Who’s Driving that Car?

Facilitator:
Cathie Curtis, Director of Vehicle Programs, AAMVA
Brett Young, Special Assistant, Director of Field Operation, Georgia Department of Driver Services

Presenters: Kevin Jacobs, Operations and Management Consultant, Office of Performance Management, Florida Department of Highway Safety and Motor Vehicles
An autonomous car, also known as a driverless car, self-driving car and robotic car, is an automated or autonomous vehicle capable of fulfilling the main transportation capabilities of a traditional car. Vehicle manufacturers, software developers, and researchers are actively engaged in the development of autonomous technology, with drastically different approaches and solutions. How can motor vehicle agencies prepare for testing drivers? What may be the enforcement issues? Should there be concern for security (hacking) risks, etc.?
Who’s Driving that Car
June 24, 2015
Brett Young
• Jurisdictional regulatory needs vs supporting technology innovation

• Define the following:
  – NHTSA vs SAE levels of automation
  – Automated vehicle vs autonomous vehicle
    • Autonomous to broad
    • Automated requires a driver
Jurisdictional collaboration during R&D
  - Registration
  - Titling
  - Crash reporting
  - Driver licensing
  - Liability
  - Financial responsibility
  - Enforcement practices
  - Penalties & enforcement
  - Road restrictions
Jurisdictional collaboration when AV’s are available to the public

- Road restrictions
- Licensing
  - Required for level 4 only?
  - Operator vs driver
  - Skills testing for levels 1-3 vs level 4
  - Endorsement vs restriction
- Training
- Titling & registration requirements
- Crash & incident reporting
• Law enforcement concerns
  – System misuse
  – Endorsement/restriction enforcement
    • How to id an AV in autonomous mode
  – Crash investigation
    • Driver vs vehicle culpability
    • Access to electronic data recorder
    • Safety of first responders
  – Vehicle identification of level certified
  – Response to emergency vehicles & manual traffic control
Autonomous Vehicles in Florida

June 24th, 2015

Kevin Jacobs
Section 316.86, Florida Statutes

“...It is the intent of the Legislature to encourage the safe development, testing, and operation of motor vehicles with autonomous technology on the public roads of the State ... the State does not prohibit or specifically regulate the testing or operation of autonomous technology in motor vehicles on public roads.”

Definition

“technology installed on a motor vehicle that has the capability to drive the vehicle on which the technology is installed without the active control or monitoring by a human operator”
### Department Overview

**Motorist Services**
- Vehicle Title
- Vehicle Registration
- Driver Credentialing

**Florida Highway Patrol**
- Traffic Enforcement
- Commercial Vehicle Enforcement
Department Involvement

- Title and register the vehicle
  - Registration process identifies “Autonomous Vehicle” on the printed certification
- Entity performing test must submit an instrument of insurance in the amount of $5 million
What is currently happening in Florida

Florida Automated Vehicles Stakeholder Working Group

Goal:
Make recommendations to address potential policy adoption or amendments, engineering and design standard changes, and infrastructure investment priorities.
What is currently happening in Florida

<table>
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<tr>
<th>Academic Research</th>
<th>Pilot Projects</th>
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| • Autonomous Vehicle Technology and Mature Drivers  
  • Florida State University  
  • Transportation plans and policy implications  
  • University of Florida | • Automated Vehicle Technology  
  • Testing effectiveness of MobilEye technology  
  • Connected Vehicle Technology  
  • Automate portions of the perishable-goods delivery supply chain |
Future of Autonomous Vehicles in Florida

Availability

Safety

Involvement

Awareness
Region II
Autonomous Vehicles
June 24, 2015
Cathie Curtis, AAMVA, Director, Vehicle Programs
What is AAMVA doing to help our members prepare for Automated, Autonomous and Connected vehicles?
• December 2013 - Established an Autonomous Vehicle Information Sharing Group.

• Group has held conference calls monthly to review state laws, studies, news articles and hear from experts.

• Developed an AV Information Library on AAMVA’s website to store information on AVs.
AV Information Sharing Working Group

• Developed an analysis of current AV state laws.

• Identified the program areas such as operator training, testing and licensing, vehicle registration and title, data privacy and security concerns, consumer safety and other areas of concern to the DMVs and Law Enforcement that will be impacted by AVs.

• Provided information to larger AAMVA community during meetings and conferences.

• 2015 - Continuing to hold quarterly calls.
Fall 2014 - Established an Autonomous Vehicle Best Practices Working Group

The purpose of the project is to form a Best Practices Working Group to:

• Work with the AAMVA jurisdictions, law enforcement, federal agencies and other stakeholders to gather, organize and share information with the AAMVA community related to the development, design, testing, use and regulation of autonomous vehicles and other emerging vehicle technology.

• Based on the group’s research, a best practices guide to assist member jurisdictions in regulating autonomous vehicles and testing the drivers who operate them will be developed.

• Funded by NHTSA
The Working Group will consist of:

- 16 jurisdictional members; including representatives with vehicles, driver license, law enforcement, information technology and legal expertise.
- 2 Canadian jurisdictional representatives to be funded by CCMTA
- 3 positions held by NHTSA representatives.
- 4 AAMVA staff plus the project officer.
- A consultant.
- Stakeholders to act as advisors.
The Working Group will:

• Research and gain an understanding of autonomous vehicles and other emerging vehicle technology, the impact they will have on the AAMVA membership, and define the potential regulatory concerns the technology will create.

• Develop and draft Best Practices. 2015 -2016

• Provide the draft best practices to the AAMVA Driver, Vehicle, and Law Enforcement Committees and to NHTSA for review and comment. Late summer 2016

• Review all comments and suggestions and modify the draft as appropriate. Late summer 2016

• Release and promote the final Best Practices document to AAMVA jurisdictional members and stakeholders. Fall 2016
• Held the first meeting in February.

• Heard several presentations to level the group’s understanding of the issues.

• Divided into 3 subgroups; driver, vehicle and law enforcement.

• Each subgroup identified policy issues in their area.

• Developed the outline for the Best Practices report.
• Subgroups are meeting monthly this summer.

• Each member volunteered to develop a very early draft of a best practice for the group to discuss during the next face to face meeting.

• Next meeting in September in San Francisco. Meeting with VW and Google.
• Will meet twice next year.

• Continue to research and develop best practices.

• Identify a path forward as this is a 2 year project, ending in the fall of 2016.

• We know the technology will continue to emerge.

• Will continue to hold call with the Information Sharing Group.
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