



Technical Memorandum

SunGuide® Software



Naming and Configuration Standards

Version 2.0

November 18, 2020

Prepared for:

*Florida Department of Transportation
Intelligent Transportation Systems Program
605 Suwannee Street, MS 90
Tallahassee, Florida 32399-0450
(850) 410-5600*

DOCUMENT CONTROL PANEL		
File Name:	SunGuide Style Guide	
File Location:		
Version Number:	2.0	
Name		Date
Created By:	John May, Global-5	8/11/2020
Reviewed By:	Gregory Dudley	11/18/2020
	Steve Petty, Ph.D.	12/03/2020
Modified By:		
Completed By:	Gregory Dudley	11/18/20

Table of Contents

List of Tables	vi
List of Figures	vi
List of Acronyms and Abbreviations	viii
1 Scope	1
1.1 <i>Document Identification</i>	1
1.2 <i>History</i>	1
1.3 <i>Background</i>	1
1.4 <i>Contacts</i>	3
2 Naming and Configuration Standards	4
2.1 <i>Summary of Naming and Configuration Standards</i>	4
2.2 <i>Roadway Name</i>	11
2.2.1 <i>Roadway Name Rules / Formatting</i>	11
2.2.2 <i>Ordinal Extensions for Numbered Streets</i>	13
2.2.3 <i>SunGuide Software Configuration</i>	13
2.3 <i>Cross Street/Reference Name</i>	14
2.3.1 <i>Cross Street/Reference Name Rules</i>	15
2.3.2 <i>Reference Point-Specific Rules and Formatting</i>	15
2.3.3 <i>EM Location-Specific Rules and Formatting</i>	16
2.3.4 <i>SunGuide Software Configuration</i>	17
2.4 <i>EM Location Sort Order</i>	18
2.4.1 <i>Sort Order Rules and Formatting</i>	19
2.4.2 <i>SunGuide Software Configuration</i>	19
2.5 <i>EM Location City and Metro Area</i>	20
2.5.1 <i>City and Metro Area Rules / Formatting</i>	20
2.5.2 <i>SunGuide Software Configuration</i>	21
2.6 <i>EM Location Mile Marker</i>	22
2.6.1 <i>Mile Marker Rules and Formatting</i>	22
2.6.2 <i>SunGuide Software Configuration</i>	23
2.7 <i>EM Location Exit Number</i>	23
2.7.1 <i>Exit Number Rules and Formatting</i>	23
2.7.2 <i>SunGuide Software Configuration</i>	24
2.8 <i>EM Location Latitude/Longitude</i>	24
2.8.1 <i>Latitude and Longitude Rules and Formatting</i>	24
2.8.2 <i>SunGuide Software Configuration</i>	25
2.9 <i>EM Location Alternate Roads</i>	25
2.9.1 <i>Alternate Roads Rules and Formatting</i>	26
2.9.2 <i>SunGuide Software Configuration</i>	26
2.10 <i>Device Location Latitude/Longitude</i>	27
2.10.1 <i>Latitude and Longitude Rules/Formatting</i>	27
2.10.2 <i>SunGuide Software Configuration</i>	28
2.11 <i>County Codes</i>	28

2.12	<i>DMS Device Name</i>	29
2.12.1	DMS Device Name Rules/Formatting	30
2.12.2	DMS Messaging.....	32
2.12.3	SunGuide Software Configuration	32
2.13	<i>CCTV Devices</i>	33
2.13.1	CCTV Device Name Rules/Formatting	33
2.13.2	SunGuide Software Configuration	35
2.14	<i>Traffic Detector Name</i>	35
2.14.1	Traffic Detector Name Rules/Formatting.....	36
2.14.2	SunGuide Software Configuration	38
2.15	<i>Traffic Detector Link Name</i>	39
2.15.1	Traffic Detector Link Name Rules/Formatting	39
2.15.2	SunGuide Software Configuration	41
2.16	<i>Traffic Detector Lane Name</i>	42
2.16.1	Traffic Detector Lane Name Rules / Formatting.....	42
2.16.2	SunGuide Software Configuration	43
2.17	<i>Travel Time (TvT) Link Name</i>	44
2.17.1	TvT Link Name Rules / Formatting.....	44
2.17.2	SunGuide Software Configuration	46
2.18	<i>Connected Vehicle Roadside Equipment (RSE) Names and Messages</i>	46
2.18.1	RSE Name Rules / Formatting	47
2.18.2	SunGuide Software Configuration	48
2.19	<i>SunGuide Software Express Lane Segment Configuration</i>	48
2.19.1	Express Lane Segment Name Rules / Formatting.....	48
2.19.2	SunGuide Software Express Lane Configuration	49
2.20	<i>Highway Advisory Radio (HAR) Name</i>	49
2.20.1	HAR Name Rules / Formatting.....	50
2.20.2	SunGuide Software Configuration	50
2.21	<i>Road Weather Information Station (RWIS) Name</i>	51
2.21.1	RWIS Name Rules / Formatting	51
2.21.2	SunGuide Software Configuration	51
2.22	<i>Safety Barrier Name</i>	52
2.22.1	Safety Barrier Name Rules / Formatting.....	52
2.22.2	SunGuide Software Configuration	52
2.23	<i>Wrong Way Device (WWD) Name</i>	53
2.23.1	Wrong Way Device Name Rules/Formatting	53
2.23.2	SunGuide Software Configuration	54
2.24	<i>511 Aliases</i>	54
2.24.1	511 Alias Rules / Formatting	55
2.24.2	SunGuide Software Configuration	55
2.25	<i>511 Spoken Name</i>	55
2.25.1	511 Spoken Name Rules / Formatting	56
2.25.2	SunGuide Software Configuration	56
2.26	<i>Truck Parking Availability System</i>	56
2.26.1	Truck Parking Facility Name Rules/Formatting	57

2.27	<i>Floodgate Message Guidelines</i>	57
2.27.1	Floodgate Message Criteria.....	58
2.27.2	Floodgate/Website Alert Messages Area Categories	58
2.27.3	Specific Area / Location.....	59
2.27.4	Configuring Barge-In	60
2.27.5	Rules of Thumb for Composing Floodgate Messages	60
3	Notes	63

List of Tables

Table 2-1: Naming and Configuration Standards Summary.....	4
Table 2-2: Roadway Name Formatting.....	12
Table 2-3: Common Abbreviations	16
Table 2-4: County Codes	28
Table 2-5: DMS Device Naming Standards	31
Table 2-6: CCTV Device Naming Standards	34
Table 2-7: Detector Installed Location Acronyms Standard	37
Table 2-8: Traffic Detector Naming Standard	38
Table 2-9: Traffic Detector Link Naming Standard	40
Table 2-10: Traffic Detector Lane Naming Standard	43
Table 2-11: TvT Link Naming Standard	45
Table 2-12: RSE Messages	47
Table 2-13: RSE Naming Standard.....	47
Table 2-14: Express Lane Segment Naming Standard	49
Table 2-15: HAR Naming Standard	50
Table 2-16: RWIS Naming Standard.....	51
Table 2-17: Safety Barrier Naming Standard	52
Table 2-18: Wrong Way Device Naming Standard.....	53
Table 2-19: Truck Parking Facility Naming Standard.....	57

List of Figures

Figure 1-1: Areas Affected by SunGuide Software's Configuration	1
Figure 1-2: Data Flow from SunGuide to Traveler via DIVAS and Florida 511	Error!
Bookmark not defined.	
Figure 2-1: Roadway Configuration Fields within SunGuide Software.....	14
Figure 2-2: Reference Point Versus EM Location.....	15
Figure 2-3: Reference Point Configuration Fields within SunGuide Software	17
Figure 2-4: EM Location Configuration Fields within SunGuide Software.....	18
Figure 2-5: Sort Order Configuration within SunGuide Software.....	19
Figure 2-6: City Versus Metro Area Example.....	20
Figure 2-7: City and Metro Area Configuration within SunGuide Software	22
Figure 2-8: Mile Marker Configuration within SunGuide Software	23
Figure 2-9: Exit Number Configuration within SunGuide Software.....	24
Figure 2-10: Concept of EM Location Offset Locations	25

Figure 2-11: EM Location Latitude/Longitude Configuration within SunGuide Software	25
Figure 2-12: Alternative Roads Configuration within SunGuide Software.....	27
Figure 2-13: Example Device Latitude/Longitude Configuration within SunGuide Software	28
Figure 2-14: DMS Device Name Configuration within SunGuide Software	33
Figure 2-15: CCTV Device Name Configuration within SunGuide Software	35
Figure 2-16: Traffic Detector Name Configuration within SunGuide Software	39
Figure 2-17: Traffic Detector Link Name Configuration within SunGuide Software.....	42
Figure 2-18: Conceptual Example for Lane Numbering	43
Figure 2-19: Traffic Detector Lane Name Configuration within SunGuide Software	44
Figure 2-20: Travel Time Link Name Configuration within SunGuide Software.....	46
Figure 2-21: RSE Name Configuration within SunGuide Software.....	48
Figure 2-22: Express Lane Segment Name Configuration within SunGuide Software	49
Figure 2-23: HAR Name Configuration within SunGuide Software.....	50
Figure 2-24: RWIS Name Configuration within SunGuide Software	51
Figure 2-25: Safety Barrier Name Configuration within SunGuide Software	53
Figure 2-26: WWD Name Configuration within SunGuide Software.....	54

List of Acronyms and Abbreviations

ATMS	Advanced Traffic Management System
AVI	Automated Vehicle Identification
BT	Bluetooth
C2C	Coast to Coast
CCTV	Closed Circuit Television
CFX.....	Central Florida Expressway
CR	County Road/County Route
CV	Connected Vehicle
DIVAS	Data Integration and Video Aggregation System
DMS.....	Dynamic Message Sign
EB	Eastbound
EL.....	Express Lane
EM.....	Event Management
FDOT	Florida Department of Transportation
FL511	Florida 511 System
FL-ATIS.....	Florida Advanced Traveler Information System
FTE	Florida's Turnpike Enterprise
HAR.....	Highway Advisory Radio
I	Interstate
ITS.....	Intelligent Transportation Systems
Lat	Latitude
Long.....	Longitude
LPR	License Plate Reader
MDX	Miami Dade Expressway
MM	Mile Marker
MUTCD	Manual on Uniform Traffic Control Devices
MVDS.....	Microwave Vehicle Detection System
NB.....	Northbound
PF	Probe Fusion Traffic Detector
PS	Point-Speed Traffic Detector
PSA	Public Safety Announcement
RTMC	Regional Transportation Management Center
RWIS.....	Road Weather Information Station
SB.....	Southbound
SR.....	State Road/State Route

TSM&O	Transportation Systems Management and Operations
TSS.....	Traffic Sensor Subsystem
TvT.....	Travel Time
US	United States
WB	Westbound
WWD	Wrong Way Device

1 Scope

1.1 Document Identification

This document outlines the naming and configuration standards for the Florida Department of Transportation's (FDOT) SunGuide® software. It describes where the noted parameters are configured in the SunGuide software; discusses how they affect external systems; explains the reasons for the specified formatting; and calls attention to certain areas of emphasis for standardization.

1.2 History

In 2001, the FDOT conducted a study to determine the best method to acquire an advanced traffic management system (ATMS) software solution that would meet specific needs for the entire state. One of the objectives was to reduce costs by eliminating duplication that would occur if each FDOT District developed their own ATMS software solution. The FDOT determined the best course of action would be to develop ATMS software tailored for Florida. Using the Texas Department of Transportation's software as a baseline, the FDOT modified and enhanced it into the package known today as the SunGuide software system.

1.3 Background

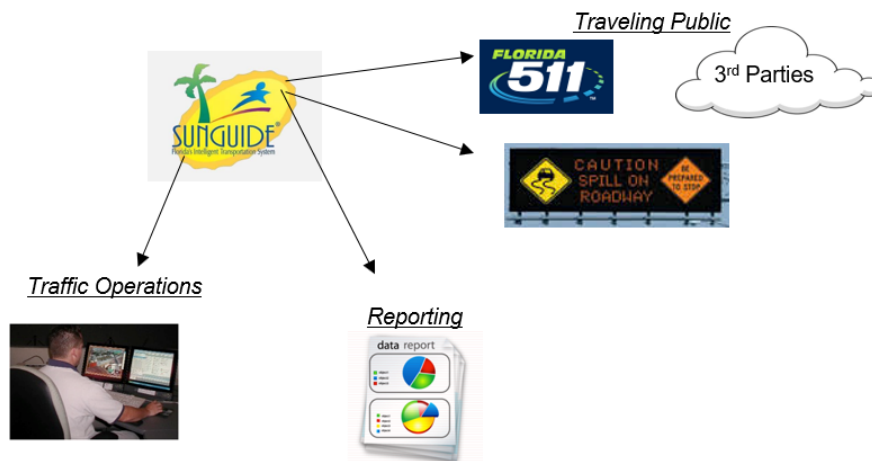
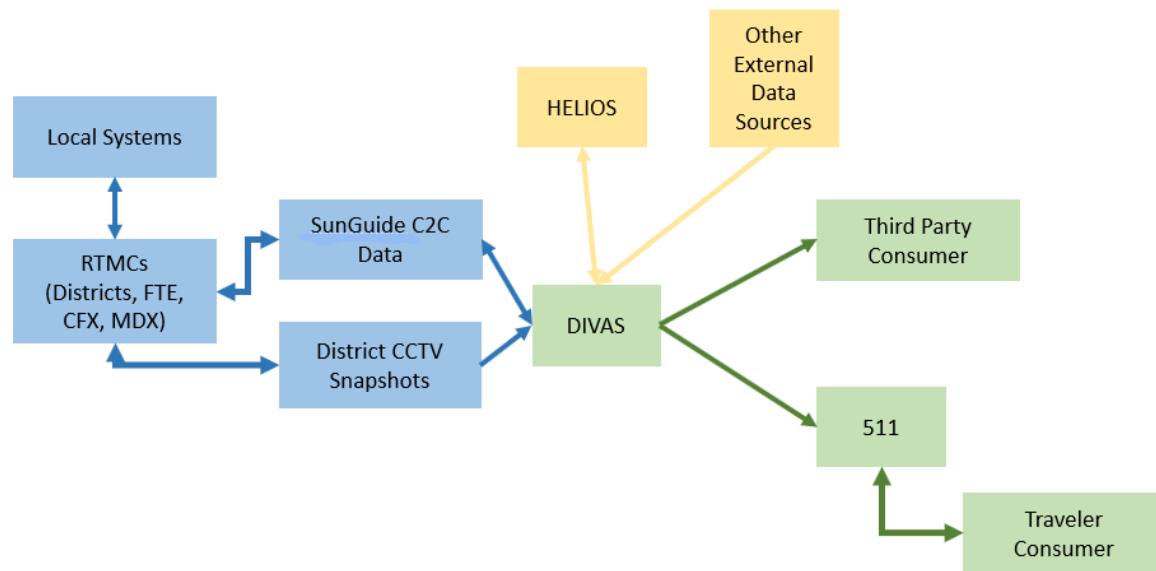


Figure 1-1: Areas Affected by SunGuide Software's Configuration

The SunGuide software is deployed in all FDOT Districts and other agencies throughout the state of Florida and is key to each agency's traffic operations. State-wide deployment of this software has enabled the FDOT to move toward consistency in traffic management and reporting. To ensure uniformity of data, SunGuide software must be used in a consistent way across Florida. Doing so not only enables the state to report consistently and generate comparative metrics, but it also

simplifies multi-agency event management (EM) and allows travelers to receive consistent traffic information throughout the state.

Figure 1-1 provides a high-level illustration of areas impacted by SunGuide. Ensuring configuration consistency makes it easier for each of the areas to manage many devices and locations. Below is a more detailed chart showing how data flows from SunGuide to the traveling public. Providing real-time road and traffic information is a vital public service made possible in part by the standardized naming protocol.



1.4 Contacts

Christine Shafik
State ITS Software Engineer
Florida Department of Transportation
Traffic Engineering and Operations Office
605 Suwannee Street, MS90
Tallahassee, FL 32399-0450
(850) 410-5615
Christine.Shafik@dot.state.fl.us

Clint Smith
TSM&O Program Development Engineer
SunGuide Project Advisor
Florida Department of Transportation
Traffic Engineering and Operations Office
605 Suwannee Street, MS90
Tallahassee, FL 32399-0450
(850) 410-5626
Clinton.Smith@dot.state.fl.us

Gregory Dudley
SunGuide Project Manager
Florida Department of Transportation
Traffic Engineering and Operations Office
605 Suwannee Street, MS90
Tallahassee, FL 32399-0450
(850) 410-5579
Gregory.Dudley@dot.state.fl.us

2 Naming and Configuration Standards

2.1 Summary of Naming and Configuration Standards

This document defines configuration and naming standards for the types of data listed in Table 2-1. This table provides a summary of the naming standards format, examples, and maximum number of characters that can be used, and where the data is used. Roadways included are Interstates (I), United States highways (US), state roads (SR), county roads (CR), and local roads.

Table 2-1: Naming and Configuration Standards Summary

Data Type	Format	Examples	Max Length	Where It Is Used
Roadway Name	I-XXX US-XXX SR-XXX CR-XXX {Local Name spelled out, limited abbreviations}	I-10 US-17/ 92 SR-50 CR-450 Hillview Street MLK Boulevard (abbreviations only used if street's name is an abbreviation)	200 Chars	<ul style="list-style-type: none"> • Event Reporting • EM • Dynamic Message Signs (DMS) • Florida 511 (FL511) System • DIVAS
Cross Street/Reference Name (Reference Point)	I-XXX US-XXX SR-XXX CR-XXX MM XXX {Local Name – use abbreviations}	I-10 US-17/ 92 SR-50 CR-450 MM 84 MLK Blvd Florida's Tpk Mile Markers Rest Area Collier Co Toll	20 Chars (short name) 50 Chars (long name)	<ul style="list-style-type: none"> • Event Reporting • EM • DMS • FL511 System • Third-Party Data Feed
Cross Street/Reference Name (EM Location)	I-XXX US-XXX SR-XXX CR-XXX MM XXX {Local Name/ Short name use abbreviations, Long name no abbreviations}	I-10 US-17/ 92 SR-50 CR-450 MM 84 MLK Boulevard Florida's Turnpike	20 Chars (short name) 50 Chars (long name)	<ul style="list-style-type: none"> • Event Reporting • EM • DMS • FL511 System • Third-Party Data Feed

Data Type	Format	Examples	Max Length	Where It Is Used
EM Location Sort Order	XXXXXXXXXX	1008552	38 Digits	<ul style="list-style-type: none"> • EM
EM Location Exit	XXX XXX{Suffix}	125 56 {A}	4 Chars 20 Chars (suffix)	<ul style="list-style-type: none"> • Event Reporting • EM • DMS • FL511 System • Third-Party Data Feed
EM Location Mile Marker	XXX XXX.X	125 87.5 7.5 (Do not use a zero in front of single digits for EM location, 7.5 not 07.5)	10 Digits	<ul style="list-style-type: none"> • Event Reporting • EM • DMS • FL511 System • Third-Party Data Feed
EM Location City and Metro Area	{Common Name}	Orlando Miami Tampa Fort Myers Saint Petersburg (spell out Saint)	50 Chars	<ul style="list-style-type: none"> • FL511 System • Third-Party Data Feed
EM Location Latitude/ Longitude	{Lat/Long Value in Microdegrees}	30482650 -84309210	9 Chars	<ul style="list-style-type: none"> • EM • FL511 System • Third-Party Data Feed
EM Location Alternate Roads	I-XXX US-XXX SR-XXX CR-XXX {Local Name spelled out, limited abbreviations}	I-10 US-17/ 92 SR-50 CR-450 MLK Boulevard (abbreviations only used if street's name is an abbreviation)	200 Chars	<ul style="list-style-type: none"> • EM • FL511 System • Third-Party Data Feed

Data Type	Format	Examples	Max Length	Where It Is Used
Device Location Latitude/Longitude	{Lat/Long Value in Microdegrees}	30482650 -84309210	9 Chars	<ul style="list-style-type: none"> • FL511 System • Third-Party Data Feed
DMS Device Name	<u>General Use DMS</u> {Roadway} {Direction} at {COUNTY CODE} Mile Marker XXX.X <u>Trail Blazer DMS</u> TB: {Roadway} {Direction} at {COUNTY CODE} {Location: Mile Marker XXX.X or Cross Street} <u>Express Lanes DMS</u> EL: {Roadway} {Direction} at {COUNTY CODE} Mile Marker XXX.X {Lanes: LXX or LXX-XX} <u>VSL DMS</u> VSL XX: {Roadway} {Direction} at {COUNTY CODE} Mile Marker XXX.X <u>Loc Desc</u> {Roadway} {Direction} {Relation} {Reference}	<u>General Use DMS</u> SR-408 EB at ORA Mile Marker 001.4 I-75 NB at HIC Mile Marker 261.1 <u>Trail Blazer DMS</u> TB: I-75 NB at Mile Marker 261.1 TB: University Blvd EB at ORA SR-434 <u>Express Lanes DMS</u> EL: I-75 NB at HIC Mile Marker 261.1 L01 EL: I-75 NB at HIC Mile Marker 264.5 L01-02 <u>VSL DMS</u> VSL 01: I-75 NB at HIC Mile Marker 261.1 VSL 02: I-75 NB at HIC Mile Marker 264.5 <u>Loc Desc</u> SR-408 EB W of Hiawasse Rd	255 Chars (sign name) 63 Chars (loc desc)	<ul style="list-style-type: none"> • EM • FL511 System • Third-Party Data Feed

Data Type	Format	Examples	Max Length	Where It Is Used
Closed-Circuit Television (CCTV) Device Name	<u>Camera Name</u> {3-Digit Camera Number}: {Roadway} COUNTY CODE} at MMXXX.X <u>Loc Desc</u> {Roadway} {Relation} {Reference}	<u>Camera Name</u> 005:SR-408 ORA at MM001.4 154: I-75 at HIC MM261.1 <u>Loc Desc</u> SR-408 E of Mills Ave I-4 W of E Colonial Dr	255 Chars (camera name) 63 Chars (loc desc)	<ul style="list-style-type: none"> • EM • FL511 System • Third-Party Data Feed
Traffic Detector Device Name	{MVDS / LOOP / CV / AVI / BT / LPR}: {Roadway} at {COUNTY CODE} Mile Marker XXX.X {Installed Location – Table 2-7} {Optional Differentiator}	MVDS: I-95 at SLU MM125.5 SS LOOP: I-275 at MNT Mile Marker 004.1 SM AVI: SR-528 at ORA Mile Marker 012.4 EM	30 Chars	<ul style="list-style-type: none"> • FL511 System • Third-Party Data Feed
Traffic Detector Link Name – Point-Speed Detectors	<u>Mainline Links</u> {MVDS / LOOP / CV} {Roadway}- {Direction} XXX.X <u>Ramp Links</u> {MVDS / LOOP / CV} {Roadway}- {Direction} XXX.X {ON/OFF} <u>Express Lane Links</u> {MVDS / LOOP / CV} {Roadway}- {Direction} XXX.X EL	MVDS: I-95-NB 125.5 MVDS: SR-528-WB 012.4 CV: SR-528-WB 012.4 ON LOOP: SR-528-WB 012.4 EL	255 Chars	<ul style="list-style-type: none"> • Traffic Detector Reporting • FL511 System • Third-Party Data Feed

Data Type	Format	Examples	Max Length	Where It Is Used
Traffic Detector Link Name – Probe Fusion Detectors	<p>Mainline Links <u>{AVI / BT / LPR}</u> <u>{Roadway}</u> - <u>{Direction} XXX.X</u> to <u>{Roadway}</u> - <u>{Direction} XXX.X</u></p> <p>Ramp Links <u>{AVI / BT / LPR}</u> <u>{Roadway}</u> - <u>{Direction} XXX.X</u> to <u>{Roadway}</u> - <u>{Direction} XXX.X</u> <u>{ON/OFF}</u></p> <p>Express Links <u>{AVI / BT / LPR}</u> <u>{Roadway}</u> - <u>{Direction} to</u> <u>{Roadway}</u> - <u>{Direction} XXX.X</u> EL</p>	<p>LPR I-95-NB 125.5 to I-95-NB 126.2</p> <p>LPR I-95-NB 125.5 to I-95-NB 126.2 EL</p> <p>AVI SR-528-WB 012.4 to SR-436-WB 001.3</p> <p>AVI SR-528-WB 012.4 to SR-528-WB 011.8 ON</p>	255 Chars	<ul style="list-style-type: none"> • Traffic Detector Reporting • FL511 System • Third-Party Data Feed
Traffic Detector Lane Name	(Traffic Detector Link name) LXX	<p>MVDS: I-95-NB 125.5 EL L01</p> <p>MVDS: I-95-NB 125.5 EL L02</p> <p>MVDS: I-95-NB 125.5 L03</p> <p>MVDS: I-95-NB 125.5 L04</p> <p>MVDS: I-95-NB 125.5 OFF L05</p> <p>AVI: SR-528-WB 012.4 to SR-528-WB 011.8 L01</p> <p>AVI: SR-528-WB 012.4 to SR-528-WB 011.8 L02</p>	255 Chars	<ul style="list-style-type: none"> • Traffic Detector Reporting

Data Type	Format	Examples	Max Length	Where It Is Used
Connected Vehicle Roadside Equipment (RSE)	RSE: {Roadway} at {COUNTY CODE} Mile Marker XXX.X	RSE:SR-408 at ORA MM001.4 RSE:I-75 at HIC MM261.1	255 Chars	• Connected Vehicle Reports
Express Lane Segments	{Roadway} {Direction} from {From Loc} to {To Loc}	I-4 EB from SR-528 to John Young Pkwy I-4 WB from MM 50.5 to MM 45.2	255 Chars	• Express Lanes Reports
Highway Advisory Radio (HAR)	HAR: {Roadway} at {COUNTY CODE} Mile Marker XXX.X	HAR:SR-408 at ORA MM 001.4 HAR:I-75 at HIC MM 261.1	255 Chars	• HAR Reports
Road Weather Information Station (RWIS)	RWIS: {Roadway} at {COUNTY CODE} Mile Marker XXX.X	RWIS:SR-408 at ORA MM001.4 RWIS:I-75 at HIC MM 261.1	255 Chars	• RWIS Reports
Safety Barrier	SFB: {Roadway} {Direction} at {COUNTY CODE} Mile Marker XXX.X	SFB:SR-408 EB at ORA MM 001.4 SFB: I-75 NB at HIC MM 261.1	255 Chars	• Safety Barrier Reports
Wrong Way Driving Devices	WWD: {Roadway} {Direction} at {COUNTY CODE} {Cross Street} {Ramp Designator}	WWD:SR-408 EB at ORA John Young Pkwy On Ramp WWD: I-75 NB at MAO US-27 Off Ramp	255 Chars	• Wrong Way Driving Reports
Truck Parking Facility	I-XX NB/SB/EB/WB Rest Area or Weigh Station at MM XX (use mile marker number to designate location, since not all rest areas or weigh stations are near cities)	I-95 NB Rest Area at MM 244 or I-75 SB Weigh Station at MM 278	255 Chars	• FL 511 System

Data Type	Format	Examples	Max Length	Where It Is Used
Travel Time (TvT) Link Name	<u>DMS Links</u> {Roadway} {Direction} from DMSXXX.X to {To Loc} <u>DMS Cross-Roads Links</u> From {Roadway} {Direction} DMSXXX.X to {Roadway} {Direction} {To Loc} <u>FL511 Links</u> {Roadway} {Direction} from {From Loc} to {To Loc} <u>FL511 Cross-Road Links</u> From {Roadway} {Direction} {From Loc} to {Roadway} {Direction} {To Loc} <u>Study Links</u> Study {Roadway} {Direction} from {From Loc} to {To Loc}	<u>DMS Links</u> I-4 WB from DMS075.5 to SR-408 <u>DMS Cross-Road Links</u> From I-95 NB DMS300.1 to West I-295 NB at I-10 <u>FL511 Links</u> SR-570 EB from West I-4 to East I-4 <u>FL511 Cross-Road Links</u> From SR-408 EB at Semoran Blvd to SR- 417 SB at SR-528 <u>Study Links</u> Study SR-570 EB from West I-4 to East I-4 Study SR-869 NB from I-75 to SR-814	255 Chars	<ul style="list-style-type: none"> • TvT Reporting • DMS • FL511 System • Third-Party Data Feed
511 Aliases	{Comma-separated list, no abbreviations except I, US, SR, and CR}	SR-417, GreeneWay, Seminole Expressway, Southern Connector	No more than 7 aliases	<ul style="list-style-type: none"> • FL511 System

Data Type	Format	Examples	Max Length	Where It Is Used
511 Spoken Name	{Actual name spelled out, no abbreviations except I, US, SR, and CR}	SR-417 Florida's Turnpike	One name only	• FL511 System

This document covers each of the data types in Table 2-1, describing in detail how the data is used and how it should be configured within SunGuide software.

2.2 Roadway Name

Roadway names are used throughout the SunGuide software system and are distributed to various external systems and devices, including:

- DIVAS
- Florida 511
- Drivers

When configuring this data type remember to configure its usage with Event Reporting, EM, DMS, the Florida 511 System, and the Third-Party Data Feed.

2.2.1 Roadway Name Rules / Formatting

SunGuide software allows for two different roadway names to be configured per roadway: a short name and description. To simplify configuration management, only one name should be used for both fields. There are no cases when the short name and description should be different. The maximum length of both fields is 200 characters.

Roadway names should be formatted as listed in Table 2-2 and follow these guidelines:

- If a roadway has multiple numeric designations, the order of preference noted should be used. For example, Interstate 95 is known as I-95 and SR-9. I-95 should be used because I-XXX has a higher order of preference. The only exception is Florida's Turnpike, in which case Florida's Turnpike is preferred over SR-91.
- Use the most common name for the road.
- Avoid using multiple names for a single roadway. If multiple names are required due to the merging of multiple roadways, then separate the names with a slash "/" followed by a space, and do not duplicate the designator. For example, US-17/92 in the Orlando area is a merger of US-17 and US-92. The correct naming of this roadway is "US-17/ 92". Note that "US" is not used twice, and there is a space between the slash and the "92."

- Spell out road names without abbreviations, and in initial caps format (do not use all caps). For example, use Davie Boulevard, not DAVIE BOULEVARD. However, when a roadway name is an acronym or set of commonly understood initials, for example “PGA Boulevard,” “LPGA Boulevard,” or “MLK Boulevard,” it is permitted to use the acronym in all caps.
- Always spell out Florida’s Turnpike. Note that Florida is possessive with an apostrophe between the “a” and “s”.
- Do not use periods.
- Add ordinal extensions for numbered streets. See section 2.2.2 for more detail.
- Do not use direction of travel as part of a roadway name. Direction should only be used if it distinguishes the name of the roadway. For example, “1st Avenue North” is permissible since “1st Avenue South” is a different roadway. Do not use northbound, southbound, eastbound or westbound.

Table 2-2: Roadway Name Formatting

Roadway Type	Order of Preference	Format	Examples	Notes
Interstate Highways	1	I-XXX	I-4 I-595 I-75	<ul style="list-style-type: none"> • Capital letters • Separate letters from numbers with a hyphen • No leading zeros
Florida’s Turnpike	2	Florida’s Turnpike	Florida’s Turnpike	<ul style="list-style-type: none"> • Spell out both words
US Highways	3	US-XXX	US-1 US-441 US-17/ 92	<ul style="list-style-type: none"> • Capital letters • Separate letters from numbers with a hyphen • No leading zeros
State Roads	4	SR-XXX	SR-7 SR-408 SR-52	<ul style="list-style-type: none"> • Capital letters • Separate letters from numbers with a hyphen • No leading zeros
County Roads	5	CR-XXX	CR-65 CR-400	<ul style="list-style-type: none"> • Capital letters • Separate letters from numbers with a hyphen • No leading zeros
Toll Roads	6	SR-XXX-Toll	SR-869-Toll SR-528-Toll Polk Parkway	<ul style="list-style-type: none"> • Capital letters • Use most common name (sometimes that is a number)

Roadway Type	Order of Preference	Format	Examples	Notes
			Sawgrass Expressway Veterans Expressway	and at other times it is a word or words.)
Named Roads	7	{Local Name}	University Boulevard North Jones Road PGA Boulevard 4th Street 1st Avenue North	<ul style="list-style-type: none"> • Spell out all words • Only capitalize first letter of each word unless using abbreviation • Acronyms permissible if commonly known as acronym • Do not use periods • Add ordinal extensions for numbered streets

2.2.2 Ordinal Extensions for Numbered Streets

Add ordinal extensions for numbered streets. The following ordinal extensions are permissible for the following numbers:

1 st	8th	15th
2nd	9th	16th
3rd	10th	17th
4th	11th	18th
5th	12th	19th
6th	13th	20th
7 th	14th	21st

For all numbers after 20, use the ordinal extensions for 1 to 9 according to the last digit (or last two digits for numbers over 100). For example, 81 should be 81st, 43 should be 43rd, and 111 should be 111th.

2.2.3 SunGuide Software Configuration

Roadway names are configured within SunGuide software's Administrative Editor by expanding "Event Management" and "Location Configuration," then selecting "Roadways." Roadways can be edited by selecting the desired roadway and clicking "Edit;" otherwise, a new roadway can be added by clicking "New Roadway."

The roadway name is configured in the "Name" and "Description" fields. Figure 2-1 shows where these two fields are located.

Name	Description	Sort Order	Performance Measures	Enable Congestion Tail Direction
I-295 W	I-295 W	30	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I-75	I-75	40	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I-95	I-95	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SR-202	SR-202 / Butler Blvd	60	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Acosta Bridge	Acosta Bridge	100	<input type="checkbox"/>	<input type="checkbox"/>
Airport	Airport / Duval Road	100	<input type="checkbox"/>	<input type="checkbox"/>
Bridge of Lions	Bridge of Lions	100	<input type="checkbox"/>	<input type="checkbox"/>
City of Gainesville	City of Gainesville	100	<input type="checkbox"/>	<input type="checkbox"/>
CR-210	CR-210	100	<input type="checkbox"/>	<input type="checkbox"/>
Hart Bridge	Hart Bridge	100	<input type="checkbox"/>	<input type="checkbox"/>
Main Street Bridge	Main Street Bridge	100	<input type="checkbox"/>	<input type="checkbox"/>

Buttons: Unmodified, Modified, New, Deleted

Included Counties: Duval (Sort Order: 10)

Available Counties: Dylla (5), Nassau (15), St. Johns (20), Baker (30)

Included Directions: Northbound, Southbound

Available Directions: Eastbound, Westbound, Innerloop, Outerloop

Status: No changes are unsaved. 0 status messages reported.

Figure 2-1: Roadway Configuration Fields within SunGuide Software

2.3 Cross Street/Reference Name

Cross Street/Reference names are used throughout the SunGuide software system and are distributed to various external systems and devices. When configuring this data type, remember to consider its usage with Event Reporting, EM, DMS, Florida 511, and the Third-Party Data Feed.

Cross Street/Reference names may refer to an actual cross street, or reference something that identifies the location. The latter may be a mile marker (Mile Marker), a structure such as a bridge or toll plaza, or other facility such as a rest area or weigh station.

There are two different configuration parameters used for Cross Street/Reference names, one called “Reference Point” and the other “EM Location.” The following describes these two parameters:

1. **Reference Point** — A Cross Street/Reference that can be used with one or more EM Locations. This is used to identify event locations when reporting to Florida 511 and to DMSs. Consequently, this must follow rules for both Florida 511 and DMSs as outlined in the Federal Highway Administration’s Manual on Uniform Traffic Control Devices(MUTCD). Adhere to road naming rules when identifying Reference Points.
2. **EM Location** — A Cross Street/Reference that is associated with a Reference Point. These are the locations provided to operators when they are creating/editing an event within

SunGuide software. Florida 511 reports the EM Location within the location field on FL511.com, personalized text alerts, Twitter, and other platforms. This should identify a specific location along a roadway. Therefore, exit numbers should be included if applicable.

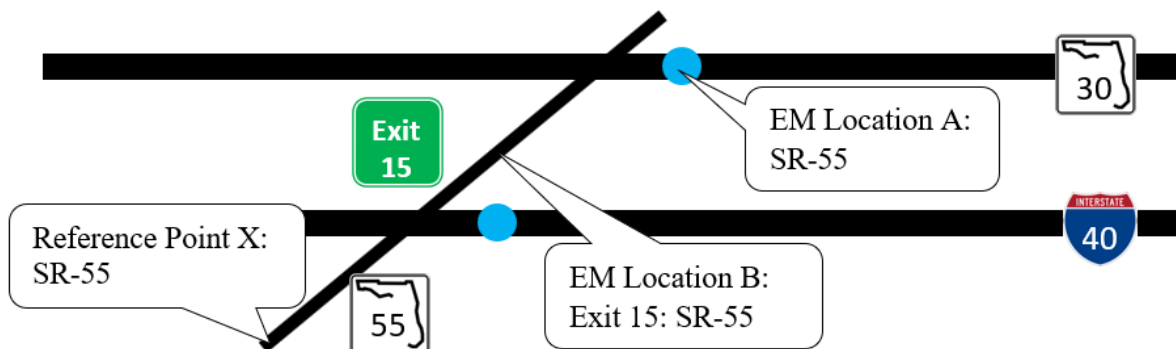


Figure 2-2: Reference Point Versus EM Location

Figure 2-2 illustrates how Reference Points and EM Locations are related. Note that the same Reference Point X can be associated with both EM Locations A and B. However, it is not necessary to reuse Reference Points. If desired, a new Reference Point can be created for each EM Location.

2.3.1 Cross Street/Reference Name Rules

The Cross Street or Reference Point should be uniquely identifiable to avoid confusing it with other locations. For example, a Reference Point called “Toll Plaza” is not uniquely identifiable; however, “Pine Hills Toll Plaza” may be, if multiple toll plazas are not given the same name. Because EM Locations are associated with a Reference Point, the Reference Point needs to be created before the EM Location.

2.3.2 Reference Point-Specific Rules and Formatting

Reference Points have a short and long name. The short name has a limit of 20 characters and the long name has a limit of 50 characters. Both short and long names use the same formatting rules, so both names should be the same whenever possible. Since the short name is limited to 20 characters, both names will likely be forced to 20 characters or fewer to maintain consistency.

For roadways, use the roadway naming formatting and rules in Table 2-2, with one exception: named roads and other local names can use abbreviations, especially as necessary to meet the 20-character limit.

Abbreviations should follow the MUTCD. [Click here](#) to view full manual. Table 2-3 lists some of the most common acceptable abbreviations according to the 2009 MUTCD. Do not use periods in abbreviations.

Table 2-3: Common Abbreviations

Word	Abbreviation
Avenue	Ave
Boulevard	Blvd
Bridge	Br
County Road	CR
Downtown	Dwntn
Drive	Dr
East	E
Eastbound	EB
Express	Exp
Expressway	Expwy
Freeway	Fwy
Highway	Hwy
Interstate	I
Junction / Intersection	Jct
North	N
Northbound	NB
Parkway	Pkwy
Road	Rd
South	S
Southbound	SB
State Road	SR
Street	St
Toll Plaza	Toll
Turnpike	Tpk
West	W
Westbound	WB

2.3.3 EM Location-Specific Rules and Formatting

EM Locations have a short and long name. The short name has a limit of 20 characters and the long name has a limit of 50 characters. Short and long names do not use the same formatting rules, so both names are typically not identical.

The primary difference between the short and long names is:

- The short name should use abbreviations wherever possible, for example “Pt St Lucie Toll.”
- The long name should not use abbreviations, for example “Port Saint Lucie Toll Plaza.”

Abbreviations should use MUTCD-approved recommended abbreviations for roadway designations and other names. Table 2-3 lists some of the most common acceptable abbreviations according to the 2009 MUTCD.

Do not use periods.

2.3.4 SunGuide Software Configuration

Reference Points: Reference Points are configured within SunGuide software’s Administrative Editor by expanding “Event Management” and “Location Configuration,” then selecting “Reference Points.” Reference Points can be edited by selecting the desired Reference Points and clicking “Edit;” otherwise, a new Reference Point can be added by clicking “New Reference Point.” See Figure 2-3.

EM Reference Point Configuration

New Reference Point Delete Reference Point

Reference Points

Short Name	Long Name	Description	Sort Order	Exit Number	Exit Suffix	Cross Street
St Johns River	St Johns River	St Johns River	5	0		<input checked="" type="checkbox"/>
Bridge	Bridge	Bridge	6	0		<input type="checkbox"/>
FL/GA State Line	FL/GA Line	FL/GA State Line	7	0		<input checked="" type="checkbox"/>
Intracoastal	Intracoastal	Intracoastal Water...	8	0		<input checked="" type="checkbox"/>
Duval/Nassau Cty	Nassau County	Nassau County Line	10	0		<input type="checkbox"/>
Duval/St Johns Cty	St. Johns County	St. Johns County Li...	15	0		<input type="checkbox"/>
Duval/Baker Cty	Baker County	Baker County Line	20	0		<input type="checkbox"/>
Columbia	Columbia County	Columbia County	25	0		<input type="checkbox"/>
Georgia	Georgia State Line	Georgia State Line	26	0		<input type="checkbox"/>
Duval Cty	Duval County	Duval County Line	27	0		<input type="checkbox"/>
Jefferson Cty	Jefferson County	Jefferson County	28	0		<input type="checkbox"/>
Flagler	Flagler County	Flagler County	30	0		<input type="checkbox"/>
Suwannee Cty	Suwannee County	Suwannee County	35	0		<input type="checkbox"/>
Madison Cty	Madison County	Madison County	36	0		<input type="checkbox"/>

Unmodified Modified New Deleted

No changes are unsaved.

Save Revert

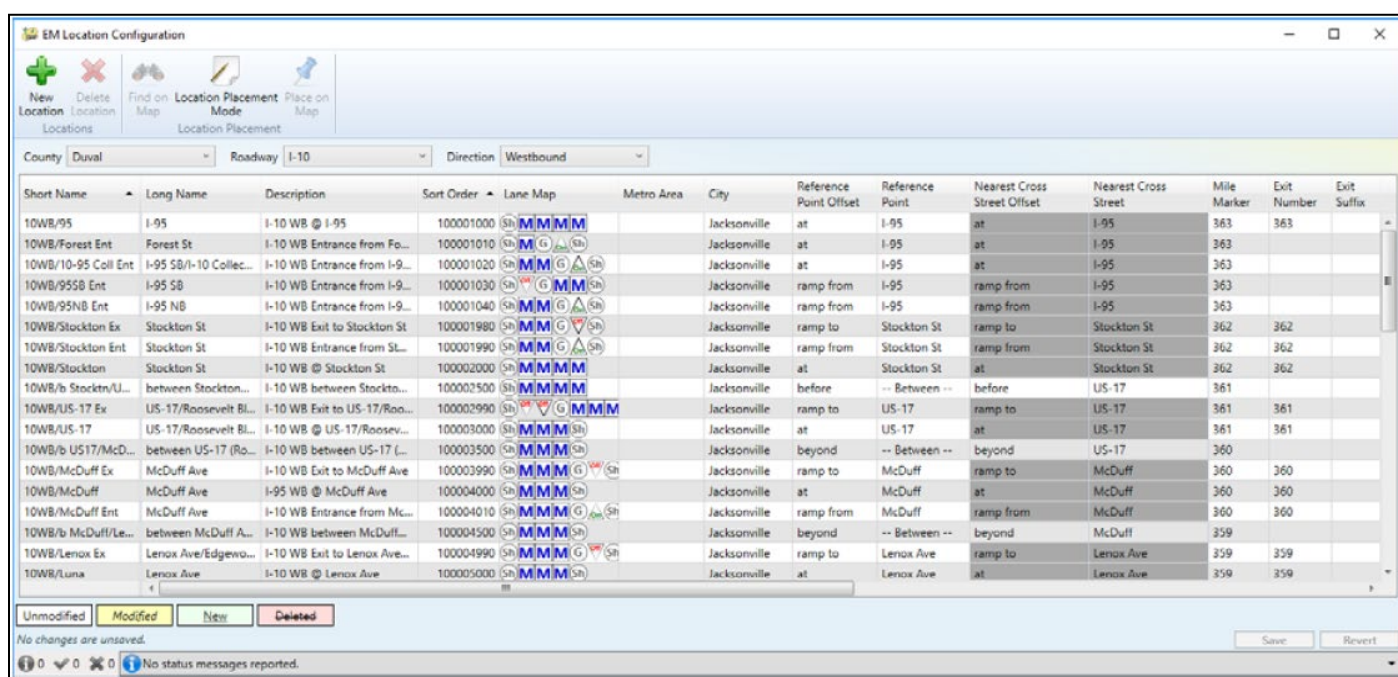
No status messages reported.

Figure 2-3: Reference Point Configuration Fields within SunGuide Software

The short and long names should be the same whenever possible. The description can also be the same, but there are no rules governing this field. Exit number and exit suffix are optional fields. Select the cross-street check box if the Reference Point is a street; this field is used for reporting purposes.

EM Locations: EM Locations are configured within SunGuide software’s Administrative Editor by expanding “Event Management” and “Location Configuration,” then selecting “Locations.” EM Locations can be edited by selecting the desired EM Location and clicking “Edit;” otherwise, a new EM Location can be added by clicking “New Location.” See Figure 2-4.

Whether adding or editing, a Reference Point must be selected as shown in Figure 2-4. Note that the associated Reference Point must be added prior to adding an EM Location.



Short Name	Long Name	Description	Sort Order	Lane Map	Metro Area	City	Reference Point Offset	Reference Point	Nearest Cross Street Offset	Nearest Cross Street	Mile Marker	Exit Number	Exit Suffix
10WB/95	I-95	I-10 WB @ I-95	100001000	Sh M M M M		Jacksonville	at	I-95	at	I-95	363	363	
10WB/Forest Ent	Forest St	I-10 WB Entrance from Fo...	100001010	Sh M G Sh		Jacksonville	at	I-95	at	I-95	363		
10WB/10-95 Coll Ent	I-95 SB/I-10 Collec...	I-10 WB Entrance from I-9...	100001020	Sh M G Sh		Jacksonville	at	I-95	at	I-95	363		
10WB/955B Ent	I-95 SB	I-10 WB Entrance from I-9...	100001030	Sh M G Sh		Jacksonville	ramp from	I-95	ramp from	I-95	363		
10WB/95NB Ent	I-95 NB	I-10 WB Entrance from I-9...	100001040	Sh M G Sh		Jacksonville	ramp from	I-95	ramp from	I-95	363		
10WB/Stockton Ex	Stockton St	I-10 WB Exit to Stockton St	100001980	Sh M G Sh		Jacksonville	ramp to	Stockton St	ramp to	Stockton St	362	362	
10WB/Stockton Ent	Stockton St	I-10 WB Entrance from St...	100001990	Sh M G Sh		Jacksonville	ramp from	Stockton St	ramp from	Stockton St	362	362	
10WB/Stockton	Stockton St	I-10 WB @ Stockton St	100002000	Sh M M M M		Jacksonville	at	Stockton St	at	Stockton St	362	362	
10WB/b Stockton/U...	between Stockton...	I-10 WB between Stockto...	100002500	Sh M M M M		Jacksonville	before	-- Between --	before	US-17	361		
10WB/US-17 Ex	US-17/Roosevelt BL	I-10 WB Exit to US-17/Roo...	100002990	Sh M G Sh		Jacksonville	ramp to	US-17	ramp to	US-17	361	361	
10WB/US-17	US-17/Roosevelt BL	I-10 WB @ US-17/Roosev...	100003000	Sh M M M M		Jacksonville	at	US-17	at	US-17	361	361	
10WB/b US17/McD...	between US-17 (Ro...	I-10 WB between US-17 (...)	100003500	Sh M M M M		Jacksonville	beyond	-- Between --	beyond	US-17	360		
10WB/McDuff Ex	McDuff Ave	I-10 WB Exit to McDuff Ave	100003990	Sh M M M M		Jacksonville	ramp to	McDuff	ramp to	McDuff	360	360	
10WB/McDuff	McDuff Ave	I-95 WB @ McDuff Ave	100004000	Sh M M M M		Jacksonville	at	McDuff	at	McDuff	360	360	
10WB/McDuff Ent	McDuff Ave	I-10 WB Entrance from Mc...	100004010	Sh M M M M		Jacksonville	ramp from	McDuff	ramp from	McDuff	360	360	
10WB/b McDuff/Le...	between McDuff A...	I-10 WB between McDuff...	100004500	Sh M M M M		Jacksonville	beyond	-- Between --	beyond	McDuff	359		
10WB/Lenox Ex	Lenox Ave/Edgeva...	I-10 WB Exit to Lenox Ave...	100004990	Sh M M M M		Jacksonville	ramp to	Lenox Ave	ramp to	Lenox Ave	359	359	
10WB/Luna	Lenox Ave	I-10 WB @ Lenox Ave	100005000	Sh M M M M		Jacksonville	at	Lenox Ave	at	Lenox Ave	359	359	

Figure 2-4: EM Location Configuration Fields within SunGuide Software

The short and long names do not need to be the same and should follow the formatting rules described in section 2.2.1 (roadway name rules/formatting). The description can be the same as the long or short names, but there are no rules governing this field.

2.4 EM Location Sort Order

The EM Location Sort Order is stored as part of an EM Location. Sort Order helps to arrange the EM Locations in the Administrative Editor for configuration management purposes and will order the EM Locations for operators in the Event Details window.

2.4.1 Sort Order Rules and Formatting

Sort Order should arrange EM Locations in geographic order, in the direction of travel. For example, numbering on I-4 eastbound should be ordered from the westernmost location (lowest number) to the easternmost location (highest number).

- Sort Order numbers can have up to 38 digits and should only contain numeric digits; no letters, symbols, or spaces.
- Numbers should be whole numbers greater than zero.
- It is highly recommended to count by tens for Sort Order values. In other words, the first five consecutive locations on a roadway should have Sort Order values of 10, 20, 30, 40, and 50. Doing this will allow additional locations to be added between configured locations. For example, if a new location needs to be added between locations with Sort Order 10 and 20, the new location can be assigned Sort Order 15 so that it is ordered properly between the legacy locations.

2.4.2 SunGuide Software Configuration

Sort Order is configured within SunGuide software's Administrative Editor by expanding "Event Management" and "Location Configuration," then selecting "Locations." EM Locations can be edited by selecting the desired EM Locations and clicking "Edit;" otherwise, a new EM Location can be added by clicking "New Location." See Figure 2-5.

Short Name	Long Name	Description	Sort Order	Lane Map	Metro Area	City	Reference Point Offset	Reference Point	Nearest Cross Street Offset	Nearest Cross Street	Mile Marker	Exit Number	Exit Suffix
10WB/95	I-95	I-10 WB @ I-95	100001000	Sh M M M M		Jacksonville	at	I-95	at	I-95	363	363	
10WB/Forest Ent	Forest St	I-10 WB Entrance from Fo...	100001010	Sh M G M		Jacksonville	at	I-95	at	I-95	363		
10WB/10-95 Coll Ent	I-95 SB/I-10 Collec...	I-10 WB Entrance from I-9...	100001020	Sh M M G M		Jacksonville	at	I-95	at	I-95	363		
10WB/95SB Ent	I-95 SB	I-10 WB Entrance from I-9...	100001030	Sh M G M M		Jacksonville	ramp from	I-95	ramp from	I-95	363		
10WB/95NB Ent	I-95 NB	I-10 WB Entrance from I-9...	100001040	Sh M M G M		Jacksonville	ramp from	I-95	ramp from	I-95	363		
10WB/Stockton Ex	Stockton St	I-10 WB Exit to Stockton St	100001980	Sh M M G M		Jacksonville	ramp to	Stockton St	ramp to	Stockton St	362	362	
10WB/Stockton Ent	Stockton St	I-10 WB Entrance from St...	100001990	Sh M M G M		Jacksonville	ramp from	Stockton St	ramp from	Stockton St	362	362	
10WB/Stockton	Stockton St	I-10 WB @ Stockton St	100002000	Sh M M M M		Jacksonville	at	Stockton St	at	Stockton St	362	362	
10WB/b Stockton/US-17	between Stockton...	I-10 WB between Stockto...	100002500	Sh M M M M		Jacksonville	before	-- Between --	before	US-17	361		
10WB/US-17 Ex	US-17/Roosevelt Bl...	I-10 WB Exit to US-17/Roo...	100002990	Sh M M M M		Jacksonville	ramp to	US-17	ramp to	US-17	361	361	
10WB/US-17	US-17/Roosevelt Bl...	I-10 WB @ US-17/Roosev...	100003000	Sh M M M M		Jacksonville	at	US-17	at	US-17	361	361	
10WB/b US17/McDuff	between US-17 (Ro...	I-10 WB between US-17 (...)	100003500	Sh M M M M		Jacksonville	beyond	-- Between --	beyond	US-17	360		
10WB/McDuff Ex	McDuff Ave	I-10 WB Exit to McDuff Ave	100003990	Sh M M M M		Jacksonville	ramp to	McDuff	ramp to	McDuff	360	360	
10WB/McDuff	McDuff Ave	I-95 WB @ McDuff Ave	100004000	Sh M M M M		Jacksonville	at	McDuff	at	McDuff	360	360	
10WB/McDuff Ent	McDuff Ave	I-10 WB Entrance from Mc...	100004010	Sh M M M M		Jacksonville	ramp from	McDuff	ramp from	McDuff	360	360	
10WB/b McDuff/Lenox	between McDuff A...	I-10 WB between McDuff...	100004500	Sh M M M M		Jacksonville	beyond	-- Between --	beyond	McDuff	359		
10WB/Lenox Ex	Lenox Ave/Edgewo...	I-10 WB Exit to Lenox Ave...	100004990	Sh M M M M		Jacksonville	ramp to	Lenox Ave	ramp to	Lenox Ave	359	359	
10WB/Lenox	Lenox Ave	I-10 WB @ Lenox Ave	100005000	Sh M M M M		Jacksonville	at	Lenox Ave	at	Lenox Ave	359	359	

Figure 2-5: Sort Order Configuration within SunGuide Software

2.5 *EM Location City and Metro Area*

EM Location City and Metro Area are stored as part of an EM Location. City and Metro Area help identify the location of a reported event within Florida 511 and are used for archive reporting purposes. The City and Metro Area configured for an EM Location are important so that Florida 511 phone users may hear an active event by asking for the city or metro area. When configuring City and Metro Area, consider the perceptions of residents and visitors to the area more so than the actual city limits on a map.

2.5.1 *City and Metro Area Rules / Formatting*

Both City and Metro Area are optional fields, but at least one — and preferably both when appropriate — should be configured for all EM Locations. A metro area is typically a larger area than a city, and there may be multiple cities within a metro area. Figure 2-6 illustrates the differences between a city and a metro area.

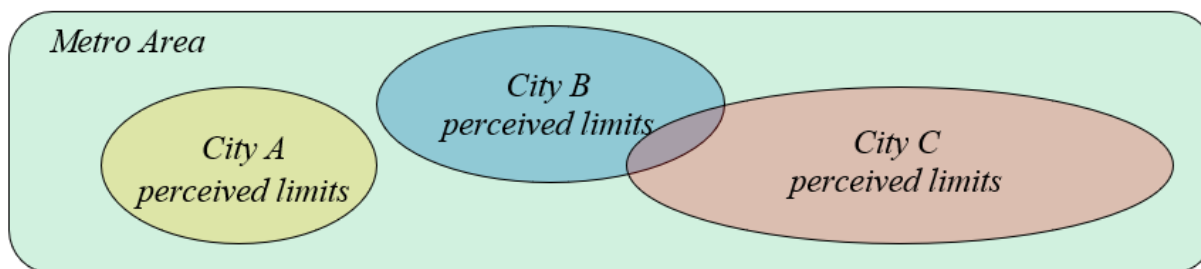


Figure 2-6: City Versus Metro Area Example

EM Locations should not follow city boundaries exactly. Rather, city configuration should follow perceived jurisdictions. In other words, city and metro areas should include areas that the traveling public generally associates with them. In some cases, there may be a need to configure multiple cities for a single EM Location. In the Figure 2-6 example, there is a small section in which the traveling public may believe they are in City B and/or City C. For EM Locations in these overlapping areas, multiple cities should be configured.

If multiple cities or metro areas are configured, names should be separated by commas. For example, if there is an area where the traveling public believes they are in Lauderhill and/or Coral Springs, the city configuration should be “Lauderhill, Coral Springs.”

- Capitalize only the first letter of each word in the name; all other letters should be lower case. For example, “Saint Petersburg” should be used and not “SAINT PETERSBURG.”
- Spell out all words for any city or metro area. For example, Port St. Lucie should be “Port Saint Lucie.”
- Do not use periods, dashes, or slashes.

- Do not include the word “city” in the name of the city, unless it is part of the commonly used name. For example, “Cross City” is the name of a city and should be entered that way, but “City of Orlando” should be entered as simply “Orlando.”

EM Locations that do not include a city and/or metro area will not be reported when a caller asks for that city or metro area.

- For example:
 - An incident occurs on I-10 at Thomasville Road. If “Tallahassee” is not configured as a city or metro area for that EM Location, and a caller asks for Tallahassee, they will not receive the incident report. However, if they ask for I-10 or Leon County, they will receive the report.
 - An incident occurs on I-4 at SR-436/ Semoran Boulevard. This incident is in the city of Altamonte Springs, which is in the metro Orlando area. Many area visitors may not be familiar with Altamonte Springs as a city, and believe they are still in Orlando. If “Altamonte Springs” is not entered into the city and “Orlando” into the metro area, callers asking for either city would not receive the report, even though it would be available by asking for I-4 or Seminole County.

2.5.2 SunGuide Software Configuration

The City and Metro Area are configured within SunGuide software’s Administrative Editor by expanding “Event Management” and “Location Configuration,” then selecting “Locations.” EM Locations can be edited by selecting the desired EM Locations and clicking “Edit;” otherwise, a new EM Location can be added by clicking “New Location.” See Figure 2-7.

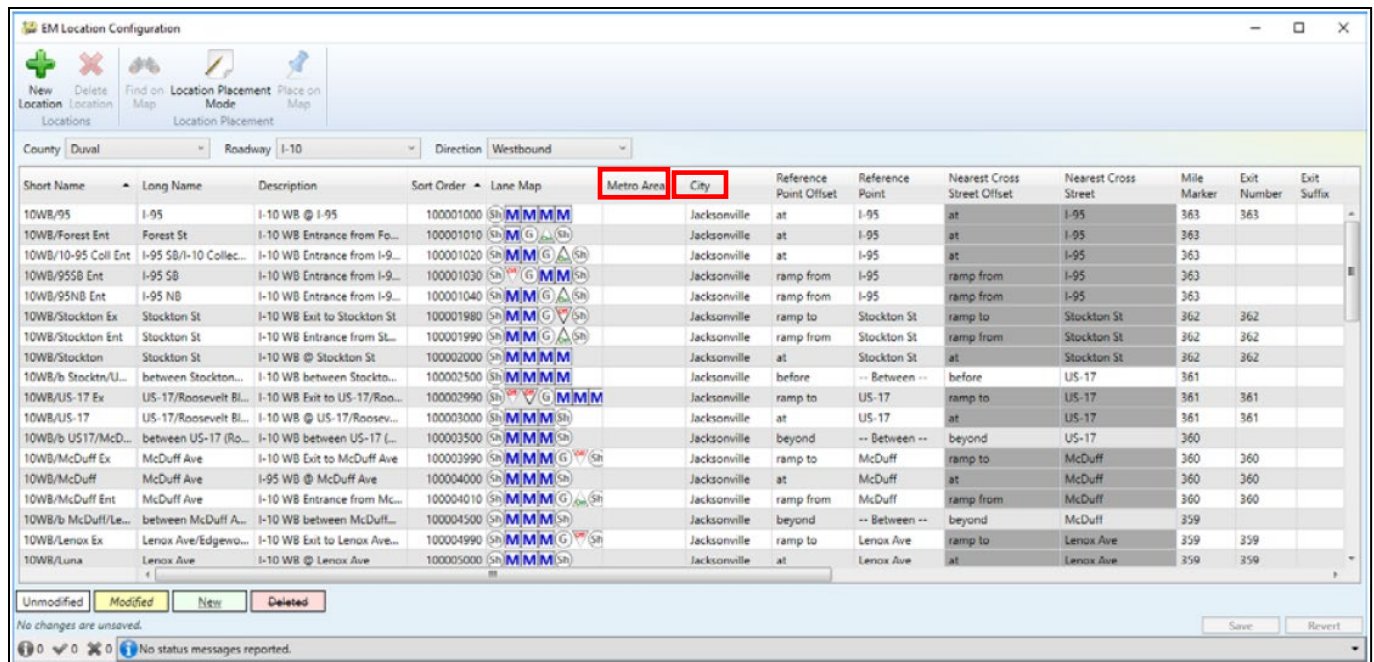


Figure 2-7: City and Metro Area Configuration within SunGuide Software

2.6 EM Location Mile Marker

The EM Location Mile Marker is stored as part of an EM Location. Mile Markers help identify the location of a reported event in Florida 511, and are used for archive reporting purposes.

2.6.1 Mile Marker Rules and Formatting

EM Location Mile Markers should follow roadside signage.

Mile Markers should be included wherever possible, but the field should be left blank if the roadway does not have mile markers.

Mile Markers:

- Mile Marker XXX (where XXX is the number of the mile marker, whether it is 1, 2, or 3 digits in length).
- Can have up to 10 digits.
- Should only contain a number with or without a decimal point. For example, valid values may include numbers like 10 or 10.5. Field should not include fractions, such as 10 1/2.
- Do not use a leading zero if the number is below 10; just use the number.

2.6.2 SunGuide Software Configuration

Mile Markers are configured within SunGuide software’s Administrative Editor by expanding “Event Management” and “Location Configuration,” then selecting “Locations.” EM Locations can be edited by selecting the desired EM Locations and clicking “Edit;” otherwise, a new EM Location can be added by clicking “New Location.” See Figure 2-8.

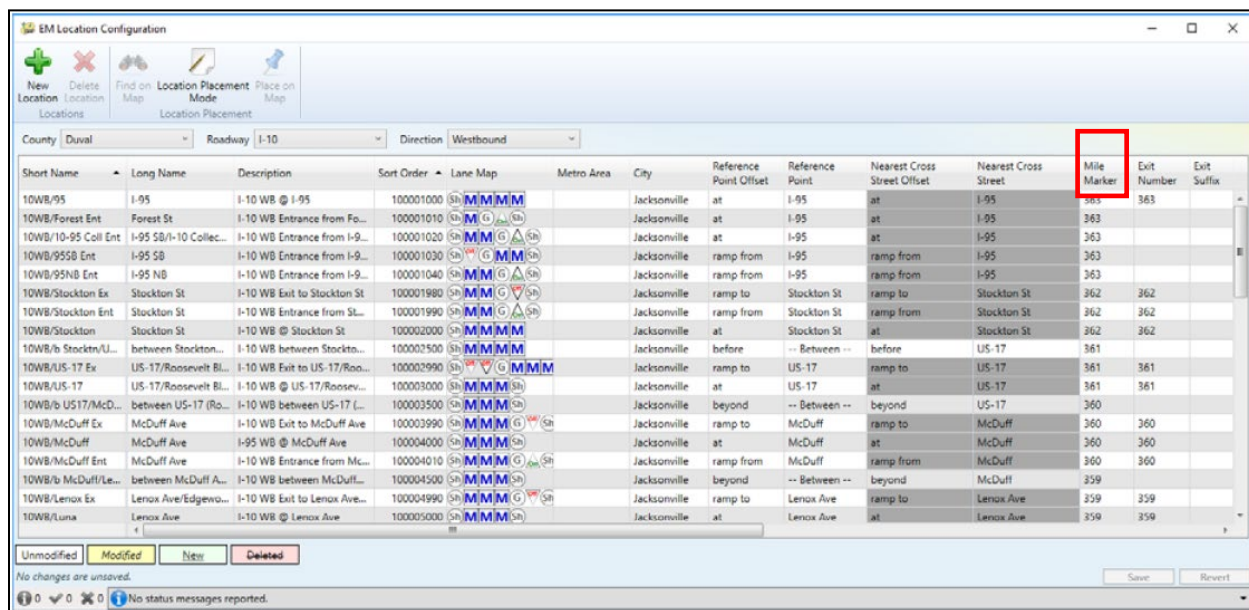


Figure 2-8: Mile Marker Configuration within SunGuide Software

2.7 EM Location Exit Number

The EM Location Exit Number is stored as part of an EM Location. Exits help identify the location of a reported event within Florida 511 and are used for archive reporting purposes.

2.7.1 Exit Number Rules and Formatting

- Exit Numbers should match roadside signage.
- Exit Numbers should be blank if the EM Location is not an exit.
- Exit Numbers can have up to four characters and should only contain numeric digits; no letters, symbols, or spaces. When an exit has an appended letter, for example “Exit 80B,” the letter should be entered in the optional Exit Suffix field, not in the Exit Number field.
 - The optional Exit Suffix is a separate field in SunGuide.
 - The Exit Suffix should only contain one or more letters.
 - The Exit Suffix is limited to 10 characters. For example, if an exit is signed “29B,” the exit should be configured “29” and the Exit Suffix should be “B.”

2.7.2 SunGuide Software Configuration

Exit Numbers are configured within SunGuide software's Administrative Editor by expanding "Event Management" and "Location Configuration," then selecting "Locations." EM Locations can be edited by selecting the desired EM Locations and clicking "Edit;" otherwise, a new EM Location can be added by clicking "New Location." See Figure 2-9.

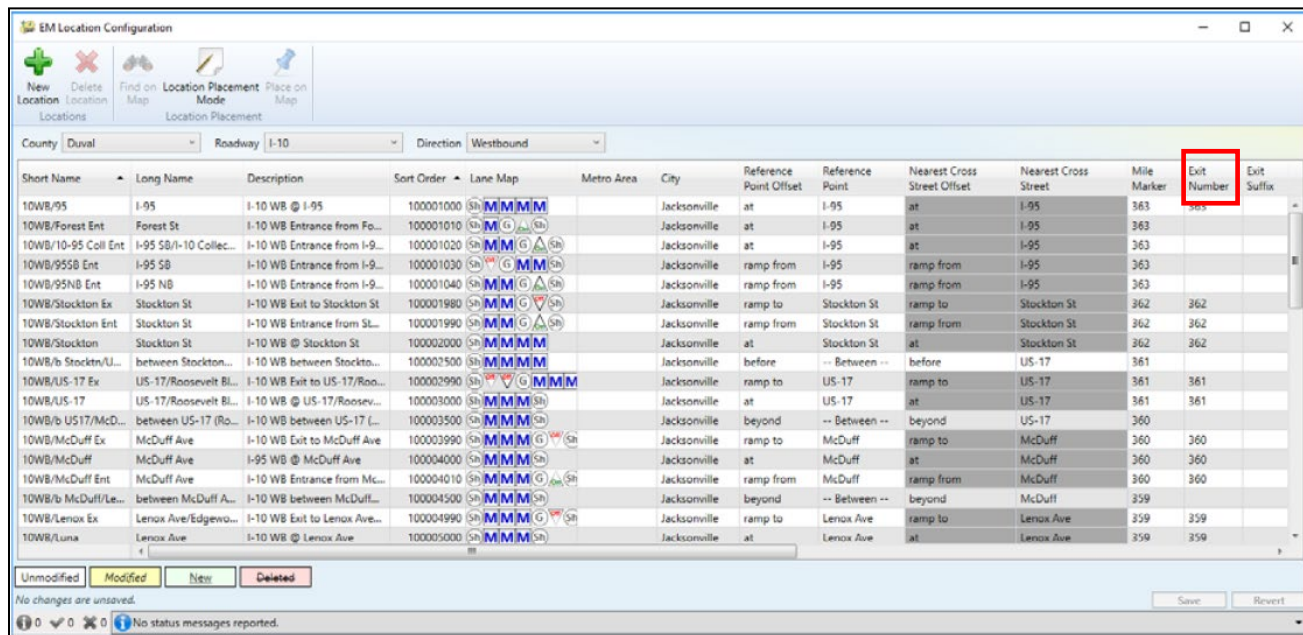


Figure 2-9: Exit Number Configuration within SunGuide Software

2.8 EM Location Latitude/Longitude

The EM Location Latitude/Longitude values are stored as part of an EM Location. Latitude/Longitude values help to identify the location of a reported event within Florida 511 and are used for archive reporting purposes.

2.8.1 Latitude and Longitude Rules and Formatting

- Latitude/Longitude values are stored in microdegrees.
- Values should be positive or negative whole numbers with no decimal points.
- Latitude/Longitude values should be as accurate as possible. Since EM Locations are direction specific, the locations should follow the center-most lane for each direction of travel.
- EM Location exit locations should be located at the exit gore.
- For EM Location at landmark reference points such as bridges, Latitude/Longitude values should be on the roadway at the geographic center of the landmark. For landmarks in which

there is an exit leading toward the landmark, such as a rest area, Latitude/Longitude values should be at the exit gore.

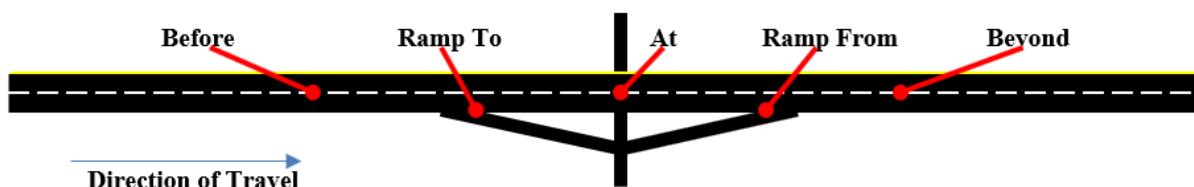


Figure 2-10: Concept of EM Location Offset Locations

SunGuide software stores a separate EM Location for different offsets. Offsets include Ramp To, Ramp From, Before, At, and Beyond. There should be a different Latitude/Longitude value for each of these offsets if there is a significant distance between the offset locations. Figure 2-10 illustrates how these offsets are related and where the Latitude/Longitude values should be located.

2.8.2 SunGuide Software Configuration

Latitude/Longitude values are configured within SunGuide software's Administrative Editor by expanding "Event Management" and "Location Configuration," then Selecting "Locations." EM Location can be edited by selecting the desired EM Locations and clicking "Edit;" otherwise, a new EM Location can be added by clicking "New Location." See Figure 2-11.

EM Location Configuration									
<div> <div> New Location Delete Location </div> <div> New Approach Delete Approach </div> <div> Find on Map Location Placement Mode Place on Map </div> </div>									
Country: Seminole Roadway: I-4 Direction: Eastbound									
Short Name	Long Name	Description	Metro Area	City	Reference Point Offset	Latitude	Longitude	Publish?	
SR-434 E On Ramp	Exit 94: SR-434			Longwood	ramp from	28666920	-81387750	<input checked="" type="checkbox"/>	
SR-436 / Semoran E	Exit 92: SR-436/ Semora...			Altamonte Springs	at	28660580	-81387830	<input checked="" type="checkbox"/>	
SR-436 Before	Exit 92: SR-436/ Semora...			Altamonte Springs	before	28660580	-81387830	<input checked="" type="checkbox"/>	
SR-436 Beyond	Exit 92: SR-436/ Semora...			Altamonte Springs	beyond	28660580	-81387830	<input checked="" type="checkbox"/>	
SR-436 E Off Ramp	Exit 92: SR-436/ Semora...			Altamonte Springs	ramp to	28660580	-81387830	<input checked="" type="checkbox"/>	
SR-436 E On Ramp	Exit 92: SR-436/ Semora...			Altamonte Springs	ramp from	28660580	-81387830	<input checked="" type="checkbox"/>	
St Johns Before	MM 105			Sanford	before	28835670	-81317830	<input checked="" type="checkbox"/>	
St Johns Beyond	MM 105			Sanford	beyond	28835670	-81317830	<input checked="" type="checkbox"/>	
St Johns River Br E	MM 105			Sanford	at	28835670	-81317830	<input checked="" type="checkbox"/>	
US-17/92 Before	Exit 104: US-17-92			Sanford	before	28829750	-81323080	<input checked="" type="checkbox"/>	
US-17/92 Beyond	Exit 104: US-17-92			Sanford	beyond	28829750	-81323080	<input checked="" type="checkbox"/>	
US-17-92 E Off Ramp	Exit 104: US-17-92			Sanford	ramp to	28829750	-81323080	<input checked="" type="checkbox"/>	
US-17-92 E On Ramp	Exit 104: US-17-92			Sanford	ramp from	28829750	-81323080	<input checked="" type="checkbox"/>	
US-17-92/W SJRBE	Exit 104: US-17-92			Sanford	at	28829750	-81323080	<input checked="" type="checkbox"/>	

Figure 2-11: EM Location Latitude/Longitude Configuration within SunGuide Software

2.9 EM Location Alternate Roads

The EM Location Alternate Roads are stored as part of an EM Location. Alternate Roads values help to identify alternative routes that the traveling public may take, near locations of a reported

event. Alternate Roads are reported from within FL511 and are used for archive reporting purposes.

When an operator selects an EM Location that has configured Alternate Roads, the operator may select to report the Alternate Roads. Even if an Alternate Road is configured, it will not be reported if the operator does not select it.

The Alternate Roads program provides the traveling public with route options to avoid traffic events where lanes may be blocked.

2.9.1 Alternate Roads Rules and Formatting

Alternate Roads are an optional configuration parameter. If configured, a primary and secondary Alternate Road may be configured. One, both or none can be configured.

If Alternate Roads are configured, the same rules and formatting for Roadway Names should be followed, as specified in Section 2.2.

A maximum of one primary and one secondary Alternate Road can be configured. An Alternate Road configuration should not contain turn-by-turn directions, only the name of a roadway. For example, an Alternate Road for I-95 in the Jacksonville area may be I-295 East or I-295 West.

2.9.2 SunGuide Software Configuration

Alternate Roads values are configured within SunGuide software's Administrative Editor by expanding "Event Management" and "Location Configuration," then selecting "Locations." EM Locations can be edited by selecting the desired EM Locations and clicking "Edit;" otherwise, a new EM Location can be added by clicking "New Location." See Figure 2-12.

Short Name	Long Name	Description	Metro Area	City	Reference Point Offset	Latitude	Longitude	Publish?
SR-434 E On Ramp	Exit 94: SR-434			Longwood	ramp from	28686920	-81387750	<input checked="" type="checkbox"/>
SR-436 / Semoran E	Exit 92: SR-436/ Semora...			Altamonte Springs	at	28660580	-81387830	<input checked="" type="checkbox"/>
SR-436 Before	Exit 92: SR-436/ Semora...			Altamonte Springs	before	28660580	-81387830	<input checked="" type="checkbox"/>
SR-436 Beyond	Exit 92: SR-436/ Semora...			Altamonte Springs	beyond	28660580	-81387830	<input checked="" type="checkbox"/>
SR-436 E Off Ramp	Exit 92: SR-436/ Semora...			Altamonte Springs	ramp to	28660580	-81387830	<input checked="" type="checkbox"/>
SR-436 E On Ramp	Exit 92: SR-436/ Semora...			Altamonte Springs	ramp from	28660580	-81387830	<input checked="" type="checkbox"/>
St Johns Before	MM 105			Sanford	before	28835670	-81317830	<input checked="" type="checkbox"/>
St Johns Beyond	MM 105			Sanford	beyond	28835670	-81317830	<input checked="" type="checkbox"/>
St Johns River Br E	MM 105			Sanford	at	28835670	-81317830	<input checked="" type="checkbox"/>
US-17/92 Before	Exit 104: US-17-92			Sanford	before	28829750	-81323080	<input checked="" type="checkbox"/>
US-17/92 Beyond	Exit 104: US-17-92			Sanford	beyond	28829750	-81323080	<input checked="" type="checkbox"/>
US-17-92 E Off Ramp	Exit 104: US-17-92			Sanford	ramp to	28829750	-81323080	<input checked="" type="checkbox"/>
US-17-92 E On Ramp	Exit 104: US-17-92			Sanford	ramp from	28829750	-81323080	<input checked="" type="checkbox"/>
US-17-92/W SJRBE	Exit 104: US-17-92			Sanford	at	28829750	-81323080	<input checked="" type="checkbox"/>

Section	Reference Point	Nearest Cross Street Offset	Nearest Cross Street	Mile Marker	Exit Number	Exit Suffix	Heading	Primary Alt Road Name	Primary Alt Road Description	Secondary Alt Road Name	Secondary Alt Road Description
Eastbound	MM 92/SR-436	at	MM 92/SR-436	92	92		90				

Figure 2-12: Alternative Roads Configuration within SunGuide Software

2.10 Device Location Latitude/Longitude

The Device Location Latitude/Longitude values are stored as part of a device configuration. Devices include traffic detectors, DMS, CCTV, highway advisory radio (HAR) systems, beacons, road weather information stations (RWIS), and safety barriers. Latitude/Longitude values help identify the location of these devices on the FL511 website and other platforms and the SunGuide software operator map.

2.10.1 Latitude and Longitude Rules/Formatting

Latitude/Longitude values are stored in microdegrees. Values should be positive or negative whole numbers with no decimal points.

Latitude/Longitude values should be as accurate as possible. There may be cases when devices are located at the same spot, even on the same pole. In these cases, it may be difficult or impossible for operators to differentiate icons on the SunGuide software operator map, so modifying the location to offset overlapping locations is recommended.

2.10.2 SunGuide Software Configuration

Latitude/Longitude values are configured within SunGuide software's Administrative Editor. Values are set within each device configuration screen. Figure 2-13 is an example of Latitude/Longitude values for Map Shields.

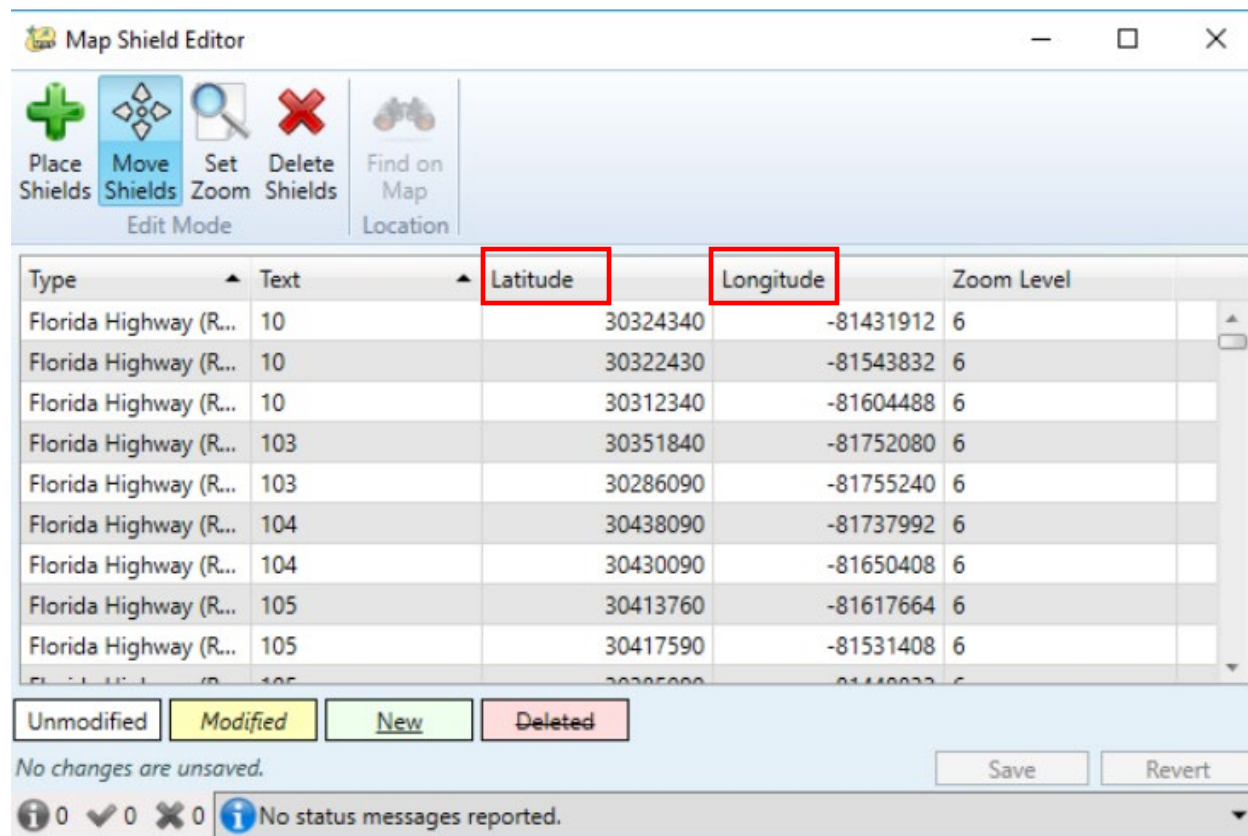


Figure 2-13: Example Device Latitude/Longitude Configuration within SunGuide Software

2.11 County Codes

Various devices require county codes. County codes should match one of the three-letter codes as listed in Table 2-4. County codes need to use the three capital letter abbreviations listed below whenever they are inputted in any entry.

Table 2-4: County Codes

Code	County	Code	County
ALC	Alachua	LKC	Lake
BAC	Baker	LEE	Lee
BAY	Bay	LEO	Leon
BRD	Bradford	LVY	Levy
BRV	Brevard	LBE	Liberty

Code	County	Code	County
BRW	Broward	MAD	Madison
CLN	Calhoun	MNT	Manatee
CHA	Charlotte	MAO	Marion
CIR	Citrus	MTC	Martin
CLY	Clay	MDC	Miami-Dade
COL	Collier	MON	Monroe
CLA	Columbia	NAS	Nassau
DEU	Desoto	OKA	Okaloosa
DIX	Dixie	OKC	Okeechobee
DVL	Duval	ORA	Orange
ESC	Escambia	OSC	Osceola
FLR	Flagler	PBC	Palm Beach
FRN	Franklin	PSC	Pasco
GAD	Gadsden	PIN	Pinellas
GIL	Gilchrist	POL	Polk
GLA	Glades	PUT	Putnam
GLF	Gulf	SAJ	St. Johns
HLN	Hamilton	SLU	St. Lucie
HAR	Hardee	SRC	Santa Rosa
HEN	Henry	SAR	Sarasota
HER	Hernando	SEM	Seminole
HIG	Highlands	SUM	Sumter
HIC	Hillsborough	SUW	Suwannee
HMS	Holmes	TAY	Taylor
IRC	Indian River	UNC	Union
JAC	Jackson	VOL	Volusia
JEF	Jefferson	WAK	Wakulla
LAF	Lafayette	WTN	Walton
		WSN	Washington

2.12 DMS Device Name

The DMS Device names are stored as part of a DMS device configuration. Meaningful and consistently formatted DMS Device names help SunGuide software operators and FL511 users to identify and locate the unit. DMS Device names are also used in device reporting.

SunGuide software uses two different fields for the DMS Device name. The Sign Name is presented to SunGuide software operators and the Location Description is available to SunGuide software operators but is primarily used by FL511 users. These two fields follow different formatting rules and should be different.

2.12.1 DMS Device Name Rules/Formatting

The DMS Device Sign Name should be named using a mile marker as a reference wherever possible. If the roadway does not have mile markers, a unique cross street or other reference point can be used. However, DMS are presented to a SunGuide software operator in alphabetical order. The naming standard for DMS assumes mile markers are used and, please note that if placed in alphabetical order, the system will list the devices in geographic order. In any case, the Sign Name must be unique. If needed, the Sign Name may be appended with a letter, e.g., A, B, C, etc., to ensure the name is unique.

The DMS Device Location Description should reference the closest cross street or reference location. Each DMS Device Location Description should be unique. If multiple DMS devices are near the same cross street or reference location, a different cross street or reference location, or a different relation should be used. Alternatively, the Location Description may be appended with a letter, e.g., A, B, C, etc., to ensure the name is unique.

Roadways and reference locations used in DMS Device Location Description should follow the same formatting standards and rules for Reference Points, as described in section 2.3.4 (Reference Points). These standards use abbreviations as necessary.

Relations are how the device geographically relates with the cross street or reference location. Relations can be one of the following: “at,” “N of,” “S of,” “E of,” or “W of.”

All sign names should include one of four directions of travel: NB, SB, EB, or WB.

A county code should be used in the Sign Name. Reference Section 2.11 of this document for all valid county codes.

The DMS Device Sign Name can be a maximum of 255 characters and the DMS Device Location Description can be a maximum of 63 characters.

There are four variations of DMS Device Sign Names depending on their use:

- General Use: Includes roadway, direction, and mile marker.
- Trail Blazer (TB): Defined as relatively small signs with a very limited number of characters supported. Sign Names begin with “TB” and cross streets are permitted on roadways without mile markers.

- Express Lanes (EL): Used for Express Lane price reporting. Sign Names begin with “EL” and end with the lane or lanes over which the DMS is mounted.
- Variable Speed Limit (VSL): Used for reporting variable speed limits. Sign Names begin with “VSL” followed by a two-digit sign number.

Location Descriptions have the same format for all DMS uses.

Table 2-5 describes the standard formatting for DMS Device Sign Name and Location Description.

Table 2-5: DMS Device Naming Standards

SunGuide Software Field	Format	Examples
Sign Name	<p><u>General Use DMS</u> {Roadway} {Direction} at {COUNTY CODE} Mile Marker XX.X</p> <p><u>Trail Blazer DMS</u> TB: {Roadway} {Direction} at {COUNTY CODE} {Location: Mile Marker XX.X or Cross Street}</p> <p><u>Express Lanes DMS</u> EL: {Roadway} {Direction} at {COUNTY CODE} Mile Marker XX.X {Lanes: LXX or LXX-XX}</p> <p><u>VSL DMS</u> VSL XX: {Roadway} {Direction} at {COUNTY CODE} Mile Marker XXX.X</p>	<p><u>General Use DMS</u> SR-408 EB at ORA Mile Marker 001.4 I-75 NB at HIC Mile Marker 261.1</p> <p><u>Trail Blazer DMS</u> TB: I-75 NB at HIC Mile Marker 261.1 TB: University Blvd EB at ORA SR-434</p> <p><u>Express Lanes DMS</u> EL: I-75 NB at HIC Mile Marker 261.1 L01 EL: I-75 NB at HIC Mile Marker 264.5 L01-02</p> <p><u>VSL DMS</u> VSL 01: I-75 NB at HIC Mile Marker 261.1 VSL 02: I-75 NB at HIC Mile Marker 264.5</p>
Location Description	{Roadway} {Direction} {Relation} {Reference}	SR-408 EB W of Hiawasse Rd I-75 NB at US-92

2.12.2 DMS Messaging

DMS messages are not a part of FL-ATIS, except that the DMS messages do appear on the Florida 511 website on the maps page when a user clicks on a DMS icon, and on the Message Boards tab under the Traffic section.

It is important that the DMS messages that appear on the roadways match as closely as possible to the information that will be presented on the FL-ATIS website and IVR system. This helps users of both systems understand that they are connected and receiving data from the same source. This increases the reliability and user trust of FDOT's ITS systems. Research has shown that people do use both systems to check traffic conditions.

Because FL-ATIS has the flexibility to offer more detailed information than DMSs, it is important that a user can read a DMS message, then use that message to call 511 and get more details regarding an event.

Information on DMS messages should always be in all capital letters. Abbreviations are allowed on DMS messages since the messages are limited in length.

FDOT DMS safety messages are located at <https://www.fdot.gov/traffic/trafficservices/dms>. These messages are updated on a regular basis.

2.12.3 SunGuide Software Configuration

DMS Device sign names and location descriptions are configured within SunGuide software's Administrative Editor. Values are set within each device configuration screen by expanding "DMS" and selecting "Signs." DMS Devices can be edited by selecting the desired DMS and clicking "Edit;" otherwise, a new DMS can be added by clicking "Add." See Figure 2-14.

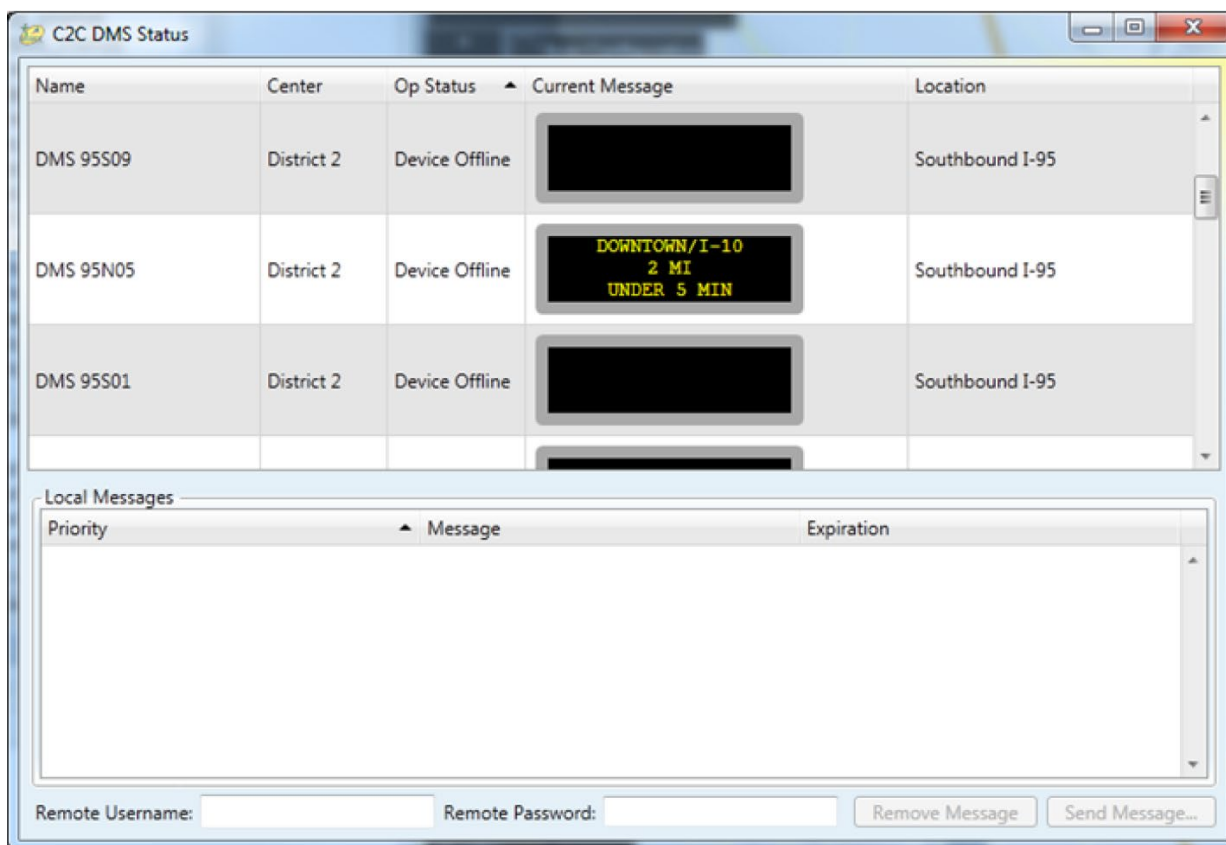


Figure 2-14: DMS Device Name Configuration within SunGuide Software

2.13 CCTV Devices

CCTV Device names are stored as part of a CCTV device configuration. Meaningful and consistently formatted CCTV Device names help SunGuide software operators and FL511 users identify and locate the device. CCTV Device names are also used in device reporting.

SunGuide software uses two different fields for the CCTV Device name. The Camera Name is presented to SunGuide software operators and the Location Description is available to SunGuide software operators but is primarily used by FL511 users. These two fields follow different formatting rules and should be different.

2.13.1 CCTV Device Name Rules/Formatting

The CCTV Device Camera Name should be named using a mile marker as a reference wherever possible. If the roadway does not have mile markers, a unique cross street or other reference point can be used. However, CCTV devices are presented to a SunGuide software operator in alphabetical order. The naming standard for CCTV assumes mile markers are used and, if placed in alphabetical order, the system will list the devices in geographic order. In any case, the Camera Name must be unique. If needed, the Camera Name may be appended with a letter, e.g., A, B, C, etc., to ensure the name is unique.

The CCTV Device Location Description should reference the closest cross street or reference location. Each CCTV Device Location Description should be unique. If multiple CCTV devices are near the same cross street or reference location, a different cross street or reference location, or a different relation should be used. Alternatively, the Location Description may be appended with a letter, e.g., A, B, C, etc., to ensure the name is unique.

The roadways and reference locations used in CCTV Device Location Description should follow the same formatting standards and rules for Reference Points, as described in section 2.3.4 (Reference Points). These standards use abbreviations as necessary.

Relations are how the device geographically relates with the cross street or reference location. Relations can be one of the following: “at,” “N of,” “S of,” “E of,” or “W of.”

Naming should not include a direction of travel.

A county code should be used in the Camera Name. Reference Section 2.11 of this document for all valid county codes.

The CCTV Device Camera Name must match the names in the video wall controller configuration for tours to work in the video wall.

The CCTV Device Camera Name must start with a three-digit number followed by a delimiter of underscore (‘_’), hyphen (‘-’), space (‘ ’), or colon (‘:’) for SunGuide to be able to identify the camera number for use with the joystick.

The CCTV Device Camera Name can be a maximum of 255 characters and the CCTV Device Location Description can be a maximum of 63 characters.

Table 2-6 describes the standard formatting for CCTV Device Camera Name and Location Description.

Table 2-6: CCTV Device Naming Standards

SunGuide Software Field		Format	Examples
Camera Name		{Three-Digit Camera Number}:{Roadway} COUNTY CODE} at MMXXX.X	005:SR-408 ORA at MM001.4 154:I-75 at HIC MM261.1
Location Description		{Roadway} {Relation} {Reference}	SR-408 W of Hiawasse Rd I-75 at US-92

2.13.2 SunGuide Software Configuration

The CCTV Device names are configured within SunGuide software’s Administrative Editor. Values are set within each device configuration screen by expanding “CCTV” and selecting “Cameras.” CCTV Devices can be edited by selecting the desired CCTV Device and clicking “Edit;” otherwise, a new CCTV Device can be added by clicking “New Camera.” See Figure 2-15.

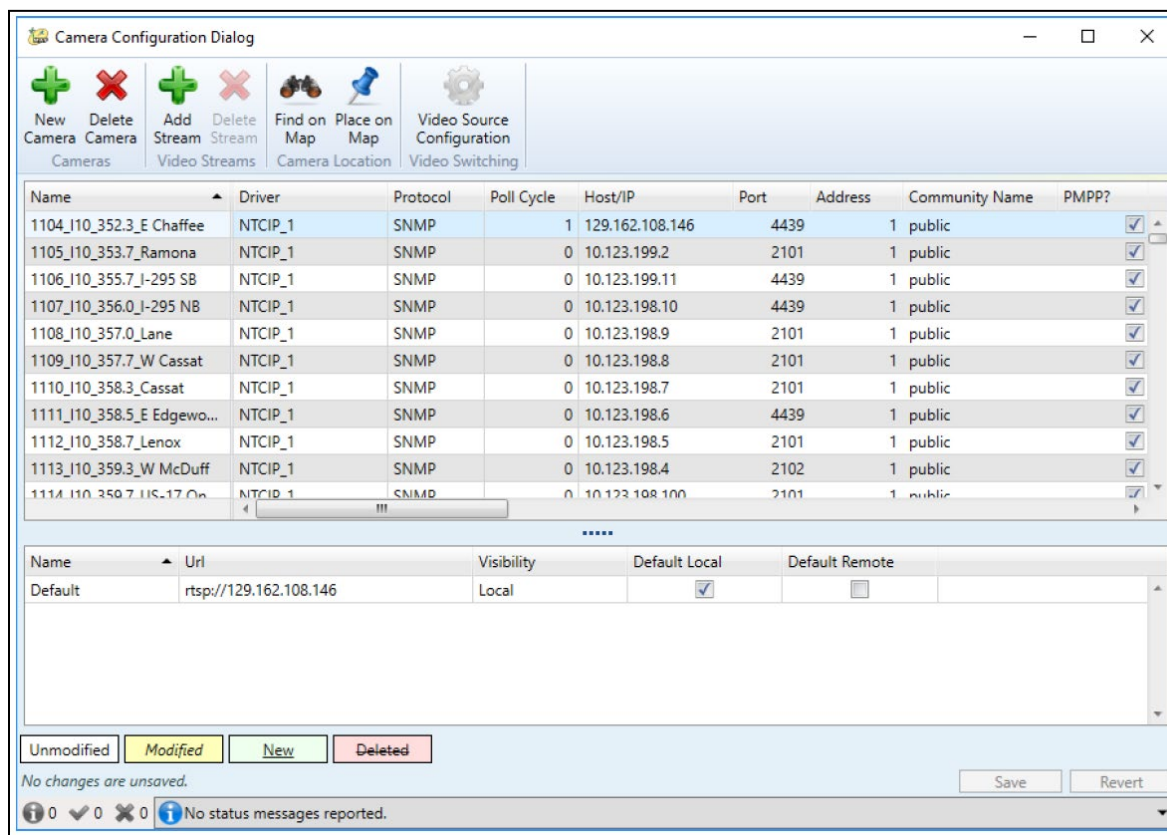


Figure 2-15: CCTV Device Name Configuration within SunGuide Software

2.14 Traffic Detector Name

Traffic Detector names are stored as part of a Traffic Sensor Subsystem (TSS) device configuration. Meaningful and consistently formatted Traffic Detector names help SunGuide software operators and FL511 users to identify and locate the device. TSS Device names are also used in device reporting.

SunGuide software uses two different fields for the Traffic Detector name. The Detector Name is presented to SunGuide software operators and used for data archiving and reporting. The Location Description is also available to SunGuide software operators. These two fields follow the same formatting rules and should be the same.

2.14.1 Traffic Detector Name Rules/Formatting

Traffic Detector names, including both the Detector Name and the Location Description, should be named using a mile marker. If the roadway does not have mile markers, they should be contrived for the roadway for the purpose of traffic detection. Contrived mile markers should start at mile marker zero at the westernmost point on east-west roadways and the southernmost point on north-south roadways. These mile markers are important for TvT link calculations and maintenance.

Mile markers for devices should be accurate to the tenth of a mile and contain three digits to the left of the decimal point, with leading zeros. For example, Mile Marker 4.7 should be named “004.7” and Mile Marker 105 should be “105.0.”

Roadways used in Traffic Detector name should follow the same formatting standards and rules for Reference Points, as described in section 2.3.4 (Reference Points). These standards use abbreviations as necessary.

The Traffic Detector name can be a maximum of 30 characters. Due to this limiting length, configuration must be as efficient as possible with the roadway and reference point. If needed, names should be truncated. For example, “University Boulevard” could simply be “Unv” or “UnvB.”

Do not use directional relations, such as “at,” “N of,” “S of,” “E of,” or “W of.”

A county code should be used in the Traffic Detector name. Reference Section 2.11 of this document for all valid county codes.

The first two- to four-letter segment of all Traffic Detector names should be one of the three supported point-speed detector acronyms (MVDS, LOOP, or CV) or one of the three supported probe fusion detector acronyms (LPR, AVI, or BT). The following describe the different allowable acronyms.

- Point-Speed detectors include all detectors that capture and report speed, volume, and occupancy at the detector location. For these type of detectors, one of the three following should be used:
 - **MVDS:** Used if the point-speed device uses microwave detection technology.
 - **LOOP:** Used if the point-speed device uses loop detection technology.
 - **CV:** Used if the point-speed device uses connected vehicle detection technology.
- Probe Fusion detectors include all detectors that report an identifier and timestamp which SunGuide software uses to calculate a travel time. For probe fusion detectors, one of the three following should be used:

- **AVI:** Used if the probe fusion device is an automated vehicle identification (AVI) detector.
- **BT:** Used if the probe fusion device is a probe vehicle detector that uses Bluetooth (BT) technology.
- **LPR:** Used if the probe fusion device is a license plate reader (LPR).

The next segment of the Traffic Detector name should indicate the roadway.

The next segment of the Traffic Detector name is optional and should indicate if the detected road segment is a specialized roadway. In this case, an appropriate abbreviation should be used. For example, I-95 Express Lanes should have an “-EL” after the roadway segment of the name as in “AVI I-95-EL 005.5.” This “EL” should only be added if the detector is used exclusively for express lanes. Otherwise, the “EL” should be added in the link and lane names, not the Traffic Detector name.

The next segment of the Traffic Detector name should indicate the mile marker with three digits and one decimal digit. The three digits should lead with one or two zeros if the value is less than 100, and the decimal digit should always be reported even if the value is zero. For example, Mile Marker 23.4 should be “023.4” and Mile Marker 7 should be “007.0.”

The direction of the roadway where the detector is installed is part of the SunGuide software configuration but should not typically be contained in the name. Direction is not required to have any bearing on the direction of travel covered by the detection. Including direction in the Traffic Detector name could confuse operators and data analysts who are not concerned with the physical deployment. Whenever possible, do not include direction unless a differentiator is required (see following paragraph).

Details of the detector installed location should be included, using one of the abbreviations included in Table 2-7.

Table 2-7: Detector Installed Location Acronyms Standard

Acronym	Installed Location
NS	Northbound Shoulder
NM	Northbound Median
SS	Southbound Shoulder
SM	Southbound Median
ES	Eastbound Shoulder
EM	Eastbound Median
WS	Westbound Shoulder
WM	Westbound Median
MB	Median accessible from both directions

Traffic Detector names should be unique. There may be cases in which multiple detectors may exist at the same Mile Marker on the same side of the road, especially in cases where detectors are mounted on the same pole to monitor mainlines separately from ramps or special purpose lanes. In this case, an optional differentiator can be added at the end of the device name. To conserve characters, this differentiator should be limited to one character. The differentiator can be a consecutive number, such as “1,” “2,” “3,” etc. Do not use standard direction nomenclature, such as “NB,” “SB,” “EB,” and “WB,” since these typically indicate the direction of travel associated with the data.

Table 2-8 describes the standard formatting for Traffic Detector names.

Table 2-8: Traffic Detector Naming Standard

SunGuide Software Field	Format	Examples
Traffic Detector Name (Detector Name and Location Description)	{MVDS / LOOP / CV / AVI / BT / LPR}: {Roadway} at {COUNTY CODE} MMXXX.X {Installed Location – Table 2-7) {Optional Differentiator}	MVDS: I-95 at SLU MM125.5 NS MVDS: I-95-EL at SLU MM005.5 NM MVDS: I-275 at MNT MM004.1 SS N MVDS: I-275 at MNT MM004.1 SS S AVI: SR-528 at ORA MM012.4 ES

2.14.2 SunGuide Software Configuration

Traffic Detector names are configured within SunGuide software’s Administrative Editor. Values are set within each device configuration screen, by expanding “TSS” and selecting “Detectors.” A Traffic Detector can be edited by selecting the desired Traffic Detector and clicking “Edit;” otherwise, a new Traffic Detector can be added by clicking “Add.” See Figure 2-16.

TSS - Status

Set Op Status Find On Map Enable Disable Enable Disable

Status Location Dynamic Linking System-Wide Dynamic Linking

Link Name	Detector Name	Detector Stat...	Roadway	Direction	Speed	Occupancy	Volume	Last Updated
R10Int04AE-R	VDS 10Int04_10EB to 95SB A	Active	I-10	Eastbound	45	20	30	03/22/2017 1
R10Int04BE-R	VDS 10Int04_10EB to 95SB B	Active	I-10	Eastbound	45	20	20	03/22/2017 1
R10Int05AS	VDS 10Int05_95SB to 10WB A	Active	I-10	Westbound	54	20	30	03/22/2017 1
R10Int05AS-R	VDS 10Int05_95SB to 10WB A	Active	I-10	Westbound		20	20	03/22/2017 1
R10Int05BS	VDS 10Int05_95SB to 10WB B	Active	I-95	Southbound	55	20	20	03/22/2017 1
R10Int05BS-R	VDS 10Int05_95SB to 10WB B	Active	I-95	Southbound		20	20	03/22/2017 1
R10Int06_95NB	VDS 10Int06_95NB @ Rosselle	Active	I-95	Northbound	54	20	30	03/22/2017 1
R10Int06_95SB	VDS 10Int06_95SB @ Rosselle	Active	I-95	Southbound	54	20	20	03/22/2017 1
R10Int06_95SB-R	VDS 10Int06_95SB @ Rosselle	Active	I-95	Southbound	54	20	10	03/22/2017 1
R10W000E_95N	VDS 10W000_@ Stockton EB	Active	I-10	Eastbound	54	20	40	03/22/2017 1
R10W000E_95S	VDS 10W000_@ Stockton EB	Active	I-10	Eastbound	54	20	30	03/22/2017 1
R10W000W	VDS 10W000_@ Stockton WB	Active	I-10	Westbound	54	20	50	03/22/2017 1
R10W001W	VDS 10W001_@ US-17 WB	Active	I-10	Westbound	54	20	50	03/22/2017 1

Lane Name	Last Updated	Speed	Occupancy	Volume
R10Int04BE-R_Ramp01_E	03/22/2017 16:19:38	45	20	10
R10Int04BE-R-lane1	03/22/2017 16:19:38	45	20	10

No status messages reported.

Figure 2-16: Traffic Detector Name Configuration within SunGuide Software

2.15 Traffic Detector Link Name

Traffic Detector Link names are stored as part of a TSS detector mapping configuration. Meaningful and consistently formatted Traffic Detector Link names help SunGuide software operators and traffic data analysts to identify and report Traffic Detector Link data.

SunGuide software uses one field for the Traffic Detector Link name, but there can be more than one Traffic Detector Link per Traffic Detector. The detector may be deployed on the shoulder opposite of the direction of travel being detected – in other words, the detector may be located on the northbound side of the road but capturing data from southbound traffic. The detector may also cover both sides of a roadway and thus have a link for each direction.

2.15.1 Traffic Detector Link Name Rules/Formatting

There are two naming standards for Traffic Detector Link names, one for links using Point-Speed detectors and one for links using Probe Fusion detectors. There are two separate naming standards because the links for Point-Speed detectors require only one detector, but those using Probe Fusion detectors require an upstream and downstream detector. The Traffic Detector Link naming

standard for Probe Fusion detectors helps to distinguish which upstream and downstream detectors are used.

For both naming standards, the first two- to four-letter segment of all Traffic Detector Link names should be one of the three supported point-speed detector acronyms (MVDS, LOOP, or CV) or one of the three supported probe fusion detector acronyms (LPR, AVI, or BT).

For Point-Speed detectors, the next segment of the detector link name should indicate the roadway and the direction of travel being reported, followed by a mile marker (to the tenth of a mile). For Probe Fusion detectors, the next segment includes the roadway and the direction of travel being reported from the upstream detector followed by a mile marker (to the tenth of a mile), the word “to ” (note: one space on either side of the word), and then the roadway and the direction of travel being reported from the downstream detector followed by a mile marker (to the tenth of a mile).

For ramp Traffic Detector Links, the final part of the Traffic Detector Link name should include a notation if the ramp is an on- or off-ramp. On-ramp links should be appended with “ON” and off-ramp links should be appended with “OFF.”

For Traffic Detector Links dedicated for express lanes, the final part of the Traffic Detector Link name should include a “EL” notation for express lanes.

Table 2-9 describes the standard formatting for Traffic Detector Link names.

Table 2-9: Traffic Detector Link Naming Standard

SunGuide Software Field	Format	Examples
Traffic Detector Link Name – Point-Speed Detectors	<u>Mainline Links</u> {MVDS / LOOP / CV} {Roadway}-{Direction} XXX.X <u>Ramp Links</u> {MVDS / LOOP / CV} {Roadway}-{Direction} XXX.X {ON/OFF} <u>Express Links</u> { MVDS / LOOP / CV} {Roadway}-{Direction} XXX.X EL	MVDS: I-95-NB 125.5 MVDS: I-95-NB 125.5 EL CV: SR-528-WB 012.4 LOOP: SR-528-WB 012.4 ON
Traffic Detector Link Name – Probe Fusion Detectors	<u>Mainline Links</u> {AVI / BT / LPR} {Roadway}- {Direction} XXX.X to {Roadway}- {Direction} XXX.X	LPR I-95-NB 125.5 to I-95-NB 126.2 LPR I-95-NB 125.5 to I-95-NB 126.2 EL

SunGuide Software Field	Format	Examples
	<u>Ramp Links</u> {AVI / BT / LPR} {Roadway}- {Direction} XXX.X to {Roadway}- {Direction} XXX.X {ON/OFF}	AVI SR-528-WB 012.4 to SR-436-WB 001.3 AVI SR-528-WB 012.4 to SR-528-WB 011.8 ON
	<u>Express Links</u> {AVI / BT / LPR} {Roadway}- {Direction} to {Roadway}- {Direction} XXX.X EL	

2.15.2 SunGuide Software Configuration

Traffic Detector Link names are configured within SunGuide software's Administrative Editor. Values are set within each Traffic Detector's detector mapping configuration screen by expanding "TSS" and selecting "Detector Maps." Traffic Detector Links can be edited by selecting the desired Traffic Detector and clicking "Map." Once the map detector window is open, Traffic Detector Links can be added by clicking "Add Link" and entering the Traffic Detector Link name in the "Link Name" field. Traffic Detector Links can be edited by selecting the link from the list, clicking "Edit Link," and typing the Traffic Detector Link name in the "Link Name" field. Once completed, click "Save and Exit." See Figure 2-17.

Link Name	Detector Name	Detector Stat...	Roadway	Direction	Speed	Occupancy	Volume	Last Updated
R10Int04AE-R	VDS 10Int04_10EB to 95SB A	Active	I-10	Eastbound	45	20	30	03/22/2017 1
R10Int04BE-R	VDS 10Int04_10EB to 95SB B	Active	I-10	Eastbound	45	20	20	03/22/2017 1
R10Int05AS	VDS 10Int05_95SB to 10WB A	Active	I-10	Westbound	54	20	30	03/22/2017 1
R10Int05AS-R	VDS 10Int05_95SB to 10WB A	Active	I-10	Westbound		20	20	03/22/2017 1
R10Int05BS	VDS 10Int05_95SB to 10WB B	Active	I-95	Southbound	55	20	20	03/22/2017 1
R10Int05BS-R	VDS 10Int05_95SB to 10WB B	Active	I-95	Southbound		20	20	03/22/2017 1
R10Int06_95NB	VDS 10Int06_95NB @ Rosselle	Active	I-95	Northbound	54	20	30	03/22/2017 1
R10Int06_95SB	VDS 10Int06_95SB @ Rosselle	Active	I-95	Southbound	54	20	20	03/22/2017 1
R10Int06_95SB-R	VDS 10Int06_95SB @ Rosselle	Active	I-95	Southbound	54	20	10	03/22/2017 1
R10W000E_95N	VDS 10W000_@ Stockton EB	Active	I-10	Eastbound	54	20	40	03/22/2017 1
R10W000E_95S	VDS 10W000_@ Stockton EB	Active	I-10	Eastbound	54	20	30	03/22/2017 1
R10W000W	VDS 10W000_@ Stockton WB	Active	I-10	Westbound	54	20	50	03/22/2017 1
R10W001W	VDS 10W001_@ US-17 WB	Active	I-10	Westbound	54	20	50	03/22/2017 1

Lane Name	Last Updated	Speed	Occupancy	Volume
R10Int04BE-R_Ramp01_E	03/22/2017 16:19:38	45	20	10
R10Int04BE-R-lane1	03/22/2017 16:19:38	45	20	10

Figure 2-17: Traffic Detector Link Name Configuration within SunGuide Software

2.16 Traffic Detector Lane Name

The Traffic Detector Lane names are stored as part of a TSS detector mapping configuration. Meaningful and consistently formatted Traffic Detector Lane names help SunGuide software operators and traffic data analysts to identify and report Traffic Detector Link data.

SunGuide software uses one field for the Traffic Detector Lane name, but there is usually more than one Traffic Detector Lane per Traffic Detector Link.

2.16.1 Traffic Detector Lane Name Rules / Formatting

All Traffic Detector Lane names should match the Traffic Detector Link name with “LXX” appended to the end, where XX is the lane number.

Regardless of where the detector is located, lane numbering should count from the median to the outermost lane. Counting should start at “01.” Figure 2-18 illustrates how lane numbering should be done.

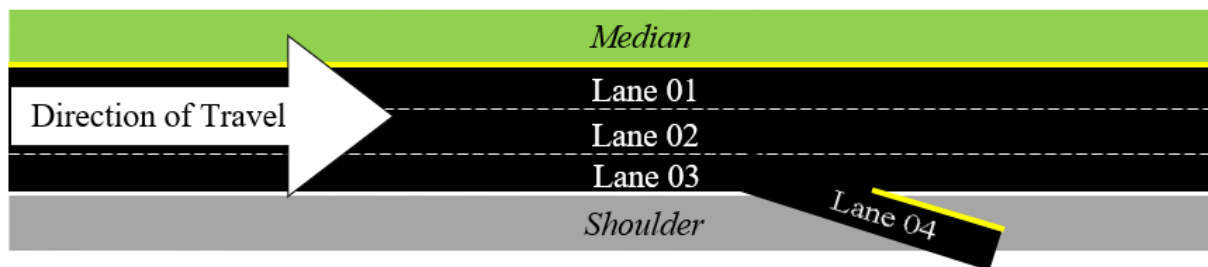


Figure 2-18: Conceptual Example for Lane Numbering

Note that in Figure 2-18, Lanes 01 to 03 are the mainline lanes while the outermost lane, Lane 04, is the off-ramp.

Table 2-10 describes the standard formatting for Traffic Detector Lane names.

Table 2-10: Traffic Detector Lane Naming Standard

SunGuide Software Field	Format	Examples
Traffic Detector Lane Name	(Traffic Detector Link name) LXX	MVDS: I-95-NB 125.5 EL L01 MVDS: I-95-NB 125.5 EL L02 MVDS: I-95-NB 125.5 L03 MVDS: I-95-NB 125.5 L04 MVDS: I-95-NB 125.5 OFF L05 AVI: SR-528-WB 012.4 L01 AVI: SR-528-WB 012.4 L02

As shown in Table 2-10 The MVDS links consist of five Traffic Detector Lanes. The first two lanes are associated with the express lanes link MVDS I-95-NB 125.5 EL, the next two lanes are associated with the mainline link MVDS I-95-NB 125.5, and the fifth lane is associated with the off ramp link MVDS I-95-NB 125.5 OFF. There is also one AVI link, AVI SR-528-WB 012.4. The AVI detector has two Traffic Detector Lanes.

2.16.2 SunGuide Software Configuration

Traffic Detector Lane names are configured within SunGuide software’s Administrative Editor. Values are set within each Traffic Detector’s detector mapping configuration screen by expanding “TSS” and selecting “Detector Maps.” Traffic Detector Links can be edited by selecting the desired TSS and clicking “Map.” Once the map detector window is open, select a Traffic Detector Link. To add Traffic Detector Lanes, click “Add Lane” and type in the Traffic Detector Lane name in the “Lane Name” field. Traffic Detector Lanes can be edited by selecting the lane from the list,

clicking “Edit Lane,” and typing the Traffic Detector Lane name in the “Lane Name” field. Once completed, click “Save and Exit.” See Figure 2-19.

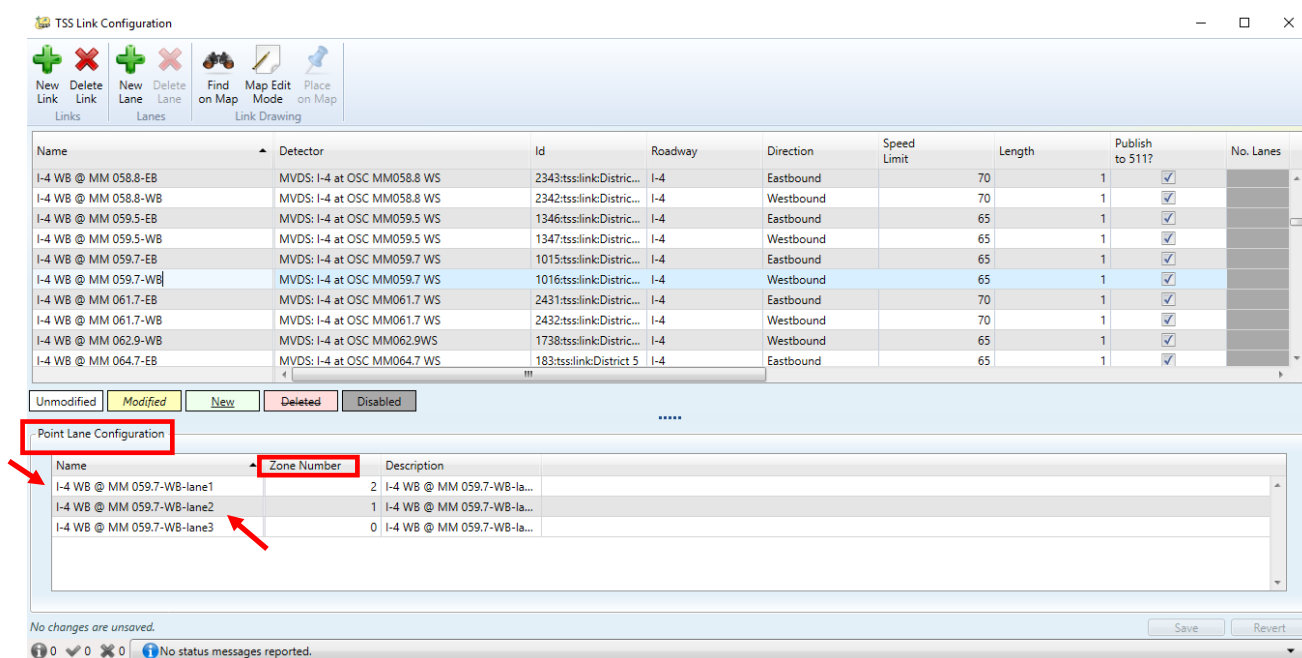


Figure 2-19: Traffic Detector Lane Name Configuration within SunGuide Software

2.17 Travel Time (TvT) Link Name

Travel Time (TvT) Link names are stored as part of SunGuide’s TvT Link configuration. Meaningful and consistently formatted TvT Link names help SunGuide software operators, FL511 users, and traffic data analysts to identify and report TvT Link data.

SunGuide software uses two fields for the Travel Time Link name, the Travel Time Link Name and Link Description. However, both fields use the same rules and should always be the same value.

2.17.1 TvT Link Name Rules / Formatting

There are three types of TvT Links typically configured within SunGuide software. Each type has a different formatting standard. The three types include the following.

- **DMS TvT Links** – These include links used for reporting TvT on DMSs. They always start at the DMS location and end at an exit or cross street.
- **FL511 TvT Links** – These include links reported to FL511. They always start and end at major interchanges and/or cross streets. These links must be specifically configured to report to FL511.

- **Study TvT Links** – These include links that are used for specialized TvT studies, which may only be needed during a finite period. They start and end at points required to best suit the travel time study.

An agency may not include all three types of TvT Links. Links should be configured as needed.

Roadways used in TvT Link names should follow the same formatting standards and rules for Reference Points, as described in section 2.3.4 (Reference Points). These standards use abbreviations as necessary.

Table 2-11 describes the standard formatting for Travel Time Link names. Note that the TvT Link Name and Link Description SunGuide fields should contain the same name per link.

Table 2-11: TvT Link Naming Standard

Link Type	Format	Examples
DMS TvT Link	<u>Normal Links</u> {Roadway} {Direction} from DMSXXX.X to {To Loc}	I-4 WB from DMS075.5 to SR-408
	<u>Cross-road Links</u> From {Roadway} {Direction} DMSXXX.X to {Roadway} {Direction} {To Loc}	From I-95 NB DMS300.1 to West I-295 NB at I-10
FL511 TvT Link	<u>Normal Links</u> {Roadway} {Direction} from {From Loc} to {To Loc}	SR-570 EB from West of I-4 to East of I-4
	<u>Cross-road Links</u> From {Roadway} {Direction} {From Loc} to {Roadway} {Direction} {To Loc}	From SR-869 NB at I-75 to I-75 NB at SR-814
Study TvT Link	Study {Roadway} {Direction} from {From Loc} to {To Loc}	Study SR-570 EB from West of I-4 to East of I-4 Study SR-869 NB from I-75 to SR-814

2.17.2 SunGuide Software Configuration

The TvT Link names are configured within SunGuide software’s Administrative Editor. Values are set within each TvT Link’s configuration by expanding “TVT” and selecting “Travel Time Links.” Travel Time Links can be edited by selecting the desired TvT and clicking “Edit.” New Travel Time Links can be created by clicking “New Link.” See Figure 2-20.

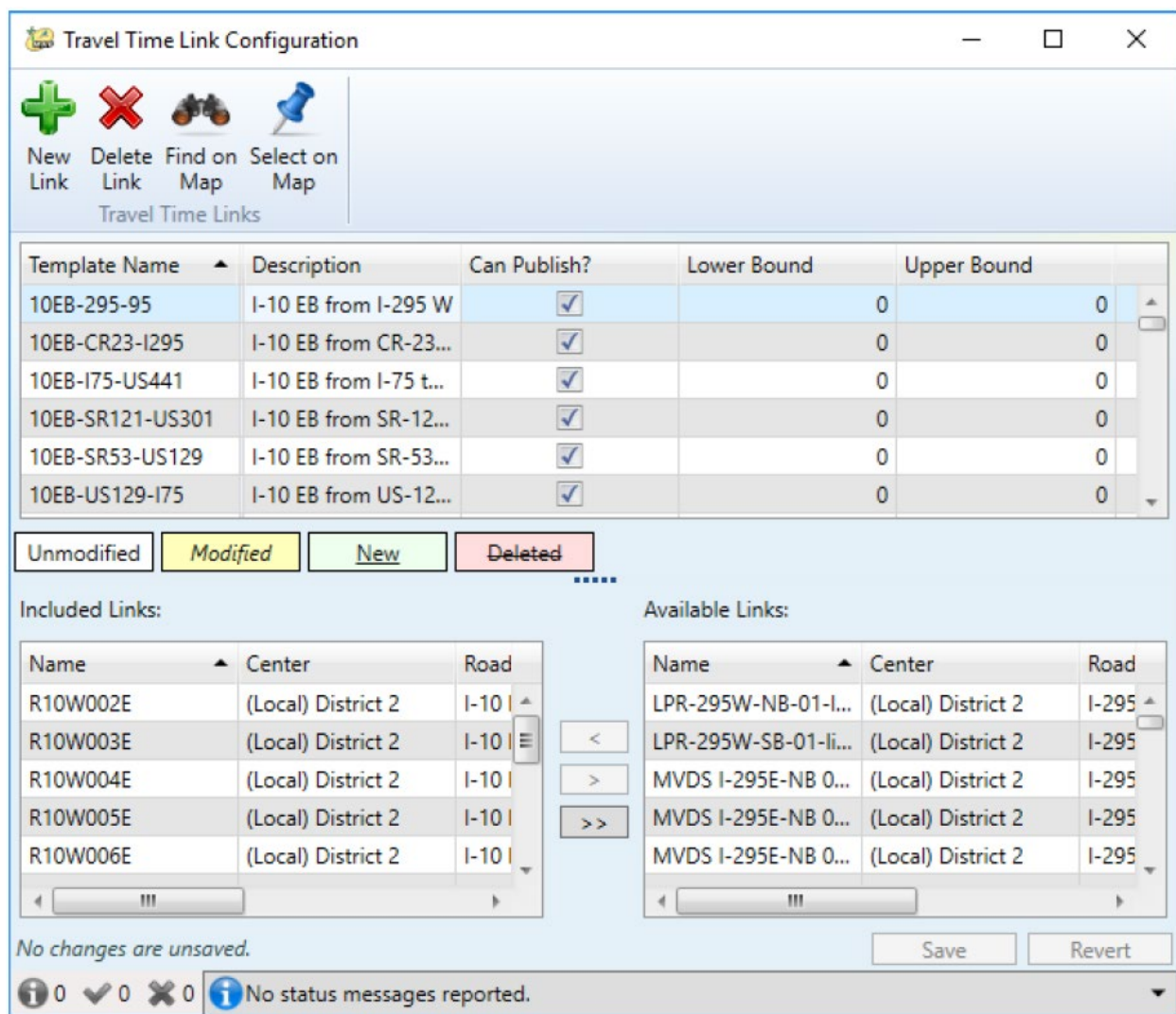


Figure 2-20: Travel Time Link Name Configuration within SunGuide Software

2.18 Connected Vehicle Roadside Equipment (RSE) Names and Messages

Connected Vehicle Roadside Equipment (RSE) names are stored as part of SunGuide’s Connected Vehicle RSE configuration. Meaningful and consistently formatted RSE names help SunGuide software operators and traffic data analysts to identify and report to RSE.

Roadside unit and connected vehicle messages can be used for the following:

- Event messaging
- Detour routing
- PSAs/safety messages
- Travel times
 - Messages should be similar to DMS messages, except they can include more text and lowercase letters. Use abbreviations using common abbreviation formats. See Table 2-12 for some examples of RSE messages.

Table 2-12: RSE Messages

SunGuide Software Field	Format	Examples	Where it is Used
RSE	Short text messages (255-character limit) similar to DMS messages, can include more text and not all capital letters. Use abbreviations using common abbreviation formats.	<ul style="list-style-type: none"> • Expect heavy pedestrian traffic on International Dr near the Convention Center due to ITS World Congress • Crash at MM 205 on I-10 Eastbound All Lanes Closed • Crash on I-4 EB at Kaley St • Weather advisory: Expect high winds 	<ul style="list-style-type: none"> • Roadside Units • Connected Vehicles

2.18.1 RSE Name Rules / Formatting

Table 2-13 describes the standard formatting for RSE names.

Table 2-13: RSE Naming Standard

SunGuide Software Field	Format	Examples
RSE Name (Id)	RSE:{Roadway} at {COUNTY CODE} MMXXX.X	RSE:SR-408 at ORA MM001.4 RSE:I-75 at HIC MM261.1

A county code should be used in the RSE name. Reference Section 2.11 of this document for all valid county codes.

2.18.2 SunGuide Software Configuration

The RSE names are configured within SunGuide software’s operator map. A new RSE can be added by clicking “Add RSE” in this window. See Figure 2-21.

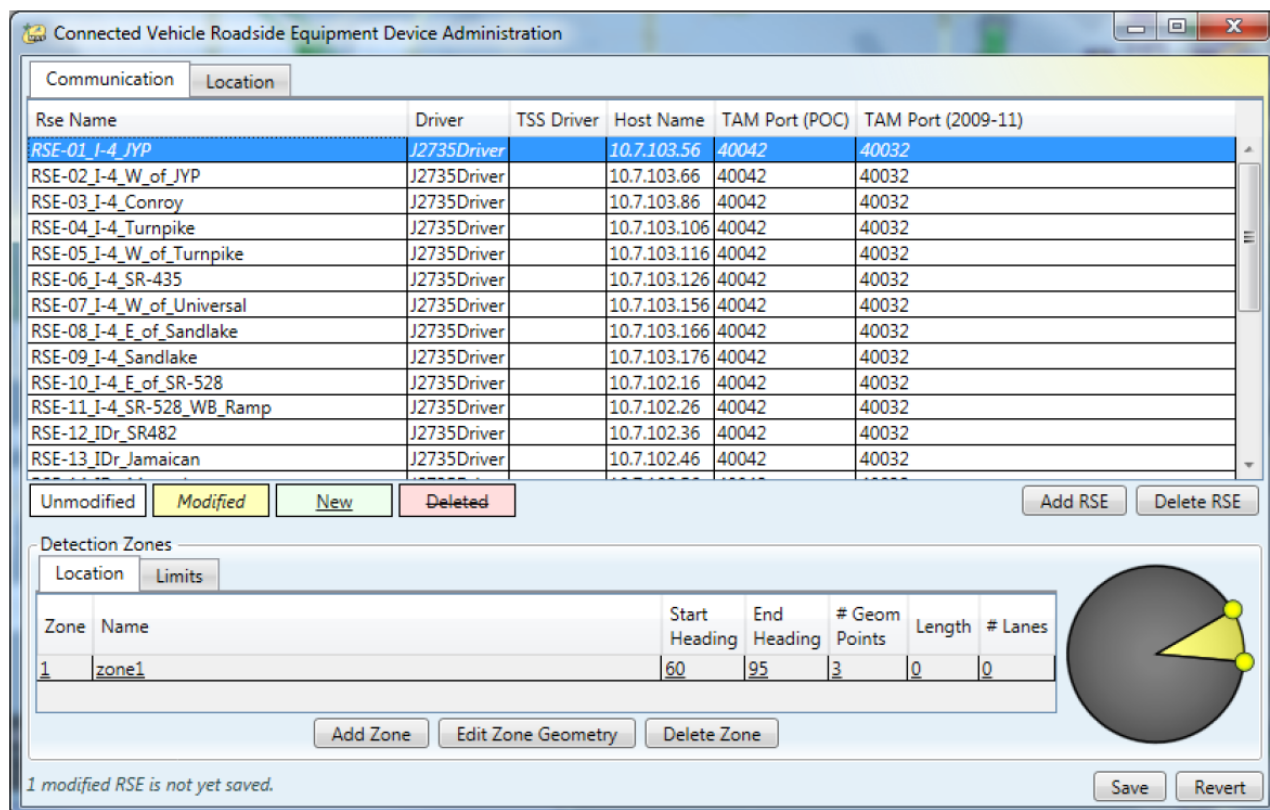


Figure 2-21: RSE Name Configuration within SunGuide Software

2.19 SunGuide Software Express Lane Segment Configuration

The Express Lane Segment names are stored as part of SunGuide’s Express Lane Segment configuration. Meaningful and consistently formatted Express Lane Segment names help SunGuide software operators and traffic data analysts to identify and manage Express Lane Segments, as well as helping operators identify segments when an Express Lane alert prompts an operator to approve a rate schedule.

2.19.1 Express Lane Segment Name Rules / Formatting

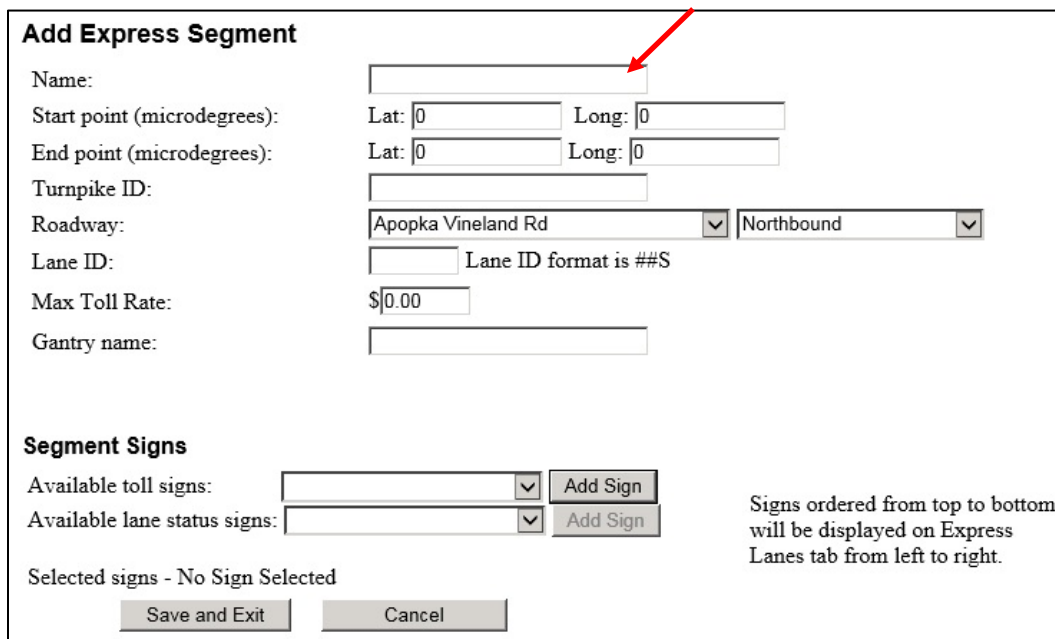
Table 2-14 describes the standard formatting for Express Lane Segment names.

Table 2-14: Express Lane Segment Naming Standard

SunGuide Software Field	Format	Examples
Express Lane Name	{Roadway} {Direction} from {From Loc} to {To Loc}	I-4 EB from SR-528 to John Young Pkwy I-4 WB from MM50.5 to MM45.2

2.19.2 SunGuide Software Express Lane Configuration

The Express Lane Segment names are configured within SunGuide software’s Administrative Editor. Values are set expanding “Express Lanes”, selecting “Segments”, and either adding or editing a segment. The Express Lane Segment name is the “Name” field. See Figure 2-22.



Add Express Segment

Name:

Start point (microdegrees): Lat: Long:

End point (microdegrees): Lat: Long:

Turnpike ID:

Roadway:

Lane ID: Lane ID format is ##S

Max Toll Rate:

Gantry name:

Segment Signs

Available toll signs:

Available lane status signs:

Selected signs - No Sign Selected

Signs ordered from top to bottom will be displayed on Express Lanes tab from left to right.

Figure 2-22: Express Lane Segment Name Configuration within SunGuide Software

2.20 Highway Advisory Radio (HAR) Name

HAR names are stored as part of SunGuide’s HAR configuration. Meaningful and consistently formatted HAR names help SunGuide software operators and traffic data analysts to identify and report to HAR.

A county code should be used in the HAR name. Reference Section 2.11 of this document for all valid county codes.

2.20.1 HAR Name Rules / Formatting

Table 2-15 describes the standard formatting for HAR names.

Table 2-15: HAR Naming Standard

SunGuide Software Field	Format	Examples
HAR Name	HAR:{Roadway} at {COUNTY CODE} MMXXX.X	HAR:SR-408 at ORA MM001.4 HAR:I-75 at HIC MM261.1

2.20.2 SunGuide Software Configuration

HAR names are configured within SunGuide software’s Administrative Editor. Values are set by expanding “HAR,” selecting “Radios,” and either adding or editing a device. The HAR name is the “Name” field. See Figure 2-23.

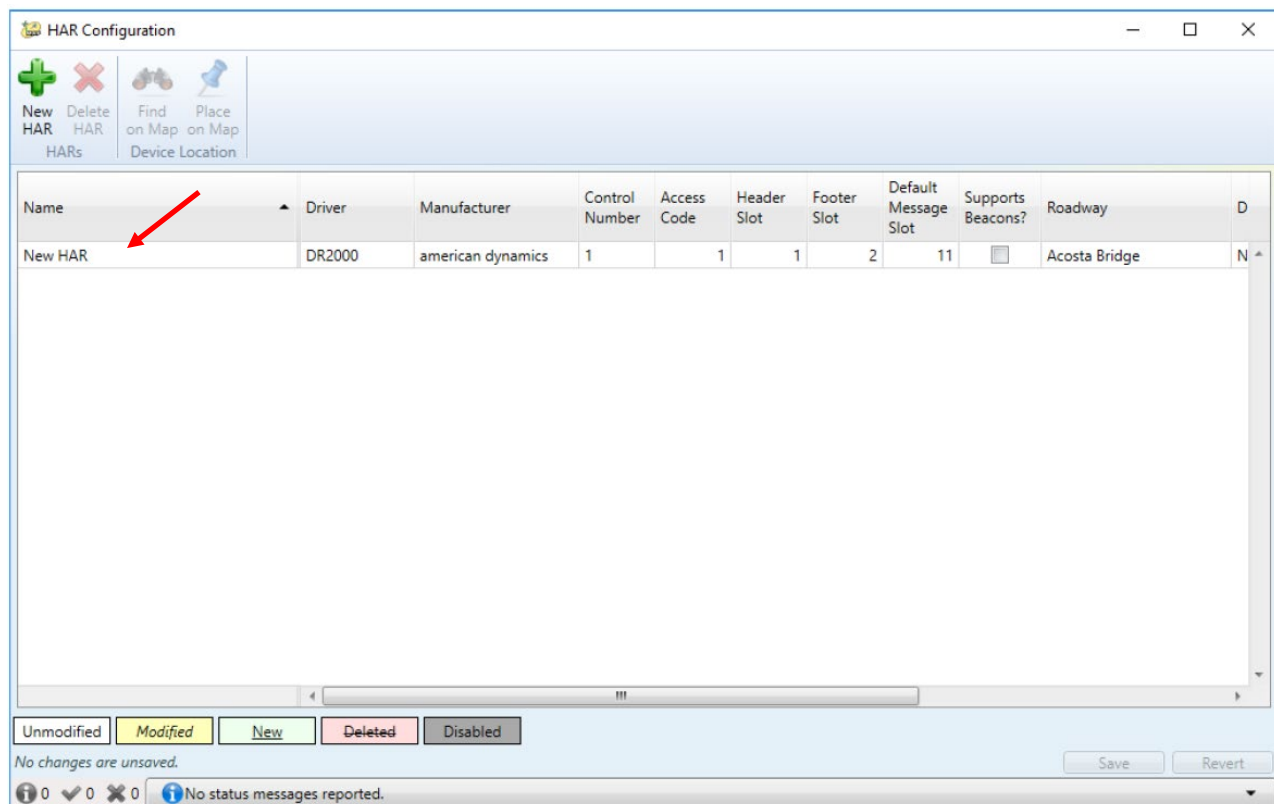


Figure 2-23: HAR Name Configuration within SunGuide Software

2.21 Road Weather Information Station (RWIS) Name

The RWIS names are stored as part of SunGuide’s RWIS configuration. Meaningful and consistently formatted RWIS names help SunGuide software operators and traffic data analysts to identify RWIS locations.

2.21.1 RWIS Name Rules / Formatting

Table 2-16 describes the standard formatting for RWIS names.

Table 2-16: RWIS Naming Standard

SunGuide Software Field	Format	Examples
RWIS Name (Station Name)	RWIS:{Roadway} at {COUNTY CODE} MMXXX.X	RWIS:SR-408 at ORA MM001.4 RWIS:I-75 at HIC MM261.1

2.21.2 SunGuide Software Configuration

RWIS names are configured within SunGuide software’s Administrative Editor. Values are set by expanding “RWIS,” selecting “Stations,” and either adding or editing a device. The RWIS name is the “Station Name” field. See Figure 2-24.

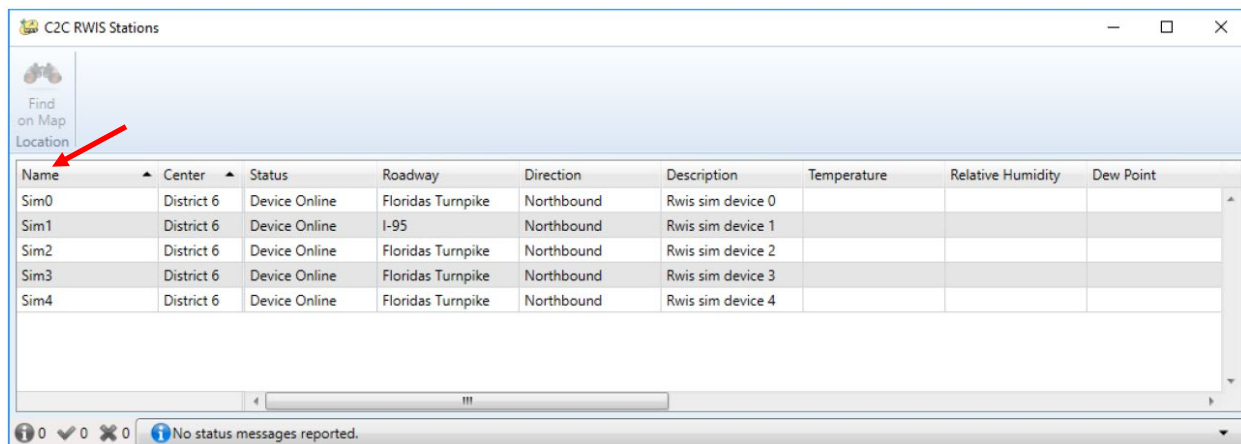


Figure 2-24: RWIS Name Configuration within SunGuide Software

2.22 Safety Barrier Name

Safety Barrier names are stored as part of SunGuide’s Safety Barrier configuration. Meaningful and consistently formatted Safety Barrier names help SunGuide software operators and traffic data analysts to identify Safety Barrier locations.

A county code should be used in the Safety Barrier name. Reference Section 2.11 of this document for all valid county codes.

2.22.1 Safety Barrier Name Rules / Formatting

Table 2-17 describes the standard formatting for Safety Barrier names.

Table 2-17: Safety Barrier Naming Standard

SunGuide Software Field	Format	Examples
Safety Barrier Name	Safety Barrier: {Roadway} {Direction} at {COUNTY CODE} MMXXX.X	SFB:SR-408 EB at ORA MM001.4 SFB:I-75 NB at HIC MM261.1

2.22.2 SunGuide Software Configuration

Safety Barrier names are configured within SunGuide software’s Administrative Editor. Values are set by expanding “Safety Barrier,” selecting “Stations,” and either adding or editing a device. See Figure 2-25.

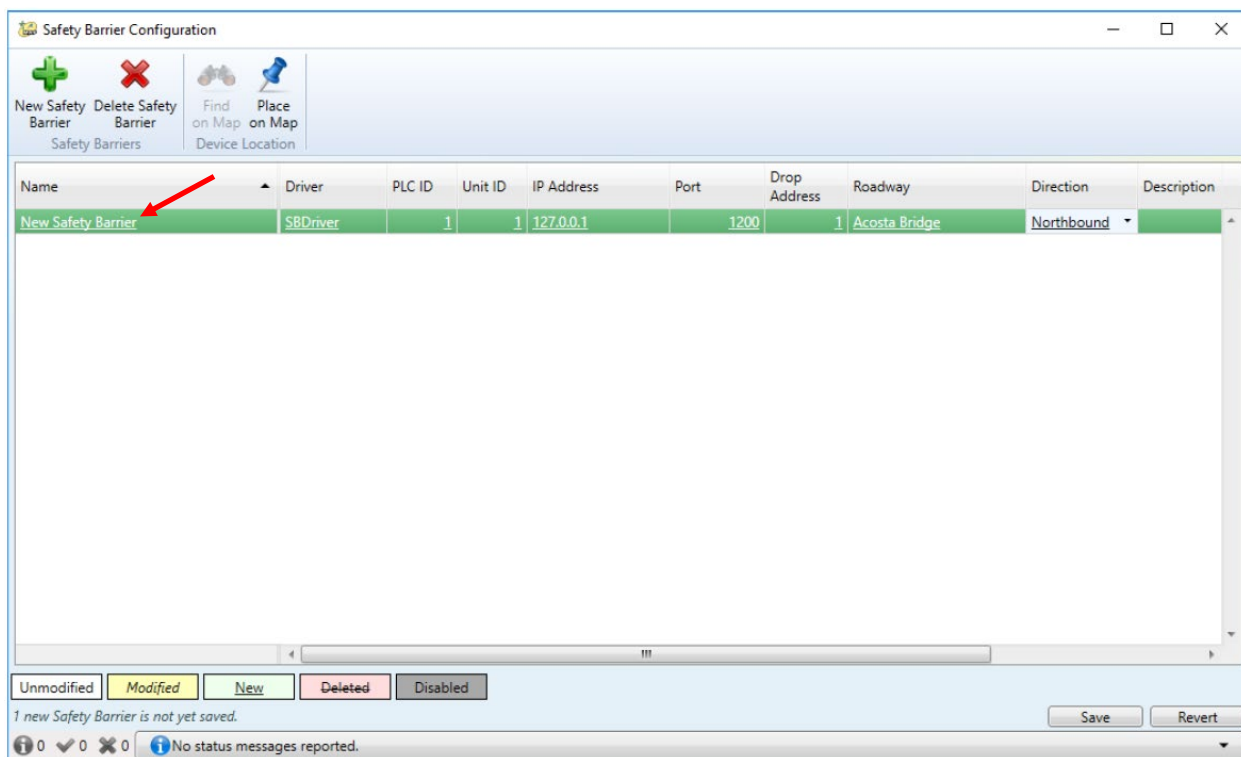


Figure 2-25: Safety Barrier Name Configuration within SunGuide Software

2.23 Wrong Way Device (WWD) Name

Wrong Way Device (WWD) names are stored as part of SunGuide’s WWD device configuration. Meaningful and consistently formatted WWD names help SunGuide software operators and traffic data analysts to identify WWD locations.

A county code should be used in the WWD name. Reference Section 2.11 of this document for all valid county codes.

2.23.1 Wrong Way Device Name Rules/Formatting

Table 2-18 describes the standard formatting for WWD names.

Table 2-18: Wrong Way Device Naming Standard

SunGuide Software Field	Format	Max Length	Examples
WWD Name	WWD: {Roadway} {Direction} at {COUNTY CODE} {Cross Street} {Ramp Designator}	255 Characters	WWD:SR-408 EB at ORA John Young PkwY On-ramp

SunGuide Software Field	Format	Max Length	Examples
			WWD:I-75 NB at MAO US-27 Off-ramp

2.23.2 SunGuide Software Configuration

WWD names are configured within SunGuide software’s operator map. Values are set within the Wrong Way Device Configuration window under the “Name” column. New devices can be added by clicking “New Device” in this window. See Figure 2-26.

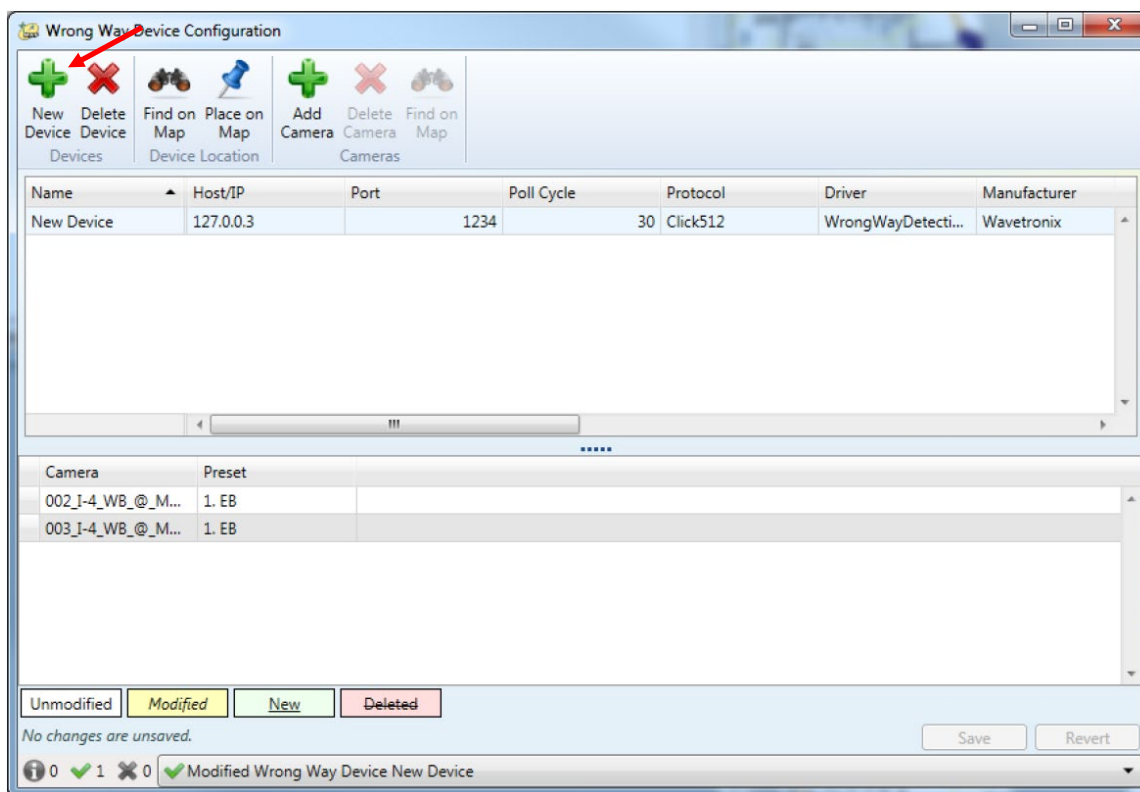


Figure 2-26: WWD Name Configuration within SunGuide Software

2.24 511 Aliases

The FL511 phone system has special requirements for its phone interface. 511 Aliases are needed to allow users to request roadways and locations. A 511 Alias is a word or utterance which a 511 caller may say, and the 511 phone system will interpret. 511 Aliases need to be configured and associated with predefined roadways and locations.

2.24.1 511 Alias Rules/Formatting

511 Aliases should be selected to cover all common names a 511 caller would use to select a roadway or location. For example, the aliases for SR-417 may include State Road 417, GreeneWay, Seminole Expressway, and Southern Connector since all of these names may reference at least one part of SR-417. A name does not need to apply to the entire stretch of roadway. The Southern Connector, for example, only refers to the southern portion of SR-417.

The same list of 511 Aliases should be used for different portions of the same roadway. Do not use a different list of 511 Aliases even if it applies to a different portion of the same roadway. The FL511 system equates each list of 511 Aliases as a different roadway. For example, if several I-4 locations have an alias list of “I 4, Interstate 4” while other locations have an alias list of “I 4, Interstate 4, State Road 400,” when a caller requests “I-4” the system will disambiguate, “Do you want I-4 or I-4?,” as it interprets this configuration as having two different I-4 roadways.

Each 511 Alias should include alphanumeric characters only. Do not include slashes (/ or \), dashes, parentheses, quotes, periods, or any other special characters with one exception – apostrophes are acceptable. Two examples include: US-17/92 should be “US 17 92” and Florida’s Turnpike should be “Florida’s Turnpike.”

Do not use an abbreviation unless it is anticipated that the caller would say the abbreviation. For example, “I 4” is acceptable since callers are likely to say the letter “I.” Other common abbreviations, like “St” for Saint or Street, should be spelled out.

Separate 511 Aliases with commas. Adding spaces is acceptable. For example, the 511 Aliases for SR-50 may be “State Road 50, East Colonial Drive, West Colonial Drive.”

FL511 will attempt to match a caller’s request with portions of an alias. Consequently, all permutations of an alias are not required. For example, for the 511 Alias list “State Road 50, East Colonial Drive, West Colonial Drive,” the caller may simply ask for “Colonial” or “50” and FL511 will match these with the configured list since the list contains “Colonial” and “50.”

2.24.2 SunGuide Software Configuration

511 Aliases are not configured within SunGuide software. The configuration management of 511 Aliases is handled via configuration spreadsheets.

2.25 511 Spoken Name

The FL511 phone system has special requirements for its phone interface. 511 Spoken Names are needed to inform the phone system what should be reported for a selected roadway or location. A 511 Spoken Name is a pre-recorded name for a roadway or location in which FL511 will report to

the caller. 511 Spoken Names need to be configured and associated with predefined roadways and locations.

2.25.1 511 Spoken Name Rules/Formatting

A 511 Spoken Name should consist of a single common name that clearly describes the selected roadway or location. For example, the 511 Spoken Name for SR-417 may simply be State Road 417. Other names, such as GreeneWay, Seminole Expressway, and Southern Connector, are not needed.

Do not use a name that only applies to a portion of a roadway. Rather, use the most general name that best describes the entire roadway. For example, SR-434 is called “Alafaya Trail” for only a portion of SR-434; therefore, “Alafaya Trail” should not be used as the 511 Spoken Name, but as a 511 Alias.

The same 511 Spoken Name list should be used for all occurrences of the same roadway. Do not use a different 511 Spoken Name list even if it applies to a different portion of the same roadway.

For locations such as rest areas and bridges, the 511 Spoken Name should be as specific as possible. For example, the Skyway Bridge should be called “Skyway Bridge” and not simply “Bridge.”

Each 511 Spoken Name should include alphanumeric characters only. Do not include slashes (/ or \), dashes, parentheses, quotes, periods, or any other special characters with one exception – apostrophes are acceptable. Two examples include: US-17/92 should be “US 17 92” and the Florida’s Turnpike should be “Florida’s Turnpike.”

Do not use any abbreviations.

Using numbers is acceptable. Numbers do not need to be spelled out. However, ordinal extensions should be used for numbered roadways. See Section 2.2.2 of this document for more information about ordinal extensions.

2.25.2 SunGuide Software Configuration

511 Spoken Names are not configured within SunGuide software. The configuration management of 511 Spoken Names is handled via configuration spreadsheets.

2.26 Truck Parking Availability System

The Truck Parking Availability System (TPAS) assists in truck parking information management. It allows state owned facilities to accurately assess and disseminate the availability of truck parking, development of predictive analysis for future parking availability and incorporate private

parking locations for systemwide resource utilization. The information provided by TPAS assists truck drivers in identifying available parking locations where the technology is deployed.

2.26.1 Truck Parking Facility Name Rules/Formatting

Table 2-19 describes the standard formatting for Truck Parking Facilities.

Table 2-19: Truck Parking Facility Naming Standard

SunGuide Software Field	Format	Example	Where it is used
Truck Parking Facility	I-XX NB/SB/EB/WB Rest Area or Weigh Station at Mile Marker XX (use mile marker number to designate location, since not all rest areas or weigh stations are near cities)	I-95 NB Rest Area at MM 244 or I-75 SB Weigh Station at Mile Marker 278	• FL511 System

2.27 Floodgate Message Guidelines

There are times when the entry of events into SunGuide, and their publishing to 511, cannot provide the key information, level of detail, or sense of urgency required for certain messages. Floodgate/Website Alert messages are designed to fill this need.

These messages are distinguished from the traffic events associated with SunGuide EM locations by the fact that they impact a larger area such as an entire roadway, county, region or the entire state and may not have a single or specific point location. Floodgate/Website Alert messages should also only be used for longer lasting events.

Users can also reference the SunGuide Software User's Manual (SUM) for additional details on how to enter Floodgate messages – <http://sunguidesoftware.com/document-library/development?sid=569:Software-Users-Manual>

Floodgate and Website Alert Messages are special messages that are played on the FL511 Interactive Voice Response (IVR) system or displayed as alerts on the FL511 website.

Floodgate messages are typically time sensitive and their entry and postings should be done as soon as possible.

2.27.1 Floodgate Message Criteria

Before posting a Floodgate message, confirm the content qualifies.

- Is the message of importance that it should not be missed by a FL511 user calling into the IVR or navigating through the website?
- Is there already a message on the system regarding this issue?
 - Check the Floodgates already posted to FL511.
 - Coordinate with other districts to avoid duplicate or conflicting messages.
 - In certain districts it is required that operators receive approval from TMC and/or FDOT management before posting a Floodgate message. In such cases, approval may require written authorization (e-mail will suffice). Check with District standard operating procedures and supervisors to ensure proper protocol is followed within your district.
- Has a SunGuide traffic event been published to FL511 for this issue? A Floodgate Alert message should not be used to duplicate a SunGuide traffic event already in the system.
- Only after completion of the above steps should you continue to compose and categorize both the Floodgate and website alert messages.

2.27.2 Floodgate/Website Alert Messages Area Categories

Floodgate and Website Alert messages can be assigned to one of several different area categories based on the audience you wish to reach. These include:

- 1) Statewide
 - a. Every user calling into the IVR will hear all the statewide Floodgate messages prior to being able to request specific traffic event information. Website users see a scrolling Alerts bar with all alert messages across the top of FL511.com pages.
 - b. Statewide Floodgates / Website Alerts are only to be used for issues that concern several regions.
 - i. Example 1: A massive event occurs at Miami International Airport; the airport is closed, roadways in the area are closed, etc. As bad as this might be, it likely only qualifies as a Regional Floodgate / Website Alert as it does not likely impact users outside of Southeast Florida.
 - ii. Example 2: A major storm is approaching the east coast of the state. The breadth of the storm is covering a wide area from Palm Beach to Daytona with no one sure where it will make landfall. Evacuations are in progress in multiple regions and the effects of the storm are spreading across the state. This message does qualify for a statewide Floodgate as it will contain urgent

information for users in several regions and travelers from all parts of the state.

- c. Note that there should be very few Statewide messages overall, with most categorized as region, county, and roadway level messages.

2.27.3 Specific Area/Location

1) Region and County

- a. Note that as you make selections in SunGuide, options will appear allowing you to narrow down your selection, stopping at whichever geographic area level is appropriate.
- b. Floodgate messages can be associated to the following area levels in the FL511 menu:
 - i. Region
 - ii. County
- c. A Floodgate assigned to a higher-level area will be played for all levels below it, if a caller requests a city, the IVR will play all Floodgates assigned to the region the city is in, and then all Floodgates assigned to the county the city is in.
- d. Callers requesting information for a region or county hear associated Floodgate messages before published traffic events. Website users see a scrolling alerts bar with all alert messages across the top of FL511.com pages.

2) Full Roadway

- a. Callers who request information for a specific roadway hear the Floodgate message before any other traffic event information. Website users see a scrolling alerts bar with all alert messages across the top of FL511.com pages.
- b. When a caller requests a specific roadway, the IVR will play all Floodgates assigned to the regions the roadway passes through, then all Floodgates assigned to the roadway itself. Special care should be taken in assigning a Floodgate to any roadway that spans multiple regions, as many IVR callers could be presented with information that is irrelevant or distant to them. For these roadways, if an issue is isolated to a specific region or county, it is often more appropriate to assign the Floodgate to the relevant region or county.

*When assigning a Floodgate to a higher-level area, consider whether the message should also be played for all associated lower levels. If not, one or more Floodgates should be created for and assigned to the lower level area(s) instead.

2.27.4 Configuring Barge-In

- 1) As a general guideline, Floodgate messages assigned to regions, counties, and roadways should have barge-in turned on. This will allow callers to interrupt or barge-in to the messages if they do not wish to continue listening.
- 2) Statewide Floodgate messages should generally be of such importance that barge-in should be turned off, requiring the caller to listen to the entire message before moving on.

2.27.5 Rules of Thumb for Composing Floodgate Messages

- 1) Floodgate messages should be critical messages.
- 2) Messages should contain only critical information about an issue that impacts mobility and safety such as an evacuation.
- 3) Messages may also include a traffic event, such as an incident or severe congestion, for which an EM location does not currently exist or does not suffice.
- 4) Floodgate messages should be clear and concise, providing a “headline” describing an issue.
- 5) So as not to distract the user from reaching their desired information:
 - a. Floodgate messages should be no longer than 20 seconds.
 - b. Website Alert messages should take no longer than 20 seconds to read.
- 6) When posting a Floodgate message, please be aware of other Floodgate messages playing on the system.
- 7) Once a Floodgate message has been recorded and posted, call 511 and listen to the message to:
 - a. Make sure the message is playing for the correct area/location.
 - b. Make sure that Floodgate barge-in capability is set correctly.
 - c. Make sure the message recording is loud enough for a caller to hear.
 - d. Listen to the call as if you were the user and determine if it is something you would want to listen to.

Floodgate messages should also fit one of the following categories:

- 1) Special Alerts
- 2) Emergency Alerts (Evacuations or weather events)
- 3) ? Missing – Amber Alerts
- 4) Law Enforcement officer Alerts
- 5) Silver Alerts

- 6) ATIS System not available
- 7) Major traffic events on routes without EM locations

Coordinate Messages for Shared Roads and at District/State Borders

- 1) Due to the overlap of responsibilities, it will be necessary for the content providers (other Districts/States) to coordinate the content being posted to the statewide ATIS in certain situations. This also includes coordination of which District will enter/record messages at specific levels in the system, where the “area” may be covered by more than one district.
- 2) Some examples of overlap include:
 - a. Florida’s Turnpike Enterprise (FTE) traverses multiple regions and Districts. If a Floodgate is to be created for the Turnpike, the message should be coordinated with relevant regional District TMCs.
 - b. The Southeast Florida region includes District 6, District 4, the Miami-Dade Expressway Authority (MDX) and Florida’s Turnpike Enterprise (FTE).

Floodgate / Website Alert Message Examples

The following are example Floodgate messages for both recordings and website alert messages entered into SunGuide:

- 1) Event 1:
 - a. Floodgate: I-75 closed across Alligator Alley due to smoke from brush fires.
 - b. Website: On I-75 through Alligator Alley, both directions are closed due to brush fires and smoke in the area.
 - c. Why is this a Floodgate/website alert message? Normally the information about this closure could simply be entered through the normal means (published SunGuide traffic event, etc.), but since the area affected is so broad, crossing county and regional lines, and the options to travelers are so few, it would be best to present the “headlines” as a Floodgate/website alert message to ensure that all interested users will receive the message. For this message, separate floodgates/website alerts should be created for Broward and Collier Counties or for the broader Southeast and Southwest Regions.
- 2) Event 2:
 - a. Floodgate: Hurricane approaching the Florida Keys. Evacuations in process, contraflow lanes along US-1. Airport in Key West closed.
 - b. Website: In the Florida Keys, a hurricane is approaching. Evacuations are in progress with three lanes of US-1 being utilized for northbound travel. Key West airport is also closed. Travel toward the Keys is not recommended. For this message, separate Floodgates / website alerts should be assigned to Monroe and Miami-Dade Counties, or to the broader Southeast Region.

- c. Why is this a Floodgate/website Alert Message? It covers a broad area and turns into a large issue as it progresses. Also, it affects travelers by roadway, sea, and air.

3 Notes

None