



Public Affairs

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Subject: Guidelines for the Safe Deployment and Operation of Automated Vehicle Safety Technologies
Docket No. NHTSA-2016-0036

To Whom It May Concern:

AAA is a not-for-profit organization of motor clubs serving more than 56 million members in the U.S. and Canada. During more than 100 years of public service, the association has worked with federal and state policymakers and stakeholders to promote sound public policy positions to improve all aspects of the driving environment, including emerging vehicle technologies and equipment that promote driver safety. AAA recognizes the great potential for innovation and safety benefits with the development and deployment of semi and fully autonomous vehicles from dramatic reductions in crash-related injuries and fatalities to significant increases in convenience and mobility.

There are significant advantages and disadvantages that come from the fact that the car of today is rapidly becoming a 4,000-pound smartphone. The issues identified by NHTSA in the March notice are equally important and must be evaluated in the overall context of the possibility of a driverless future moves closer to reality. The key is to strike a balance between safety and innovation, and we appreciate the opportunity to offer the following comments for consideration.

Issues

(4) Driver transitioning from AV operating mode

AAA has not done extensive research on the transition time needed for driver re-engagement in full autonomous mode but the interaction between the vehicle system, driver and environment must be fully explored. Real-world evaluations of driver behavior under a variety of driving conditions such as trip distance, urban vs. rural driving, time behind the wheel, physical and cognitive distractions will impact response time.

Based on AAA's ongoing testing of advanced driver assistance systems, a driver's familiarity with how these technologies *operate and their limitations* is critical to garnering the greatest potential overall safety benefits from these technologies. There are significant benefits but these systems all appear to currently have limitations based on road, weather and other conditions beyond the driver's control. Drivers could rely too heavily on these systems, thus creating a situation that creates an unintended conscience in terms of safety through distraction.

(7) Effects of Surrounding Environment on Electronic Component Performance

It is important to consider that many of these electro-mechanical systems are interconnected and rely on input from other sensors and systems. As a result, it is imperative that these systems be tested at the system level and not at the component level. Component level testing will not highlight potential system interactions, sensor fusion, and algorithms specific to a particular model. A sensor that performs within limits individually may not at the system level due to stacked tolerances or other variables.

(9) Aspects of AV technology that may not be suited or ready for guidelines

Vehicle Data and Consumer Protections

- While we recognize that data control and privacy may not fall under the agency's purview, the issues of vehicle data and privacy, transparency and choice must be part of the discussion. Right now, about one-in-five new cars sold have wireless connections – they can collect and transmit data outside the vehicle – to enable a range of services to improve safety and convenience for drivers. Future autonomous vehicles will likely generate even *more* data. Questions about who owns this data, and has the right to control its distribution and use, are not well addressed in current laws. AAA urges businesses, the government and other organizations to ensure that consumers are provided with transparency, choice and security as outlined in AAA's Consumer Rights for Car Data.

Driver Training and Licensing

- Current driving training programs need to keep pace with vehicle technology and include instruction on the operation and use of advanced driver assistance systems. Looking forward, driver training could undergo a revolution if autonomous vehicles become mainstream. At a minimum, drivers will need to be proficient in skills necessary to operate autonomous cars and/or interact with such cars as they become more common on the roadways.

Liability

- One of the biggest challenges to the introduction of autonomous vehicles has nothing to do with the cars themselves, but rather the legal, regulatory and physical environment in which they will operate. Current laws and infrastructure never envisioned a vehicle that can drive itself creating liability issues that need to be addressed. Questions regarding liability responsibility when a vehicle is involved in a collision e.g., the "driver," their insurance provider, the automaker that built the vehicle, or the third-party supplier that provided the autonomous control systems must be resolved before widespread deployment of an AV fleet.

(10) Identification of industry voluntary standards, best practices

AAA is encouraged with initial steps the automakers have taken to address vehicle cybersecurity vulnerabilities through the industry-led Automotive Information Sharing and Analysis Center. The collaborative efforts to share research findings among automakers, as well as NHTSA and other government agencies could lead to safer and more secure vehicles and reduce the potential risks from external sources. However, the success of this effort is best supported by expanding participation in the ISAC to include other stakeholders in the supply chain, academics, and consumer groups. AAA urges this expansion as soon as possible.

Conclusion

AAA recognizes the potential safety and other benefits associated with connected and autonomous vehicles and look forward to working with NHTSA and other stakeholders as these technologies continue to evolve. We will continue to monitor pilot programs, policy and regulations related to connected and autonomous vehicles, and when necessary provide additional comments on behalf of the consumer and vehicle safety.

Respectfully,

A handwritten signature in black ink, appearing to read 'Avery Ash', with a stylized, cursive script.

Avery Ash
Director, Federal Affairs