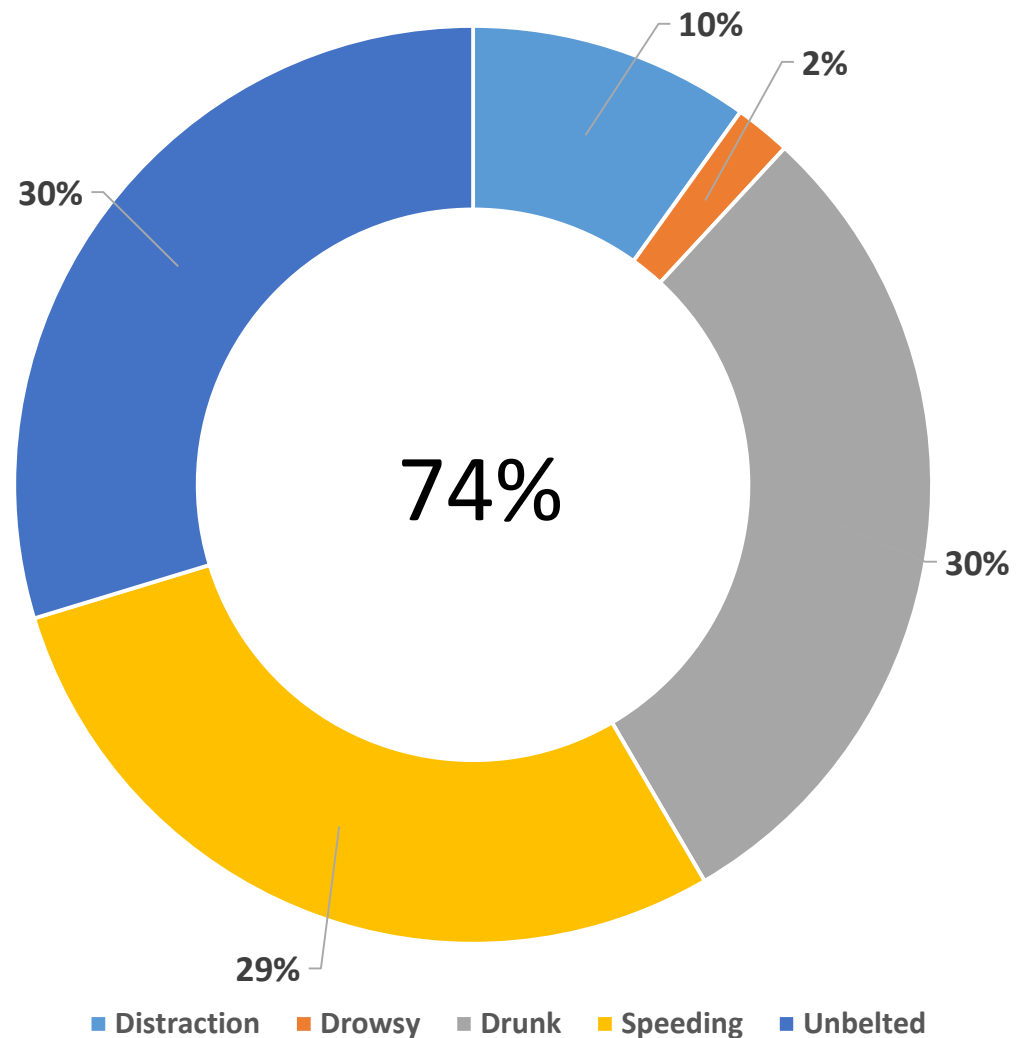


Briefing on Connected and Autonomous Vehicles (CAVs)



National Highway Traffic Safety Administration (NHTSA) reported 47,402 lives were lost on U.S. roads in 2016.

35,289 lives were lost to human error.*



*Excludes pedestrian, bicycle and motorcycle fatalities.

SOURCE: USDOT Releases 2016 Fatal Traffic Crash Data, October 6, 2017 | Washington, DC, NHTSA 01-17.

Connected and Autonomous Vehicles (CAVs)



The Never-Ending Self-Driving Car Project



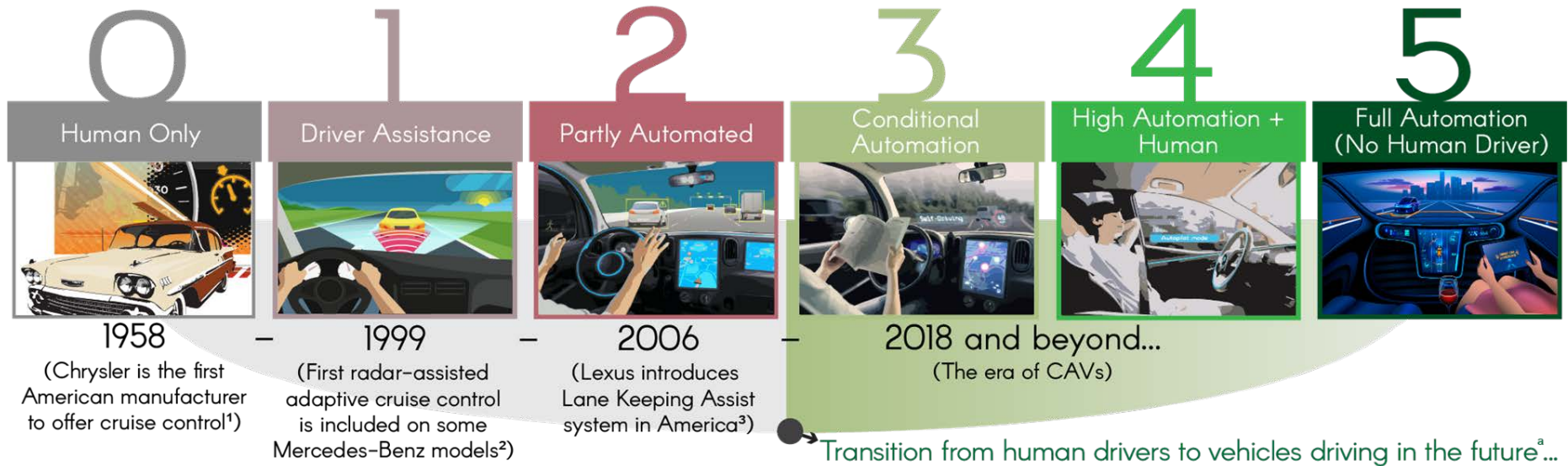
When will autonomous vehicles be "ready"? Don't hold your breath. Really—stop it.

Wired Magazine, April 4, 2018

Levels of Automation



Connected / Autonomous Vehicle (CAV) Level*...



* CAV level information based on iq.intel.com/autonomous-cars-road-ahead and SAE International standards
^a roboticsandautomationnews.com/2017/06/05/saes-full-list-of-levels-for-autonomous-vehicles/12669/
¹ Auto Editors of Consumer Guide (2007-10-08). "1958 Imperial Auto-Pilot cruise control".

² wardsauto.com/news-analysis/smart-cruise-mercedes-first-adaptive-cruise-control-system
³ en.wikipedia.org/wiki/Lane_departure_warning_system

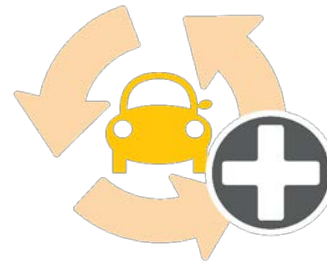
Benefits CAV



Improve
Safety



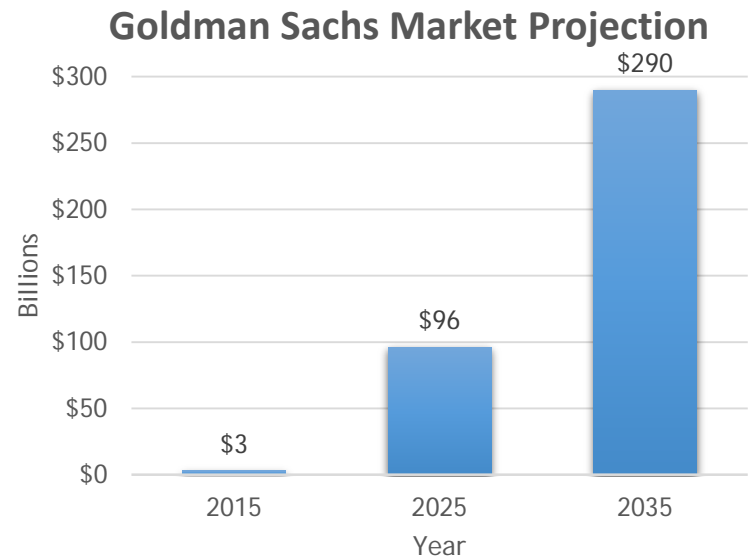
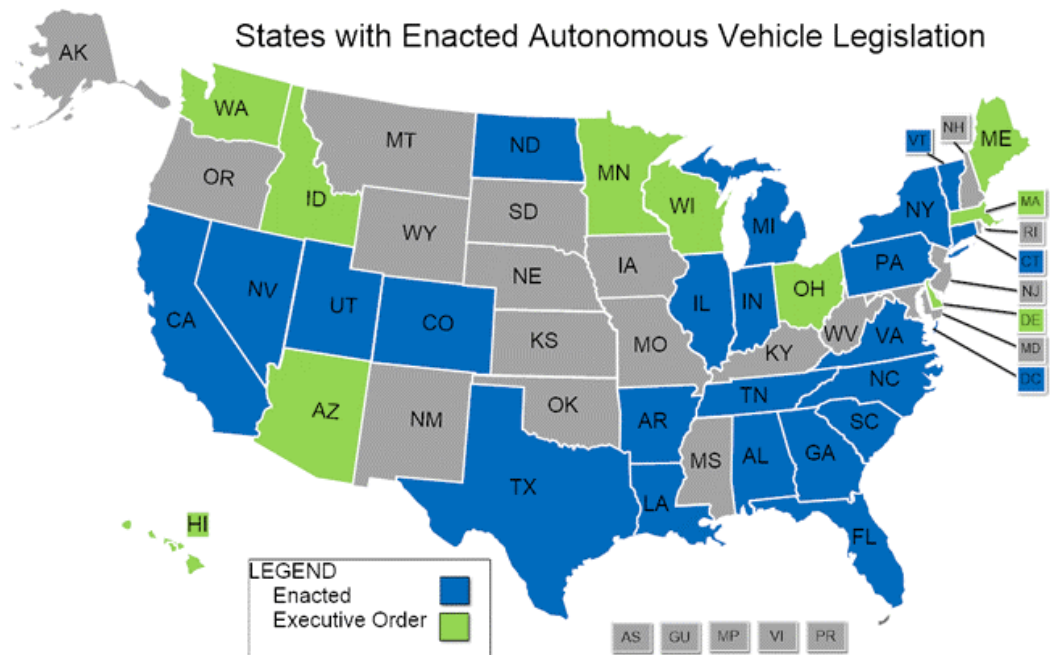
Reduce
Congestion



Enhance
Mobility



Minimize
Environmental
Impacts



Source: Cities vie to become hubs of self-driving technology, USA Today, June 25, 2017

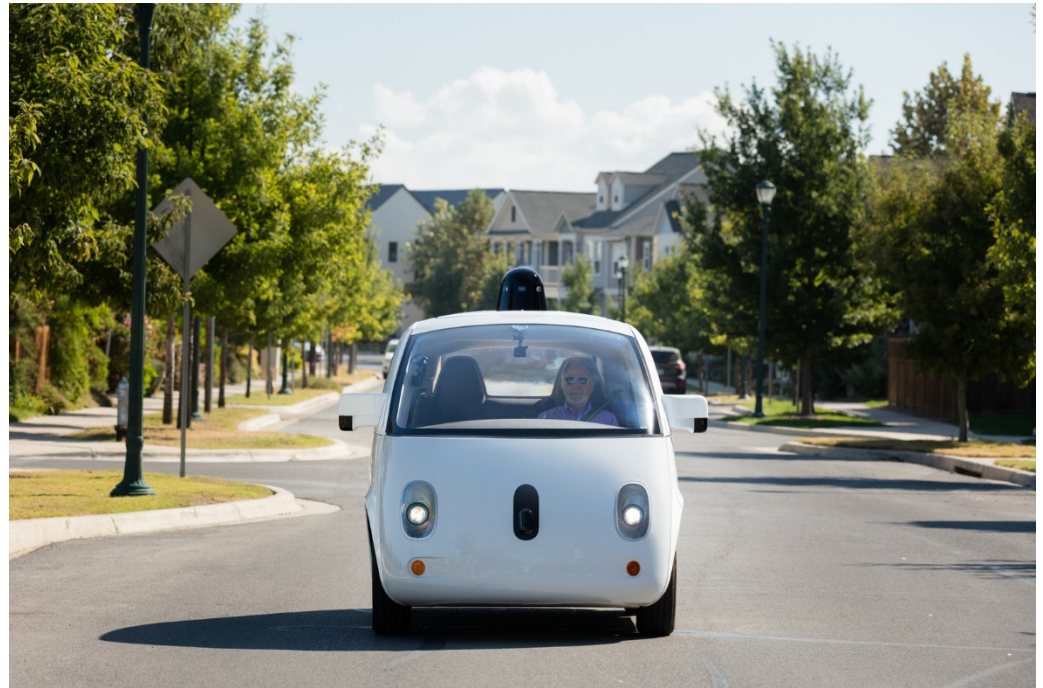
Florida CAV Legislation



HB 1207 (2012)

HB 7027 (2016)

HB 7061 (2016)



Federal CAV Legislation



- Safely Ensuring Lives Future Deployment and Research In Vehicle Evolution - (**SELF DRIVE Act**), H.R. 3388 - *Passed*
- American Vision for Safer Transportation through Advancement of Revolutionary Technologies Act - (**AV START Act**), S. 1885 – *Passed Commerce Committee*

Summary of Federal Legislation



- Empowers NHTSA
- Preempts state rules
- Privacy/Cybersecurity Plans
- Exemptions to Federal Motor Vehicle Safety Standards (FMVSS)
- Excludes commercial vehicles

US DOT Policy Guidance

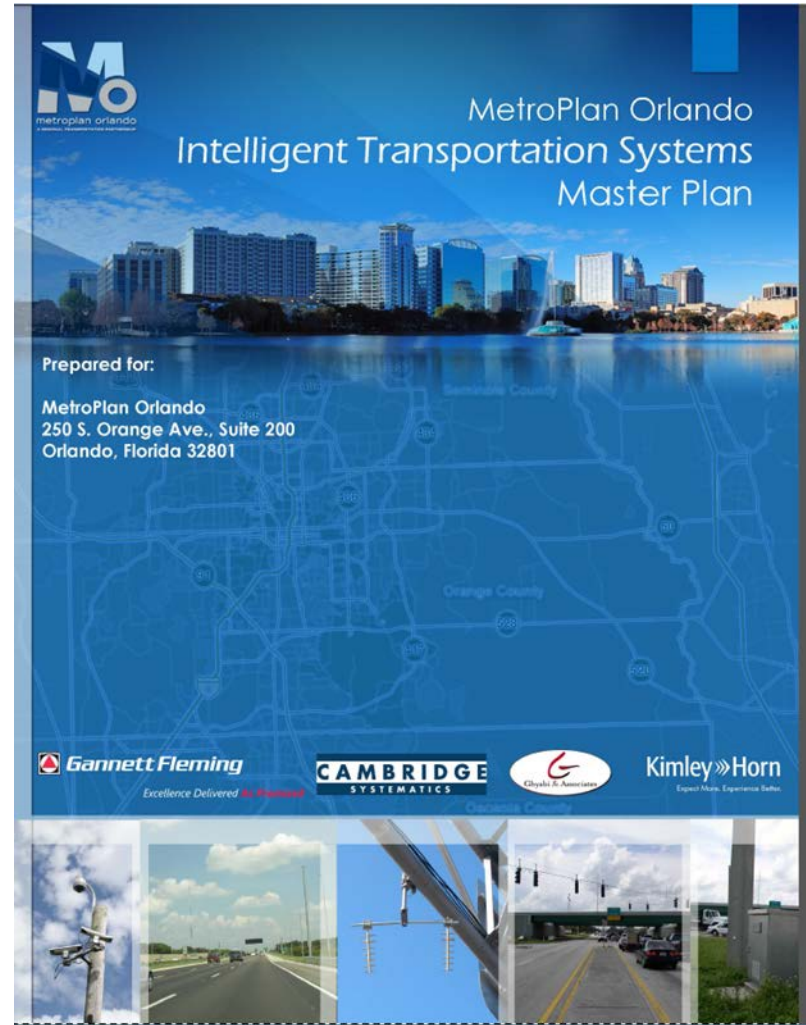


- Federal Automated Vehicle Policy, September 2016
 - Vehicle Performance Guidance for Automated Vehicles
 - Model State Policy
 - NHTSA's Current Regulatory Tools
 - New Tools and Authorities
- Automated Driving Systems 2.0: A Vision for Safety, September 2017
- 3.0 ???

Due Diligence



- UPWP/LRTP
- Association of MPOs, CAV Work Group
- Central Florida AV Partnership
 - Demonstrations/Testing



Florida Initiatives

30A Mobility Project

Tallahassee CV Test bed

I-75 AV Pilot

Tampa Streetcar Expansion
Tampa AV Shuttle

THEA/Tampa USDOT Connected Vehicle Pilot Deployment
MobilEye's Advanced Driver Assistant System (ADAS) Testing

SunTrax (FTE / FL Polytechnic University)

Babcock Ranch Development

JTA Skyway Modernization

UF Smart Campus Initiative

USDOT AV Proving Ground
Driver Assistive Truck Platooning
Orlando CV Test bed
Disney World Pilot
Connected Vehicle Pilot on SR 434

FDOT D4 Technology Blueprint

Floral Industry AV/CV/ITS Application

Research Projects

- FSU - Enhanced Mobility for Aging Population Using Automated Vehicles
- Embry-Riddle Aeronautical University - Autonomous Service Vehicle Project
- FSU - Envisioning Florida's Future: Transportation and Land Use in an Automated Vehicle World
- HDR - FDOT D5 TransFuture

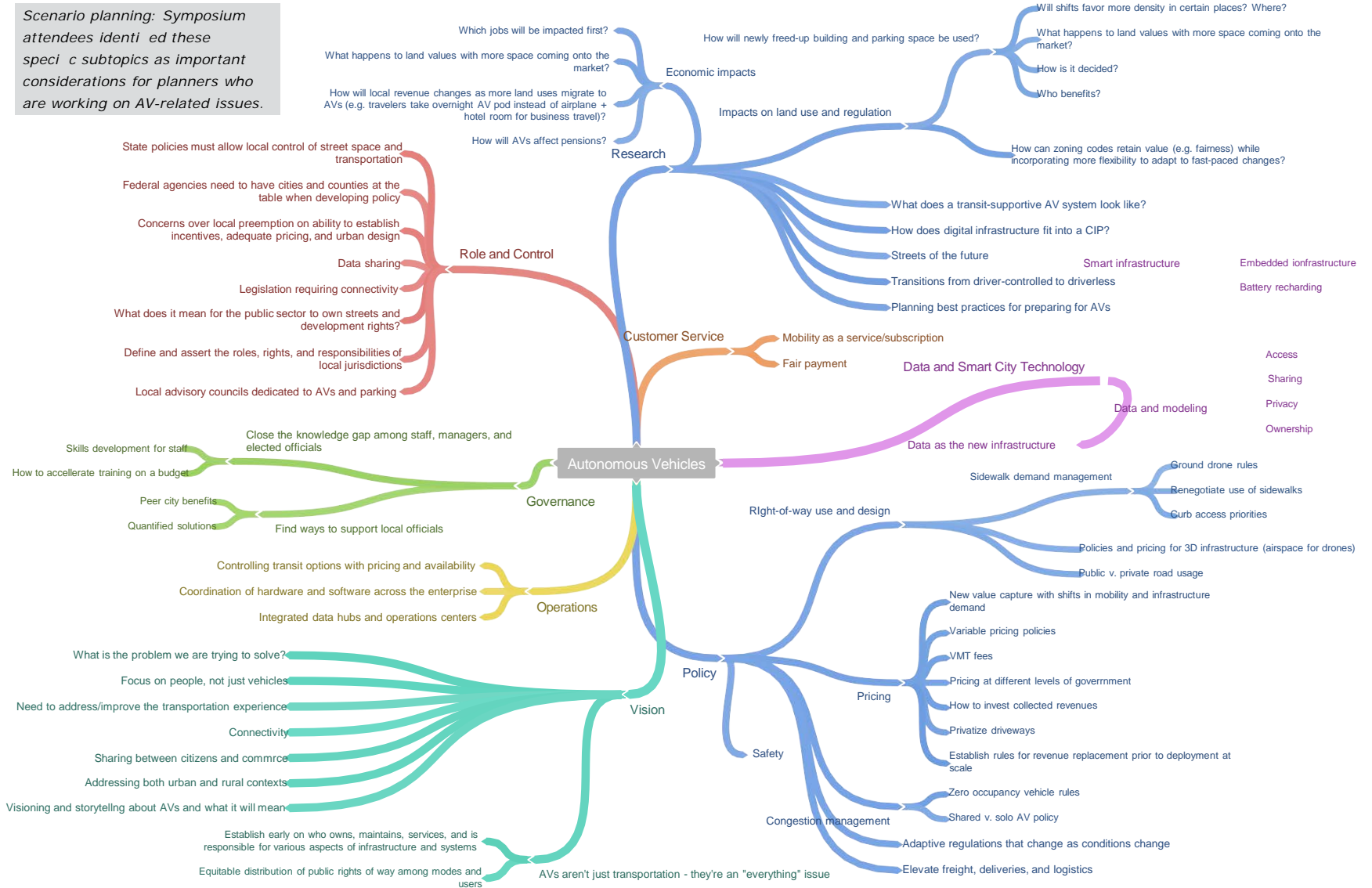
Uncertainties



- Cybersecurity/Privacy
- Land-use: sprawl vs. density
- Liability/Legal
- Modal/Equity
- LRTP – future proofing;
scenario planning



Scenario planning: Symposium attendees identified these specific subtopics as important considerations for planners who are working on AV-related issues.



Thank You

MetroPlanOrlando.com | 407-481-5672

250 South Orange Ave., Suite 200, Orlando, FL 32801

