



# FDOT'S Statewide TSM&O Excellence Program

ITS America Workshop

# TSM&O TRAINING

## STEP: Statewide TSM&O Excellence Program

- Trainings for Local and Regional Transportation Agencies
- Technical Assistance on Traffic Control Systems & Devices
- Construction Engineering and Inspection Training
- Operations Staff Training
- TIM & CVO Program Training

# 1. ITS Projects, Role

- Several projects to mention
- TSM&O Strategic Plan
- SPaT Challenge
- Statewide Policy and Guidance on TSM&O
  - Ramp Metering
  - Hard Shoulder Running
  - Adaptive Signal Control Technology Guidance
- Wrong-Way Driving
- Training initiative on TSM&O (STEP)
- Mainstreaming Arterial Management
  - Deployment focus – ASCT, SPM, connectivity
- Signal Maint. and Comp. Agrmnt – Performance Measures
- Plan to pursue Integrated Corridor Management etc
- Research projects – TSM&O from planning to o&m

## 2. Need for Technical Content

- Key challenge today: Work force skill set
- Need professionals who are technically competent
- How many know what goes into or in a controller cabinet?
- How many understand the need for good CEI for ITS?
- Role of Information Technology experts in TMC
- Challenges with identifying and dedicating O&M funding
- Migrating to an integrated freeway-arterial system
- Institutionalization and not individualization
- Distinguishing between 'optimal' and 'efficient' systems
- Balancing safety and mobility; and multimodalism

# 3. Young Engineers; what is missing?

- Back to basics! knowing basic traffic engineering & operations
- Recognizing that TSM&O and transportation are very diversified
- TSM&O is very interesting and a great future for young engineers
- Instilling the need for understanding the role of data in decision-making
- Willing to stick around to see project success
- Need for combining technical knowledge with industry/client/academic/research needs
- Practical, pragmatic research with statewide applications
- Hands-on and field-level knowledge, skills and competence
- Need folks who know what field implications can be and not based on mere simulations alone

# 4. Education needs

- Traffic Engineering and operations
- Knowledge of field conditions
- Practical, field-level immersion
- Understanding how other units function (design, maint. etc)
- Computer science and public information type coursework

# Planned STEP COURSES

## Managed Field Ethernet Switch

- Computer-Based Training
- Basic understanding of MFES
- Acceptance and Inspection on FDOT Projects
- Audience: FDOT Project Administrators, Inspectors, PE Trainees, ITS Designers

## Closed-Circuit Television

- Computer Based Training
- Ensure proper installation
- Approved and properly configured devices
- Audience: FDOT Project Administrators, Inspectors, PE Trainees, ITS Designers

# Planned STEP...

## Dynamic Message Signs

- Computer Based Training
- Basic understanding of Dynamic Message Signs
- Acceptance and Inspection on FDOT Projects
- Audience: FDOT Project Administrators, Inspectors, PE Trainees, ITS Designers

## Microwave Vehicle Detection System

- Computer Based Training
- Basic understanding of MVDS
- Proper configuration and installation for FDOT
- Audience: FDOT Project Administrators, Inspectors, PE Trainees, ITS Designers

# Planned STEP

## Traffic Signals Training

- **101 Course CBT-** basic information on traffic signals, purpose/needs, and definitions
- **Classroom/Hands-on Training-** Traffic signal planning and design, re-timing and basic controller know-how
- **Proficiency Exam-** tested in the classroom
- **Audience-** FDOT Project Administrators, Inspectors, PE Trainees, Signal Designers

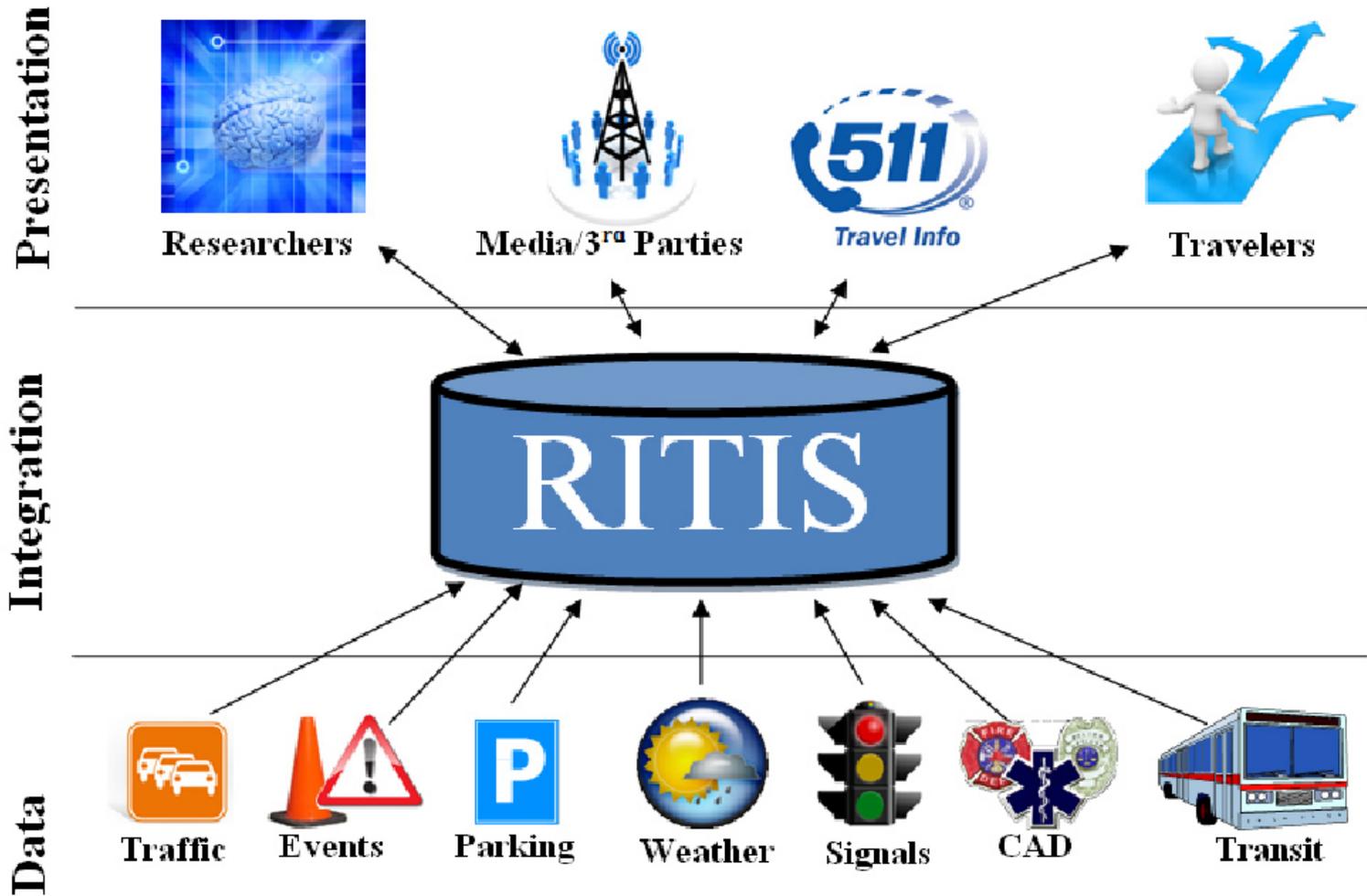


# Regional Integrated Transportation Information System



- Computer-Based Training
- 11 modules
- Time to Complete the Course: 5 hours 45 minutes
- Available now- Internal and External Users

# RITIS



# ITS-Facility Management

**ITSEFM**

Florida Department of Transportation

Intelligent Transportation Systems Facility Management

Available now to  
Florida Districts  
and Regional Partners

- **Manager/ITS Engineer (Viewer) Training Session-** one day training workshop, viewing capabilities
- **Maintainer Training Session-** 2.5 days of training, learn to utilize the ITSEFM to full capacity
- **Editor Training-** Month long training that gives learner rights to edit any part of ITSEFM

\*User access contingent upon successful training completion\*



# Work Program

## ITS & Traffic Operations Work Program Training

This training is to give a briefing of the Work Program Office, define key budget concepts, and explain how the ITS Program and Traffic Engineering and Operations are funded in Work Program.

- Instructor Led
- Available to Central Office and Districts
- Computer Based Training available in late 2016
- Approximately 1 hour

# STEP MATERIALS IN PLANNING

## ITS Fiber/Network Design

- Computer Based Training

## ITS Network Security

- Computer Based Training

## Ramp Signal Handbook



# Thank you!

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