## Meeting Notes

## Change Management Board

August 15, 2012 – 1:30 pm to 4:30 pm

August 22, 2012 Final - Version 1.0





### Prepared for:

Florida Department of Transportation Traffic Engineering and Operations Office Intelligent Transportation Systems Section 650 Suwannee Street, M.S. 90 Tallahassee, Florida 32399-0450 (850) 410-5600

## **List of Acronyms**

C2C Center-to-Center CAD Computer-Aided Dispatch CMB Change Management Board CO Concept of Operations Corts	AVL	Automated Vehicle Location
CAD Computer-Aided Dispatch CMB Change Management Board CO Central Office ConOps Concept of Operations COTS Commercial Off-the-Shelf CPU Central Processing Unit DMS Dynamic Message Sign EM Event Manager EOC Emergency Operations Center FDOT Florida Department of Transportation FHP Florida Highway Patrol FL-ATIS Florida Advanced Traveler Information System FTE Florida Turnpike Enterprise GUI Graphical User Interface HAR Highway Advisory Radio IE Intelligent Transportation Systems MAS Message Arbitration Subsystem MDX Miami-Dade Expressway Authority OIS Office of Information Systems MDX Miami-Dade Expressway Authority OIS Office of Information Systems ONVIF Open Network Video Interface Forum OOCEA Orlando-Orange County Expressway Authority RCA Remote Control Application RR Road Ranger RWIS Roadway Weather Information System SPARR Smart Phone Application for Road Rangers SUG SunGuide Software Users Group SwRI Southwest Research Lab TMC Transportation Management Center TSM&O Transportation Management Center TSM&O Transportation Management Center TSM&O Transportation Management and Operations TXDOT Texas Department of Transportation VWA Volume Weighted Averaging VLC Video LaN Client WAN Window Presentation Framework		
CMB. Change Management Board CO Central Office ConOps Concept of Operations COTS Concept of Operations COTS Commercial Off-the-Shelf CPU Central Processing Unit DMS Dynamic Message Sign EM Event Manager EOC Emergency Operations Center FDOT Florida Department of Transportation FHP Florida Department of Transportation FHP Florida Advanced Traveler Information System FTE Florida Turnpike Enterprise GUI Graphical User Interface HAR Highway Advisory Radio IE Intelligent Transportation Systems MAS Message Arbitration Systems MAS Message Arbitration Systems MAS Message Arbitration Systems MDX Mismi-Dade Expressway Authority OIS Office of Information Systems ONVIF Open Network Video Interface Forum OOCEA Orlando-Orange County Expressway Authority RCA Remote Control Application RR Road Ranger RWIS Roadway Weather Information System SPARR Smart Phone Application for Road Ranger SSUG SunGuide Software Users Group SwRI Southwest Research Lab TMC Transportation Management Center TSM&O Transportation Management Center TSM&O Transportation Management Center TSM&O Transportation Management Averaging VLC Video LAN Client WAN Volume Weighted Averaging VLC Video LAN Client WAN Window Presentation Framework WPF Window Presentation Framework		
CO. Central Office ConOps. Concept of Operations COTS Comercial Off-the-Shelf CPU Central Processing Unit DMS. Dynamic Message Sign EM Event Manager EOC Emergency Operations Center FDOT Florida Department of Transportation FHP Florida Department of Transportation FHP Florida Advanced Traveler Information System FTE Florida Advanced Traveler Information System FTE Florida Graphical User Interface HAR Highway Advisory Radio IE Internet Explorer ITS Intelligent Transportation Systems MAS Message Arbitration Systems MAS Message Arbitration Systems MDX Miami-Dade Expressway Authority OIS Office of Information Systems ONVIF Open Network Video Interface Forum OOCEA Orlando-Orange County Expressway Authority RCA Remote Control Application RR Road Ranger SSUG SunGuide Software Users Group SWRI SunGuide Software Users Group SWRI SunGuide Software Users Group SWRI Southwest Research Institute TERL Traffic Engineering Research Lab TMC Transportation Management Center TSM&O Transportation Management Center TSM&O Transportation Management and Operations TXDOT Texas Department of Transportation VWA Volume Weighted Averaging VLC Video LAN Client WAN Wied Area Network WPF Window Presentation Framework		·
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OOCEA	ONVIF	Open Network Video Interface Forum
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RWIS	RCA	Remote Control Application
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VWA	TSM&O	Transportation Systems Management and Operations
VLC	TxDOT	Texas Department of Transportation
WAN		
WPFWindow Presentation Framework		
WWDWrong Way Drivers	WPF	Window Presentation Framework
	WWD	Wrong Way Drivers

# Florida Department of Transportation CHANGE MANAGEMENT BOARD MEETING NOTES Wednesday, August 15, 2012 1:30 P.M. to 4:30 P.M

#### Rhyne Building, Room 330 Tallahassee, Florida

#### Attendees:

Elizabeth Birriel, CO Gene Glotzbach, CO Arun Krishnamurthy, CO Chris Birosak, D1 Pete Vega, D2 Donna Danson, D2 Charles Lattimer, Atkins Chad Williams, D3 Dong Chen, D4 Javier Rodriguez, D6 Jessica Baker, Atkins Alejandro Motta, D6 Chester Chandler, D7 Eric Gordin, FTE Terry Hensley, D7 Randy Pierce, CO Kris Milster, FHWA Mark Laird, AECOM Dee McTague, AECOM David Chang, Atkins John Hope, Atkins Ryan Crist, Clear Channel Rebecca Bratcher, Clear Channel Penny Kamish, Clear Channel Santos Morin, Clear Channel Jason Summerfield, Clear Channel Cathie McKenzie, Gannett Fleming Dave Howell, HNTB Craig Carnes, Metric Jill Dawson, Metric Chris Botti, SwRI

Craig Carnes, Metric

Chris Botti, SwRI

Frank Deasy, Telvent

Shannon Watterson, HNTB

Craig Carnes, Metric

Tucker Brown, SwRI

Clay Packard, Atkins

Fred Littrel, Telvent

Craig Carnes, Metric

Jill Dawson, Metric

Robert Heller, SwRI

Karen Miller, Atkins

Corey Quinn OOCEA

**Purpose:** The purpose of this meeting was to review and vote on statewide issues and requirements, and review footprints issues.

**Welcome and Call for Quorum:** Change Management Board (CMB) Chairman Javier Rodriguez opened the meeting at 1:30 P.M. A quorum was established. He briefly introduced the objectives of the meeting.

#### **Previous Meeting Recap and Action Item Review**

- Minutes from May 2012 meeting posted on website for any review and comment, any comment forward to Arun K.
- CO to propose ONVIF voting at a future CMB meeting, this is on hold.
- Device grouping for permissions is on the agenda and will be discussed in this meeting.
- CO will discuss GUI overhaul enhancement with cost at this meeting and is on agenda.

#### **Agenda Items**

#### **ITS WAN Update**

Frank Deasy presented slides and reported that in D7 they finished installing all the equipment before the Republican National Convention (RNC) preparation had to begin and on 7/31/12 equipment was installed and they are able to communicate with the switch installed at the district. They have confirmed the fiber communication between District 5 and 7.

D1 is installing the equipment in the racks and have confirmed communication with D6. Installation is now complete and still configuring with the District. In D3 the Pensacola connection to the WAN is complete and Tallahassee fiber connection is in process- trying to coordinate. Turnpike Pompano is in process and still being worked on. FHP CAD is now available to everyone that is connected- Multi cast re-addressing is ongoing and Districts should re-address their network. FLATIS & VAS are working to replace dedicated circuits. Pete Vega with D2 asked if a white paper stress test would be performed on WAN. F.Deasy stated that is something that would need to be done. Javier stated we would put as an action item for CO to provide documentation of how stress test will be conducted.

Javier would like to address the issue regarding not receiving disabled vehicles in the FHP CAD reports. Arun Krishnamurthy explained that he spoke to FHP this morning regarding two things: 1) getting location information on the FHP CAD feed in a different manner, to be easier to digest in SunGuide; and 2) event types such as road closures. Penny Kamish with D2 said they are working with FHP to have information input in a friendlier manner such as official roadway name and not local roadway name.

#### **SSUG Update**

John Hope presented slides and stated that the SSUG Charter document is in draft form on the Forums section of the SunGuide website. He has received comments and updated the document on the website. John briefly touched upon the Volume Weighted Averaging. Analysis was done that will be discussed later in this meeting; the new SunGuide Project website forums have been very helpful. Adding tiers to user permission will be discussed later in the meeting by Tucker Brown. C2C reliability / AVL-RR- mobile Device Recognition – most everyone stated that major issues were being addressed. SG R6.0 GUI will be discussed separately at a later date; ODS-TvT Report/data usage was also discussed.

#### **SunGuide GUI Enhancement (Vote)**

Mark Laird spoke on behalf of D6 to sponsor the enhancement: One of the enhancements would be to merge Admin editor into SunGuide. It would be more efficient to be able to move back and forth in one place, also once someone was given access to Admin Editor they had access to everything, new process would be able to monitor access. When it is in the GUI you can locate devices without using the map by entering longitude and latitude. T. Brown took over presentation starting with slide 15 - with version 5 and 5.1, SunGuide was moving from Java script windows to WPF, more options and ways to configure- every window in SunGuide would be configured to look the way they want. Each user will be able to customize each window.GUI enhancement would have better mapping location functions also. Expressed need to get away from IE completely - would be hosted from central location, automated updates for all users-

redesign/ consolidate dialogs, multiple design reviews that will hopefully satisfy everyone. Ballpark estimate is \$425K.

Pete Vega asked if enhancement would be in 6.0, T. Brown explained that this will be done after 6.0 version. Eric Gordin asked if the GUI enhancement is related to the SQL server concept of background database. T. Brown stated that the SQL server is coming out in the 6.0 release and has no interrelation with the database. With the database, we are modifying the back end but the front end that the user sees are not related.

Enhancement – Vote:

District 1: yes District 2: yes

District 3: yes

District 4: yes

District 5: yes

District 6: yes

District 7: yes

FTE: yes

CO: yes

MDX: not present

#### **USER PERMISSION**

Jason Summerfield gave brief introduction on behalf of D2 to sponsor the enhancement: Current permission's list has become very lengthy, with no device specific for permissions for users. There have been discussions over the years to clean up the user permissions.

Tucker Brown presented slides:

#### Option 1-

Module in TxDOT that does their permission administration only has a single subsystem as opposed to the multiple subsystems in SunGuide. User can see all DMS signs in a "read only" fashion and only be able to change those in particular permission set-

C2C usage for remote operator restriction-

Would port TxDOT application over to SunGuide but instead of giving only single permission set it would also give them a read only permission for all devices.

Estimate \$125K

**Option 2** – could apply multiple, custom sets of user permissions for an operator to a particular device or group

- Pro's better level of control
- Con's- very complex administrative tasks

Estimate for \$250K

Javier Rodriguez suggested discussing further at SSUG and discuss between districts in technical detail- Tucker Brown stated there is plenty of time to discuss as it would be done after the 6.0 deployment.

#### **HAR Enhancement**

Dee McTague gave brief introduction on behalf of D4 as the sponsor and stated that currently the limited functionality control in SunGuide doesn't allow users to utilize the devices as efficiently as they do other devices. Important features mentioned in the Conops are direct connection with HAR devices. Currently SunGuide is relying on the SIM Interface and you do

not get immediate response back. Also needs to be integrated into the operator map for control and monitoring and configuration. The HAR system needs to have a flexible message library, as well as the ability to sequence the device within SunGuide. HAR devices have ability to report multiple messages at a time.

J. Hope continued presenting slide summary of enhancements- HAR Sim is currently being used to manage devices-SunGuide relies on HAR Sim to manage devices. If there are device failures this information is not sent back to SunGuide- HAR Message library for common messaging would be translated using text to speech dictionary and then translate to text to speech audio file. Control and Monitoring of HAR should be moved into the Operator map and use the WPF format instead of IE.

HAR message management (doesn't exist right now) but enhancement would allow multiple messages in a HAR queue, list them in priority manner then it would pick out the top message and send to the HAR transmitter that will fit within the allotted time limit. Beacons would need to be sequenced in a way that when an event is entered into response plan SunGuide would pick the appropriate HAR beacon and flash them to the operator. The HAR RPG Template would need to be enhanced; the message template would have to be specific.

#### Summary of benefits:

- easier system configuration
- vendor software is not needed
- expanded HAR capable features

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Mark Laird asked if District has provided comments on the ConOps - John said he has responded to the comments and the responses can be downloaded from the forum. Robert Heller stated it is a great idea but HAR vendor has typically resisted providing access to the device directly and many systems don't do text to speech transmittal. J. Hope stated that there is more detailed information on the text to speech in the ConOps, regarding pre recorded wav files. A. Krishnamurthy stated they talked to Viasala and the reason behind talking to the server instead of directly talking to the device is that their device interface is not clean and rudimentary. Viasala will need to develop a driver.

Chester Chandler is procuring HAR in D7 right and now putting them in the new project.

E. Gordin has 16 transmitters and if anyone needs assistance they may be of some help.

J. Rodriguez said this topic can be discussed at the next CMB meeting after it is confirmed that Viasala will develop the driver and SwRI provides the cost of enhancement.

#### **Providing Data to RITIS**

A. Krishnamurthy presented slides and stated RITS is a product of University of Maryland will be FDOT's new Statewide Central Data Warehouse, which will be available at the end of September 2012. FDOT will provide traffic and incident data to UMD. the TMC's will send C2C data to TERL and TERL will then forward all data to UMD and RITIS- TMC's on ITS WAN will send data though the ITS network and others will send via the internet- by mid September hopefully all TMC's will be connected with TERL through C2C. We hope to send traffic and incident data via FTP as well. SwRI is modifying the Data Archive in SunGuide. A. Krishnamurthy recommends each district deploy the software as soon as possible, release of 5.1.1 will be available mid September. A. Krishnamurthy stated we have sent a hard drive to UMD with all the Florida's historical Data. Mark Laird asked between the dates that the data is sent and the date we start what will happen with the interim data. A. Krishnamurthy stated they do not want a gap and they will need figure out how to make that happen. Mark Laird asked

that there is a lot of data going to C2C, and would the traffic load be an issue. J. Hope stated that the issue of the C2C capacity issue was a FLATIS 511 issue and has been resolved. A. Krishnamurthy stated we may want the data to continue to be sent to STEWARD initially until we have reliable connection to RITIS. Mark Laird asked SwRI if the 5.1.1 changes only related to ODS for archive. Tucker Brown confirmed it.

#### TSS and Travel Time Modifications - Vote

Clay Packard presented slides: TxDOT has implemented some enhancements that could be ported over to SunGuide. Some of the enhancements will be additional device support which includes the EIS G4 with classification, Wavetronix HD support with classification. The Wavetronix HD device has the ability to report back to SunGuide with a negative speed when it detects a "wrong way driver" (WWD) which can be used to alert drivers immediately.

Another improvement will be with the reporting of traffic conditions in IDS alerts, in regards to negative speeds. Travel times values without units - there will be couple different ways to configure travel times on DMS. An analysis was done for excessive TSS alarms. System needs to be able to properly recognize no traffic data. Volume Weighted Averaging (VWA) will be used to better reflect true speed and vehicles- if less than 3 vehicles no alarm will be triggered- Real data was processed for calculation, alarm generation was simulated using D5's data for a week. The analysis showed reduction of TSS alarms by 90%.

Another SunGuide modification proposed includes Link averaging by TSS, not by TSS clients - the C2C plug-ins and Data archive consumers and these must support missing and null speed value. Mark Laird asked about latency of data. C.Packard explained the raw data will be sent and also include new averages immediately. C.Packard went over the numerous benefits to this enhancement which are listed on the slides.

#### Vote

District 1: yes

District 2: yes – asked can a text or email be sent immediately to authorities for WWD drivers—Clay and Arun say it should be able to be sent. CO will look at doing this at a later time when we are comfortable that we don't receive false alarms with these.

District 3: yes

District 4: yes

District 5: yes

District 6: ves

District 7: yes

FTE: yes supportive of reducing alarms concerned about # - C.Packard said we would add to action item

CO: yes

MDX: not present

#### Add Vehicle Year to SunGuide EM - (FP 2223) Vote

T. Brown explained adding vehicle year to the event dialog template can be released in the 6.0 and this will be included in Amber/Silver Alerts. Mark Laird asked if there is an updated vehicle model list available to be included in an update. Joe stated you can go in and add vehicle make and model within SunGuide but it is very time consuming.

P. Vega stated adding the vehicle year is not needed.

# FDOT Change Management Board Meeting Notes Wednesday, August 15, 2012 – 1:30 p.m. to 4:30 p.m.

District 1: no District 2: no District 3: no District 4: no District 5: no District 6: no District 7: no FTE: no CO: no MDX:

#### Add Arterial Turn Lanes to SunGuide EM (FP722) - Vote

T.Brown presented slides requesting a new lane type be added in 6.1 release

District 1: yes
District 2: yes
District 3: yes
District 4: yes
District 5: yes
District 6: yes
District 7: yes
FTE: yes
CO: yes
MDX:

#### Find on Map for IDS Alerts (FP1715) - Vote

T. Brown presented slide for Find on Map for IDS Alerts to be released in 6.0.

District 1: yes
District 2: yes
District 3: yes
District 4: yes
District 5: yes
District 6: yes
District 7: yes
FTE: yes
CO: yes

MDX: Not present

#### **Top Priority SunGuide Item by District**

A. Krishnamurthy recapped discussed at the previous meeting.

D1 issue of Floodgate text to speech is still being investigated.

D2 wanted Blue Toad integration in SunGuide. We hope this will be in R5.1.1 or soon after.

D4 had asked about SunGuide Permission issue, we discussed at the CMB meeting today.

FTE Miles ahead issue has been fixed.

D6 had requested a listing of hot fix on the SunGuide website and this has been done.

#### **District Concerns**

District 6 mentioned that they were having trouble with old Mark IV signs.

A. Krishnamurthy stated we are looking into enhancing the FHP CAD and asked to let him know if there are additional issues that need to be addressed and he will address all at once.

#### **Action Items Review**

- 1. CO to conduct Stress test of ITS WAN and to provide white paper on the issue.
- 2. SSUG to review SunGuide Permission options and to provide recommendation for voting at next meeting.
- Central office and district to follow up with HAR vendor to see if a driver can be developed and follow-up with SwRI for cost estimate for the GUI and subsystem enhancements.
- 4. Central Office to evaluate if the 2030 alerts from D5 were actual or false alarms.
- 5. CO to review the possibility of providing a comprehensive vehicle make and model to be included in SunGuide so TMCs do not have to manually type it in.
- 6. Districts to provide any FHP CAD issues and suggestions to CO so they can address them.
- 7. CO to provide a plan for working out RITIS and STEWARD transition.

Meeting adjourned at 4:29