

Meeting Notes

Change Management Board

September 20, 2011 – 1:30 pm to 4:30 pm

October 26, 2011
Final - Version 1.0



Prepared for:
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Traffic Engineering and Operations Office
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List of Acronyms

| | |
|-------------|---|
| C2C | Center-to-Center |
| CCTV | Closed-circuit television |
| CMB | Change Management Board |
| CO | Central Office |
| DMS | Dynamic Message Sign |
| EOC | Emergency Operations Center |
| FDOT | Florida Department of Transportation |
| FTE | Florida Turnpike Enterprise |
| GUI | Graphical User Interface |
| IV&V | Independent Verification and Validation |
| MDX | Miami-Dade Expressway Authority |
| MUTCD | Manual on Uniform Traffic Control Devices |
| NTCIP | National Transportation Communications for ITS Protocol |
| ONVIF | Open Network Video Interface Forum |
| OOCEA | Orlando-Orange County Expressway Authority |
| PSIA | Physical Security Interoperability Association |
| RCA | Remote Control Application |
| SwRI | Southwest Research Institute |
| TERL | Traffic Engineering Research Lab |
| TMC | Transportation Management Center |
| TRC | Technical Review Committee |
| TxDOT | Texas Department of Transportation |
| VAS | Video Aggregation System |
| WAN | Wide Area Network |

Florida Department of Transportation
CHANGE MANAGEMENT BOARD MEETING NOTES
Tuesday, September 20, 2011
1:30 P.M. to 4:30 P.M
Rhyne Building, Room 330 Tallahassee, Florida

Attendees:

| | | |
|-----------------------|-------------------------------|----------------------|
| Gene Glotzbach, CO | Trey Tillander, CO | Chris Birozak, D1 |
| Carlos Bonilla, D1 | Pete Vega, D2 | Mark Nallick, D3 |
| Dong Chen, D4 | Mike Smith, D5 | Nathan Ruckert, D5 |
| Shannon Watterson, D5 | Javier Rodriguez, D6 | Ramona Burke, D7 |
| Chester Chandler, D7 | Terry Hensley, D7 | Eric Gordin, FTE |
| Kelly Kinney, FTE | Ivan del Campo, MDX | Dee McTague, AECOM |
| TJ Hapney, Atkins | John Hope, Atkins | Clay Packard, Atkins |
| Marie Tucker, Atkins | David Howell, HNTB | Alex Mirones, Jacobs |
| Brian Ritchson, MCG | Jason Summerfield, SmartRoute | Tucker Brown, SwRI |
| Robert Heller, SwRI | Jose Perez, SwRI | Frank Deasy, Telvent |

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 Eric Gordin 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

- Southwest Research Institute (SwRI) to provide cost estimate for video touring. – **Will be discussed at a later meeting.**
- CMB to choose one of two options presented for H.264 during the meeting. – **Discuss in current meeting.**

Agenda Items

CMB Chair Nomination

Eric Gordin stated that the CMB is now taking nominations for a new chair that would start in January 2012. Gene Glotzbach nominated Arun Krishnamurthy and Pete Vega seconded the nomination. E. Gordin stated that if any others have nomination to please email him.

SunGuide 5.1 Update

Central Office (CO) stated that this release is considered to be a two part release. The first part is connected vehicle and the second part is the rest of the footprint issues that were addressed. CO then reviewed what the connected vehicle portion of the release does. He continued to say that there was still testing on the connected vehicle part of the release as there were some

environment challenges that are still being worked through. Brian Ritchson then reviewed some of the enhancements that were requested by the Districts and discussed the testing approach that was used with the Traffic Engineering Research Lab (TERL) testing.

C. Packard stated that the distribution of the new release will be within the next week and coordination with SwRI on any installation issues and please copy C. Packard and A. Krishnamurthy on those request. Please contact C. Packard for any training request as these will be on case by case basis.

FMT / ITS WAN Update

G. Glotzbach stated that there was going to be an upgrade to the Video Aggregation System (VAS) system in 511 to provide streaming video but that was put on hold when we found out we had to re-advertise the contract. A decision has been made to move forward in two phases. The first phase would be to provide the Emergency Operations Center (EOC) access to the video for emergency purposes and the second phase would provide the video to the public. The first phase is currently underway and should be complete in the next couple months.

Frank Deasy stated his staff is currently working with IBI on completing the first phase but there are still problems with Florida Turnpike Enterprise (FTE) – Pompano and currently there is no schedule for the fix. Fiber for I-4 looks good and CO will setup a meeting with District 5 to discuss minor issues. The final assignment for this is for District 4 and a request has been put out to the vendor. C. Chandler asked what the date was for District 7 and F. Deasy stated he thought by the end of the year but did not have a final schedule at this point.

TVT Scheduling

Robert Heller reviewed the slides regarding the original request and the proposed enhancement. He then stated that this enhancement could schedule the display of travel times on individual time, and described in detail the Graphical User Interface (GUI) and how this feature could be protected by privilege. The cost estimate for the enhancement is \$75K.

Mark Laird stated that the Dynamic Message Sign (DMS) groups are defined in the admin editor. SwRI stated that it would be more in a SAS format where you pick the ones you want. M. Laird asked if there would be a conflict between the global vs. specific and SwRI stated yes and we need to pick which one would override but this would not affect the price.

TVT Scheduling Vote:

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

SQL Server

R. Heller discussed the licensing scheme for Oracle and SQL and reviewed the costs for both. He then reviewed what would need to be done to have SunGuide support SQL and Oracle. The cost for this enhancement would be \$350K. M. Laird agreed that this was a big job and asked if the SwRI would be changing the Oracle tables in SQL so they are the same. SwRI responded that yes nested tables would be removed. M. Laird then asked will it be migrating the data or just the structure and SwRI stated the data. M. Laird then asked if this was going to include two different SQL server databases and SwRI stated that it could be possible, we are going to take a hard look at the data and the databases to see what it needs to be moved and restructure some of the data and try to do a little cleanup.

Brian Ritchson asked if this would be more generic programming language in SunGuide. SwRI stated that this is the driving force between ODCs, if we extract the databases up a level and you do not take a bad performance hit as we did this a lot with Lonestar. SwRI would look carefully before we use any MS SQL specifics and we would try to get away from Oracle or MS SQL standard languages. It is supposed to be standardized but most vendors have made it their own and this is where you get into issues and then you get tied to one vendor. FTE asked that the CMB are provided with updates as this process moves along and asked if there could be a change in the cost as SwRI moves forward. SwRI stated that the items listed in the approach we can deliver within this budget as long as we do get into a lot of bad stuff. The schedule is tougher as we are looking at 9-12 months to get this complete. Carlos Bonilla stated that this would need to coincide with the renewal for Oracle licenses. CO stated that the current expiration date is September 2012. SwRI noted that this would be a tight schedule. District 7 stated that if this was delayed for a year the cost is as much as the Oracle purchase. SwRI stated they will discuss on how to accelerate the schedule. District 7 asked if Oracle offers any type of extensions; CO stated that they do not allow for a purchase less than a year but you can go unsupported as a last resort but that is not suggested. District 1 asked if in the future we are running dual databases, as we make changes to SunGuide does that cost extra because SwRI will have to make sure it works in both. SwRI stated that it will make the testing more costly but should not affect the deployment cost. M. Laird stated if we try to accelerate the schedule we could run into problems in the long run and would prefer to give SwRI the time to make it right.

SQL Server Vote:

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

Color DMS

E. Gordin discussed the proposed images by the Technical Review Committee (TRC) and went on to review the standard template and that the color scheme is limited to what is stated in the Manual on Uniform Traffic Control Devices (MUTCD). R. Heller reviewed the enhancements in SunGuide. He then stated that the cost is based on the availability of Texas Department of Transportation (TxDOT) merges DMS which would be \$185K. M. Laird asked if the library graphics are not scalable would that reduce the effort. SwRI stated that would not affect the cost. District 7 stated they did not understand the single control issue. CO stated that when you see the status of the sign it paints what is suppose to have on the sign, it will see the status of the sign and show you what is being displayed so the code can be used for 511 as well and you will not have to rebuild the code to display on another application such as a DMS simulator.

Color DMS Vote:

District 1: Yes

District 2: Yes

District 3: Yes

District 4: Yes

District 5: Yes

District 6: Yes

District 7: Yes

FTE: Yes

MDX: Yes

CO: Yes

TVT Algorithm

R. Heller discussed the issues with Footprint 1847 and discussed that Orlando-Orange County Expressway Authority (OOCEA) uses the approach of using a number of matches and a time period. He then discussed the enhancements to SunGuide and the cost would be \$35K. G. Glotzbach asked if this would apply to the Inrix data. SwRI stated that it would not because the data from Inrix is based on their own probe matching; we are already getting processed data from them. G. Glotzbach stated that we are still faced with the similar situation and SwRI agreed but all we see from Inrix is the travel time. District 1 asked what happens if you have very high volumes and it is congested, is this a concern. SwRI stated they did not think it was a concern because the age is when the match occurs, the point B is what matters it does not matter how long it took them to get there. John Hope stated that OOCEA uses two different methods when it calculates travel times. The first is fusion where the system requires a minimum number of matches which currently it requires 10 matches in 1 minute. The second default method is a minimum number of matches but in a larger time frame. SwRI stated that this was the exact intent of this enhancement.

District 2 stated that while examining the Bluetooth filter system it is pretty much doing the same thing and asked if SwRI has looked at the Bluetooth to see if there is a way to incorporate it as well. SwRI stated that the enhancement does not throw away any data as the Bluetooth does. J. Hope stated that it might be worth researching throwing out suspect data and SwRI stated how do you determine what suspect data is. District 2 stated that late at night you may have one car every minute and you are getting a read of 6 mph so you would not want to keep that travel time, you can set a minimum number of cars in a time period. SwRI asked if District 2 was referring to time base filtering of low numbers; based on certain parameters yes that is an outlier

but the problem is describing in detail what an outlier is. District 3 asked if there was any logic flow chart for the data and SwRI stated that they used some design material from OOCEA and there may be some flow diagrams in that material. J. Hope stated that there is probably some additional diagrams in the OOCEA data system as well. District 3 stated they are looking for something to state what good data is and what is not. SwRI stated they will look for this information and it would help resolve this issue.

District 5 asked that in the case when all lanes are blocked and there are no reads what would be posted; SwRI stated that it would depend on how it is configure but we believe it would stop reporting if it surpassed all parameter. District 2 asked CO if they were working with TrafficCast on their filtering system. CO stated that yes the drive tests were completed last week but do not have the results. FTE stated that the filtering needs to be looked at further and a parameter needs to be set high enough so that the traffic that goes through outweighs the ones going in the service plaza. We need to get this right the first time so we do not have to go back and revisit this issue again. E. Gordin agreed to postpone the vote for this item until further research is completed.

ONVIF Support

SwRI gave an overview of the original SunGuide requirements for MPEG4, H.264, Open Network Video Interface Forum (ONVIF) and Physical Security Interoperability Association (PSIA) and stated that a lot of products are being marketed for ONVIF compliance. They went on to discuss the SunGuide enhancements regarding specifications and device types. There is no budget at this time as SwRI would like to get more direction from the CMB. We are not looking at supporting protocols other than ONVIF. M. Laird stated that there has been growth in the standard since the last time this was discussed and SwRI agreed. James Bitting asked what the impact on National Transportation Communications for ITS Protocol (NTCIP) would be. SwRI stated that fewer manufacturers are supporting NTCIP. J. Bitting then asked if there are plans to incorporate this in the specifications and Trey Tillander replied yes it would be incorporated.

M. Laird stated his biggest concern is the self certification compliance, SwRI stated yes that was interesting and there is a test specification for that. District 6 asked CO how many vendor are coming in with this as the only interface they are supporting. CO stated that they did not know how many, but can think of two but when asked for the firmware they could not provide it. We think the vendors will get there but have not received any ONVIF compliant products at this time.

E. Gordin stated that his assumption is that CO will continue to talk and discuss and asked if the Districts should provide feedback or is this going to be based on the market. E. Gordin also suggested keeping this as an agenda item for the next meeting. SwRI stated that at the next meeting they will provide a cost estimate. E. Gordin asked what would change in the next two month and SwRI stated they are going to try to order a couple of ONVIF compliant products and see what the reaction is from the vendors. District 2 stated that we may see a lot of these vendors at World Congress.

Top Priority Item by District

District 2 stated that while at Independent Verification and Validation (IV&V) there was a discussion with CO regarding Road Rangers entering activity. When the Road Ranger enters activity it becomes permanent and if something is selected incorrectly it requires a full audit to correct. CO suggested researching to see if the activities can be put in a drop down list format so that before the incident is complete it would be able to be modified. B. Ritchson then showed an example and District 2 agreed that this is what they were thinking of for this issue. M. Laird asked if this was just for Road Ranger activity and District 2 confirmed. SwRI asked if you have multiple activities entered and you delete one should it completely remove the activity or should it be noted. District 2 stated that would be a design question. M. Laird stated that if you accidentally delete something then it is just gone and CO stated that there is no timestamp with this so it might be easier to just delete the activity. M. Laird stated that he could see problems with this and would like to discuss this with Joe Snyder to get his opinion.

J. Hope stated that he was asked to bring up an existing footprint issue for L.A. Griffin. There is currently a footprint out on this topic; controlling DMS' from a different SunGuide installation. OOCEA has its DMS controlled by SunGuide but the District 5 Transportation Management Center (TMC) operators performs the operations and currently have to login separately to perform a common action of posting incident messages and travel time. Sometime they run into issues with being able to have District 5 SunGuide fully control OOCEA signs through Center-to-Center (C2C) command. J. Hope then asked if any other Districts were doing this as well. FTE stated that it has discussed having two separate SunGuide installations but our configuration is we run one and both connect to it. District 4 stated they have two SunGuide installations but does not know if IBI has done any test running them back and forth but we do this with Closed-circuit television (CCTV)s. The operator just makes them inactive in one area and then activates them in another area. FTE asked if District 4 was controlling them through C2C. District 4 stated that no they have them configured in both SunGuide installations. FTE then asked if District 4 has seen any problems with this method versus something that is automated. District 4 stated that yes it is more work but there has not been any testing on DMS'. District 4 will discuss this with IBI and see if there is any additional information. J. Hope stated that this is a low priority item since there is a current solution but it would help the District 5 operations so they do not have to go into two separate systems. SwRI stated that there is an application subsystem for TxDOT call remote control application (RCA). This is meant to solve the problem you are discussing. J. Hope then asked if it would give the District 5 operators transparent control of the signs located in OOCEA or the cameras for District 4 and you would not have to run C2C only the RCA application. SwRI stated they would not suggest enhancing C2C but does suggest waiting to see when TxDOT releases the application and see how stable it is and if it would resolve the issue. CO stated that this would be an agenda item for the next meeting and asked for more details to be provided.

M. Laird stated that he would email District 6 list of priority items.

Action Item Review

1. SwRI to provide further information regarding Travel Time Algorithm.
2. SwRI to provide cost estimate for ONVIF.
3. SwRI to provide further information regarding TxDOT RCA application.