ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

April 9, 2025

The Honorable Ted Cruz, Chair
The Honorable Maria Cantwell, Ranking Member
Committee on Commerce, Science and Transportation
United States Senate
Washington, D.C. 20510

Dear Chair Cruz and Ranking Member Cantwell:

In advance of tomorrow's hearing, "If I Could Turn Back Time: Should We Lock the Clock?", to examine issues related to daylight saving time (DST), Advocates for Highway and Auto Safety (Advocates) submits this letter to underscore the persistent public health crisis of crash fatalities and injuries on our roadways. Advocates respectfully requests this letter be included in the hearing record.

Research from the Insurance Institute for Highway and Auto Safety (IIHS) finds that biannual time changes may result in fewer fatalities for certain road users at certain times of the year, yet the improvements correspond with negative impacts on other road users.[1] Considering research does not conclusively determine whether to retain or rid the U.S. from use of DST based on roadway safety outcomes, we do not have a policy position on this issue. However, we do know that solutions are available to enhance roadway safety in different lighting conditions. They should swiftly be advanced.

Enduring High Motor Vehicle Crash Fatalities and Injuries Require Urgent Intervention
On average, 112 people were killed every day on roads in the U.S., totaling just over 40,901 fatalities in 2023, the most recent final annual data from the National Highway Traffic Safety Administration (NHTSA).[2] This is a 24 percent increase in deaths in just a decade.[3] An additional 2.44 million people were injured.[4] Early estimates for 2024 were released this week as well, and find a welcome reduction in traffic fatalities to 39,345.[5] Yet, nearly 40,000 people killed on our roads is still reason for significant investments in solutions and the U.S. Department of Transportation (U.S. DOT) and its safety agencies.

To review the times of day/lighting conditions during which fatalities occurred, the latest figures available are from 2022. That year, 42,514 people were killed and 2.4 million people were injured on U.S. roads. Half of the fatalities and 28 percent of those injured were in crashes in dark conditions.[6] Moreover, 7,522 pedestrians were killed in traffic crashes, and 78 percent of those occurred in dark conditions.[7] Also in 2022, there were 1,105 pedalcyclists fatalities, and 51 percent occurred in dark conditions.[8]

The physical and emotional repercussions of motor vehicle crashes are compounded by the annual economic cost, approximately $340 billion (2019 dollars).[9] This figure equates to every person living in the U.S. essentially paying an annual "crash tax" of over $1,000. Moreover, the total value of societal harm from motor vehicle crashes in 2019, which includes loss of life, pain and decreased quality of life, was nearly $1.4 trillion.[10] When adjusted solely for inflation, this figure amounts to over $1.77 trillion.[11] Research from the Network of Employers for Traffic Safety (NETS), finds motor vehicle crashes cost employers $72.2 billion in direct crash-related expenses in 2019.[12]

Roadway deaths and injuries are not only preventable, but they also result in long-lasting impacts which often are not accounted for in statistics alone. For every single death and serious injury, there is a horrific ripple effect forever changing the lives of children, parents, friends and communities. The public is aware and rightly worried about roadway safety. In December 2024, Advocates released a public opinion poll that found 9 of 10 adults surveyed are concerned about themselves or their loved ones getting into motor vehicle crashes.[13]

Implementation and Expansion of Effective Solutions are Needed

Since our inception in 1989, Advocates' mission has been focused on pursuing proven policies to advance safe vehicles, safe roadway environments and safe road users. The Committee on Commerce, Science and Transportation advanced commonsense safety solutions in the most recent transportation reauthorization law, the bipartisan Infrastructure Investment and Jobs Act (IIJA).[14] The Safe System Approach (SSA), which is incorporated in the IIJA, undertakes a holistic method to improve safety in the roadway environment. It is "an effective way to address and mitigate the risks inherent in our enormous and complex transportation system. It works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur."[15] SSA assumes that humans will make mistakes and that we must anticipate this and make accommodations to account for limited human injury tolerances through five elements: Safe Vehicles, Safe Road Users, Safe Roads, Safe Speed and Post-Crash Care.

Federal Safety Standards Save Lives and Curb Costs

Vehicle safety standards and requirements for technology and systems are proven to prevent crash fatalities and curb costs. Research from the NHTSA has estimated that, "From 1968 through 2019, NHTSA's safety standards prevented more than 860,000 deaths on the nation's roads, 49 million nonfatal injuries, and damage to 65 million vehicles. In 2019 alone, these standards prevented about 40,000 deaths, 1.9 million nonfatal injuries, and damage to 3.8 million vehicles," and "[F]rom 1968 to 2019, the comprehensive societal benefits amounted to $17.3 trillion, using 2019 dollars. In contrast, the total costs for the 52 years combined are roughly $1 trillion."[16]

Advocates has always enthusiastically championed rulemaking for innovative vehicle safety technologies shown to prevent injuries and deaths because it is effective. These efforts include: tire pressure monitoring systems;[17] rear outboard 3-point safety belts;[18] electronic stability control;[19] rear safety belt reminder systems;[20] brake transmission interlocks;[21] safety belts on motorcoaches;[22] rear-view cameras;[23] and, safer power window switches.[24] Most recently, the IIJA directed standards for: advanced driver assistance systems (ADAS); impaired

driving prevention technology; enhanced vehicle hood and bumpers to better protect vulnerable road users; systems to address the issue of unattended children in vehicles; and, advanced head lamps, as well as potentially for driver support systems also known as driver monitoring.[25] The U.S. DOT should take swift regulatory action to keep pace with these advances and others to improve public safety.

IIHS research has demonstrated crash reductions from advanced driver assistance systems (ADAS) including:[26]

Automatic emergency braking

- ↓ 50% Front-to-rear crashes
- ↓ 56% Front-to-rear crashes with injuries
- ↓ 14% Claim rates for damage to other vehicles
- ↓ 24% Claim rates for injuries to people in other vehicles
- ↓ 41% Large truck front-to-rear crashes

Automatic emergency braking with pedestrian detection

- ↓ 27% Pedestrian crashes
- ↓ 30% Pedestrian injury crashes

Lane departure warning

- ↓ 11% Single-vehicle, sideswipe and head-on crashes
- ↓ 21% Injury crashes of the same types

Blind spot detection

- ↓ 14% Lane-change crashes
- ↓ 23% Lane-change crashes with injuries
- ↓ 7% Claim rates for damage to other vehicles
- ↓ 8% Claim rates for injuries to people in other vehicles

Rear automatic braking

- ↓ 78% Backing crashes (when combined with rearview camera and parking sensors)
- ↓ 9% Claim rates for damage to the insured vehicle
- ↓ 29% Claim rates for damage to other vehicles

Rearview cameras

- ↓ 17% Backing crashes

Rear cross-traffic alert

- ↓ 22% Backing crashes

Congress directed a requirement and performance standard for automatic emergency braking (AEB) and lane keeping assist (LKA) in the IIJA. In May 2024, U.S. DOT issued a Final Rule to require passenger vehicles be equipped with AEB that detect pedestrians in all lighting conditions.[27] NHTSA estimates that this action will save 362 lives and mitigate over 24,000 injuries annually and result in a yearly cost benefit of between $5.8-$7.2 billion.[28] U.S. DOT should issue the Final Rule for AEB in heavy vehicles and LKA in passenger vehicles. Congress should take the next step to direct AEB performance scenarios include bicycle and motorcycle rider detection and response in all lighting conditions.

Nearly 12,500 people were killed in alcohol-impaired crashes on U.S. roads in 2023 accounting for nearly a third of all fatalities.[29] Over two-thirds (68 percent) of those alcohol-impaired crash fatalities occurred in dark conditions.[30] IIHS research estimates that passive impaired driving prevention technology will save more than 10,000 lives each year, once widely deployed.[31] Congress should exercise its oversight authority to ensure the U.S. DOT advances a performance standard for the technology, as Congressionally directed, to meaningfully reduce one of the leading killers on our roadways.[32]

With 78 percent of pedestrian fatalities occurring in the dark,[33] improvements to vehicle lighting would afford drivers additional time to identify and respond accordingly to pedestrians in the roadway. Adaptive driving beam (ADB) headlights are a lighting technology which uses headlight beam modification to increase illumination of the road while avoiding glare to other traffic. While the U.S. DOT has taken action to allow use of ADB, it should improve the standard and require them.[34]

Crash avoidance technologies are also foundational building blocks for a potentially automated driving future. An autonomous vehicle (AV) will need to detect and respond to all road users, vehicles and infrastructure in the roadway environment in all lighting conditions and speeds, to monitor blind spots and take appropriate action (blind spot detection with intervention), to stay within its lane, to follow speed limits (intelligent speed assistance), and to know if the vehicle is occupied, especially if deployed as a shared system, among other responsibilities. For partial automated driving systems (ADS), the technology also will need to ensure that an alert and attentive driver is ready and able to take over at a moment's notice when the system is unable to continue the driving task.

Surface transportation reauthorization legislation has historically prioritized safety for the public traveling on our Nation's roads.[35] The current historic highs of roadway fatalities and injuries compels the next reauthorization legislation to continue this legacy. The opportunity to advance proven solutions including vehicle safety technologies and systems in the next reauthorization must be seized to keep American families safe and whole on our public roads.

Thank you for your consideration. We look forward to continuing to work with this Committee to improve safety on our nation's roadways.

Sincerely,

Catherine Chase, President

cc: Members of the U.S. Senate Committee on Commerce, Science and Transportation

[1] "Daylight saving time and fatal crashes: the impact of changing light conditions", Insurance Institute for Highway Safety (IIHS), February 2025. Available here: https://www.iihs.org/topics/bibliography/ref/2299; "Daylight saving time and motor vehicle crashes: the reduction in pedestrian and vehicle occupant fatalities", IIHS, Jan. 1995, available at https://www.iihs.org/topics/bibliography/ref/944#:~:text=During%20daylight%20saving%20time%2C%20which%20shifts%20an,been%20retained%20year%2Dround%20from%201987%20through%201991

[2] Traffic Safety Facts: Overview of Motor Vehicle Traffic Crashes In 2023, April 2025, DOT HS 813 705 .

[3] Traffic Safety Facts 2022: A Compilation of Motor Vehicle Traffic Crash Data, NHTSA, DOT HS 813 656, Dec. 2024 [Annual Report 2022]; and Traffic Safety Facts: Overview of Motor Vehicle Traffic Crashes In 2023, April 2025, DOT HS 813 705 [Overview 2023]; [comparing 2013 to 2023].

[4] Traffic Safety Facts: Overview of Motor Vehicle Traffic Crashes In 2023, April 2025, DOT HS 813 705 [Overview 2023].

[5] Early Estimate of Motor Vehicle Traffic Fatalities in 2024, DOT HS 813 710, April 2025.

[6] Traffic Safety Facts 2022: A Compilation of Motor Vehicle Traffic Crash Data, NHTSA, DOT 813 656, Dec. 2024.

[7] Traffic Safety Facts 2022 Data: Pedestrians, NHTSA, DOT HS 813 590, Jul. 2024.

[8] Traffic Safety Facts 2022 Data: Bicyclists and Other Cyclists, NHTSA, DOT HS 813 591, Jul. 2024.

[9] The Economic and Societal Impact of Motor Vehicle Crashes, 2019, NHTSA, Dec. 2022, DOT HS 813 403. (Economic and Societal Impact 2019). Note: economic costs include "lost productivity, medical, legal and court costs, emergency service, insurance administration, congestion, property damage, and workplace losses."

[10] Economic and Societal Impact 2019.

[11] CPI Inflation Calculator, BLS, available at https://www.bls.gov/data/inflation_calculator.htm, calculated from Jan. 2021 – Jan. 2025.

[12] Cost of Motor Vehicle Crashes to Employers – 2019, Network of Employers for Traffic Safety, March 2021.

[13] Online CARAVAN SURVEY, The Public is Very Concerned About Traffic Safety Even Though They Are Not Aware of the Enormity of the Deadly Toll on our Roadways (Dec. 2024). Available at: https://saferoads.org/wp-content/uploads/2024/12/Advocates-December-2024-Poll-Report-12-4-24.pdf

[14] Pub. L. 117-58 (2021).

[15] U.S. DOT, What is a Safe System Approach? Available here: https://www.transportation.gov/safe-system-approach.

[16] Fatalities, Injuries, and Crashes Prevented by Vehicle Safety Technologies and Associated FMVSS, 1968 to 2019 – Passenger Cars and LTVs, DOT HS 813 611, Dec. 2024, and Historical Analysis of Costs and Benefits of FMVSS for Passenger Cars and LTVs on a Calendar-Year Basis, DOT HS 813 647, Dec. 2024.

[17] Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Pub. L. 106-414 (Nov. 1, 2000).

[18] Anton's Law, Pub. L. 107-318 (Dec. 4, 2002).

[19] Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59 (Aug. 10, 2005).

[20] *Id.*

[21] *Id.*

[22] Moving Ahead for Progress in the 21st Century (MAP-21) Act, Pub. L. 112-141 (Jan. 3, 2012).

[23] Cameron Gulbransen Kids Transportation Safety Act of 2007, Pub. L. 110-189 (Feb. 28, 2008).

[24] *Id.*

[25] *Id.*

[26] Real-world benefits of crash avoidance technologies, IIHS, July 2023. Available here: https://www.iihs.org/media/290e24fd- a8ab-4f07-9d92-737b909a4b5e/HvQHjw/Topics/ADVANCED%20DRIVER%20ASSISTANCE/IIHS-HLDI-CA-benefits.pdf

[27] 89 FR 39686 (May 9, 2024); available at https://www.govinfo.gov/content/pkg/FR-2024-05-09/pdf/2024-09054.pdf .

[28] 89 FR 39686 (May 9, 2024); available at https://www.regulations.gov/document/NHTSA-2023-0021-1065.

[29] Traffic Safety Facts: Overview of Motor Vehicle Traffic Crashes In 2023, April 2025, DOT HS 813 705 [Overview 2023].

[30] Fatality and Injury Reporting System Tool (FIRST), NHTSA, query for Persons Killed in Fatal Crashes in 2023 by Highest Driver BAC (.08+) and Light Condition, query on Apr. 9, 2025.

[31] Alcohol and Drugs, IIHS Website, last accessed Oct. 25, 2023, available at: https://www.iihs.org/topics/alcohol-and-drugs#by-the-numbers.

[32] Traffic Safety Facts 2021: A Compilation of Motor Vehicle Traffic Crash Data, NHTSA, DOT HS 813 527, Dec. 2023, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813527

[33] Traffic Safety Facts: 2022 Data, Pedestrians, NHTSA, Jul. 2024, DOT HS 813 590, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813590.

[34] Federal Motor Vehicle Safety Standards; Lamps, Reflective Devices, and Associated Equipment, Adaptive Driving Beam Headlamps, Final Rule, NHTSA, 87 FR 9916, Feb. 22, 2022. NHTSA-2022-0013-001.

[35] Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59 (Aug. 10, 2005); Moving Ahead for Progress in the 21st Century (MAP-21) Act, Pub. L. 112-141 (Jan. 3, 2012); Fixing America's Surface Transportation Act (FAST Act), Pub. L. 114-94 (Dec. 4, 2015); Infrastructure Investment and Jobs Act, Pub. L. 117-58 (Nov. 15, 2021).