FULLY AUTONOMOUS VEHICLES: REALITY OR HYPE?

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2020 LifeSavers National Conference on Highway Safety Priorities
FUTURE IS NOW

Connected & Autonomous Vehicles

Urban Data Proliferation

Smart Cities & Communities
EMERGING TECHNOLOGIES

Safety and Mobility Focus
Florida's Transportation System

- 27 Metropolitan/Transportation Planning Organizations
- 53 Transit Systems
- 780 Airports
- 2,753 Centerline Miles of Rails
- 12,099 Centerline Miles of State Roads
- 59 Centerline Miles in Operation
- 107 Miles Under Construction
- 326 Miles in Planning/Design
- 4 Toll Authorities
- 2 Spaceports
- 15 Deep Water Seaports
Revolution in Automotive Industry

In the past

OEMs were primarily providers of hardware

In the present and future

OEMs as providers of mobility solutions

Fueled by technology and consumer trends

- Mobility as a Service (Ride-sharing continues steady growth in usage and changing ownership models)
- Connected car becoming ubiquitous leveraging data
- Consumers pay premium for experiences
- Electric vehicle Technologies
- Fully online sales / new dealer models (e.g., flagship store, showroom, VR/AR)
- Autonomous Driving
- Assistance Systems
- Infotainment
- Premium Services

Source: Nissan.com
ELECTRIC VEHICLES: ECO-FRIENDLY MOBILITY

US Venture Investment in EVs $1.4B

Source: PitchBook and SVB analysis

38,000+
Registered Electric Vehicles in Florida

Source: Drive Electric Florida

EV Sales Forecast by Global Region

Chinese Carmakers: 7M
US Carmakers: 3M
Rest of the World Carmakers: 6M

Source: PitchBook and SVB analysis
AV: NEED FOR OEM PARTNERSHIPS

Source: PitchBook and SVB analysis
FDOT’s PROGRAM
Vision Zero

Improving Safety

Reducing Congestion

Using Technology

2018 TRAFFIC FATALITIES
3,174

2018 PEDESTRIAN FATALITIES
702

2018 BICYCLE FATALITIES
149

2018 MOTORCYCLE FATALITIES
502
ART – Attract, Retain, Train
Focus Areas

1. Policies and Governance
2. Program Funding
3. Education and Outreach
4. Industry Outreach and Partnerships
5. Technical Standards and Specifications Development
6. Implementation Readiness
7. Deployment and Implementation
1. Central Florida Autonomous Vehicle (AV) Proving Ground
2. Connected Freight Priority System Deployment
3. US 1 Keys COAST
4. US 98 Smart Bay
5. Downtown Tampa Autonomous Transit
6. Florida’s Turnpike Enterprise (FTE) SunTrax
7. Gainesville Bike and Pedestrian Safety
8. I-4 Florida’s Regional Advanced Mobility Elements (FRAME)
9. I-75 Florida’s Regional Advanced Mobility Elements (FRAME) Gainesville
10. I-75 Florida’s Regional Advanced Mobility Elements (FRAME) Ocala
11. Implementing Solutions from Transportation Research and Evaluation of Emerging Technologies (I-STREET)
12. Lake Mary Boulevard CV Project
13. Orlando Smart Community (2017 ATCMTD)
14. Pinellas County Signal Phase and Timing (SPaT)
15. SR 434 Connected Vehicle Deployment
16. US 41 Florida’s Regional Advanced Mobility Elements (FRAME)

1. AV Shuttles at Lake Nona
2. Gainesville AV Shuttle
3. Gainesville Signal Phase and Timing (SPaT) Trapezium
4. Osceola County Connected Vehicle Signals
5. Tampa Hillsborough Expressway Authority (THEA) Connected Vehicle Pilot
6. US 90 Signal Phase and Timing (SPaT) Tallahassee
7. Voyage at The Villages
The Importance of Partnerships

AGENCY PARTNERS

UNIVERSITIES

INDUSTRY

STAKEHOLDERS

CAV PROGRAM
FLORIDA is Open for Implementation

THANK YOU

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