Traffic Incident Management
RESPONDER
Volume 4, Issue 2 June 2023

RISC Incident on I-275

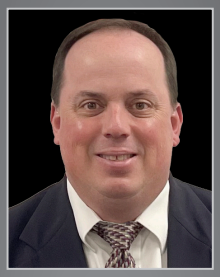
Formula 1 Miami Grand Prix 2023

MegaCon Traffic Conditions Solved with New Tech Solutions

TIM Team & Working Group
MEETINGS & WEBINARS

	Date/Time	District	Meeting	Location
JUNE	**6/28/23** 10 AM - 12 PM	**6**	Monroe TIM Team Meeting	Florida Keys/Marathon International Airport Monroe County Sheriff's Office - Aviation Hangar 10600 Aviation Blvd., Marathon, FL 33050
JULY	**7/11/23** 1:00 PM	**1**	Charlotte-Lee-Collier TIM Team Meeting	Heartland (Virtually)
	7/12/2023 1:30 - 3:30 PM	**4**	Broward TIM Team Meeting	Ft. Lauderdale TSM&O RTMC 2300 West Commercial Blvd., 2nd Floor Training Room Fort Lauderdale, FL 33309
	7/13/23 10:00 AM	**1**	Charlotte-Lee-Collier TIM Team Meeting	Polk County Sheriff's Office 1891 Jim Keene Boulevard, Winter Haven, FL 33880
	7/18/23 10 AM - 12 PM	**2**	First Coast TIM Meeting	Regional Transportation Management Center (RTMC) 980 N. Jefferson Street, Jacksonville, FL 32211
AUGUST	**8/1/2023** 1:30 - 3:30 PM	**4**	Palm Beach TIM Team Meeting	Palm Beach Ops Auditorium 7900 Forest Hill Blvd., West Palm Beach, FL 33413
	8/2/23 9:30 - 11 AM	**5**	I-4/Metro Orlando Quarterly TIM Meeting	FDOT RTMC 4975 Wilson Rd. Sanford, FL 32771
	8/3/23 9:30 - 11 AM	**5**	I-75 Area Quarterly TIM Meeting	CO Public Safety (EOC) 7361 Powell Rd., Wildwood, FL 34785
	8/8/23 1:30 PM	**1**	Charlotte-Lee-Collier TIM Team Meeting	Manatee County Public Safety Center 2101 47th Terrace East, Bradenton, FL 34203
	8/8/23 10:00 AM	**7**	Pinellas TIM Team Meeting Team Meeting	FDOT District 7 Pinellas Maintenance Office 5211 Ulmerton Road, Clearwater, FL 33670
	8/9/23 10 -11.30 AM	**2**	Alachua-Bradford TIM Meeting	FDOT Gainesville Operations Office 5301 N.E. 39th Avenue, Gainesville, FL 32609
	8/9/23 9:30 AM	**1**	Charlotte-Lee-Collier TIM Team Meeting	SWIFT SunGuide Center 10041 Daniels Parkway, Fort Myers, FL 33913
	8/10/23 9:30 - 11 AM	**5**	I-95 South (Brevard) Quarterly TIM Meeting	FHP Brevard Office 3775 W. King St., Cocoa, FL 32926
	8/15/23 10:00 AM	**FTE**	Turnpike TIM South	Pompano Beach - Turnpike Pompano Beach Operations Center Pompano Beach, FL 33069
	8/17/23 9:30 - 11 AM	**5**	I-95 North (Volusia/Flagler) Quarterly TIM Meeting	Volusia Emergency Management Center 3825 Tiger Bay Rd., Daytona Beach, FL 32127
	8/17/23 10:00 AM	**FTE**	Florida Turnpike Enterprise	Turnpike Turkey Lake Headquarters Mile-Post 263 - Turkey Lake Service Plaza, Bldg. 5315, Ocoee, FL 34761
	8/22/23 10:00 AM	**7**	Hillsborough TIM Team Meeting TIM Team Meeting	FDOT District 7 HQ Auditorium 11201 N. McKinley Drive, Tampa, FL 33612
SEPT.	**9/7/2023** 1:30 - 3:30 PM	**4**	Treasure Coast TIM Team Meeting	FDOT Treasure Coast Ops Center 3601 Oleander Ave., Crew Building #3 Fort Pierce, FL 34982
	9/19/23 10 AM - 12 PM	**2**	First Coast TIM Meeting	Regional Transportation Management Center (RTMC) 980 N. Jefferson St., Jacksonville, FL 32212

TIM Program Manager Update



SHAWN KINNEY
Traffic Incident Management
Road Ranger Program Manager
605 Suwannee St., MS 90
Tallahassee, FL 32399
(850) 410-5600
Shawn.Kinney@dot.state.fl.us

JEFF FROST
Traffic Incident Management
Commercial Vehicle Operations
Program Manager
605 Suwannee St.
Tallahassee, FL 32399
(850) 410-5607
Jeff.Frost@dot.state.fl.us

DISTRICT ONE
Robbie Brown, Program Manager
Robbie.Brown@dot.state.fl.us
(239) 225-1915

DISTRICT TWO
Dee Dee Crews, Program Manager
DeeDee.Crews@dot.state.fl.us
(904) 903-2009

DISTRICT THREE
David Roark, Program Manager
David.Roark@dot.state.fl.us
(850) 330-1589

DISTRICT FOUR
Andres Sanchez, Program Manager
Andres.Sanchez@dot.state.fl.us
(954) 847-2789

DISTRICT FIVE
Lauren Pearson, Program Manager
Lauren.Pearson@dot.state.fl.us
(321) 257-7246

DISTRICT SIX
Carlos Dardes, Program Manager
Carlos.Dardes@dot.state.fl.us
(305) 640-7331

DISTRICT SEVEN
Sam Taylor, Program Manager
Sam.Taylor@dot.state.fl.us
(813) 615-8611

FLORIDA'S TURNPIKE
Michael Washburn, Program Manager
Michael.Washburn@dot.state.fl.us
(954) 934-1621

https://www.fdot.gov/traffic/default.shtm

Greetings Traffic Incident Management (TIM) professionals. Welcome to the second edition of the Florida TIM Responder, Florida's Statewide TIM Program newsletter, for the 2023 calendar year. The newsletter aims to provide you with relevant and timely information that will collectively help us advance the TIM state of practice throughout Florida. It is also expected that the TIM Responder newsletter will increase awareness of TIM and promote its benefits. The newsletter will focus primarily on the current state of the practice, articles from peers and partner first responder agencies, technology updates, national TIM updates, upcoming events, and awards/recognition.

The Florida Department of Transportation (FDOT) continues to advance the statewide TIM Strategic Plan adopted in January 2019. At its core, the Strategic Plan is designed to set priorities, focus energy and resources, strengthen operations, and ensure that stakeholders and TIM Program partners are working toward common goals supporting Florida's Open Roads Policy.

A meeting of the FDOT TIM Program Managers was held at FDOT District 5 Regional Transportation Management Center on March 17-19, 2023. The meeting facilitated the discussions of the advancement of TIM programs, procedures, scopes, and implementation strategies of the Road Ranger Safety Initiative. Later on, April 4, 2023, Road Ranger Safety Forum was organized at the same location to have a discussion with FDOT TIM Program Managers and Road Ranger vendors on the implementation of the safety strategies.

The following issue of the TIM Responder focuses on some great articles received from our District teams and external stakeholders to highlight TIM activities in Central Office and Districts. One focuses on traffic management during the Formula 1 Grand Prix in Miami By District 6 and Turnpike, while another talks about the use of Unmanned Aerial System (UAS) in Traffic Incident Management. Some of the other articles in this issue focus on traffic management at MegaCon in Orlando and how District 5 is bridging the gaps in incident management. This edition also highlights the performance measures for the second quarter of FY 2022/23 based on TIM training, Road Ranger assists, Rapid Incident Scene Clearance (RISC), and recognizes selected Road Rangers for their continued efforts in keeping Florida's highways safe.

In closing, it warrants emphasizing that a multiagency, multi-disciplined team effort is critical to the success of TIM. As such, we always value your input and would like to extend an open invitation to you to send us TIM Responder newsletter ideas and comments as well as articles and announcements that you'd like to share.

Thank you for your steadfast commitment to the TIM Program for the State of Florida. Together, we have responded to the needs of motorists while making every effort to create a safer working environment for our responder community. The team has risen to the challenge and continues to provide excellent service. Thank you for all that you do and please continue to be safe.

Shawn Kinney
Traffic Incident Management

Vision...
To increase the delivery rate of fatality-free and congestion-free transportation systems supporting the FDOT vision and Florida Transportation Plan goals.

Mission...
To identify, prioritize, develop, implement, operate, maintain, and update TSM&O program strategies and measure their effectiveness for improved safety and mobility.

Unmanned Aerial System (UAS) and Incident Management

Shawn Kinney, Road Ranger Program Manager, FDOT
and Rakesh Sharma, PE, PTOE, CVP, PMP

First responders play a critical role in managing incidents and emergencies, such as natural disasters, search and rescue operations, and hazardous material incidents. To improve their response capabilities, first responders are increasingly turning to unmanned aerial systems, commonly known as UAS, to enhance their situational awareness and response capabilities.

UASs offer a range of benefits for incident management, including:

- **Rapid Deployment:** UAS can be quickly deployed to the incident site, providing first responders with real-time situational awareness of the situation.
- **Aerial Surveillance:** UAS can provide aerial surveillance, which can help identify hazards, locate victims, and assess damage.
- **High-Resolution Imaging:** UAS can capture high-resolution images and video footage of the incident site, which can be used to inform decision-making and communicate the situation to other responders.
- **Access to Hard-to-Reach Areas:** UAS can access hard-to-reach areas, such as collapsed buildings or remote wilderness areas, allowing responders to gather information and assess the situation without putting themselves in harm's way.
- **Cost-Effective:** UAS are a cost-effective solution for incident management, as they require fewer resources than traditional response methods, such as manned helicopters.

Here are some specific examples of how first responders can use UAS for incident management:

- **Search and Rescue:** UAS equipped with thermal imaging cameras can be used to locate missing persons in remote or difficult-to-reach areas. In addition, UAS can be used to drop supplies, such as food, water, and medical supplies, to stranded individuals.
- **Disaster Response:** UAS can be used to assess damage and identify hazards following a natural disaster, such as a hurricane or earthquake. This information can be used to prioritize response efforts and allocate resources.
- **Hazardous Materials Incidents:** UAS can be used to assess the extent of a hazardous materials spill and identify the safest route for responders to take. In addition, UAS can be used to monitor air quality and detect any harmful chemicals or gases.
- **Traffic Incidents:** UAS can be used to quickly assess the extent of a traffic incident and identify any hazards or obstacles that may impede the response effort. In addition, UAS can be used to create 3D models of the incident scene, which can help investigators determine the cause of the accident.

Despite the benefits of using UAS for incident management, there are some challenges that first responders may face. These include privacy concerns, regulatory restrictions, and the need for specialized training to operate UAS safely and effectively.

To address these challenges, first responders should work with their local governments and regulatory agencies to develop policies and procedures for the use of UAS in incident management. In addition, they should ensure that all responders receive specialized training in drone operations and safety protocols.

In conclusion, UAS offer a range of benefits for incident management, including rapid deployment, aerial surveillance, and high-resolution imaging. By using UAS to enhance their response capabilities, first responders can improve their situational awareness and response times, ultimately saving lives and protecting property.

RISC Incident on I-275

Captain Peter Bergstresser, Lt. Jim Beauford, and Sgt. Steve Gaskins, Florida Highway Patrol

On Friday, April 21, 2023, at approximately 10:30 AM, a truck tractor/flatbed semitrailer combination was traveling southbound on Interstate 275 (State Road 93), south of North Lois Avenue, in the outside lane of travel.

According to the driver, a 33-year-old Lakes Wales man, a phantom vehicle was on the outside shoulder of Interstate 275 (State Road 93) southbound parked. The driver said the phantom vehicle pulled back into the traffic lane by driving south on the outside shoulder. The driver then stated that the phantom vehicle cut him off, resulting in the driver slamming on his brakes. Due to the driver slamming on his brakes, two Duke metal/concrete poles broke loose from the tie-downs on the flatbed semitrailer, resulting in the two poles moving forward and going through the back window of the truck tractor and out of the front window before coming to final rest.

The truck tractor/flatbed semitrailer combination remained at rest in the outside lane of Interstate 275 (State Road 93) southbound facing south. The two Duke metal/concrete poles remained at final rest, with the bottom of the poles touching the surface of Interstate 275 (State Road 93) southbound and the upper portion of the poles remaining in the cab.

- The truck tractor/flatbed semitrailer combination was hauling six poles; the two poles that broke lose were: Pole #1 Duke Serial Number 1372, weight 5,467lbs, and Pole #2 Duke Serial Number 1368, weight 5,467lbs.
- Rapid Incident Scene Clearance (RISC) was activated for this incident.
- The driver was not injured during the incident.

CONTACT: LT. JIM BEAUFORD, FLORIDA HIGHWAY PATROL | JimBeauford@flhsmv.gov

Formula 1 Miami Grand Prix 2023

By Daniel Salon, Technical Writer, Florida's Turnpike

Once again for a second year in a row, South Florida was able to successfully host one of the biggest sporting events in the world. With the collaboration of the Florida Department of Transportation, the Florida Highway Patrol (FHP), and local law enforcement, Florida's Turnpike Enterprise and its resources coordinated with Formula 1 to host the Miami Grand Prix at Hard Rock Stadium the weekend of May 6 & 7. The successful event once again showcased FDOT's ability to stage world-class events to a global audience as Formula 1 drivers weaved their way through Miami Gardens' most iconic landmark, Hard Rock Stadium, providing spectators with a thrilling spectacle.

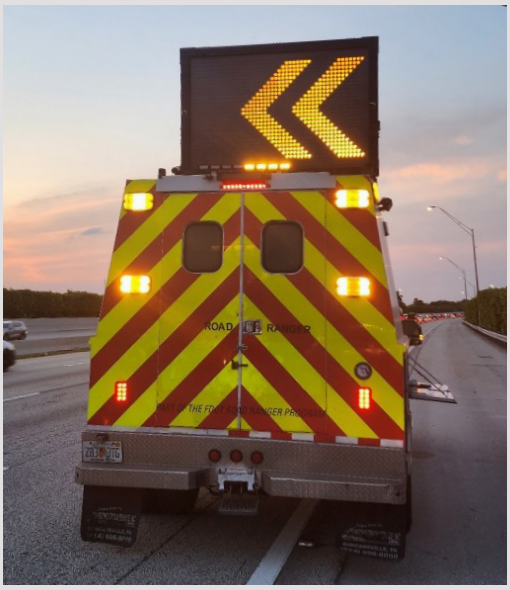
Behind the revving engines, screeching tires, and the thunderous wave of adrenaline is where the real magic took place. Florida's Turnpike Operations personnel worked in parallel with FHP command and Formula 1 and stadium representatives to assure the high-profile race did not overly impact the Turnpike, Interstate 95, and adjacent roadways. Planning and preparations began months prior to the race by FDOT, Turnpike, and FHP.

A big change to this year's plan was the full closure of the Turnpike's Stadium exit to Northwest 199 Street, Exit 2X, both northbound and southbound to the general public from Thursday, May 4, through Sunday night, May 7, for the race preparations and weekend competition. Turnpike and District 6 Traffic Management Centers posted DMS messages throughout the week and during the race weekend advising motorists of the ramp closures and expected arterial roadway impacts. Only race-credentialed buses and workers were allowed access.

In conjunction with the Turnpike and District 6 Transportation Management Center (TMC) monitoring, both centers provided roadway closed circuit television (CCTV) video sharing with the stadium command post inside the venue grounds staffed by event operations personnel, FHP, local law enforcement, and fire rescue. Turnpike and District 6 representatives in the command post were crucial in bringing real-time incident and traffic flow information into focus but most importantly to help the agencies and departments to work in unison.

Prior to the start of the event, Florida's Turnpike Roadway Maintenance reviewed the maintenance of traffic setups approaching the stadium. Beginning Friday, Road Rangers staged with FHP Troopers along the southbound and northbound Turnpike Golden Glades Spur to monitor traffic flow in both directions and to maintain safe conditions with the event and public motorists. A mobile Pan-Tilt-Zoom (PTZ) camera mounted to a Road Ranger vehicle was staged to enhance monitoring and incident verification capabilities on the Turnpike and interchange area. Traffic sensors gathered volume and speed data around the interchange with the goal of being able to analyze and point out any flaws or issues if any that could be addressed for future events. This year's race was the second of a planned 10-year Miami Grand Prix circuit at Hard Rock.

CONTACT: MICHAEL WASHBURN, PROJECT MANAGER
| Michael.Washburn@dot.state.fl.us



PERFORMANCE MEASURES

Responders Trained

The National TIM Responder Training Program was developed and reviewed by professionals from all responder disciplines, and those disciplines are the target audience for the training. Since the implementation of the program, **14,902** incident responders have received training in the state of Florida (as of March 27, 2023). That number represents roughly 36.6% of the responders in operational roles that support traffic incident response operations. During the third quarter of FY 2022/2023, about **430** responders received the training. Figure 5 provides the breakdown, by discipline, of the responders trained.

TIM TRAINING RECEIVED BY:	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	FYTD TOTAL
Police	2	46	39	-	87
Fire Dept	73	169	178	-	420
Emergency Medical Service	19	25	30	-	74
Towing	31	29	46	-	106
FDOT	12	56	103	-	171
Other Training	22	29	34	-	85
QTR TOTAL	159	354	430	-	943

2023 National Responder Safety Statistics

50 Responders were killed in Struck-By Incidents as of May 22, 2023

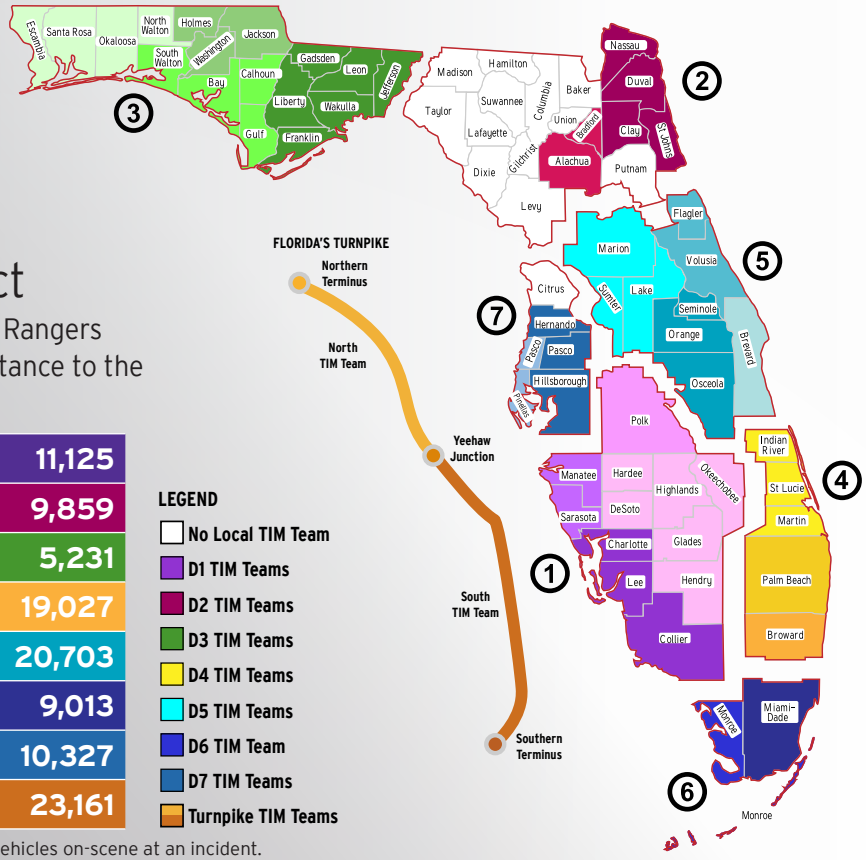
https://www.respondersafety.com/news/struck-by-incidents/yearly-fatality-reports/

RESPONDER	FATALITIES
DOT	***1***
Crash Scene	1
Fire and EMS	***4***
Crash Scene	3
Vehicle Fire	1
Law Enforcement	***2***
Stop-Sticks	1
Vehicle Fire	1
Road Service Technician	***4***
Disabled Vehicle	4
Towing	***8***
Crash Scene	1
Disabled Vehicle	6
Debris Removal	1
TOTAL FATALITIES	**15**

Road Ranger Assists by District

During the third quarter of FY 2022/2023, Road Rangers were involved in 108,356 events providing assistance to the motorists of Florida.

DISTRICT ONE	11,125
DISTRICT TWO	9,859
DISTRICT THREE	5,231
DISTRICT FOUR	19,027
DISTRICT FIVE	20,703
DISTRICT SIX	9,013
DISTRICT SEVEN	10,327
FLORIDA'S TURNPIKE	23,161



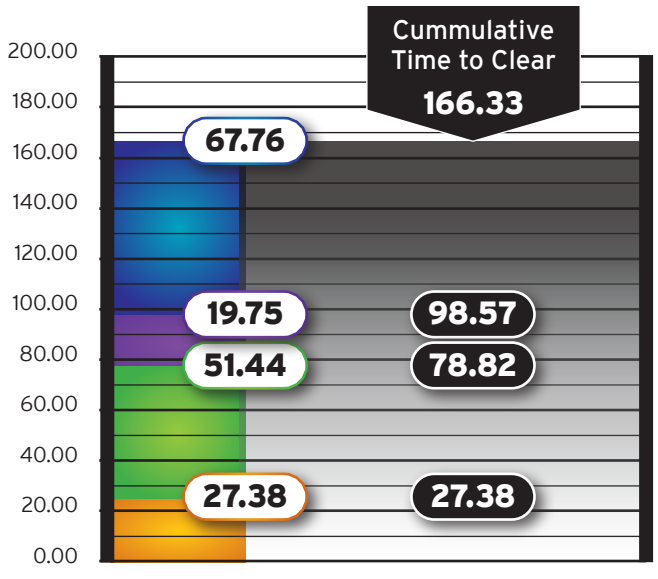
Note: An event is defined as the arrival of one or more Road Ranger vehicles on-scene at an incident. Events can have multiple assists, and each Road Ranger will have at least one assist per event.

Road Ranger Assist Data

	HIGHEST ACTIVITY TOTALS		LOWEST ACTIVITY TOTALS	
	SOURCE	TOTAL	SOURCE	TOTAL
ASSISTS BY NOTIFIER	ROAD RANGER	60,113	MOTORIST	40
ASSISTS BY EVENT TYPE	DISABLED VEHICLE	67,169	CONGESTION	2
ARRIVALS BY DAY OF WEEK*	FRIDAY	12,167	SATURDAY	9,457
ARRIVALS BY TIMEFRAME*	3:00 pm - 6:00 pm	16,519	12:00 am - 3:00 am	2,879

Statewide Average RISC Incident Duration

During the third quarter of FY 2022/2023, seven Districts and FTE activated the RISC Program **87** times with approximately **$250,300** in bonus-incentive payments made to vendors.



Statewide Traffic Incident Management (TIM) Update

Integrating Technology, Data, and Training

Shawn Kinney, Road Ranger Program Manager, FDOT, Rakesh Sharma, HNTB and Samia Rubaiat, HNTB

The second quarter of the year 2023 has been very progressive and active for the FDOT Traffic Incident Management team. A face-to-face Statewide TIM Managers meeting was held at FDOT District 5 Regional Transportation Management Center (RTMC) on March 17-19, 2023. Around thirty TIM members from Districts and Turnpike attended this meeting.

During the meeting, several key TIM topics such as the Road Ranger Safety Initiative implementation plan, Road Ranger procedure, Rapid Incident Scene Clearance (RISC) procedure, etc. TIM members participated in a live survey to share their opinions on the action items for the next TIM Strategic Plan. District 5 arranged RTMC tours for the meeting attendees.

On the second day of the meeting, District 5 demonstrated how they are using Unmanned Aerial System (UAS) in TIM and updates on the advanced warning alert system. District 6 presented the structures and benefits of using Road Ranger Driver Information System (RRDIS) software. On the third day, Chief Tim Roufa from Florida Highway Patrol (FHP) presented how FHP is using UAS to manage and monitor different emergency situations. A vendor named "Mobile Eye" presented collision avoidance technology for vehicles. Moreover, "Orlando Health" presented how they operate during air-lifting incidents. They also brought a helicopter and landed on a field in front of RTMC. The knowledge-sharing discussion, presentations, and demonstrations made the meeting a successful one. FDOT Central Office hopes to continue organizing this meeting in the upcoming years.

FDOT Central Office also organized Road Ranger Safety Forum with District TIM Program managers and industry at District 5 RTMC on April 4, 2023. The focus of the meeting was to discuss the implementation plan of the safety strategies. Vendors and TIM managers openly discussed the different perspectives for these strategies and how the implementation plan can be successful.

FDOT has been involved with Federal Highway Administration's Every Day Counts program since the beginning of the program. In April 2023, FDOT has been recognized by FHWA in EDC-6 Innovation Spotlight for Next Generation TIM: Integrating Technology, Data, and Training. FDOT commits to keep progressing to incorporate technology in TIM operations.

CONTACT: **SHAWN KINNEY** | Shawn.Kinney@dot.state.fl.us

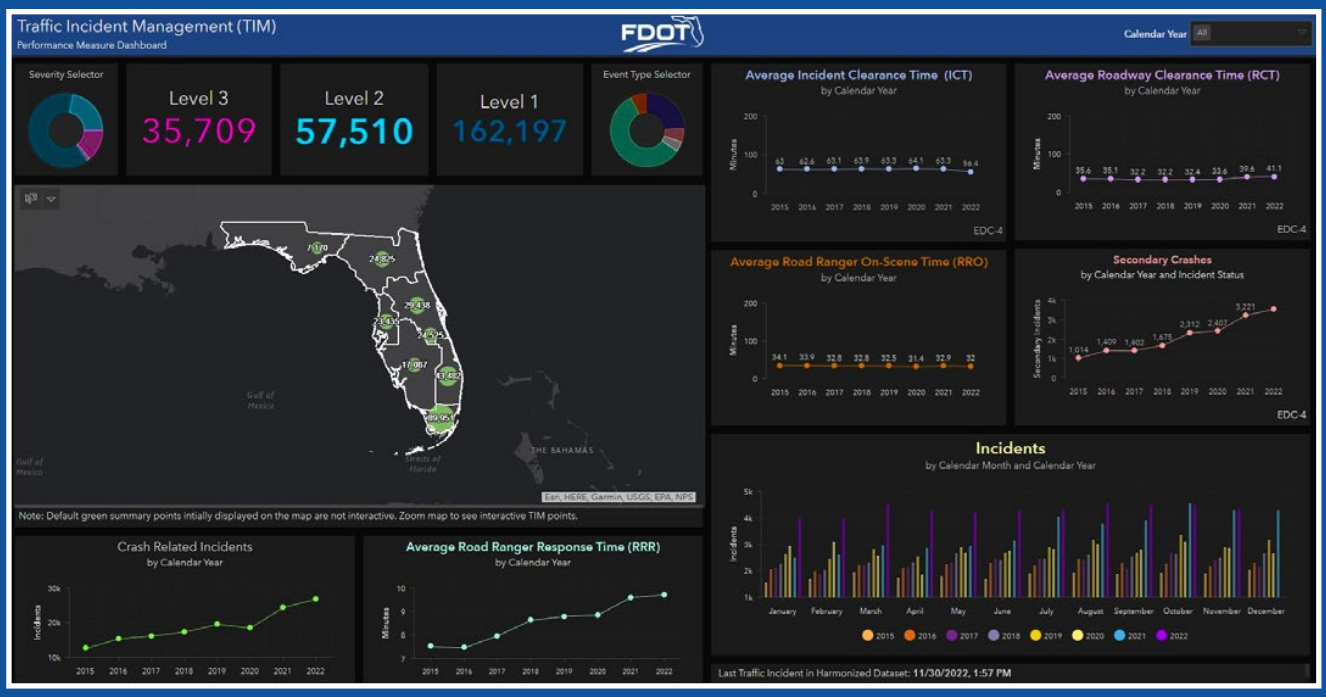
Innovation Spotlight

|Next-Generation TIM: Integrating Technology, Data, and Training|

Florida Department of Transportation (FDOT) traffic management centers (TMC) use SunGuide® Software to integrate various hardware, software, and network applications among TMCs. The software, known for tracking events and time-based metrics very effectively, collects TIM measures like roadway clearance time (RCT), incident clearance time (ICT), and secondary crashes very effectively. In addition, SunGuide tracks service patrol (Road Ranger) vehicles' live locations, coverage routes, activity details, status, and administrative and operational details.

Leveraging a wealth of TIM and Road Ranger data, FDOT created new dashboards that make that data come to life. As part of EDC-6, the agency migrated their TIM dashboard to a new global information system (GIS) platform that enhanced search capabilities and elevated the visualization of data in charts and maps. With the dashboard, everyday users can drill down into data with simple yet powerful interface tools that query the data.

The FDOT use of TIM data and dashboards has been a significant factor in funding increases for the statewide TIM efforts. TIM data helped expand the coverage area, hours of operation, and beat configuration for Road Rangers and in 2022 data justified expansion the Rapid Scene Incident Clearance (RISC) program. An Instant Dispatch Tow program is now being implemented statewide for immediate response and roadway clearance in certain situations, thanks to the data-driven approach to TIM.



FDOT Traffic Incident Management Performance Measure Dashboard

Credit: Florida Department of Transportation

District Six Launches Alert System for Warning Gate System on 95 Express

Carlos Dardes, FDOT District Six

The District Six Transportation Systems Management and Operations (TSM&O) Office launched a new traffic alert system that notifies the public when selected ramps to I-95 Express are closed due to incidents.

The alert system was installed on the entrance ramps that have a Warning Gate System (WGS) that deploys a barrier arm to block driver access and retracts when open. The system is equipped with a transponder that uses a direct wired communication connection that detects whether the gates are open or closed to traffic. The detector uses this connection and sends status alerts to the Waze application and to vehicles equipped with Vehicle to Infrastructure (V2I) technology. This lane closure digital alert was launched for the gates located at the ramps from NW 39 Street/NW 10 Avenue and from the Golden Glades Multimodal Transportation Facility. This system is helping drivers better plan their routes and avoid the affected areas when the gates are closed to promote safe travel.

To ensure accurate information is being disseminated to the public, the WGS has a built-in quality control feature named Safety Cloud Dashboard (SCD). The dashboard serves as an interface for District Six to view and edit all closure information that is being collected in real-time from the transponders. The SCD also allows the District to establish closure parameters such as their geometric configuration, description, as well as the messages being published.

District Six launched this new V2I system as a pilot project to evaluate the feasibility of adding an external device to assist in distributing traveler information. The District will determine if the system will be expanded to other I-95 Express ramps.

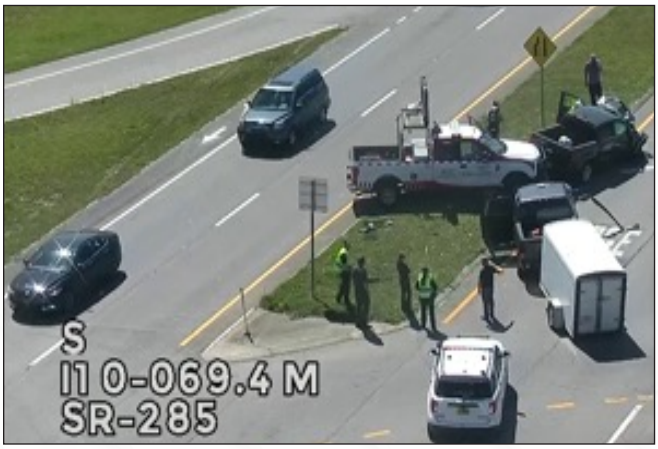
CONTACT: **CARLOS DARDES** | Carlos.Dardes@dot.state.fl.us

Mike Watkins
DISTRICT THREE

ROAD HEROES

FDOT RR Road Rangers

Road Ranger Outstanding Performance



Mike Watkins, a Road Ranger operator, received recognition and accolades from the District Three Regional Traffic Management Center (RTMC) on Wednesday, March 29, 2023. The RTMC honored Watkins for his outstanding performance and presented him with an award and a challenge coin, acknowledging his exceptional efforts on two separate occasions.

On March 23, 2023, Watkins acted as the first responder at the scene of a lane-blocking incident involving an overturned 5th-wheel RV, posing a hazard to motorists. After ensuring the safety of everyone involved, Watkins swiftly cleared the travel lanes by directing the subjects to move the frame off the roadway and pushing the camper's body to the shoulder using his truck. His prompt actions significantly reduced the likelihood of secondary incidents, minimized traveler delays, and created a safer incident scene.

Similarly, on March 15, 2023, Watkins once again displayed his exemplary professionalism and dedication. He cleared the lanes of SR 285 at the I-10 exit by pushing a vehicle out of the roadway. The Sheriff's office commended Watkins for his efforts in swiftly clearing the travel lanes from the crash scene.

Watkins' exceptional performance and outstanding efforts did not go unnoticed. The District takes pride in honoring him with this award for his contribution to road safety and the minimization of travel delays. His work serves as a shining example of the dedication and commitment required to ensure the safety and efficiency of our roads.

MegaCon Traffic Conditions Prove to Be Mega Success Thanks to New Tech Solutions

Gabriel Smith, Technical Information Officer, FDOT District Five

As crowds gathered at the Orange County Convention Center (OCCC) the weekend of March 30 for MegaCon Orlando 2023, convention center personnel partnered with several state and local agencies behind the scenes to ensure the safe mobility of both vehicles and pedestrians entering and exiting the four-day, action-packed event.

This year's MegaCon Orlando, which touts itself as one of North America's largest comics, sci-fi, horror, anime, and gaming events, required a unique tech solution to accommodate the record-high number of incoming vehicles, as this year's convention counted 160,000-plus fans in attendance and more than 27,000 vehicles parked.

Vehicles funneling into the event area were directed and managed with the help of major pre-planning efforts by the Florida Department of Transportation's (FDOT) Traffic Incident Management team (Led by Michael Hudson), OCCC personnel, Orange County traffic engineers, Orange County Fire and Rescue, Orange County Sheriff's Office, Florida Department of Emergency Management, and Orange County Emergency Management.

FDOT TIM Program Manager Mike Hudson partnered with the above agencies to monitor the surrounding area's traffic conditions by flying a Unmanned Aerial System (UAS) in the vicinity of the event, spanning Sand Lake Road, John Young Parkway, and International Drive.

> ***"We deployed the UAS to see how full the parking lots were. We live-streamed that back to the command center so everyone could see it at the same time. It was the first time we've done that for parking lots," Hudson explained.***

Hudson's team was further able to survey MegaCon's traffic conditions remotely through close digital monitoring of the surrounding roadways. This was achieved by the use of a Virtual Private Network (VPN) remote access that transmitted real-time traffic footage through SunGuide, FDOT's transportation management platform, back to Hudson's team at the OCCC, preventing roadway congestion and safety incidents from occurring.

This footage was then streamed to state partner agencies for optimum safety conditions, "bringing the Regional Transportation Management Center (RTMC) to the OCCC command center," Hudson states.

The mapping and navigation team collaborated with global positioning systems (GPS) apps such as Waze to correctly map and identify the correct routes for motorists traveling to the OCCC. By verifying the accuracy of the navigation apps, the TIM team reduced arterial congestion caused by lost motorists and helped to ensure a smooth travel process for MegaCon attendees. The mapping and navigation support team often works in conjunction with GPS apps during large-scale events like MegaCon to provide more efficient travel for motorists.

Active Arterial Management information was also routed into the Advanced Traffic Management System for comprehensive traffic visibility.

A Smart Work Zone Trailer, which uses a system of three cameras powered by a group of modular solar panels to transmit traffic data back to the RTMC, was also used to monitor traffic leading into the MegaCon event space with great success.

In cooperation with the Florida Highway Patrol, FDOT also dispatched a certified Road Ranger to provide emergency roadside assistance during the convention. Road Rangers serve as vital assets in clearing disabled vehicles, providing fuel, and performing minor repairs at no cost to the motorist.

Another key factor in the success of MegaCon's traffic management was Orange County traffic engineers optimizing the timing of traffic signals to account for the increase of vehicles entering the area. Improved signal timing enables vehicles to move through an intersection more efficiently. This strategic traffic management is especially impactful at large events such as MegaCon.

The OCCC sent a letter of appreciation to Hudson for FDOT's success in coordinating with various state and local agencies in a "well-nurtured partnership" to ensure attendees were able to safely enter and exit the event without incident.

CONTACT: **GABRIEL SMITH** | Gabriel.Smith@dot.state.fl.us

Bridging the Gap in Incident Management

Sheryl Bradley, ICM Project Manager, FDOT District Five

On February 22, just after 9 am, the District Five Regional Transportation Management Centers (RTMC) received a Transportation Sensor Subsystem (TSS) alert on I-75 at MM 347. Via closed circuit television (CCTV), the Traffic Management Specialist observed Florida Highway Patrol (FHP) stopping all northbound traffic. Within a couple of minutes, FHP Troop B dispatch had called to alert District 5 that the 66th St overpass (MM 348) had been hit by a semi hauling an oversized load. On camera, the RTMC could see a semi with an oversized load straddling multiple lanes underneath the bridge but did not have a visual of the damage. Incident management kicked into high gear, requesting a Road Ranger to respond and get pictures of the bridge. Asset management was simultaneously dispatched to establish a closure of northbound I-75 with diversion at Exit 341/CR 484. Structures Maintenance was notified and instantly called for a bridge inspector, and our Integrated Corridor Management (ICM) signal engineers went to work implementing diversion plans to help manage the diverted traffic, while adjacent districts were notified. Our Mapping and Navigation Support team worked diligently to provide driver notifications through partnerships with Waze, Google, Apple, and TomTom.

Images from the Road Ranger showed significant damage and were immediately shared with all relevant stakeholders in FDOT's incident response group, queuing further response by the District. The ICM TIM manager followed with a call to FHP to determine a plan for the 6 miles of vehicles trapped between the incident and the closure. FHP had hoped the left lane would be reopened once the bridge inspector arrived. Based on the extent of the damage, however, the ICM TIM manager reached out to Structures Maintenance

who was now en route to the scene, and asked about the likelihood of opening a lane. Structures Maintenance advised we would be several hours from opening any lanes as the loose debris from the underdeck would have to be removed and the bridge secured. With this information, the ICM TIM Manager and FHP Lieutenant worked together to establish a plan for turning trapped vehicles southbound using an emergency turnaround at MM 336. A Road Ranger was sent to shut down the left lane of southbound MM 336 to allow for a free-flow lane for traffic being directed to the emergency turnaround and the process began, ultimately taking 2.5 hours to clear the 6 miles of trapped traffic.

Ocala Operations and Structures Maintenance were on scene, along with the Asset Management contractor and bridge inspector, where work commenced for what would be an 11.5-hour closure of the northbound lanes. Signal engineers worked throughout the event to ensure all adjacent arterials were working at maximum efficiency. Even so, the impact on traffic throughout Sumter and Marion Counties was significant. Arterial management was compounded by several secondary incidents, including a fatality on US 441 – our only alternate northbound route — and involving a diverted semi that ran a red light and hit a sedan and killing its driver. Communication efforts were well coordinated with local law enforcement working on the incident. Because of the potential impact of a long-term closure of US 441, they expedited the traffic homicide investigation and had the roadway reopened in under an hour.

Although a challenging incident, the teamwork between the RTMC/TIM, FDOT's response team, and local partners made for a well-orchestrated, multi-faceted event. Northbound traffic on I-75 never extended beyond the Turnpike (13 miles from the point of closure), which is an impressive feat on any closure that lasts more than a couple of hours. The same level of collaboration was used in the following weeks as additional closures were needed for ongoing bridge repair work, which was completed on Thursday, March 30, 2023.

CONTACT: **SHERYL BRADLEY** | Sheryl.Bradley@dot.state.fl.us

Traffic Incident Management

SHAWN KINNEY
Traffic Incident Management and Road Ranger Program Manager
605 Suwannee St., MS 90
Tallahassee, FL 32399
(850) 410-5600
Shawn.Kinney@dot.state.fl.us