



Summary of Mark Riccobono’s Comments to the Subcommittee on Innovation, Data, and Commerce for “Self-Driving Vehicle Legislative Framework: Enhancing Safety, Improving Lives and Mobility, and Beating China.”

July 26, 2023

1. Key statistics regarding blind and disabled Americans and how the adoption of autonomous vehicles will impact our lives
2. Support for Disability Provisions in the Upcoming Autonomous Vehicle Bill:
 - Prohibition on discrimination on the basis of disability in licensing for highly automated vehicles
 - Disability inclusion in the Highly Automated Vehicles Advisory Council
 - Creation of a highly automated vehicles exemption class to promote transportation access for people with disabilities
 - Creation of updated motor vehicle safety standards for highly automated vehicles with a new category for accessibility, including non-visual accessibility
3. Appreciation for including the blind and other Americans with disabilities in the early stages of legislation and rulemaking regarding autonomous vehicles

Good morning Chair Bilirakis, Ranking Member Schakowsky, Chair Rodgers, Ranking Member Pallone, and other members of the committee. My name is Mark Riccobono, and I serve as President of the National Federation of the Blind, the transformative membership and advocacy organization of Blind Americans. Thank you for allowing us to share our thoughts regarding the advent of autonomous vehicle technology and the necessary legislation and regulations that must therefore be adopted.

Three and a half years ago I sat in front of this committee and testified about the primary concerns of blind Americans regarding the advancements in autonomous vehicle design. At that hearing, I expressed that our concerns were twofold. First, we hoped to ensure that any licensure requirements for the operation of autonomous vehicles did not discriminate on the basis of disability and, more specifically, blindness. Second, we wanted the forthcoming legislation and regulations to ensure that nonvisual accessibility would be a required feature on all autonomous vehicles. Since then, I have had the opportunity to ride in multiple fully autonomous vehicles, both with and without a test driver and have experienced true independence in vehicular travel. The experience also showed me the full potential that autonomous vehicles hold for blind and disabled Americans.

Let's discuss that potential for a moment. According to the 2019 American Community Survey (ACS) conducted by the United States Census Bureau, there are an estimated seven million blind or low-vision Americans over the age of sixteen.¹ I think it can be safely argued that the vast

¹ United States Census Bureau, American Community Survey. "The number of non-institutionalized, male or female, ages 16-64, all races, regardless of ethnicity, with all education levels in the United States reported a visual disability in 2019" plus "The number of non-institutionalized, male or female, ages 65+, all races, regardless of ethnicity, with all

majority of those seven million people do not possess a driver's license. This means that they make up a significant portion of the 16.1 percent of eligible Americans,² approximately 43.3 million people, who do not possess a valid driver's license according to the Federal Highway Administration. There is no question that this barrier to independent travel is a significant contributing factor to 67.6 percent of working age blind and low-vision Americans being either unemployed or underemployed.³ At the same time, a persistent problem is blind people being denied transportation options due to the discrimination of drivers, especially in the rideshare industry, who actively reject transporting the blind and our guide dogs. While this is a bleak picture, autonomous vehicles have the potential to change all of it. According to a recent report published by the United States Chamber of Commerce, a 25 percent adoption rate of advanced autonomous vehicles should increase the annual vehicle miles traveled by Americans with disabilities by 4.6 billion miles.⁴ Furthermore, according to the National Disability Institute, a moderate adoption of autonomous vehicles would increase the number of jobs held by people with disabilities by 4.4 million, add \$867 billion to the national GDP, and increase national output by \$1.6 trillion,⁵ resulting in \$92 billion of additional federal tax revenue.⁶

education levels in the United States reported a visual disability in 2019." Compiled by Cornell University. <https://www.disabilitystatistics.org/reports/acs.cfm?statistic=1>

² United States Department of Transportation, Federal Highway Administration. "Distribution of Licensed Drivers – 2020: By Sex and Percentage in each Age Group and Relation to Population." <https://www.fhwa.dot.gov/policyinformation/statistics/2020/dl20.cfm>

³ United States Census Bureau, American Community Survey. "The percentage of non-institutionalized persons aged 21-64 years with a visual disability in the United States who were employed full-time/full-year in 2019." Compiled by Cornell University. <https://www.disabilitystatistics.org/reports/acs.cfm?statistic=4>

⁴ Robert Shapiro and Isaac Yoder, *Innovation Highway: Unlocking the Social and Economic Benefits of Autonomous Vehicles*, United States Chamber of Commerce, July 19, 2023, 5. <https://www.uschamber.com/technology/innovation-highway-unlocking-the-social-and-economic-benefits-of-autonomous-vehicles>

⁵ Dominic Modicamore, George Voigt, Danny Clark, Jack Murphy, and Elizabeth Layman, *Economic Impacts of Removing Transportation Barriers to Employment for Individuals with Disabilities Through Autonomous Vehicle Adoption*, National disability Institute, December 30, 2022, 16. <https://www.nationaldisabilityinstitute.org/wp-content/uploads/2023/02/ndi-economicimpactsofremovingtransportationbarriers.pdf>

⁶ *Ibid*, 17.

As I sit before you today, on the thirty-third anniversary of the signing into law of the Americans with Disabilities Act, the National Federation of the Blind has been given the opportunity to review two versions of an upcoming bill regarding autonomous vehicles, one from Representative Latta and one from Representative Dingell. We are pleased that both versions would create a provision in federal law that does not allow states to discriminate on the basis of disability in licensing procedures for the use of dedicated highly autonomous vehicles. We are equally pleased that both versions would create an autonomous vehicle advisory council that would include representatives with disabilities and that both versions have a stated priority to develop technical advice and present recommendations regarding “advancing mobility access for the disabled community through the deployment of automated driving systems.” Both versions of the bill also include language that would create an exemption class for manufacturers if the exempted components “would provide transportation access for individuals with disabilities.” We believe this exemption will create an expanded opportunity for testing that will provide manufacturers the ability to innovate, make bold choices, and think outside of the box of current vehicle design and move us into what an ideal vehicle could be for someone with disabilities. Finally, we appreciate that Representative Latta’s version of the bill contains a list of fourteen updated or new motor vehicle safety standards for highly automated vehicles that includes a subject area dedicated to “accessibility, including nonvisual accessibility.”

These provisions in both versions of the bill prove that accessibility is a universal issue.

Furthermore, these provisions give me hope that Americans with disabilities are being considered, included, and asked to provide input from the very outset of this new technological frontier. We greatly appreciate this consideration and inclusion. It is a significant step in the journey toward

realizing the full goal of the Americans with Disabilities Act and a step toward the goal of the National Federation of the Blind which is to ensure the full integration of the blind into society on the basis of equality. We appreciate this level of inclusion, and we look forward to working together with both lawmakers and manufacturers to secure the right of blind Americans to travel accessibly and independently. Thank you for the opportunity to address you today.