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Transportation Interim Committee
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AUTONOMOUS VEHICLES AND THE REGULATORY FRAMEWORK AND GUIDANCE AVAILABLE AT THE FEDERAL LEVEL

House Joint Resolution No. 10, sponsored by Rep. Loge, tasks The Transportation Interim Committee with the study of autonomous vehicles. This paper examines federal and state policies in preparation for the operation of autonomous vehicles on Montana roadways.

The U.S. Congress has not enacted any laws regarding autonomous vehicles. In 2017, the House and Senate considered competing autonomous vehicle bills, the House passed the Self-Drive Act, but both bills failed. In September 2020, a revised Self-Drive act was introduced but failed to gain support. While Congress has not regulated this topic, the United States Department of Transportation (USDOT) provides guidance in its annual reports “Ensuring American Leadership in Automated Vehicle Technologies 4.0.”

The report's goal is to unify efforts in automated vehicles across 38 federal departments and build upon model state policy since the prior reports AV 2.0 and 3.0. The Report defines three principles the Federal Government will recognize when developing AV technologies:

1. **Protect users and communities:** Prioritize safety; emphasize security and cybersecurity; ensure privacy and data security; and enhance mobility and accessibility.
2. **Promote efficient markets:** Remain technology-neutral; protect American innovation; and modernize regulations.
3. **Facilitate coordinated efforts:** Promote consistent standards and policies; ensure a uniform federal approach; and improve transportation system-level effects.

USDOT states it will remain technology-neutral to allow the public to choose the most economically efficient and effective transportation and mobility solutions. AV 4.0 outlines steps to establish manufacturing, performance, and operation standards to increase safety in AV testing and integration but remain technology neutral. The exact parameters of the standards remain unclear.

USDOT emphasizes cross-government partnerships, international collaboration, and stakeholder engagement as ways to achieve its goals. Through these partnerships, USDOT believes AVs can save thousands of lives annually and improve the quality of life by reducing traffic congestion, increasing productivity, and environmental benefits.

Other Research

Federal research covers many subjects, from automated driving scenarios to operator interfaces to remotely supervised space robots.

Security and cybersecurity are critical for developing AVs. High degrees of connectivity and automation increases the need to protect vehicle control systems and secure sensitive information. Considering

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potential increases to technologies for both vehicles and infrastructure, the Federal Government and USDOT are dedicated to providing a secure AV environment.

Infrastructure is an essential component of AVs. Across the U.S. Government, many agencies are investing in diverse infrastructure R&D that allows for further innovation. This research explores both utilizing current infrastructure and exploring new infrastructure to maximize the potential of AVs.

National Highway Safety Administration

National Highway Traffic Safety Administration (NHTSA) is a branch of the USDOT. Its mission is to “save lives, prevent injuries, and reduce vehicle-related crashes.” In June of 2020, NHTSA launched the AV test initiative to provide local governments, stakeholders, and the public with information from states reporting AV activity, legislation, regulations, and information provided by private AV companies. NHTSA’s AV test initiative has extensive resources relating to testing locations and state-specific information. Currently, Montana does not report to NHTSA

Testing Locations in the USA



Links:

Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0

<https://www.transportation.gov/av/4>

Framework for Automated Driving System Safety – Federal Register

<https://www.federalregister.gov/documents/2020/12/03/2020-25930/framework-for-automated-driving-system-safety>

NHTSA AV-TEST Initiative

<https://www.nhtsa.gov/automated-vehicle-test-tracking-tool>