

Notable Functionalities



Center-to-Center

Center-to-center expands the SunGuide software's capability to remotely manage other TMCs, provide traffic and event data to the FL511 system, and receive traffic data from third-party data sources. The center-to-center application is based on nationally recognized Traffic Management Data Dictionary Standards, which allows for interoperability.



Communication with Florida Highway Patrol's Computer-Aided Dispatch System

SunGuide software is integrated with the computer-aided dispatch (CAD) system used by the Florida Highway Patrol (FHP). This allows TMC operators to view incidents entered by FHP. TMC operators are instantly notified about every traffic-related incident that FHP is working on.



Video on Desktop

SunGuide software's video on desktop feature allows users to view multiple camera video streams on their computer monitors. Video on desktop integration into the SunGuide software reduces the configuration, maintenance, and run-time operational effort.



High Degree of User Customizability

The software has been optimized for flexibility, performance, and efficiency for everyday users. It allows customization of layout of application windows, locations on the map, and custom message templates for events and travel times. These customizable features are designed to make the most efficient use of the software – minimizing operator actions.



Service Patrol Integration

SunGuide software maximizes the efficiency of collaboration and information sharing between TMC operators and service patrols. TMC operators can view the real-time location and status of service patrol vehicles and dispatch them from their map. Service patrols can view and update incidents on their mobile device. This improves the accuracy of the event information and saves time for traffic operations.



Connected Vehicle Technology

Connected vehicle technology is the latest ITS innovation. Vehicles act as sensors, sending speed and location information to the SunGuide software using industry standards. SunGuide software displays messages in the vehicle at exactly the right time, duration, location, and direction of travel. These messages can be custom designed or generated by the software as part of an event response plan.



www.SunGuideSoftware.com

Florida Department of Transportation
ITS Program
Derek Vollmer
Derek.Vollmer@dot.state.fl.us



SUNGUIDE® Software

Florida's Advanced Traffic Management Systems Software

Powering Florida's Intelligent Transportation Systems Program

What is SunGuide® Software?

SunGuide® software is Florida's statewide advanced traffic management systems software that monitors traffic and manages incidents. SunGuide software offers a comprehensive set of tools for all facets of traffic operations including operating equipment, integrating data sources, and automating incident detection and response. SunGuide software significantly reduces congestion, traffic delays, and keeps the motoring public connected with time-sensitive traffic information.

Why Choose SunGuide Software?

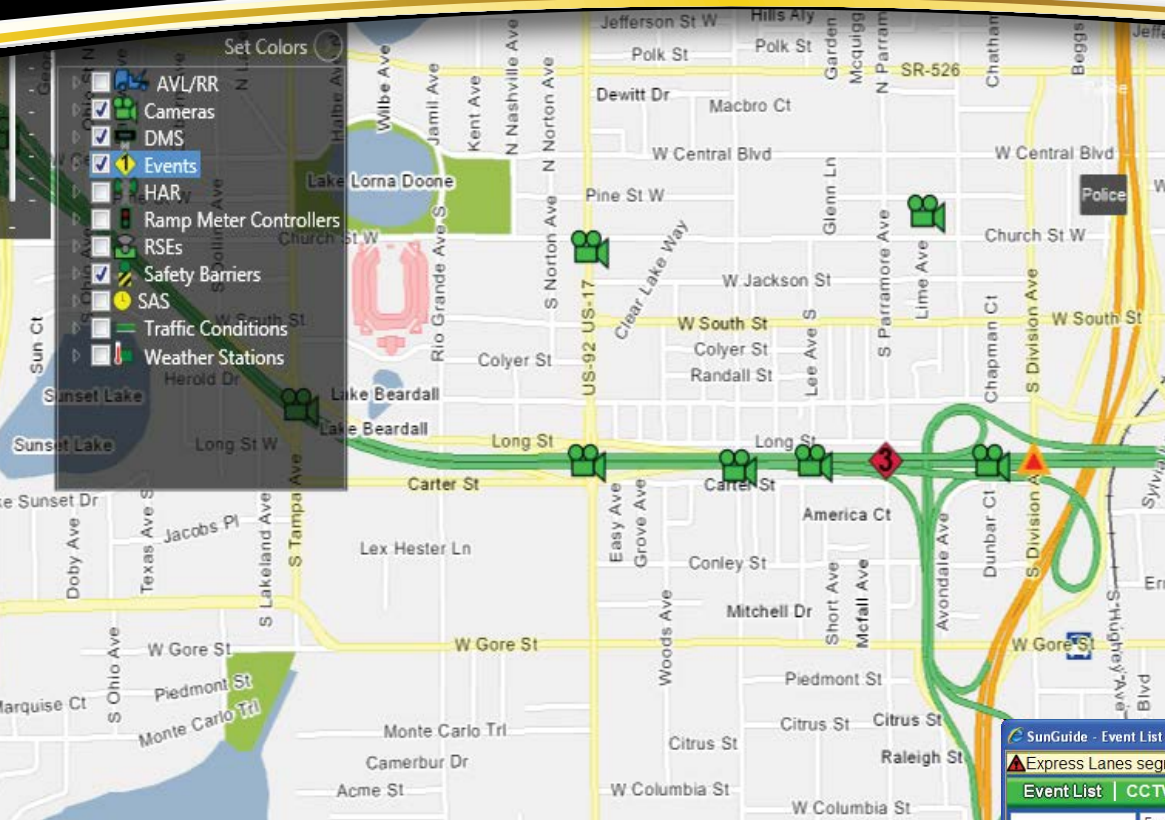
SunGuide software is publically owned with no licensing fees, offering a low deployment and maintenance cost. The software development is not restricted to any one vendor allowing the agency to make the most cost-effective vendor choice. The Florida Department of Transportation (DOT) collaborates with Texas DOT by leveraging their software and enhancements into SunGuide software through initial and on-going development. Since 2005, the SunGuide software user base has grown to 12 transportation management centers (TMC) in Florida and has matured to a robust, reliable, and feature-rich product. SunGuide software has an open architecture that allows maximum flexibility for third-party data and system integration. Thus, TMCs can select the most cost-effective solution through many choices among data providers and field devices.

“ In Florida, SunGuide software has been an invaluable tool to bring agencies together as a team to improve the safety and mobility of our traveling public. ”

Elizabeth Birriel, P.E.
FDOT ITS Program Manager



SUNGUIDE SOFTWARE COMPONENTS WORK TOGETHER FOR DETECTION, MANAGEMENT, AND REPORTING & PERFORMANCE.



Management

Once incidents are detected, SunGuide software maximizes efficiency of event management and responder coordination. SunGuide software uses a holistic approach to integrate devices and systems to seamlessly perform event management. Service patrols can directly interact with the software using mobile devices. The software intuitively recommends response plans for intelligent transportation systems (ITS) devices and records event-specific details from service patrols and TMC operators. The software also publishes events to the FL511 system.

SunGuide - Event List - Windows Internet Explorer

Express Lanes segment 95XNBSR112-NW151ST: Rate is changing from \$0.25 to \$0.50. Express Lanes segment 95XNBSR112-NW151ST: Rate is changing from \$0.50 to \$0.75.

Event List | CCTV | AVL/RR | VSL | Express Lanes | Reports | Travel Times | Audit 09:45:15

Event ID	Filter	Open Panel on Startup	Save Preferences	Printable List	Add Event
Active Events with Travel Lane Blockage					
240201	Miami-Dade on SR-826 Northbound, Beyond SR-934/ NW 74 St	Black LINCOLN TOWN CAR TAG# FL-PU76G	Disabled Vehicle	3 Right Lanes (of 6 Lanes) Blocked	602 656 FDOT D6 SunGuide TMC clarkc 04/03/2010 09:40 05/25/2010 15:12
240202	Miami-Dade on I-95 Southbound, At I-195 East - Miami Beach/ SR-112 West - Airport		Crash	All Lanes (of 3 Lanes) Blocked	FDOT D6 SunGuide TMC cpackard 05/31/2010 15:28 05/31/2010 15:40
240203	Miami-Dade on SR-112 Eastbound, At North Le Jeune		Vehicle Alert	All Lanes (of 2 Lanes) Blocked	FDOT D6 SunGuide TMC cpackard 06/02/2010 10:40 06/23/2010 11:10
240204	Miami-Dade on I-95 Northbound, At SR-860/ Miami Gardens Dr		Crash	2 Lanes (of 4 Lanes) Blocked	FDOT D6 SunGuide TMC cpackard 09/08/2010 09:02 09/08/2010 09:33
Active Events without Travel Lane Blockage					
240079	Miami-Dade on I-95 Northbound, At SR-932/ NW 103 St		Scheduled Road Work	No lanes blocked.	FDOT D6 SunGuide TMC carrasn 04/02/2010 00:55 05/25/2010 15:12
240081	Miami-Dade on I-195 Westbound, At I-95 North/ I-95 South		Scheduled Road Work	No lanes blocked.	FDOT D6 SunGuide TMC carrasn 04/02/2010 01:13 05/25/2010 15:12
240082	Miami-Dade on OTHER Northbound, At OTHER		Other	No lanes blocked.	FDOT D6 SunGuide TMC carrasn 04/02/2010 01:20 05/25/2010 15:12
240084	Miami-Dade on I-195 Westbound, Ramp To I-95 South		Scheduled Road Work	No lanes blocked.	FDOT D6 SunGuide TMC carrasn 04/02/2010 01:48 05/25/2010 15:12
240085	Miami-Dade on I-195 Westbound, At I-95 North/ I-95 South		Congestion	No lanes blocked.	FDOT D6 SunGuide TMC carrasn 04/02/2010 11:56 05/25/2010 15:12

Alerts

- Express Lanes segment 95XNBSR112-NW151ST: Rate is changing from \$0.25 to \$0.50. 5 min ago
- Express Lanes segment 95XNBSR112-NW151ST: Rate is changing from \$0.50 to \$0.75. 5 min ago
- Express Lanes segment 95XNBSR112-NW151ST: Rate is changing from \$0.75 to \$1.00. 5 min ago
- Incident detected by Weather Report (Current Precipitation radar mosaic): Heavy rain - Miami-Dade. 5 min ago
- Incident detected by FHP: Incident Unknown - Washington - I-10 West MM120 MM120. 5 min ago
- Incident detected by FHP: Incident Unknown - Washington - SR-277 HUTCHINSON RD. 5 min ago
- Incident detected by Citilog camera SG3_Citilog1: Stopped Vehicle. 5 min ago

Response Plan

- ☒ Express Lane Alerts
- ☒ VSL Updates
- ☒ AVL/RR Alerts
- ☒ Weather Alerts
- ☒ External Incidents
- ☒ FHP Incidents
- ☒ Citilog Alarms
- ☒ TSS Alarms

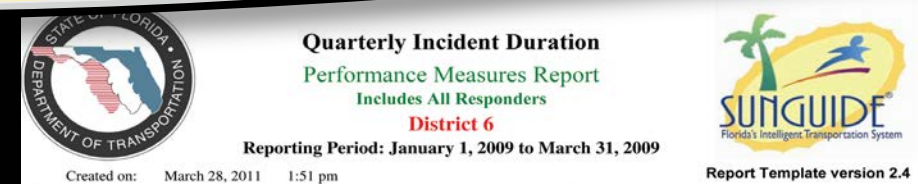
Show all Show none Group alerts by category

Detection

SunGuide software collects traffic data from a variety of traffic detection devices and third-party data feeds. The traffic information is intuitively displayed on the operator map interface and used by other SunGuide software applications. This traffic data is also used to detect incidents, calculate travel times, and determine variable speed limits and express lanes pricing. This data is shared with external systems including FL511, Florida's advanced traveler information system.

Key Software Features

- Comprehensive set of ITS devices supported
- Modular architecture allows for ongoing enhancements
- Open interfaces allow third-party system integration
- Standards-based software ensures interoperability
- Multiple database platform support
- User-friendly interface provides intuitive operation
- Automated incident detection for adverse traffic and weather conditions
- Automated incident response plan generation for ITS devices
- FL511 system integration supporting traffic and incident data
- Interfaces with the University of Maryland's Regional Integrated Transportation Information System (RITIS)

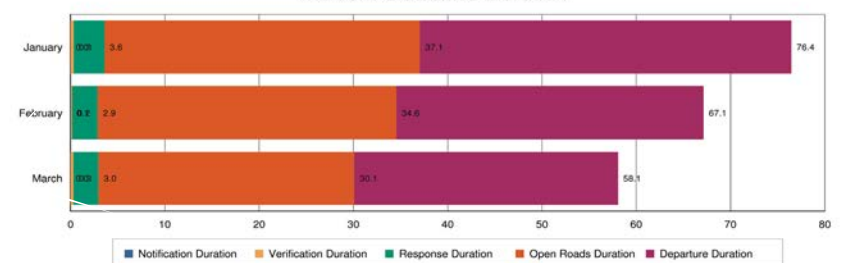


Performance Measures Summary

	January	February	March	Total
Events included in Performance Measures	196	242	297	735
Notification Duration (min.)	0.0	0.1	0.0	0.0
Verification Duration (min.)	0.3	0.1	0.3	0.2
Response Duration (min.)	3.3	2.7	2.7	2.8
Open Roads Duration (min.)	33.4	31.7	27.1	30.3
Departure Duration (min.)	39.4	32.6	28.0	32.5
Roadway Clearance Duration (min.)	37.1	34.6	30.1	33.4
Incident Clearance Duration (min.)	76.4	67.1	58.1	65.9

*FHP Data is not available for Notification Duration

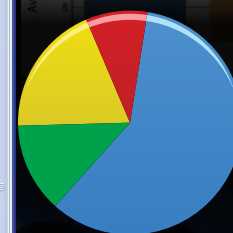
Incident Clearance Duration



Open Roads Duration / Month



Roadway Clearance Duration / Month



Reporting & Performance

SunGuide software offers an extensive (customizable) set of reports that benefit operators, TMC managers, and systems engineers. These reports provide graphical or tabular information stored in the software database. Each report offers a set of parameters that can be specified to generate a customizable report. These reports provide valuable feedback to improve the effectiveness and efficiency of TMC and traffic operations.

ITS Devices Supported

- Traffic detection devices
- Cameras, encoders, and decoders
- Video walls
- Color dynamic message signs
- Highway advisory radios
- Road weather information systems

Advanced Applications

- Connected vehicle
- Reversible lane system
- Vehicle safety barrier
- Ramp metering
- Variable speed limits
- Express lanes