Change Management Board Meeting

Tuesday, June 17, 2014

Video Conference: CO–Burns Video Bridge 1

Audio Only: 850–414–4972 PIN: 490513 Do NOT Put on Hold

GoToMeeting: https://www2.gotomeeting.com/join/311908618

Welcome and Call for Quorum

Derek Vollmer, P.E., CMB Chairman

Agenda

Time	Item	Lead
1:30 – 1:35	Welcome and Call for Quorum	Derek Vollmer
1:35 – 1:40	Previous Meeting Recap & Action Item Review	Derek Vollmer
1:40 – 1:45	ITS WAN Update	Randy Pierce & Frank Deasy
1:45 – 2:00	FL-ATIS, VAS switch to ITS WAN	James Barbosa
2:00 – 2:20	SunGuide Software Update	Derek Vollmer
2:20 – 2:30	RITIS Update	Derek Vollmer
2:30 – 2:40	Closed versus Blocked **(vote)**	Derek Vollmer
2:40 – 2:55	Waze	Gene Glotzbach

Agenda

Time	Item	Lead
2:55 – 3:05	Break	
3:05 – 3:25	Color DMS for Express Lanes	Derek Vollmer
3:25 – 3:50	Arterial Probe Data Algorithm	Derek Vollmer
3:50 – 4:10	Open Discussion	Derek Vollmer
4:10 – 4:20	Review Action Items	Derek Vollmer

CMB agenda, slides, and attachments posted here:
http://www.dot.state.fl.us/trafficoperations/ITS/Projects_Deploy/CMB.shtm

Previous Meetings Recap and Action Items Review

Derek Vollmer, P.E., FDOT

Previous Meeting Action Items

1. **Districts to send top five prioritized SunGuide software enhancement requests to D. Vollmer.**

2. **CO to further investigate/evaluate the operator map out of IE.**

3. **D. Vollmer to follow-up with Districts on ITS architecture workshop needs.**

4. **D. Vollmer to follow-up with Districts about closed versus blocked DMS messages. (Open Action Item)**

5. **D3 and D7 to determine desired SunGuide software installation dates. (Open Action Item)**

6. **D5 will get in touch with CO to discuss ITS WAN connectivity. (Open Action Item)**

7. **FTE to prepare white paper to document their efforts and findings on WWD. (Open Action Item)**

8. **CFX to prepare email for distribution to all Districts on findings of latest deployment effort. (Open Action Item)**

ITS Telecommunications Update

Randy Pierce & Frank Deasy, P.E.

ITS WAN Update

- **Connecting D3 RTMC Tallahassee**
  - Build-outs completed, and splicing in progress
  - Tallahassee fiber ring nearing completion
  - Connectivity to SEOC will also be established

- **FTE RTMC Pompano**
  - ITS WAN ready for re-connection of FTE ITS Network

- **Multicast Re-Addressing**
  - Districts should re-address their multicast devices now to resolve any overlapping addresses
  - D3, D4 & D6 completed their multicast addressing
  - D1, D5, D7 & MDX are in process
  - D2 not implemented at Layer 3 at this time
  - Multicast video can then be shared statewide

ITS WAN Update

- ## FL-ATIS & VAS
  - ITS WAN can support FL-ATIS
  - FL-ATIS migrating from leased circuits to ITS WAN (IBI)
  - ITS WAN connectivity established and working for VAS
  - VAS IP addresses will be migrated in a future project

- ## FTE Tolls Middleware Application
  - D6 has a Layer 2 Connection over ITS WAN
  - D4 has a Layer 2 Connection over separate FDOT fiber
  - FTE Tolls connection to the ITS WAN being upgraded to a Layer 3 connection with routing to support the 95Express project and future Managed Lanes projects
  - Discussing a new Layer 3 connection at Turkey Lake to supplement the existing connectivity
  - FTE Tolls has requested a consolidated connection over the ITS WAN for all Districts

QUESTIONS?

Randy Pierce & Frank Deasy, P.E.

Randy.Pierce@dot.state.fl.us

Frank.Deasy@dot.state.fl.us

FL-ATIS Migration to ITS WAN

James Barbosa, IBI

Migration Details

- **Why the transition?**
- **Contacts**
  - FLATIS:
    - James Barbosa (jbarbosa@IBIGroup.com)
    - Gene Glotzbach, P.E. (gene.glotzbach@dot.state.fl.us)
  - ITS WAN:
    - John Glowczewski (john.glowczewski@telvent.com)
- **Schedule**
  - Phase 1 completed by end of June 2014
  - Phase 2 completed by end of July 2014
  - Coordinate transition dates for each District in July

Migration Summary

- **Phase 1: IP/Configuration changes**
  - IP range –
    - IP Changes:
      - ITS WAN Team Subnet Provided: 192.168.115.0/27 bitmask – 255.255.255.224, range 192.168.115.1 through 192.168.115.30.
      - Specific IP provided by ITS WAN ~ 2 years ago
    - SunGuide software configuration file changes
    - Change a single entry (for flatis-c2c) in a windows hosts file
- **Phase 2: Transition to ITS WAN**
  - Network Configuration:
    - Reconfigure network routing to use ITS WAN path to FL-ATIS servers (instead of leased line path)

QUESTIONS?

FLATIS:

James Barbosa, IBI Group

jbarbosa_@IBIGroup.com

Gene Glotzbach, P.E., FDOT

Gene.Glotzbach@dot.state.fl.us

ITS WAN:

John Glowczewski, Telvent

John.Glowczewski@telvent.com

SunGuide Software Update

Derek Vollmer, P.E., FDOT

Status of 6.0 Upgrades

- **Districts 6, 7, & MDX still on Release 5.1.1**
- **All other Districts on Release 6.0**
- **All Release 6.0 should be on patch 2 with hotfixes through 14**

Release 6.1

- **Major Enhancements:**
  - New Installer
  - SAA
  - RWIS
- **Other Development**
  - WWD

Prioritized Enhancements

- **Only received requests from District 6:**

Description	FP #
Ramp Metering: archival and holiday support	1081 + 1407
Discontinuous Lane Blockages	1912
Deletion of TSS links used in TVT links	2418
Email enhancements: Templates and Automatically Updated Data (proposal to follow)	1066 + 1957
Warn operators when closing an event with response plan active	583
C2C links: Show Timestamps for C2C Link Data and Operator Control Display of C2C Links	2735
Unable to link manually generated DMS message to event	844

SunGuide Reports Update

- Reports updated for Release 6.0, however, several issues found
- Reporting Subsystem issues:
  – Several districts needed Native client 11.0 installed on all server nodes in cluster
- Issue involving parameters needing both SunGuide and Report template changes
- Current status of reports: (next slides)
- New report support process uses Footprints

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Performance Measures Reports

- Several data questions researched and answered
- 1 Issue being addressed on SQL Server :
  - Footprint 2764 - Events being discarded from performance measures if responder Departure is null

Road Ranger Reports

- Driver and Vehicle ID to name mapping for parameters
  - Vehicle Location Report
  - Vehicle GPS Location Report
  - Road Ranger Status Report
  - Road Ranger Duplicate Activity Report
  - Road Ranger Activity Report
  - Road Ranger Activity Summary Report
  - Road Ranger Activity Details Report
  - AVL Report
- Road Ranger Administration Summary:
  - Use tablet arrival and departure time when available
- Fixed templates and database views with hotfix 14

EM / 511 Reports

- **Incident Management Monthly (FP 2753):**
  - Too many secondary incidents
  - Fixed, awaiting confirmation
- **Event Level Report**
  - Missing "Lanes Cleared Date" – under investigation
- **Regional Floodgate Messages (FP 2680)**
  - With hotfix 13, report enhanced to better show when floodgates are deleted
- **Secondary Crash Report and Secondary Event Report**
  - Reported to have not generated
  - To be investigated

DMS Reports

- **DMS Messages report:**
  - Several changes including numeric ID parameter fix
  - Excel version not sortable due to headers
  - Resolved

- **DMS Usage report (FP 2754):**
  - Error in view where ID in name field: fixed
  - Awaiting confirmation

Detection Reports

- Speeds at Detector
  - Report note returning results for devices with a SunGuide ID greater than 999
  - Resolved
- Traffic Volumes Report
  - Report note returning results for devices with a SunGuide ID greater than 999
  - Resolved

Other Reporting Issues

- **Several reports reported to run slowly or not produce data**
- **These will be investigated after prior functional issues have been investigated:**
  - **CCTV Report – Report generates slowly**
  - **DMS Report – Report generates slowly**
  - **TSS Report – Report generates slowly**
  - **Detector Data Detail – Report empty**
  - **Segment Average Speed Line Graph – Report generates slowly**
  - **Speeds at Detector – Report empty**
  - **Suspect Data Report – Report empty**

Other Reporting Issues cont'd

- Total Volume by Direction at Detector – Report empty
- Traffic Volumes Report – Report empty
- Typical Volumes at Detector – Report fails to run
- Segment Average Travel Time Line Graph – Report generates slowly
- Segment Travel Time Detail for Last Hour – Report empty
- QAR DMS Safety Message Campaign – Certain date ranges not returning data
- Secondary Crash Report – Failed to generate report
- Secondary Event Report – Failed to generate report
- Basic Safety Messages – Report empty
- Traffic Advisory Message – Report empty

QUESTIONS?

Derek Vollmer, P.E., FDOT

Derek.Vollmer@dot.state.fl.us

RITIS Update

Derek Vollmer, P.E., FDOT

Summary

- **RITIS project has launched after funding and approval was obtained**
  - Support
  - HERE data integration with VPP suite tools
  - FDOT Probe Data Integration with VPP suite tools
- **Recent Project Activity:**

Date	Item
4/3	Executed Task Work Orders 1 and 2
4/14	Executed Notice to Proceed
5/20	Kickoff Meeting
6/2	First Monthly Status Meeting

RITIS Training

- **RITIS: http://www.matoc.org/?q=node/55**
- **VPP Suite: https://vpp.ritis.org/suite/screencast/**

- **Friday, June 27: Advanced Features**
- **Friday, July 25: RITIS 101**
- **Friday, August 29: Advanced Features**
- **Friday, September 26: RITIS 101**
- **Friday, October 24: Advanced Features**
- **Friday, November 21: RITIS 101**
- **Friday, December 19: Advanced Features**

- **Typically 4th Friday of each month from 10am-12pm (except in Nov. and Dec. due to holidays)**
- **For additional information, email: training@matoc.org**

Enhancement Schedule

Date	Item
7/7	HERE real-time data on RITIS website
8/4	HERE real-time data with VPP Suite tools
12/22	HERE 3-year archive incorporated
9/15	FDOT Probe real-time data on RITIS website
11/10	FDOT Probe real-time data with VPP Suite tools
1/5/2015	FDOT Probe data archive incorporated

RITIS High Priority Issues

- **Detector ID / Name Mismatch**
  - May be causing several other issues including null/invalid data
- **Missing Detectors**
- **Zone volume not equal to sum of lanes**

- **Please send RITIS issues to: Derek.Vollmer@dot.state.fl.us, Kelli.Moser@dot.state.fl.us, and Clay.Packard@dot.state.fl.us**

QUESTIONS?

Derek Vollmer, P.E., FDOT

Derek.Vollmer@dot.state.fl.us

FP Closed Versus Blocked
(with vote)

Derek Vollmer, P.E., FDOT

Current Behavior Summary

- **Footprint 2579: Email and DMS were inconsistent**
  - All lanes blocked (Shoulders open)- DMS reads "Closed", email reads, "Blocked"
  - All lanes closed (including shoulders)- DMS reads "Closed", email reads, "Closed"
  - The DMS response plan "Lane Status" should read "Blocked" when shoulders are still open. The TMC has to manually edit the response plan suggested message to change the word "Closed" if vehicles are still using the shoulder.
- **Need statewide consistency and agreement on when to use Blocked and Closed**
- **District polled for input (see next slide)**

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Desired Behavior

Results from Poll:

- **D1 – Closed for both scenarios.**

- **D2 – Blocked for both scenarios.**

- **D3 – Blocked: If all lanes are blocked. Closed: If all travel lanes and shoulders are blocked.**

- **D4 – Whatever majority decides.**

- **D5 – All Lanes Blocked for temporary incidents causing delays. Closed for road closures with additional information on where closure begins i.e. I-75 Closed at I-10**

- **D6 – All Lanes Blocked: If all lanes are blocked. Closed: If all travel lanes and shoulders are blocked.**

- **CFX – Closed when no traffic gets through. Blocked when lanes obstructed but traffic can get through on shoulder(s).**

- **City of Tallahassee – Closed for all lanes blocked. Blocked when traffic can still pass.**

- **Turnpike – Closed for both scenarios.**

Statewide Recommendation

- **All lanes _and_ shoulders blocked:**
  DMS and Email should say: **CLOSED**

- **All lanes _without_ shoulders blocked:**
  DMS and Email should say: **BLOCKED**

- **Cost: ~$1,000 (8 hours)**
- **Schedule: Release 6.1 in December, 2014**

QUESTIONS?

(VOTE)

Derek Vollmer, P.E., FDOT

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Waze Incident Data Agreement

Gene Glotzbach, P.E., FDOT

Summary

- **FDOT and Waze executed agreement**
  - Share incident data
  - Give credit to data source when published
- **Waze Data**
  - Crowd sourced incident data
  - Includes speed traps
- **RITIS Integration**
  - Need to determine if agreement permits

QUESTIONS?

Gene Glotzbach, P.E., FDOT

Gene.Glotzbach@dot.state.fl.us

Break – 10 min

http://ipadstopwatch.com/timer.html

Color DMS for Express Lanes
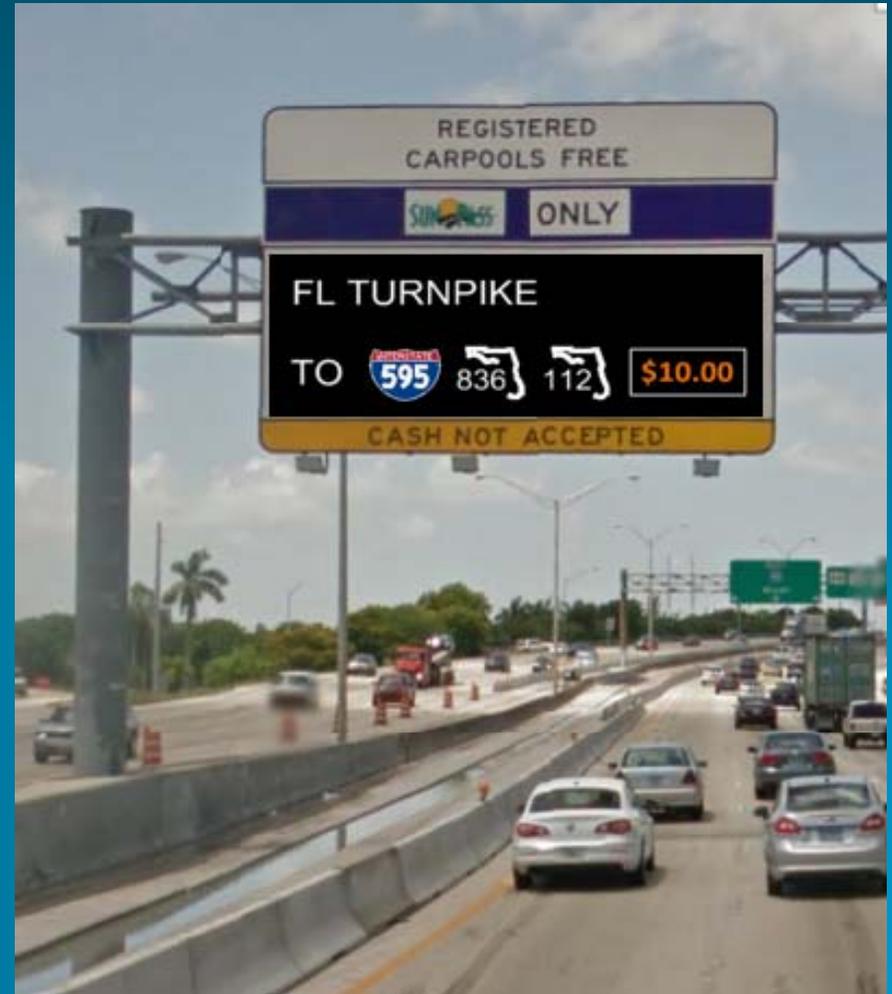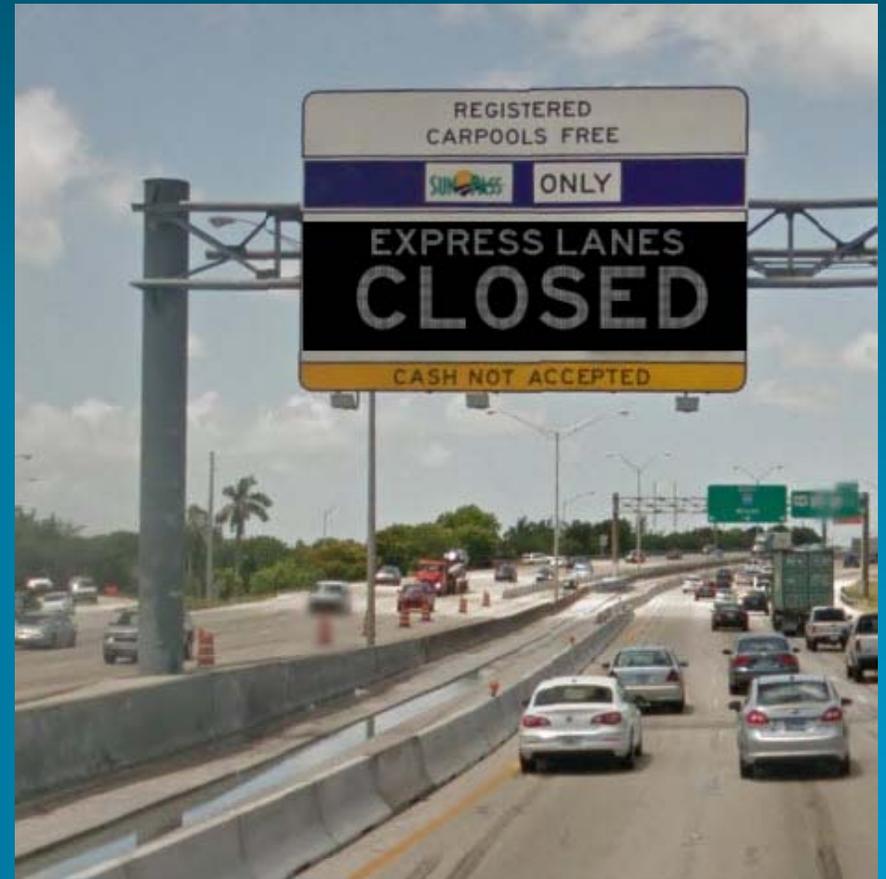
Derek Vollmer, P.E., FDOT

Summary

- **FHP not comfortable enforcing "CLOSED"**
  - Not formatted as MUTCD regulatory signs
  - Citations may not be held up in court

- **New Express/Managed Lanes DMS Signs**
  - Toll signs full color, full matrix

- **SunGuide software enhancements needed**
  - Multiple graphics per message phase
  - Multiple fonts (sizes) per message phase
  - Could also consider alternative TVT formats
  - May need Technical Review Committee to make recommendations on formats

Suggested Messages

Change Management Board

QUESTIONS?

Derek Vollmer, P.E., FDOT

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Arterial Probe Algorithm

Derek Vollmer, P.E., FDOT

Summary

- **Current SunGuide Probe Algorithm**
  - Designed for highways
  - Arterials not originally considered
- **More emphasis on Arterial mgmt.**
  - Turn Lanes enhancement (prior topic)
  - TVT more representative around stop lights
  - Arterials have more traffic flow variation
    - Needs more per-link parameters to tweak algorithm
- **SunGuide desire to handle raw data**
  - non-service-based probe devices
  - Competition fosters better products and prices

Probe Detection Concepts

- **Probe detectors pair up to form TSS Links**
- **Contiguous TSS Links group together to form TVT Links**
- **TVT Links can mix technologies of TSS links**
- **Probe TSS Links cannot mix vendors/models/protocols**

Probe Detection Algorithms

- **Release 4.1 introduced original probe algorithm**

- **Release 5.1.1 incorporated CFX algorithm components**

- **CFX's algorithm has been tested and calibrated for years on limited access facilities**

- **Arterials present more variance in traffic flow and stoppage**

- **Arterials need additional configurability to filter outliers without filtering good data**

Probe Algorithm Parameters

- **Parameters for Probe Algorithm**
  - Link already configurable as freeway/arterial
  - New algorithm parameters introduced
  - Some parameters changed
  - Some converted from system-wide to per-link
  - ConOps shows list of current versus proposed

Other Operational Concepts

- **Support additional Probe devices**
- **Fill in missing data with historical**
  - Back to a configurable expiration
- **Notify the operator when data is not available for TVT**
  - Operator determines what to post

QUESTIONS?

Derek Vollmer, P.E., FDOT

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Open Discussion

Derek Vollmer, P.E., FDOT

Review Action Items

Derek Vollmer, P.E., FDOT