Jurisdictional Guidelines for the Safe Testing and Deployment of Highly Automated Vehicles

Autonomous Vehicle Considerations for Law Enforcement

Lifesavers Conference
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Background on the AAMVA Autonomous Vehicles Working Group (AVWG):

The AAMVA AVWG was established in late 2014, Why???
Regulatory Inconsistency ...
Autonomous Vehicle Testing State Actions

February 2019

Legislation or executive order contains:
- General testing provision(s)
- Jurisdictional approval for testing provision(s)
- Testing notification provision(s)
- Permissive A/V language but no specific testing provision(s)
Sub-groups were formed within the AVWG focusing on 3 specific areas:

**Drivers:** Education, Testing, Licensing

**Vehicles:** Permits, Registration and Title

**Law Enforcement:** Considerations & Challenges
AAMVA Jurisdictional Guidelines for the Safe Testing and Deployment of Highly Automated Vehicles

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To assist motor vehicle and law enforcement agencies seeking to address testing or deployment of Level 3, 4, and 5 highly automated vehicles in their jurisdiction.

Version 2.0 under development – Publishing late 2019/early 2020
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Chapter 1 Introduction
Chapter 2 Automated Vehicles Classifications, Terms and Technologies
Chapter 3 Administrative Considerations
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There are a total of 88 recommendations. Some are directed at the jurisdictions (65), and others at Manufacturers and Other Entities (23).
Chapter 6. Law Enforcement Considerations

6.1 Crash/Incident Reporting
6.2 Criminal Activity
6.3 Distracted Driving
6.4 Enforcement of Permit Conditions
6.5 Establishing Operational Responsibility
6.6 First Responder Safety
6.7 Law Enforcement/First Responder Training
6.8 Vehicle Response to Emergency Vehicles, Manual Traffic Controls and Atypical Road Conditions
6.9 System Misuse and Abuse
6.10 Vehicle Identification
6.11 Adherence to Traffic Laws

Version 2.0 will add subsections on Law Enforcement Interaction Plans and Cyber Security
Chapter 6 Recommendations

There are a total of 16 jurisdiction recommendations and 18 MOE recommendations in

Chapter 6 – Law Enforcement Considerations

We only have time to review SOME of these 34 total recommendations ...
Chapter 6 Recommendations (continued)

6.1.2 U.S. jurisdictions should adopt the MMUCC 5th Edition (August 2017) recommendation as soon as practicable.

6.2.1 Jurisdictions that have HAV permitting requirements should require the designated test users (employees, contractors and other persons) to pass a background check, including, but not limited to, a driver history review and a criminal history check, prior to being authorized to operate a test HAV.

6.5.3 For vehicles classified as Levels 4 or 5, which may be operated without a licensed driver and where the driverless vehicle performs the DDT independent of human input, the registered owner should be responsible for its safe operation.
Chapter 6 Recommendations (continued)

MOE 6 Manufacturers should design HAVs to record vehicle behavior sensor data and the driver/vehicle interface. Law enforcement should be provided with access to this information as well as a minimum of 30-seconds of pre-crash and post-crash data for completing a proper investigation.

MOE 7 Manufacturers should make EDR information retrievable in a standard, non-proprietary format for ready access by those duly authorized.

MOE 8 Manufacturers should include time stamping and GPS location in EDR data.

MOE 12 Manufacturers or other entities should prohibit users from all distracting activities when testing any HAV.
Chapter 6 Recommendations (continued)

MOE 13 Manufacturers or other entities should design HAVs with a means of identifying when a vehicle is in automated mode to facilitate effective enforcement of distracted driving laws (i.e., so an officer knows if using a hand-held device is legal at the time of observation).

MOE 17. Manufacturers, in partnership with highway safety stakeholders, should develop national or international standardized first responder training on safely interacting with vehicles and users in both the testing and deployment of HAVs.
Chapter 7. Next Steps

The AAMVA Autonomous Vehicle Working Group will:

• Continue attending conferences, seminars and other technology focused forums to learn and share expertise.

• Provide technical assistance to jurisdictions.

• Work closely with industry and research stakeholders, state and federal government officials and national associations.

• Update this report periodically for the foreseeable future to keep it up-to-date and expand its scope as deemed appropriate.
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