



July 24, 2023

TO: Members, Subcommittee on Innovation, Data, and Commerce  
FROM: Committee Majority Staff  
RE: Hearing Entitled “Self-Driving Vehicle Legislative Framework: Enhancing Safety, Improving Lives and Mobility, and Beating China.”

## I. INTRODUCTION

The Subcommittee on Innovation, Data, and Commerce will hold a hearing on Wednesday, July 26, 2023, at 10:30 a.m. in 2322 Rayburn House Office Building. The hearing is entitled “Self-Driving Vehicle Legislative Framework: Enhancing Safety, Improving Lives and Mobility, and Beating China.”

## II. WITNESSES

- Mr. Mark Riccobono – President, National Federation of the Blind
- Mr. John Bozzella – President and CEO, Alliance For Automotive Innovation
- Mr. Gary Shapiro – President and CEO, Consumer Technology Association
- Dr. Philip Koopman, Ph.D. – Associate Professor, Carnegie Mellon University

## III. BACKGROUND

In 2017, the Committee on Energy and Commerce unanimously advanced H.R. 3388, the Safely Ensuring Lives Future Deployment and Research in Vehicle Evolution Act, or the SELF DRIVE Act. Despite this bill also passing the House unanimously, Congress has failed to move legislation since, hampering access to mobility for senior citizens and individuals living with disabilities, and putting the U.S. at risk of relinquishing its leadership position to the People’s Republic of China (PRC).

Allowing China to lead on self-driving vehicles, also known as autonomous vehicles (AVs) would continue to leave senior citizens and those individuals living with disabilities behind, as well result in significant damage to the American automotive and technology sectors. The concession of leadership in the transportation sector because of Congressional inaction enables profound consequences for our country and its most vulnerable citizens.

To uphold global leadership in AVs, the United States must enact a comprehensive federal framework that establishes a consistent national standard facilitating the expansion of

testing, and deployment initiatives, by granting companies space to innovate. Moreover, it is imperative to safeguard these companies from frivolous legal proceedings concerning the operational efficacy of ancillary features.

According to the National Highway Traffic Safety Administration (NHTSA) traffic fatalities report in 2021, the number of fatalities in road accidents reached a 16-year peak at 42,915<sup>1</sup> and an estimated 42,795 in 2022.<sup>2</sup> Human error accounts for approximately 98 percent of these incidents.<sup>3</sup> The safety benefits offered by self-driving vehicles (or AVs), which would eliminate many of the mistakes associated with human drivers, are widely recognized and comprehended.<sup>4</sup> Such advancements hold the potential to diminish up to 90 percent of crash-related fatalities, which would have saved almost 40,000 lives in 2021 and 2022.<sup>5</sup>

The widespread adoption of AVs is crucial in revolutionizing transportation and ensuring equal access to secure mobility throughout the nation. In addition to the benefits this technology holds for people living with disabilities, it also has transformational potential for Americans living in both rural and urban areas. By embracing AVs, people from all walks of life will be able to experience the benefits of enhanced safety and seamless travel experiences, fostering a more inclusive and efficient transportation ecosystem for everyone.

While AVs promise advantages in terms of mobility and safety, they also have the potential to spur substantial global economic growth, amounting to an estimated \$8 trillion.<sup>6</sup> The integration of pioneering technologies has consistently served as a pillar of strength for the American automotive industry, fostering 10 million job opportunities and contributing nearly 3.5 percent to the nation's gross domestic product (GDP).<sup>7</sup> Projections indicate that the annual revenue generated globally from AVs in urban settings may increase to approximately \$1.6 trillion by the year 2030.<sup>8</sup>

It is crucial for the U.S. to establish the standards for the technology cementing its global leadership of AVs and ensuring the mobility and accessibility, economic, and safety benefits they promise to deliver actually occur for Americans.

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<sup>1</sup> National Highway Traffic Safety Administration, Newly Released Estimates Show Traffic Fatalities Reached a 16-year High in 2021 (May 17, 2022). <https://www.nhtsa.gov/press-releases/early-estimate-2021-traffic-fatalities>.

<sup>2</sup> National Highway Traffic Safety Administration, NHTSA Estimated for 2022 Show Roadway Fatalities Remain Flat After Two Years of Dramatic Increases. (April 20, 2023) <https://www.nhtsa.gov/press-releases/traffic-crash-death-estimates-2022>.

<sup>3</sup> U.S. General Services Administration, Office of Motor Vehicle Management, Crashes Are No Accident, <https://drivethru.gsa.gov/DRIVERSAFETY/DistractedDrivingPosterA.pdf>.

<sup>4</sup> BENEFITS OF AUTOMATED VEHICLES (AVS) Benefits of Automated Vehicles available at: <https://www.autosinnovate.org/initiatives/innovation/autonomous-vehicles/benefits-of-havs>.

<sup>5</sup> Iyad Rahwan and Azim Shariff, Self-Driving Cars Could Save Many Lives. But Mental Roadblocks Stand in the Way., Wall Street Journal (April 6, 2021). <https://www.wsj.com/articles/self-driving-cars-could-save-many-lives-but-mental-roadblocks-stand-in-the-way-11617732000>.

<sup>6</sup> Michael Wayland, GM's Cruise Values Autonomous Vehicle Industry at \$8 Trillion, CNBC (February 5, 2020). <https://www.cnbc.com/2020/02/05/gms-cruise-values-autonomous-vehicle-industry-at-8-trillion.html>.

<sup>7</sup> Ibid.

<sup>8</sup> Hina Miyazu, Mobility as a Service (MaaS) Market by Latest Trends, Top Key Players, Future Growth, Revenue Forecast, Demand Forecast To 2030, Comserve (May 11, 2021)

Members can use this hearing as an opportunity to discuss the importance of enacting a preemptive national framework allowing the U.S. to lead in the broad deployment of these safe and life transforming vehicles.

#### **IV. DISCUSSION DRAFTS UNDER CONSIDERATION**

- A. H.R. \_\_\_\_\_, the Safely Ensuring Lives Future Deployment and Research In Vehicle Evolution Act (SELF DRIVE Act). (Representative Latta (R-OH))

The discussion draft establishes a preemptive national standard regarding the design, construction, and performance of highly automated vehicles, automated driving systems, or components of automated driving systems. The draft authorizes a Department of Transportation rulemaking, which would require manufacturers of AVs, and other covered entities, to submit safety assessments that include a clear description of contents to demonstrate the vehicles are designed to maintain safety, function as intended, contain fail safe features, and include subject areas identified in Automated Driving Systems (ADS): A vision for Safety 2.0 as well as accessibility, including for non-visual accessibility.

The draft prohibits a state from issuing a motor vehicle operator's license for the operation or use of a dedicated highly automated vehicle in a manner that discriminates based on a disability.

Section 4 requires the Secretary of the Department of Transportation (DOT) to make public, and submit to Congress, a rulemaking and safety priority plan to accommodate the development and deployment of highly automated vehicles and to update motor vehicle safety standards, issue new motor vehicle safety standards, and consider how objective ranges in performance standards could be used to test motor vehicle safety standards, which safety standards would be appropriate for such testing, and whether additional authority would facilitate such testing.

Section 5 requires manufacturers to develop a written cybersecurity plan that includes vulnerability detection and response practices, identification of the individual responsible for the management of cybersecurity, a process for controlling access to automated driving systems, and employee training and management.

Section 6 amends existing exemption authority for the DOT to evaluate and classify highly automated vehicles as safe or safer than current Federal Motor Vehicle Safety Standards. Vehicles classified as such would be permitted to be introduced into the stream of commerce. The draft expands the total number of vehicles that may be granted an exemption (from the current cap of 2,500 up to 100,000 after four years after the date of enactment) and the duration of exemptions.

Section 7 amends existing law related to prohibitions on manufacturing, selling, and importing noncomplying vehicles and equipment to include provisions related to the testing or evaluation of highly automated vehicles, automated driving systems, or components of automated driving systems.

Section 8 requires the Secretary of DOT to conduct research to determine the most effective method and terminology for informing consumers about, with respect to each highly automated vehicle, the capabilities and limitations of such vehicle.

Section 9 creates a Highly Automated Vehicle Advisory Council within NHTSA: to examine mobility access for the disabled community; mobility access for senior citizens and populations underserved by traditional public transportation; cybersecurity; the sharing of relevant, situational testing information; labor and employment issues that may be affected by the deployment of Highly Automated Vehicles (HAVs); the impact of the development and deployment of HAVs on the environment; protection of consumer privacy and security of information collected by HAVs; cabin safety for HAV passengers; the testing and deployment of HAVs and automated driving systems in areas that are rural, remote, mountainous, insular, or unmapped; and the verification and validation procedures for HAVs that may be useful to safeguard motor vehicle safety.

The draft also includes language from Rep. Walberg's H.R. 4761, which would authorize the Secretary of Transportation to prohibit certain manufacturers from being granted an exemption if they share information with the PRC or the Chinese Communist Party (CCP), or if they are under control of the PRC or CCP. The draft also provides authority for the Secretary of Transportation to determine in coordination with the Secretary of Commerce whether a manufacturer offering for sale, selling, manufacturing, or importing a vehicle would pose a risk to U.S. security, and if so, prohibit such activity from occurring.

- B. H.R. \_\_\_\_\_, to amend title 49, United States Code, to provide for updated and new motor vehicle safety standards and regulations for highly automated vehicles and partially automated vehicles, and for purposes. (Representative Dingell (D-MI))

The draft would require that within eight years of enactment, the Secretary of Transportation shall issue a rule to mitigate unreasonable risks to motor vehicle safety related to the design, construction, and performance of highly automated vehicles, automated driving systems, and components of an automated driving system. The draft would also require that within three years of enactment, the Secretary issue a rule requiring certain entities, including manufacturers and contracted partners to submit a safety self-assessment to identify risks during the design development, and introduction into interstate commerce of an automated driving system. Additionally, within five years, the Secretary would be required to issue a rule related to event data recorders for partially automated vehicles and highly automated vehicles.

Section 3 - would establish a preemptive standard of laws that specifically regulates the design, performance, or construction of highly automated vehicles, automated driving systems, and components of an automated driving system, but that would terminate on the earlier date that is ten years after the date of enactment, or the effective date of a final rule to mitigate unreasonable risks to motor vehicle safety related to the design, construction, and performance of highly automated vehicles, automated driving systems, and components of an automated driving system.

Section 4 - would ban predispute arbitration agreements with respect to any case involving a claim related to the design, construction, or performance of a highly automated vehicle; a claim involving the death or bodily injury of a natural person, an unfair or deceptive act or practice, breach of warranty, whether express or limited, or fraud; a claim seeking to recover damages, including consequential or punitive damages to the extent available under applicable law; and a claim that was commenced on or after the date of the enactment of this Act, without regard to whether the harm that is the subject of the claim, or the conduct that caused the harm, occurred before such date of enactment.

Section 5 - would establish that while an original automated driving system or a replacement automated driving system installed in or on a highly automated vehicle is performing the dynamic driving task, that the manufacture of the original automated driving system or the replacement of the automated driving system shall be considered the driver or operator of the highly automated vehicle.

Section 6 - would amend existing law related to prohibitions on manufacturing, selling, and importing noncomplying vehicles and equipment to include provisions related to the testing or evaluation of highly automated vehicles, automated driving systems, or components of automated driving systems.

Section 7 - would amend the DOT's current exemption authority to permit the Secretary to grant an exemption to manufacturers of highly automated vehicles and automated driving systems (up to 80,000 after eight years after the date of enactment). The draft would also establish a sunset for exemptions on the earlier of the date that is twelve years after the enactment of the act or the effective date of specific motor vehicle safety standards that meets certain criteria.

Section 8 - would establish a highly automated advisory council and direct the Secretary of DOT to issue a rule requiring manufacturers of highly automated vehicles, partially automated vehicles, and driver assistance vehicles to provide consumers with information related to whether the vehicle is equipped with an advanced driver assistance system, automated driving system, or partial automation system and the capabilities and limitations of the technology.

The draft would also require that the Secretary issue a rule that incorporates by reference the incident reporting requirements of Standing General Order 2021-01. The draft would also require the Secretary to keep a publicly available database on a public website of the DOT that provides information regarding manufactures, contracted partners, and eligible research institutions and their work on highly automated vehicles, automated driving systems, or components of such systems and information related to the introduction into commerce of such vehicles and components.

Section 14 - would appropriate such sums as are necessary to carry out the Act and Chapter 301 of title 49 U.S.C. with respect to highly automated vehicles.

Section 15 - would require the Secretary to submit a resource and staffing report describing additional personnel and resources that the Secretary may need during a 10-year period after the date of enactment to carry out the Act and determine whether highly automated vehicles comply with the requirements of Chapter 301 of Title 49 U.S.C.

## **V. RELEVANT COMMITTEE ACTION OF 118<sup>th</sup> CONGRESS**

On February 1, 2023, the Innovation, Data, and Commerce Subcommittee held an educational hearing entitled, “Economic Danger Zone: How America Competes to win the Future Versus China.”

## **VI. ISSUES**

The following issues may be examined at the hearing:

- How can the U.S. implement policies that reduce barriers to AV development in a way that is consistent with U.S. values?
- What are the national and economic security threats of China leading in the deployment of self-driving vehicles?
- How will AVs change if countries like China are allowed to lead in their global development and standard settings?
- How do misnomers regarding the term exemption confuse consumers regarding the safety of AVs?
- How can a national comprehensive framework ensure all Americans will have the accessibility benefits AVs promise to deliver?

## **VII. STAFF CONTACTS**

- Tim Kurth, Chief Counsel
- Teddy Tanzer, Senior Counsel
- Brannon Rains, Professional Staff Member
- Michael Cameron, Professional Staff Member
- Jessica Herron, Clerk