

# Connected and Automated Vehicle (CAV) Readiness Study Workshop

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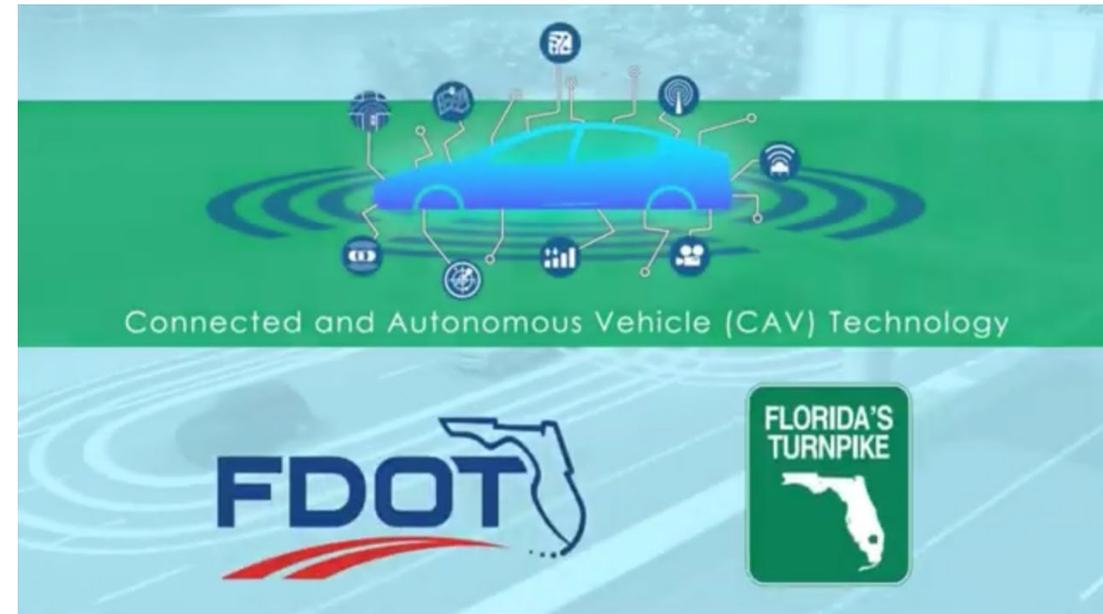


# CAV Technology



## CAV Video

Connected +  
Autonomous Vehicle  
CAV Technology



VIDEO SOURCE: FDOT / FLORIDA'S TURNPIKE ENTERPRISE

# CAV Readiness Study



## 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

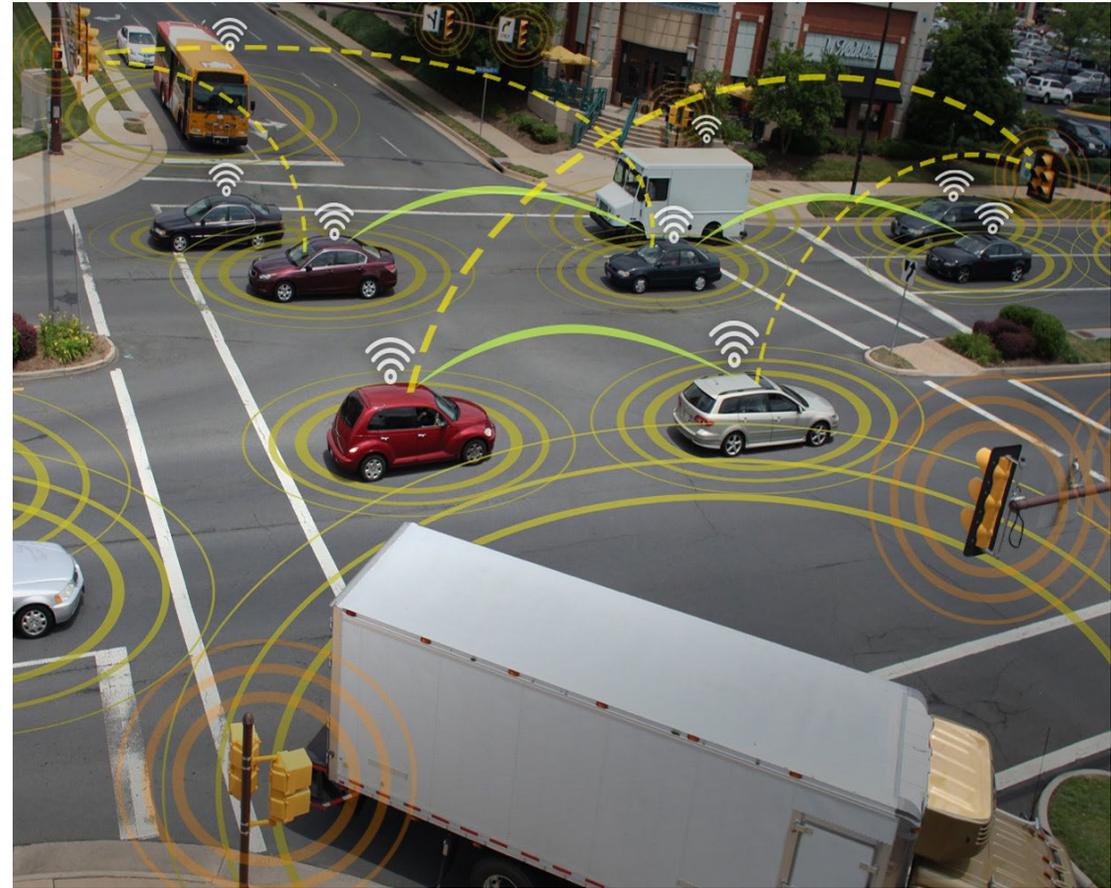


IMAGE SOURCE: USDOT

# CV Examples



- Collision Warning
- Reduce Speed
- Pedestrian Ahead
- Blind Spot Warning
- Wrong Way Vehicle
- Curve Speed Warning
- Work Zone Ahead

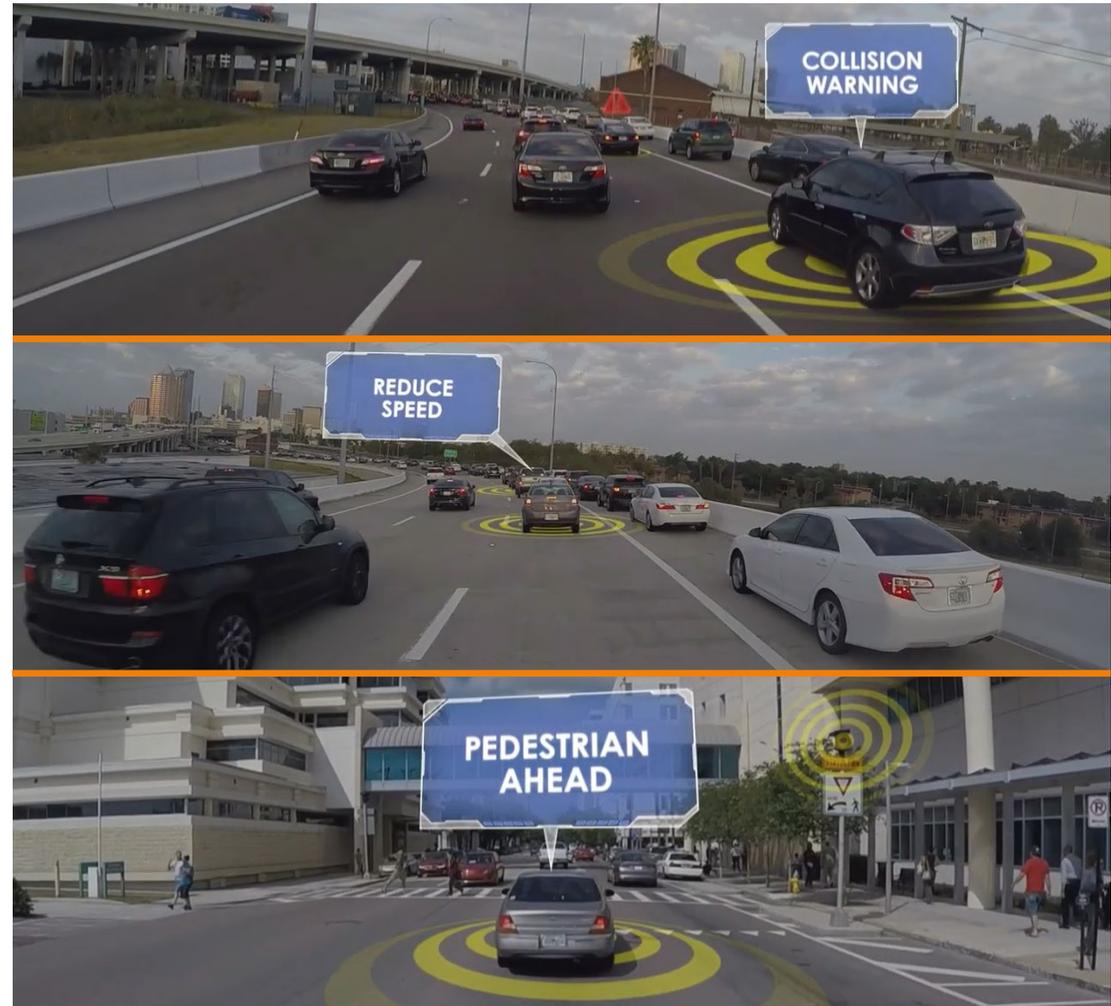


IMAGE SOURCE: THEA CONNECTED VEHICLE PILOT

# 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



IMAGE SOURCE: USDOT

# CAV Readiness Study



## 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

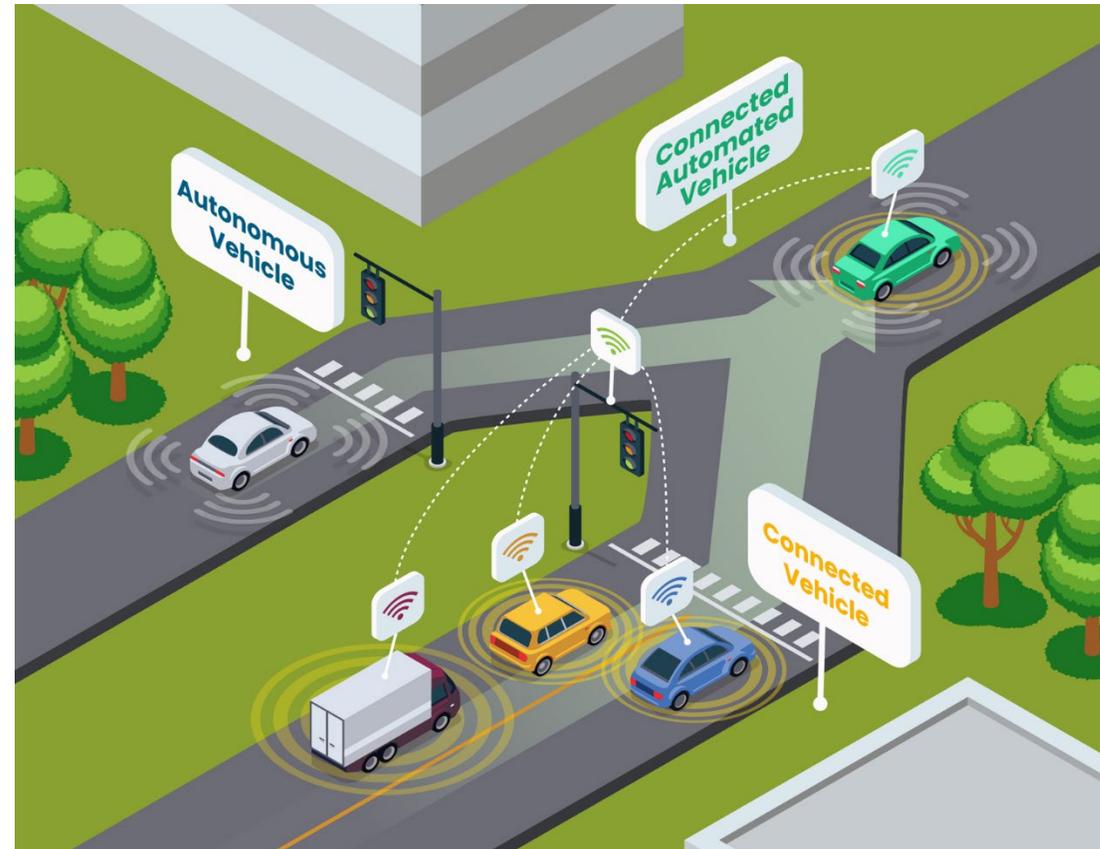


IMAGE SOURCE: USDOT

# Technical Memorandum 1



## CAV Best Practices

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

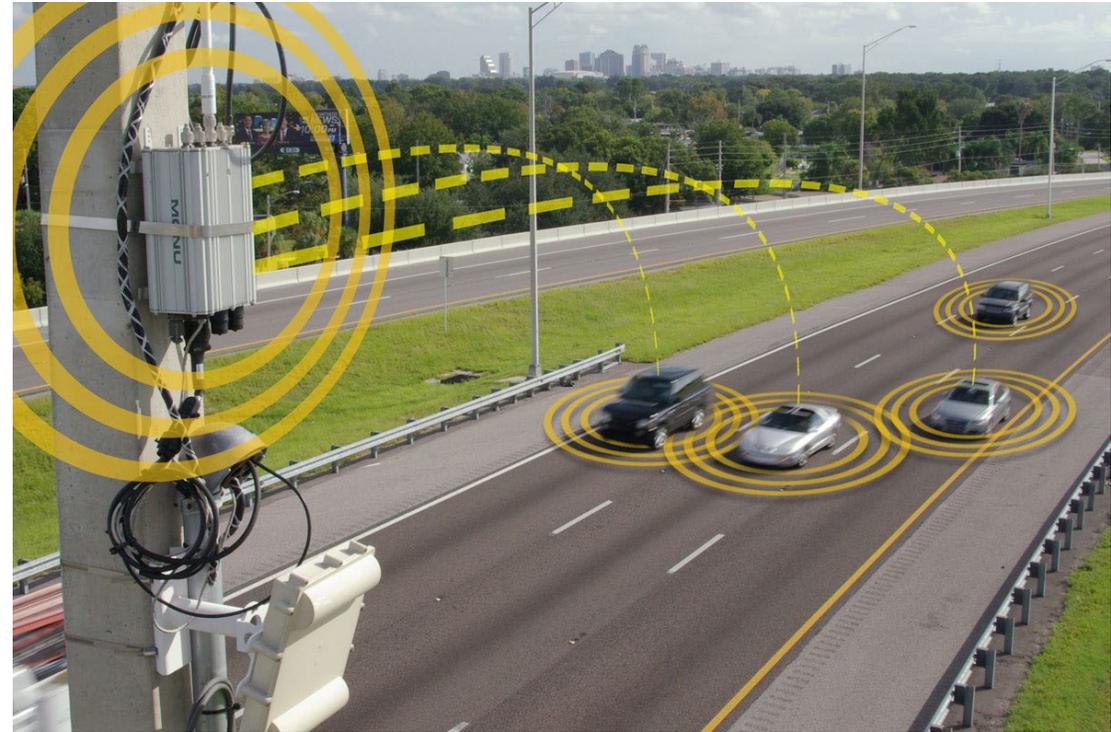


IMAGE SOURCE: GLOBAL-5

# 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

# Technical Memorandum 2



## Evaluation of Local Existing Capabilities

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



IMAGE SOURCE: GLOBAL-5

# 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



IMAGE SOURCES: LAKE NONA, COAST AUTONOMOUS

# 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

# CAV Public Engagement



## 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 Public Engagement



## 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](http://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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