



# Change Management Board Meeting

*October 19<sup>th</sup>, 2010*

**Video Conference: CO- Burns Video Bridge 3**

**Audio: 850 - 414 – 4660**



# Welcome and Call for Quorum

**Eric Gordin, CMB Chairman**



# Agenda



Time	Item	Lead
1:30 - 1:35	Welcome and Call for Quorum	Gordin
1:35 – 1:40	Previous Meeting Recap and Action Item Review	Gordin
1:40 – 2:05	CMB Charter Update ( <i>Vote</i> ) <ul style="list-style-type: none"><li>• Issues handled by CMB and not by CMB</li><li>• CMB funding distribution</li></ul>	Gordin
2:05 – 2:35	EM Flags ( <i>Vote</i> ) Miles Ahead DMS ( <i>Vote</i> ) FL-ATIS Dashboard ( <i>Vote</i> )	Heller
2:35 – 3:00	District 2 Mobile Application for RR	Vega
3:00 – 3:25	Bluetooth in SunGuide – Concept Exploratory	Krishnamurthy
3:25 – 3:45	ITS WAN Status Update Video Sharing Across ITS WAN	Deasy Packard



# Agenda (cont')



Time	Item	Lead
3:45 – 4:00	Impath H.264 SunGuide compatibility	Packard
4:00 – 4:15	“Pending FDOT Approval” FP issues prioritized by Districts – Progress update	Krishnamurthy
4:15 – 4:20	Predict Traffic Jam	Vega
4:20 – 4:30	Action Items Review	Gordin



# Change Management Board



## Previous Meetings Recap and Action Items Review

Eric Gordin



# July 28<sup>th</sup> - CMB Action Items

1. CO to look for funding contribution required to become a member of CMB. *Complete*
2. CO to provide SwRI and District a memorandum regarding travel approval for SwRI. *Complete*
3. CO to prioritize “Enhancement” Footprints. *Complete*
4. District to provide CO with a list of current SunGuide concerns. *Complete*
5. FTE to work with SwRI to specify EM enhancement request. *Complete*
6. CO will provide Districts with further information regarding EM Flags Enhancement. *Complete*



# July 28<sup>th</sup> - CMB Action Items



7. SwRI to provide CO with cost estimate for Miles ahead on DMS enhancement. *Complete*
8. CO to provide Districts with FL-ATIS dashboard Whitepaper. *Complete*
9. SwRI to provide CO with cost estimate for SSUG enhancement requests. *Not Complete*
10. SwRI to provide CO with cost estimate for weather enhancements. *Not Complete*
11. CMB members to review CMB Charter document and vote on changes. *Not Complete – will do today*



# Change Management Board



## CMB Charter Update

**Eric Gordin**





# CMB Charter Update



- **Issues handled by CMB**
  - High level decision/guidance
    - **Examples:**
      - Do we need Inrix within SunGuide?
      - Weather enhancements in SunGuide?
- **Issues not handled by CMB**
  - SunGuide design details
    - **Example: location of drop-down lists, etc.**
    - **Let SwRI handle SunGuide design details along with specific District and/or Central Office input.**



# CMB Charter Update



- **CMB funding distribution**
  - **March 19, 2008 CMB meeting minutes (pages 2-4)**
    - **MDX joined as a voting member**
    - **Discussions regarding voting membership**
  - **CMB voting (new membership)**
    - **Three (3) criteria:**
      - **Install SunGuide software and pay \$50,000 annual fee.**
      - **Fund a significant enhancement of SunGuide that provides additional functionality for other users.**
      - **Petition to become a new member.**
    - **SunGuide software users can be non-voting members, even if they don't meet the criteria.**



# CMB Charter Update



- **Change Management Process for the Deployment of ITS in the State of Florida**
  - Document last updated December 17, 2007.
  - Two Word documents submitted to Districts prior to CMB meeting:
    - ‘Proposed changes to CMB Charter 100929.docx’
    - ‘100722 CMB Change Management Process-v1a.docx’



# CMB Charter Update



- **Vote**



# Change Management Board



## EM Event Location Publish Flag

Heller/Brown



# Event Location Publish Flag



- Currently in SunGuide, all EM event locations are published to the FL-ATIS system with no way to distinguish which locations should be published and which locations should not.

## Proposed Enhancement

- Add a flag to EM event locations indicating that they should be published for public view



# Event Location Publish Flag



## SunGuide® Administrative Editor



- AVL/RR
- CCTV / VS
- Data Archive
- DMS
- Event Management
  - Activity Types
  - Agencies
  - Agencies Contacts
  - Comment Types
  - Event Status Types
  - Event Types
  - Injury Types
  - Organizations
  - Location Configuration
    - Locations
    - Counties
    - Lane Maps
    - Lane Types
    - Reference Points
    - Roadways
  - Mailing Lists
  - Mailing Lists Contacts
  - Procedural Errors
  - Response Plans
  - Vehicle Tracking
  - Weather Conditions
- Express Lanes
- HAR
- Incident Detection
- Inventory/Maintenance
- Reporting
- RMS
- RWIS
- Safety Barrier
- Scheduled Actions
- TSS
- TVT
- VSL
- Miscellaneous
- User Management

### Reference Point

- I-295
- Lane Ave
- Cassat
- Lenox Ave
- McDuff
- US-17
- Stockton St
- I-95
- Not Assigned ---
- 103rd St
- 8th St

### Locations

- Marietta
- Marietta
- Marietta
- I-295 NB/SB
- I-295 SB ramp
- I-295 NB ramp
- I-295
- I-295 SB
- I-295 NB

Short Name:

Long Name:

Description:

Sort Order:

Metro Area:

City:

Mile Marker:  Reference Point Offset:

Exit Number:  Nearest Cross Street:

Exit Suffix:  Nearest Cross Street Offset:

Latitude:  Lane Map:

Longitude:

### Primary Alternate Road

Short Name:

Description:

### Secondary Alternate Road

Short Name:

Description:

Publish to FL-ATIS



# Event Location Publish Flag



- SunGuide will publish all event locations
  - New publish flag in the XML for each event location
  - SunGuide will not block users from publishing events at any location
    - FL-ATIS will determine to post the event or not based on the publish flag of the location
- Development cost: **\$26,672**
- **Vote**





# Change Management Board



## Response Plan Addition: “Miles Ahead” for a DMS

Heller/Brown



# Miles Ahead for a DMS



- Request have been made to post mileage to an incident on a DMS sign (i.e. "CRASH 4 MILES AHEAD AT...") but, as there is no automated way to do this, operators have to estimate distances themselves.

## Proposed Enhancement

- Add an additional field in the response plan message templates that will allow a user to define a message template with a distance field.
- Distances will be calculated and added to the DMS message when EM generates the response plan.



# Miles Ahead for a DMS



SunGuide Software Administration Application - Windows Internet Explorer

http://taylor/SunGuideAdmin/

File Edit View Favorites Tools Help

SunGuide Software Administration Application

**SunGuide®**  
**Administrative Editor**

**Add RPG Message Template**

Template name:

Current template appearance:  
CRASH[DISTANCE]MI AHEAD AT[ROUTE NAME]

Template text:

CRASH
[DISTANCE]
MI AHEAD AT
[ROUTE NAME]

Delete

Text Tags	Data Tags
<a href="#">Freetext</a>	<a href="#">Cross Street</a> <a href="#">Route Dir</a> <a href="#">Veh Make</a>
<a href="#">New Line</a>	<a href="#">Event Type</a> <a href="#">Route Name</a> <a href="#">Veh Model</a>
<a href="#">New Page</a>	<a href="#">Lane</a> <a href="#">Status</a> <a href="#">Veh Color</a>
<a href="#">Space</a>	<a href="#">Proximity</a> <a href="#">Veh State</a>
	<a href="#">Distance</a> <a href="#">License Tag</a>

Save and Exit Cancel

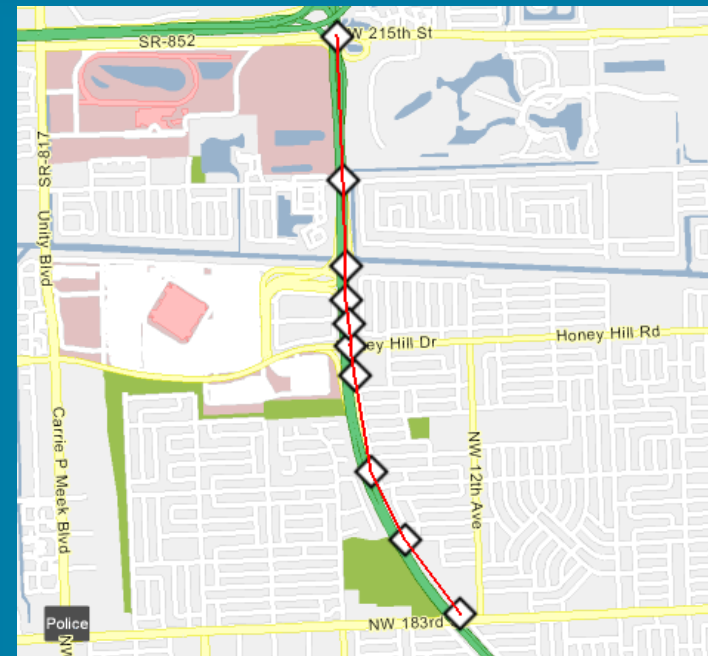
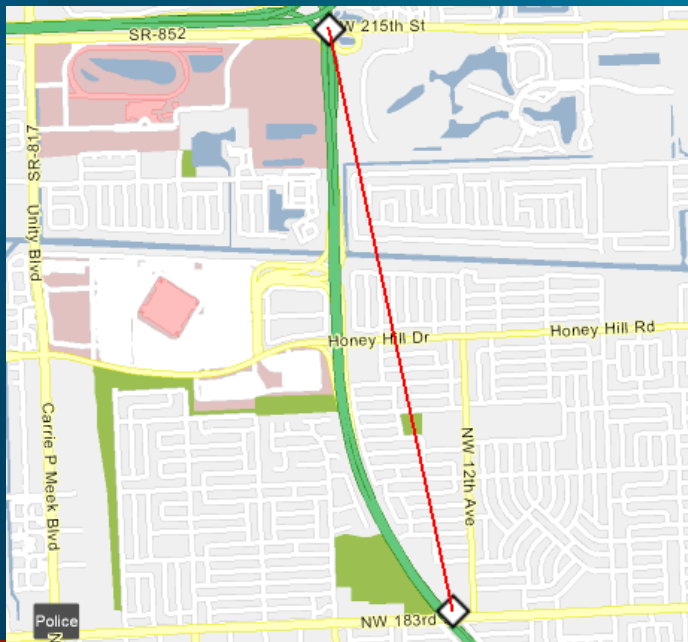
Local intranet 100%



# Miles Ahead for a DMS



- Distance calculation will be done via the device linking file
  - Straight line distance from node to node (virtual or device node)
  - For curved roads, more virtual nodes would result in higher precision for the generated message





# Miles Ahead for DMS



- Development cost: **\$18,363**
- **Vote**



# Change Management Board



## FL-ATIS Dashboard

John Brisco



# FL-ATIS Dashboard



- **Currently Available**
  - Status web service type
  - Last time the web service started
  - Other Status web services that the web service can connect to (data sources)
  - Other status web services that are connected to the web service (data clients)
  - Counts of all the data elements by data type and data source
  - Time and item count of the last update received for each data type and data source
  - Latitude and Longitude of each data source (as defined in the source's configuration file)

**Status View - Windows Internet Explorer**  
http://localhost/c2c/statuswebsite/ViewStatus.aspx?ws=ht  
Live Search

File Edit View Favorites Tools Help

Status View

[Home](#) **Center-to-Center Infrastructure Status**

Type: Collector  
Status: Active  
Location: http://flatis-c2c/C2C/Collector/StatusPortal.aspx  
Start Time: 05/04/2010 13:03:39  
Up Time: 0 days 01:03:36

Data Types | Data Sources | Data Clients | Expansion Data

- + Data Type: localeData
- + Data Type: dmsData
- + Data Type: cctvStatusData
- + Data Type: trafficSpeedData
- + Data Type: tvtStatusData
- + Data Type: networkData

Done Local intranet 100%



# FL-ATIS Dashboard



## Proposed Enhancements

- **New status web page would be developed that provides a summary of activity that is visible without expanding any controls**
  - **Based on the newer Windows Presentation Foundation technology that has been used in the development of the new SunGuide Operator Map**
  - **Organization selections can include the current view of all data sources for each data type and a new view of all data types for each data source**
  - **Each detail item display will include a color-coded status update status**





# FL-ATIS Dashboard



## Proposed Enhancements

- The status portal web service will be updated to include additional data items that will be available to the new web page.
  - Software version information for the web service
  - Configurable expected update interval for each data type, defaulting to infinite
  - Elapsed time between updates for each data type from each data source
  - Status web service type (Collector, Provider) for each data source
  - Software version information and last start time for each data source



# FL-ATIS Dashboard



- Development cost: \$42,464
- **Vote**



# Change Management Board



## Smart Phone Application for Road Rangers

Peter Vega



# Smart Phone App for RR



- **Current mobile applications for Road Rangers require laptop or tablet in addition to phone, radio**
  - Each device represents ongoing cost
- **Power available in current-generation smart phones supports Road Ranger functionality without extra device**
- **Initial concept provides limited functionality to Road Ranger**
  - Reduced training overhead
  - Increased Road Ranger focus on vehicles on road



# SPARR - Features



- Automatic location reporting using on-phone GPS
- Notification of dispatch to events
  - Audio notification
  - Visual details of event
- Road Ranger can report Arrived, Departed at event
- Road Ranger can set status (Patrolling, Break, etc.)
- Road Ranger can create skeleton events
  - Where possible, populated from current location
  - Event must then be managed by TMC operator
- Speed dial buttons in app to call TMC



# SPARR – Expansion Potential



- **Initial scope limited – Future activities discussed**
  - Road Ranger selection of on-site activities
  - Road Ranger event editing
  - Map display of RR location and active events
  - Turn-by-turn directions to dispatched event
  - Distribution of on-site photos to TMC personnel
- **Future scope may be designed as configurable options**
  - Allows districts to customize level of Road Ranger interactivity



# Change Management Board



## Bluetooth Integration in SunGuide

Arun Krishnamurthy



# Introduction



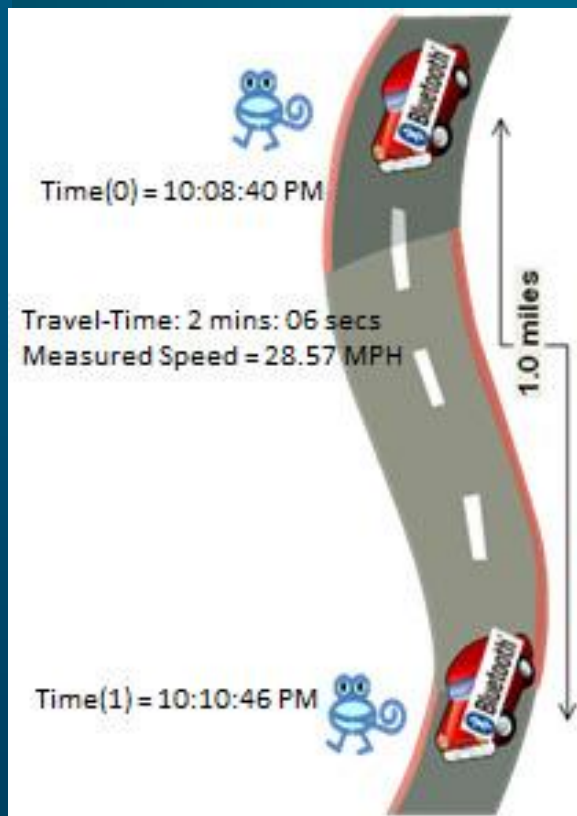
- **Recently, some districts have shown interest in deploying Bluetooth.**
  - **District 2, District 4 and District 5.**
  - **Any others?**
  - **Does any district have a timeline for when they will procure Bluetooth devices?**
- **General interest to have Bluetooth functionality in SunGuide.**





# How Bluetooth Works

- Works similar to probe detectors: automatic vehicle identification (AVI) and license plate reader (LPR).



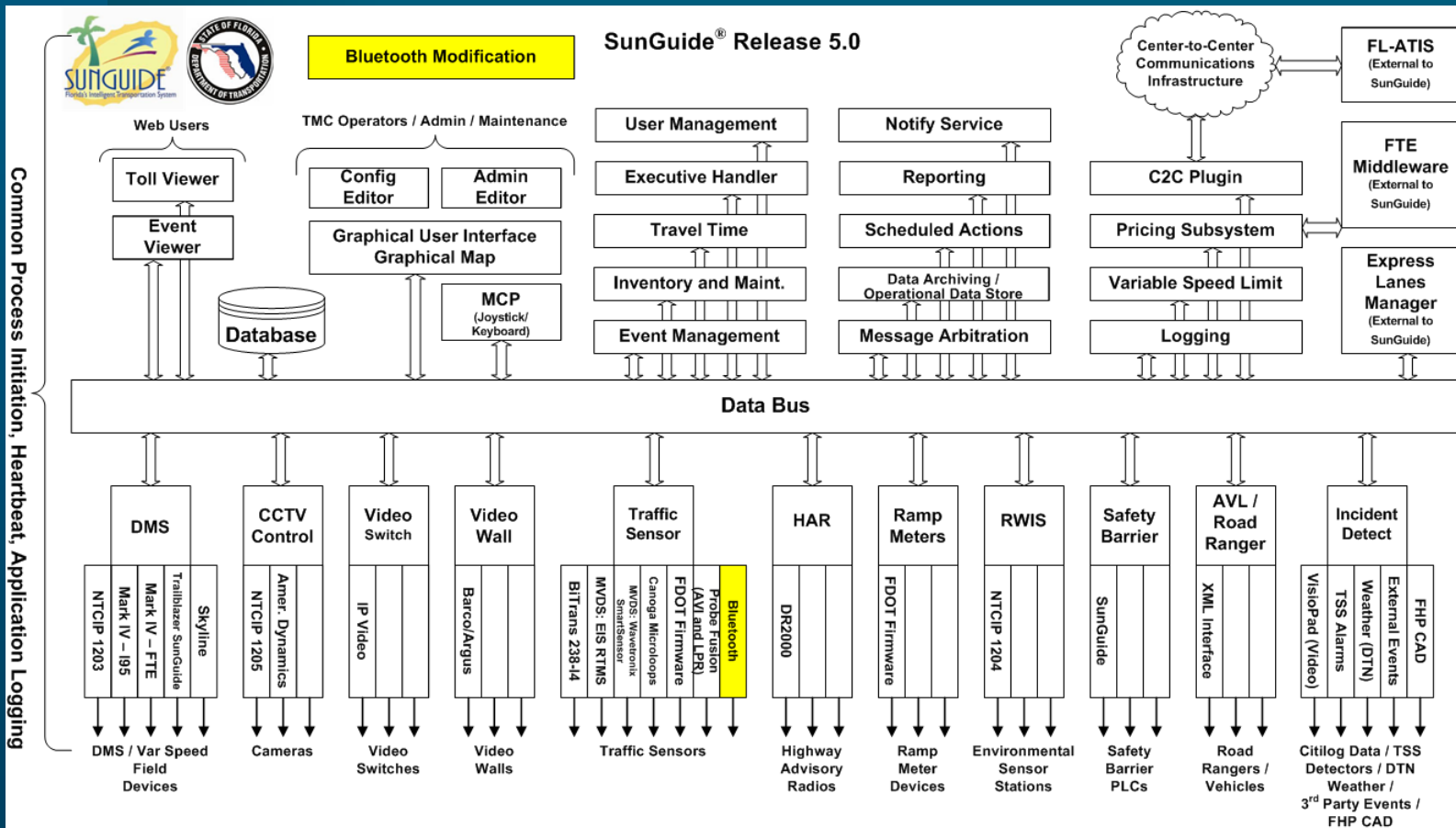
Picture taken from a BlueToad marketing document.



# SunGuide Integration



- Develop driver in "Traffic Detection" subsystem.





# SunGuide Integration



- **Currently, no standard protocol for Bluetooth.**
- **Recommend developing a standard protocol within SunGuide.**
- **Alternative, develop a driver for each Bluetooth device.**



# Funding: Bluetooth Integration



- FDOT develop driver for FDOT standard protocol
- Vendor specific drivers; FDOT supply standard protocol driver to vendors
  - Funded by vendors
  - Derivative work
  - Supply tool to test the vendor driver



# Change Management Board



## ITS WAN Update

Frank Deasy



# Change Management Board



## Impath H.264 SunGuide compatibility

Clay Packard



# Considerations for Video Sharing



- **Stream compatibility (Transport vs. elementary)**
- **IP port assignments**
  - Multicast stream
  - Data pass-through
- **Use of session announcement protocol (SAP)**
  - SAP announcements describe video stream
  - Commonly used for automatic population of video source lists in some (non-SunGuide) decoding applications
  - Character limitations / differences
- **Bitrate and Resolution vs bandwidth**
- **Recommendation: have a working group meeting to go through these issues for a later CMB decision (SSUG, other?)**



# H.264 SunGuide Compatibility



- Impath and Bosch IP camera have been approved
- Both use H.264
- Neither uses SNMP (legacy protocol SG uses for MPEG-2 devices)
- Current SG video switching does not work with these products; however
- The industry is moving to H.264 and use of RTSP and other methods for command and control (ONVIF, PSIA)
- SwRI needs direction and authorization to pursue support for new video appliances





# Change Management Board



## Prioritized-by-Districts “Pending FDOT Approval” FP issues - Update

Arun Krishnamurthy



# District prioritized FPs



- Districts provided input on 60 enhancement requests entered in FPs
  - Priority 1: 11 issues. SwRI is working on some of these.
  - Priority 2: 20 issues



# Upcoming Release / Patch

- Patch will be distributed in the next few weeks:
  - GUI enhancements
  - RR/AVL defect fixes
- Release 5.0.4 (distribute in December, 2010)
  - INRIX enhancement
  - FP fixes
  - EM Flags
  - Transcore E6 driver (convert UDP protocol to TCP protocol) - \$16,000



# Upcoming Release (cont.)



- **Release 5.1 (distribute in June/July, 2011)**
  - **FP fixes / Enhancement mods**
  - **IntelliDrive**
  - **DMS multi-threading and DMS blanking**
  - **FLATIS Dashboard**
  - **Bluetooth**



# Change Management Board



## Predict Traffic Jam

Peter Vega



# Change Management Board



## Action Item Review

**Eric Gordin**