Florida Department of Transportation

State Traffic Engineering and Operations Office

Annual Report
Fiscal Year 2014/2015

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Statewide

Intelligent Transportation Systems Performance Measures

What's Working TODAY

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 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 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) 2014/2015, all output and outcome measures were reported. The data for these reported measures was collected for the period beginning July 1, 2014, and ending June 30, 2015.

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.

In February 2012, FDOT launched 12 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

2014/2015 RESULTS

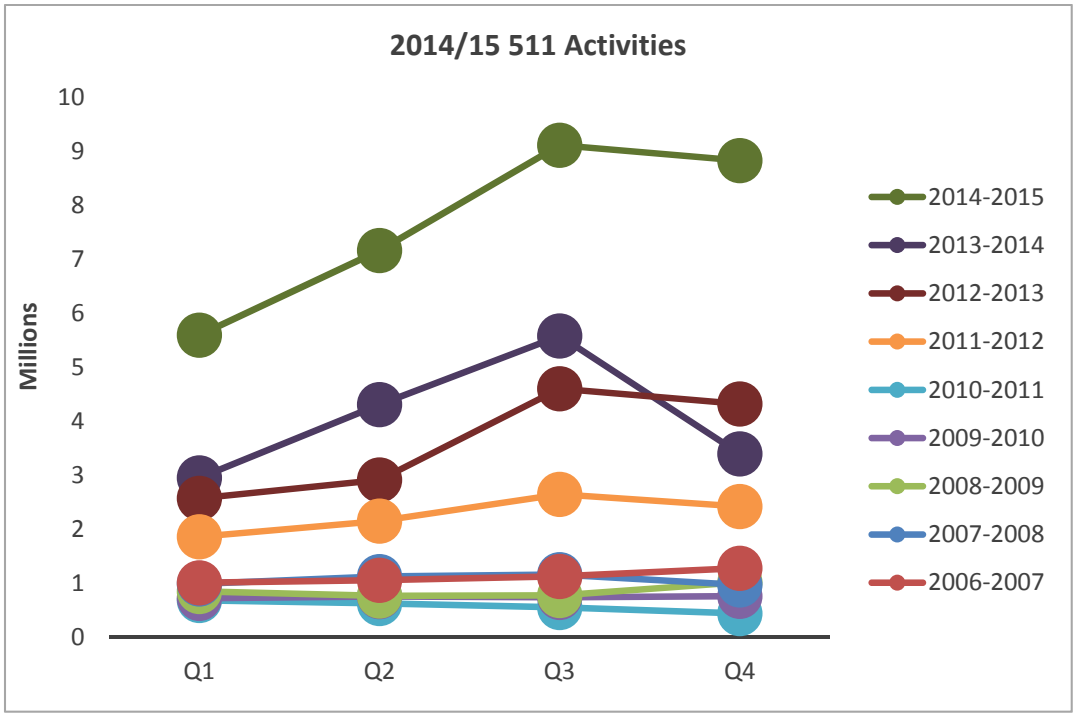
Tracking phone calls to Florida 511 is no longer the sole indicator of system usage as more travelers use automated and mobile applications to customize their experience. Over 30 million messages, calls, visits, and alerts were made in FY 2014-2015 keeping travelers on Florida's highways informed. The breakdown of 511 activities are as follows:

- Approximately 1.7 million calls to Florida's statewide 511 phone system were made during the 12-month period from July 2014 through June 2015.

- The FL511.com web site received 941,235 visitors during the fiscal year. There were 1,909,913 visits to the 511 mobile application in the past year.

- Currently there are approximately 26,104 Twitter subscribers to the 12 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



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 Ranger Program in December 1999. The Road Ranger 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 Ranger Programs. However, the specific services provided, hours of operation, fleet size, and area coverage differs among these entities.

Purpose: The primary mission of Road Ranger service patrols is to support emergency response personnel during incidents by establishing maintenance of traffic 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.

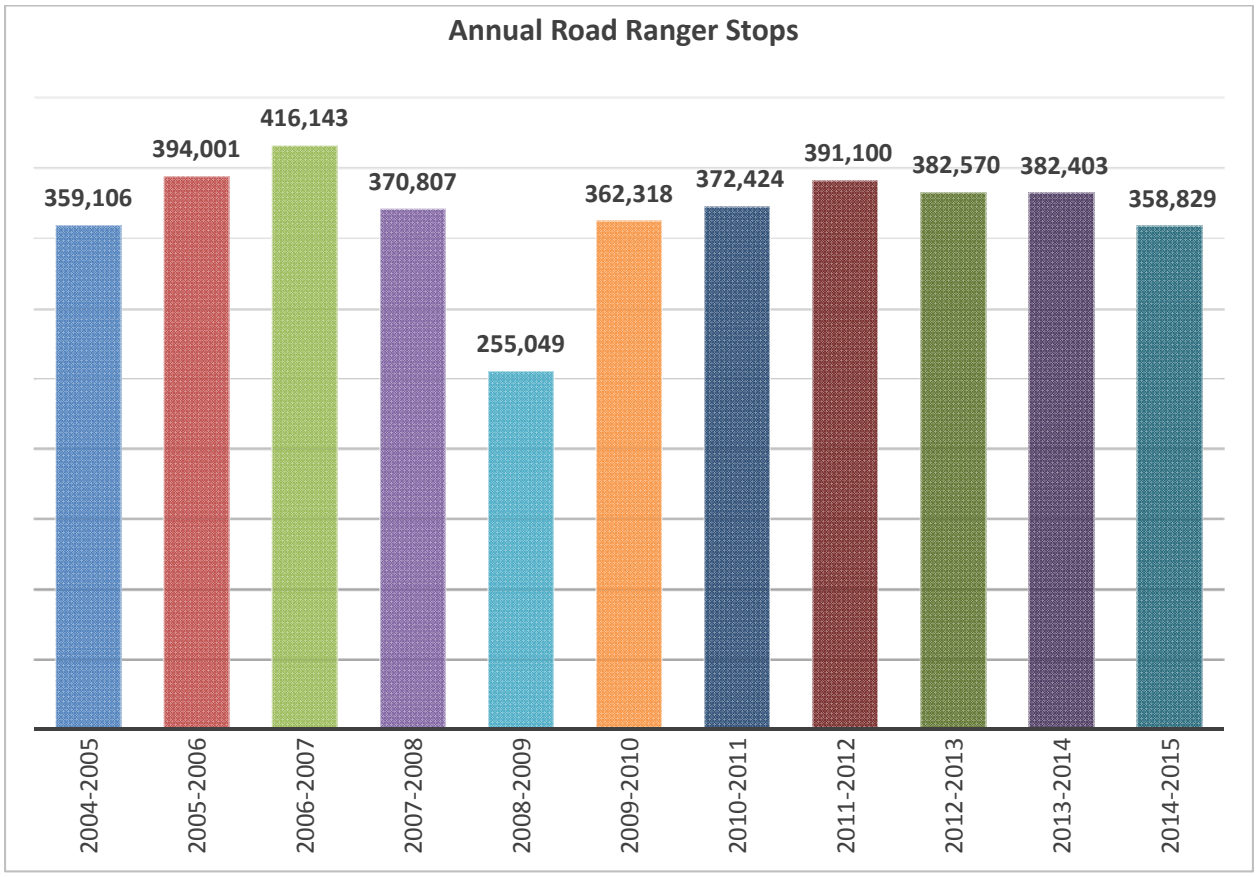
Objective: To help reduce the overall travel delay associated with incidents by providing quick response to motorists in need and assistance to other emergency responders.

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

ROAD RANGER STOPS

2014/2015 RESULTS

From July 2014 to June 2015, there were 358,829 Road Ranger stops made statewide. All seven Districts and Florida's Turnpike Enterprise provided Road Ranger services.



ITS MILES MANAGED

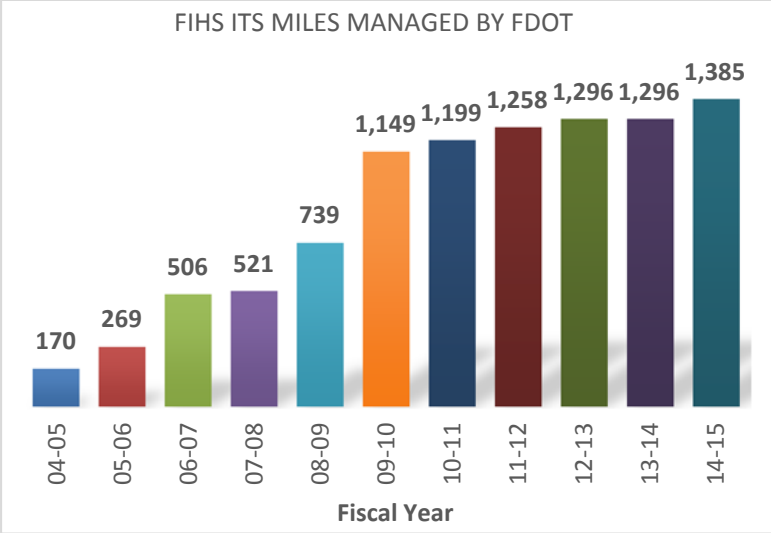
SEAMLESS, OPERATIONAL, REAL-TIME DEPLOYMENT OF ITS ACROSS FLORIDA

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 Florida's Turnpike Enterprise. Corresponding geographic coverage is also reported and mapped in terms of mile point limits.

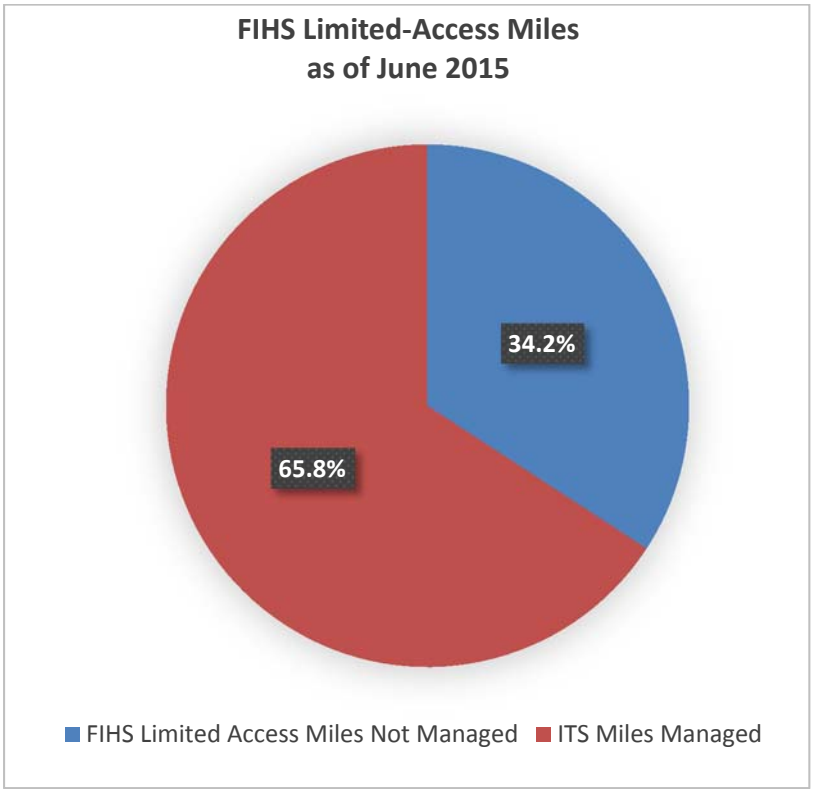
Note: FDOT no longer uses the FIHS; it has been replaced with the Strategic Intermodal System (SIS). However, for the sake of consistency, this report still reports the ITS miles managed in terms of the FIHS.

ITS MILES MANAGED

2014/2015 RESULTS

At the end of June 2015, 1,385 miles were managed by ITS. This represents 65.8 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	176.48	79.2%
2	372.3	90.8	24.4%
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%
State Total	**2,106.7**	**1,385.5**	**65.8%**

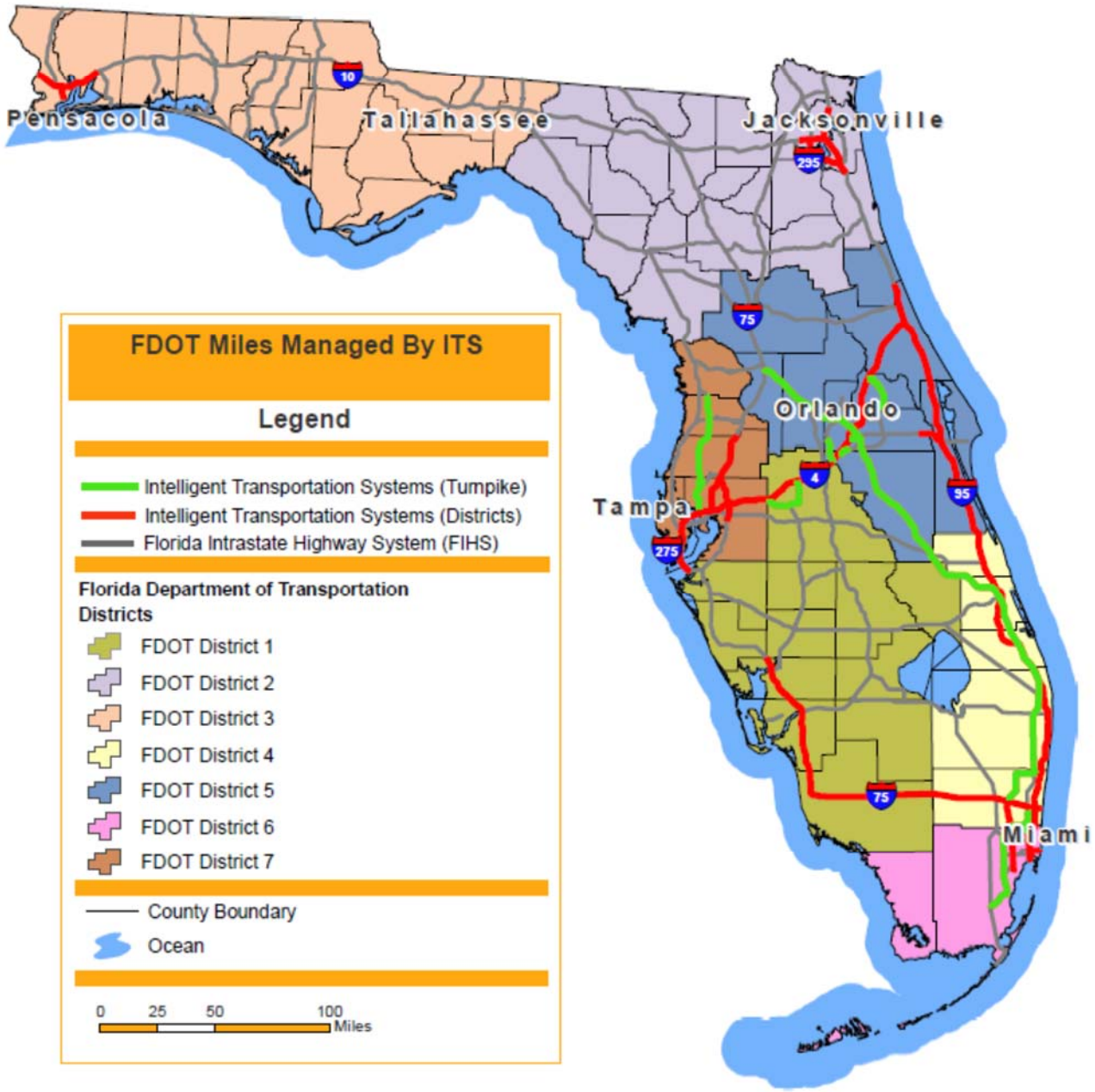


ITS Miles Managed, Roadway Segment Limits

Managing District	Roadway	From	To	Length
1	I-75	Broward/Collier Co. Line	I-275 Interchange in Manatee County	176.5
2	I-95	Race Track Road	Pecan Park Rd (Duval/St. Johns Co. Line)	33.7
2	I-295	SR 10 at Atlantic Boulevard	I-95 (south)	48.2
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 (MM 32)	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	I-4	US 27	Polk/Osceola Co. Line	3.6
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	Skyway Bridge South Toll Plaza	I-75 Apex (Pasco Co Line)	53.2
7	I-4	I-275	Hillsborough/Polk Co. Line	25.7
7	I-4	Hillsborough/Polk Co. Line	US 27	29.2
7	I-75	South of Progress Boulevard	Pasco/Hernando Co Line	40.7
Turnpike	Sawgrass Expressway	I-595	Atlantic Blvd. in Broward Co.	22.0
Turnpike	Seminole Expressway (SR 417)	Orange/Seminole Co. Line	I-4	17.0
Turnpike	Southern Connector (SR 417)	I-4	International Dr.	5.0
Turnpike	Western Beltway (SR 429)	I-4	Seidel Rd.	10.0
Turnpike	Polk Parkway (SR 570)	I-4	I-4	24.0
Turnpike	Veteran's Expressway (SR 589)	SR 60	Suncoast Parkway	16.0
Turnpike	SR 568	Veteran's Expressway	Dale Mabry Dr.	3.0
Turnpike	SR 589 (Suncoast Parkway)	Veteran's Expressway	US 98	38.0
Turnpike	HEFT (Homestead Extension/SR 821)	US 1	Turnpike Mainline	48.0
Turnpike	Florida's Turnpike (SR 91)	SR 826 (US 441)	Turnpike Mainline	3.0
Turnpike	SR 408 (East West Expressway)	Turnpike Mainline	SR 50	1.0
Turnpike	Florida's Turnpike (SR 91)	Sawgrass Expressway	I-75	236.0
Turnpike	SR 528 (Beachline Expressway)	I-4	Florida Turnpike in Orange Co.	4.0
Turnpike	Florida's Turnpike (SR 91)	Miramar Parkway	Griffin Road	6.0
Turnpike	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

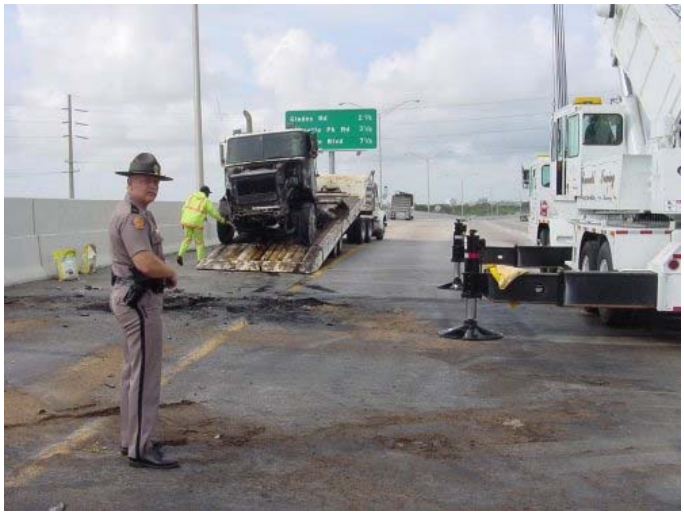
MINIMIZE TRAFFIC INCIDENT TIMELINE

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 duration 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, FDOT's 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, SunGuide software was modified to include 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 (TIM) Program. There are four major components to this program:

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

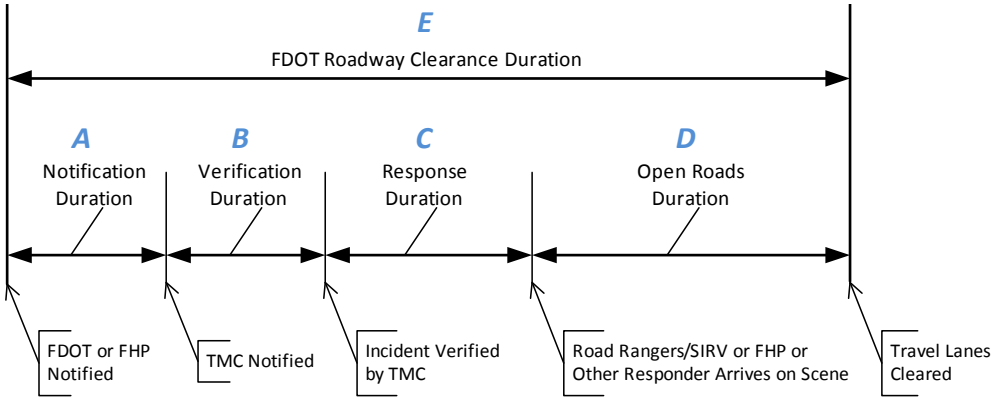


The Florida *Open Roads Policy* is an agreement between FDOT and the Florida Highway Patrol (FHP). Both agencies signed this agreement in November 2002. The agreement states that it is the policy of FHP and FDOT to expedite the removal of vehicles, cargo, and debris from state highways and to restore, 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 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 Ranger service patrols, 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.

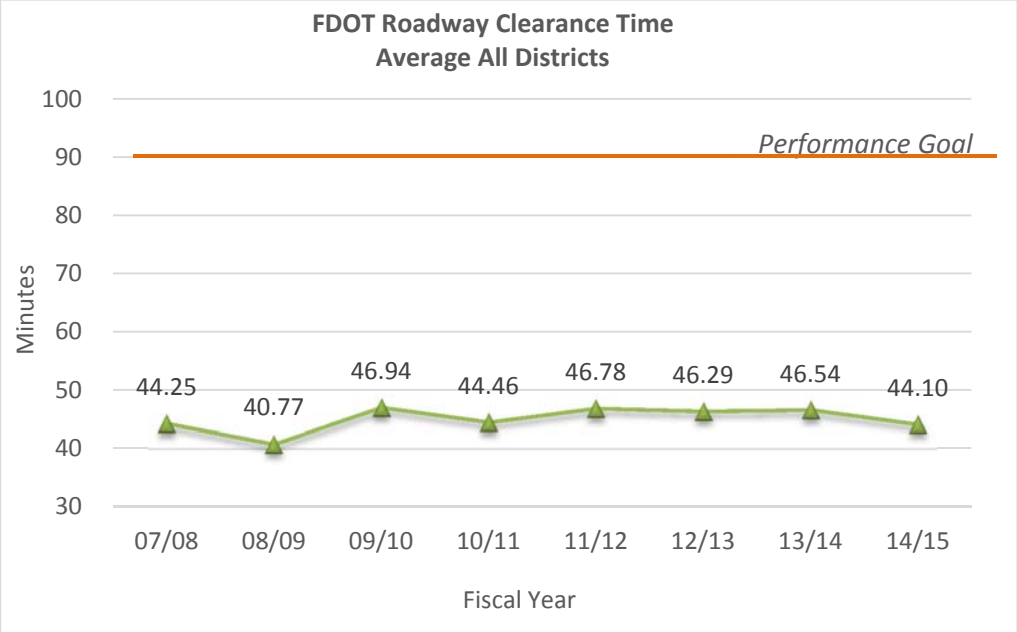
Objective: To minimize the incident timeline from the time any FDOT or FHP staff is notified to the time that all travel lanes are cleared.

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

2014/2015 RESULTS

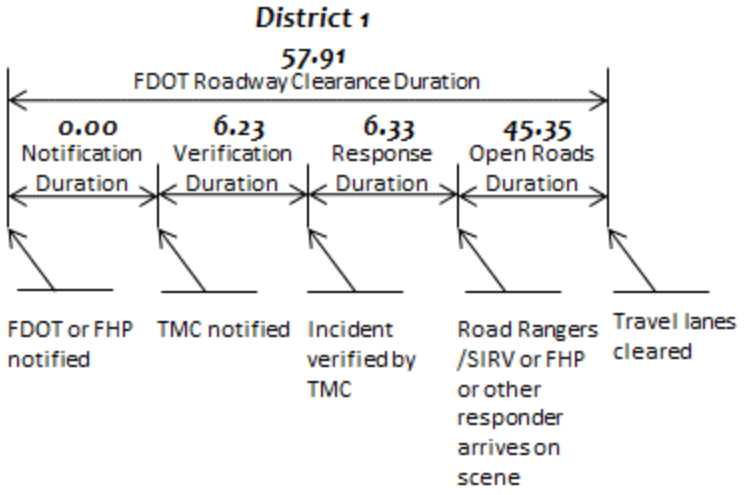
FDOT Roadway Clearance Duration varied from month to month, but the annual average time from the reporting Districts is 44.1 minutes, ranging from 27 to 57 minutes. The Open Roads Clearance Duration averages about 36 minutes for the reporting Districts. This is well under the *Open Roads Policy* target of 90 minutes. The graphics below show the averages for the 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.

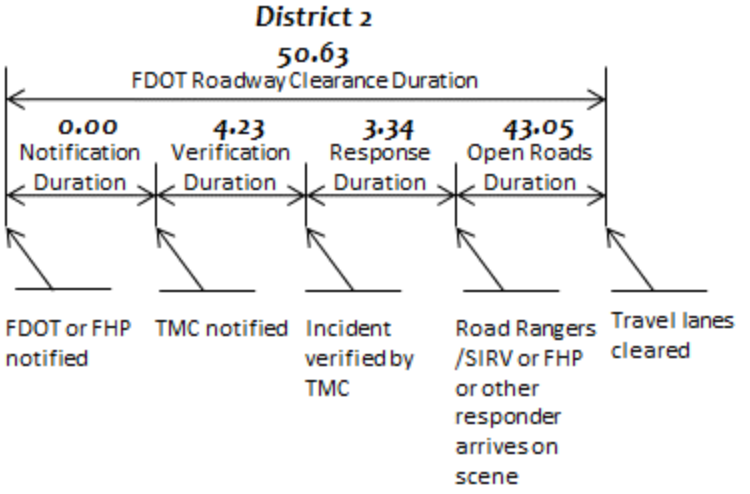


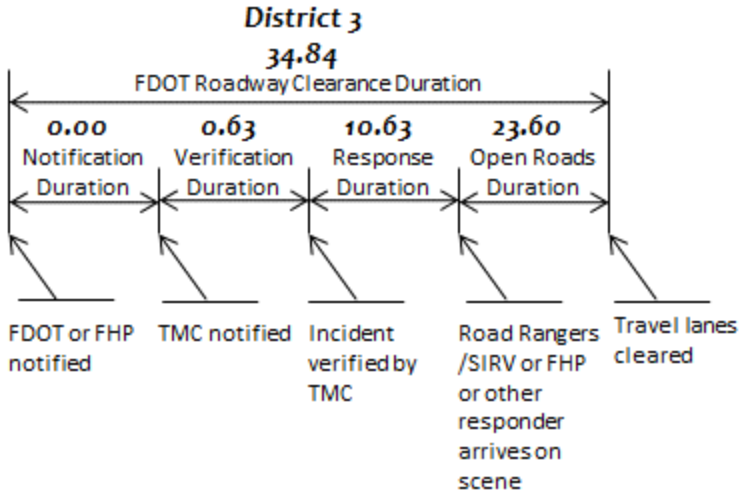
District	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
1	NA	NA	NA	50.48	54.89	64.71	62.38	57.9
2	46.11	43.34	59.36	40.74	53.43	55.72	55.11	50.6
3	NA	NA	NA	NA	NA	36.01	39.81	34.8
4	38.77	34.26	37.16	39.47	36.00	36.19	38.95	36.0
5	50.48	38.53	57.18	55.51	62.83	53.43	51.97	54.0
6	36.20	37.62	34.34	30.53	27.55	29.20	27.96	27.7
7	48.59	40.20	49.36	46.99	45.28	45.54	46.10	43.8
Turnpike	45.33	50.67	44.25	47.53	47.50	49.53	50.08	48.0
AVG ALL DISTRICTS	44.25	40.77	46.94	44.46	46.78	46.29	46.54	**44.1**

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

District Results (annual average in minutes):







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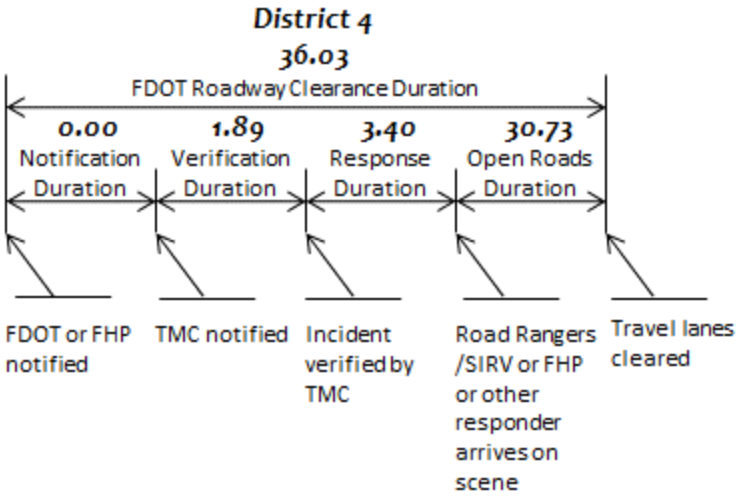
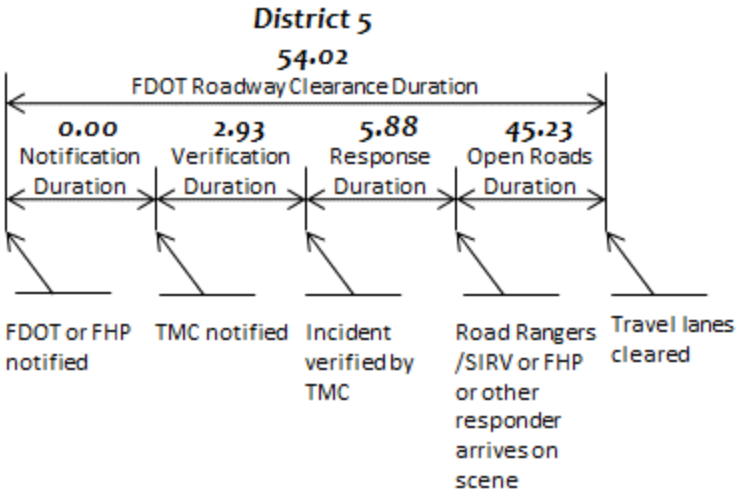
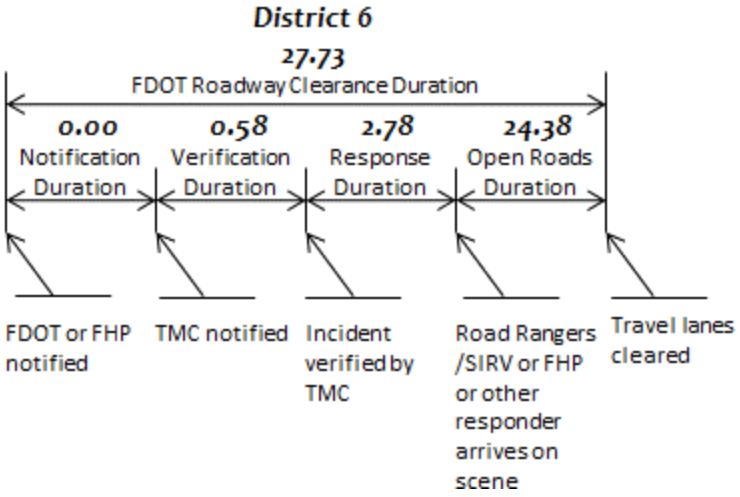
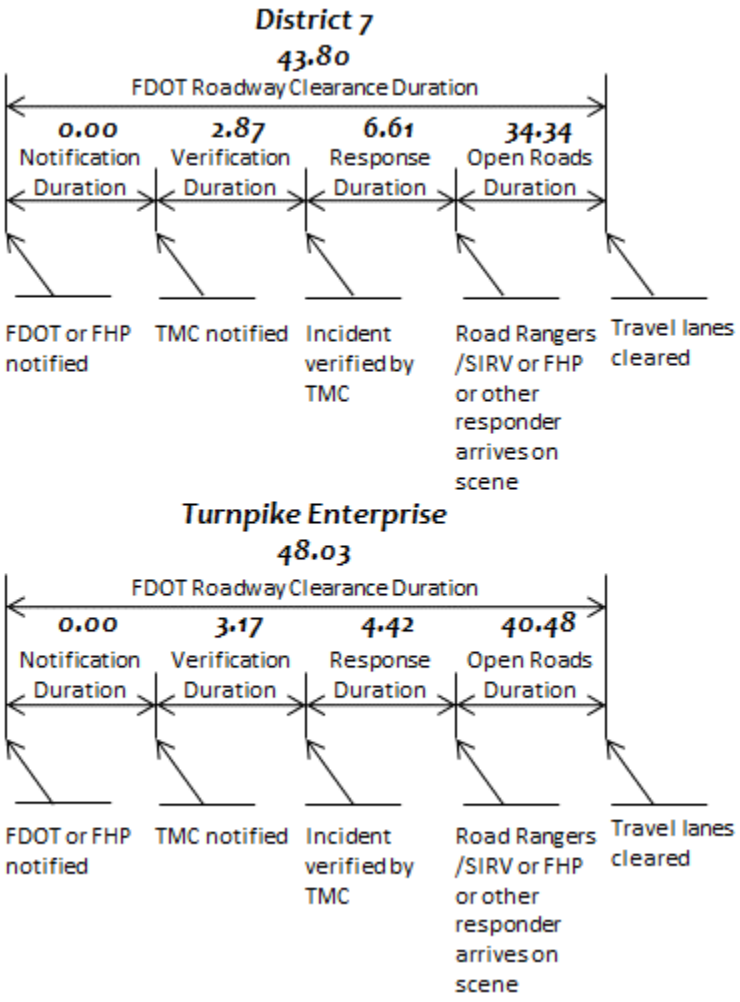







District 7
43.80
FDOT Roadway Clearance Duration
0.00
Notification Duration
2.87
Verification Duration
6.61
Response Duration
34.34
Open Roads Duration
FDOT or FHP notified
TMC notified
Incident verified by TMC
Road Rangers /SIRV or FHP or other responder arrives on scene
Travel lanes cleared
Turnpike Enterprise
48.03
FDOT Roadway Clearance Duration
0.00
Notification Duration
3.17
Verification Duration
4.42
Response Duration
40.48
Open Roads Duration
FDOT or FHP notified
TMC notified
Incident verified by TMC
Road Rangers /SIRV or FHP or other responder arrives on scene
Travel lanes cleared

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, and Florida's Turnpike Enterprise. FDOT currently uses the University of Maryland's Regional Integrated Transportation Information System (RITIS) as its production data warehouse for ITS data. Beginning in 2014 the travel time reliability was 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 95th 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. PTI is now being used instead of the buffer time index.

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

2014/2015 RESULTS

Travel time and planning indices were calculated for ITS-managed corridors in each District. The following table shows the segments, limits, and results for both TTI and PTI. This year's report includes more segments than in the past – for example, the Turnpike was not included prior to this year. The data was obtained through RITIS. Due to differences in processing the data this year, comparisons to previous years are not shown.

2014/2015 Reliability Segment Limits and Results

District	Roadway	Start	End	Approx Length	Direction	Peak Period	PTI	TTI
1	I-75	Hillsborough/Manatee Co. Line	Fruitville Road (SR780)	24.1	northbound	am	1.06	1.03
						pm	1.70	1.14
					southbound	am	1.23	1.06
						pm	1.20	1.05
	I-75	Fruitville Road (SR780)	Jackaranda Boulevard	16.8	northbound	am	1.06	1.03
						pm	1.35	1.08
					southbound	am	1.06	1.02
						pm	1.07	1.02
	I-75	Jackaranda Boulevard	Kings Highway	23.2	northbound	am	1.07	1.04
						pm	1.06	1.02
					southbound	am	1.04	1.01
						pm	1.29	1.05
	I-75	Kings Highway	Bayshore Road (SR78)	26.9	northbound	am	1.05	1.02
						pm	1.05	1.02
					southbound	am	1.04	1.01
						pm	1.06	1.01
	I-75	Bayshore Road (SR78)	Corkscrew Road	20.0	northbound	am	1.08	1.03
						pm	1.11	1.04
					southbound	am	1.08	1.04
						pm	1.08	1.03
	I-75	Corkscrew Road	Collier Blvd	21.6	northbound	am	1.08	1.03
						pm	1.11	1.03
					southbound	am	1.05	1.01
						pm	1.04	1.00
	I-75	Collier Blvd	Broward/Collier Co. Line	50.3	eastbound	am	1.05	1.01
						pm	1.03	1.00
					westbound	am	1.08	1.02
						pm	1.07	1.02
2	I-95	Airport Road	I-10	11.8	northbound	am	1.11	1.06
						pm	1.15	1.07
					southbound	am	1.22	1.08
						pm	1.29	1.09
	I-95	I-10	Race Track Rd. (MM 332)	19.6	northbound	am	1.68	1.17
						pm	1.86	1.22
					southbound	am	1.25	1.08
						pm	1.79	1.22
	I-295	I-10	I-95 (south)	20.4	northbound	am	1.09	1.00
						pm	1.35	1.00
					southbound	am	1.68	1.05
						pm	1.18	1.00
	I-10	I-295	I-95	5.0	eastbound	am	2.79	1.28
						pm	1.13	1.00

District	Roadway	Start	End	Approx Length	Direction	Peak Period	PTI	TTI
					westbound	am	1.12	1.00
						pm	1.57	1.01
	I-10	US 90 in Sanderson	I-295	32.9	eastbound	am	1.07	1.02
						pm	1.08	1.02
					westbound	am	1.09	1.03
						pm	1.09	1.03
	I-295	I-95 North	I-95 at end of 275 exit 61	25.5	northbound	am	1.08	1.03
						pm	1.23	1.07
					southbound	am	1.38	1.08
						pm	1.09	1.03
	I-95	Airport Road	GA state line	18.9	northbound	am	1.09	1.02
						pm	1.10	1.05
					southbound	am	1.08	1.02
						pm	1.10	1.04
	I-295	I-10	I-95 North	14.9	northbound	am	1.10	1.04
						pm	1.08	1.03
					southbound	am	1.06	1.02
						pm	1.32	1.07
	I-10	SR 85	CR191	30.4	northbound	am	1.08	1.02
						pm	1.10	1.03
					eastbound	am	1.05	1.01
						pm	1.05	1.01
3	I-10	CR191	Florida/Alabama State Line (US98)	26.0	northbound	am	1.16	1.08
						pm	1.17	1.08
					southbound	am	1.09	1.05
						pm	1.11	1.06
	I-110	all 6 miles in Pensacola		6.3	eastbound	am	1.07	1.00
						pm	1.07	1.00
					westbound	am	1.05	1.02
						pm	1.04	1.01
	I-95 in Broward County	Hillsboro Blvd/SR 820	Commercial Blvd/SR 870	9.6	northbound	am	2.24	1.31
						pm	2.16	1.29
					southbound	am	1.82	1.21
						pm	2.31	1.39
	I-95 in Broward County	Commercial Blvd/SR 870	Broward/Miami-Dade Co. Line/MM 17	15.1	northbound	am	1.83	1.26
						pm	2.12	1.32
					southbound	am	1.73	1.22
						pm	2.25	1.41
	I-595	I-75	US 1	12.9	eastbound	am	1.15	1.07
						pm	1.34	1.12
					westbound	am	1.39	1.13
						pm	1.17	1.09
4	I-75	Broward/Miami-Dade Co. Line	I-595	12.0	northbound	am	1.39	1.11
						pm	1.51	1.14
					southbound	am	1.05	1.01
						pm	1.05	1.00
	I-75	I-595	Broward/Collier Co. Line	33.4	eastbound	am	1.07	1.02
						pm	1.07	1.02
					westbound	am	1.49	1.14
						pm	1.24	1.11
	I-95	Hillsboro Blvd/SR 820	SR 882 / Forest Hill Boulevard	24.2	northbound	am	1.24	1.08
						pm	1.63	1.18
					southbound	am	1.60	1.16
						pm	1.75	1.22
	I-95	SR 882 / Forest Hill Boulevard	Palm Beach/Martin Co. Line	22.5	northbound	am	1.09	1.04
						pm	1.13	1.04

District	Roadway	Start	End	Approx Length	Direction	Peak Period	PTI	TTI
					southbound	am	1.09	1.04
						pm	1.15	1.05
	I-95	Palm Beach/Martin Co. Line	SR714 (Martin Hwy)	21.7	northbound	am	1.06	1.01
						pm	1.06	1.01
					southbound	am	1.05	1.02
						pm	1.06	1.01
	I-95	SR714 (Martin Hwy)	SR68 (Orange Avenue)	20.8	northbound	am	1.09	1.04
						pm	1.09	1.04
					southbound	am	1.06	1.02
						pm	1.06	1.02
	I-95	SR68 (Orange Avenue)	Indian River/Brevard County Line	28.8	northbound	am	1.48	1.23
						pm	1.49	1.24
					southbound	am	1.46	1.22
						pm	1.47	1.23
5	I-4	US 192 (Irlo Bronson Mem Hwy)	SR 408 (East-West Expressway)	18.5	northbound	am	1.65	1.19
						pm	2.20	1.44
					southbound	am	1.31	1.10
						pm	2.18	1.38
	I-4	SR 408 (East-West Expressway)	US 17/92 (SR 15)	22.0	northbound	am	1.31	1.14
						pm	2.44	1.44
					southbound	am	1.88	1.24
						pm	1.81	1.23
	I-95 in Volusia County	SR 40	SR 44	19.0	northbound	am	1.07	1.03
						pm	1.08	1.03
					southbound	am	1.07	1.03
						pm	1.08	1.03
	I-95 in Brevard County	SR 520	US 192	20.8	northbound	am	1.06	1.02
						pm	1.07	1.03
					southbound	am	1.05	1.02
						pm	1.06	1.02
	I-4	17/92	I-95	28.3	northbound	am	1.09	1.05
						pm	1.17	1.07
					southbound	am	1.13	1.05
						pm	1.21	1.07
	I-95	SR 46	SR 44	25.3	northbound	am	1.08	1.02
						pm	1.09	1.03
					southbound	am	1.07	1.02
						pm	1.08	1.02
	I-95	SR520	SR 46	22.2	northbound	am	1.07	1.02
						pm	1.07	1.02
					southbound	am	1.06	1.02
						pm	1.07	1.02
	I-95	Brevard/Indian River Co. Line	US192	20.7	northbound	am	1.07	1.02
						pm	1.07	1.02
					southbound	am	1.07	1.01
						pm	1.10	1.03
	I-4	US 27	US 192/SR 530	9.4	northbound	am	1.17	1.09
						pm	1.26	1.10
					southbound	am	1.13	1.07
						pm	2.75	1.45
	I-95	SR 40	Flagler/St. Johns Co Line	29.2	northbound	am	1.07	1.03
						pm	1.08	1.04
					southbound	am	1.07	1.02
						pm	1.07	1.02
6	I-195	I-95	Alton Road	4.4	eastbound	am	1.17	1.05
						pm	2.51	1.41

District	Roadway	Start	End	Approx Length	Direction	Peak Period	PTI	TTI
					westbound	am	2.08	1.25
						pm	1.23	1.07
	SR 826 (Palmetto Expressway)	I-95	I-75	8.5	eastbound	am	2.04	1.31
						pm	1.53	1.19
					westbound	am	2.71	1.50
						pm	1.59	1.20
	SR 826 (Palmetto Expressway)	I-75	SR 836	10.2	northbound	am	1.38	1.09
						pm	3.49	1.79
					southbound	am	2.19	1.39
						pm	3.45	1.91
	I-75	SR826	Broward/Miami-Dade Co. Line	5.4	northbound	am	1.17	1.09
						pm	2.31	1.26
					southbound	am	2.68	1.37
						pm	1.18	1.08
	I-95	Broward/Miami-Dade Co. Line	US 1	17.3	northbound	am	1.41	1.11
						pm	2.79	1.68
					southbound	am	2.71	1.59
						pm	1.78	1.29
	SR 826	SR 836	US 1	7.2	northbound	am	3.77	1.93
						pm	2.01	1.21
					southbound	am	1.11	1.05
						pm	1.17	1.07
	I-395	I-95	West end McCarthy Brd	1.3	eastbound	am	1.23	1.09
						pm	3.45	1.57
					westbound	am	1.64	1.23
						pm	2.15	1.35
7	I-275	38th Avenue N in St. Pete	SR 60	14.5	northbound	am	1.90	1.25
						pm	2.85	1.59
					southbound	am	1.06	1.02
						pm	1.84	1.17
	I-275	I-4	I-75	16.0	northbound	am	1.17	1.09
						pm	1.77	1.28
					southbound	am	2.05	1.31
						pm	1.34	1.14
	I-4	I-275	SR553/Park Road	22.4	eastbound	am	1.12	1.06
						pm	2.00	1.26
					westbound	am	1.71	1.16
						pm	1.58	1.13
	I-275	SR 60	I-4	5.8	eastbound	am	1.32	1.13
						pm	2.88	1.54
					westbound	am	2.56	1.59
						pm	2.79	1.80
	I-75	US 301	I-275 (North side)	20.0	northbound	am	1.48	1.12
						pm	1.97	1.24
					southbound	am	1.61	1.16
						pm	1.72	1.17
	I-275	38th Avenue North in St. Pete	I-75	24.5	northbound	am	1.17	1.05
						pm	1.13	1.04
					southbound	am	1.06	1.01
						pm	1.19	1.04
	I-4	SR553/Park Road	US 27	32.1	eastbound	am	1.06	1.02
						pm	1.13	1.05
					westbound	am	1.06	1.03
						pm	1.10	1.03
	I-75	I-275 North	Hernando/Sumter Co. Line	31.5	northbound	am	1.10	1.04
						pm	1.12	1.06

District	Roadway	Start	End	Approx Length	Direction	Peak Period	PTI	TTI
					southbound	am	1.12	1.05
						pm	1.15	1.06
	I-75	Manatee/Hillsborough Co. Line	US 301	20.0	southbound	am	1.06	1.02
						pm	1.37	1.08
FTE	Florida's Turnpike Homestead Extension/SR 91	US 1	Tamiami Trail/US 41	25.8	northbound	am	2.52	1.45
						pm	1.14	1.06
					southbound	am	1.10	1.04
						pm	1.64	1.26
	Florida's Turnpike Homestead Extension/SR 91	Tamiami Trail/US 41	Original Turnpike Stub	22.1	northbound	am	1.29	1.10
						pm	1.93	1.23
					southbound	am	2.12	1.26
						pm	2.25	1.33
	Florida's Turnpike Homestead Extension/SR 91	Original Turnpike Stub	Broward/Palm Beach Co. Line	25.5	northbound	am	1.35	1.09
						pm	1.38	1.09
					southbound	am	1.11	1.05
						pm	1.39	1.10
	Florida's Turnpike Homestead Extension/SR 91	Broward/Palm Beach Co. Line	Southern Boulevard/US 98	24.3	northbound	am	1.09	1.05
						pm	1.48	1.10
					southbound	am	1.11	1.05
						pm	1.26	1.07
	Florida's Turnpike Homestead Extension/SR 91	Southern Boulevard/US 98	Palm Beach/Martin Co. Line	20.3	northbound	am	1.07	1.03
						pm	1.09	1.03
					southbound	am	1.04	1.01
						pm	1.15	1.04
	Florida's Turnpike Homestead Extension/SR 91	Palm Beach/Martin Co. Line	Martin/St. Lucie Co. Line	20.2	northbound	am	1.07	1.02
						pm	1.07	1.03
					southbound	am	1.05	1.01
						pm	1.06	1.01
	Florida's Turnpike Homestead Extension/SR 91	Martin/St. Lucie Co. Line	St. Lucie/Indian River Co. Line	35.0	northbound	am	1.05	1.02
						pm	1.05	1.02
					southbound	am	1.05	1.01
						pm	1.06	1.02
	Florida's Turnpike Homestead Extension/SR 91	St. Lucie/Indian River Co. Line	Yeehaw Junction/SR 60	20.1	northbound	am	1.06	1.01
						pm	1.06	1.01
					southbound	am	1.06	1.00
						pm	1.06	1.00
	Florida's Turnpike Homestead Extension/SR 91	Yeehaw Junction/SR 60	Kissimmee Park Road	46.3	northbound	am	1.06	1.02
						pm	1.06	1.02
					southbound	am	1.06	1.03
						pm	1.07	1.03
	Florida's Turnpike Homestead Extension/SR 91	Kissimmee Park Road	East-West Expressway	26.5	northbound	am	1.10	1.04
						pm	1.11	1.05
					southbound	am	1.05	1.02
						pm	1.12	1.04
	Florida's Turnpike Homestead Extension/SR 91	East-West Expressway	US 27	23.0	northbound	am	1.16	1.06
						pm	1.17	1.06
					southbound	am	1.17	1.06
						pm	1.18	1.06
	Florida's Turnpike Homestead Extension/SR 91	US 27	I-75	19.7	northbound	am	1.07	1.03
						pm	1.07	1.04
					southbound	am	1.06	1.02
						pm	1.07	1.03
	Sawgrass Expressway/SR 869	I-595	SR 845/Powerline Road	21.8	northbound	am	1.07	1.03
						pm	1.07	1.03
					southbound	am	1.18	1.06
						pm	1.09	1.03

District	Roadway	Start	End	Approx Length	Direction	Peak Period	PTI	TTI
	Polk Parkway/SR 570	I-4	I-4	24.4	eastbound	am	1.09	1.03
						pm	1.10	1.03
					westbound	am	1.10	1.05
						pm	1.09	1.05
	Veteran's Expressway/SR 589	Memorial Highway	Suncoast Parkway	11.4	northbound	am	1.13	1.04
						pm	1.76	1.23
					southbound	am	2.72	1.40
						pm	1.14	1.01
	Suncoast Parkway/SR 589	Veteran's Expressway	US 98	41.5	northbound	am	1.08	1.04
						pm	1.06	1.02
					southbound	am	1.07	1.03
						pm	1.08	1.04
	Veteran's Expressway Spur/SR 568	Veteran's Expressway/Suncoast Parkway	Dale Mabry Highway/SR 597	3.0	eastbound	am	1.21	1.07
						pm	1.19	1.06
					westbound	am	1.03	1.00
						pm	1.04	1.00
	Beachline Expressway/SR 528	I-4	Orange Blossom Trail/US 17/92	4.3	eastbound	am	1.12	1.06
						pm	1.88	1.20
					westbound	am	1.12	1.08
						pm	2.00	1.21
	East West Expressway/SR 408	Turnpike Mainline	SR 50	0.9	eastbound	am	1.15	1.05
						pm	1.10	1.02
					westbound	am	1.10	1.02
						pm	1.12	1.03
	Seminole Expressway/SR 417	Orange/Seminole Co. Line	I-4	17.4	northbound	am	1.06	1.02
						pm	1.09	1.02
					southbound	am	1.09	1.03
						pm	1.08	1.02
	Southern Connector/SR 417	I-4	International Drive	5.1	northbound	am	1.10	1.03
						pm	1.10	1.03
					southbound	am	1.07	1.01
						pm	1.10	1.02
	Western Beltway/SR 429	I-4	Seidel Road	9.9	northbound	am	1.06	1.01
						pm	1.05	1.01
					southbound	am	1.05	1.01
						pm	1.06	1.01

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. FDOT's Central Office Traffic Engineering and Operations staff conducted further review. 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 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.

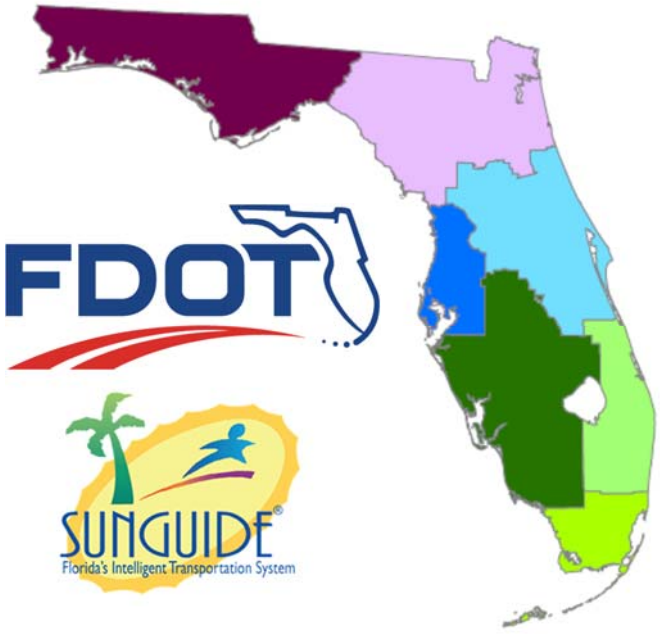
District	Qualifying Freeways
1	I-75, I-275, I-4, SR 570
2	I-10, I-75, I-95, I-295, SR 9A, J. Turner Butler Blvd. (SR202), Arlington Expressway (SR115), Hart Bridge Expressway (SR 228)
3	I-10, I-110 (SR 8A)
4	I-95, I-75, I-595, Sawgrass Expressway (SR 869), Florida's Turnpike (SR821)
5	I-4, I-75, I-95, 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

2014 RESULTS

The customer satisfaction survey was conducted April-June 2014. FDOT interviewed 2,100 drivers across Florida (about 300 drivers in each FDOT District) to explore usage of, attitudes toward, and perceptions of FDOT's ITS services. The most significant findings of that survey are listed below.

- 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.
- The Road Ranger Program and dynamic message signs continue to receive overwhelmingly positive ratings by customers, and these services are highly valued and trusted by the driving public.
- Alternative sources of traffic information are gaining ground on the traditional radio and television traffic reports. Today, less than half of drivers listen to radio traffic reports or watch traffic reports on television. More drivers are instead relying on in-car navigation systems, traffic web sites, and traffic mobile apps as their sources of traffic information. It would seem that drivers are interested in immediate, customized information for their trips, so FDOT should ensure that its web site and mobile app provide relevant data very quickly to drivers.
- Among drivers who use web sites for traffic information, a majority (59 percent) have not heard of the FL511.com web site. Among those who use mobile apps for traffic information, nearly two-thirds (65 percent) of drivers have never heard of the Florida 511 mobile app. These are prime audiences — especially younger drivers — who would be more likely to use these resources. Among those who do not use traffic web sites and mobile apps, 33 and 41 percent of drivers, respectively, indicate that they would be interested in doing so.
- A majority (53 percent) of drivers indicate that they would be likely to use a service like the 511 Traveler Information System, but only 32 percent of drivers know anything about it. Among those who use the service, the call-in service remains the most commonly used feature, but the web site and mobile app are becoming more popular.
- Drivers are just as likely to use the 511 Traveler Information Service before heading to their destination as they are while on their way or when sitting in traffic. Drivers are now also more likely to use it during an emergency, after hearing a television or radio report, and to report a traffic incident.
- Drivers' aided awareness of how to reach a Road Ranger — that is, those who say they know how to contact one after they hear the correct way to do so — continues to trend upward. Their unaided awareness, though, has taken a hit in 2014; only 10 percent of drivers can correctly state how to contact a Road Ranger without assistance.
- When asked what additional types of information FDOT should provide to aid travelers in their area, most drivers say they would like information on other transportation services. In addition, there is a large contingent of drivers who would like to be provided with information about roads not in their area.

For more information on ITS Performance Measures:

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http://www.dot.state.fl.us/trafficoperations/ITS/ITS.shtm