**Meeting Notes**

**Change Management Board**

October 27, 2020 – 1:00 p.m. – 4:00 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

D(number) FDOT District (number)

DMS Dynamic Message Sign

DTOE District Traffic Operations Engineer

EM Event Management

EOC Emergency Operations Center

FDOT Florida Department of Transportation

FHP Florida Highway Patrol

FLATIS Florida Advanced Traveler Information System

FTE Florida’s Turnpike Enterprise

ITS Intelligent Transportation Systems

ITSFM Intelligent Transportation System Facilities Management

IV&V Independent Verification and Validation

MDX Miami-Dade Expressway Authority

MIMS Maintenance Inventory Management System

MVDS Microwave Vehicle Detection System

R-ICMS Regional Integrated Corridor Management System

RWIS Roadway Weather Information System

SSUG SunGuide®® Software Users Group

SwRI Southwest Research Institute®

TERL Traffic Engineering Research Laboratory

TIM Traffic Incident Management

TSM&O Transportation Systems Management and Operations

**Florida Department of Transportation**

**CHANGE MANAGEMENT BOARD MEETING NOTES**

**Tuesday, October 27, 2020**

**1:00 p.m. – 4:00 p.m.**

**Microsoft Teams Meeting**

**Attendees:**

|  |  |  |
| --- | --- | --- |
| Robbie Brown, D1Justin Merritt, D1Luis Hernandez, D1Ray Mikol, D1Pete Vega, D2Jason Evans, D2Jason Summerfield, D2Amy DiRusso, D3Mark Nallick, D3William Reynolds, D3Aven Morgan, D3Kevin Mahaffey, D3Robert Briscoe, D3Dee McTague, D4Tushar Patel, D5 | Jeremy Dilmore, D5Eddie Grant, D5Jay Williams, D5Kyle Higgins, D5Jovanny Varela, D5John Hope, D5/CFXMark Laird, D6Alejandro Motta, D6Alex Mirones, D6Mike Crawson, D7Dan Buidens, D7Matt Mileto, D7Romona Burke, D7Eric Gordin, FTE | Kelly Kinney, FTEBrent Poole, CFXBryan Homayouni, CFXChristine Shafik, COFred Heery, COAlex Brum, CO HNTBMark Dunthorn, CO HTNBGreg Dudley, CO HNTBJennifer Langford, CO HNTBKenny Shiver, CODerek Vollmer, COTucker Brown, SwRIAJ Skillern, SwRI |

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

**Welcome:**  Change Management Board (CMB) Chairman Jay Williams opened the meeting.

**Call for Quorum and Review of Agenda:** A quorum was established for this CMB meeting. Jay Williams reviewed the meeting agenda.The agenda should have links to all of the voting items.

**Previous Meeting Recap and Action Item Review:** The following items are complete.

**Action Item Review**

* **Central Office:** Three of the enhancements we were tabled for a future ITS Working Group meeting. Enhancement 5, 6, and 7. Two of those we will be voting on in today’s meeting. One was closed out after subsequent discussion.
* **Central Office:** Topics to be added to the next CMB should be sent to Jay Williams.
* **Central Office:** Mark Dunthorn to work with Christine Shafik to send out an email asking all Districts to submit their databases.
* **District Five:** Dashboard discussions have been had in different meetings.
* **Central Office:** Mark Dunthorn to run two instances of separate nodes for RITIS and measure load. This item is currently in progress.
	+ **Mark Dunthorn:** I will report back to the group at the next CMB. We have built the system but don’t want to get in the middle of IVT.

**SunGuide® User Management Audit**

Christine Shafik: Earlier this year in March the State Auditor General requested that we provide them with information on SunGuide User Access Privilege Controls. The AG Report 2017-121, finding #14 recommends that the department “ensure that periodic reviews of SunGuide user access privileges are performed” and that we develop a methodology to retain historical user access privilege records. We did all of this and sent it back to the AG. Recently they reached back out to us and asked us some follow up questions based on the data we provided. The information we provided was not consistent. I requested them to provide us with a template of what they would like to see, they did give us a template, one for current active SunGuide user list and another for the deactivated SunGuide user list. Their request is to run the report on specific date statewide. I recommend we all run it on Friday, October 30th. If you are unable to run it on Friday, please send a justification as to why you couldn’t run it. I will provide this in an email that I will send out after the CMB. They want the deactivated list for a specific amount of time. If you cannot provide the data, please give a justification as to why you couldn’t provide the data. Also, please provide us with any back up documentation. I will send you a query to assist you in running it, please fill out the template from the AG. The second thing is they need a contact person for follow up questions. Please keep Central Office (Christine and Derek) in the loop with all communication with the AG. Right now, we are only required to submit data – we do not have to make any changes to processes or guidelines.

Mark Laird: If we have someone who was an FDOT employee at times and a consultant at other times, for the employee field is it the current status?

Christine Shafik: If we are running it on October 30th then I think the current status would be appropriate. The one that we are running on Friday are all the currently active status is what we are going to go with. The other is for the deactivated users and it should be for the specific timeframe AG requested.

Mark Laird: What if they change during that time window?

Christine Shafik: Good question. If it happens, I think we should note that next to the name.

Mark Nallick: Our process is we use the AARF form to make the user ID an FDOT OIT generated user id. When that person leaves, we use the AARF process to deactivate them and their account is deleted. So basically, District Three doesn’t have any deactivated accounts since they are all deleted.

Christine Shafik: You just need to justify why you are not providing this for District Three. Again, for any reason if the Districts will not be able to provide the information please send a formal justification and the backup documents.

Dan Buidens: Can you give me the date range for the time of interest?

Christine Shafik: Sure, I will request it via email after the meeting, but it is July 2018 to January 2020. The active list should be running Friday, October 30th. Any other questions?

Christine asked the Districts to provide a contact person per District.

Robbie Brown: Can it be consultant as a contact person?

Christine Shafik: I am not sure.

Robbie Brown: I will give you two names.

District One: Luis Hernandez, Robbie Brown

District Two: DeeDee Crews, Jason Evans

District Three: Mark Nallick, Greg Reynolds

District Four: Will have to get back to you with that information.

District Five: Jeremy Dilmore

District Six: Javier Rodriguez

District Seven: Dan Buidens

Florida’s Turnpike: Jermaine Da Silva, Tony Abid

Christine Shafik: For everyone that provided two names, I just want to make sure that one of them is FDOT personnel. I don’t think we need through CFX or MDX. As I mentioned earlier, I will be providing you with an email that contains the query, the exact dates, and the templates. With that said, that will be it for the audit.

**SunGuide Software Update**

Christine Shafik: The last release which was 7.2 was released back in October. I really want to thank you all for your cooperation. Statewide we are on a single version which is a great thing! It couldn’t have happened without your help. With that said, I can confidently drop support for 7.1.2. We released hotfix 2 in May and hotfix 3 in August which both of them fixed a lot of issues and enhancements. Currently, we are in the process of testing 8.0. There are 33 enhancements, and the RISC and RCA are in the process of being tested. Those are major enhancements. The entire team is working hard on getting it done and we are trying to commit to one big release per year.

With all of the backlog in JIRA tickets cleared, we have been discussing a lot of issues and there is a long list of enhancements in the list to be developed. The post 8.0 release has a full list of enhancements. By the January 2021 we will have the cutoff date for the next release. If you have anything urgent or time sensitive, please be sure to have it to us before the January CMB.

John Hope: To respond to that request, can you send out a list for what is currently slated for post 8.0.

Christine Shafik: I was planning to do this in January, but if you need it now, I can send it. That was the last slide in my presentation, I am open for questions if you have any.

**Action Item:** Christine to send enhancement list out to the District for the post 8.0 release.

**Device Integrations**

Mark Dunthorn: A couple of SSUG’s back we discussed some new device integrations. These are vendors that Central Office has been talking to about integrating these devices with SunGuide. Three of them are Wrong Way Driving and all support WWD. We are looking at them for the post 8.0 release. We just wanted to get the list in front of the CMB and to get any feedback or find out if there are any other vendors that are important to you from a project schedule perspective.

Is there anything that we missed here? Like Christine said, we are running out of time for getting this post data release stood up. Again, these are just vendors we have been talking to recently. We have the API for a few of these and we have been talking to the vendors about making changes to these when they make sense. I will open it up to the floor for any feedback.

Jeremy Dilmore: The last vendor you have the list is a supplier of solar solutions that are used for things like beacons, and other types of low energy draw systems. What is the function of the integration of these devices into SunGuide?

Mark Dunthorn: They are all for incident detection. The first and last and more general. The three in the middle are all wrong way driving but they would all be considered incident detection and come in as IDS drivers. Were you saying that Carmanah is the one that is focused on low energy?

Jeremy Dilmore: I was looking, and they have an RRFB, a speed check radar, and a school zone beacon. So, what would they be alerting on? What functionality are we going to be supporting with the new device integration?

Mark Dunthorn: That is a good question. We haven’t looked at any beyond WWD. If you are interested in those applications, then we should be looking at them as well. Did you have specific project uses in mind?

Jeremy Dilmore: Honestly, I just wanted to look up what they did. When you look at M.H. Corbin, they are used for a variety of things that we are keeping track of. That’s why I was trying to understand how deep you were going for the integration. The M.H. Corbin, I think that is the one we would have the most potential use for but we are not at a point where we are putting them in a way that I could definitively write up a Concept of Operations and it not change. I don’t think we are at that point yet.

Mark Dunthorn: We are looking at the protocol level and looking at how we get data out of these devices. We have a concept that once we get the data it will go into IDS. Once we get the protocol level figured out then we could talk about other levels. Or the specific wrong way driving IDS. I can’t say specifically for sure but Carmanah does have a nice API, I did look at that. I get the impression that once we have integrated with some of those end points that we would find it fairly easy to integrate with other end points and get other types of data from them. As far as other applications there will always be questions on integration. I think we can look at other applications and I don’t think we are limiting ourselves, at least in the long run, to specific applications. These have all been brought forward with some specific application in mind.

John Hope: You had asked if there is anything missing from this list. We have a ticket in for blank out sign integration and I believe Jeremy will be talking about that, but it should probably be in this list as well.

Mark Dunthorn: Good point. We are certainly aware of the blank out sign question and it’s not like its being neglected here. These just came to us in a different way, some directly with the vendor. This was something we wanted to get out there for you guys because they might not have been surfaced otherwise. So, with the blank out signs I would throw them into this. They are new devices to be integrated but they are already in the process with a JIRA ticket and Jeremy will be discussing it today. In other words, this is not an exclusive list of all device integrations for the next post 8.0 release.

Jeremy Dilmore: Are these all the folks working their way through the APL process? I thought only K&K and someone else on the APL.

Mark Dunthorn: I am not sure; Derek can answer that. I do know that more than one is talking to the TERL.

Christine Shafik: Derek just stepped out and will be joining shortly. We can address this question once he is back because I believe he has a lot input on the APL.

Jeremy Dilmore: I was just concerned we might be putting the cart before the horse with having the integration for WWD happening, if they have not made it through the APL approval process or if we have concerns that they won’t make it through the APL process.

Craig Carnes: On the ITS Florida technical committee call, Derek was saying that in the January 2021 Specifications that it is stated that the WWD detection system had to be integrated with SunGuide. He brought up that K&K was not tested and integrated with SunGuide. Therefore, they thought there would have to be an addendum to the January 2021 Specs to pull that requirement out. They were going to work with the vendors to get them APIs to be integrated with SunGuide. So that might be where this is coming from. He wants to put that requirement back in as soon as possible but didn’t think that it was fair now.

Jeremy Dilmore: That helps, thank you.

Mark Dunthorn: Any other questions? Okay, I think we can move on then.

**BOS – Blank Out Signs Integration**

Jeremy Dilmore: What we are referring to here is the Daytona Event Management System we put out blank out signs. We were replacing 67 DMS with something that is easier to maintain and something that would last a little bit longer. With that in place, we also were using these signs to redirect detour traffic. We were hoping to integrate this into SunGuide. What we were looking at was the ability to use this for route messaging, for when there is a response plan already in place for when there are full closures. It would pull the appropriate endpoints to show the messages to navigate around the arterial system. We were also looking at this from a over height vehicle standpoint. Instead of it being a push out it would be looking to get information from an over-height sensor. The final thing we looked at is to be able to activate some signs on the arterials and it would be an event management activity. The changes in SunGuide to support both the blank out sign and the over-height system is to have the right contact closure on the blank out sign there was an existing relay. We thought they would be similar to those used in beacons however they don’t call individual channels they call all of the channels at the same time. Obviously, that would be a problem with our blank out sign and then they actuate to turn on and off that particular contact closure. We want something to persist on a single channel instead of multiple channels. When it comes to over height vehicle, this would be monitoring the feedback and activating that call out when that beam being broken. We would go ahead and say yes this contact out on the edge has closed and therefore we would be looking to generate a response plan from it. There is additional information we tried to write up in a concept of operations. It was an abbreviated one that covers both uses and it talks about that we have a more extensive use of the blank out signs. However, those uses we have already covered by custom software that didn’t have applicability with the ability to provide an alternative route messaging as well as monitor a contact closure. Something that would be general enough to be used at the statewide level and thus integrating it into SunGuide. Any questions? Hearing none I will pass it back over to Jay.

Jay Williams: Here we will get into all of the voting items. As a reminder we will be doing all of the voting via the links that are in the agenda.

**Enhancement 1: SG-564 Remove List Options without Deleting**

Tucker Brown: This is something that was discussed at the last CMB and was tabled to this meeting. This has to do with when you remove something in the system, it keeps it around to make sure it is there for reporting purposes. Right now, the devices themselves are deleted from the system although some are stored in data archive. Event management does keep it around for most things but not everything is done like that. Like I said, once you delete them it is difficult to run reports on them. The proposed enhancement is to make everything in the system a cease use so once you add it to the system it never gets deleted, there is just a concept of adding a flag that says we no longer need it but it will hang around. This is a large change to implement across the system, so we have broken it up into three phases. The change from the last one is now that we have estimates for all three phases, but we have also slightly reordered the phases. Originally, we were going to do AVL and EM first as phase one, but it has been switched out to now do the core devices (CCTV, DMS, TSS) with SAA for users. Because of the AG discussion we had the beginning of this, we also added SAA to phase one which will track when the user is removed from the system. It also includes changing the reports to be able to look at the devices that have been deleted for that matter. Phase two gets into AVL and the rest of EM. Phase three is all of the other device types (less used).

**Estimates:**

**Phase 1: $146k**

**Phase 2: $85k**

**Phase 3: $207k**

**Release: Post 8.0**

We can break phase three into multiple phases, if needed. Phase One and Phase Two are locked as whole as a need for those. We could break them out as well, but those groups seem to make sense. The idea here is that only Phase One would be authorized for post 8.0. The next release would have Phase Two then the following release would have Phase Three. I will open this up for general questions.

John Hope: Since SAA is included in Phase One, does that include all of the SunGuide users?

Tucker Brown: Can you clarify that?

John Hope: When SunGuide user accounts are deleted it deletes the entry so is Phase One going to include the SunGuide user accounts?

Tucker Brown: Yes, that is correct.

Christine Shafik: Yes, that is correct. We want to make everyone’s life easier. We want to be prepared for the next audit and automate the process as much as we can.

Jay Williams: Any other questions? If not, we will go onto the vote. Note that we are voting on each phase separately so there will be three links in the agenda. You will need to go to each link to vote for each of the phases.

We have all of the votes in and this item passes for Phase One, Phase Two and Phase Three. **All three phases of Enhancement One pass.** We will move to the next enhancement.

**Enhancement 2: SG-3499 Reporting “Ramp Closed” (Blocked) for Different Lane Mappings**

Tucker Brown: The initial issue here is when you have the different lane mappings, they have different blockage descriptions, so we sync those. However, when we did, there was a discussion on what should be said. When you have an exit, ramp closed but the shoulders are open was taken to the ITS Working Group. It was decided there that it should say “all lanes blocked” or “all ramps blocked” even if the shoulders are still open.

**Estimate: $4.5k**

**Release: Post 8.0**

Mark Laird: You said all lanes blocked or all ramps blocked. I don’t understand all ramps blocked terminology. All lanes blocked makes sense to me.

Tucker Brown: There could be more than one ramp lane. If it was the ramp lanes it would more than likely say ramp blocked.

Mark Laird: Okay, how do we know what SunGuide is going to do?

Tucker Brown: SunGuide would have to evaluate the number of ramps in the particular location and determine if it is one or more than one and adjust the description.

Mark Laird: Normally it says ramp to something then if you have ramps to the east and west, wouldn’t you have separate? I don’t know.

Tucker Brown: Are you referring to the SAE description at the bottom of the event?

Mark Laird: I am really trying to understand how it will pick what message to use and what we would see. If we have a simple ramp with both travel lanes blocked and both shoulders are open, we are going to see all lanes blocked. Is that correct?

Tucker Brown: Yes.

Mark Laird: If we have a ramp that splits and goes two different directions on a connecting road you might get all ramps blocked and both travel lanes blocked? Is that right?

Tucker Brown: Say the lane configuration again.

Mark Laird: Your exit ramp goes two different directions to the same target road. Part of it goes north bound and part of it goes south bound. I am trying to figure out all ramps comes in.

Tucker Brown: That has multiple off ramps coming off of a mainline, if you had a split from there would you have more locations defined downstream that you could put that you could put that particular ramp is blocked? Or would you block all them to the point where you exit the mainline? In these scenarios, you wouldn’t be able to use the ramp at all. It sounds like in the scenario you were talking about you could use the ramp going North bound but if you were going South bound it would be closed.

Mark Laird: When would it ever say all ramps blocked? It seems like all lanes is what we expect.

Tucker Brown: From that standpoint if it said ramp blocked all the time as opposed to all, would that be something you would see in any case?

Mark Laird: We would be used to seeing something like all lanes closed ramps to something closed. The proximity is the ramp to which is built into the message.

Luis Hernandez: If I could chime in, I think the ideal point is that all ramp lanes are closed. I think that lanes are the missing part. Otherwise it makes it sound like every ramp at the interchange is closed.

Tucker Brown: I am good with that. I am going based on what the working group ended up with and maybe something got lost in translation there. Was anyone on that call that would like to shed some light on why that particular terminology was chosen?

Jeremy Dilmore: I don’t recall that terminology being chosen.

Fred Heery: We did all lanes blocked but I don’t remember anything about all ramps blocked.

Jeremy Dilmore: Agreed.

Tucker Brown: Was there a discussion at the working group on ramps?

Jeremy Dilmore: I believe it was ramp blocked, not all ramps blocked.

Tucker Brown: If that is what it needs to change to, that is fine. No issue with that.

Derek Vollmer: When you say ramp blocked, are you referring to the travel lanes being closed but the shoulder might still be open? And the ramp closed is everything closed? Which is consistent with how we do it for the limited access facilities.

Alex Brum: Yes, I believe that was the discussion in the working group.

Jeremy Dilmore: That is correct.

Derek Vollmer: Okay, thanks.

Fred Heery: I remember the word blocked vs closed.

Tucker Brown: We will bring this to the design review and make sure we go through it and have different lane configurations and what the resulting description would be and confirm those with the group.

John Hope: How is this configurable in SunGuide?

Tucker Brown: It is not. The description is set on how things get labeled. I want to say that is more of a consistency issue.

Dan Buidens: If we block out the travel lanes but the shoulders are open, SunGuide will say lanes blocked. But if the shoulders are closed as well then, the message would be ramps are blocked. Is that accurate?

Tucker Brown: On the top of my head I can’t answer that, I would have to go test it all to be sure.

Derek Vollmer: I was thinking it would be ramped closed if everything was closed. Am I not understanding that correctly?

Dan Buidens: I think you are right, but I always interpreted blocked as an incident and closed like a long-term closure.

Derek Vollmer: I know a while back we had changed something to where if all of the travel lanes and all of the shoulders were blocked, it would say that the road was closed. And if most of everything was blocked but one shoulder was open it would say blocked.

Peter Vega: You are correct Derek; we were going to leave it up to the interpretation of the person on if they want to take that ramp.

Tucker Brown: Does someone want to sum that up and make sure we are all on the same page for the notes?

Pete Vega: I guess we can still make changes if we need to at the SSUG meeting, right?

Tucker Brown: Yes, we can. It is more of just making sure that the wording is consistent. At the design review we will bring up what we propose and ensure it is correct.

Pete Vega: So right now, we are voting on if we need it and how much it will cost.

Tucker Brown: Any other questions before voting?

Jay Williams: Is everyone clear on what we are voting for? I am hearing there is still some uncertainty.

Pete Vega: I think everyone is in consensus on voting, it is just the wording that needs to be finalized. I think we could still vote.

Jay Williams: The detail is then in the implementation. What is the opportunity that we have on weighing in on how this get implemented?

Christine Shafik: If you want to table this until we can verify the language, the cut off is going to be the next CMB.

Jay Williams: I don’t think we want to table it; I just want to be clear on how Districts will give feedback on the implementation.

Mark Dunthorn: Tucker will present the details at a design review meeting and we will adjust if needed then.

Derek Vollmer: That is usually done at the SSUG and a lot of people here don’t attend that.

Jay Williams: Will that work for everyone?

Pete Vega: Yes, I think so. The folks who would be there are the boots on the ground and tell us what to do anyhow.

Jay Williams: So, we will move forward with the vote and details on the implementation will be discussed at the design review.

Jeremy Dilmore: Just for my clarification, I thought we came to the decision of when there is a ramp blocked which is when the lanes on the ramp are blocked but one or more shoulders is passable. Ramp closed is when everything is completely shut down and you could not use the ramp to get off in any way, shape or form. I thought that is what Derek had articulated. Are there still elements of this that we are struggling with? Am I missing something about the missing message?

Derek Vollmer: I think the missing message is that the language in the slides is different than what we just said.

Fred Heery: Plus, it says all ramps blocked and we were looking for ramp blocked.

Jeremy Dilmore: Okay, so that is now going to the SSUG for it to be clarified just to make sure it is appropriately modified to cover the different situations? Is that what I am hearing or is it coming back to the CMB? I am sorry.

Derek Vollmer: I think there will be a vote and the details will be discussed at a future design meeting. I personally think we should be a little clearer like we want ramp blocked and ramp closed.

Jeremy Dilmore: I am prepared to say ramp blocked and ramp closed at this point.

Dan Buidens: I am with you Jeremy. I think that was very clear what you articulated.

Dee McTague: That would keep it consistent with how we handle lanes. If lanes are blocked without the shoulders it is called blocked vs if everything is shut it is called closed.

Pete Vega: District Two concurs with Districts Four, Five and Seven.

Bryan Homayouni: CFX agrees.

District: Turnpike agrees.

Javier Rodriguez: District Six agrees.

Robbie Brown: District One agrees.

Jay Williams: Everyone should vote. **We have enough yes voted to move forward with this.** Before we move to the next item, I just want to clarify District Three I am not sure if you have someone logging in and registering the votes, can you confirm the links are working for you?

Greg Reynolds: The links are not working. I have tried doing it from two different computers. Both votes were yes but I was not successful using the links.

Christine Shafik: It is in the agenda document.

Jay Williams: I don’t know if this is the issue but maybe try to switch browsers?

Mark Nallick: We block everything in District Three.

**Enhancement 3: SG-3488 DMS Priority in Response Plan changes all DMS sign messages**

Tucker Brown: Right now, when you are in a Response Plan and you are attempting to edit DMS, if you select multiple it would change all the messaging and priority for every sign. Clicking the button to modify the message will sync all messages and priorities of the DMS signs. There was a suggested change to only set the priority without effecting the message on the sign. Additionally, at the SSUG meeting there was a different behavior that was requested but has a similar effect to be able to modify the messaging to be the same without effecting the priority. What we came up with is if you multi-select and just say edit it will bring up the exact same behavior you have now. Or if you select those signs and right click you will have two more options will be if you just want to set the priority without effecting the messaging and the other would be to set the message without effecting the priority. This is another way to affect multiple DMS signs at a time. If you don’t use that behavior, there will not be any change.

**Estimate: $5k**

**Release: Post 8.0**

Jay Williams: If there are no questions, we can vote on this enhancement. **That item passes with all yes votes.** We will move onto the next item.

**Enhancement 4: SG-2570: Allow comments to be added to closed events without reopening**

Tucker Brown: Right now, if you want to add a comment to a closed event you can do it via audit. The other option would be to reopen the event, add the comment, then close the event. The proposed enhancement here is to be able to allow comments to be added to closed events while they are still on the event list (1 hour after closure).

**Estimate: $2k**

**Release: Post 8.0**

John Hope: Does the operator have to own the event in order to add a comment?

Tucker Brown: We were going to make that a no since it was already closed. Is there a preference?

John Hope: The preference is no.

District Three: Does it indicate who made the comment?

Tucker Brown: Yes, it would.

John Hope: One more point for clarification, does the event have to be closed in order for someone to make a comment?

Tucker Brown: Are you suggesting you want for anyone to be able to go into an event without owning it? Right now, you have to own the event to make a comment. Once an event is closed, we can make it to where anyone can comment. It wouldn’t be a large jump to make it where anyone can make a comment on the event at any time. But it could get you into a situation where there is an event update while someone is modifying it. On closed events, no one should be making modifications anyway.

Mark Laird: It should be for closed.

John Hope: District Five is okay with the requirement of having the closed event.

Tucker Brown: Anyone could make comments to an event that is closed and while it is still in the map. Once it leaves the map and you can’t see it, audit would be the only way to do that.

Jay Williams: Any other questions on this item? In that case we will move forward with the vote this enhancement. **We received all Yes votes for that item so we will move ahead to the next enhancement.**

**Enhancement 5: SG-5376: Center-to-Center (C2C) Add Nearest Camera Information**

Tucker Brown: Current functionality is when you auto select an event it selects the nearest camera, and that field would be available inside the event. Operators can modify the cameras. In general, you will always have a camera there showing that this is the one nearest the event. Right now, that information is only held in SunGuide and not passed out to Center-to-Center. The request is to make it available in C2C in both the event data and publishing it to FLATIS. I believe they also have a concept to the nearest camera. We would add it two different ways to pass it to third parties.

**Estimate: $3k**

**Release: Post 8.0**

Jay Williams: Any questions on this item? If not, we will move forward with the vote. **That item passes, we will move onto enhancement 6.**

**Enhancement 6: SG-4876: Agency Contact Config**

Tucker Brown: The issue that is happening is when a new device (or one that has never produced an alert) sends an alert, EM needs to make a contact based on the device for the event. This fails if the user handling the alert doesn’t have permission to create contacts.

The proposed enhancement is to allow the system to add the contact as an Administrator so that this will succeed and the user can continue to manage the event, even though they do not have permission to create contacts. This is the first time a user would be able to complete an action that technically they don’t have permission to do. In terms of risk, it is low since it is a single action.

**Estimate: $2k**

**Release: Post 8.0**

Jeremy Dilmore: Is there a way that SunGuide knows who the added contact was?

Tucker Brown: It would know when it was created but I would have to check if it logs the user who created it.

Jeremy Dilmore: It is more of if it is the same person being added over and over again. Not who created it. I am less worried about abuse, but I want to fix an error if that is what is causing this.

Tucker Brown: You would basically see an error in that case. Because the system is going to create those in a very finite way, it will put the fields in the same spots. If it created the first one and it errored out and the system tried to do it again, it would fail. That case you would get a report and then let us know that something is wrong. Duplication is not high risk either.

Mark Laird: You are basically creating contacts for that device, right? The name probably reflects device name and if there is one, it will likely use the one that is there.

Tucker Brown: That is the intent. If it is there then it would be used, if it is not then we would create it. The duplication is a concern, but we have stuff in place to catch it and prevent it from happening.

Mark Laird: Let me ask a question if there is an alternative to this. When the devices are created, does SunGuide know this is a device that can create an event?

Tucker Brown: Right now, we have a finite list of devices that are capable of creating events. I am assuming where you are going with this is as part of device creation it will automatically create a device contact. A couple of things that could occur there is if you happen to create the device when EM is down you would still run into the issue you have now. Also, some people don’t use particular alert types so creating those contacts would be extra information that they didn’t need. It is not a huge issue.

John Hope: That first case that you said is impossible because EM must be functioning.

Tucker Brown: Yes, you are right. Good call. The secondary route is to create the device type itself. This is definitely the cheaper route to go.

Jay Williams: Any other questions? If not, let’s have everyone vote on the enhancement. **This item passes.**

**Enhancement 7: SG-5251 Wrong Way Device – Incorrect Images Displayed in SunGuide with Alert**

Tucker Brown: This is about wrong way driving and we talked about this at the SSUG a few times. The base issue is the image didn’t match up with the alert. What we came out with was a reordering of how this should actually work. Right now, if you have an alert come in on a device and you don’t resolve it, what comes in will be discarded. Essentially you can only have one active alert on a single device. Changes to this will allow multiple alerts from the same device. What that means is that the images on this will be unique to the alert itself. It will be put into a storage area then on the map so you can view it. Once you release that alert, it will claim those files so we aren’t storing images long term but we would be able to use a variety of files to create those images for multiple alerts on the same device. You get all the images you need but we aren’t storing them long term. We are still going by that and are able to create multiple alerts with images to the map.

**Estimate: $10k**

**Release: Post 8.0**

Bryan Homayouni: So how long are they are they stored with those images?

Tucker Brown: Lets imagine you have a device that has 5 images come in with each alert. So, alert comes in and it uses files 1-5 then alert 2 uses 6-10. A new alert comes in and I would reuse files 1-5. They are stored in a way they wouldn’t be overwritten. We would not go in and delete them.

Bryan Homayouni: So, the images themselves are used for resolving the alert.

Tucker Brown: Correct. If we need to, we can send something to go in to go clean those up but overwriting them seemed easy enough.

Bryan Homayouni: I am just curious how that ties into public records.

Tucker Brown: Currently they are being overwritten. If they are constantly being overwritten it doesn’t constitute storage of them. The SSUG discussion seemed to make it feel like this was okay.

Pete Vega: I think Christine or Fred could discuss that. I believe that if we create a record, we are supposed to keep it.

Jeremy Dilmore: I agree with Pete. It is an issue that should go to legal before we make this enhancement.

John Hope: How would that effect the cost of this enhancement as far as the storage of images?

Tucker Brown: None, we would just make them unique file names. But it does have storage implications of where you put those. If you want to store them to straight disc that is easy enough, it is what we are doing now. You could alternately store them in some kind of database, but you are left with the decision of what to do with its long term. It is honestly harder to figure out the algorithm to overwrite them than it is to store them.

Pete Vega: I think for WWD we won’t have so many that it will be an impact on our storage capabilities.

John Hope: Tucker, if we go in the direction of never overwriting, is there a configurable perimeter where we can specify another server for storage?

Tucker Brown: Right now, you specify the location where they are being stored. The only caveat is wherever you store them needs to be accessible by the operators. There is a link to the folder they are stored in and the map retrieves the image. You can put it wherever you want as long as it is noted and accessible.

Jay Williams: What I am hearing is that we will move ahead with the vote, but we will need a separate discussion on the storage.

Pete Vega: What I heard from Tucker is that what they are trying to do is more complex so would this effect the price and decrease it?

Tucker Brown: Potentially yes, this would be a maximum. Assuming we are storing them all the time opposed to overwriting them. What could increase it is if we have to make a system that goes in and checks and deletes after a certain amount of time.

Fred Heery: We might have to look at that because storage isn’t infantile, and I know we don’t have to keep records forever. I know when we asked about the signal timing changes it was only three years. We can have a separate discussion on that.

Derek Vollmer: I agree with Fred. I would prefer to have it clean it up after X amount of time and X would be dependent on our retention policy. I think we can reach out to someone in CO to find out the retention policy and if not maybe create our own. I think it is Amelia Ponds.

Bryan Homayouni: Since we are talking about storage requirements and records retention. One of the things that would help in that area is knowing the size limitations and if the image size is configurable. It would be good to know what we are talking about storing, is it 5 images per alert? Are they each 5 mg each?

Tucker Brown: I believe Tapco has a configurable number and if you are using Blinklink those get forwarded to the server. In that case it is a configurable number of images. I can’t guess at what the image sizing is. I would have to go look at a server and check.

Bryan Homayouni: So, what you are saying is that it would have to be done on the equipment itself?

Tucker Brown: Number of images for Tapco is yes. We are looking at the other vendors for WWD and I don’t know if they are similar. Keep in mind that the five vendors might have different perimeters.

Bryan Homayouni: Yes, and while we are talking about these images can become video and that would impact storage as well.

John Hope: I believe the overarching question is there anything in SunGuide that tells how many images, and the image sizes are allowed?

Tucker Brown: No, there is no hard cap or anything telling you what you can and can’t have. We are not passing the image sizing around; we are passing links to where they are stored. When the operator starts to view it, that is when it is trying to download it off of wherever they are coming from.

John Hope: At the last SSUG Tucker presented an enhancement about the resizing of the image in the pop-up windows. Does this include that portion? Or is this separate?

Tucker Brown: It is a separate enhancement; these slides were put together before that SSUG took place. Although those would be good to do together but I don’t have an estimate.

Christine Shafik: I think this one it would be beneficial to get clarification prior to voting on it. I don’t know how comfortable everyone would be to vote on this one now.

Jeremy Dilmore: I would like to get clarification.

Jay Williams: Are we going to table this item then?

Christine Shafik: I would say yes until we clarify everything.

Jay Williams: Is the clarification that we are looking for is related to the records requirement?

Christine Shafik: Yes, we need to check with legal first.

Jay Williams: **We will table the vote for enhancement 7** and go onto enhancement 8.

**Enhancement 8: SG 3429 – Reliable DAR to RITIS Interface Using a Message Queueing Product**

Mark Dunthorn: We are talking about the interface between SunGuide and RITIS and the Data Archive Report. Most of you know that SunGuide will zip up all of the data every minute and transfers that zip file up to RITIS. One problem we have seen over the years is if that transfer mechanism is interrupted (usually network related), then the DAR stacks up all these zip files and holds onto them until the connection is restored and it can transfer them. Unfortunately, there have been times when these interruptions can take weeks to resolve. RITIS has proposed a new interface and they are asking us to make a change to SunGuide to support this. It will involve changes on both the RITIS side and SunGuide side. RITIS will implement REST API service to ingest data from FDOT. This service will provide two or more endpoints per district. One endpoint for detector inventory the other for detector data. These updates will be sent to RITIS in real time, there will no longer be a one-minute lag. There is a fair amount of work to be done on the RITIS side. They already get inventory data by a different channel, but they might also look to get DMS data in real time. All of the data will be stored how it is now and all the analytics will work the same. What this will do is open up the potential for more real-time data on their end. Those were the RITIS changes.

Here are the SunGuide changes. Raw data reads would be forwarded on to RITIS as XML – no more zip files. There will likely still be a need to store the zip files incase we still need them. This doesn’t address the original need of what we do with network/RITIS outages, so we still need a way to recover if that happens. The current mechanism of recovery will work. One thing I should say is that RITIS has done a good job recently and Christine has pushed them while monitoring this situation. This year there haven’t been any outages that nobody was aware of. We get alerts directly from their monitoring system. Again, there is a little bit of work for SunGuide. SunGuide will be a client to the new interface and have access through the API.

**Estimate: $17k**

**Release: Post 8.0**

Jason Summerfield: Is there any compression of that XML stream before it gets sent?

Mark Dunthorn: I don’t believe the RITIS API supported that. It is something we could ask for. Tucker, did RITIS API support that? And I know we have a flag in SunGuide that allows us to turn compression on, is that something that is functional and that we could use here?

Tucker Brown: As far as I know it did not talk about compressing the XML it just talked about sending the REST API directly. I did ask them about load and possible issues on the request on a short interval. They said that would be no problem and they would want to do load testing before that happens. It would be trivial to do something to the data to compress it as long as the interface supports it.

Jason Summerfield: Not that it will be a huge bandwidth load, but it would save a bunch of bandwidths if it were compressed. We are doing a lot of data, but we are zipping it first.

Mark Dunthorn: Tucker brings up a good point, this architecture does allow them to span out horizontally so any load issues on their end there would be no problem. When we talked about this at the SSUG we did make it clear that there was a lot of testing that needs to be done.

Jeremy Dilmore: Do we have any idea of pipe size that is needed in order to support this connection?

Mark Dunthorn: So ballpark when we collect data, if we collect both the link level, traffic and event data we are looking at 2.5-3 MBps on average. I think it shouldn’t be a problem but is good to monitor. If we consider compressing the XML, that would work nicely.

Jeremy Dilmore: Has there been any thought about emergency situations when we lose internet connected and result to failover secondary sites and how a message priority would affect it?

Mark Dunthorn: We have looked at using RITIS during when we had urgent needs. I would say that during any situation like that you would have to put the District needs first. We are able to go back and get the District data to RITIS. If you needed that internet pipe for immediate operational needs, I don’t think that would be a problem on the RITIS side. Tucker, we can’t just shut off DAR because then we wouldn’t be zipping up the files, correct?

Tucker Brown: Correct.

Jeremy Dilmore: So as part of this enhancement do, we need to have a way that our administrators could turn off this service and the files would be available when bandwidth is.

Mark Dunthorn: I agree that’s a good idea. I was thinking you could do that on the network side, but it might be better to have a switch in SunGuide. Tucker, is that a big change?

Tucker Brown: Just to clarify, you want a real-time flag that you can switch that will stop sending to RITIS and archive the files locally then resend them when the switch is turned back on or would you send them independently?

Jeremy Dilmore: I would think it would be the former. When you say independently are you implying that we would manually be shipping those over?

Tucker Brown: You are correct.

Jeremy Dilmore: Yes, I am thinking that during an emergency we will be on a back up and turn off anything non-essential then when we recover we resume normally which would be sending the larger files without a problem.

Tucker Brown: So, it is not a completely trivial change, there is nothing in place that would stop that with an error right now. Having the user be able to toggle that on the fly would be necessary. There is no mechanism now for zipping the files and storing them somewhere until you are done. The grab the files from where they are stored and then reupload them. That is the part that doesn’t exist and would have to be changed. Potentially it is doable but isn’t trivial. We also don’t have a direct connection to the UI’s directly to DAR. DAR is a process that collects data from the system and ships it out. The operator maps don’t have a concept that DAR exists so we would have to put that in place too.

Jeremy Dilmore: I would like to get the pricing around the modifications and seeing what it comes up to.

Mark Dunthorn: I think that is an important point. I think we should implement this, so we have that ability.

Pete Vega: I think the first thing is to find out the bandwidth demand to do this then go from there.

Mark Dunthorn: Good thing is that we are looking at the bandwidth as part of another investigation so we should be able to get something firm on that. We need to get with RITIS to find out how to recover it since it will be something we could control.

Derek Vollmer: I know you were initially thinking this could be done on the network side. What if we did it on the network side? What would happen? Would SunGuide still archive the data and when the connection is made again send it out?

Mark Dunthorn: What is missing is that it wouldn’t send it out, it would just archive the data until someone went in there and transferred the data. It would be SwRI who goes into to do that. What Jeremy is proposing is a more eloquent way of doing it.

Derek Vollmer: I thought the current FTP solution goes in and archives until FTP starts to work again it sends the backlogs.

Tucker Brown: It only sends them if they are in the same folder and sends them as full zips. In the case we are talking about now, is unzipping the zip files and send them in the normal fashion.

Mark Dunthorn: RITIS did say they would continue to support FTP as a backup plan. If that’s the case, isn’t Derek right and it would just start transferring the FTP files?

Tucker Brown: I think that is correct. Yes, it would do that, but it would have to know when to start sending it live again vs trying to backlog the archive.

Mark Dunthorn: I think we still want to table this and go back to RITIS and ask them if they can support compression, and we will determine the bandwidth requirements for the compressed and non-compressed version. And we can clarify the question of what recovery looks like. Finally, we need to introduce a way for the operator or administrator to go in and flip that switch.

Jay Williams: **So, I am hearing that we will table the item until we have further discussion and will revisit at a future meeting**. That concludes all of the voting items for this CMB. Now we will move into open discussion if any participants want to bring up any issues.

**Open Discussion**

Jeremy Dilmore: One thing we put a ticket in had to do with performance measures for wrong way driving. I think there a couple measures that Raj came out with. We have one system, Tapco, it is pretty easy to gather those metrics after the fact. But when we start having multiple vendors within the District, we were looking to gather in the SunGuide interface whether it was a turnaround, false alarm or if someone continued to the mainline I think those were the main ones. We were hoping that would be something integrated into SunGuide as a consistent report so we can provide Raj with the performance measure information.

Pete Vega: Is this like a checkbox?

Jeremy Dilmore: Yes, just check which case it is.

Bryan Homayouni: So, you have resolution check boxes in there already that the operator can enter. Is this a different layer of resolution?

Tucker Brown: What he is referring to there is in the alert itself when you have that as opposed to creating the event and checking the event, there is the ability to put in custom resolution actions based on the district itself that they can put in the resolution. When the alert comes in logging what it was exactly becomes easier. What it would not give you is tying it to an event ID it would only tie to the alert ones and your reports would be based on IDS alerts not the event itself.

Jeremy Dilmore: Let me restate that and you tell me if I understand correctly. There is a difference between an alert and an event. The alert would be the system goes off and only if it was confirmed then there was further action which makes it an event? What makes it into an event vs an alert?

Tucker Brown: So, you will get an alert in any scenario. Some of those that are legitimate get turned into events and actions get taken based on the fact that it is a real thing that we need to react to. Other scenarios where alerts are generated is false alarms for emergency vehicles. The intent of that would be instead of creating the event and closing it out from there, you would just cancel the alert and the custom resolution action would give you the classification of WWD. Then when you run the report and ask for all WWD alerts, these would be getting all the ones that were events and will show you real ones. When creating the event, you would need some way to tell what it was (like the checkboxes you mentioned). The implication here is that you could run a report on the IDS alerts and not the event.

Jay Williams: I don’t know if that covers the scenario where we create an event that is not based on an alert that came from the WWD device. My understanding is the report Raj is looking for needs to include both of those scenarios.

Tucker Brown: If you just need the total count, you could make a report that looks at both.

Bryan Homayouni: Can someone speak to the report and what is being looked for vs what is being generated?

Jay Williams: We are going to try to pull it up on our end so everyone can see but CO asked for a report from all of the districts with the number of WWD events we have had in the Districts. Can everyone see what we have on the screen now? My understanding is that this information is part of the CO information request for quarterly performance tracking for all of the Districts. The ask is to get the fields in green from a centralized SunGuide report.

Tucker Brown: You could use the presence of an alert. Would confirmed mainline entries mean that they got up the ramp and up on the mainline? A turnaround means they made it on the ramp but then turned around.

Dan Buidens: Yes.

Bryan Homayouni: We need to be clear on false event and if that includes emergency vehicles.

Dan Buidens: One other point is that I think we are only interested in the ramps that have had the deployed edge lit sign. I think the wigwag, RRFB or any legacy device we aren’t tracking the metrics on those.

Bryan Homayouni: I think all of the information is in there and being tracked one way or another.

Tucker Brown: If you create events for mainline entries and turnarounds there is no way to distinguish between those two.

Bryan Homayouni: So that would be the key.

Tucker Brown: If there is a turnaround but no reaction to it, can you ignore that one? For mainline entries you would create an event and set the flag type for WWD. Turnaround would be an alert comes into the system, I look at it, I see them turnaround so there is nothing left to do. So, I dismiss it as a false alarm and then note it was turnaround when the system asks why it was dismissed. For WWD crashes, if it is from an alert the event type should be crash with the WWD flag set. Or it could be a manual event created with the event type crash and the WWD flag. False events you could put a WWD resolution type that says… I feel like there should be another category here that has false positives and expected false events to cover maintenance and emergency vehicles. But depending on how you do your operations I think you could grab this information as it is now. The report would mainly be IDS, but you would also want to include events with a crash type and a WWD flag checked.

Jay Williams: Anything else on that topic? What’s the next steps for that? How do we move that specific concern forward?

Jeremy Dilmore: I think it needs to go to the SSUG and I want to talk to our operations folks.

Christine Shafik: I think you are right. Someone needs to submit a JIRA ticket so we can take it to the SSUG to discuss it. Mark please note this and have it as a priority to discuss at the SSUG.

Jay Williams: Does anyone have any other open discussion items?

Bryan Homayouni: One thing CFX is working on as an agency is that we are working on a part time shoulder use application. We’re in the process of designing several widening projects and with that we will be implementing a part time shoulder use application while putting up gantries and lane control signaling. It will be a substantial deployment effort. We are in the really early stages for the planning, but we are putting together a ConOps and coordinating with District Five. As we continue the process, we will likely need to bring up possible enhancements to SunGuide. Our primary approach is to look at a third-party vendor software for the initial deployment of the part time shoulder use. I think the long-term solution would be to have this integrated with SunGuide. I just wanted to bring it up to the group. I am happy to discuss. I think it should be something covered in future meetings.

Jay Williams: Thank you for the heads up and we will accommodate you at future meetings with what your plans are.

Derek Vollmer: Do you know if upper management has changed direction on part time shoulder use?

Fred Heery: No, they haven’t changed direction but that doesn’t mean it won’t change. We will have to see what this is and how involved it is to have the capability incase management does change their mind.

Derek Vollmer: Okay, I just wanted to check.

Jay Williams: Does anyone have any other items to bring up? Hearing none, we will recap the action items.

**Action items:**

* Christine in CO will send out email related to the SunGuide Access OIG Audit.
* Two items from this meeting are being tabled for more discussion – the one related to WWD and the snapshots specifically records retention and finding out from Central Office the legal requirements for us to comply with the Florida statutes. Item 8 will be tabled based on additional discussion.

Were there any other action items that I missed?

Hearing none, I think that covers everything for today’s meeting.