LESS Session

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February 2, 2017
Agenda

1. ITSFM Updates
2. Statewide TSM&O Excellence Program
3. Design Manual Updates
1. ITSFM Updates

- Specification update
- Contract deliverables
- ITSFM website update
- New construction
As-built plan deliverable includes
- GPS coordinates for infrastructure is required
- Fiber optic splicing diagrams detailing
  - All cable splices, terminations
  - Equipment port assignments
  - Optical circuit path names

ITSFM system deliverable includes
- Equipment inventory
  - Inventory must include the manufacturer, model, and serial number for each device or completed assembly
- Feature import templates
Contract Deliverables

• Key changes

- Site Identification Name (shown above)
  - All support structures
  - Equipment cabinets
  - Other fixed location features

- Assigning a unique Site ID Name creates an association between the as-built plans, inventory forms, and the ITSFM system
Key changes (cont’d)

- Feature import templates
  - Submit supplemental as-built information using Feature Import Templates
  - Include data for all the components or completed assembly

- Feature import templates can be downloaded from the Department’s website (fdot.gov/traffic/ITSFM)
Contract Deliverables

• Key changes (cont’d)
  – Fiber optic cables
    • Optical path names
    • Cable manufacturer, type, and strand count and other attributes
  • Cable sequential reading
    – Each pull box entrance/exit
    – Each side of the splice enclosure
    – Patch panels
ITSFM Website Update

- Improved organizational structure
- How-to and benefits videos
- ITSFM Standards
- Available downloads
  - Inventory forms
  - Bulk import templates
  - Installation checklist
ITSFM Website Update

- New Construction
  - Contractor & Consultants
    - Data Collection Forms
    - GPS mapping
    - Feature Import Templates
  - Construction, Engineering & Inspections
    - Quality Assurance & Quality Control
    - As-Built guidelines
    - As-Built document Acceptance Testing
New Construction

- Contractor and Consultants
  - Data Collection Forms
  - GPS Mapping
  - Feature Import Templates
New Construction

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  – Data Collection Forms
  – GPS Mapping
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New Construction

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New Construction

• Construction Engineering and Inspection
  – Quality Assurance and Quality Control
  – As-Built guidelines
  – As-Built document Acceptance Testing
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New Construction

• Construction Engineering and Inspection
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  – As-Built guidelines
  – As-Built document Acceptance Testing

CEI must collect and document as-built information throughout the construction process to compare against the contractor submittals.
2. Statewide TSM&O Excellence Program

• Statewide TSM&O Excellence Program (STEP)
  – Goal is to build technical capacities in TSM&O
  – Course descriptions and intended audiences for 20 specific courses
STEP Process

- FDOT Develops Training Content
- FDOT Delivers First Webinar Training
- FDOT Develops Computer Based Trainings
- Third Party Training Delivery Mechanism
STEP Course Update

**Under Development**
- ITS CEI
  - Closed Circuit Television Camera
  - Dynamic Message Signs
  - Microwave Vehicle Detection Systems
  - Fiber Optic Infrastructure

**Delivered**
- ITS/TSM&O Work Program
- Managed Field Ethernet Switch (MFES)

**Instructor-led**
- Systems Engineering

**Available Upon Request**
- Signals Training 102
- ITSFM

**Guides**
- TSM&O Guidebook
  - Ramp Metering Guide
  - Hard Shoulder Running Guide
STEP Course Update

Tentative ITS CEI Course Timeline:
- Develop course material
- Develop computer based trainings
- Deliver instructor-led course at 2018 FTBA Construction Conference

Managed Field Ethernet Switch
Closed Circuit Television Camera
Dynamic Message Signs
Microwave Vehicle Detection System

January 2017
February 2018
ITSF M User Training

• Feature Import Template Training
  – How-to videos
    • Used for introduction and refresher
  – Understanding code list
  – Instructor demonstrations
    • Lessons learned
    • Quality Review of the data
  – Hands-on exercises
  – Validate completeness & accuracy
ITSFM User Training

• Computer Based Training (CBT)
  – CBT will be managed by FDOT’s new learning management system
  – CBT modules will supplement instructor lead training
  – New “ITSFM Training Plan” under development
3. Design Manual Update

- Plans Preparation Manual is now FDOT Design Manual
- FDM 233 Intelligent Transportation Systems (ITS)
- Changes proposed
  - Revised outline
  - Added emphasis on Systems Engineering Process
  - Added emphasis on use of Approved Products List (APL)
  - More references to FDOT Design Standards
  - Added section on wireless communication
  - Added section on ITS power design
Questions?
Thank you

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