

Meeting Notes

Change Management Board

August 24, 2017 – 1:30 to 4:30 p.m.

Version 0.1



Prepared for:
Florida Department of Transportation
Traffic Engineering and Operations Office
Transportation Systems Management and Operations Program
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List of Acronyms and Abbreviations

C2C	Center-to-Center
CFX	Central Florida Expressway Authority
CMB.....	Change Management Board
CO	Central Office
ConOps.....	Concept of Operations
CoT	City of Tallahassee
FDOT.....	Florida Department of Transportation
FHWA	Federal Highway Administration
FTE.....	Florida’s Turnpike Enterprise
IP	Internet Protocol
ITS.....	Intelligent Transportation Systems
MDX.....	Miami-Dade Expressway Authority
PTZ.....	Pan-Tilt-Zoom
RITIS	Regional Integrated Transportation Information System
SSUG	SunGuide® Software Users Group
SwRI.....	Southwest Research Institute®
TERL	Traffic Engineering Research Laboratory
TSM&O.....	Transportation Systems Management and Operations
UMD	University of Maryland
WAN	Wide Area Network

**Florida Department of Transportation
CHANGE MANAGEMENT BOARD MEETING NOTES**

Thursday, August 24, 2017

1:30 to 4:30 P.M

Rhyme Building, 330 Conference Room, Tallahassee, Florida

Attendees:

Bryan Homayouni, CFX
John Hope, CFX
Tucker Brown, SwRI
John McFadden, CoT
Derek Vollmer, CO
Mark Dunthorn, CO
David Heupel, CO
Randy Pierce, CO
Terry Posey, CO
Jennifer Fortunas, CO
Frances Ijeoma, CO
Russell Allen, CO
Jennifer Rich, CO
Mark Mathes, D1
Pete Vega, D2
Craig Carnes, D2

Josh Reichert, D2
Tanesha Sibley, D2
Jason Summerfield, D2
Ryan Crist, D2
Dee Dee Johnson, D2
Kevin Mehaffy, D3
Mark Nallick, D3
Daniel Smith, D4
Dee Mctague, D4
Tushar Patel, D5
Charles Stratton, D5
Clay Packard, D5
Jay Williams, D5
Steve Johnson, D5
Jeremy Dilmore, D5
Alex Mirones, D6

Javier Rodriguez, D6
Alejandro Motta, D6
Mark Laird, D6
Rodney Carrero-Vila, D6
Chester Chandler, D7
Susan Shaffer, D7
Vinny Corazza, D7
Daniel Buidens, D7
Jared Roso, D7
Alex Brum, FTE
Eric Gordin, FTE
Ryan Brown, FTE

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

Welcome: CMB Chairman B. Homayouni opened the meeting at 1:30 p.m.

Call for Quorum and Review of Agenda: A quorum was established since over seven voting members are present. B. Homayouni reviewed the meeting agenda there were 15 agenda items and eight are voting items.

Previous Meeting Recap and Action Item Review

The previous meeting was held on January 19, 2017 and only had two voting items and both items were voted through successfully. The meeting minutes were distributed and if anyone had any issues accessing the meeting minutes please let us know.

- Complete - FDOT requests a status of the multicast re-addressing from the Districts. A few weeks back John Hope sent out a survey to all of the Districts and Districts responded. It looks like at this time majority of the agencies have completed their multicast.
- Complete and will be implemented with 7.1 release - Statewide agreement for removing the pricing subsystem in SunGuide. Derek has implemented that and the removal will be part of SunGuide version 7.1.

- In progress - Request by District 2 to re-establish the DMS Color/Graphic committee. Central Office is working on some graphical mockups to explain the changes better.
 - P. Vega: We just need some more guidance since we have many colored signs in the District and want to use them.
 - D. Vollmer: Guidance sounds more like an ITS Working Group meeting item and our committee will be more focused on changes to the SunGuide Software. This will be added to the agenda of the ITS Working Group Meeting in October.
 - M. Laird: Some of the guidance that is needed is how the color DMS works and interacts with SunGuide.
- In progress - Reach out to Russell for D5 architecture. Central Office is working with HNTB to create a scope to advertise to get a consultant under contract to help finalize the creation of the architecture update on a statewide level.
 - J. Dilmore: keep the districts updated on the schedule and the progress.
- In progress - Add DMS travel-times in rural areas to the ITS WGM. Request originated from the thresholds used for travel times in rural areas vs the threshold used in urban areas. Item has been added to the ITS Working Group meeting that is scheduled in October.
- In progress - End of life of devices to be discussed at the LESS committee meetings. This has been done on multiple levels. The first was the update to the APL application, which includes a question to the vendor if there is an end of life schedule for the device. If they answer yes, the vendor has to provide the schedule of end of life for the device. Additionally, they are having products undergo a two-year recertification process. The feedback received from the vendors will be posted on the APL website. They are also working with the vendors to have an inventory of devices and parts so when the device is at end of life it can be replaced.
- Complete - Add Nelson to the SSUG.

AGENDA ITEMS

Statewide ITS Communications Network (SICN) Update

R. Pierce: Thank you to the Districts for getting the multicast video to the state EOC. There is multicast video from Districts 1, 3 (Tallahassee), 4, 5, and 6. The State EOC is aware of the issues in D2 and D7 in regards to testing.

The migration from D5 and D6 is continuing.

D. Heupel: District 4 fiber damage was on the Don Shula in District 6, which took District 4's only connection down and were down for about a week. District 4 is eager to get their redundant connection back to the RTMC. We have a preliminary plan in place to get them reconnected. There is a face-to-face kick off meeting currently scheduled for September 20th to finalize the details and schedule field work and site visits. Next, we will finalize the plan and submit the work plans to District 4 and FTE and then issue a task work order to our maintenance contractor make changes to the fiber equipment and to light the circuits up.

T. Posey: The Keys microwave upgrade project is progressing. The cabinet reconfigurations are about 75% complete. We will move onto the installation of microwave radios on the poles to start within two weeks.

R. Pierce: We were success in lobbying the Work Program group for the Next Generation Microwave. We are referring to the Keys ITS Network Upgrade as phase 1 and phase 2 is being worked on right now by the Atkins staff, which will be replacing the switches and routers throughout the existing networks. In 2018, we will have the bid let to replace all equipment procured in 1995 and 1996.

D. Vollmer: It is proposed for the ITS Communications update to move to the ITS Working Group meeting. It is redundant since it is already discussed in the ITS Working Group Meetings. Does anyone oppose this suggestion?

R. Pierce: I agree.

J. Dilmore: I just wanted to point out for the IP conversions we should be done with everything that is currently to our network and therefore connected to the ITS WAN. If you see that, we are on an IP range we shouldn't be on, please let us know so I can follow up and get that taken care of.

SunGuide Software Update – Derek Vollmer

This week we released SunGuide Software 7.0. Just as a reminder of what is included in 7.0 is the truck parking module. This is the higher level of the truck parking components, adding devices to the current system will be included as a hotfix. We are currently working on Sensit and getting the protocol portion created and it will be dropped in as a hotfix.

Signals in SunGuide are also included in 7.0. We are still working with the Trafficware vendor to fix issues with the protocol. Once corrected, they will be released as a hotfix.

The Managed Lanes system was ported over from TxDOT and this was mostly for the versilis gate control. This is where we disabled emails from response plans, alternate travel time destinations and some other small items.

M. Laird: when that system got moved over, was it called the Managed Lanes subsystem?

D. Vollmer: Yes, is that going to be problematic?

M. Laird: Just with Express Lanes and Managed Lanes not being involved in this, it seems a little bit miss leading.

D. Vollmer: I can work it out with Jennifer and we can call it something else but it will be called this for now and I will also talk to Tucker offline.

D. Vollmer: Additional changes to release 7.1 we will transition all of the GUIs to the Windows presentation foundation. The remaining GUIs are the ramp metering and C2C. We have deprecated the pricing subsystem and will deprecate the variable speed limit. Whatever is left to move out of the admin editor will be moved to the map. Now, with the 7.1 release the Admin Editor will go away.

M. Laird: A while back we moved something from Admin Editor and it required us to create new permissions. Will we have to have create new permissions?

T. Brown: It is possible that we will have to create some new permissions but it is not a difficult process for them to be created. We are striving to get them made beforehand but it is possible we might miss one and if that happens it can be changed after the fact easily.

P. Vega: We are getting rid of the variable speed limit, what happens if someone needs to use it in the future?

D. Vollmer: That variable speed limit was very specific to District 5's deployment. If you need to use variable speed limits in the future, we will need to go through and get something else created.

D. Vollmer: Additional items included in 7.1 are the ramp meter NTCIP Protocol, TAPCO protocol and we are working to get their wrong way device incorporated into SunGuide and the device permissions and device groups are included in the release.

The 7.1 Factory Acceptance Testing is happening in San Antonio the week of October 2nd and the release date is early January 2018.

Still working on fleshing out the executive notification automation, we are at the stage of creating graphical mock ups to solidify the process. We are discussing an interface with active directory, which stemmed from the IG audit. Controlling remote DMS, we will continue to discuss this topic at the Statewide Express Lanes Software (SELS) meeting and the SSUG meetings. From an event management perspective, we are working on intersections in SunGuide. At the SSUG meeting we had District 6 present the RISC module in OTM and we would be interested in including that module of OTM in SunGuide.

We need to continue on getting the Color DMS Enhancements group together, part time shoulder use, C2C improvements and continuous work on small enhancements.

I sent an email out that stated that no one is using the inventory management in SunGuide. I would like to deprecate the inventory management in SunGuide since it is not being used and costs money to keep update it with releases. Does anyone oppose?

B. Homayouni: Lets vote on this item.

CFX: yes, CO: yes, D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes
This item passes.

SunGuide Software Development Process – Derek Vollmer

We would like to change the SunGuide Development Process so we will have more releases in a year. We would have a major release like 7.1 and then have subsequent smaller releases. The goal is to have four releases a year. It helps us get the fixes out quicker instead of having to wait. It also helps with testing because we are testing throughout the year instead of everything at once. We will still release hotfixes for issues that need immediate attention. If a bug fix is included in a minor release, we will not release a hotfix. We want you to upgrade to the next minor release. Smaller releases there will only be remote installation support.

- We would like to work with Bryan to update the CMB charter so we can vote on some of the smaller items by email instead of at the quarterly CMB meetings. The chair would still send the email for the voting item. The results will be captured in the next CMB meeting minutes.
- J. Rodriguez: I would like the voting items to be passed by the SSUG before it comes to the CMB voting members via email so we know it was vetted through the SSUG.
- J. Dilmore: What type of install is required with the minor enhancements?
- T. Brown: With the enhancement, it would not involve any database changes; it would be a patch over the existing software parts. If changes are required, then we would push that to a larger release. An example of the change would be adding a column. It would be low risk.
- D. Vollmer: Also, note that for the minor updates - you do not necessarily have to go to that version. We want everyone to switch to major versions but skipping a minor version is up to the District. The major updates will include the minor updates/enhancements.
- B. Homayouni: How do you plan to manage the release schedule?

- D. Vollmer: I want them to be quarterly; the changes would have to be voted on in a previous CMB meeting. Changes would have to be approved at least a quarter before the release. We want to create a backlog of approved work. In order to accomplish that we would need to work hard up front to get the smaller enhancements approved. Since this is a new way to do it, it will be a work in progress.
- Vote on changes:
 - D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes
 - The item is approved.

Roadway Type Flag; How Roadways are Handled (Event Manager) (VOTE) – Derek Vollmer

- **2 items: Roadway Type Effort: 1 day, Cost \$1k; Roadway Naming Effort: 3 weeks, Cost: \$13k**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

District 2 requested the ability to identify roadways as Arterials instead of Limited Access or Interstates. One of the main drivers behind this request is that the performance measure differ on Arterials, Interstates and Limited Access facilities. This change would help with running performance measure reports and would help in separating the types of roadways that are required in the report.

There was also a request on roadway naming. Example: US 1 is the name on one segment and is called Philips Hwy on the next segment and then called a third name on another segment. In SunGuide you have one roadway but named two different names. It can cause problems, especially when trying to run reports.

- Issues with events that start on one and end on another (congestion).
- Issues with running reports for the roadway (now multiple roadways).

We want to have the capability of having one road name but also want to be able to display to the name the public is most familiar with.

After discussing with the SSUG, we would like to add three roadway types:

1. Limited Access
2. Arterial
3. Express Lanes

All roadways will be assigned a type during upgrade and will default to Limited Access. You can then go in to change the roadway type.

M. Laird: We talked about in the SSUG the roadways that are not Arterials, Limited Access or Express Lanes and needing a fourth type to cover them.

D. Vollmer: I do remember that but I think we are just going to boil it up into one of these three.

M. Laird: We have other roads that are not Limited Access or Arterials.

J. Fortunas: We are proposing that is it is not a Limited Access then it would be considered an Arterial.

M. Laird: Arterials are different when it comes to performance measures so I am not sure they fit in that category.

R. Allen: For clarification, when you think of Arterial are you thinking State Highway System?

M. Laird: No, but it could be. I am just throwing it out there as something to consider. I think what District 2 is wanting to do doesn't cover some of the roadways we manage.

D. Vollmer: This initial list is to cover the Routes of Significance; FHWA is looking for us to have performance measures on these roads.

J. Fortunas: I can't think of a roadway that does not fall within one of the three categories.

D. Vollmer: I think we should stick with these three types for now and if in the future we need to add another, we can.

J. Hope: Is it possible to have multiple roadway types on the same road? Segments that can be Limited Access and segments that can be Arterials.

T. Brown: You could not have a single roadway and have certain segments be different types without having a different roadway. They can be secondary roadways. It is possible from a software standpoint to do that but you would have to go in and configure from this point to that point it is Arterial. Then you have to tie the specific EM locations and devices to that specific segment of roadway and not the roadway itself.

J. Fortunas: Would the problem be solved if we added another roadway type?

T. Brown: As it relates to reporting, are you being asked for different types of reports? Or want to report on different road segments?

D. Vollmer: No.

T. Brown: My point is that if a roadway has multiple types and we assign it to one now, it only effects the reporting aspect. If you were to run a report for all Limited Access, it would effect it but you can still run a report by roadway name to get the information.

J. Dilmore: It seems like the reporting we want will be for our Express Lanes vs. Arterials from an operations standpoint. Is there a different roadway for Express Lanes and the mainline?

M. Laird: Yes.

B. Tucker: They can do a comparison of the roadways and running reports but they have to be separate roadway names.

T. Brown: We have not thought about that specific use case but let me think about that and how to tie it to a specific roadway segment.

D. Vollmer: We don't have part-time shoulder use in SunGuide right now so can keep thinking about it as we flesh out the part-time shoulder use concepts.

B. Homayouni: for this voting item does it make sense to move forward with the three roadway types or should we wait for a future update?

D. Vollmer: I would like to move forward.

J. Dilmore: is there an immediate need we are satisfying by doing this right now or can we take time to get a better idea and direction to SwRI?

D. Vollmer: I am just trying to get this in before we get another Route of Significance report request from FHWA.

J. Fortunas: Are the Routes of Significance for any District both Limited Access and Arterial for a route?

P. Vega: The JTB is a good example. Between I-95 and US 1 it is an Arterial and east of I-95 and the beaches it is Limited Access.

J. Fortunas: Is that going to mess up how we are categorizing the roadway? Maybe we can do a query and look at some of the Routes of Significance and see if they share roadway types.

J. Dilmore: I would like to throw out Osceola Parkway (CR 522) as one and Pineda Causeway (SR 404). We are updating our list with our MPO's right now but I can find out and let you know.

D. Vollmer: With that, I am okay with pulling this item and for it to be voted on at another CMB when we have more information. I would like to continue talking about the roadway naming and vote on that.

Proposed solution for the roadway naming is that you would have primary roadway and then could create a smaller secondary roadway to be associated to a primary roadway. You could use the secondary roadway name to send messages out to the public. Reports can be ran on the primary roadway or you can run reports on the secondary roadway. The secondary report would give information on that section of roadway that would not include the entire primary roadway. With 7.0 the roadway configuration is a lot easier.

- Example: US 1 would be entered as usual and then you would enter in Philips Highway as the secondary. EM locations would be configured using the Philips Highway so that information is sent to FL511. US 1 primary and Philips Hwy is secondary.
- Can run reports on either the primary or secondary roadway. Primary includes secondary events and secondary report only includes secondary event information.

We will wait on the roadway type and vote on it later. We will just focus on the roadway naming for the vote. We will discuss the roadway type via email to the CMB members.

B. Homayouni: Voting on the Roadway Naming.

J. Dilmore: Our initial concern with the roadway type was the transition between limited access and arterial but they have two different roadway names, one on the arterial side and one on the limited access side. For us the ability to use the roadway naming and create a secondary roadway and be able to link them together for reporting purposes will solve the initial problem we had with the roadway type. I think we would no longer have a problem with the roadway type and would like to revisit for part-time shoulder use but know it is a long way away. I don't have an issue voting on the first item.

B. Homayouni: Mark, you were the other one that had a concern with the roadway type, do you still have an issue with it? Did that address your concerns as well?

D. Vollmer: Jeremy's point is valid and would like to proceed with the original vote.

B. Homayouni: We are going to go with the original vote on Roadway Type and Roadway Naming. D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes

This item passes.

Traffic Signal Malfunction (new SAE codes) (VOTE) – Derek Vollmer

- **Effort: 2 days, Cost: \$2k**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

In District 2, when something goes wrong with the traffic signals they would like to be able to inform the public. Currently, they use "other" as the event type in SunGuide. On the 511 system, it appears as an incident and for performance measures; it isn't included as something we can run a report on.

With this, we would introduce two new event types: Traffic Signal Dark and Traffic Signal Flash. There are SAE codes associated with this already – 1804 traffic lights not working; use when signal is dark and 1805 traffic lights working incorrectly; use this when signal is unexpectedly in

flash. FL511 would display the same text as SAE codes. There is a new Waze alert type “traffic light fault” we will see how accurate it is.

This is a simple enhancement and is \$2k and the effort would be 2 days.

M. Laird: What about the bridge pre-emption SAE code 58?

D. Vollmer: We would like to add the new event type called: “bridge up” and there is an SAE code that would cover this that is similar to “drawl bridge up”. This is specifically for a District 6 item where there is a bridge that goes up frequently and people need to be notified before they take that route.

B. Homayouni: Voting on the Traffic Signal Malfunction and the Bridge Up mechanism unless anyone opposes or has any questions.

V. Corazza: Can we make the traffic signal malfunction one code? If the signal is dark then the operators go in and make the signal flash due to maintenance, it is just one more step for our operators to go in and make the change.

D. Vollmer: Would you just want to use traffic lights working incorrectly?

V. Corazza: What about traffic signal malfunction?

D. Vollmer: I am looking at it from an SAE perspective, which is standardized.

P. Vega: We need to keep it the same way because of hurricanes.

B. Homayouni: Derek what are your thoughts?

D. Vollmer: When originally talking to Russell on this topic, he wanted to have two. Let’s keep it that way.

B. Homayouni: On a District level basis, they could just use one code instead of both codes if they did not want to have to update the system twice.

Proceeding with the vote. D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes. The item passes.

Lane Level Detector Information in C2C (VOTE) – Jeremy Dilmore

- **Effort (if same data type): 4 days, Cost (if same data type): \$4k; Effort (if different data type): 6 days, Cost (if different data type): \$6k**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

SunGuide has lane level detector information but C2C does not. We are looking to get more granular level of data that can be provided to external systems. It would give us specific information on lane congestion. Example: left lane backed up instead of congestion. We just want to be able to see that level of detail in systems that are outside of SunGuide at the lane level instead of aggregated at the link level.

M. Laird: We talked about speed limit information in C2C and if we are going in and making changes to C2C can we change the speed limit data too?

D. Vollmer: What do you mean speed limit data? Speed limit data that is already configured in SunGuide?

M. Laird: Yes, because what’s in SunGuide would not make it through C2C right now or at least the last I knew it wouldn’t make it through C2C. It was footprint 1685.

D. Vollmer: I am not comfortable tagging that one to this one. This should be added to a future SSUG meeting. The reason being, this won't impact external users but the speed limit change would.

B. Homayouni: Any other comments or questions before moving to the vote?

D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes
This item passes.

FP 1422 Audit Chronology (VOTE) – Mark Laird

- **Effort: 5 days, Cost: \$5k**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

Whenever we do an audit, the records are put into chronology at the time the modification occurs. The proposal is to put audit records into the chronology at the time the audit was done with information indicating what was modified, time at which the item appears in the chronology and the original value. Refer to the slides for more information and examples of the old way and the new proposed way.

B. Homayouni: If there are no questions, we will vote.

D1: yes, D2: is there a cost associated with this? But I will still vote yes.

B. Homayouni: Can you tell us a price estimate?

T. Brown: Not off the top of my head.

B. Homayouni: Tucker and Mark get together offline, come up with price options for all of the footprint items, and add them to the meeting minutes later.

D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes

*This item passes but is contingent upon pricing. Pricing was verified after the meeting and is documented above. The item passes.

FP 2963 Case Insensitivity (VOTE) – Mark Laird

- **Effort: 7 days, Cost: \$7k with a program to show you all the problems before an upgrade is preformed**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

There is data we enforce uniqueness for and the uniqueness is case sensitive. The proposal is to make the same words case-insensitive. Example: OTHER and other, Dms107, DMS107, dms107 – currently they are considered as different values but they are the same.

D. Vollmer: user names would be included in this. Want to include them as case-insensitive.

What happens for the past issues? Would this only be for future?

M. Laird: As discussed in the SSUG meeting, you would leave them and it is only enforced in configuration.

J. Dilmore: What problems is this solving?

M. Laird: Creating multiple names that are really the same thing.

B. Homayouni: What is the level of effort to accomplish this?

T. Brown: Initially it did not seem like a large effort but now we have to look at the entire configuration. An alternative is that we develop a utility that looks for this before we do the install and can help you prepare for the install.

M. Laird: That is okay for us, we have fixed the issues that have already occurred but other districts would have to go in and fix it before they installed the software.

J. Dilmore: Does the benefit outweigh the cost? When you mention the user name, we thought that would be fixed when the active directory is added into 7.1. We need a clear benefit tied to this.

T. Brown: If we need to fix the configuration and we are taking about \$3,000.

J. Dilmore: if we could put a cap of \$5,000 then I would be okay voting on this.

B. Homayouni: With the stipulation of the \$5,000 cap on this item, let's move forward with the vote.

D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes
This item passes but is contingent upon pricing. Pricing was verified after the meeting and is documented above. Pricing information was provided to all voting CMB members and an online vote was cast with this additional information in hand.

The results of the online vote conducted after the meeting is as follows:

D1: Yes, D2: Yes, D3: Yes, D4: no vote, D5: Yes, D6: Yes, D7: no vote, FTE: Yes, CO: Yes, CFX: Yes, MDX: no vote

This item passes.

FP 2736 Links on Map (VOTE) – Mark Laird

- **Implementation Option 1:**
 - **Effort: 2 days, Cost: \$2k**
- **Implementation Option 4:**
 - **Effort: 3-5 weeks, Cost: \$15k-25k**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

There are multiple sources of link data that are displayed on the map and overlaid and only one is visible at a time. We can go into C2C and change the sources that are displayed. The proposal is to provide an easier mechanism to view the data. SSUG recommended options 1 and 4 – add a link “Source” item under C2C (or TSS) to choose which link(s) to display and hovering over a link “spreads” the links to show all.

B. Homayouni: In hovering over links and spreading the links, how is it going to affect the operations overall? It seems like it might over complicate the map.

M. Laird: They would not be spread all the time, just for a second or half second. It would be similar to a tool tip.

B. Homayouni: would it show the same amount at all zoom levels? Do you want an off switch for hovering? To hover or not to hover at all

D. Vollmer: I would like to keep existing behavior and the configurable would to be spread links or not.

J. Dilmore: We like the idea of having the option to turn on/off the spreading of links. That way if it is a problem for us we can turn it off.

B. Homayouni: Any other questions? Let's vote with the same cost stipulation to get at a later time and distribute the pricing in the meeting minutes at a later.

D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes

This item passes but is contingent upon pricing. Pricing was verified after the meeting and is documented above. Implementation Option 1 passes.

Implementation of Option 4 required an additional vote. Pricing information was provided to all voting CMB members and an online vote was cast with this additional information in hand.

The results of the online vote conducted after the meeting is as follows:

D1: Yes, D2: Yes, D3: Yes, D4: no vote, D5: Yes, D6: Yes, D7: no vote, FTE: Yes, CO: No, CFX: No Preference, MDX: no vote

Implementation of Option 4 passes.

Planned Events (VOTE) – Derek Vollmer

- **Effort: 3-4 weeks, Cost: \$20k**
- ****Estimated Cost is based on current contract rates and are subject to change based on negotiations scheduled.***

Incorporate planned events in SunGuide. Currently, SunGuide shows the active events but using SAS there is a way to schedule a response plan activation but not to create an event. Planned events are marathons, bike week, etc. not intended for construction events where more interaction is needed. The proposed solution is to create events the same as they are created now except you would have optional start and end times. If the event was never started, it can be voided out so they don't influence performance measures. A new event status would be required. The event status would be "planned". Planned events would reside in their own section of the event list until they start. Also, want to include an approval of the response plan. It would be a configurable as to who has permission to approve the response plans. The Response Plan would need to be approved prior to activation and could be approved anytime between creation and start of the event. Effort will be about a month to complete and cost about \$20,000 and would be a major release in 7.2.

M. Laird: The response plan approval and activation is for planned events, not other response plans.

P. Vega: What is the intent?

D. Vollmer: You want to be able to post information to the public about an event but the operators might be tied up handling a major incident. This would be a backup because you know the information would be posted to the public and they would be aware of this event.

Vote: D1: yes, D2: yes, D3: yes, D4: yes, D5: yes, D6: yes, D7: yes, FTE: yes, CO: yes, CFX: yes

This item passes.

Module to Control Lane Availability – Part time shoulder use – Jeremy Dilmore

To help with bad congestion, the solution we came up with is part-time shoulder use. In order to support the part time shoulder use, enhancements are needed in SunGuide. The goal is to detect roadway failure due to congestion and respond appropriately. The operational concept is four steps:

1. Traffic builds up until it reaches configured thresholds based on volume, speed, location of congestion, time of day.
2. Alert an operator who dispatches a Road Ranger- the alert is to begin the procedure for part-time shoulder use.
3. Road Ranger confirms congestion with operator
4. Operator activates a response plan that will update dynamic lanes signage

The goal is not to be fully dynamic in this, but to get a heads up and open the shoulder prior to the congestion happening.

M. Laird: In event messaging, would this be treated as travel lanes on the shoulder and right two lanes blocked and what right two lanes? Right lane and the shoulder? Also, how would this effect performance measures?

J. Dilmore: Those are all great questions and I do not know the answers. Our concept is slightly different from the graphic shown and we would just put green arrows over the shoulder only.

D. Vollmer: Whom on your staff would we be working with to flesh out all of the changes?

J. Dilmore: It would be John Hope.

B. Homayouni: What are the next steps?

J. Dilmore: We are planning to have this operational by 2022 so we can work with the SSUG in the meantime.

D. Vollmer: Let's flesh out some of the details and then determine where it should go from there.

Saving Accurate Device Locations – Jeremy Dilmore

One thing we do is offset our icons but we have so many that our links overlap. With the width of our lanes, we have to offset our cameras. We have noticed that people think these CCTVs are on the arterials when really they are not and just offset on the map. The latitude and longitude are correct but it is not displayed correctly. We want to make it similar to RITIS and have bubbles of how many devices are there until the user zooms in and the real location is there.

B. Homayouni: this is a good idea and I think it should be pushed along sooner rather than later. Maybe bring it up at the SSUG.

D. Vollmer: I think it is close and maybe have a few more SSUG discussions and move to the next CMB.

RWIS Enhancement

Requested by District 2 because they have sensors on their bridges that detect wind speed and wind gust. The communicate via the GOES satellite; we currently receive these messages at a ground station in Lake City. We already have the ability to get the information from the devices and onto the ITS WAN. Under normal conditions, the device sends a message once an hour. Every 10 minutes, it collects one-minute worth of data (average wind speed, wind speed direction, gust speed). There are thresholds configured on the device and if the threshold is surpassed then the device will send a message immediately. A comment that was sent in was to have a time factor, which might not be applicable. However, it could be a good idea for TSS devices. I wanted to go over a few questions that were brought up:

- Can FHP be notified with automated response plans? Not currently, emails for weather are not included in automated responses.
- Find on map? Yes, all alerts now have find on map feature.
- How to check accuracy of RWIS? Discuss at the SSUG
- Display wind information via icon. This should be discussed at the SSUG.

C. Chandler: An anticipated use for RWIS is that we want a lightening module. We want to know how many strikes there are and it would be helpful to know how the ITS field devices are holding up. Could you add to the standard specifications to add lightening capability to RWIS?

D. Vollmer: There is no RWIS specification any more but there is a developmental specification and we can relay the request to the owner of the developmental specification, which is Alan El-Urfali.

Executive Notification Update – Derek Vollmer

I wanted to go over the current state of the executive notifications. Emails are generated automatically based on some of the executive notification criteria (road closure duration and estimated duration). There is also the ability to manually generate it using a specific comment type. Information will still need to be copied over to the executive group.

Items discussed at the SSUG:

- Five or more fatalities and since we are not 100% on the number of fatalities, we will leave it up to the Districts to manually generate those notifications.
- Work zone and fatality we want to automate the executive notification. If it is an FDOT/contractor injury/fatality it would be manually generated.
- Multi-vehicle crash fog would be automated but multi-vehicle crash smoke would be manually generated. The smoke situation is less frequent.
- 10 vehicles in a chain reaction would be automated. Add checkbox for 10 or more vehicles and it would be configurable.
- Bus crash with injuries and fatalities we do have the ability to configure a bus vehicle for every District.
- The police activity will be removed as criteria.
- One-hour closure will be automated. All bridge failures or closures is not intended for ramp closures without structural damage. We are still figuring out if it can be automated or not.
- Wildfires that close the roadways. We can add wild fire event type in SunGuide and the SAE code is “serious fire” and this could be automated.

We want the ability to link multiple SunGuide events to a single notification. We are working on the graphical mock ups and want a popup to come up to edit what would be sent in an email. We also want the ability to add a comment to this area and have the ability to hide comments.

Email content needs to be approved before being sent. Configurable permission to be an approver and have a prioritized approver list. These emails would go straight to the executive group. The SSUG is still working on this concept of an approver list and the graphical mock ups. It will come back to the CMB for approval. Also, note that we will be removing the estimated duration field from the emails. Reason being, management is confused because of the duration fields shown.

Review Action Items

- **B. Homayouni: follow up with Elizabeth Birriel in regards to outstanding action item from previous CMB meeting (1/19/17).**

- **R. Allen:** add the Color DMS guidance to the October ITS Working Group meeting.
- **D. Vollmer:** keep the District informed on the architecture update process.
- **D. Vollmer:** remove ITS Communications Update from the future agenda items and remove from CMB meeting invite.
- **R. Pierce/D. Heupel:** let District 5 know if they are not in the IP range so they can fix it.
- **D. Vollmer:** talk to Jennifer Fortunas and Tucker about the naming of the managed lanes subsystem.
- **D. Vollmer:** get with Ryan Crist specific intersections in SunGuide's EM Location configuration
- **D. Vollmer –** send Tucker an email to delete the inventory management.
- **D. Vollmer/B. Homayouni –** get together to update the CMB charter to allow email voting on smaller items.
- **T. Brown –** look into any potential permissions need to be added to account for the removal of the Administrative Editor
- **D. Vollmer –** will provide districts with dollar amount for voting items that don't specify dollar amounts
- **D. Vollmer:** Identify Routes of Significance to flag which ones will require more than one roadway type.
- **D. Vollmer:** Add Footprint 1685 to future SSUG agenda item.
- **D. Vollmer:** Add item to SSUG meeting to work out design details of module to control lane availability
- **D. Vollmer:** Add Saving Accurate Device Location to SSUG and next CMB.
- **D. Vollmer:** Add RWIS enhancements (accuracy, wind icon) to SSUG meetings.
- **D. Vollmer:** Follow up with Alan EI-Urfali on the RWIS developmental specification
- **D. Vollmer:** Chester Chandler wants lightening detection language added to the developmental specification.

Meeting adjourned at 4:38 p.m.