Connected and Automated Vehicle (CAV) Readiness Study Workshop

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CAV Technology

CAV Video

Connected + Autonomous Vehicle
CAV Technology

VIDEO SOURCE: FDOT / FLORIDA’S TURNPIKE ENTERPRISE
Commissioned Study

Purpose
Assess the region’s readiness for arrival and integration of connected and automated vehicles (CAVs)

Tasks
- Task 1 – CAV Industry Best Practices Review
- Task 2 – Evaluation of Existing Local Capabilities
- Task 3 – Host 3 Public Involvement Workshops
- Task 4 – Recommendations for CAV Preparedness
- Task 5 – Final Report
Connected Vehicle (CV)

Onboard wireless communications share information and alerts to

- Improve safety
- Increase mobility
- Reduce congestion

IMAGE SOURCE: USDOT
CV Examples

- Collision Warning
- Reduce Speed
- Pedestrian Ahead
- Blind Spot Warning
- Wrong Way Vehicle
- Curve Speed Warning
- Work Zone Ahead
Automated Vehicle (AV)

Has one or more aspects of a safety-critical driving functions controlled by something other than direct input by a human driver.
Connected Automated Vehicle (CAV)

The fully-automated, self-driving vehicle of the future that may not have a steering wheel or pedals for braking and accelerating – it will combine CV and AV capabilities.
CAV Best Practices

- Analysis of current CAV planning nationwide
- Paradigm shift in technologies
- Policy and regulation changes
CAV Industry Practices

• CAV projects: feasible; innovative; local need; and regional equity

• Consider CAV technologies to inform the decision-making process

• Match local needs and capabilities with emerging industry trends
Evaluation of Local Existing Capabilities

- 23 jurisdictions interviewed in Osceola, Seminole and Orange counties
- AV and CV practices and infrastructure
Potential Opportunities

- Establish CAV consortium
- Advance CAV deployments
- Install enhanced communication networks
- Expand workforce CAV knowledge
- Develop region-wide training
- Solve or mitigate equity challenges
CAV Existing Capabilities

Pilot Deployments

• Lake Nona AV shuttle launched Sept 18
• UCF AV shuttle, CV and PedSafe programs funded by FDOT to launch in 2020 and 2021
CAV Deployments

Orange County
- GreenWay connected vehicle (CV) infrastructure
- PedSafe CV pedestrian and bicycle collision avoidance system

Seminole County
- State Road 434 CV pilot
- Bluetooth/DSRC CV RSUs on Lake Mary Boulevard

Osceola County
- Dedicated Short Range Communications
- Neptune Road Corridor; NeoCity
CAV Challenges

• Safety

• Security

• Impact on the network/mobility
Public Involvement Workshops

- Osceola County, Kissimmee Civic Center Tuesday, October 29, 5 - 6:30 p.m.

- Seminole County, Lake Mary Events Center Tuesday, November 12, 5 - 6:30 p.m.

- Orange County, First United Methodist Church Tuesday, November 19, 5 - 6:30 p.m.
CAV Readiness Workshop
Live Polling

We’d like to have your input.

In your mobile phone browser, please open the following webpage

etc.ch/EoHt (Case sensitive)

If you do not have a mobile phone, one of our staff members will provide a paper ballot
What’s Next for CAVs

Comments?
Thank You

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