

# Florida Department of Transportation ITS Program

Elizabeth Birriel PE  
Florida Department  
of Transportation  
Deputy State Traffic Engineer  
ITS Program Manager



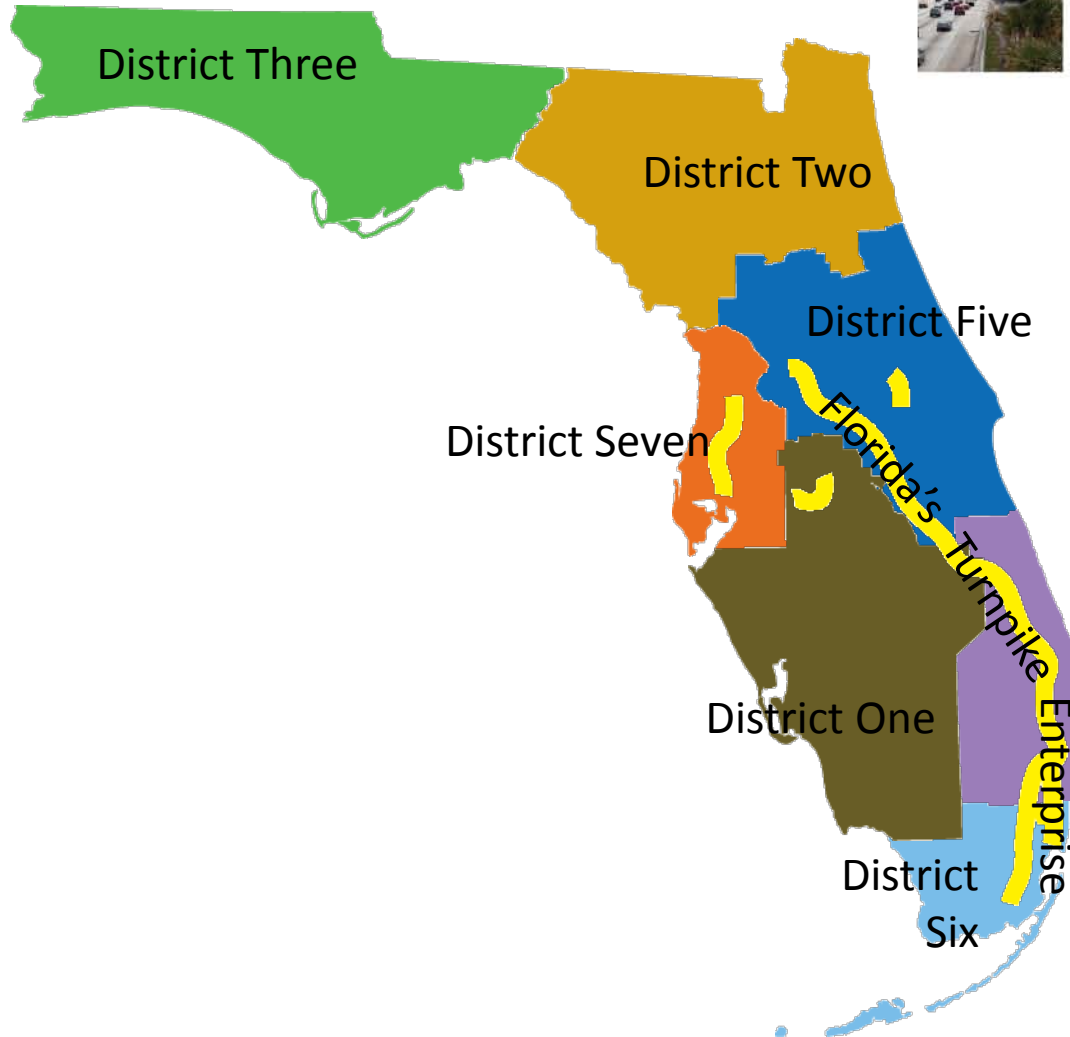
# FDOT's ITS Program Mission



Provide effective intelligent transportation systems for Florida's travelers that enhances the safety and mobility of people and goods, economic competitiveness, and the quality of our environment and communities by serving commuters, tourists, commercial vehicles, and evacuees.



# FDOT Districts



# FDOT's Commitment to ITS



- Maintains a State Highway System of more than 12,000 centerline miles and 42,633 lane miles
- \$8.8 billion budgeted in Five-Year Work Program to support Florida's transportation needs
- Committed to investing approximately \$975 million in ITS between 2002 and 2012



# FL-511

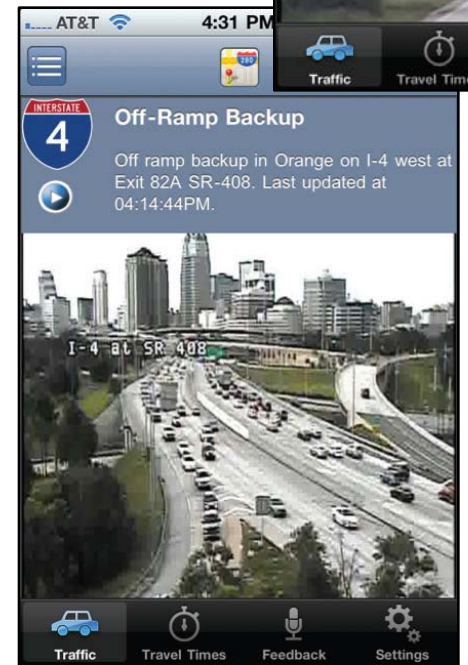


- Over 2.7 million calls in 2010
- More than 400,000 traveler alerts to over 10,000 My Florida 511 subscribers
- More than 660,000 FL511.com web visits
- Educate.FL511.com web site



# FL-511

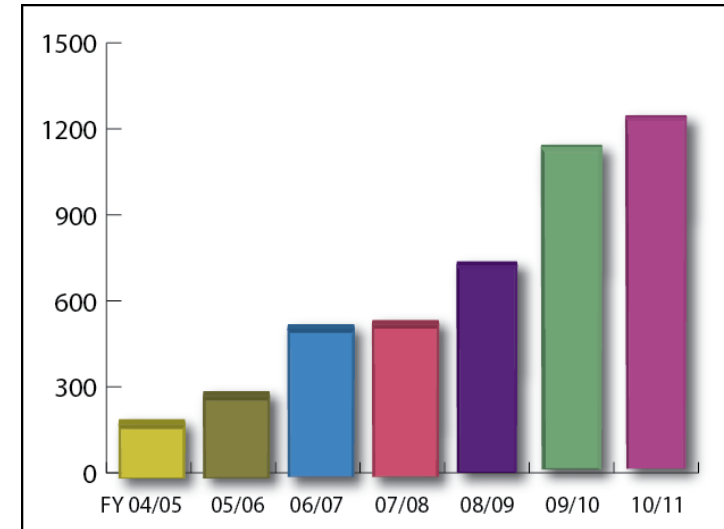
- New iPhone, iPad, and iPod Touch app
  - Audible incident reports
  - On-screen incident list
  - Map
  - Traffic camera views
- Android expected in late 2011



# Statewide Operations Performance Measures



- Miles managed by ITS on the Florida Intrastate Highway System
  - 1,275 miles
- Number of 511 Calls
  - Slight decrease due to added means of access



# Statewide Operations Performance Measures



- Number of Road Ranger stops
  - One percent increase over last year
- Incident duration
  - 45 minute average for clearance
- Travel Time Reliability
  - Buffer Index and Travel Time Index



# ITS Strategic Plan Update



- Safer, more secure transportation system
- Enriched quality of life and responsible environmental stewardship
- Enhanced mobility for people and freight
- Sustainable transportation investments



# ITS Facility Management



- Establishes a statewide standard software system to manage the FDOT's fiber optic and microwave networks
- Provides the ability to analyze and troubleshoot fiber optic and ITS networks statewide
- Capable of tracking ITS device replacement costs



# Rural ITS in Florida



- FL-511 feedback function to report traffic
- Florida Highway Patrol (FHP) resource through collation in TMC
- SunGuide<sup>®</sup> Software – Access to FHP computer aided dispatch
- Third party data collection



# Mobile Communications



- Pilot project started in 2008
  - WiFi®-equipped trailer
- Original design
  - WiFi hotspot
  - Versatile power system (battery, solar, and generator)
  - Motorized satellite antenna



# SunGuide® Software



- Statewide advanced traffic management
  - Facilitate traffic and incident management
  - Disseminate traveler information
  - Exchange critical information among agencies
  - Collect and report data
- Deployed at FDOT Districts, toll authorities, and local agencies



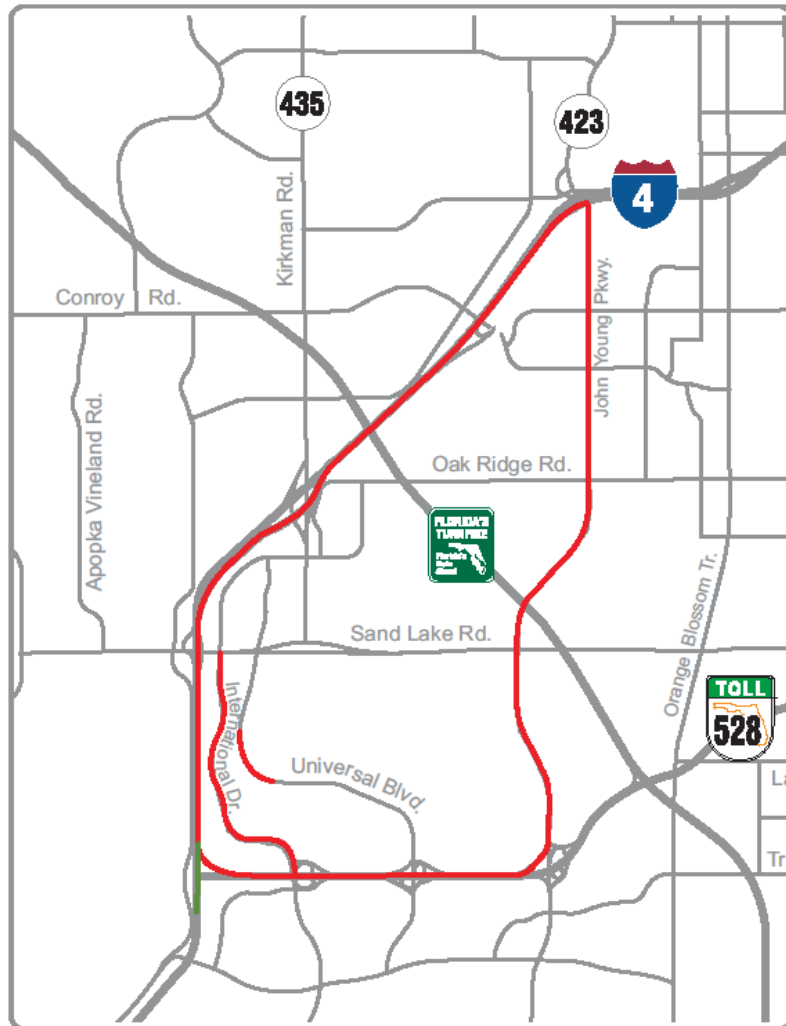
# SunGuide® Software – Return on our Investment



- Flexible and expandable
- Incur the cost once; use at multiple TMCs
- Complies with state and national standards
- Single-source code base
- Statewide integrated use
- Supportability for long-term use

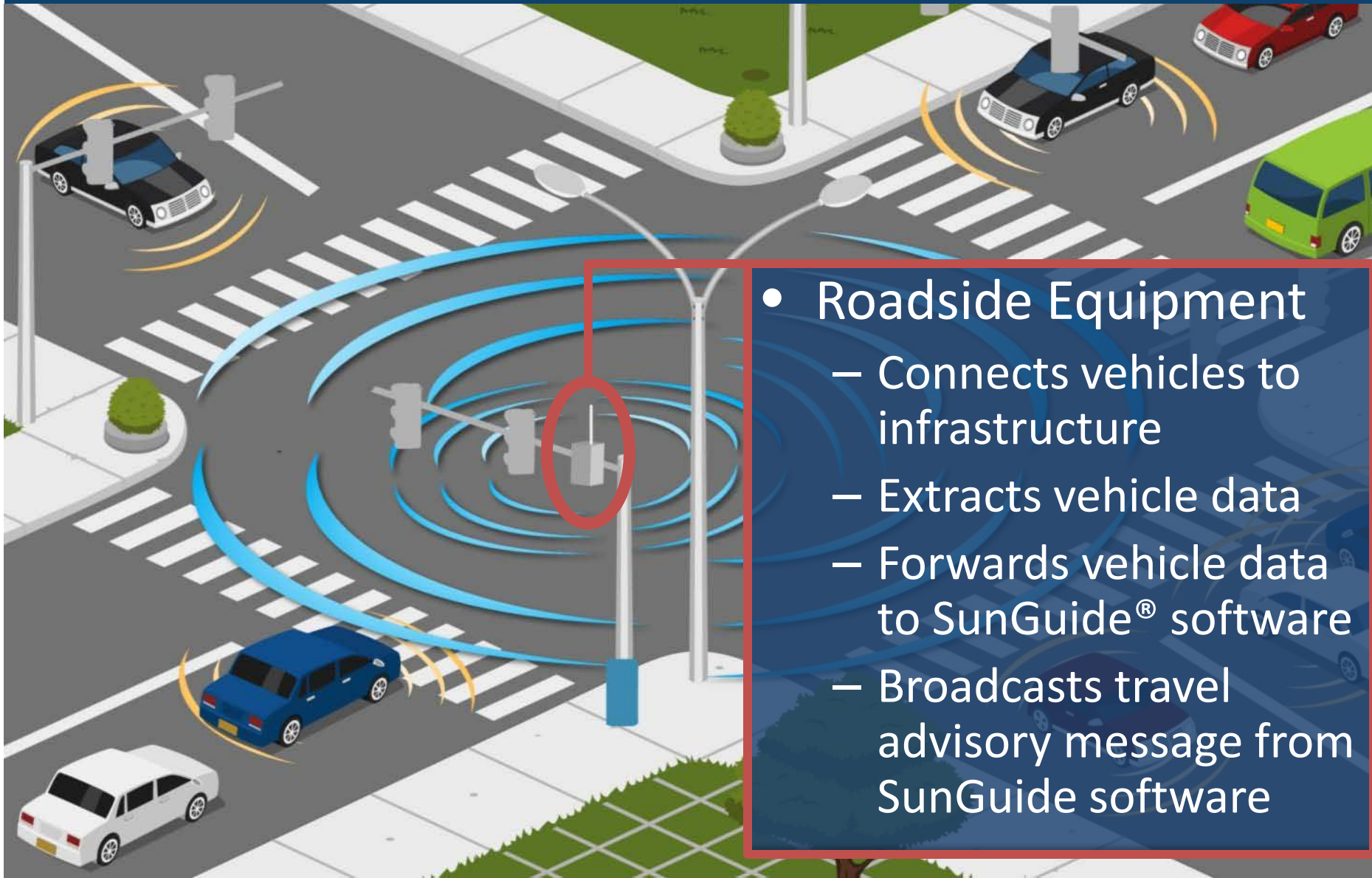


# ITS World Congress Connected Vehicle Deployment



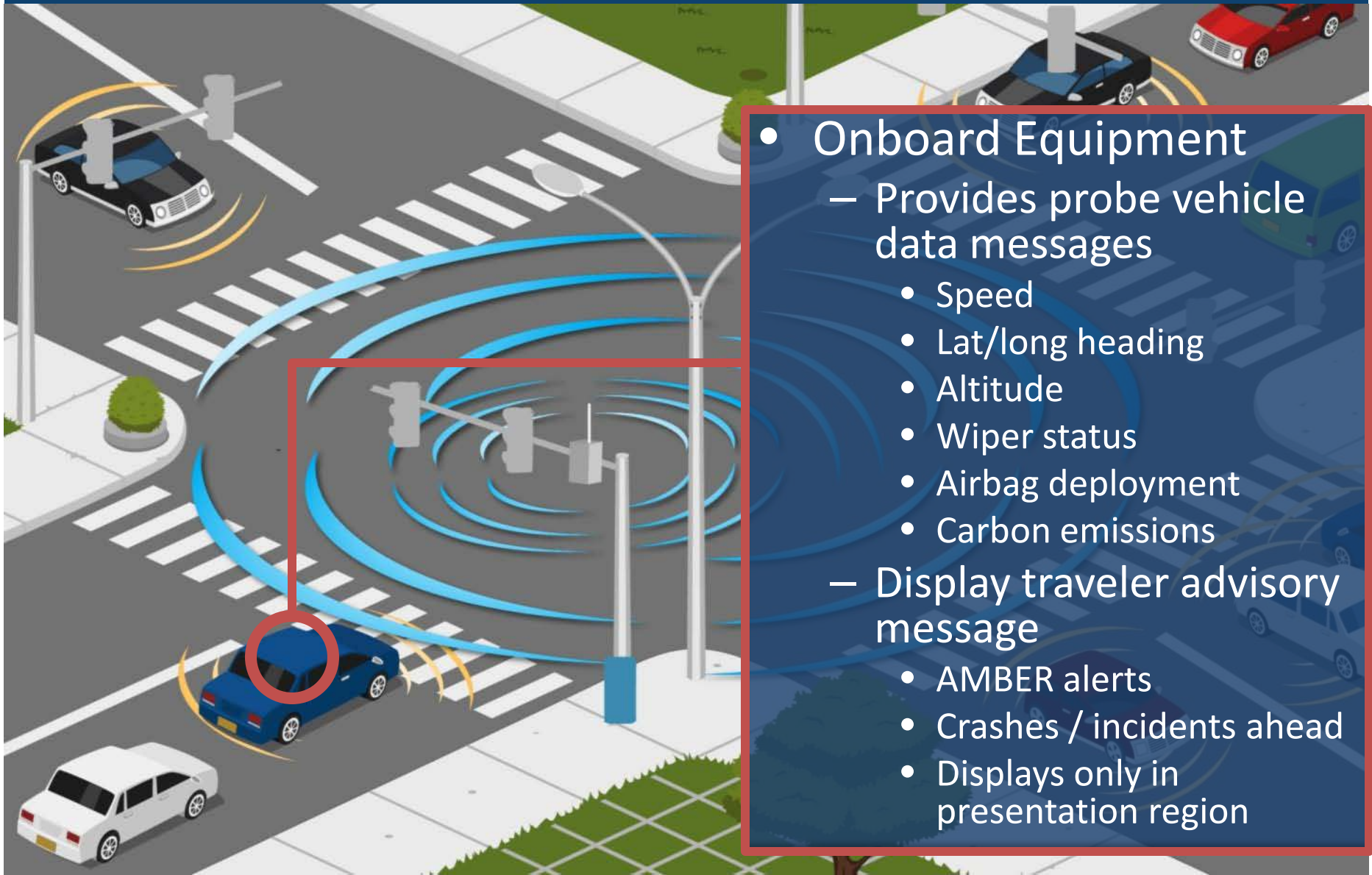
- Roadside equipment
  - Interstate 4 (11)
  - John Young Pkwy. (5)
  - International Dr. (9)
  - Universal Blvd. (2)
  - Convention Center (1)

# Connected Vehicle – How it Works



- Roadside Equipment
  - Connects vehicles to infrastructure
  - Extracts vehicle data
  - Forwards vehicle data to SunGuide<sup>®</sup> software
  - Broadcasts travel advisory message from SunGuide software

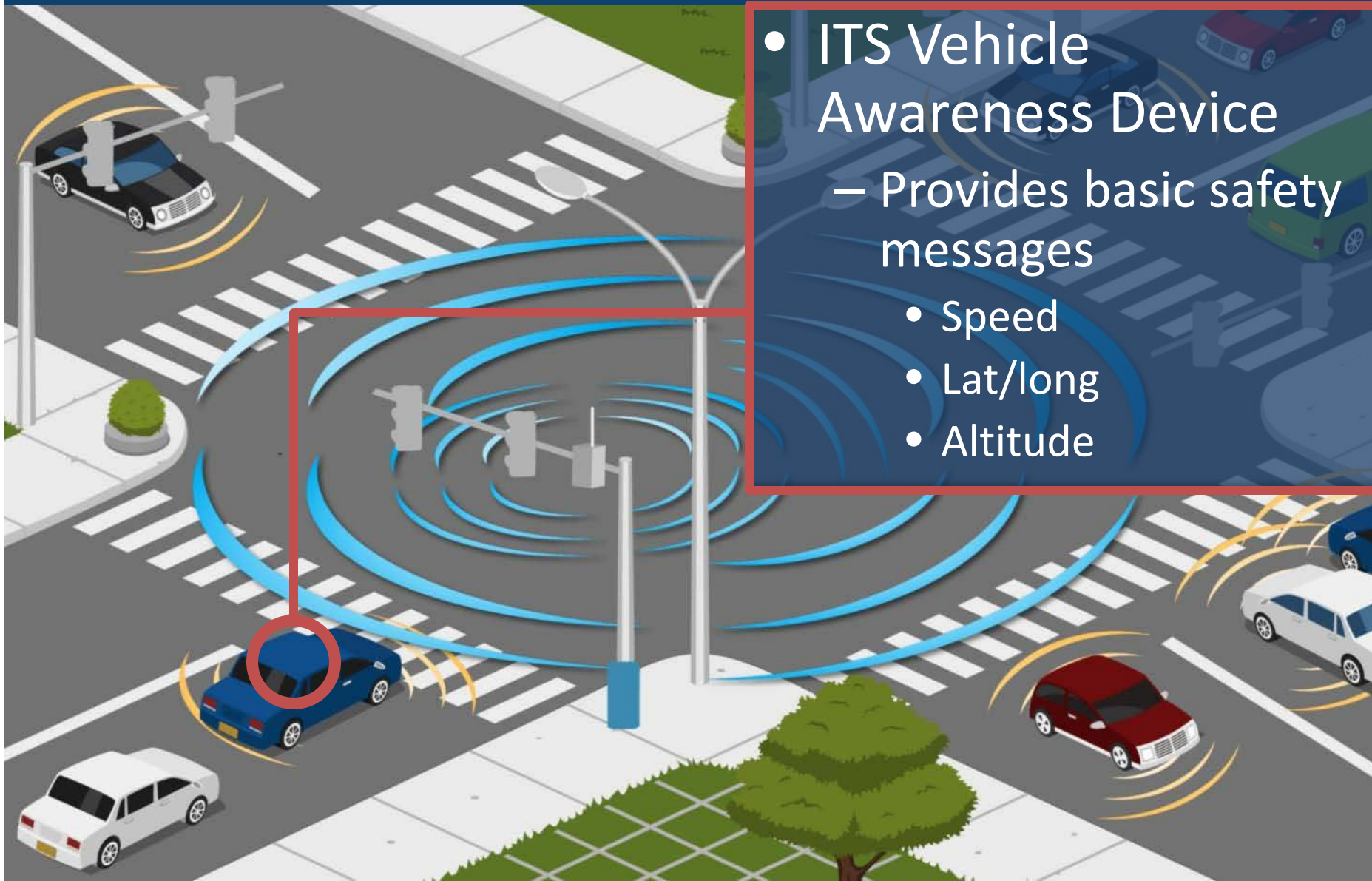
# Connected Vehicle – How it Works



- Onboard Equipment
  - Provides probe vehicle data messages
    - Speed
    - Lat/long heading
    - Altitude
    - Wiper status
    - Airbag deployment
    - Carbon emissions
  - Display traveler advisory message
    - AMBER alerts
    - Crashes / incidents ahead
    - Displays only in presentation region

# Connected Vehicle – How it Works

- ITS Vehicle Awareness Device
  - Provides basic safety messages
    - Speed
    - Lat/long
    - Altitude



# TSM&O



- Transportation Systems Management & Operations
  - Adopted in May 2010
  - Manages multi-modal transportation network
  - Ensures safety and mobility
  - Leverages FDOT's ITS network



# TSM&O



- Emphasis on real-time active management and operation of existing transportation system
- Public and private partners



# Thank You!

Questions?

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