



Change Management Board Meeting

AM: Video Con. Bridge 4 Audio: 850 – 414 - 4661

PM: Video Con. Bridge 1 Audio: 850 – 414 - 4977



Welcome and Introductions

Steve Corbin, CMB Chairman



Change Management Board

Time	Item		Lead	Supporting Materials
10:00 – 10:10	Welcome and Introductions		Corbin	
10:10 – 10:25	Next CMB Chairperson <i>(Vote)</i>		Corbin	<i>Change Management Process for Deployment of ITS in the State of Florida</i>
10:25 – 10:55	SunGuide Software Event Types	Accident vs. Crash	Fontan, Vega	CMB .ppt, 080903 <i>Statewide_EM_EVENTTYPE_TABL E.xlsx</i>
		AMBER Alert vs. Vehicle Alert	Hensley	
10:55 – 11:30	SunGuide Software Release 4.0	FDOT Modified SAE Codes <i>(Vote)</i>	Gaarder	CMB .ppt, FDOT Modified SAE Code Sequencing 08 27 2008 v12.xls, Ballot
		Requirement Waiver/Deviations to Support FL ATIS <i>(Vote)</i>		
11:30 – 1:00	LUNCH BREAK			
1:00 – 1:30	SunGuide Software Release 4.1	Probe Travel Time Requirement Waiver/Deviations <i>(Vote)</i>	Tillander	Ballot
1:30 – 2:05	SunGuide Software Release 4.2	D7 Road Ranger/AVL Interface Requirements <i>(Vote)</i>	Chang	Ballot, Road Ranger AVL System Concept of Operations
2:05 – 2:50	SunGuide Software Release 4.2	FHP CAD Interface ConOps and Requirements	Hope	.ppt, FHP CAD Data in SunGuide Software Concept of Operations
2:50 – 3:00	Closing and Action Item Review		Corbin	



Change Management Board



Next CMB Chairperson

Steve Corbin



Change Management Board



- **Nominees:**
 - **Peter Vega**
 - **Steve Corbin**



Change Management Board

SunGuide Software Event Type – Accident vs. Crash

Manuel Fontan

Peter Vega



Altering SunGuide Terminology

"Accident" versus "Crash"



- **Background:**
 - Request raised by FDOT D6 DTOE initially
 - Separate, but same request raised by D2 ITS Engineer
 - "Official" FDOT and FHP term is "Crash" not "Accident"
- **Software Modifications that need to be done:**
 - Updating of EM database for Crash event type
 - Updating of EM GUI and subsystem code as necessary
 - Updating of SAE code mapping from Accident -> Crash
 - Update the SUM
 - Update Administrator Training Materials
 - Update Operator Training Materials
- **Cost:**
 - \$2,832
 - Implement in next SunGuide Release



Change Management Board

SunGuide Software Event Type – AMBER Alert vs. Vehicle Alert

Terry Hensley



Change Management Board

SunGuide Software R 4.0 – FDOT Modified SAE Codes

Erik Gaarder



FDOT Modified SAE Code Sequencing



FDOT Modified SAE Code Sequencing

1. Event Description (FDOT Mod SAE Code Group 1)		2. Event Location Information (Partial list)						(Optional) 3. On-Ramp (FDOT Mod SAE Code Group 2)		(Optional) 4. Off-Ramp (FDOT Mod SAE Code Group 3)		(Optional) 5. Lane Closure (FDOT Mod SAE Code Group 4)			(Optional) 6. Event Location Information Continued	(Optional) 7. Alternate Road Information	8. Event Time Stamp Information
FDOT Mod SAE Code	Description	2a. County	2b. Road	2c. Direction	2d. Distance from	2e. Relationship to exit	2f. Reference Point	FDOT Mod SAE Code	Description	FDOT Mod SAE Code	Description	FDOT Mod SAE Code	Optional Qualifier (See note 5 below)	Description	8a. Congestion (See note 6 below)		
1494	Evacuation							406	On-ramp closed	407	Off-ramp closed	2103		All lanes blocked	Contains location information for head end/tail of congestion (See 2a - 2b)		
205	Accident involving hazardous materials	Examples: • Orange • Polk	Examples: • I-4 • I-95	Examples: • Eastbound • Westbound • Northbound • Southbound	Examples: • 5 miles	Examples: • At • Before • Beyond • Ramp to • Ramp from	Examples: • Exit 78 • International Drive • Exit 230A	2071	On-ramp left lane blocked	2068	Off-ramp left lane blocked	2104	X	Lanes blocked (for non-contiguous blocked lanes)			
203	Multi-vehicle accident							2072	On-ramp center lane blocked	2069	Off-ramp center lane blocked	2101	X	Left lanes blocked			
89	Overturned tractor-trailer							2070	On-ramp right lane blocked	2067	Off-ramp right lane blocked	2102	X	Center lanes blocked			
30	Accident involving a tractor-trailer											2100	X	Right lanes blocked			
135	Accident involving bus											457		Express lanes closed			
204	Accident involving truck											503		Left lane blocked			
201	Accident											508		Center lane blocked			
3053	Emergency Road Construction											2105		1. Center lane blocked			
47	Disabled tractor-trailer											507		Right lane blocked			
148	Disabled bus											2076		Left express lane blocked			
210	Disabled truck											2065		Center express lane blocked			
211	Disabled vehicle											2077		Right express lane blocked			
213	Vehicle on fire											2081		Left shoulder blocked			
2081	Abandoned vehicle											2080		Right shoulder blocked			
85	Partial construction											2079		Express lane left shoulder blocked			
81	Project on roadway											2080		Express lane right shoulder blocked			
136	Traffic congestion																
107	Large maintenance operations																
907	Flooding																
1706	Emergency vehicles																
2043	CR Plans Backlog																
2049	Police Activity																
2085	Emergency coordination																
2096	Weather event due to rain																
2097	Weather event due to fog																
2098	Weather event due to flooding (See note 1 below)																
2074	Weather event																
2099	Special Event																
214	Incident																
2084	Unknown event (See note 1 below)																

●Note: Version 12 sent to all districts on 08.27.2008



FDOT Modified SAE Code Sequencing



- Change control (SAE code changes from V7 02.15.2008):
 - Added SAE Code 2104 - Lanes blocked
 - Added SAE Code 2105 - 1 Center lane blocked
 - Re-prioritized SAE Codes with left lanes having higher priority than center lane and right lane blocked codes.
 - Gave "Overturned tractor-trailer" a higher priority so that it would not become redundant
- *Vote*



Change Management Board

SunGuide Software Release 4.0 - Requirements to Support FL-ATIS (Waivers and Deviations)

Erik Gaarder



Event



- **Modify Requirement – DF007G**
 - Current Req. text
 - DF007G – An event created by the SunGuide operator for the traveler information shall have a field where the operator can select from a **drop down list** to be specified by FDOT of how long the event is expected to last.
 - Modified Req. text
 - DF007G – An event created by the SunGuide operator for the traveler information shall have a field where the operator can enter into a **text box** how long the event is expected to last.
- **Justification: during development of Release 3.0 this was implemented as a “text box” and during Release 4.0 FAT FDOT verbally requested the current implementation not be changed.**
- **Cost impact: None**



Event



- **Modify Requirement – DF001F**

- Current Req. text
 - DF001F – The Data Fusion component shall associate any other real-time information within **200 feet** of a current event on a roadway segment with that current event. If no data is available, a null value or blank shall be provided.
- Modified Req. text
 - DF001F – The Data Fusion component shall associate any other real-time information within a configurable value (**provided in tenths of a mile**) of a current event on a roadway segment with that current event. If no data is available, a null value or blank shall be provided.

- **Justification: during Release 4.0 FAT FDOT expressed a preference for the distance to be measured in miles and tenths of miles.**
- **Cost impact: None**



Event



● Modify Requirement – DF004F

– Current Req. text

- DF004F – The Data Fusion component shall associate real-time emergency events such as police, fire and rescue events that are within **1,000 feet** to one or more incidents or events on the same roadway to the incident or event. If no data is available, a null value or blank shall be provided.

– Modified Req. text

- DF004F – The Data Fusion component shall associate real-time emergency events such as police, fire and rescue events that are within a configurable value (**provided in tenths of a mile**) to one or more incidents or events on the same roadway to the incident or event. If no data is available, a null value or blank shall be provided.

- **Justification:** during Release 4.0 FAT FDOT expressed a preference for the distance to be measured in miles and tenths of miles.
- **Cost impact:** None



GUI Alert



- **Modify Requirement – DF020G**
 - Current Req. text
 - DF020G – The GUI shall alert the operator when there are conflicting or duplicate event reports.
 - Modified Req. text
 - DF020G – The GUI shall alert the operator to potential conflicts when an alert is selected to be processed.
- **Justification: operational paradigm of SunGuide is to provide alerts, once an operator opens an alert; information such as potential duplicate events is displayed.**
- **Cost impact: None**



Event



- **Modify Requirement – DF010G2**
 - Current Req. text
 - DF010G2 – Events must be owned by one of the operators logged into SunGuide.
 - Modified Req. text
 - DF010G2 – Any events owned by an operator when they log out shall continue to be owned by the operator after they log out.
- **Justification: the operational paradigm implemented in SunGuide 3.0 is that event ownership is retained logging out, during Release 4.0 FAT FDOT verbally requested the current implementation not be changed.**
- **Cost impact: None**



Event Severity

- **Modify Requirement – DF009G1**
 - Current Req. text
 - DF009G1 – Event severity shall be one of 3 values with the default as Minor (1): 3 = Severe; 2 = Moderate; 1 = Minor.
 - Modified Req. text
 - DF009G1 – Event severity shall be one of the following values: Severe, Moderate, Minor, or Unknown.
- **Justification: the event severity categories were implemented in SunGuide 3.0, during Release 4.0 FAT FDOT verbally requested the current implementation not be changed.**
- **Cost impact: None**



Reporting

- **Waived Requirements –**
 - **XDF001R:** The Reporting subsystem shall be able to display a report within 10 seconds of when the last report criteria were entered by the operator and a report was requested.
- **Justification:** EM002R, an existing SunGuide requirement, specifies time limits for report generation that will be used to judge such performance. Additionally, the speed of reports is directly related to hardware configuration which is beyond the scope of SunGuide software development.



System configuration / use related requirements



- Waived Requirements –
 - XDF022: The Data Fusion Subsystem shall provide for secure, remote computer-based access to the servers and control of the system software for upgrading and quality monitoring of the data.
 - XDF008F: The data fusion component shall have an SMTP server to allow e-mail messages to be sent to designated addresses.
- Justification: not within the scope of SunGuide development. SwRI did not estimate or charge FDOT any funds to address these requirements)



Database



- Waived Requirements –
 - XDF004D: Information shall be accessible from the database for a period of at least one year.
 - XDF006D: The database component shall support archiving of data to external media for long term storage.
 - XDF010: The Data Fusion subsystem availability shall have an operational availability annually of at least 99.93% annually over an operating cycle of 24 hours starting at midnight.
 - XDF008D: The database component shall have an operational availability annually of at least 99.99% over an operating cycle of 24 hours starting at midnight.
- Justification: these requirements address “system”, “deployment”, “hardware” or “commercial software” issues that are not within the scope of SunGuide development. SwRI did not estimate or charge FDOT any funds to address these requirements.



Change Management Board

- No cost impact
- *Vote*



Change Management Board



Lunch Break

PM:

- **Video Conf. Bridge line 1**
- **Audio: 850 – 410 - 4977**



Change Management Board

SunGuide Software Release 4.1 – Probe Travel Time Requirement (Waivers and Deviations)

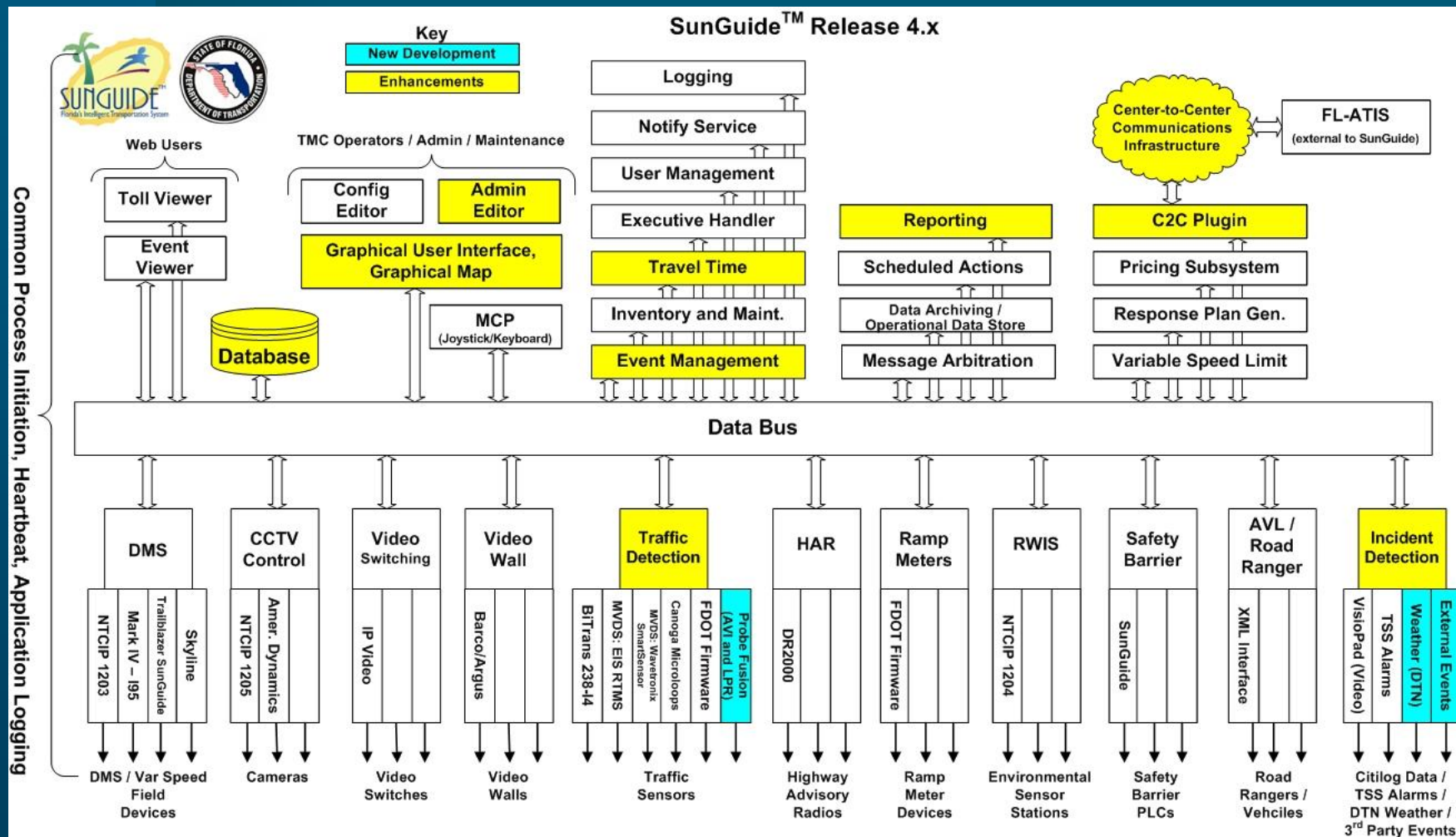
Trey Tillander



Travel Time



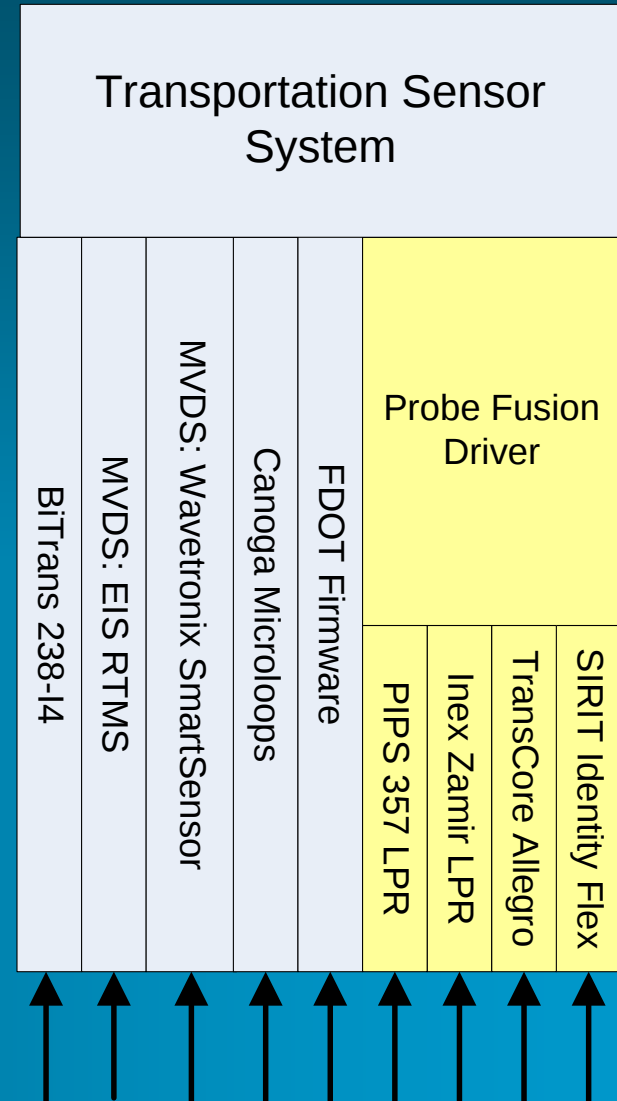
- What is under R 4.1?





Travel Time

- **New Probe Fusion Drivers added to TSS subsystem**
 - 2 AVI protocols:
 - SIRIT Identity Flex Title 21
 - TransCore Allegro IT2020
 - 2 LPR protocols:
 - PIPS P357 Video Processor
 - Inex Zamir Zap
- PIPS P357 Video Processor
 - Inex Zamir Zap





Travel Time

- During Release 4 Travel Times Design Review held the week of November 6, 2007, SwRI became aware that AVI transponder numbers are “one way hashed” before they are transmitted to the host software. It will not be possible to reverse this “hash” to derive the real AVI transponder number. This action on the part of the transponder readers makes obsolete or redundant certain Release 4.1 requirements
- Other Requirements cannot be implemented as originally written.
- Deviations or Waivers have been requested and concurred by FDOT CO.



Travel Time - Cont

- **SunGuide ID: TM007S1 – Deviation Request**
 - Requirement Text: SunGuide shall ensure that toll tag customers remain anonymous in the system.
 - Proposed Text: SunGuide shall process AVI tag ids in the form provided by the tag readers, i.e. will not reconstruct the original tag or identifying information.
 - Rationale for Deviation: Tag numbers are made anonymous by the readers, it is this anonymous form of the tag id that is received by SunGuide.

- **SunGuide ID: TM009S1 – Waiver Request**
 - Requirement Text: AVI Tag read data shall be archived with encrypted transponder IDs.
 - Rationale for Waiver: This sub-requirement is redundant with TM009S.



Travel Time - Cont

- **SunGuide ID: TM009S – Deviation Request**
 - Requirement Text: SunGuide shall archive encrypted AVI Tag read data.
 - Proposed Text: SunGuide shall archive AVI Tag read data.
 - Rationale for deviation: The Tag read transponder numbers are received as described above (“one-way-hashed”).

- **SunGuide ID: TM009S2 – Deviation Request**
 - Requirement Text: Raw AVI Tag read data shall be archived in the same format in which it was received, except that the transponder ID shall be encrypted.
 - Proposed Text: Raw AVI Tag read data shall be archived in the same format in which it was received.
 - Rationale for deviation: The Tag read transponder ID is “one-way-hashed.” This alleviates the necessity to encrypt.



Travel Time - Cont

- **SunGuide ID: TM001X – Deviation Request**
 - **Requirement Text:** The SunGuide Software shall collect the following data from License Plate readers (LPR):
 - Individual license plate numbers (plate numbers will be encrypted and/or truncated to ensure driver privacy)
 - A timestamp for when each license plate number was collected
 - Data Collection Station id
 - Lane of travel from which data was collected
 - Quality/likely accuracy of each plate read (as assessed by LPR system)
 - Information concerning system health - license plate readers, power, communications, etc.



Travel Time - Cont

- **SunGuide ID: TM001X – Deviation Request**
 - **Proposed Text: The SunGuide Software shall collect the following data from License Plate readers (LPR):**
 - Individual license plate numbers that have been made anonymous by the LPR readers.
 - A timestamp for when each license plate number was collected
 - Data Collection Station id
 - Lane of travel from which data was collected
 - Quality/likely accuracy of each plate read (as assessed by LPR system)
 - Information concerning system health - license plate readers, power, communications, etc.
 - **Rationale for deviation: The plate numbers are truncated by the readers (dropping first and last character of plate numbers).**



Travel Time - Cont

- **SunGuide ID: TM004G – Waiver Request**
 - Requirement Text: The SunGuide GUI shall allow an operator to specify an optimum travel time in whole minutes for each segment used for travel time calculations.
 - Rationale for Waiver: FDOT voted in the November 7-8, 2007 TvT Design Review to have optimum time automatically calculated.
- **SunGuide ID: TM005S1 – Deviation Request**
 - Requirement Text: The AVI data collection system shall communicate with the existing AVI protocols used for travel time data collection applications in the State of Florida: TransCore Allegro and Caltrans Title 21.
 - Proposed Text: The AVI data collection system shall communicate with the existing AVI protocols used for travel time data collection applications in the State of Florida: TransCore Allegro and SIRIT Flex.
 - Rationale for Waiver: At FDOT direction SwRI implemented protocols identified as “TransCore Allegro” and “SIRIT Flex.”



Travel Time - Cont

- **SunGuide ID: TM006T2 – Deviation Request**
 - **Requirement Text:** SunGuide shall utilize the following meta-rules and apply them in sequence to dynamically resolve missing link data: (1) If only partial link data is available, then use existing link data to extract a travel time; (2) If all link data is not available, then utilize dynamic linking to determine a travel time; (3) If dynamic linking is not available, then utilize the results of a least squares trending analysis; and (4) If dynamic linking data does not prove adequate or reliable, then use (as a last resort) a "no data available" condition.



Travel Time - Cont

- **SunGuide ID: TM006T2 – Deviation Request**
 - **Proposed Text:** SunGuide shall utilize the following meta-rules and apply them in sequence to dynamically resolve missing link data: (1) If only partial link data is available, then use existing link data to extract a travel time; (2) If all link data is not available, then utilize dynamic linking to determine a travel time; and (3) If dynamic linking does not prove adequate or reliable, then use (as a last resort) a "no data available" condition.
 - **Rationale for Waiver:** January 7, 2008 TvT Follow-up Design Review meeting minutes stated "FDOT opted to remove third meta-rule in TM006T2"



Travel Time - Cont

- **SunGuide ID: TM004X – Deviation Request**
 - **Requirement Text:** The SunGuide LPR data collection function shall communicate with the existing LPR protocols used for travel time data collection applications in the State of Florida: PIPS and I-10 in Tallahassee (TBD).
 - **Proposed Text:** The SunGuide LPR data collection function shall communicate with the existing LPR protocols used for travel time data collection applications in the State of Florida: PIPS and Inex Zamir Zap.
 - **Rationale for Waiver:** At FDOT direction SwRI implemented a protocol as Inex Zamir Zap for the “I-10 in Tallahassee (TBD).”



Travel Time - Cont

- **SunGuide ID: TM004X1 – Deviation Request**
 - **Requirement Text:** The SunGuide LPR data collection function shall be able to process data from the existing LPR readers used for travel time data collection applications in the State of Florida: PIPS P357 Video Processor and I-10 in Tallahassee (TBD).
 - **Proposed Text:** The SunGuide LPR data collection function shall be able to process data from the existing LPR readers used for travel time data collection applications in the State of Florida: PIPS P357 Video Processor and Inex Zamir Zap.
 - **Rationale for Waiver:** At FDOT direction SwRI implemented a protocol as Inex Zamir Zap for the “I-10 in Tallahassee (TBD).”



Travel Time - Cont

- **SunGuide ID: TM0013T1 – Deviation Request**
 - **Requirement Text:** A travel time link shall be allowed to contain TSS links of varied types (i.e., AVL, LPR, roadway Sensor Types).
 - **Proposed Text:** A travel time link shall be allowed to contain TSS links of varied types (i.e., AVI, LPR, roadway Sensor Types).
 - **Rationale for Waiver:** SwRI has assumed that the AVL reference is a typo and the intended was AVI.



Travel Time - Cont

- **SunGuide ID: TM004S – Deviation Request**
 - **Requirement Text:** The Toll Tag reader function shall report and archive average speed and travel time calculations (not raw data) to three decimal places of precision.
 - **Proposed Text:** The Toll Tag reader function shall report and archive average speed in miles per hour and travel time calculations (not raw data) in terms of seconds.
 - **Rationale for Waiver:** The “three decimal places of precision” is not specific with regard to what is desired. Travel time calculations in SunGuide have supported calculations to seconds since initially released as part of SunGuide Release 1.5. This is more than three decimal places of precision for the unit of hours. It should be noted that additional precision implies that the source data is more precise than it is. E.g. for TSS detectors 10% is typical precision.



Travel Time - Cont

- **SunGuide ID: TM005S8 – Deviation Request**
 - **Requirement Text:** An alert shall be generated to the SunGuide operator if no data is received after the poll of an AVI device for a configurable amount of time set the by the SunGuide operator.
 - **Proposed Text:** An alert shall be generated to the SunGuide operator if no data is received from an AVI or LPR device after a configurable amount of time that can be established the by the SunGuide Administrator. This configured time is the same time designated as the polling cycle for detector devices.
 - **Rationale for Waiver:** References to polling need to be removed since the protocols do not support polling, but rather push data to the SunGuide drivers. Thus, SwRI has implemented this function by generating an alert if no data is received for a configurable amount of time. The device configuration will include a “polling interval” for which if no communication is received from the device an alert will be generated.



Travel Time - Cont

- **SunGuide ID: TM007G – Deviation Request**
 - **Requirement Text:** SunGuide shall notify SunGuide operators of reported failures by the LPR equipment or failure to get a response from an LPR using e-mail, a pop-up window, or other means of alerting a SunGuide Operator.
 - **Proposed Text:** SunGuide shall notify SunGuide operators of reported failures by the LPR equipment.
 - **Rationale for Waiver:** References to polling need to be removed since the protocols do not support polling, but rather push data to the SunGuide drivers. Thus, SwRI has implemented this function by generating an alert if no data is received for a configurable amount of time. The device configuration will include a “polling interval” for which if no communication is received from the device an alert will be generated.



Travel Time - Cont

- **SunGuide ID: TM0011T1 – Deviation Request**
 - **Requirement Text:** Diversion messages shall be formatted into the following template: Line 1: To Destination Route Name 1; Line 2: VIA Alt Route Name X MIN; Line 3: VIA Main Route Name Y MIN.
 - **Rationale for Deviation:** This requirement was written with the view in mind that signs are typically three lines and of sufficient width to support this format. Furthermore, it ignores cases in which there may be multiple destinations in a single sign phase, e.g.

TRAVEL TIME TO:
COMMERCIAL 10 MIN
MARVIN GARDENS 15 MIN



Change Management Board

- No cost impact
- *Vote*



Change Management Board

SunGuide Software Release 4.2 – D7 Road Ranger/AVL Interface Requirements

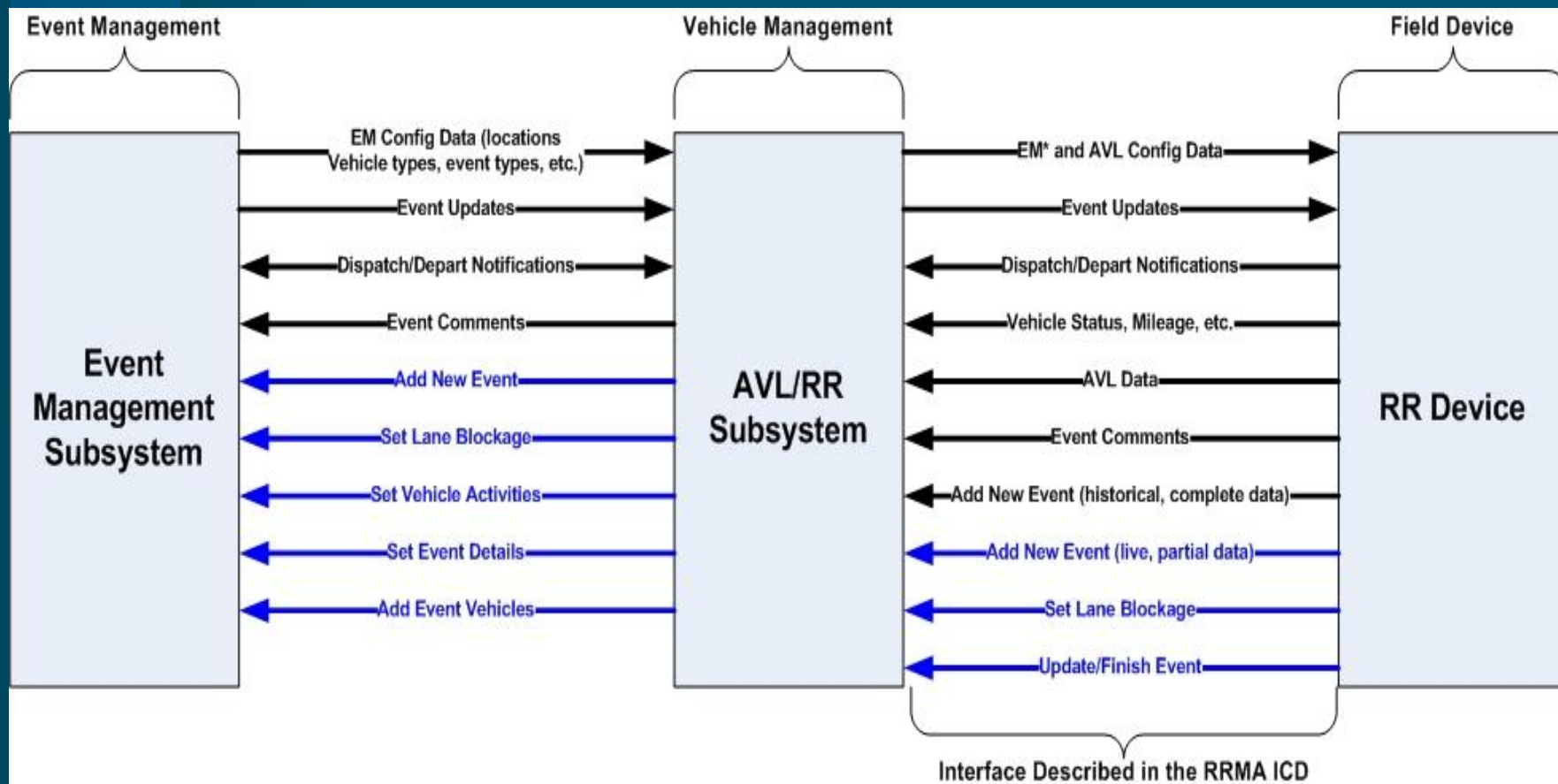
David Chang



D7 RR/ AVL Interface

- FDOT District 7 has developed a ConOps for the AVL Road Ranger System (dated March 12, 2008) that will enhance the existing software.

D7 RR/ AVL Interface - Cont





D7 RR/ AVL Interface - Cont

- **New Requirements:**

- AV018 System shall be able to determine likely duplicated data during audit which was caused by communications loss, then recovery.
- AV020 Mobile operator shall be able to initiate incident.
- AV020M Mobile operator shall be able to close incident which was initiated by that unit.
- AV020M1 Mobile operator shall be able to depart incident and leave it unresolved in SunGuide (i.e., abandoned vehicles).
- AV009T4 Data for an involved vehicle shall include: color, make, model, license state, and license tag.



D7 RR/ AVL Interface - Cont

- **Modified Requirements:**

- AV002V The icon used on the SunGuide map shall be an SVG icon. (ID changed from AV002V1)
- AV001T The operator shall be able to view the vehicle status via the SunGuide GUI Map. (ID changed from AV006V1)
- AV002T6 Historical vehicle positions (tracks) shall be indicated by "+" symbols or similar leading away from the current vehicle position. (ID changed from AV002T1)
- AV002T7 There shall be an option to hide track display that applies to the track of the vehicle. (ID changed from AV002T2)
- If the operator leaves "display track" on for a particular vehicle, the number of symbols representing the track shall follow the vehicle's position on the map with the oldest track symbol being erased as the next to current one is displayed.



D7 RR/ AVL Interface - Cont

- **Modified Requirements:**

- AV002T2 If the operator leaves "display track" on for a particular vehicle, the number of symbols representing the track shall follow the vehicle's position on the map with the oldest track symbol being erased as the next to current one is displayed. (ID changed from AV002T3)
- AV002T3 If a vehicle speed is "stopped" or "0", no more than one track icon shall be displayed. (ID changed from AV002T4)



D7 RR/ AVL Interface - Cont

- **Modified Requirements:**

- AV014 The AVL system shall operate over the communications network designed for the Road Ranger tablet application by District 4. (**New ID**)
- AV015 The AVL central software shall be distributed as part of a SunGuide software release. (**New ID**)
- AV001D The AVL central software shall use the SunGuide oracle database to store and record vehicle location and speed history. (**New ID**)
- AV016 The AVL software shall implement operator notifications within the SunGuide software. (**New ID**)



D7 RR/ AVL Interface - Cont

- **Modified Requirements:**

- AV006V2 The AVL software shall provide summary data when an operator "mouses-over" the vehicle icon. The summary data shall consist of truck number, beat, driver, radio/telephone number, truck position (roadway, direction, reference location, proximity to reference location), speed and status (availability). (New ID)
- AV007L5 An operator shall be able to right-click on a vehicle to dispatch it to a new or existing event. In the case of new events, the operator will be prompted to enter the required information for the new event. (New ID)



D7 RR/ AVL Interface - Cont

- **Modified Requirements:**

- AV017 The list of Road Rangers, part of the EM GUI, shall be augmented to include current truck position (roadway, direction, reference location, proximity to reference location), speed and status (availability) from the AVL software. A "Find on map" option will be provided from the list, which will 'zoom' the SunGuide map to the current position of the vehicle icon. (**New ID**)
- AV005T3 A list of currently logged on trucks and their current dispatch status shall be displayed. (**New ID**)
- AV005T4 A Truck Activity report shall be available. This report shall list all activity for a truck for a given date and time range. The report shall be filterable by truck number (or all), event types, event dispositions, and Driver ID. (**New ID**)



D7 RR/ AVL Interface - Cont

- **Modified Requirements:**

- AV005T5 An Activity Summary Report shall be available. This report shall summarize all activity for a given date and time range. The report shall be filterable by truck number (or all), event types, event dispositions, & Driver ID. (**New ID**)
- AV005T6 A Location report shall be available. This report shall list each GPS update for a given date and time, and the geo-referenced location for that report. It shall be filterable by truck (or all), and Driver ID. (**New ID**)
- AV019 TMC Operators shall be able to change unit status in the event of mobile electronics or communications malfunction. (**New ID**)



D7 RR/ AVL Interface - Cont

- **Tasks:**
 - EM
 - AVL/RR
 - General Tasks
- **Cost: \$119,537, half funded by D7.**
- ***Vote***



Change Management Board

SunGuide Software Release 4.2 – FHP CAD Interface ConOps and Requirements

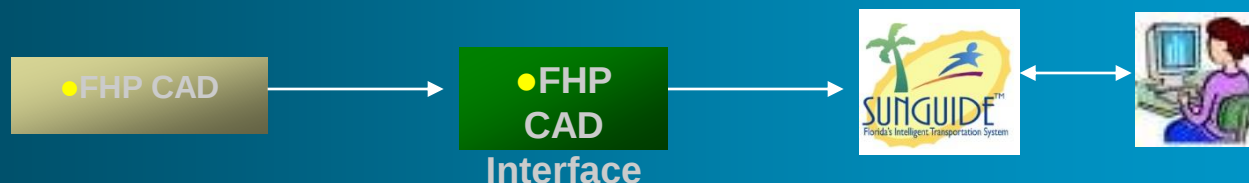
John Hope

FHP CAD Interface

- Currently, FDOT operators need to manually monitor FHP CAD websites or call FHP operators to obtain FHP CAD data



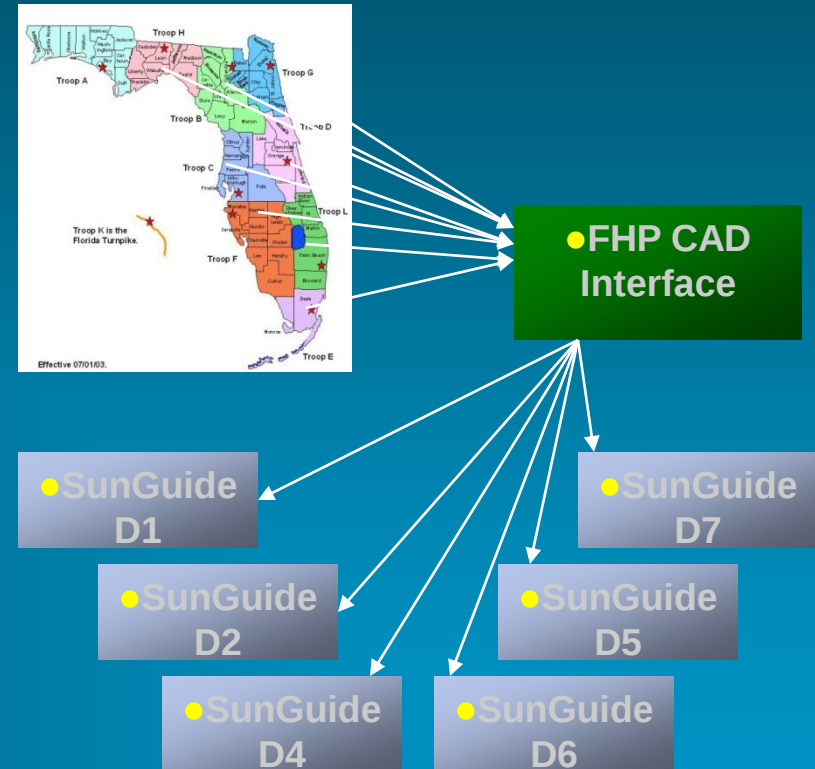
- Goal of interface is to make the communication of event information between FDOT and FHP operators faster and more efficient





FHP CAD Interface - Cont

- Automated interface that consolidates, filters, and redistributes FHP CAD data to each SunGuide deployment
- Interface will filter by county; Districts will be able to receive events outside district boundaries





FHP CAD Interface - Cont

- SunGuide operators will be alerted to new and updated FHP CAD events via the existing Alerting window next to Event List
- When an operator handles an alert, he/she will be provided options to incorporate or dismiss FHP CAD data

Event List

Block CCTV

AVL/RR

VSL

Reports

Audit

11:08:33

Event ID

Filter

Open Panel on Startup

Save Preferences

Printable List

Add Event

ID	Event	Primary Vehicle	Event Type	Blockage	RR	Org	Operator	Date Added	Date Last Updated	Alert	Time
Active Events with Travel Lane Blockage											
7545	Osceola on I-4 Westbound, At SR-429 / Western	Police Activity	1 Right Lane (of 3 Lanes) Blocked, Right Shoulder Blocked	Unit 06-12	DS	RTMC	skennedy	07/17/2008 10:42	07/17/2008 11:03	Response Call Nearby Camera Find On Map Audit	Events associated with 511 link report SW-I4-SG3 have changed. 55 min ago
Active Events without Travel Lane Blockage											
7544	Osceola on I-4 Eastbound, At SR-536 / EPCOT	Congestion	No lanes blocked.	DS	RTMC	klackwell	07/17/2008 10:23	07/17/2008 10:27	Response Call Nearby Camera Find On Map Audit	Events associated with 511 link report SW-I4-SG2 have changed. 41 min ago	
7546	Osceola on I-4 Eastbound, At CR-532 / Champion	Congestion	No lanes blocked.	DS	RTMC	klackwell	07/17/2008 11:03	07/17/2008 11:06	Response Call Nearby Camera Find On Map Audit	Events associated with 511 link report CF-I4-SG1 have changed. 24 min ago	
Unconfirmed Events											
Unresolved Events											
Closed Events											
7543	Seminole on I-4 Eastbound, At SR-434	Blue MAZDA	Disabled Vehicle	No lanes blocked.	DS	RTMC	skennedy	07/17/2008 10:12	07/17/2008 10:23	Response Call Nearby Camera Find On Map Audit	Events associated with 511 link report CF-I4-SG2 have changed. 2 min ago
Other Events											

☐ AVL/RR Alerts

☐ VSL Updates

☐ Detected Incidents

☐ 511 Segment Alerts

☒ Show all alerts

☐ Group alerts by category

SunGuide Incident Detected - Windows Internet Explorer

Address: C:\Development\FDOT\SDF\SG4 Draft Screenshots\DF\ids3rdparty.htm

Google

SunGuide Incident Detected

Type: External Event: Accident
Category: Current
Status: Active
Description: Two car accident on shoulder
Reported Time: 02-02-2008 20:31
Data Source: Local 911 Dispatch

Nearby events (500 ft): 249-Abandoned Vehicle, Broward on I-595 Westbound, At I-595 at University Dr.

What would you like to do?

- ☒ Create New Event
- ☐ Create Secondary Event
- ☐ Set Responder Arrival
- ☐ Dismiss as Already Detected
- ☐ Dismiss as False Alarm

Cancel Next >



FHP CAD Interface - Cont

- Options for incorporating FHP CAD events include:
 - Creating a New SunGuide event using data from the FHP CAD event and “associate” the events
 - Creating a Secondary SunGuide event using data from FHP CAD event and “associate” the events
 - Associate the FHP CAD event with existing SunGuide event
 - Acknowledge/Dismiss FHP CAD event alert
- After the FHP CAD event and SunGuide events are “associated”, then FHP CAD event updates can update the correct SunGuide event with operator approval

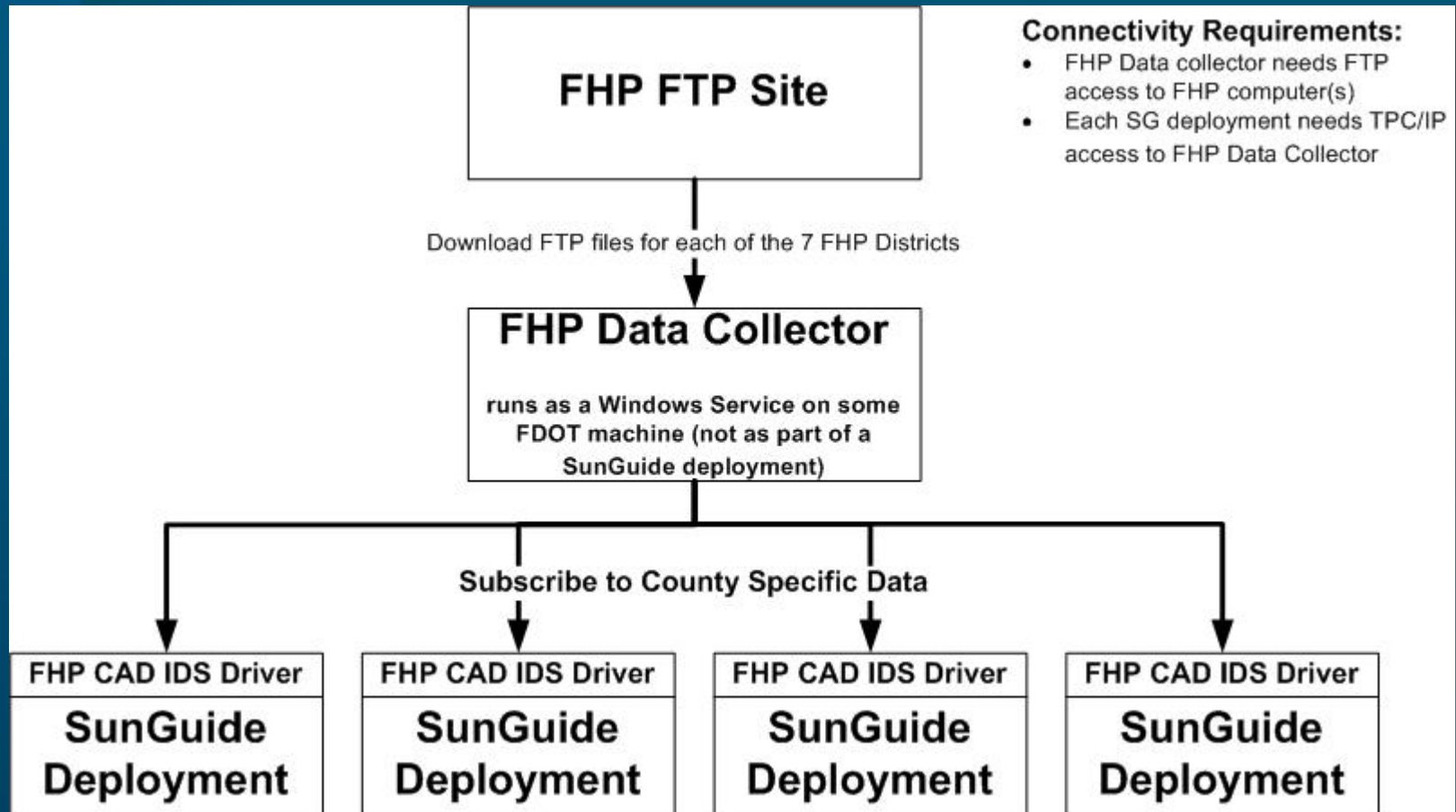


FHP CAD Interface - Cont

- Options for incorporating FHP CAD events include:
 - Creating a New SunGuide event using data from the FHP CAD event and “associate” the events
 - Creating a Secondary SunGuide event using data from FHP CAD event and “associate” the events
 - Associate the FHP CAD event with existing SunGuide event
 - Acknowledge/Dismiss FHP CAD event alert
- After the FHP CAD event and SunGuide events are “associated”, then FHP CAD event updates can update the correct SunGuide event with operator approval



FHP CAD Interface - Cont





FHP CAD Interface - Cont

- **System Requirements:**

- An external event alert shall be presented to the SunGuide operator within 60 seconds of a traffic incident for a requested location being placed on the FHP CAD FTP server.
- The system shall support filtering of FHP traffic incidents by county.
- The system shall support filtering of FHP traffic incidents by a configurable list of FDOT-covered roadways.
- A SunGuide operator shall be notified of FHP CAD interface communication failures.
- A SunGuide operator shall be notified if RCC updates are not received at the FHP CAD server within a configurable amount of time.
- Notifications and data entry related to the handling of FHP CAD incidents shall be consistent with SunGuide Release 4.0.0 functionality.



FHP CAD Interface - Cont

- **FHP Interface Requirements:**
 - Traffic incidents shall be accessed from a single configurable location, consisting of separate files from each FHP CAD RCC.
 - Traffic incidents shall be accessed from the FHP CAD server using the existing XML format.
 - Incident data shall be provided to SunGuide in a format consistent with the SunGuide External Events XML schema.



FHP CAD Interface - Cont

- **SunGuide Requirements:**

- Updated FHP CAD incidents shall update/replace existing unacknowledged alerts.
- External event alerts from FHP CAD incidents shall include the following fields from the FHP CAD incident, subject to availability in the incoming incident data:
 - FHP CAD Incident ID
 - FHP CAD Incident Type
 - FHP CAD Incident Description and Details (if provided)
 - Route Designator
 - Route Direction
 - Linear Reference, Cross Street, or Mile Marker (if provided)
 - County
 - Latitude and Longitude (if provided)
 - Incident Creation Timestamp
 - Incident Update Timestamp (if update)
 - Trooper Dispatch Timestamp (if provided)
 - Trooper Arrival Timestamp (if provided)
 - Originating RCC of the Incident



FHP CAD Interface - Cont

- **SunGuide Requirements:**

- External event alerts with no prior association to SunGuide events shall provide the SunGuide operator with the following action choices:
 - Create New Event (creates association)
 - Create Secondary Event (creates association)
 - Associate with existing SunGuide event
 - Acknowledge, take no action
 - Dismiss (providing a reason, e.g. False Alarm)
- If the FHP CAD incident has not been associated with a SunGuide event, a list of active SunGuide events within a configurable radius shall be presented to the operator.
- A SunGuide event created from an acknowledged FHP CAD incident shall be populated initially from the FHP incident alert data.



FHP CAD Interface - Cont

- **SunGuide Requirements:**

- All FHP CAD incident data received by SunGuide will be stored in the SunGuide database with appropriate timestamps, preserving the original data received including maintaining latitude/longitude data in micro degrees, updates to the data and operator responses to alerts generated by SunGuide.
- If an operator dismisses an alert from an FHP CAD incident, the alert and reason for dismissal will be stored in the SunGuide database.
- If an FHP CAD incident has been dismissed (i.e. as a false alarm), the SunGuide will not create new alerts from the updates to the FHP CAD incident.
- SunGuide events created from FHP CAD incidents shall be displayed on the SunGuide operator map.
- When SunGuide receives updates to alerts that have been acknowledged (only) it will generate an alert as if it had not been previously received.



FHP CAD Interface - Cont

- **Future Functionality (not included in this ROM):**
 - There are several requirements that depending on the “interpretation” or “intent could be easy to implement or quite difficult, SwRI has not provided a ROM for these requirements, we understand FDOT may include them in a future release, these requirements include:
 - If the FHP CAD incident has been associated with a SunGuide event, the associated SunGuide event and FHP CAD incident fields that differ shall be highlighted.
 - The owner of an existing SunGuide event selected for update with FHP CAD incident data shall acknowledge the update before the change to the existing event is made.
 - FHP CAD incidents that have been dismissed will continue to be shown in the event list GUI in a section for dismissed FHP CAD incidents.
 - An operator may “undismiss” or activate an FHP CAD incident (if it becomes apparent that the incident should not have been dismissed).



FHP CAD Interface - Cont

- **Tasks:**
 - FHP CAD Interface Service
 - External Events Driver
 - Incident Detection Subsystem
 - Event Management
 - GUI
- **Cost : \$198,078**



Change Management Board

Closing and Action Item Review

Steve Corbin