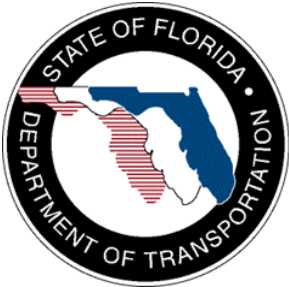


# Florida Department of Transportation



## Intelligent Transportation Systems Performance Measures Annual Report

**FY 2008/2009**

### Fiscal Year 2008/2009

511 Calls	2
Road Rangers	4
ITS Miles Managed	6
Incident Duration	9
Travel Time Reliability	12



## 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 represents the use of 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, the development and reporting of operations performance measures is a high priority for FDOT to demonstrate and document the benefits of ITS. When the ITS Program began addressing performance in 2004, the Districts had no automated data collection systems and were initially limited to measures of basic production and usage (*output*). The initial output measures reported statewide were 511 calls, Road Rangers assists, 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 the 2008/2009 fiscal year (FY), three output and two outcome measures—incident duration and travel time reliability—will be reported. The customer satisfaction survey was last conducted in 2008, but will not be performed this year. The next customer satisfaction survey is scheduled for spring 2010. The data for these reported measures was collected for the period beginning July 1, 2008, and ending June 30, 2009.

## 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" and, in 2009, it was accessible to approximately half of the Florida's population.

**Background:** In July 2000, the Federal Communications Commission designated 511 as the national three-digit telephone number for traveler information. By May 2009, there were over 146 million calls made to the 511 systems in 46 locations, in 35 states, and three Canadian provinces. Estimates indicate that 511 is accessible to 54 percent of Americans and almost seven million Canadians.

In Florida, most urban areas of the state currently offer this service to travelers. Following are the regional coverage areas and launch dates:

**Southeast (2002):** Broward, Miami-Dade, Palm Beach, Indian River, Monroe, St Lucie, Martin, Indian River, Palm Beach, Martin, St Lucie, and Miami-Dade Counties

**Central (2002):** I-4 in greater Orlando

**Tampa Bay (2004):** Hernando, Pasco, Polk, Pinellas, Hillsborough, Pinellas, Sarasota, Polk, Manatee, Sarasota, and Pasco Counties

**Northeast (November 2006):** Clay, Nassau, Duval, and St. Johns Counties

**Southwest (April 2007):** Charlotte, Collier, and Lee Counties

**Statewide (2005):** Covers all areas not covered by regional services

In June 2009, Florida's statewide 511 services integrated all the Florida regional 511 services into one statewide system. Since inception of the aforementioned systems, 511 calls made in Florida totaled over 40 million.

**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 number of 511 calls and different callers, and maintaining a high level of user satisfaction.

**Methodology:** Compilation of annual monthly (and ultimately, annual hourly) 511 calls by each of the service providers. During FY 2008/2009, LogicTree managed the Statewide, Southeast, and Central Florida systems. Mobility Technologies managed both the Tampa Bay area system and the Southwest system; SmartRoutes managed the Northeast system. As of June 17, 2009, LogicTree began managing all systems as part of the new statewide system.

## TOTAL ANNUAL 511 CALLS 2008/2009 RESULTS

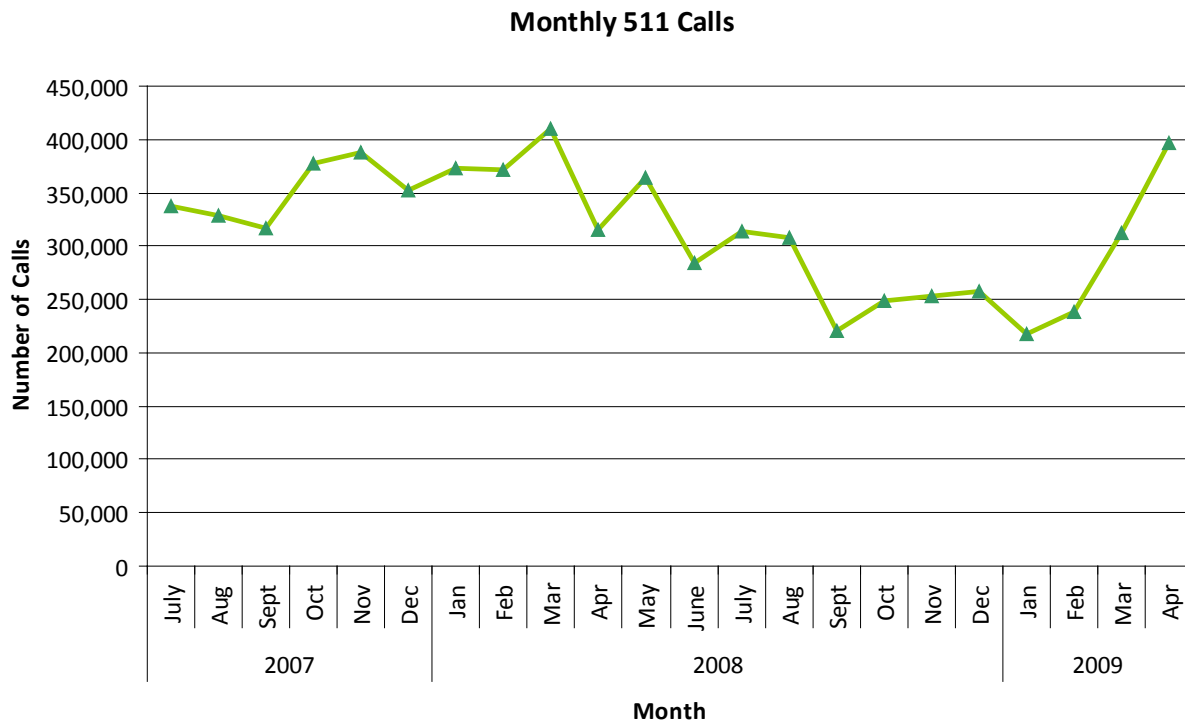
Approximately 3.4 million 511 calls were made during the 12-month period from July 2008 through June 2009 under the six Florida systems. Due to the changeover in system operations, the June 2009 numbers are incomplete. As can be seen below, the number of total monthly 511 calls is increasing with over 400,000 calls made in Florida. Total annual statewide calls have a 19 percent overall decrease over 2008.

The Southeast Florida 511 system surpassed 13 million calls in August 2008. The Tampa Bay 511 system reached two million calls. Due to Hurricane Fay, the Northeast Florida 511 system showed an 87 percent spike in calls. In September, the Central Florida 511 system reached eight million calls.

**WHAT'S NEW**  
System integration allows users to request customized calls or texts to inform them of incidents in areas of interest to them.

After several media events during the 2008 Thanksgiving holidays, Florida 511 calls were up 61 percent compared to a typical week. In December, the statewide SunGuide® Software installation was completed. Preparation for the Next Generation Florida 511 System advanced featuring one seamless and integrated system, personalized services, new Web site, and additional transfer options. Call volumes in the six Florida 511 services surpassed 25 million calls.

On June 17, 2009, the new Statewide Florida 511 Traveler Information System was launched. The fully integrated, bilingual resource offers statewide roadway coverage, the addition of more than 50 new travel partners, and personalized services.



## **ROAD RANGERS**

### *QUICK RESPONSE FOR CLEARANCE OF INCIDENTS AND TO 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. Districts 1, 2, 4, 5, 6, and 7, and the 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 the Road Ranger 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 for the incident. Providing quick response and clearance reduces the number of secondary incidents and returns the roadway to capacity sooner. Road Rangers assist in hurricane evacuations by providing support to evacuees and responders. Road Rangers 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.

**Methodology:** Compilation and summary of Road Ranger Log Forms (mostly in electronic format). All of the Districts are now providing Road Ranger data to the Central Office on a quarterly basis.

## ROAD RANGERS 2008/2009 RESULTS

For the period July 2008 to June 2009, there were 255,049 Road Ranger stops made statewide along 1,062.4 miles of coverage. Six Districts and the Florida's Turnpike Enterprise provided Road Ranger services in FY 2008/2009. District 3 is making progress toward implementation of this service in the next fiscal year.

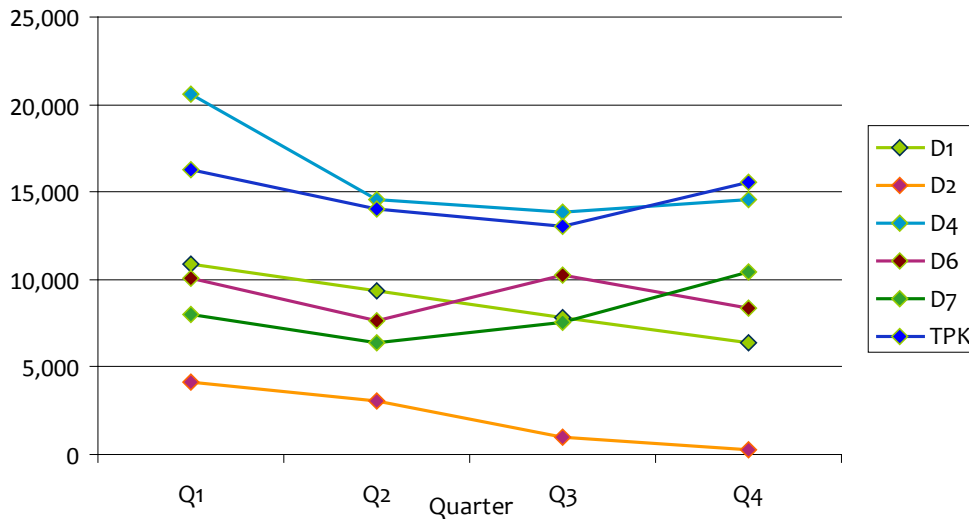
As illustrated in the following graph, changes in funding affected most Districts. Compared to the previous period of documentation (July 2007 to June 2008) annual stops decreased 31 percent. This is due in part to reductions in the number of Road Ranger units, hours and days of operation, and roads covered.

In 2008, the Florida Legislature instituted a 50 percent reduction of funding from the previous year's funding for the Road Ranger Program. By the end of the 2009 session, after reviewing the benefits of the Road Ranger Program, the legislature reversed the 50 percent cap from the prior funding year, made that the floor for 2010, and explicitly allowed other funding sources, such as sponsorships, which were not previously expressly permitted.

**WHAT'S NEW**  
*Funding was a challenge in 2008/2009; however, Florida legislators restored funding once they understood the Road Rangers Program benefits.*

Examples of some of the specific reductions in Road Ranger services are as follows: District 2 reduced the number of patrols from eight to two, and hours per day to 10. District 5's thirteen Road Ranger service patrols are operational Monday through Friday from 6:30 a.m. to 10:30 p.m. They were previously operating 24-hours a day, 7-days per week. District 2 and District 5 suspended patrol operations for approximately 60 days. District 6 reduced patrols from seven to four, and reduced weekend patrols from five to three. District 6 eliminated coverage on US 1 and I-75, (although they responded to requests on these roads from law enforcement), and reduced weekend coverage on SR 826 to 12-hour daytime-only hours. District 7 eliminated three Road Rangers routes and increased the coverage area of one of the remaining routes to accommodate the reduction in staff.

**ROAD RANGERS STOPS BY QUARTER**



## MILES MANAGED

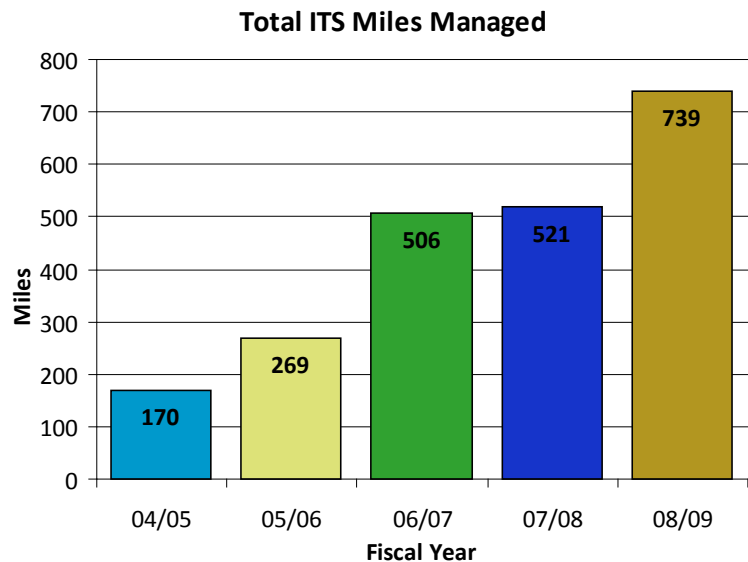
### SEAMLESS, OPERATIONAL, REAL-TIME DEPLOYMENT OF ITS ACROSS FLORIDA

FDOT is committed to implementing a statewide, fully integrated ITS in a cost-efficient manner, to better accommodate our rapid growth in population, tourism, and commerce. ITS represents the use of 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 the Florida's Turnpike Enterprise are committed to the deployment of ITS; each has embarked with this deployment in varying stages and pace in accordance with the FDOT *Ten-Year ITS Cost Feasible Plan*. As a percent of the limited-access Florida State Highway System (SHS) 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.

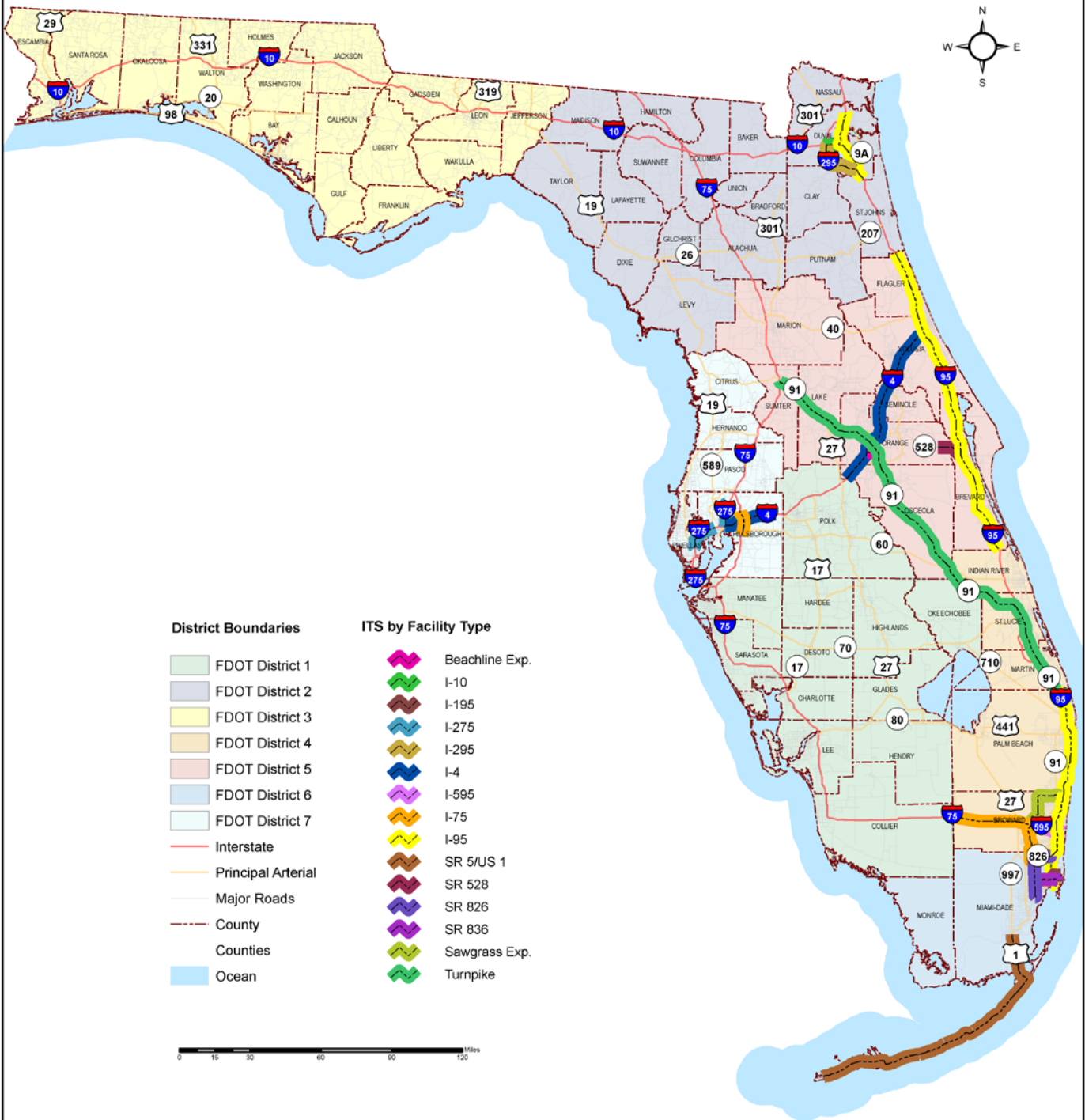


**Purpose:** Report progress in completing deployment of the FDOT *Ten-Year ITS Cost Feasible Plan* and beyond, as appropriate.

**Objective:** To initially deploy ITS across the limited-access portion of the SHS, 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.

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

# Florida's Intelligent Transportation Systems Program Coverage



### District Boundaries

- FDOT District 1
- FDOT District 2
- FDOT District 3
- FDOT District 4
- FDOT District 5
- FDOT District 6
- FDOT District 7
- Interstate
- Principal Arterial
- Major Roads
- County
- Counties
- Ocean

### ITS by Facility Type

- Beachline Exp.
- I-10
- I-195
- I-275
- I-295
- I-4
- I-595
- I-75
- I-95
- SR 5/US 1
- SR 528
- SR 826
- SR 836
- Sawgrass Exp.
- Turnpike

August, 2009



## MILES MANAGED 2008/2009 RESULTS

At the end of June 2009, 739 miles are managed by ITS. This represents 35 percent ITS coverage of the Florida Intrastate Highway System (FIHS). Extensive ITS deployment took place during FY 2008/2009 in all Districts and the Florida's Turnpike Enterprise. Compared to the previous period of documentation (June 2007 to July 2008), the miles managed by ITS increased 42 percent statewide.

### WHAT'S NEW

*A 42 percent increase in miles managed furthers the objective to integrate ITS-related user services across the entire state, improving mobility and safety for travelers.*

District	Limited- Access FIHS Miles	Total ITS Miles Managed by FDOT	Facility, Extent, and Location
2	372.3	63.4	I-10: 9 miles (MM 354 to MM 363 in Duval County) I-95: 34 miles (MM 332 to MM 366 in Duval County) I-295: 20.4 miles (MM 0 to MM 20.6)
4	203.2	131.1	I-95: 46 miles (MP 0 to MP 46 in Palm Beach County) I-75: 46.9 miles (MM 0 to MM 45, and 1.9 miles along Sawgrass Exp north of I-75) I-95: 25.3 miles (MM 0 to MM 25.3 in Broward County) I-595: 12.9 miles (MM 0 to MM 12.9 in Broward County)
5	386.1	215.5	I-4: 74.5 miles (MM 58 to MM 130) I-95: 130 miles (MM 298 to MM 160) SR 528: 11 miles (from SR 520 East to I-95)
6	53.5	52.18	I-75: 5.44 miles (SR 826/Palmetto Expressway to Miami-Dade/Broward County Line) I-95: 17.26 miles (SR 5/US 1 to Miami-Dade/Broward County Line) I-195: 4.91 miles (NW 11 Avenue to SR 907/Alton Road) SR 826: 24.57 miles (SR 5/US 1 to Golden Glades Interchange)
		plus 123 miles on controlled access FIHS and arterial facilities ---->	SR 5/US 1: 123 miles in Dade and Monroe Counties: SR 836 (SR 826 to MacArthur Causeway Bridge) SR 5/US 1 (N of Atlantic Blvd. to Monroe/Dade County Line) SR 5/US 1 (Monroe/Dade County Line to Card Sound Road) SR 5/US 1 (Card Sound Road to SR 821 HEFT) SR 5/US 1 (S of McDonald Ave to Industrial Road/ Sands Road) SR 5/US 1 (Industrial Road/ Sands Road to Palm Island Road) SR 5/US 1 (Palm Island Road to 1 mile W of Tom Harbor Bridge) SR 5/US 1 (1 mile W of Tom Harbor Bridge to Caloosa Cove Blvd) SR 5/US 1 (Caloosa Cove Blvd to N of Atlantic Blvd.)
7	166.5	59	I-275: 13 miles (MP 25.5 to MP 38.5) I-275: 11 miles (MP 43 to MP 54) I-75: 12.5 miles (MM 253.2 to MM 265.7) I-4: 22.5 miles (MP 0 to MP 22.5)
TPE	460	218	Sawgrass Expressway: 22 miles (I-595 to Atlantic Blvd in Broward county). Beachline Expressway/SR 528: 4 miles (I-4 to Florida's Turnpike in Orange County) Florida's Turnpike: 192 miles (MP 117 to MP 309)
<b>Statewide Total</b>	<b>2106.7</b>	<b>739.18</b>	<b>35% of District Total FIHS Limited-Access Miles are ITS Managed Miles</b>

## **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 analysis and improvement in the system. 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® Software was modified to include the data collection and reporting requirements for obtaining incident duration data.

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

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

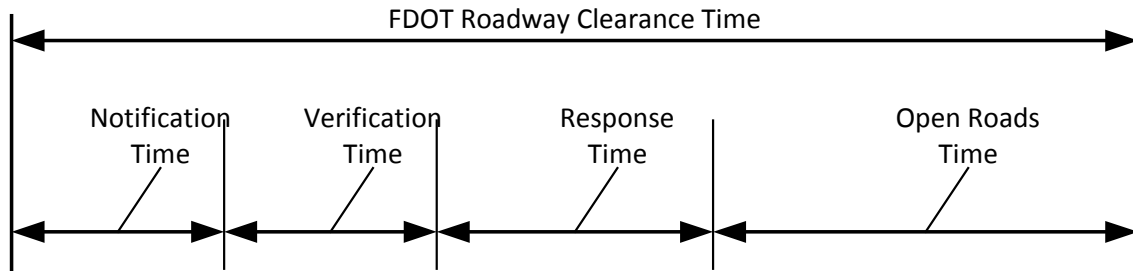
The Florida *Open Roads Policy* is an agreement between FDOT and the Florida Highway Patrol (FHP). Both agencies signed this agreement in November 2002. The agreement states that it is policy of FHP and FDOT to expedite the removal of vehicles, cargo, and debris from state highways and to restore, in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

Rangers, and maintenance crews. The 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 The Florida's Turnpike Enterprise.

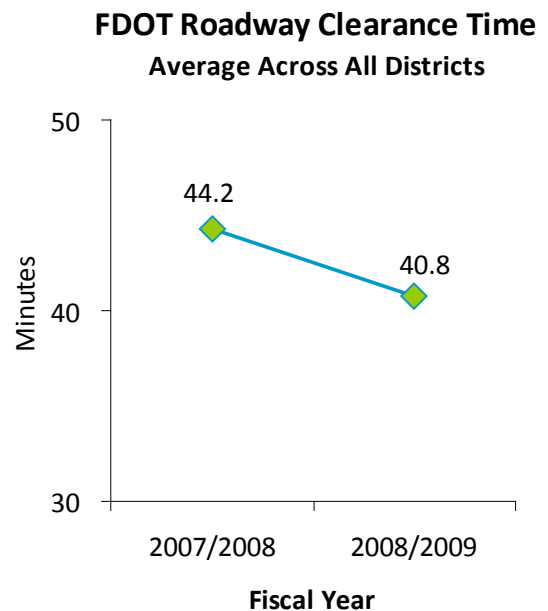
The incident duration timeline measure is an indicator of the effectiveness of these programs.



**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:** In 2008, to more closely align with National Traffic Incident Management definitions, the terminology for reporting incident duration was modified. The FDOT incident duration timeline includes the following components: notification/verification time, response time, and Open Roads Clearance Time. The definition for Open Roads Clearance Time 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 Time 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 times, as well as the open roads clearance time. Although the terminology changed for FY 2008, the individual components of the incident duration timeline are still the same as that used for FY 2007 reporting.

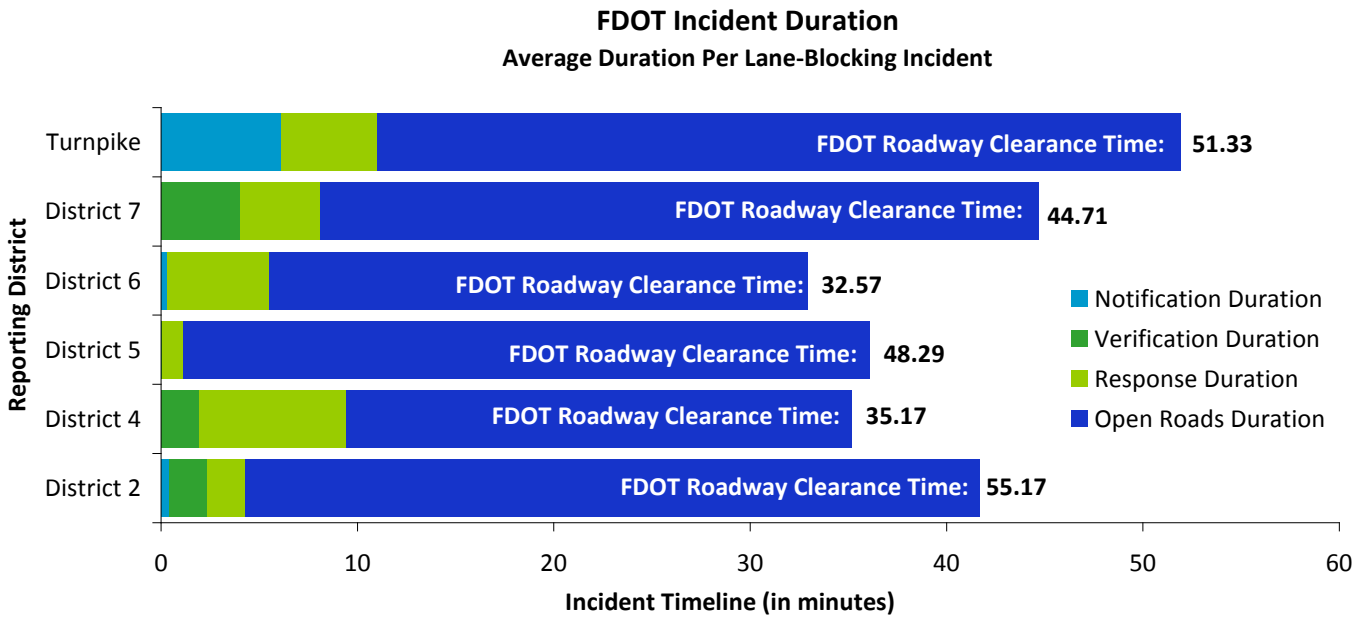


## INCIDENT DURATION 2008/2009 RESULTS

FDOT Roadway Clearance Time varied from month to month, but the average time from the reporting Districts is about 40 minutes, ranging from 31 minutes to 96 minutes for monthly averages. The Open Roads Clearance Time averages about 30 minutes for the reporting Districts. This is well under the *Open Roads Policy* target of 90 minutes. The graphic below shows the FDOT Roadway Clearance Time for the five reporting Districts and the Florida's Turnpike Enterprise. The Roadway Clearance Times shown are weighted averages based on the number of incidents that occurred that month. Therefore, Roadway Clearance Times for each month will not necessarily correspond to the sum of the verification, response, and open road's averages.

**WHAT'S NEW**

*With the new integrated system implemented in mid-June 2009, all Districts will report using the same format in fiscal year 2009/2010, fulfilling goal of reporting accurate data.*



## TRAVEL TIME RELIABILITY

### ESTIMATE TRAVEL TIMES FOR TRIP PLANNING

**Background:** In 2005, FDOT adopted reliability as an outcome performance measure to report to the Florida Transportation Commission on a statewide basis. FDOT identified reliability reporting definitions and data needs in FY 2006. A limited amount of data were available for reporting reliability in FY 2007; however, speed detector data quality issues prohibited reporting of results. For FY 2008, travel time reliability and congestion results are available for Districts 2, 5, and 7. For FY 2009, travel time reliability and congestion results are available for Districts 2, 4, 5, 6, and 7. Districts 5 and 7 provided data, and Districts 2, 4, and 6 provided data collected from the STEWARD system at University of Florida.

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

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

**Methodology:** FDOT identified two metrics for measuring travel time reliability and congestion. The Buffer Index is a measure of the reliability of travel service. The Buffer Index is calculated as the ratio between the difference of the 95th percentile travel time and the average travel time divided by the average travel time, i.e.  $(95\text{th travel time} - \text{average travel time}) / \text{average travel time}$ . For example, a value of 0.4 means that a traveler should budget an additional 8-minute buffer for a 20-minute average peak trip time to ensure 95 percent on-time arrival. A secondary metric is the Travel Time Index (TTI), which is a measure of traffic congestion. TTI is calculated as the ratio of average peak travel time to an off-peak (free-flow) standard, in this case 60 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 peak: from 6 a.m. to 9 a.m.

Midday peak: from 9 a.m. to 4 p.m.

Afternoon peak: 4 p.m. to 7 p.m.

**Freeway Segments:** A typical freeway section is about 3 to 7 miles between major interchanges in urban areas, and can go up to 12 to 13 miles in rural areas with less congestion and fewer interchanges. When possible, congested freeways were separated from freeways that had less congestion.

## **TRAVEL TIME RELIABILITY**

### *2008/2009 RESULTS*

A complete list of sections, including limits and lengths, is included in Appendix A. A complete summary of all results is included in Appendix B.

The following tables summarize congestion and reliability results for ITS managed corridors in Districts 2, 4, 5, 6, and 7. The tables indicate the rank, roadway, direction, limits, peak period, travel time index/buffer time index, and the change in result when compared to 2007/2008 values. NA indicates that a value was not available for the particular segment and period due to data collection gaps.

District 2 experiences the most congestion during the afternoon peak on I-95 northbound from Palm Avenue to the I-95 northbound exit to 8th Street, with a travel time index of 1.32, which reflects a slight decrease when compared to 2007/2008. The most unreliable travel times occur on I-295 westbound from north of I-95 to San Jose Boulevard with a buffer index of 0.53.

In District 4, the most congested section is I-595 westbound from I-95 to east of the Turnpike during the afternoon peak, with a travel time index of 1.40. This is also the period and area experiencing the most unreliable travel times, with a buffer index of 0.77.

In District 5, the most congested section is I-4 eastbound from South Street to State Road 414 during the afternoon peak, with a travel time index of 1.60, which is less than the 2007/2008 value. The most unreliable section is on the Turnpike eastbound from the eastbound ramp to State Road 408 during the afternoon peak, with a buffer index of 0.89. These two sections are reporting the highest statewide travel time and buffer index for the reporting period.

In District 6, the most congested section is I-195 southbound from east of Second Street Bridge to west of North Miami Avenue during the afternoon peak, with a travel time index of 1.42; again, less than the 2007/2008 value. This is also the period and area experiencing the most unreliable travel times, with a buffer index of 0.78.

In District 7, the morning peak experiences the most congestion on I-275 southbound between Busch Boulevard and the Hillsborough River, with a travel time index of 1.38. The afternoon peak on Howard Frankland Bridge northbound experiences the most unreliable travel times, with a buffer index of 0.83.

It is interesting to note that the 2008/2009 values for congestion and travel time reliability have consistently high value segments when compared to 2007/2008. In general, many of the numbers were very close in value or went down slightly in 2008/2009.

### District 2 - Travel Time Index

Rank	Roadway	Limits	Peak Time Period	Travel Time Index	Change from 2008
1	I-95	NB -Palm Ave to 8th St	PM	1.32	-0.01
2	I-95	SB - Hendricks Ave to Butler Blvd	PM	1.21	0.09
3	I-295	WB - N of I-95 to San Jose Blvd	AM	1.16	na
4	I-95	NB - Butler Blvd to Acosta Bridge	PM	1.15	-0.02
5	I-95	NB - Palm Ave to 8th St	Midday	1.13	0.01

### District 2 - Buffer Time Index

Rank	Roadway	Limits	Peak Time Period	Buffer Time Index	Change from 2008
1	I-295	WB – N. of I-95 to San Jose Blvd.	AM	0.53	na
2	I-95	NB - Butler Blvd. to Acosta Bridge	PM	0.42	-0.12
3	I-95	SB - Hendricks Ave. to Butler Blvd.	PM	0.41	0.01
4	I-95	NB - I-295 S. to NB Entrance from Butler Blvd. WB	AM	0.31	0.06
5	I-95	SB - 8th St. to Palm Ave.	PM	0.28	-0.23
5	I-295	WB - San Jose Blvd. to S. of US-17	AM	0.28	na

### District 4 - Travel Time Index

Rank	Roadway	Limits	Peak Time Period	Travel Time Index	Change from 2008
1	I-595	WB - I-95 to E of Turnpike	PM	1.4	na
2	I-595	EB - Hiatus Rd to Davie Rd	AM	1.25	na
3	I-95	SB - S of Palm Beach County line to N of Commercial Blvd	PM	1.15	na
4	I-595	WB - Davie Rd to Hiatus Rd	PM	1.15	na
5	I-95	NB - N of SR-84 to Commercial Blvd	PM	1.13	na

### District 4 - Buffer Time Index

Rank	Roadway	Limits	Peak Time Period	Buffer Time Index	Change from 2008
1	I-595	WB - I-95 to E of Turnpike	PM	0.77	na
2	I-95	NB - N of SR-84 to Commercial Blvd	PM	0.48	na
3	I-595	EB - Hiatus Rd to Davie Rd	AM	0.46	na
4	I-95	SB - S of Palm Beach Co/Ln to N of Commercial Blvd	PM	0.43	na
4	I-95	SB - S of Palm Beach Co/Ln to N of Commercial Blvd	AM	0.43	na

### District 5 - Travel Time Index

Rank	Roadway	Limits	Peak Time Period	Travel Time Index	Change from 2008
1	I-4	EB - South St to SR 414	PM	1.6	-0.11
2	I-4	EB - Turnpike E/B Ramp to SR 408	PM	1.56	-0.24
3	I-4	WB - E of Lake Mary Rest Area to East of SR 414	AM	1.42	0.02
4	I-4	WB - SR 414 to South St	PM	1.39	0.02
5	I-4	EB - East of SR 414 to Lake Mary Rest Area	PM	1.2	0.03

### District 5 - Buffer Time Index

Rank	Roadway	Limits	Peak Time Period	Buffer Time Index	Change from 2008
1	I-4	EB - Turnpike E/B Ramp to SR 408	PM	0.89	-0.21
2	I-4	WB - SR 414 to South St	PM	0.63	0.08
3	I-4	EB - South St to SR 414	PM	0.56	-0.06
4	I-4	WB - E of Lake Mary Rest Area to East of SR 414	AM	0.55	-0.08
4	I-4	WB - 528 E/B Ramp to US 192	PM	0.55	-0.09

### District 6 - Travel Time Index

Rank	Roadway	Limits	Peak Time Period	Travel Time Index	Change from 2008
1	I-195	SB - East of 2nd Bridge to West of N Miami Ave	PM	1.42	na
2	I-195	SB - East of 2nd Bridge to I 195 West of N Miami Ave	AM	1.24	na
3	SR 826	WB - East of NW 12 Ave to South of NW 154 St	AM	1.14	na
4	SR 826	EB - South of NW 154 St to East of NW 12 Ave	AM	1.11	na
5	SR 826	WB - East of NW 12 Ave to South of NW 154 St	PM	1.11	na

### District 6 - Buffer Time Index

Rank	Roadway	Limits	Peak Time Period	Buffer Time Index	Change from 2008
1	I-195	SB - East of 2nd Bridge to West of N Miami Ave	PM	0.78	na
2	I-195	SB - East of 2nd Bridge to West of N Miami Ave	AM	0.43	Na
3	SR 826	WB - East of NW 12 Ave to South of NW 154 St	AM	0.41	na
4	I-75	NB - West of SR 826 to North of Turnpike	PM	0.33	na
5	I-75	SB - North of Turnpike to West of SR 826	AM	0.32	na



### District 7 - Travel Time Index

Rank	Roadway	Limits	Peak Time Period	Travel Time Index	Change from 2008
1	I-275	SB - Busch Blvd to Hillsborough River Downtown	AM	1.38	-0.11
2	I-275	NB - Howard Frankland Bridge	PM	1.35	0.08
3	I-275	SB - Livingston Ave to Bush Blvd	AM	1.31	-0.15
4	I-275	NB - Hillsborough River Downtown to Bush Blvd	PM	1.23	0.04
5	I-275	SB - Busch Blvd to Hillsborough River Downtown	PM	1.18	-0.02

### District 7 - Buffer Time Index

Rank	Roadway	Limits	Peak Time Period	Buffer Time Index	Change from 2008
1	I-275	NB - Howard Frankland Bridge	PM	0.83	0.15
2	I-275	SB - Livingston Ave to Busch Blvd	AM	0.81	-0.25
3	I-4	EB - MLK Blvd to CR579	PM	0.64	0.03
4	I-4	WB - MLK Blvd to I-275	AM	0.49	0.25
5	I-275	SB - Busch Blvd to Hillsborough River Downtown	AM	0.42	-0.06

The following tables show the congestion (indicated by travel time index) and reliability (indicated by buffer index) on freeway sections within Districts 2, 4, 5, 6, and 7. The first column in these tables indicates the roadway; second column shows the total number of segments evaluated for that roadway; the remaining columns indicate the percentage of the total segments that exceed the threshold indicated above each column. Note that the number of segments includes both directions. For example, I-95 in District 2 has five segments; however, northbound and southbound direction data are compiled separately and, therefore, there are 10 segments included.

### District 2 - Percent of Segments Exceeding Congestion and Reliability Thresholds

	# segments	AM				PM			
		TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4	TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4
I-95	10	0	0	0	0	33	20	40	20
I-295	8	12	25	0	12	0	0	0	0

### District 4 - Percent of Segments Exceeding Congestion and Reliability Thresholds

	# segments	AM				PM			
		TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4	TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4
I-95	6	17	0	67	17	50	0	83	50
I-595	4	50	25	50	25	50	25	50	25

### District 5 - Percent of Segments Exceeding Congestion and Reliability Thresholds

	# segments	AM				PM			
		TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4	TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4
I-95	28	0	0	0	0	0	0	0	0
I-4	22	18	5	9	5	36	14	18	9

### District 6 – Percent of Segments Exceeding Congestion and Reliability Thresholds

	# segments	AM				PM			
		TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4	TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4
I-195	2	50	50	50	50	50	50	50	50
I-75	2	0	0	50	0	0	0	50	0
SR 826	2	100	0	100	0	50	0	100	0

### District 7 - Percent of Segments Exceeding Congestion and Reliability Thresholds

	# segments	AM				PM			
		TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4	TTI>1.1	TTI>1.2	BTI>0.2	BTI>0.4
I-275	8	25	25	25	25	38	25	50	13
I-4	6	17	0	17	17	17	0	33	17

The following table shows the Buffer Time Index range for the instrumented freeways within each District. The most unreliable section calculated throughout the state is a section of I-4 south of downtown Orlando in the afternoon peak period (BTI of .89).

### Buffer Time Index Range by District and Roadway

	I-95	I-295	I-595	I-4	SR 826	I-75	I-195	I-275
<b>D2</b>	0 - .42	0 - .53						
<b>D4</b>	0 - .48		0 - .77					
<b>D5</b>	0 - .19			0 - .89				
<b>D6</b>					.2 - .41	0 - .33	.04 - .78	
<b>D7</b>				0 - .64				0 - .83

**APPENDIX A**  
*FREEWAY SEGMENTS*

District	SECT_ID	Road	Direction	From To	Length
2	1	I-95	NB	from I-95 NB North of I-295S to I-95 NB Entrance from Butler Blvd WB	5.88
	2	I-95	SB	from I-95 SB Entrance from Butler Blvd WB to I-95 SB North of I-295S	5.58
	3	I-95	NB	from I-95 NB North of Butler Blvd to I-95 NB Exit to Acosta Bridge	5.64
	4	I-95	SB	from I-95 SB at Hendricks Ave to I-95 SB Exit to Butler Blvd	5.96
	5	I-95	NB	from I-95 NB at Palm Ave to I-95 NB Exit to 8th St	3.88
	6	I-95	SB	from I-95 SB Exit to 8th St to I-95 SB at Palm Ave	3.96
	7	I-95	NB	from I-95 NB Exit to MLK Blvd to I-95 at South Trout River Bridge	4.12
	8	I-95	SB	from I-95 at South Trout River Bridge to I-95 SB Entrance from MLK Blvd	3.71
	9	I-95	NB	from I-95 NB Entrance from Heckscher Blvd to I-95 NB Exit to Airport Rd	5.24
	10	I-95	SB	from I-95 SB Exit to Airport Rd to I-95 SB Entrance from Heckscher Blvd	5.99
	11	I-295	EB	From N of Normandy Blvd to 103rd St	4.24
	12	I-295	WB	From 103rd St to N of Normandy Blvd	4.24
	13	I-295	EB	From S of 103rd St to US-17	6.26
	14	I-295	WB	From US-17 to S of 103rd St	6.26
	15	I-295	EB	From S of US-17 to N of San Jose Blvd	4.25
	16	I-295	WB	From San Jose Blvd to S of US-17	4.24
	17	I-295	EB	From San Jose Blvd to N of I-95	3.49
	18	I-295	WB	From N of I-95 to San Jose Blvd	3.49
4	1	I-95	NB	From N of Miami-Dade Co/Ln to between I-595 and SR-84	8
	2	I-95	NB	From N of SR-84 to Commercial Blvd	7.2
	3	I-95	NB	From N of Commercial Blvd to S of Palm Beach Co/Ln	10
	4	I-95	SB	From between I-595 and SR-84 to N of Miami-Dade Co/Ln	8
	5	I-95	SB	From Commercial Blvd to N of SR-84	7.2
	6	I-95	SB	From S of Palm Beach Co/Ln to N of Commercial Blvd	10
	7	I-595	EB	From Hiatus Rd to Davie Rd	4.95
	8	I-595	EB	From E of Turnpike to I-95	2.95
	9	I-595	WB	From Davie Rd to Hiatus Rd	4.95
	10	I-595	WB	From I-95 to E of Turnpike	2.95
5	1	I-4	EB	from I-4 @ 532 to I-4 @ SR 417	5.75
	2	I-4	EB	from I-4 @ US 192 to I-4 528 E/B Ramp	7.85
	3	I-4	EB	from I-4 528 W/B Ramp to I-4 @ Turnpike	5.05
	4	I-4	EB	from I-4 @ Turnpike E/B Ramp to I-4 @ SR 408	5.75
	5	I-4	EB	from I-4 @ South St to I-4 @ SR 414	7.30
	6	I-4	EB	from I-4 East of SR 414 to I-4 E of Lake Mary Rest Area	7.40
	7	I-4	EB	from I-4 West of Lake Mary to I-4 @ US 17/92	8.15
	8	I-4	EB	from I-4 @ St Johns Bridge to I-4 @ Dirksen Rd	3.80
	9	I-4	EB	from I-4 East of Dirksen Rd to I-4 @ SR 472	5.40
	10	I-4	EB	from I-4 East of SR 472 to I4-SR44 MM 118.4	4.75
	11	I-4	EB	from I4-SR44 MM 120 EB to I4-Just W I95	12.15
	12	I-4	WB	from I-4 @ SR 417 to I-4 @ 532	5.75
	13	I-4	WB	from I-4 528 E/B Ramp to I-4 @ US 192	7.85
	14	I-4	WB	from I-4 @ Turnpike to I-4 528 W/B Ramp	5.05
	15	I-4	WB	from I-4 @ SR 408 to I-4 @ Turnpike E/B Ramp	5.75
	16	I-4	WB	from I-4 @ SR 414 to I-4 @ South St	7.30
	17	I-4	WB	from I-4 E of Lake Mary Rest Area to I-4 East of SR 414	7.40
	18	I-4	WB	from I-4 @ US 17/92 to I-4 West of Lake Mary	8.15

	19	I-4	WB	from I-4 @ Dirksen Rd to I-4 @ St Johns Bridge	3.80
	20	I-4	WB	from I-4 @ SR 472 to I-4 East of Dirksen Rd	5.40
	21	I-4	WB	from I4-SR44 MM 118.4 to I-4 East of SR 472	4.75
	22	I-4	WB	from I4-Just W I95 to I4-SR44 MM 120 WB	12.15
	23	I-95	NB	from I-95 NB @ MM 168 to I-95 NB @ MM 173	5.65
	24	I-95	NB	from I-95 NB @ MM 174.3 to I-95 NB @ MM182.1	9.20
	25	I-95	NB	From I-95 NB @ MM 183.6 to I-95 NB @ MM 191	8.90
	26	I-95	NB	from I-95 NB @ MM 192.5 to I-95 @ SR 520	10.05
	27	I-95	NB	from I-95 @ SR 524 to I-95 NB @ MM 212.9	11.15
	28	I-95	NB	from I-95 NB @ MM 213 to I-95 NB @ MM 223	10.90
	29	I-95	NB	from I-95 NB @ MM 224.7 to I-95 NB @ MM 231.1	7.75
	30	I-95	NB	from I-95 NB @ MM 232.1 to I-95 NB @ SR 442	13.05
	31	I-95	NB	from I-95 NB @ MM 245.3 to I-95 NB @ MM 248.9	4.85
	32	I-95	NB	from I-95 NB @ MM 250.1 to I95-I4	11.35
	33	I-95	NB	from I95-S US 92 to I95-SR40	7.65
	34	I-95	NB	from I95-N of SR40 MM 268.7 to I95-N US1	7.00
	35	I-95	SB	from I-95 SB @ MM 173 to I-95 SB @ MM 168	5.65
	36	I-95	SB	from I-95 SB @ MM 182.1 to I-95 SB @ MM 174.3	9.20
	37	I-95	SB	from I-95 SB @ MM 191 to I-95 SB @ MM 183.6	8.90
	38	I-95	SB	from I-95 @ SR 520 to I-95 SB @ MM 192.5	10.05
	39	I-95	SB	from I-95 SB @ MM 212.9 to I-95 @ SR 524	11.15
	40	I-95	SB	from I-95 SB @ MM 223 to I-95 SB @ MM 213	10.90
	41	I-95	SB	from I-95 SB @ MM 231.1 to I-95 SB @ MM 224.7	7.75
	42	I-95	SB	from I-95 SB @ SR 442 to I-95 SB @ MM 232.1	13.10
	43	I-95	SB	from I-95 SB @ MM 248.9 to I-95 SB @ MM 245.4	4.80
	44	I-95	SB	from I95-I4 to I-95 SB @ MM 250.1	11.35
	45	I-95	SB	from I95-SR40 to I95-S US 92	7.65
	46	I-95	SB	from I95-N US1 to I95-N of SR40 MM 268.7	7.00
	47	I-95	NB	From I-95 @ MM 276 to I-95 @ MM 287.5	12.75
	48	I-95	NB	From I-95 @ MM 289 to I-95 @ MM 298	9.75
	49	I-95	SB	From I-95 @ MM 287.5 to I-95 @ MM 276	9.75
	50	I-95	SB	From I-95 @ MM 298 to I-95 @ MM 289	12.75
6	1	SR-826	EB	From SR 826 SOUTH OF NW 154 ST to SR 826 EAST OF NW 12 AVE	8.00
	2	SR-826	WB	From SR 826 EAST OF NW 12 AVE to SR 826 SOUTH OF NW 154 ST	8.02
	3	I-75	NB	From I 75 WEST OF SR 826 to I 75 NORTH OF TURNPIKE	4.65
	4	I-75	SB	From I 75 NORTH OF TURNPIKE to I 75 WEST OF SR 826	4.65
	5	I-195	NB	From I 195 WEST OF N MIAMI AVE to I 195 EAST OF 2ND BRIDGE	3.63
	6	I-195	SB	From I 195 EAST OF 2ND BRIDGE to I 195 WEST OF N MIAMI AVE	3.63
7	1	I-275	NB	from 38th Av to Howard Frankland Br	6.50
	2	I-275	NB	Howard Frankland Bridge	6.40
	3	I-275	NB	from Hillsborough River in downtown to Bush Blvd	6.90
	4	I-275	NB	from Bush Blvd to Livingston Av	3.80
	5	I-275	SB	from Howard Frankland Br to 38th Av	6.50
	6	I-275	SB	Howard Frankland Br	6.35
	7	I-275	SB	from Bush Blvd to Hillsborough River in downtown	7.15
	8	I-275	SB	from Livingston Av to Bush Blvd	3.90
	9	I-4	EB	from I-275 to MLK Blvd	4.95
	10	I-4	EB	from MLK Blvd to CR579	5.1
	11	I-4	WB	from MLK Blvd to I-275	5.15
	12	I-4	WB	from CR579 to MLK Blvd	5.25
	13	I-4	EB	from CR579 to CR601	12.05

	14	I-4	WB	from CR601 to CR579	12.1
--	----	-----	----	---------------------	------

**APPENDIX B**  
2008/2009 RESULTS

**District 2 – Travel Time Index and Buffer Index**

SECT_ID	PERIOD	TTI	BTI
1	AM_PEAK	1.07	0.31
1	PM_PEAK	1.00	0.00
2	AM_PEAK	1.00	0.00
2	PM_PEAK	1.00	0.00
3	AM_PEAK	1.01	0.00
3	PM_PEAK	1.15	0.42
4	AM_PEAK	1.03	0.11
4	PM_PEAK	1.21	0.41
5	AM_PEAK	1.08	0.05
5	PM_PEAK	1.32	0.27
6	AM_PEAK	1.03	0.12
6	PM_PEAK	1.07	0.28
7	AM_PEAK	1.09	0.06
7	PM_PEAK	1.09	0.06
8	AM_PEAK	1.07	0.09
8	PM_PEAK	1.04	0.07
9	AM_PEAK	1.00	0.03
9	PM_PEAK	1.00	0.00
10	AM_PEAK	1.01	0.05
10	PM_PEAK	1.01	0.00
11	AM_PEAK	1.00	0.00
11	PM_PEAK	1.00	0.00
12	AM_PEAK	1.00	0.00
12	PM_PEAK	1.02	0.02
13	AM_PEAK	1.00	0.00
13	PM_PEAK	1.01	0.00
14	AM_PEAK	1.00	0.00
14	PM_PEAK	1.01	0.00
15	AM_PEAK	1.00	0.00
15	PM_PEAK	1.04	0.12
16	AM_PEAK	1.06	0.28
16	PM_PEAK	1.01	0.00
17	AM_PEAK	1.03	0.15
17	PM_PEAK	1.03	0.05
18	AM_PEAK	1.16	0.53
18	PM_PEAK	1.01	0.00

**District 4 – Travel Time Index and Buffer Index**

SECT_ID	PERIOD	TTI	BTI
1	AM_PEAK	1.04	0.24
1	PM_PEAK	1.03	0.12
2	AM_PEAK	1.08	0.33
2	PM_PEAK	1.13	0.48
3	AM_PEAK	1.04	0.2
3	PM_PEAK	1.05	0.23
4	AM_PEAK	1.01	0
4	PM_PEAK	1.11	0.36
5	AM_PEAK	1.01	0.06
5	PM_PEAK	1.1	0.42
6	AM_PEAK	1.1	0.43
6	PM_PEAK	1.15	0.43
7	AM_PEAK	1.25	0.46
7	PM_PEAK	1.01	0.04
8	AM_PEAK	1.1	0.26
8	PM_PEAK	1.01	0
9	AM_PEAK	1.01	0
9	PM_PEAK	1.15	0.28
10	AM_PEAK	1.01	0
10	PM_PEAK	1.4	0.77

**District 5 – Travel Time Index and Buffer Index**

SECT_ID	PERIOD	TTI	BTI
1	AM_PEAK	1.00	0.04
1	PM_PEAK	1.00	0.00
2	AM_PEAK	1.02	0.10
2	PM_PEAK	1.13	0.44
3	AM_PEAK	1.02	0.09
3	PM_PEAK	1.09	0.20
4	AM_PEAK	1.19	0.48
4	PM_PEAK	1.56	0.89
5	AM_PEAK	1.10	0.14
5	PM_PEAK	1.60	0.56
6	AM_PEAK	1.04	0.11
6	PM_PEAK	1.20	0.39
7	AM_PEAK	1.01	0.13
7	PM_PEAK	1.05	0.21
8	AM_PEAK	1.01	0.10
8	PM_PEAK	1.04	0.10
9	AM_PEAK	1.00	0.02
9	PM_PEAK	1.01	0.00
10	AM_PEAK	1.00	0.00
10	PM_PEAK	1.01	0.00
11	AM_PEAK	1.00	0.00
11	PM_PEAK	1.01	0.00
12	AM_PEAK	1.00	0.00
12	PM_PEAK	1.05	0.17
13	AM_PEAK	1.02	0.03
13	PM_PEAK	1.15	0.55
14	AM_PEAK	1.02	0.04
14	PM_PEAK	1.11	0.50
15	AM_PEAK	1.02	0.04
15	PM_PEAK	1.14	0.46
16	AM_PEAK	1.12	0.18
16	PM_PEAK	1.39	0.63
17	AM_PEAK	1.42	0.55
17	PM_PEAK	1.08	0.26
18	AM_PEAK	1.05	0.25
18	PM_PEAK	1.02	0.04
19	AM_PEAK	1.02	0.00
19	PM_PEAK	1.01	0.00
20	AM_PEAK	1.01	0.00
20	PM_PEAK	1.01	0.00
21	AM_PEAK	1.00	0.00
21	PM_PEAK	1.00	0.00
22	AM_PEAK	1.00	0.00
22	PM_PEAK	1.01	0.00
23	AM_PEAK	1.00	0.00
23	PM_PEAK	1.00	0.00
24	AM_PEAK	1.00	0.00
24	PM_PEAK	1.01	0.00

25	AM_PEAK	1.01	0.00
25	PM_PEAK	1.00	0.00
26	AM_PEAK	1.03	0.19
26	PM_PEAK	1.03	0.18
27	AM_PEAK	1.01	0.00
27	PM_PEAK	1.00	0.00
28	AM_PEAK	1.00	0.00
28	PM_PEAK	1.00	0.00
29	AM_PEAK	1.00	0.00
29	PM_PEAK	1.00	0.00
30	AM_PEAK	1.00	0.00
30	PM_PEAK	1.00	0.00
31	AM_PEAK	1.00	0.00
31	PM_PEAK	1.00	0.00
32	AM_PEAK	1.00	0.00
32	PM_PEAK	1.00	0.00
33	AM_PEAK	1.00	0.00
33	PM_PEAK	1.00	0.00
34	AM_PEAK	1.00	0.00
34	PM_PEAK	1.00	0.00
35	AM_PEAK	1.00	0.00
35	PM_PEAK	1.00	0.00
36	AM_PEAK	1.00	0.00
36	PM_PEAK	1.00	0.00
37	AM_PEAK	1.00	0.00
37	PM_PEAK	1.01	0.00
38	AM_PEAK	1.01	0.02
38	PM_PEAK	1.03	0.03
39	AM_PEAK	1.00	0.00
39	PM_PEAK	1.00	0.00
40	AM_PEAK	1.00	0.00
40	PM_PEAK	1.00	0.00
41	AM_PEAK	1.00	0.00
41	PM_PEAK	1.00	0.00
42	AM_PEAK	1.00	0.00
42	PM_PEAK	1.00	0.00
43	AM_PEAK	1.00	0.00
43	PM_PEAK	1.00	0.00
44	AM_PEAK	1.00	0.00
44	PM_PEAK	1.00	0.00
45	AM_PEAK	1.00	0.00
45	PM_PEAK	1.00	0.00
46	AM_PEAK	1.00	0.00
46	PM_PEAK	1.00	0.00
47	AM_PEAK	1.00	0.00
47	PM_PEAK	1.00	0.00
48	AM_PEAK	1.00	0.00
48	PM_PEAK	1.00	0.00
49	AM_PEAK	1.00	0.00
49	PM_PEAK	1.00	0.00

50	AM_PEAK	1.00	0.00
50	PM_PEAK	1.00	0.00

**District 6 – Travel Time Index and Buffer Index**

SECT_ID	PERIOD	TTI	BTI
1	AM_PEAK	1.11	0.2
1	PM_PEAK	1.06	0.2
2	AM_PEAK	1.14	0.41
2	PM_PEAK	1.11	0.26
3	AM_PEAK	1.01	0.05
3	PM_PEAK	1.07	0.33
4	AM_PEAK	1.07	0.32
4	PM_PEAK	1	0
5	AM_PEAK	1.03	0.07
5	PM_PEAK	1.02	0.04
6	AM_PEAK	1.24	0.43
6	PM_PEAK	1.42	0.78

**District 7 – Travel Time Index and Buffer Index**

SECT_ID	PERIOD	TTI	BTI
1	AM_PEAK	1.00	0.00
1	PM_PEAK	1.02	0.12
2	AM_PEAK	1.03	0.15
2	PM_PEAK	1.35	0.83
3	AM_PEAK	1.00	0.01
3	PM_PEAK	1.23	0.38
4	AM_PEAK	1.09	0.06
4	PM_PEAK	1.16	0.10
5	AM_PEAK	1.00	0.00
5	PM_PEAK	1.06	0.26
6	AM_PEAK	1.00	0.00
6	PM_PEAK	1.01	0.00
7	AM_PEAK	1.38	0.42
7	PM_PEAK	1.18	0.29
8	AM_PEAK	1.31	0.81
8	PM_PEAK	1.00	0.00
9	AM_PEAK	1.00	0.00
9	PM_PEAK	1.02	0.09
10	AM_PEAK	1.00	0.00
10	PM_PEAK	1.15	0.64
11	AM_PEAK	1.12	0.49
11	PM_PEAK	1.08	0.38
12	AM_PEAK	1.01	0.00
12	PM_PEAK	1.01	0.00
13	AM_PEAK	1.01	0.01
13	PM_PEAK	1.04	0.18
14	AM_PEAK	1.02	0.07
14	PM_PEAK	1.01	0.04



