Florida’s Connected and Automated Vehicle Initiative
CAV Projects/Initiatives

Website: http://www.fdot.gov/traffic/ITS/Projects_Deploy/CV/Connected_Vehicles.shtml

PROJECTS/INITIATIVES

PLANNING
University of Florida (UF) Accelerated Innovation 1
Deployment (AID) Demonstration 2
Implementing Solutions from Transportation Research and Evaluation of Emerging Technologies (I-STREET) 3
Gainesville Signal Phase and Timing (SPaT) Trapezium 3
Central Florida Autonomous Vehicle (AV) Proving Ground 4
Driver Assistive Truck Platooning (DATP) Pilot 5

DESIGN/IMPLEMENTATION
US 90 SPaT Tallahassee 1
I-75 Florida’s Regional Advanced Mobility Elements (FRAME) Gainesville 2
I-75 Florida’s Regional Advanced Mobility Elements (FRAME) Ocala 3
Gainesville Autonomous Transit Shuttle (GAToRS) 4
Florida’s Turnpike Enterprise (FTE) SunTrax 5
Tampa Hillsborough Expressway Authority (THEA) Connected Vehicle Pilot 6
City of Orlando Greenway/Pedestrian Safety 7
SR 434 Connected Vehicle Deployment 8
Downtown Tampa Autonomous Transit 9
Orlando Smart Community 2017 ATCMTD 10

OPERATIONAL
Osceola County Connected Vehicle Signals 1
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 – Lessons Learned

• Two stage FCC licensing:
  • First: blanket approval for use of DSRC
  • Second: Location (GPS detail, mounting height of devices, make and model of RSU’s and OBU’s)
• Ensure devices are licensed by FCC for deployment
• Proposers should ask questions during the procurement process regarding device compatibility with controllers, etc.
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 phase and timing, pedestrian safety, freight and transit priority
- Automated Traffic Signal Performance Measures (ATSPM) in both Gainesville and Ocala for Active Arterial Management (AAM)
- Test using On-Board Units (OBUs)
- D2 and D5 programmed this project
I-STREET

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
- FDOT
- UF
- City of Gainesville
Gainesville SPaT Trapezium

- FDOT in partnership with City of Gainesville is preparing a Request for Proposal (RFP) for the 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
Future of CAV
Future of CV
Future of CV
Future of CV

ECO-LANE AVAILABLE

DYNAMIC ECO-LANES

Garage Full

DYNAMIC PARKING AVAILABILITY SYSTEM
Thank you!

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