Work with us to plan the future!

Past and Future Levels of Automation

Connected / Autonomous Vehicle (CAV) Level*

0  Human Only
1  Driver Assistance
2  Partly Automated
3  Conditional Automation
4  High Automation + Human
5  Full Automation (No Human Driver)

- 1958 (Chrysler is the first American manufacturer to offer cruise control)
- 1999 (First radar-assisted adaptive cruise control is included on some Mercedes-Benz models)
- 2006 (Lexus introduces Lane Keeping Assist system in America)
- 2018 and beyond... (The era of CAVs)

Transition from human drivers to vehicles driving in the future*

* CAV level information based on intel.com/autonomous-cars-road-ahead and SAE International standards
* roboticsandautomationnews.com/2017/06/05/saes-full-list-of-levels-for-autonomous-vehicles/12669
* Auto Editors of Consumer Guide (2007-10-08) "1958 Imperial Auto-Pilot cruise control"
* en.wikipedia.org/wiki/Lane_departure_warning_system
Benefits of CAV Technology

- Improve Safety
- Reduce Congestion
- Enhance Mobility
- Minimize Environmental Impacts
CAV Benefits the Entire Community

- Longer commuter trips
- Impacts to traditional transit services by adding access-modes
- Induced trips by seniors, elderly, children, etc.

CAV technology is good for...

- Business Professionals
- Elderly & Infirm
- Parents with Children
- People with Disabilities
- Teenagers
USDOT’s Ten Automated Vehicle Proving Ground Designees

- Contra Costa Transportation Authority (CCTA) & Go Mentum Station
- City of Pittsburgh and the Thomas D. Larson Pennsylvania Transportation Institute
- U.S. Army Aberdeen Test Center
- North Carolina Turnpike Authority
- San Diego Association of Governments
- American Center for Mobility (ACM) at Willow Run
- University of Wisconsin-Madison
- Iowa City Area Development Group
- Texas AV Proving Grounds Partnership
- CFAVP (Central Florida Automated Vehicle Partners)
The Partnership offers a comprehensive multi-modal environment for research, development, testing and deployment of emerging mobility technologies and solutions.
Central Florida Automated Proving Ground

- Simulation & Testing
- Controlled Environments
- Open Environments
Florida’s Turnpike Enterprise CAV Initiatives

143-mile pilot project
Road Safety and Fuel Savings

50-mile ± future corridor
Florida’s Next Generation Corridor

7-mile corridor
Future Technology Corridor
Driver Assistive Truck Platooning | Road Safety and Fuel Savings

Project Location

Southern Returning Point: TPK MP 116 Jupiter (Indiantown Rd.)
Northern Returning Point: TPK MP 272 (S.R. 50)
Coastal Connector | Florida’s Next Generation Corridor

Project Location

Tallahassee
Jacksonville
Orlando
Tampa
Miami
Colonial Parkway | Future Technology Corridor

Reduce Congestion
Create Mobility Choices
Improve Safety
Enhance Evacuation Routes
Avoid and Minimize Environmental Impacts

Project Location

- 15 miles to Orlando
- 35 miles to Port Canaveral

Tallahassee
Jacksonville
Orlando
Tampa
Miami

Source: CH2M, 2017

Embrace Innovative Technologies
**Colonial Parkway | Incorporating Technologies**

### Key Corridor Challenges

- **Pedestrian/Cyclist Safety**
- **Recurring Congestion**
- **Unpredictable Travel Times**
- **Poor Intersection Operations**
- **Emergency Services, Incidents, and Evacuations**

### CAV Technology Solutions

- **Smart Intersections**
- **Incident Detection Systems**
- **Fully Connected Vehicles**
- **Dynamically Reroute Traffic**
- **Dynamic/Adaptive Signals**
- **Automated Vehicle (AV) Detection**
How is FTE/D5 preparing for this future?
Questions?

Peloton-tech.com

ColonialParkway.com

CoastalConnector.com

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