

Wes Moore Governor

Aruna Miller Lieutenant Governor

Paul J. Wiedefeld Secretary

March 7, 2024

The Honorable Marc Korman Chair, House Environment and Transportation Committee 251 House Office Building Annapolis MD 21401

RE: Letter of Information – House Bill 1447 – Motor Vehicles - Autonomous Vehicles - Standards, Requirements, and Prohibited Acts

Dear Chair Korman and Committee Members:

The Maryland Department of Transportation (MDOT) offers the following information for the Committee's consideration on House Bill 1447.

House Bill 1447 would authorize a person to operate a fully autonomous vehicle if seated in the front seat of the autonomous vehicle (AV) and if they possess a valid driver's license. The legislation also prohibits AV taxis, shuttles, micro-transit, buses, and other AV for-hire vehicles.

The MDOT Motor Vehicle Administration (MVA) monitors emerging and innovative technologies – including connected and automated vehicles (CAV) – to adapt to, and take advantage of, technologies reshaping mobility choices and freight logistics. The rapidly developing and quickly emerging technology in the AV field has the potential to transform the way people and goods move through Maryland's transportation system, enhancing highway safety, increasing mobility options, and fostering economic productivity.

The U.S. Department of Transportation (USDOT) deems that automation has the potential to impact safety significantly by reducing crashes caused by human error, including crashes involving impaired or distracted drivers, resulting in saving lives on America's roadways. Currently, even the highest level of driving automation available to consumers requires the full engagement and undivided attention of drivers. However, there is considerable dedication and investment into safe testing, development, and validation of new and advanced vehicle technology with the enormous potential for improving safety and mobility, along with improving equity, air pollution, accessibility, and traffic congestion from these burgeoning technologies.

SAE International is a global standards development and professional association widely considered the industry leader in defining standards in the AV field. SAE J3106 defines the SAE Levels from Level zero (no driving automation) to Level 5 (full driving automation). References to "fully autonomous" at the national level consider it to be designed to function without a human driver as a level four (4) or five (5) system. Most AV testing and deployment start on the test track, move to protected on-road testing, then testing in mixed traffic with a safety operator. Only after such extensive testing has eventually proven an AV technology or system safe is it considered for fully self-driving without a human monitoring. House Bill 1447 may impede this testing and deployment in Maryland with the mandate to always require a human in the driver's seat even for Level five (5) fully self-driving vehicles.

If passed, Maryland would be the first and only state in the country to have a "driver-in" policy mandated for all AVs. Alternatively, 24 states allow AV deployment with no human operator onboard, with another 12 states allowing for testing.

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The MVA currently has a process for connected and automated vehicles on Maryland's roadways. Since 2015, the MVA has supported a robust Connected and Automated Vehicle (CAV) Working Group which serves as the central point of coordination for the development and deployment of emerging CAV technologies in Maryland. Maryland's CAV Working Group includes elected officials, representatives from state and local government, highway safety organizations, private sector, automotive industry, and other transportation stakeholders. This group evaluates the latest research, including guidance from the American Association of Motor Vehicle Administrators (AAMVA) and the USDOT, tracks federal and state actions, and coordinates with all interested stakeholders. This collaborative program is setting a course for the future of automated and connected vehicles in Maryland, prioritizing the safety for all roadway users.

The MVA serves as the central clearinghouse for planning and coordination as well as testing for CAVs in Maryland. To support a safe and productive testing environment, the MVA facilitates a permit process for parties interested in testing highly automated vehicles (HAV) and has designated a number of sites owned by MDOT and its partners for the testing of CAV technologies. Through the HAV permit process, applicants work collaboratively with the MVA to ensure project objectives are met while prioritizing safety in testing.

The MVA is embracing CAV technology and working collaboratively with many partners to ensure that Marylanders benefit from a transportation system which fully realizes the many positive potential outcomes of CAV technology, while also ensuring the safety of all roadway users. This means taking active steps to prepare for the future by engaging with new technologies to ensure safety without impediments to the safe testing and deployment of such vehicles.

The Maryland Department of Transportation respectfully requests the Committee consider this information when deliberating House Bill 1447.

Respectfully submitted,

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