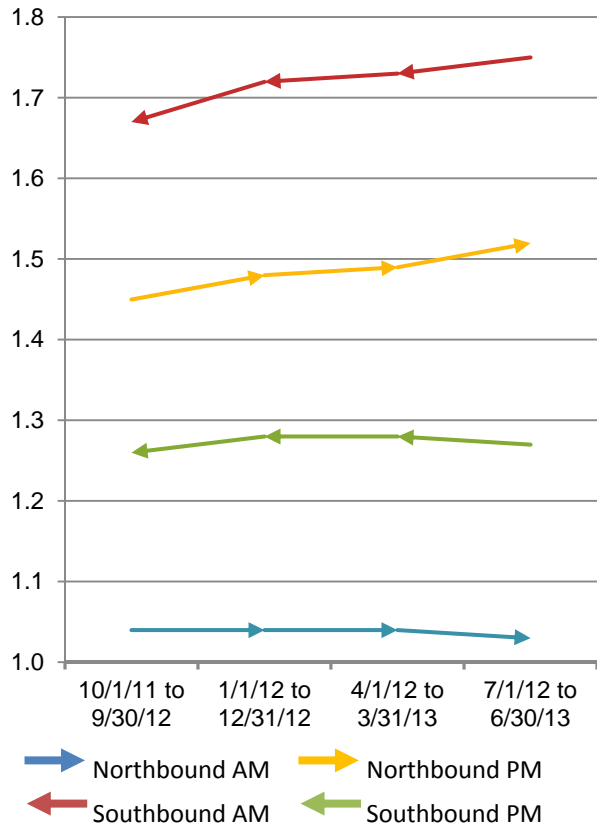


**Travel Time Index (TTI)**



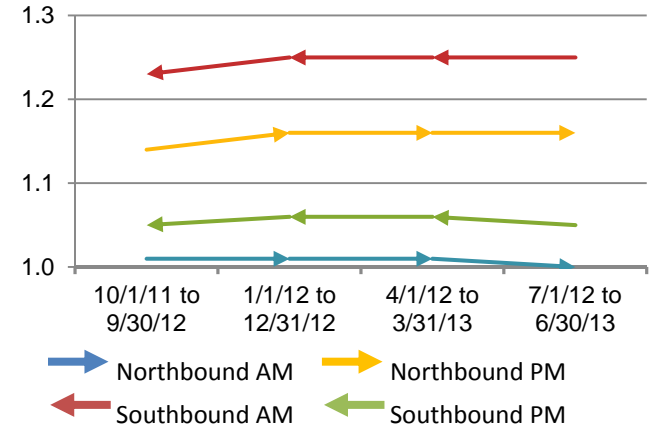
**Planning Time Index (PTI)**

**I-275 (I-4 to I-75)**



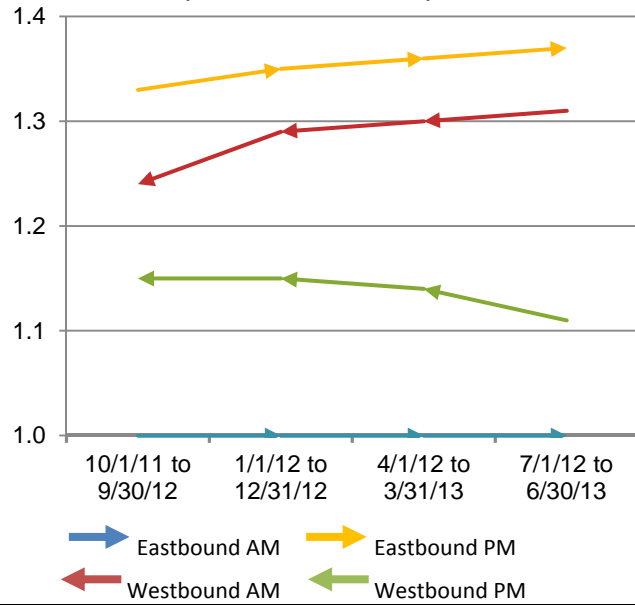
**Travel Time Index (TTI)**

**I-275 (I-4 to I-75)**



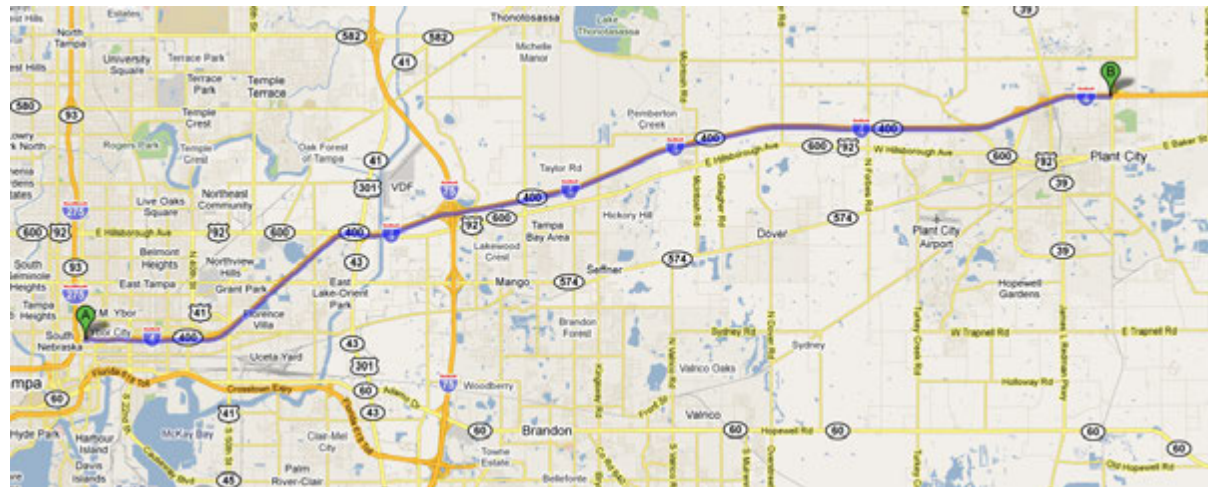
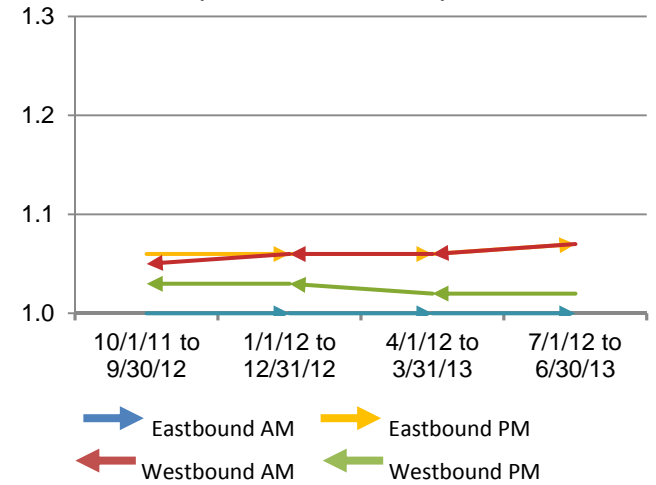
**Planning Time Index (PTI)**

**I-4 (I-275 to N. Park Road)**



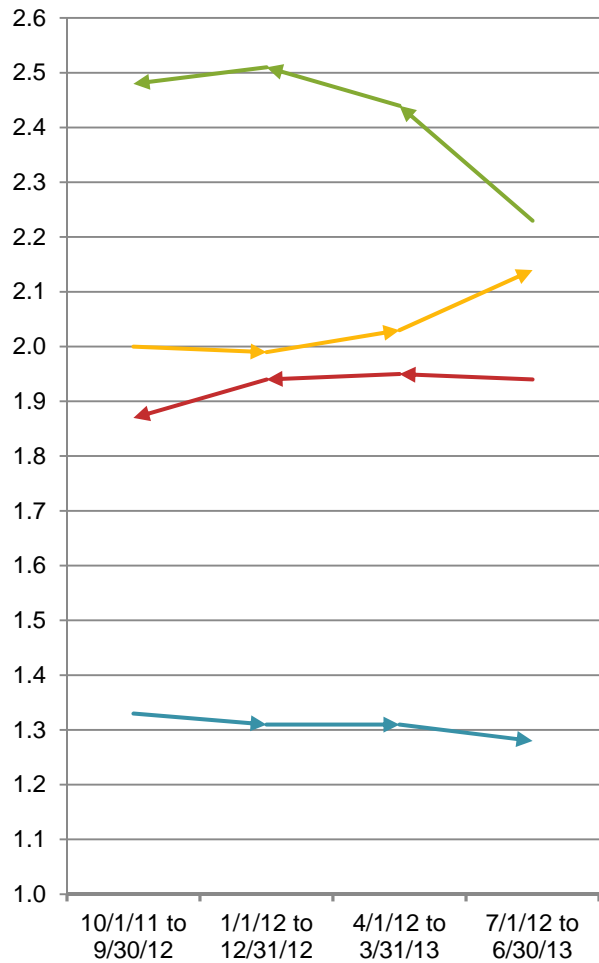
**Travel Time Index (TTI)**

**I-4 (I-275 to N. Park Road)**



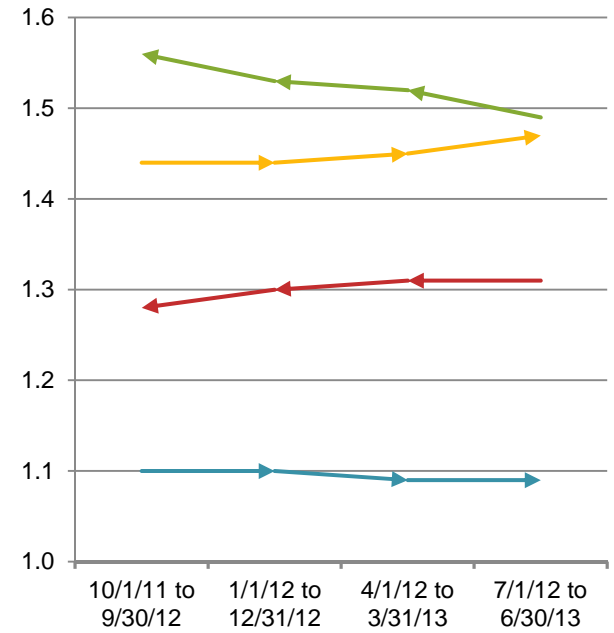
**Planning Time Index (PTI)**

**I-275 (SR 60 to I-4)**



**Travel Time Index (TTI)**

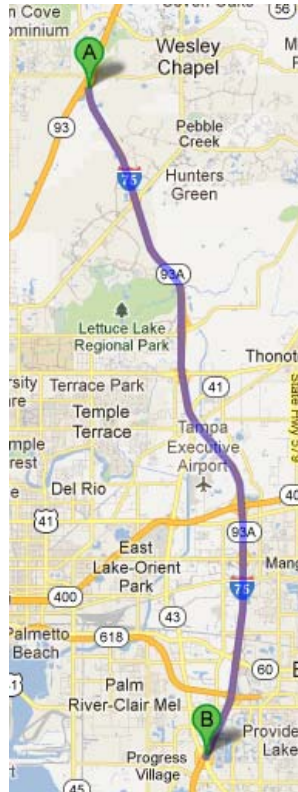
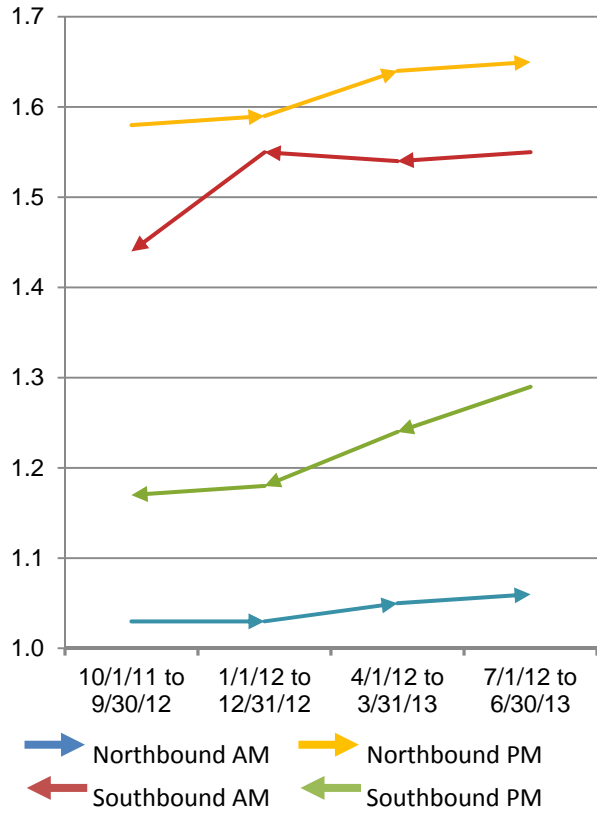
**I-275 (SR 60 to I-4)**



- ➔ Northbound AM
- ➔ Northbound PM
- ➔ Southbound AM
- ➔ Southbound PM

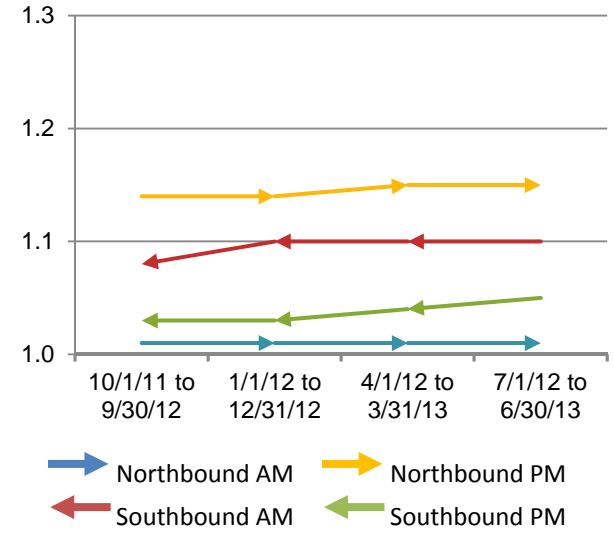
**Planning Time Index (PTI)**

**I-75 (US 301 to I-275)**



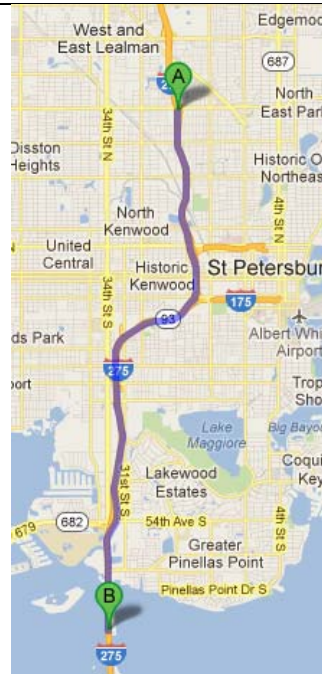
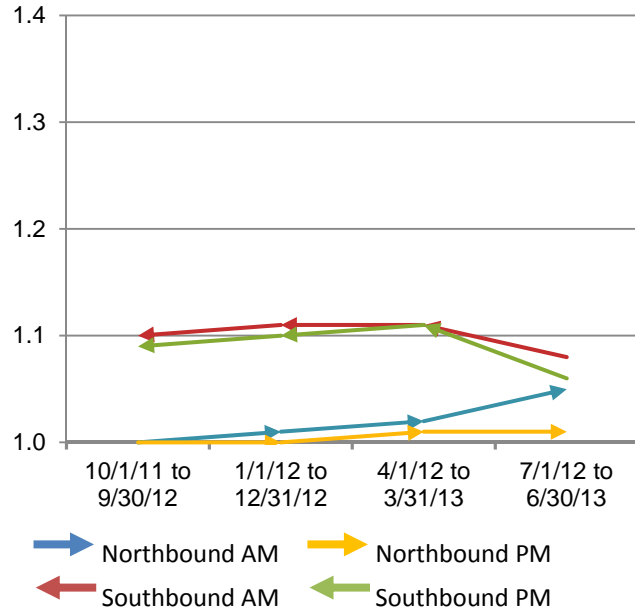
**Travel Time Index (TTI)**

**I-75 (US 301 to I-275)**



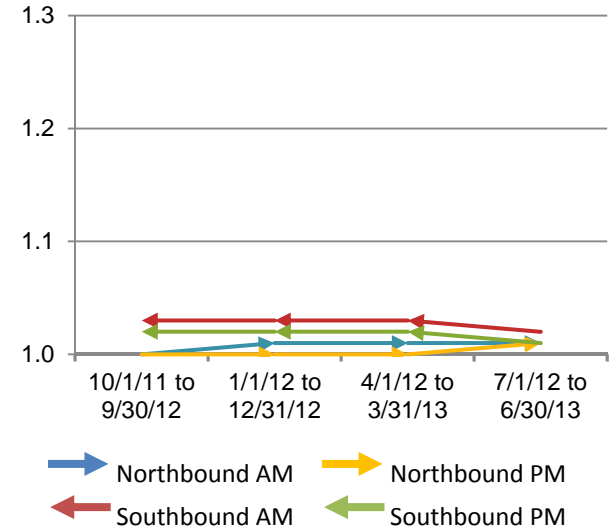
**Planning Time Index (PTI)**

**I-275 (38th Ave N. to I-75)**

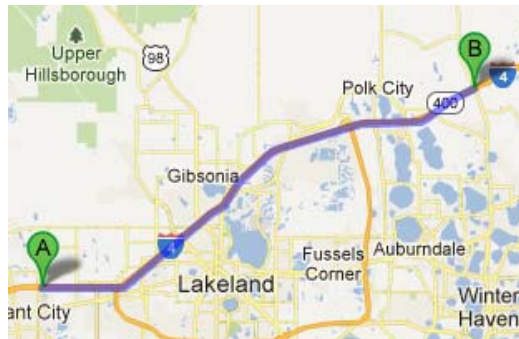
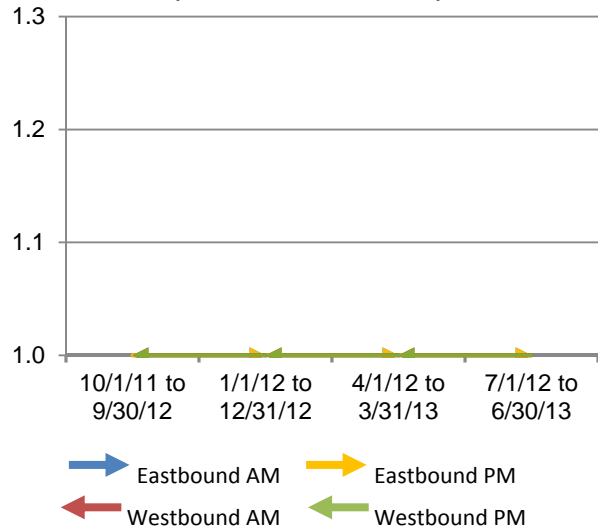


**Travel Time Index (TTI)**

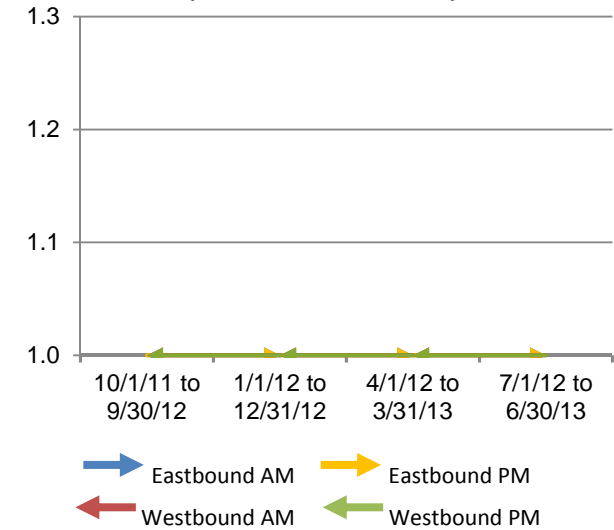
**I-275 (38th Ave N. to I-75)**



**I-4 (N. Park Road to CR 557)**



**I-4 (N. Park Road to CR 557)**



## 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

### *2012 RESULTS*

The Customer Satisfaction survey was conducted during July and August 2012. FDOT interviewed 2,100 drivers across Florida (about 300 drivers in each FDOT District) 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. By far the most popular alternative source is electronic message signs, which are used by three-quarters (75%) of drivers. The next most popular sources for traffic information are in-car navigation systems (34%) and websites on a home or work computer (23%).
- 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.
- When asked what additional types of traffic information FDOT should provide, most drivers say they would find information on alternate routes useful. Also, there is a large contingent of drivers who would like to be provided with additional information about all of the tested choices.



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