Meeting Notes

Change Management Board

September 23, 2013 – 1:30 to 4:30 p.m.

Final - Version 1.0





Prepared for:

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List of Acronyms

APL	Approved Product List
C2C	
CAD	
CO	
FDOT	Florida Department of Transportation
FHP	Florida Highway Patrol
FL511	Florida's Advanced Traveler Information System
FTE	Florida Turnpike Enterprise
GUI	Graphical User Interface
HAR	Highway Advisory Radio
IDS	Incident Detection Subsystem
ITS	Intelligent Transportation Systems
NTCIP	National Transportation Communications for ITS Protocol
OOCEA	Orlando-Orange County Expressway Authority
RITIS	Regional Integrated Transportation Information System
RWIS	Road Weather Information System
TERL	Traffic Engineering Research Laboratory
TMC	Transportation Management Center
WAN	
WPF	Windows Presentation Foundation
WWD	Wrong-Way Driving

Florida Department of Transportation CHANGE MANAGEMENT BOARD MEETING NOTES Monday September 23, 2013 1:30 P.M. to 4:30 P.M

Rhyne Building, Room 330 Tallahassee, Florida

Attendees:

Aelon Suskey, CO/Atkins
Brian Ritchson, CO/MCG
Clay Packard, CO/Atkins
David Chang, CO/Atkins
Derek Vollmer, CO/Atkins
Frank Deasy, CO/Telvent
Chris Birosak, D1/FDOT
Scott Robbins, D1/HNTB
Tom Watts, D1
Vincent Lee, D1/Lucent
Craig Carnes, D2/Metric
Donna Danson, D2
Jason Summerfield, D2/Metric

Pete Vega, D2
Ryan Crist, D2/Metric
Lee Smith, D3
Dee MacTague, D4/AECOM
Dong Chen, D4
Jeremy Dilmore, D5
Alex Motta, D6
Javier Rodriguez, D6
Joe Snyder, D6/AECOM
Mark Laird, D6/AECOM
Cathie McKenzie, D7/Gannett
Chester Chandler, D7/FDOT
Dave Howell, D7/HNTB

Ramona Burke D7 Terry Hensley, D7 Eric Gordin, FTE John Easterling, FTE Corey Quinn, OOCEA John Hope, OOCEA/Atkins Kris Milster, FHWA Robert Heller, CO/SwRI Tucker Brown, CO/SwRI

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

Welcome and Call for Quorum: Change Management Board Chairman Javier Rodriguez opened the meeting at 1:40 p.m. A quorum was established. He briefly introduced the objectives of the meeting.

Previous Meeting Recap and Action Item Review

- Central Office (CO) will conduct meetings with the Districts to identify any needed changes and also training necessary to support the Districts with the intelligent transportation systems (ITS) architecture.
- Gene Glotzbach to coordinate inventory / NH tags for Florida's advanced traveler information system (FL511) server infrastructure.
- CO to coordinate with the highway advisory radio (HAR) vendor for product modification suitable for implementation of the Florida Department of Transportation's (FDOT) updated HAR ConOps.
- CO to continue research on PostgreSQL and cloud computing.

AGENDA ITEMS

ITS Wide Area Network Update

F. Deasy presented slides on the ITS wide area network (WAN). He stated D1 and D7 have established connectivity. The ITS WAN and Unicast are both operational. Multicast connectivity is in process and the Gigabit fiber circuit between the two transportation management centers

(TMC) is installed and in final testing. With regard to the D3 regional TMCs, the fiber connection is in process and routing for local ring architecture is being provisioned by the City of Tallahassee. Florida's Turnpike Enterprise (FTE) switch configuration and connection to the ITS WAN are still in process. For those Districts connected to the ITS WAN, the Florida Highway Patrol (FHP) computer-aided dispatch (CAD) is available. The Districts should re-address their multicast devices now to resolve any overlapping addresses. D4 and D6 have completed their multicast addressing and D1, D5, D7, and Miami-Dade Expressway Authority have committed to the process. The dedicated circuits for FL511 and video aggregation system have been replaced with ITS WAN connectivity.

SunGuide® Software Update

C. Packard presented slides on SunGuide software release 6.0 and noted that it was released July 3, 2013. The center-to-center (C2C) hot fix for release 5.1.1 is also included and provides compatibility between 6.0 and 5.1.1. The release 6.0 patch 1 is expected on September 23, 2013. This patch addresses a number of issues that have been resolved including the full installer and inventory control document. C. Packard showed the components of the 5.1.1 platform support and the corresponding operating systems required for compatibility. The current scope of SunGuide software release 6.1 includes: Phase 0 of SunGuide/Lonestar software unification, Nokia and Open Network Video Interface Forum compatibility, installer enhancement, Activu, and support for multiple walls. Proposed additional scope will include road weather information system (RWIS), wrong-way driving (WWD), and several small enhancements as well. The current release of 6.1 is scheduled in March 2014.

Weather Enhancements (vote)

C Packard presented slides on RWIS and would like to add National Transportation Communications for ITS Protocol (NTCIP) v03 support for compatibility with the newer devices. Adding support for the newer version will increase competition and quality as well as add value to operations. RWIS operational needs include: additional operational scenarios; integration into incident detection/event management; consistent, user-friendly graphical user interface (GUI); configuration for portable devices; and reporting on device status and data. The existing implementation is a status only and uses hypertext markup language dialog. C. Packard stated he would like to enhance the software by adding version 3, incident detection subsystem (IDS) integration, event management integrations, and enhance GUI to Windows Presentation Foundation (WPF) as well as reporting device status and device data. C. Packard showed examples of the weather alert and response plan. RWIS will use a beacon subsystem, which will include beacons as an icon on the map. The user would be able to manually activate the beacons and include them in a response plan suggestion. The cost for the SunGuide software modifications to include the subsystems and GUI is \$179,500. This includes NTCIP v3, web relay for beacons; covers current needs in D1 and D2; and includes automatic location updates and message templates for different weather types. Additional device protocols would cost \$16,000. These modifications would be scheduled for release with SunGuide software 6.1. T. Hensley asked if the message templates would include templates for the arterials as well as the main dynamic message signs to include character size, color, and amber. C. Packard stated it would include color and thinks one could design a template for character size and amber. J. Dilmore asked when the release could be expected. C. Packard stated the development should be done sometime in January 2014, with anticipation of the release in the first guarter of 2014.

Vote to move forward with weather implementation:

D1-yes

D2-yes

D3-yes

D4-yes

D5-yes

D6-yes

D7-yes

FTE-yes

CO-yes

Small Enhancements (vote)

T. Brown presented slides on small SunGuide software enhancements. He noted that these would be smaller scale efforts, not conflict with Lonestar or the merge effort, have straightforward concepts of operation, and would most likely not require extensive discussion or differing opinions on how the system should operate with the enhancement. The first enhancement is to the response plan status proposed by D2 that would add a terminate response plan button to the event details dialog and indicate if the response plan has been activated. Another enhancement to the response plan would prompt users if the response plan is active and then provide the option to terminate and close, close, or cancel. It would also prevent Road Rangers from closing events and would be added to the event status sent to third parties.

The second enhancement, proposed by the Traffic Engineering Research Laboratory (TERL), is the automated vehicle location update alerts. The alert would notify operations when a vehicle hasn't reported a position in a configurable amount of time. There would be one alert for all vehicles and the alert would also provide the amount of time communications has been lost.

A third enhancement, proposed by D2, would allow device display groups to be created so an operator could set up a custom set of devices. D2 would also like to add contractions as supported/ approved words. D6 proposed to modify event dialog filtering so the list of available events will be filtered to those that are currently open. D2 and Orlando-Orange County Expressway Authority (OOCEA) proposed roadway filtering, whereas, the roadway list will contain new filters with links showing whether the roadway or direction has been set or not.

Another enhancement, proposed by OOCEA, is to have SunGuide software time sync all radar based devices with the server running transportation sensor subsystem and the drivers. The proposed modifications to the reporting subsystem consist of removing the GUI from the tabbed user interface and re-writing in WPF, and enabling a queue of currently running reports, queued reports, and reports that have been completed in the last hour. Reports may be cancelled or emailed if desired. T. Brown showed slides on response plan scheduling and how a user can open an event with a response plan and then make necessary modifications. He also showed slides demonstrating the integration of the login and subsystem. Some video on desktop enhancements include: a collapsible list with closed-circuit television cameras configured with video streams, a camera with an attached video stream that can be viewed by video on

desktop, and zoom so the user can expand the video stream. Video on desktop will also be utilized across C2C. The last enhancement is to add the anonymous wireless address matching protocol to the probe fusion driver in order to read Bluetooth devices. The total cost for the SunGuide software modifications is \$181,000 and the modifications are planned for release 6.1.

Vote for SunGuide software enhancements

D1-yes

D2-yes

D3-yes

D4-yes

D5-yes

D6-yes

D7-yes

FTE-yes

i i L-ycs

CO-yes

Wrong-Way Driving

FDOT Secretary Prasad asked CO to form a task team to investigate WWD warning systems and countermeasures. The scope of this effort includes: literature review of past studies and projects, evaluation of wrong-way warning devices, review of FDOT standards to help improve application and consistency of warning system, SunGuide software proof-of-concept detection and response for WWD events, and a pilot project field testing. Preliminary device evaluation by TERL includes wrong-way detection on mainline lanes using WavetronixHD with Click!512 as well as wrong-way signage on ramps. SunGuide software solutions include single Wavetronix HD detection on mainline, TAPCO detection and warning signs on off-ramps, and having WWD events handled completely by SunGuide software. The necessary SunGuide software modifications include the need for support of two devices, Click!512 and TAPCO detections trigger, instant alerts and emails, alerts logged in database for reporting, and operator map configurations. FTE is working with CO on the pilot project. E. Gordin shared that Phase 1 of the wrong-way deployment will include signage and paint marking. Phase 2 will incorporate TAPCO products into SunGuide software. The cost for the WWD enhancements to SunGuide software is \$74,000; it is planned for SunGuide software release 6.1.

FHP CAD Improvements

C. Packard asked what Districts are using FHP CAD. D6 is not currently using it, but their intent is to use the system once enhancements are implemented. D2 currently uses FHP CAD system. D7 is attempting to use the system, but is working through various issues. D5 has been using FHP CAD for a long time, and it is part of their everyday operating procedure. D4 used it briefly and provided detailed feedback. D1 is using FHP CAD and, although it is a little cumbersome for the operators, they are working through it. D2 stated that they believed D3 was using it as well. The objectives for FHP CAD and IDS are to address issues already identified and capture additional ideas. The summary of issues include: incorrect location is auto-selected, incorrect filtering of roadways, alert updates are too frequent, missing and unclassified event types, and events that are always active. CO has requested that the FHP contractor make some minor enhancements to the FHP CAD feed, which will provide location in separate fields and additional event types. To address the incorrect location issues, FHP CAD location data will

need to be altered as well as SunGuide software using latitude and longitude. SunGuide software will be modified to improve parsing of the location string, which will greatly reduce incorrect location selections. To repair roadway filtering, roadways will be configured as a list of names and the name in the list may be contained within the roadway name to reduce the amount of irrelevant alerts. The benefits of FHP CAD improvements will consist of fewer alerts from undesired and incorrect locations, increased efficiency for operators, no change to concept of operations, and more users benefiting from FHP CAD alerts. FHP CAD improvements should be deployed in late October.

Upcoming Regional Integrated Transportation Information System Enhancements

C. Packard stated SunGuide software data is now connected to the Regional Integrated Transportation Information System (RITIS) and the original contract ended January 2013. CO is in the process of entering a new contract. Some priorities are to fix existing system issues, new modifications to include compatibility with SunGuide software release 6.0, Nokia third-party data feed integration, SunGuide probe data integration, future enhancements, and system defects.

TERL Approved Product List Process Update

A. EI-Urfali presented slides on the new Approved Product List (APL) process. He stated it's a new process that will enable one to get a permit for devices that have potential for a good cause, such as those that reduce congestion, save lives, etc., but have not been certified and listed on the APL. The change in process will allow permitting of products that compete with APL-certified items in a fair and impartial manner. It will also allow new technology to be readily used in the field under authorized conditions and reduce turnaround time to issue a permit. The process for getting a device permit is to submit a Request for Traffic Control Device Permit to the TERL; they will review for completeness, and the State Traffic Operations Engineer will issue the permit. A. EI-Urfali presented slides on the necessary attachments needed for the permit process as well as applicable conditions.

Open Discussion

With regard to detectors, J. Rodriguez suggested the Districts get together to discuss and compare detector data. P. Vega suggested examining the frequencies and field testing to capture data and performance to make sure everything is within the desired frequencies. Districts are concerned with data quality and having quality checks. The Districts would like to discuss different technologies and applications that could be used.

Review Action Items

- D5 will get in touch with CO to discuss ITS WAN connectivity
- FTE to prepare white paper to document their efforts and findings on WWD
- OOCEA to prepare email for distribution to all Districts on findings of latest deployment effort
- CO working with D7 on issues list with RITIS enhancements
- E. Gordin to set up GoToMeeting regarding detector issues
- C. Packard to schedule meeting to discuss SunGuide software enhancements

Meeting adjourned 4:33 p.m.