Where Do We Go From Here?

RIVER TO SEA TPO ANNUAL PLANNING RETREAT

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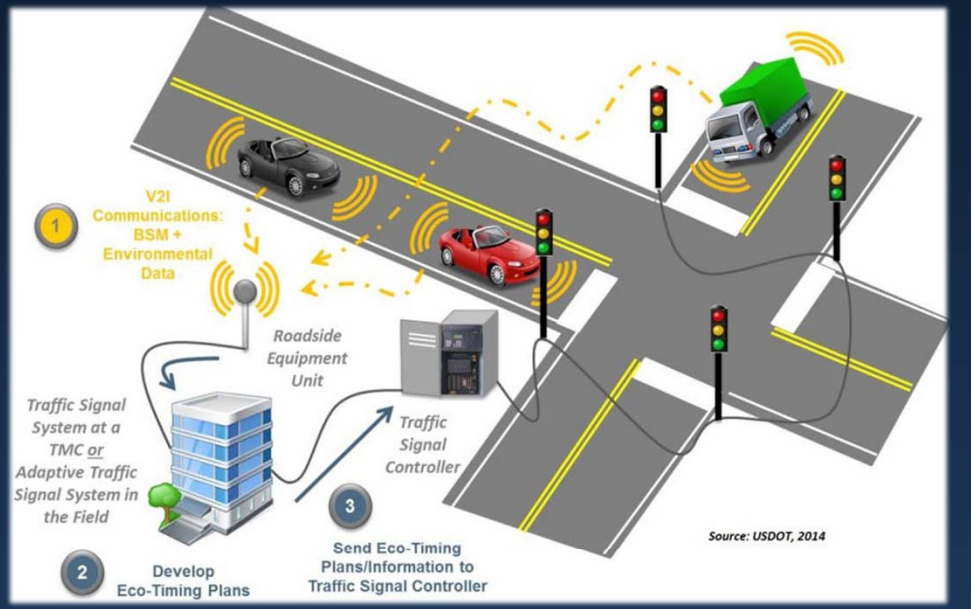
February 5th, 2016

ITS Strategies

- Local Strategies
  - Bike & Ped ITS Solutions
  - Dynamic Junction Control
  - Dynamic Merge Control
  - Queue Warning
  - Highway Rail Intersections
  - Intersection Collision Avoidance
  - Wrong Way Countermeasures

ITS Strategies

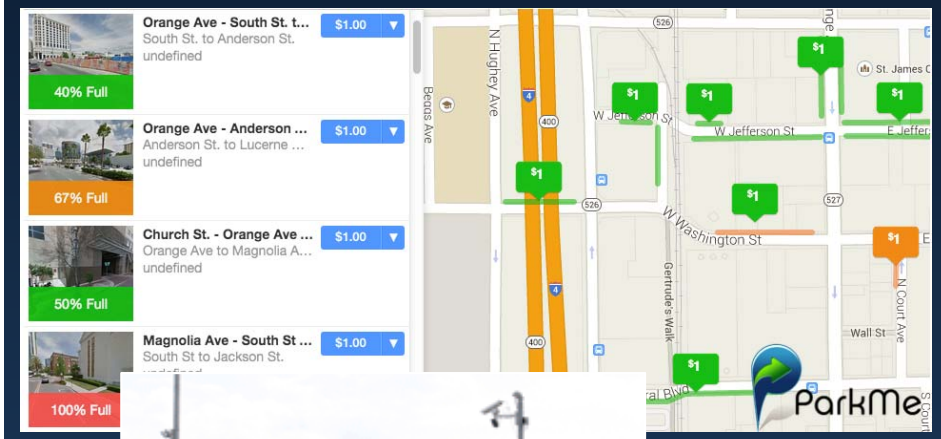
- Regional Strategies
  - Active Traffic Management/ Traffic Control
    - Active Arterial Management (AAM)
    - Integrated Corridor Management (ICM)
    - Dynamic Routing
    - Incident Management
  - Transit Signal Priority (TSP)
  - Event Management

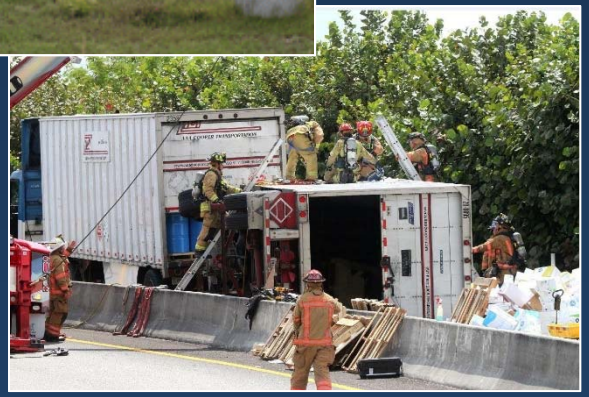


ITS Strategies

- Regional Strategies (Cont'd)
  - Traveler Information
    - Predictive Traveler Information
    - Travel Demand Management/Trip Information/Mode Choice
    - Dynamic Wayfinding
  - Public Transportation Management
    - Dynamic Transit Capacity Assignment
    - Personalized Public Transit
    - Electronic Transit Ticketing
  - Dynamic Ridesharing

ITS Strategies



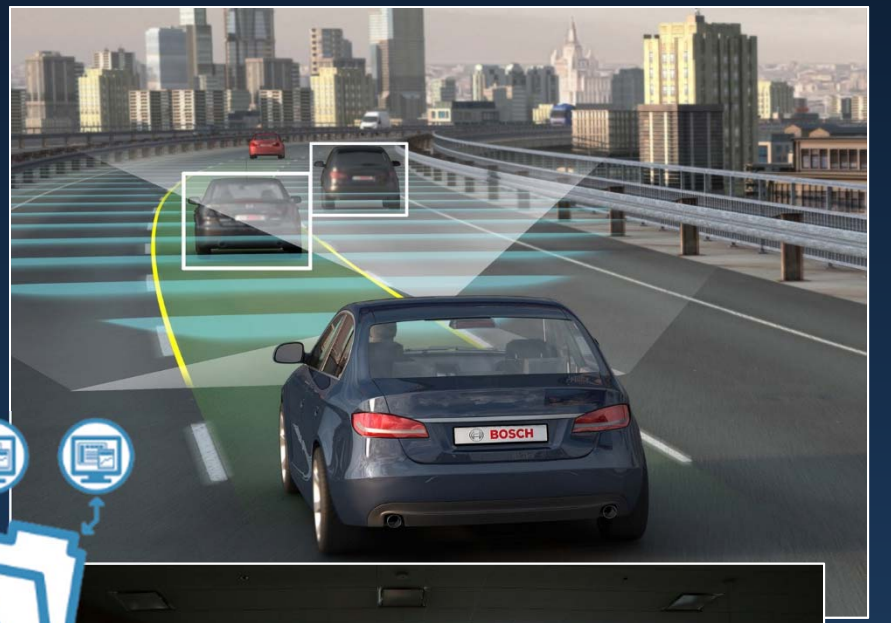


Regional Strategies (Cont'd)

- Advanced Parking Management Dynamic Parking Guidance and Reservation
  - Dynamic Overflow Transit Parking
- Freight/Commercial Vehicles Freight Parking
  - Freight Parking
  - Automated Roadside Safety Inspection/Administration/ Credentials
  - Hazmat Security and Incident Response

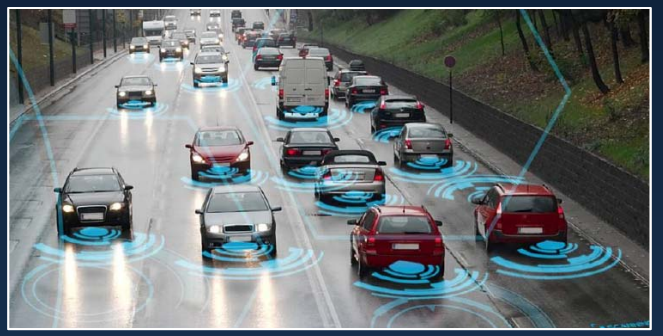
ITS Strategies

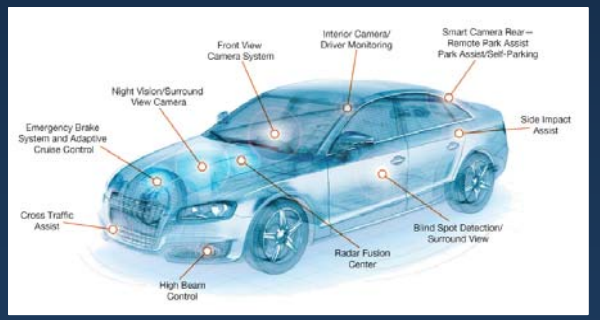
- D5 Regional Strategies (Cont'd)
  - Hazardous Materials Security
  - Public Travel Security
  - Electronic Payment Services
  - Emergency Management
    - Emergency Notification & Personal Security
    - Disaster Response and Evacuation
  - Information Management
    - Archived Data
    - Big Data/Analytics
    - Performance Management/Measurement
  - Asset Management
  - Advanced Vehicle Safety Systems
  - Connected/Autonomous Vehicles



ITS Strategies

- D5 Regional Strategies (Cont'd)
  - Connected/Autonomous Vehicles
    - The connected vehicle quickly identifies roadway hazards and alerts drivers.
    - The automate vehicle will steer and brake for you.
    - The autonomous vehicle does it all
    - Some technologies include:
      - Wireless communications
      - Vehicle sensors
      - Roadside Sensors
      - Global positioning system navigation
    - Tampa, FL test bed (upcoming)
    - Smart City – Orlando, FL





ITS Strategies

- D5 Regional Strategies (Cont'd)
  - Connected/Autonomous Vehicles

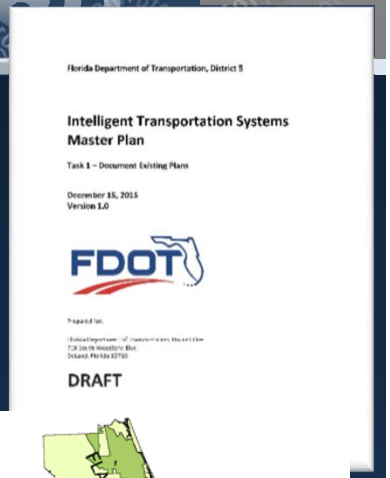
ITS Strategies

- D5 Regional Strategies (Cont'd)
  - Connected/Autonomous Vehicles

https://www.youtube.com/watch?v=3yCAZWdqX_Y

Regional ITS Master Plan

- D5 ITS Master Plan for Region
  - Purpose
    - Create an overarching ITS Master Plan for the Region
    - Create a consensus on what items need to be integrated between agencies
    - Determine what standards need to be met (security, maintenance, staffing, etc.)
    - Develop an overall assessment
      - What is in place? Goals for the future?
      - What are the road blocks and how do we overcome them?
    - High level goals the region should be working towards
      - Types of investment that could work toward these goals


Florida Department of Transportation, District 5

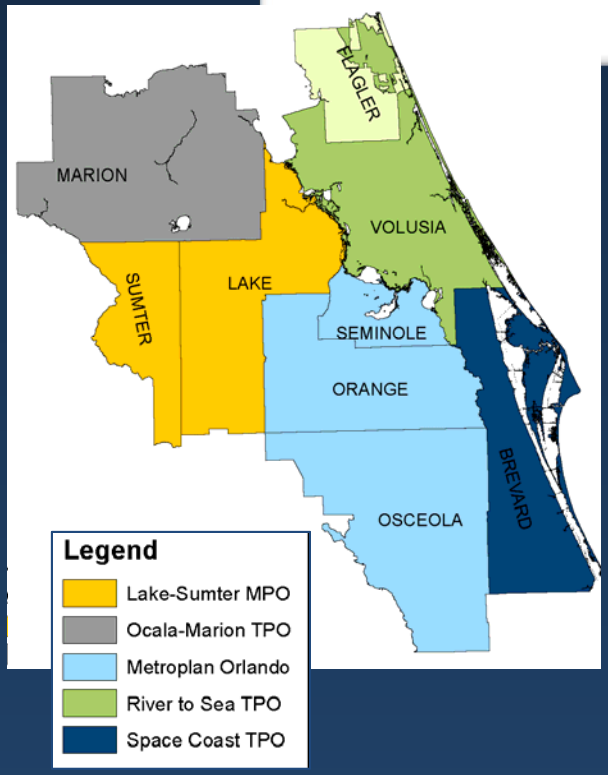
Intelligent Transportation Systems Master Plan

Task 1 – Document Existing Plans

December 15, 2015
Version 1.0

FDOT

DRAFT



ITS Master Plan

- D5 ITS Master Plan for Region
  - Stakeholder Involvement
    - Incorporate all stakeholders – MPO/TPO, Cities, Counties, CFX, SunRail, Airport, Seaport, Fire/Rescue, Transit
    - Discuss Roles and Responsibilities (FDOT/Maintaining Agency)
      - Cooperative Approach through Communication

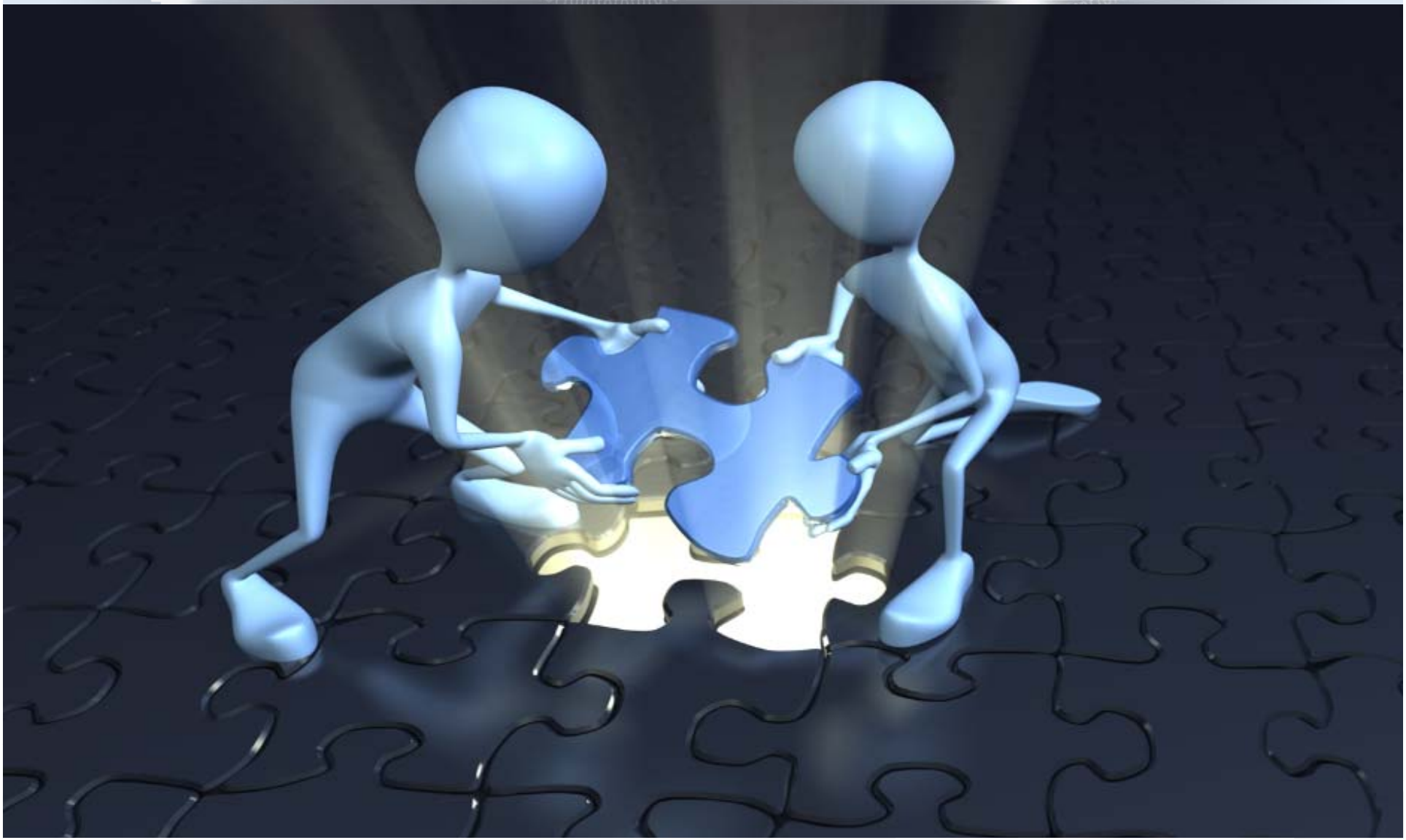
ITS Architecture

- Central Florida Regional ITS Architecture
  - Consistent with State and National ITS Architecture
  - Roadmap for transportation systems integration in Central Florida over the next 20 years
  - Cooperative effort by the region's transportation agencies
  - Shared vision of how each agencies' systems will work together in the future

Plan of Action…

- Coordinate Regionally
- Consistent with Central Florida as a Whole
- Develop ITS Master Plan
  - To improve mobility/mode choice
  - Include all stakeholders
  - Identify challenges
  - Identify funding source options
  - Gain stakeholder buy-in
  - Ensure consistency with Regional Architecture
- Considerations
  - What are the roles and responsibilities of each agency/stakeholder?
  - Interaction and demarcation points of each agency?

Questions/Comments?



Audience Participation

1. Do you feel that the majority of these strategies promote improvements to congestion on a day to day basis for travelers?
   a. Yes, 100%
   b. Agree mostly
   c. No, not really

2. Do you feel that the majority of these strategies promote improvements to congestion during special events/evacuations for travelers?
   a. Yes, 100%
   b. Agree mostly
   c. No, not really

3. Do you feel that the majority of these strategies promote enhanced safety for travelers?
   a. Yes, 100%
   b. Agree mostly
   c. No, not really
   d. I don’t care about safety.

Audience Participation

4. Have you ever utilized any of the ITS Strategy tools here in Central Florida?
   a. Yes, several times
   b. Yes, once or twice
   c. No, but I have seen them available
   d. No, I have not come across any to date

5. Connected Vehicles technology has the ability to improve:
   a. Congestion
   b. Safety
   c. Driver Experience
   d. All of the above

6. Do you see a need or perceived benefit in creating an ITS Master Plan for the R2STPO?
   a. Yes, 100%
   b. Yes, but I anticipate many issues such as funding, implementation, etc.
   c. No, not really