

July 30, 2024

The Honorable Sherrod Brown, Chairman The Honorable Tim Scott, Ranking Member Committee on Banking, Housing and Urban Affairs United States Senate Washington, D.C. 20510

Dear Chairman Brown and Ranking Member Scott:

Thank you for convening tomorrow's hearing, "Long-Term Economic Benefits and Impacts from Federal Infrastructure and Public Transportation Investment." Advocates for Highway and Auto Safety (Advocates) respectfully requests this letter be included in the hearing record.

Founded in 1989, Advocates is an alliance of consumer, medical, public health, law enforcement, and safety groups and insurance companies and agents working together to improve road safety in the U.S. Advocates' mission is the adoption of federal and state laws, policies and programs that prevent motor vehicle crashes, save lives, reduce injuries, and contain costs.

Motor Vehicle Crashes are a Devastating and Costly Public Health Crisis

In 2022, an average of 116 people were killed every day on roads in the U.S., totaling just over 42,500 fatalities.¹ An additional 2.38 million people were injured.² This represents a 29 percent increase in deaths in just a decade.³ Early projections for 2023 traffic fatalities remain at a similar historic high level; nearly 41,000 people are estimated to have died that year.⁴ Tragically, 7,522 pedestrians and 1,105 bicyclists were killed in 2022, representing a 57 percent and 48 percent increase respectively in the past decade.⁵ Fatalities of motorcyclists increased as well, resulting in 6,218 deaths.⁶

Truck crashes continue to cause exceedingly high loss of life and injuries. In 2022, 5,936 people were killed and over 160,000 people were injured in crashes involving large trucks. Since 2009, which was a historic low, the number of fatalities in large truck crashes has increased by 76 percent. In that same timespan, the number of people injured in crashes involving large trucks increased by 117 percent. In fatal two-vehicle crashes between a large truck and a passenger motor vehicle, 96 percent of the fatalities were occupants of the passenger vehicle.

Several leading behavioral issues continue to be leading factors in traffic fatalities including alcohol-impairment, speeding and lack of restraint use. ¹¹ Driver distraction is also known to be a principal cause of motor vehicle crashes. ¹² In 2022, alcohol-involved crashes claimed the lives of 13,524 people, speeding-related traffic crashes killed 12,151 people, and 11,302 people killed in

crashes did not buckle up, when restraint use was known. ¹³ This dangerous road epidemic is predicated on dangerous roadway design (*See* 2024 Dangerous by Design report). Additionally, in 2021, the most recent year for which data is available according to the Non-Traffic Surveillance (NTS) system, an estimated 3,990 people were killed in non-traffic motor vehicle crashes, an increase of 26 percent from 2020. ¹⁴ And, since 1990, at least 1,098 children have died in hot cars, including 15 children this year. ¹⁵ These issues are persistent, and the solutions are known and available, yet remain underused, underfunded, or unregulated and therefore not required as standard equipment in vehicles.

The financial impact of motor vehicle crashes on our economy and our families is staggering. Conservatively, the annual economic cost of motor vehicle crashes is approximately \$340 billion (2019 dollars). In comparison, the budget for the modal agencies within U.S. Department of Transportation (DOT) responsible for roadway safety in 2024 is only a little more than 20 percent of that figure, at \$74.8 billion. Essentially, every person living in the U.S. pays an annual "crash tax" of over \$1,000. These crashes negatively impact businesses as well. According to the Network of Employers for Traffic Safety, the total cost of crashes to employers is more than \$72 billion (2019 dollars). Moreover, the total value of societal harm from motor vehicle crashes in 2019 was nearly \$1.4 trillion. 19

Federal Safety Standards Have Saved Hundreds of Thousands of Lives by Preventing Crashes and Reducing Associated Costs

The National Highway Traffic Safety Administration (NHTSA) has estimated that between 1960 and 2012, over 600,000 lives have been saved by motor vehicle safety technologies. Advocates always has enthusiastically championed rulemaking for innovative vehicle safety technologies shown to prevent injuries and deaths because it is effective. In 1991, Advocates led the coalition that supported enactment of the bipartisan Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991²¹ which included a mandate for front seat airbags as standard equipment. As a result, by 1997, every new car sold in the United States was equipped with this technology and the lives saved have been significant. Airbags have saved an estimated 50,457 lives from 1987 to 2017, according to NHTSA.²²

Advocates continued to support proven lifesaving technologies as standard equipment in all vehicles in other federal legislation and regulatory proposals. These efforts include: tire pressure monitoring systems;²³ rear outboard 3-point safety belts;²⁴ electronic stability control;²⁵ rear safety belt reminder systems;²⁶ brake transmission interlocks;²⁷ safety belts on motorcoaches;²⁸ rear-view cameras;²⁹ safer power window switches;³⁰ advanced driver assistance systems (ADAS);³¹ impaired driving prevention technology;³² enhanced vehicle hood and bumpers to better protect vulnerable road users;³³ systems to address the issue of unattended children in vehicles;³⁴ and, advanced head lamps.³⁵

Requiring proven safety technologies as standard equipment in vehicles also promotes traffic safety equity for new car buyers, the next generation of used car buyers, other vehicle occupants and road users outside the vehicle when the rulemaking includes them, as it should when applicable. Rulemaking accelerates fleet penetration and amplifies the safety benefits of the technology while curbing its cost due to economies of scale.

Recommendations for vehicle safety technologies and other verified safety solutions are included in Advocates' annual *Roadmap to Safety* report. This comprehensive tool provides a guide for communities, state legislatures, governors, Congress, and the DOT on how to reverse the trend of skyrocketing deaths and injuries on U.S. roads.

The Historic Investment in America's Roads Made by the Infrastructure Investment and Jobs Act (IIJA) Will Help to Reduce the Costs Associated with Motor Vehicle Crashes

Commonsense solutions were advanced by the bipartisan Infrastructure Investment and Jobs Act (IIJA) that will help to repair our Nation's crumbling infrastructure and improve public safety.³⁶ These include provisions and robust appropriation levels to advance the Safe System Approach (SSA) and Complete Streets policy which undertake a holistic method to improve safety for all in the roadway environment. Vehicle safety technology and roadway infrastructure improvements designed to upgrade safety have great potential to complement each other, ensure redundancy and save lives. For example, the IIJA authorizes safety upgrades to the Highway Safety Improvement Program (HSIP) which will help to protect vulnerable road users, such as infrastructure features that calm traffic and reduce vehicle speeds, separate road users to minimize conflicts, and deter dangerous driving. The Centers of Disease Control and Prevention (CDC) released a recent report which found disparities in those who suffered injuries as pedestrians, and noted risk factors could be reduced for all pedestrians by advancing infrastructure improvements and other strategies that advance the SSA.³⁷ Research on the impact of New York City's Vision Zero policy and actions, which are based on the SSA, observed "marked reductions in severe injuries (brain injury, hospitalizations) and savings of \$90.8 million in Medicaid expenditures over the first 5 years."³⁸

Additionally, the IIJA required the DOT to issue Final Rules requiring automatic emergency braking (AEB) for new cars and trucks. We continue to commend DOT³⁹ for its issuance of a Final Rule for cars which will protect approximately 362 lives, mitigate 24,321 non-fatal injuries and save up to \$7.2 billion annually when it takes effect. According to the Insurance Institute for Highway Safety (IIHS), AEB has the capability to reduce car front-to-rear crashes with injuries by 56 percent and large truck front-to-rear crashes by 41 percent. We continue to urge DOT to expeditiously complete the Final Rule on AEB for trucks, as well as all the safety advances mandated in the IIJA and its predecessor infrastructure reauthorization laws. These improvements will curb the physical and emotional toll on families, as well as generate a wideranging ripple effect of crash reductions resulting in less damage to infrastructure, less congestion caused by crashes, less crash related costs, and less expenditure of first responder and health care resources, among others.

Experimental Autonomous Driving Technology Remains Unproven

Currently, vehicles are being equipped with unregulated and unproven systems that perform partial driving automation as well as full driving automation including AVs and being driven on public roadways. On the release of its study, *Convenience or safety system? Crash rates of vehicles equipped with partial driving automation*, July 2024, the Insurance Institute for Highway Safety (IIHS) noted, "With no clear evidence that partial automation is preventing crashes, users and regulators alike should not confuse it for a safety feature." It is important to note that AVs

used solely for testing do not have to comply with current Federal Motor Vehicle Safety Standards (FMVSS), including those that provide occupant protection.⁴⁴ Further, companies can apply for exemptions from FMVSS.⁴⁵

Additionally, the Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence issued on October 30, 2023, notes that AI "holds extraordinary potential for both promise and peril" and "[h]arnessing AI for good and realizing its myriad benefits requires mitigating its substantial risks." The U.S. DOT must ensure proper safeguards and regulations are established for AI used in vehicle safety applications.

Numerous dangerous and troubling safety incidents involving vehicles equipped with ADS have occurred on public roads in the U.S., mostly resulting from the operations of self-driving taxis in San Francisco, California and Austin, Texas. ⁴⁶ In addition, NHTSA is currently investigating Tesla's Autopilot System, Ford's BlueCruise, and the AV operations of Waymo and Zoox. ⁴⁷ Furthermore, as of July 29, 2024, NHTSA's Standing General Order (SGO) 2021-1, which requires manufacturers to report certain crashes involving vehicles equipped with ADS or SAE Level 2 ADAS, has resulted in information collected on approximately 665 crashes involving ADS and 1,553 involving ADAS. These include 37 crashes resulting in a fatality. ⁴⁸ Moreover, millions of vehicles with partial driving automation systems have been subject to safety recalls. ⁴⁹

Many promises have been touted about AVs bringing reductions in motor vehicle crashes and resultant deaths and injuries, lowering traffic congestion and vehicle emissions, expanding mobility and accessibility, improving efficiency, and creating more equitable transportation options and opportunities.⁵⁰ However, as Transportation Secretary Buttigieg and others within the auto industry have acknowledged, these outcomes are far from certain.⁵¹ Secretary Buttigieg noted that AVs need to be held to a higher standard, "The standard should be, don't just be as good as a human driver. Be much, much better."⁵²

Some supporters of AVs often assert that these vehicles will improve roadway safety by inaccurately stating that 94 percent of crashes are due to human error pointing to a report from NHTSA as support for this misleading claim. However, the agency stated in the same document with this statistic that "[a]lthough the critical reason is an important part of the description of events leading up to the crash, it is not intended to be interpreted as the cause of the crash nor as the assignment of the fault to the driver, vehicle, or environment (*emphasis added*)."⁵³ In addition, NTSB Chair Jennifer Homendy has declared that using the statistic in such a manner is "dangerous" and "[a]t the same time it relieves everybody else of responsibility they have for improving safety, including DOT."⁵⁴ Some proponents of AVs also have claimed that these vehicles will prevent 90 percent of crash fatalities.⁵⁵ Yet, no credible research supporting such an assertion is cited.

In sharp contrast to what is happening in the U.S., other countries are taking a more calculated, careful, and cautious approach to the development of AVs.⁵⁶ Often-repeated claims about the U.S. "falling behind" other countries in the "race" for AVs are simply not true nor supported by research. For example:

• China continues to require permits or restricts operations of AVs on its roads to only those areas approved by the authorities.⁵⁷

- Germany continues to require permits, approvals, and limits areas of operation for AVs. 58
- In Japan, the introduction of Level 4 vehicles is controlled and limited to specific areas, operations, and oversight.⁵⁹
- The latest United Nations Economic Commission for Europe (UNECE) regulations limit operations to restrict risks and oversee approval through testing and other requirements.⁶⁰

In sum, no country is selling fully automated vehicles for unfettered use to the public and by many accounts, none will be for a significant amount of time. According to the most recent KPMG analysis, the U.S. ranks fourth in the world for AV readiness, while China stands at number twenty. The U.S. is not lagging other countries in allowing AVs to go to market, but we are behind in establishing comprehensive regulations to ensure public safety will not be jeopardized or diminished.

Considering the current inadequate performance of partial automation and fully autonomous technologies, it is unsurprising that the public has significant concerns. In February 2023, Advocates commissioned a public opinion poll which found that 83 percent of respondents were concerned with sharing the road with driverless cars. This number increased to 86 percent of respondents regarding driverless trucks.⁶² Yet, 64 percent of respondents indicated that their concerns would be addressed if the vehicles were required to meet minimum government standards.⁶³

Autonomous Driving Technology Policy: Protecting Public Safety Must be First and Foremost

Any federal legislation that is advanced by Congress likely will set AV policy for decades to come and must include minimum standards to improve safety on our Nation's roads before these vehicles are sold in the marketplace. In the meantime, it is essential that NHTSA continues to collect and evaluate the data obtained through the SGO involving these technologies, as well as improve the reporting requirements in the SGO as enumerated in letters from members of Congress to the U.S. DOT.⁶⁴

To identify a people-and-safety-first path forward on AVs, Advocates and numerous stakeholders developed the "AV Tenets." These sound and sensible policy positions should be a foundational part of any national AV policy. The AV Tenets are based on expert analysis, real-world experience, and public opinion. They have four main categories including: 1) prioritizing safety of all road users; 2) guaranteeing accessibility and equity; 3) preserving consumer and worker rights; and, 4) ensuring local control and sustainable transportation. They are supported by a coalition of more than 65 organizations representing consumers, public health and safety experts, pedestrians, bicyclists, disability rights activists, emergency responders, law enforcement, labor and others. Requiring that AVs meet minimum performance standards, including for cyber security, and that operations are subject to adequate oversight, including a comprehensive database accessible by vehicle identification number (VIN) with basic safety information, are fundamental prerequisites and will save lives and boost consumer confidence in this burgeoning technology.

Conclusion

Thank you again for convening this hearing and for your consideration of these issues including those which may exceed the jurisdiction of the Committee but impact all who walk, roll, bike, drive or ride in the U.S. and are critical to a comprehensive and effective solution to reducing crash costs. We look forward to working with you to improve safety for all road users on our Nation's roadways.

Sincerely,

Catherine Chase

President

cc: Members of the Committee on Banking, Housing and Urban Affairs

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