Florida’s Connected and Automated Vehicle Initiative

Florida Section ITE & ITS Florida Annual Meeting, November 1-3, 2017
USDOT Connected Vehicle Video
CV Projects/Initiatives

Website: http://www.fdot.gov/traffic/ITS/Projects_Deploy/CV/Connected_Vehicles.shtm
Signal Phase and Timing (SPaT) Pilot Project

- 22 signalized intersections along US 90 (Mahan Drive) in Tallahassee
- FDOT and City of Tallahassee Partnership
  - City to install
- Pre-deployment testing at the Traffic Engineering Research Laboratory (TERL)
- Vendor selected
SPaT Pilot Project – Pre-Deployment Testing
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SPaT Pilot Project – Pre-Deployment Testing
SPaT Pilot Project – Pre-Deployment Testing Video
I-75 Florida’s Regional Advanced Mobility Elements (FRAME)

- **Project limit:** I-75 and US 441/US 301 from Wildwood to Alachua
- **Deploy Integrated Corridor Management (ICM) using connected vehicle technologies**
- **Roadside Units (RSUs) at every mile on I-75 for incident management (in project limits)**
- **RSUs at signals on detour routes for signal phasing and timing, pedestrian safety, freight and transit priority**
- **Automated Traffic Signal Performance Measure (ATSPM) in both Gainesville and Ocala for Active Arterial Management (AAM)**
- **Test using On-Board Units (OBUs) and other testing tools**
- **D2 and D5 programmed this project**
Note: Implementing Solutions from Transportation Research and Evaluation of Emerging Technologies (I-STREET)

Purpose
To provide a real-world Test Bed facility where FDOT can collaborate and assist the industry to demonstrate and evaluate a wide range of connected vehicle solutions.

Goal
To test and evaluate different technologies and solutions within the areas of safety, mobility, and data management.

Goal Areas
- Safety
- Mobility
- Data Management

Partners

Legend
- Arterials in I-75 FRAME
- I-75 in I-75 FRAME
- UF AID
- Gainesville SPA-T Trapezium
- Gainesville Autonomous Transit Shuttle (GAToRS)
USDOT Transit Video
Gainesville SPaT Trapezium

• FDOT in partnership with City of Gainesville is preparing a Request for Proposal (RFP) for deploying CV technologies on 27 signals along four corridors forming a trapezium around UF campus:
  • University Ave; SW 13th St; Archer Rd (NE SR 24); SW 34th St.

• Potential technologies to deploy and test
  • Roadside Units
  • On-board Units
  • Web-based and/or smartphone application for pedestrian and bicyclist safety
University of Florida AID Application

- FDOT applied for 2017 Accelerated Innovation Deployment (AID) Demonstration grant application
- University of Florida (UF) and City of Gainesville connected vehicle pilot project
USDOT Pedestrian Video
Future of CV
Future of CV
Future of CV
Future of CV
Traffic Signal Training

• Developed by FDOT
  • Modules A-F

• Delivered by UF T2 Center
  • Module A: Introduction to Traffic Signals
  • Module B: Traffic Signal Warrants
  • Module C: Traffic Signal Design

• Leveraging Local Technical Assistance Program funds

• Over 90 attendees registered

• Part of the Statewide TSM&O Excellence Program (STEP)
Thank you!

Central Office
Trey Tillander
Alan El-Urfali
Derek Vollmer
Elizabeth Birriel
Fred Heery
Jeff Frost
Jennifer Fortunas
Russell Allen

District Traffic Operations Engineers
D1: Keith Slater
D2: Jerry Ausher
D3: Steve Benak
D4: Mark Plass

District Traffic Operations Engineers
D5: Jim Stroz
D6: Omar Meitin
D7: Ron Chin

FTE: John Easterling

District TSM&O Engineers
D1: Mark Mathes
D2: Peter Vega
D3: Amy DiRusso
D4: Melissa Ackert

District TSM&O Engineers
D5: Jeremy Dilmore
D6: Javier Rodriguez
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