

SMART MOVES

FDOT District Four ITS Quarterly Newsletter

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Severe Weather Ahead!

Dynamic Message Signs (DMS) are taking on yet another role in District Four: severe weather messaging. Weather messages are posted on DMS based on information provided by the National Weather Service. Using weather radar, operators determine the affected area(s) and apply the information to District Four covered roads. Messages get posted throughout the entire affected area

as well as on one DMS in each direction approaching the warning. Messages are posted for the following conditions:

- Tropical Storm Warning
- Tornado warning
- Severe thunderstorm warning
- Fog advisory
- Hurricane



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A Message from the TIM Team Manager

It started with a standing room-only meeting at the St. Lucie County Sheriff's Office. On that day, May 22, 2008, the Treasure Coast Traffic Incident Management (TIM) Team was born.

Joining the long-standing Broward and Palm Beach TIM teams, the Florida Department of Transportation (FDOT) District Four now has complete Traffic Incident Management coverage along its 143-mile I-95 corridor.

Traffic incident management is made up of representatives from law enforcement, fire rescue, towing and recovery, emergency management, hazardous materials contractors, traffic information media and public safety communications, with everyone working together to clear crashes faster and keep motorists and responders as safe as possible.

Our success relies on partnerships. The three Cs – communication, cooperation and coordination – are key to achieving our goals. Through multi-agency training and discussion, responders learn how they can accomplish their individual responsibilities without sacrificing the common good.

The benefits of traffic incident management are many. Most importantly, drivers aren't stalled in congestion, responders have a safer work environment and there are fewer secondary crashes.

Treasure Coast ITS

A new network of roadside devices along I-95 will make the drive faster and safer for Treasure Coast commuters.

Information that is collected 24 hours a day, seven days a week from ITS will warn drivers about crashes and other incidents that could cause extended delays, letting them to choose an alternate route to their destination.

The ITS network also will enable police and fire rescue crews to respond quicker to these incidents and get them cleared up quicker.

Here's how ITS works:

- Closed circuit television cameras located on poles above I-95 allow operators at the Transportation Management Center to monitor traffic conditions. Other devices, called vehicle detectors, alert

The process of building a TIM team takes time. The first anniversary of the Treasure Coast TIM Team brought the hiring of a full-time TIM Coordinator and the start of a new schedule of bimonthly meetings.

Road Ranger service patrol is expected to begin operations in September in Martin, St. Lucie and Indian River counties. The primary function of the Road Rangers is to assist first responders with traffic control at incident scenes.

The Treasure Coast Intelligent Transportation System (ITS) is scheduled to go live later this year or early 2011. A network of closed-circuit television cameras, dynamic message signs and speed detectors will help detect and verify incidents faster, deploy first responders quicker and warn motorists about blocked lanes so they can seek alternate routes.

We welcome all first responder agencies in the Treasure Coast to join us and share your thoughts and ideas on how we can do things better. To learn more about our Traffic Incident Management program, please visit our website, www.SMARTSunGuide.com/TIM.aspx.

Sincerely,
Guy Francese



operators when there is a sudden change in the flow of traffic.

- Real-time information about road closures or blocked lanes is posted on dynamic message signs, located at strategic points along the highway.
- The information will be available to motorists in other ways. They can call 511, check the SMART SunGuide website, or tune to 1630 AM when they see the flashing lights on the Highway Advisory Radio signs along the roadway. They also can sign up to receive personal alerts as e-mail or text messages.

The 71-mile stretch of I-95 through Martin, St. Lucie and Indian River counties will have 70 cameras, nearly 100 vehicle detectors and 12 dynamic message signs when the network is operating later this year or in early 2011.

TIM Meeting Participation

One of the goals of the traffic incident management program is to have the designated representative or alternate from FDOT's partner agencies attend bimonthly meetings to promote a coordinated decision-making and information-sharing forum. Here's a rundown of meeting attendance since the formation of the Treasure Coast TIM Team in May 2008:

Agency	Meetings Attended	Agency	Meetings Attended
AECOM	11	Martin County Traffic Engineering	2
Anchor Towing	1	Mike's Wrecker Service	3
Creative Engineering	2	Okeechobee County Sheriff's Office	3
FDOT Central Office	2	Port St. Lucie Police	5
FDOT District Five TIM	1	Port St. Lucie Traffic Engineering	1
FDOT Fort Pierce Operations	11	Smart Route Systems/511 Help Center	1
FDOT Motor Carrier Compliance	8	SMART SunGuide RTMC	11
Florida Division of Forestry	4	St. Lucie County Emergency Management	3
Florida Highway Patrol	10	St. Lucie County Fire District	5
Florida's Turnpike	10	St. Lucie County Public Safety	1
Indian River County Fire Rescue	2	St. Lucie County Sheriff's Office	9
Indian River County Emergency Management	2	St. Lucie County Traffic Engineering	3
Indian River County Metropolitan Planning Org.	1	St. Lucie Transportation Planning Organization	5
Indian River County Sheriff's Office	10	Treasure Coast Regional Planning Council	2
Kauff's Towing	8	Target Engineering	1
Keller's Towing	1	Tow Masters	2
Martin County Emergency Management	1	Transfield Services	2
Martin County Fire Rescue	1	Tri-County Towing	4
Martin County Sheriff's Office	7	Tropic Towing	2



The TIM Team brings together representatives from FDOT's partner agencies for bimonthly meetings. Pictured (L to R): Ofc. Reed, Delray Beach PD; Lt. Miller, Jupiter PD; Lt. Gardner, FDOT/MCCO; Sgt. Thomas, Riviera Beach PD; Lt. Leffler, Palm Beach Gardens PD; Ofc. Cramer, Delray Beach PD; Ofc. Main, Palm Beach Gardens PD.

SIRV Pilot Program now in Palm Beach County

The Severe Incident Response Vehicle (SIRV) program provides FDOT presence on the scene of major incidents. SIRV team members assist all responding agencies in communication, coordination and cooperation while safely reopening the roadway as quickly as possible to meet the 90-minute goal of the State of Florida's "Open Roads" Policy.

On July 6, the SIRV program began weekday patrols on a portion of I-95 between West Palm Beach and

Boca Raton as part of an expanded coverage plan. The intention is to lay the groundwork for a permanent Palm Beach SIRV program that will begin in the coming months.

The morning and afternoon rush hour patrols (6 – 9 a.m. and 4 – 7 p.m.) will be dispatched by the FDOT District Four Palm Beach Transportation Management Center. The patrol zone will encompass I-95 between Southern Boulevard/SR80/US98 (Exit 68) and Hillsboro Boulevard/SR810 (Exit 42) along with a portion of Southern Boulevard between Military Trail and Dixie Highway/US 1 in West Palm Beach.



The SIRV program uses Boynton Beach Fire Rescue Station No 5 and EOC as its Palm Beach base.

SIRV trucks are outfitted with traffic management equipment such as cones, signs, spill absorbent, roadway repair supplies and flares to be used for the Maintenance of Traffic (MOT) to ensure the safety of everyone on scene. To educate the first responders, SIRV outreach and program reviews will be conducted with the various police, fire/emergency medical services and dispatch centers along the I-95 corridor, under the leadership of FDOT Project Manager Guy Francese.

"Even in the pilot stage, the response has been very positive. As the project continues the communication, coordination and cooperation will only get better and we will really begin to see the benefits of SIRV," said Mr. Francese. "Benefits are not only in terms of time and cost savings for our partner agencies but also in quicker and safer incident clearance for the traveling public in Palm Beach County."

During off-peak hours, SIRV performs quality of service audits and vehicle inspections for the FDOT Road Ranger Service Patrol Program. SIRV also participates in the bimonthly Broward County and Palm Beach County TIM Team meetings. This pilot program is part of the existing SIRV contract currently operating on I-75, I-95 and I-595 in Broward County.

For more information on the SIRV program, go to <http://www.SMARTSunGuide.com/SIRV.aspx>.

Treasure Coast Welcomes the Road Rangers

There's a new incident responder on I-95 in the Treasure Coast.

Road Rangers are now patrolling Interstate 95 in Martin, St. Lucie and Indian River counties, looking for crashes, disabled vehicles, stranded motorists and debris. Their job is to help clear the roadway and keep traffic flowing.

The service is being provided by Anchor Towing and Marine Transport of Fort Lauderdale under a three-year contract with the FDOT District Four. Anchor Towing is an experienced Road Ranger contractor, providing the same highway assistance services in the Miami, Fort Myers and Tampa Bay areas.

Road Rangers service patrols are one of the most effective components of traffic incident management. Initially created to assist disabled vehicles in construction zones, the program was expanded to include other types of roadway mishaps.

Often arriving at an accident before law enforcement or fire rescue, Road Rangers will protect the scene by setting up cones to direct traffic around the incident. If possible, they will push or pull vehicles from travel lanes to a safe area.

The arrow board on the back of the trucks can be used as a warning for drivers to move over or as a mini-message sign about problems ahead on the highway. The trucks carry a variety of equipment and materials to fix a flat tire, jump start a dead battery or make minor repairs. The service is free of charge to motorists.

Among the benefits of the program are increased safety at incident scenes, a reduction in accidents and a decrease in incident duration. Road Rangers also act as FDOT's eyes and ears on the interstate, watching for suspicious vehicles or persons.

On the Treasure Coast, Road

Rangers will operate from 6 a.m. to 10 p.m. Monday through Friday. There will be eight trucks and a roaming supervisor on the highway in the three-county area during these hours.

Road Rangers have assigned beats, but will go where needed in the event of a major incident. The limits of the beats are:

- Indiantown Road to Kanner Highway
- Kanner Highway to Martin Highway
- Martin Highway to Gatlin Boulevard
- Gatlin Boulevard to Midway Road
- St. Lucie West Boulevard to Okeechobee Road
- Okeechobee Road to Indrio Road
- Indrio Road to Osceola Boulevard
- Osceola Boulevard to Fellsmere Road

Road Rangers hand out comment cards to motorists for feedback on their experience. FDOT uses the comments to improve service.

In 2009, Road Rangers were involved in 68,336 service assists in FDOT District Four and 296,041 statewide.

To request Road Ranger assistance, dial *FHP (*347) from any cell phone. For more information on the Road Ranger program in District Four, visit www.SMARTSunGuide.com/RoadRangers.aspx.



Treasure Coast Road Rangers started patrolling in September 2010.

TIM Public Service Efforts Applauded

Motorists who drive I-95 in Palm Beach County can thank the Florida Department of Transportation's Traffic Incident Management program when they arrive at their destination safely and on time. The cameras along I-95 detect incidents so police and fire-rescue crews can get to the scene faster. The dynamic message signs warn drivers about delays and roadway closures. And the Road Rangers help clear travel lanes and get disabled motorists back on their way.

The person responsible for keeping the Palm Beach TIM Program running smoothly and efficiently and spreading the TIM message in the media is project manager Bob Murphy. Bob is the one you'll see on the evening news, promoting the benefits of the high-tech system that provides traveler information to the public. He's the one quoted in the daily newspaper, explaining how the information is gathered and disseminated through personal cell phone alerts and the Florida 511 system. Bob was recently recognized by the Traffic Safety Committee of the Palm Beaches for his outstanding effort.

The Florida Highway Patrol (FHP) is one of the most active partners in the Traffic Incident Management program. According to Lt. Tim Frith, the program has been enhanced significantly under Bob's guidance. Frith explained that without the TIM program and Road Rangers, FHP would not be able to keep up with the demand for service on I-95. According to Lt. Frith, "We all serve the public and as a resource for FHP, the TIM program since Bob took over has been invaluable."



Road Ranger Operations Training

The Regional Transportation Management Center in District Four hosted the 2010 Road Ranger and TMC Operator Joint Training. This two-day training occurs approximately every six months.

Eleven different modules were taught by the Traffic Incident Management Coordinators, Mike McGee and Chuck McGinness. A vehicle rollover demonstration was performed by the current Road Ranger Service Patrol contractor, Sunshine Towing.

Topics covered during training included:

- Communications
- Vehicle inspections
- Relocating vehicles
- Road Ranger safety
- Contract overview
- Maintenance of traffic
- Hurricane preparedness
- Traffic incident management
- Florida laws and policies

New this year was instruction on tablet PCs which will make all Road Ranger reporting paperless. The tablet PCs will also provide Automatic Vehicle Locator Systems (AVLS) for tracking Road Rangers, which will enable TMC Operators to dispatch the closest Road Ranger to an event.



Pictured (L to R): Chief Deputy Michael Gauger, Palm Beach County Sheriff's Office; Bob Murphy, TIM Project Mgr.; Major Luis Ramil, FHP.

District Four Deployment Updates



The ITS program currently has deployment projects in all five counties covered in District Four.

In Broward County, construction activities for a design/build project to provide an ITS power distribution system within the county have recently been completed. This project simplifies the power distribution system in Broward County as well as reduces the amount of Florida Power & Light service points, thus reducing maintenance costs. Generators were deployed to serve as backup power during any power outage. The contractor is now providing the Department maintenance support for the newly deployed devices for a period of one year.

The Alligator Alley (I-75) ITS Safety (AAITSS) Design/Build Project was awarded to the InfraSource/PBS&J team. This project aims to improve safety on the Alligator Alley segment of the I-75 corridor, specifically to keep drivers alert and driving within the speed limit. Deployment will include installation of Dynamic Message Signs (DMS), environmental sensors, closed-circuit televisions (CCTV) cameras, and vehicle detectors. The design/build team is working on the design plans and has recently submitted 60 percent plans to the Department for review. Construction activities are tentatively scheduled to begin in

September 2010.

The Palm Beach County ITS deployment is currently under construction and the first phase is planned for completion in 2011. This design/build project includes deploying multiple DMS (both arterial and highway), Road Weather Information System (RWIS), Highway Advisory Roadway System (HARS), CCTV cameras, vehicle detectors and communications infrastructure to gather highway conditions and provide information to the motoring public about road conditions (i.e. weather, congestion, incidents, and travel times).

In the northern three counties of District Four (**Martin, St. Lucie, and Indian River**) an ITS deployment project is also currently under construction. It includes deploying highway DMS, RWIS, HARS, CCTV cameras, vehicle detectors, and communications infrastructure to gather highway conditions and provide information to the motoring public about road conditions. This project is expected to be complete by early 2011.

Upon completion of these projects, 100 percent of FDOT District Four's freeway lane miles will be served by a fully integrated, state-of-the-art Intelligent Transportation System.

Skywarn™ Storm Spotter Training

District Four TMC operators and support staff completed Skywarn™ Storm Spotter training in July. The training was a result of the recently formed partnership between the TMC and the National Weather Service (NWS).

Two-hour training sessions were led by Robert Molleda, Warning Coordination Meteorologist for the NWS. Participants were taught to identify funnel

clouds, wall clouds and tornadoes. In addition to reporting these weather conditions, spotters will also call in strong winds, hail, flooding and damage from severe weather.

Skywarn™ is a national network of volunteers that provide information to NWS. For more information, visit www.srh.noaa.gov.

Hurricane Power Redundancy Tested in Broward County

The FDOT District Four ITS Unit recently completed a power distribution system upgrade in Broward County. This system reduced the number of commercial power connections from several dozen to only six and allowed for small generators to be installed near the commercial power connections. Over time, the system will reduce maintenance costs and increase device availability.

In preparation for hurricane season, a one-day test was planned to occur during off-peak hours. The ITS Unit alerted all involved parties of when and why the commercial power to ITS devices would be turned off. Part of the testing team stayed at the Regional Transportation Management Center (RTMC) to monitor the impact of commercial power loss. The rest of the team traveled a predetermined route to manually disconnect commercial power at the distribution sites.

Ideally, after turning the power off, the Uninterruptible Power Supplies (UPS) would maintain system power until the generators could automatically start and assume the load of the ITS devices within the distribution network. However, being that this is the first year generators have been in place, the



test was sure to yield some interesting results. The team decided this would also be an ideal time to test the redundant fiber optic communications path by removing all power to a main communications hub site, the network data traffic should reroute itself nearly instantly.

Below are the major issues uncovered by the test:

- A dead generator battery was unknown to the maintenance staff due to the lack of an automated monitoring system.
- An incorrectly configured redundant path from a major hub to the RTMC.
- Some detector sites did not contain UPS devices or had UPS with dead batteries, breaking the data chain in locations where a wiring panel was used.

The ITS Unit quickly created and completed a list of corrective measures. The biggest lesson learned was not to be complacent and assume that a backup plan is fully functional just because it is in place. To maintain redundant systems for critical assets that is always ready, the ITS Unit will perform this full system test twice a year: once before and once after hurricane season. Any time a hurricane watch is issued for the area, the test will be conducted again.