

Meeting Notes

Change Management Board

October 27, 2009 – 1:30 pm to 3:45 pm

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Prepared for:
Florida Department of Transportation
Traffic Engineering and Operations Office
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List of Acronyms

C2C	Center-to-Center
CAD	Computer-Aided Dispatch
CMB	Change Management Board
CO	Central Office
ConOps	Concept of Operations
DMS	Dynamic Message Sign
FAT	Factory Acceptance Test
FDOT	Florida Department of Transportation
FHP	Florida Highway Patrol
FTC	Florida Transportation Commission
FTE	Florida Turnpike Enterprise
FL-ATIS	Florida Advanced Traveler Information System
GUI	Graphical User Interface
ICD	Interface Control Document
ITN	Invitation to Negotiate
IVR	Interactive Voice Response
ITS	Intelligent Transportation Systems
IV&V	Independent Verification and Validation
MDX	Miami-Dade Expressway Authority
RTMC	Regional Transportation Management Center
SAE	Society of Automotive Engineers
SSUG	SunGuide® Software Users Group
SwRI	Southwest Research Institute
TERL	Traffic Engineering Research Laboratory
TMC	Transportation Management Center
WAN	Wide Area Network
WGM	Working Group Meeting

Florida Department of Transportation
CHANGE MANAGEMENT BOARD MEETING NOTES
Tuesday, October 27, 2009
1:30 P.M. to 3:45 pm
Rhyne Building, Room 330 Tallahassee, Florida

Attendees:

Chris Birosak, FDOT D1	Carlos Bonilla, FDOT D1	Peter Vega, FDOT D2
Chad Williams, FDOT D3	Mark Nallick, FDOT D3	Michael Smith, FDOT D5
Jennifer Heller, FDOT D5	Manuel Fontan, FDOT D6	Bill Wilshire, FDOT D7
Terry Hensley, FDOT D7	Chester Chandler, FDOT D7	John Easterling, FTE
Eric Gordin, FTE	Trey Tillander, FDOT CO	Randy Pierce, FDOT CO
Arun Krishnamurthy, FDOT CO	Elizabeth Birriel, FDOT CO	Paul Mannix, PBS&J
Erik Gaarder, PBS&J	David Chang, PBS&J	Khue Ngo, PBS&J
Clay Packard, PBS&J	Marie Howell, PBS&J	Mark Laird, AECOM
Robert Heller, SwRI	James Barbosa, IBI Group	Jason Summerfield, SmartRoute
Frank Deasy, Telvent		

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

Welcome and Call for Quorum: Change Management Board (CMB) Chairman Pete Vega opened the meeting at 1:30 p.m. A quorum was established. He briefly introduced the objectives of the meeting then recapped the previous meeting's action items.

Action Items Recap:

- Central Office to coordinate with FHP and CO-Telecommunication section (Randy Pierce) for FHP CAD connectivity to Districts. – Presentation in CMB meeting today.
- Central Office to find out the statewide policy on how long the FHP CAD alerts should be stored. – A. Krishnamurthy will work with SwRI to develop a recommendation on storing the data.
- CO to find out the policy from FHP whether it is allowed to store the FHP CAD data. – Major Williams with FHP stated that the data can be stored as it is public information.
- District 4 (Dee) to send "Roadway Damage" report to Districts for reference. - Complete.
- City of Tallahassee (Wayne Bryan) to provide VPN access to District 2 (Pete Vega) as a result of the meeting with C. Williams. Details of level of access will be discussed in the meeting. – P. Vega talked to Wayne Bryan and District 2 should have VPN access in a few months.
- SwRI to come up with a new requirement for TSS generating an alarm every time the speed AND/OR (configurable in Admin Editor) occupancy of a link crosses a specified threshold (slides 89, 90, 91). – SwRI is working on the new requirements.
- Districts to review "Right click menu" proposal and provide feedback to Central Office. – A. Krishnamurthy will email the final proposal to the districts
- CO to coordinate with Districts on SunGuide training. – Complete.
- Develop requirements for SunGuide Software Release 5.0 – Response Plans Enhancement. – SwRI is working on the requirements.
- Develop requirements for SunGuide Software Release 4.3 – Express Lanes Enhancement. – SwRI is working on the requirements.

SunGuide Software Re-advertisement – Arun Krishnamurthy

Arun Krishnamurthy stated that the current SunGuide contract was for five years and a one year renewal was done last year. Central Office (CO) was only able to extend the current contract by nine months; therefore the current contract will expire June 2010. CO is working on the advertisement and hopes to have the contractor selected by April or May of 2010. The advertisement will be posted by December 2009 which gives CO some time to work on the invitation to negotiate (ITN). A. Krishnamurthy stated that the draft ITN will be ready within a week or so and will be distributed to Florida Department of Transportation (FDOT) only. Manny Fontan asked what will happen with open Footprint issues. A. Krishnamurthy stated that currently the Footprints are hosted on the Southwest Research Institute (SwRI) Web site; CO does not expect that all issues will be closed and will work on a transition plan. P. Vega expressed the need to work on this issue quickly and to setup a selection committee that will work with CO in creating the ITN. A. Krishnamurthy agreed and stated that the selection committee will happen in the next two weeks.

SunGuide Release Update: Release 4.2.2 Patch 2, Release 4.3 and Release 5.0 – Arun Krishnamurthy

Release 4.2.2 Patch 2: A. Krishnamurthy stated that Release 4.2.2 Patch 2 is for the FTE's Mark IV dynamic message sign (DMS) driver. This will be for the Florida Turnpike Enterprise (FTE) and is also funded by FTE. A. Krishnamurthy went on to state that FTE has approximately 20 Mark IV DMSs. There will be no changes in the SunGuide requirements to add the driver. The Factory Acceptance Test (FAT) was performed on October 22nd at the Traffic Engineering Research Lab (TERL) and the Independent Verification and Validation (IV&V) will be performed on October 29th at FTE TMC - Turkey Lake, Orlando. This was a low level update and will not have an impact on other SunGuide functionalities. The software will be delivered to FTE in early November.

Release 4.3: Release 4.3 is for the 95 Express Lanes enhancements. The weather alert enhancement has not gone through the CMB however, SwRI will provide a whitepaper regarding this issue and it will be voted on before being implemented. Footprint 1280: Floodgate Enhancements will also be addressed in this release and CO would also like to include Footprint 1365 in this release. Footprint 1365 will allow multiple counties to be selected for one floodgate message. This has not been approved by the CMB either and will be addressed at the next meeting. The scheduled release is February 2010.

Release 5.0: A. Krishnamurthy stated that Release 5.0 will include two major enhancements; response plan enhancement and map enhancement. The response plan enhancement will be a significant improvement and more user-friendly. Both enhancements were discussed briefly and will be discussed again at the next CMB meeting.

A. Krishnamurthy stated that both of these releases will be developed parallel as CO does not want to do any major enhancements prior to the transition into a new contractor.

Performance Measures – Clay Packard

Clay Packard started by stating that CO received comments from the Districts and the three main issues are the need to account for all responders not just Road Rangers, too many flagged events and the need to account for special cases. C. Packard then went over some of the changes to the Performance Measure Reports and showed examples of what they will look like after the changes. C. Packard asked that if any of the Districts have comments to the proposed changes to please direct those to Arun Krishnamurthy. P. Vega stated that District 2 would like to know if there is a capability to run travel time reliability reports now or will there be in the future, as these are very helpful when looking at how traffic is impacted during construction projects. CO is working on a travel time reliability report. Elizabeth Birriel stated that when

reporting to the Florida Transportation Commission (FTC), this is not a performance measure, just a performance indicator as they realize we still need time to work on this. A. Krishnamurthy stated that comments on the Performance Measure reports are due Tuesday November 3rd. Also, A. Krishnamurthy mentioned that many special cases were included but some were not as they would require a complete re-work of the performance measures report code.

SunGuide Enhancement Release 4.3: 95 Express Lanes – Robert Heller

Robert Heller started by naming the supporting documents for Release 4.3 and noted that some of the documents do not match but an effort to update the documents is underway. Release 4.3 is an enhancement to improve operations as the express lanes operator can manually enter information into SunGuide, there is a possibility of errors being made due to manual entry, terminology changes and facilitate offline toll processing when the system goes down. There were 141 requirements that are in the reference documents. R. Heller went over some changes and updates for 95 Express Lanes. Based on an early concept of operations (ConOps), SwRI provided a whitepaper with estimates and a cost of \$325,000 to complete these changes. There is now an accelerated schedule for Release 4.3 with the FAT being held in mid-January and the release in February.

Release 4.3: 95 Express Lanes Vote:

D1 – Yes
D2 – Yes
D3 – Yes
D4 – Non present
D5 – Yes
D6 – Yes
D7 – Yes
FTE – Yes
MDX – Yes
CO – Yes

SAE Code Update – Erik Gaarder

Erik Gaarder stated that Gene Glotzbach sent out FDOT modified Society of Automotive Engineers (SAE) code updates to the Districts for review and the updated codes were posted for review. A few codes were added for on / off ramps to provide more detail to the end user. The next step once these are approved is for SwRI to add the codes into the system for them to be automatically chosen by user. E. Gaarder stated that it will take some time to get the new codes into the system and will not happen immediately. There were other suggestions for updates to the SAE codes and these were not discarded and will be discussed in depth at future 511 working group meeting (WGM)s.

SAE Code Update Vote:

D1 – Yes
D2 – Yes
D3 – Yes
D4 – Not present
D5 – Yes
D6 – Yes
D7 – Yes
FTE – Yes
MDX – Yes
CO - Yes

Arterial Signal Module – Pete Vega

P. Vega stated that some local agencies for Intelligent Transportation Systems (ITS) Coalition want to use SunGuide but want to have the capability to use Nazteq software as well, is there a possibility to incorporate a traffic signal module into SunGuide. This will be helpful if there is a major incident on the interstate and traffic is deferred off the interstate system. P. Vega received a whitepaper from A. Krishnamurthy that he received from District 4 on this issue. District 1 stated that they like this idea. Trey Tillander asked for P. Vega to discuss more about the level of monitoring / control when he talked about integration. P. Vega responded by stating this will be the uploading of timing plans and went on to give an example from District 4's whitepaper. T. Tillander clarified by stating that it would have a choice of plans and when you select a plan would that send a request to the local agency to implement or would the transportation management center (TMC) take control. P. Vega stated that it would be a request sent to the local agency. He went on to say that in the future District 2 will be in the same building as the local agency and this would be very helpful.

P. Vega stated that he just wanted to get the discussion started about this and did not think this will happen until the new contractor is selected for SunGuide. Chris Birosak stated that with this level of complexity the department will have to work carefully with the local agencies. R. Heller stated that what has been discussed is to communicate to the traffic signal system but not the controller for the desire to change plans. SunGuide will not control the signal but select a preferred change in plan. This is supported by center-to-center (C2C) Interface Control Document (ICD)s, this has been developed but is not operational in Texas due to the lack of cooperation by the signal provider to facilitate this functionality. P. Vega stated this is basically a software to software functionality and Nazteq is willing and has offered to work with District 2 on the plug-ins needed.

SunGuide Enhancement: Incident Severity (FP 1280) – Arun Krishnamurthy

A. Krishnamurthy stated that a whitepaper was provided to the Districts on October 5th regarding the incident severity levels in SunGuide. T. Tillander discussed this issue during a previous 511 WGM. The issue some Districts are having is that if two of three lanes are blocked in one direction and it happened 15 minutes ago this would be classified as a minor incident and there is no way for the operator to manually change the status. The definition we have is good for post processing but not for real time. The solution for the issue is to have a two step process. SunGuide incident severity levels will be used for post processing and the new incident severity levels for the Florida Advanced Traveler Information System (FL-ATIS) system will be created for real time. The new levels will be based on the percentage of lanes blocked. A. Krishnamurthy then went over the new levels and stated that this enhancement if approved will be in Release 4.3.

M. Fontan inquired if the drop down menu selectable and asked if it will be automatically selected by the percentage of lanes blocked. A. Krishnamurthy responded by stating there is a drop down menu that is selectable and yes it will be always first selected by the percentage of lanes blocked. FTE stated that most of their highways are two or three lanes therefore it will show most of their incidents as major but there is the option to change the status. A. Krishnamurthy stated that this is why it can be changed due to different traffic patterns. M. Fontan asked if the severity level will change by going up or down if more lanes are opened. A. Krishnamurthy stated that if the level changes it will automatically update the level and make a recommendation and the operator will have to approve the change. District 1 stated that they have the same concern as the FTE, is there a way we can change it from 25% to 40%. T. Tillander responded by stating that for incident severity levels, we need to think in a driver perspective. A. Krishnamurthy agreed and stated that we need to shift our perspective and look

at this from the driver's point of view. Bill Wilshire stated that he does not expect to see the intermediate level show up very often but this could be a good thing because the driver probably won't understand intermediate. T. Tillander agreed and said that there was a discussion to use the work moderate and asked Bill's opinion. B. Wilshire responded that he does not think the driver knows the difference. C. Birosak inquired if this was a matter of educating the driver, they are signing up for these alerts on the Web site. P. Vega agreed with C. Birosak but we need to stay away from lane closures and times. T. Tillander also agreed and stated that the department is trying to do this but then events get posted to the Web site as minor only because it has yet to go over the time limit. M. Fontan stated that he can see where CO is trying to see the driver's perspective and say it's a major incident but the driver gets through the incident quicker than expected they will be happy. M. Fontan thinks it's a good idea and FL-ATIS incident severity levels are for a different purpose than the SunGuide levels.

Incident Severity (FP 1280) Vote:

D1 – Yes
D2 – Yes
D3 – Yes
D4 – Not present
D5 – Yes
D6 – Yes
D7 – Yes
FTE – Yes
CO – Yes
MDX – Yes

SunGuide Enhancement: Congestion across County Lines (FP 497) – Robert Heller

R. Heller started by addressing the original issue for Footprint 497; once you chose the location of the incident and check the congestion box the congestion is locked to the county, roadway and direction, this information has to be identical to the location of the incident. The operator can only back the congestion to the furthest point in county in which event occurs and if the congestion backs into adjacent county, the event cannot be adjusted accordingly. In the EM GUI, the counties are grayed out and cannot be changed. A resolution is to look for counties with the same road and event but there are issues with this solution. EM currently focuses on relationship between head and tail and the sort order has to be sequential. SunGuide only knows about the EM location through sort orders. There are roadways that go north and south then the same roadway goes east and west. R. Heller then went over the issues related to the original solution. He stated that this was meant to be an easy fix for a common problem and is expected to be included in Release 4.3; however, this does not address the changing direction in roadways.

M. Fontan stated that he is confused on this issue, it seems like it addressed everything and then it did not address everything. We need to address a roadway with multiple directions and cross county lines. R. Heller stated that it will allow you to select a tail where the roadway and the direction of the roadway match as long as those locations are visible to your operator. M. Fontan asked if those locations need to be in your admin editor. R. Heller stated that he does not know how the locations will interact with C2C. M. Fontan addressed R. Heller by stating during their discussion the agreement was you would need to have the other Districts information, if it was not in your database and sort orders were not correctly configured then you would have trouble using this. R. Heller agreed with M. Fontan. M. Fontan stated that we really need to handle the changing of directions on roadways. A. Krishnamurthy stated that if SR 826 was coded in as separate roadways for direction it causes a problem because SunGuide thinks

it is two different roads. R. Heller stated that if we can develop a set of rules for handling this change in direction of roadways we can make it work; however, the cost estimate was based on the simple case and if we expand this we will have to look at the estimate again. M. Fontan stated that he can send the rules via email so this can be included in Release 4.3. P. Vega inquired how this will work with FL-ATIS. R. Heller stated that he asked J. Brisco and the C2C software will communicate the two locations to FL-ATIS. J. Barbosa stated that the event is assigned to the county for which the primary location is located. M. Fontan asked will the congestion tail need to be recorded or does FL-ATIS need for us to input those locations. J. Barbosa stated that yes it will need to be recorded for the Interactive Voice Response (IVR) system.

A. Krishnamurthy asked if EM extract for additional location needs to be provided to the FL-ATIS team and will these have to be assigned to the existing IVR spoken names. P. Vega inquired if the vote for this item should be postponed. A. Krishnamurthy stated that there appears to be some FL-ATIS concerns that need to be addressed. Data checking would entail across county lines having a uniform sort order and this would have to be redone. R. Heller stated that SunGuide will have an error checking in it but the Districts will have to modify some of their sort order assignments, if this is not done it will be less work for the Districts but there will be no error checking. District 7 stated that they have looked into this and it will be a major undertaking. M. Fontan stated that District 6 has looked into this as well and calculated that it will take a maximum of three days with someone doing it by hand but with a script it would be faster. District 2 and FTE shared how they use their sort number. M. Fontan inquired if the CMB chair can poll for a vote on the checking issue. P. Vega requested the districts to let the board know if they had an issue. No districts raised any issues on error checking. P. Vega concluded that error checking needs to be included in SunGuide.

A. Krishnamurthy agreed with P. Vega to hold off on voting on this issue. District 6 will coordinate with CO and SwRI to propose new requirements. District 6 will coordinate via email and a target vote date of about two weeks.

SunGuide Release Upgrade Procedures with FL-ATIS – Arun Krishnamurthy

A. Krishnamurthy stated that CO would like for each District to coordinate with CO and have a backup plan for updating SunGuide. There are times when things do not go as expected and we would like to have a plan in place when this happens. G. Glotzbach and A. Krishnamurthy recommend the District provide at least a one week notice when upgrades will be done and provide a backup plan if something goes wrong. There are other cases when SunGuide could be down and CO recommends that they be informed so that they can work with the District to come up with a resolution to get data to FL-ATIS. District 7 asked what CO envisioned as a backup plan, District 7 thinks the only plan is to put up a floodgate message. E. Gaarder stated that some Districts have production and backup systems and if FL-ATIS knows in advance we can connect to your backup system while upgrades are performed.

District 5 asked if there has been any progress on having FL-ATIS connected to two different systems. E. Gaarder responded that he has been told that if there is a notice it could be connected but not to both systems at one time. J. Barbosa stated that they could configure the circuit to be able to access both systems but FL-ATIS can only connect to one system at a time. District 7 stated they thought this is something that should be thought through more and we shouldn't assume it will work. P. Vega suggested that the SunGuide® Software Users Group (SSUG) should pick up this item and come up with a process for all Districts.

ITS WAN and FHP CAD Update – Arun Krishnamurthy and Randy Pierce

Randy Pierce introduced Frank Deasy who is heading up the ITS wide area network (WAN). F. Deasy stated that a contract is underway with Quest on the third phase for the Orlando TMC. They will prepare to order the equipment and will have some field work to do with the District; this should be complete in the next few weeks. F. Deasy stated that there are currently some issues in conversations with IBI they have used an internet protocol (IP) address that is in the middle of District 5's IP addresses. Until this issue is resolved a connection cannot be established with District 5. P. Vega confirmed that the department got an allotment of IP addresses. F. Deasy stated that this is correct and R. Pierce is working to get this resolved but the biggest question will be the downtime which is hard to predict. P. Vega suggested distributing the document of IP addresses again.

A. Krishnamurthy stated that he wanted to give an update to the Florida Highway Patrol (FHP) computer-aided dispatch (CAD) module in SunGuide. For the Districts to have access to the data, they will have to use the ITS WAN, CO will work with each District once they are using the ITS WAN to get the FHP CAD working in SunGuide. In the next couple of weeks / months most of the Districts will have the ITS WAN, except for District 1 and District 7. We are working with FL-ATIS for an alternate solution so they can receive the FHP CAD data. CO will coordinate with those Districts and this will be an interim solution. P. Vega inquired if there is a contract in place if the ITS WAN goes down. R. Pierce stated that they are incorporating this with an existing contract with Transcore so we are establishing a process for that now. A. Krishnamurthy sent out an email with a FAQ sheet on FHP CAD, if you have any further questions regarding FHP CAD please contact Arun Krishnamurthy.

Action Items

- Mark Laird to finalize the "Right Click Menu" proposal and Arun Krishnamurthy to distribute to CMB members for review.
- Central Office to initiate "Travel Time Reliability" report.
- SwRI to develop rules to handle with roadway changing direction issue in the SunGuide Enhancement: Congestion across County Lines.
- Manuel Fontan to send two rules for handling roadway changing direction to SwRI (Robert Heller) and Central Office.
- Central Office to initiate 10-minute teleconference with CMB members for voting on SunGuide Enhancement: Congestion across County Lines (FP 497).
- SSUG (Clay Packard) to discuss on SunGuide Release Upgrade with FL-ATIS procedures issues and provide result to the next CMB meeting.