

Department of Legislative Services
Maryland General Assembly
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FISCAL AND POLICY NOTE
First Reader

House Bill 1447 (Delegate J. Lewis)
Environment and Transportation

Motor Vehicles - Autonomous Vehicles - Standards, Requirements, and
Prohibited Acts

This bill authorizes a person to operate on a highway a fully autonomous vehicle with the automated driving system engaged, including for the transportation of goods in interstate commerce, if (1) the person holds a valid driver’s license; (2) the person is seated in the front seat of the vehicle while it is in motion; and (3) the vehicle and its passengers are in compliance with all requirements of the Maryland Vehicle Law. A person may not operate a fully autonomous vehicle on a highway to transport passengers unless the person is doing so for a personal and noncommercial purpose. Additionally, a person may not operate a fully autonomous vehicle on a highway unless, at the time of its manufacture, the vehicle is certified by the manufacturer as compliant with applicable federal motor vehicle safety standards. A fully autonomous vehicle operated on a highway is subject to (1) applicable security and insurance requirements under Title 17, Subtitle 1 of the Transportation Article and Title 19, Subtitle 5 of the Insurance Article and (2) the Maryland Consumer Protection Act (MCPA) under Title 13 of the Commercial Law Article. The Maryland Department of Transportation (MDOT) must adopt regulations to implement and enforce the bill.

Fiscal Summary

State Effect: The bill is not anticipated to materially affect MDOT operations or finances within the five-year period covered by this fiscal and policy note. Revenues are not affected.

Local Effect: This bill does not materially affect local government operations or finances.

Small Business Effect: Minimal.

Analysis

Bill Summary: “Fully autonomous vehicle” means a motor vehicle equipped with an automated driving system that has the capability to perform all aspects of the dynamic driving task without a driver within an operational design domain. “Automated driving system” means the hardware and software that are collectively capable of performing the entire dynamic driving task on a continuous basis, regardless of operational design domain limitations. A “dynamic driving task” is defined as all of the real-time operational and tactical functions required to operate a vehicle. “Operational design domain” means a description of the operating domains and systems under which an automated driving system is designed to effectively operate, including (1) geographic limitations; (2) roadway types; (3) speed range; and (4) environmental conditions.

Current Law: Autonomous vehicles are governed and regulated primarily at the federal level through plans and guidance developed by the U.S. Department of Transportation (DOT). The current [Automated Vehicles – Comprehensive Plan](#) includes the three major goals of promoting collaboration and transparency, modernizing the regulatory environment, and preparing the transportation system for autonomous vehicles. Among other things, it includes safety and operational standards developed by the Society of Automotive Engineers (SAE) International.

Chapter 501 of 2023 authorizes an autonomous vehicle converter, as defined, to sell transfer, lease, offer for sale, or resell a converted autonomous vehicle or a motor vehicle purchased by an autonomous vehicle converter with the intent to convert the motor vehicle into a converted autonomous vehicle. This authorization only extends to motor vehicles intended for commercial or industrial use. A converted autonomous vehicle is a motor vehicle that (1) is equipped with an aftermarket automated driving system capable of operating in accordance with some or all of the automated driving standards; (2) meets or exceeds weight or capacity thresholds established under federal law; and (3) is capable of operating in accordance with applicable State and federal law.

Additional Comments: The Motor Vehicle Administration advises that there are currently no fully autonomous vehicles in operation on State roads. In 2015, The Maryland Secretary of Transportation established the Connected and Automated Vehicles (CAV) Working Group as the central point of coordination for the development and deployment of emerging CAV technologies in Maryland. Through extensive stakeholder input and public comment, the group has developed a statewide CAV strategic framework.

SAE International has developed a [classification system](#) for defining driving automation for motor vehicles. This system has been widely adopted, including by DOT and the United Nations. There are six levels of automated driving, ranging from momentary driver assistance/no driving automation (Level 0) to full driving automation (Level 5). According

to S&P Global Mobility, most automakers are currently focused on achieving Level 2 automation (partial driving automation) in their vehicle fleets. Even by 2035, S&P Global Mobility forecasts that only 9% of all light vehicles sold globally will comprise vehicles at Level 3 or higher. None of those vehicles, S&P Global Mobility advises, is likely to reach Level 5 autonomy.

It is unclear how MCPA would be applied to fully autonomous vehicles operated on the State's highways as such operation would be by individuals rather than businesses. MCPA prohibits engaging in unfair, abusive, or deceptive trade practices and applies penalties for violations.

Additional Information

Recent Prior Introductions: Similar legislation has not been introduced within the last three years.

Designated Cross File: None.

Information Source(s): Office of the Attorney General (Consumer Protection Division); Department of State Police; Maryland Department of Transportation; National Highway and Transportation Safety Administration; U.S. Department of Transportation; S&P Global Mobility; Society of Automotive Engineers International; Department of Legislative Services

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