



ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

**STATEMENT OF CATHERINE CHASE
PRESIDENT
ADVOCATES FOR HIGHWAY AND AUTO SAFETY**

ON

**“SUMMER DRIVING DANGERS: EXPLORING WAYS TO PROTECT
DRIVERS AND THEIR FAMILIES”**

SUBMITTED TO THE

**UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON CONSUMER PROTECTION AND COMMERCE**

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Introduction

Advocates for Highway and Auto Safety (Advocates) is a coalition of public health, safety, and consumer organizations, insurers and insurance agents that promotes highway and auto safety through the adoption of federal and state laws, policies and regulations. Advocates is unique both in its board composition and its mission of advancing safer vehicles, safer motorists and road users, and safer roads. We respectfully request that this statement be included in the hearing record.

Deaths and Injuries on Our Nation's Roads Remain Unacceptably High

In 2017, more than 37,000 people were killed and 2.7 million were injured in motor vehicle crashes.¹ Crashes impose a financial toll of over \$800 billion in total costs to society and \$242 billion in direct economic costs, equivalent to a “crash tax” of \$784 on every American. The summer travel season can be an especially hazardous time on our Nation's roads as families depart for their annual vacation or travel over the long Memorial Day weekend. In fact, according to the National Safety Council as many as 380 people may be killed in crashes over the upcoming Memorial Day holiday period this year. This incredibly high level of carnage and expense would not be tolerated in any other mode of transportation.

Available Commonsense and Cost-Effective Solutions

While far too many lives are lost and people are injured on our Nation's roads each year, proven solutions are currently available that can help to prevent or mitigate these senseless tragedies. The National Highway Traffic Safety Administration (NHTSA) currently values each life lost in a crash at \$9.6 million. Each one of these preventable losses not only irreparably harms families and communities, but they also impose significant costs on society that can be avoided. While we are optimistic that in the future autonomous vehicles (AVs) may bring about meaningful and lasting reductions in motor vehicle crashes, that potential remains far from a near-term reality. Over the next decades, while the technology is being developed and deployed, lawmakers should require verified vehicle safety technologies in all cars. We urge your consideration of our recommendations for safety advances outlined below.

Preventing the Tragedy of a Child Being Left Unattended in a Vehicle

In 2018, at least 52 children were killed as a result of being left unattended in a vehicle or as a result of gaining access independently into an unoccupied vehicle – a record number for annual vehicular heatstroke fatalities. Since 1990, at least 889 children have been killed in these tragic and preventable circumstances.²

While leaving a child, especially an infant or toddler, in a car may seem unthinkable, scientific research and the findings of neuroscience experts show that many factors including work demands, lack of sleep or a change in routine, can lead to children being forgotten by parents, grandparents or other child care providers and catastrophic outcomes. People are not infallible; that's why reminder systems for headlights, keys, doors and regular maintenance are built into

¹ Statistics are from the U.S. Department of Transportation unless otherwise noted.

² Statistics provided by KidsAndCars.org.

vehicles. Systems are currently available that can detect the presence of a child and alert the driver that an occupant is in a rear seating position unattended. This problem will continue until such technology is placed as standard equipment in all new cars because no one believes that they would ever forget their precious child or that this situation could happen to them.

Recommendation: Congress should enact legislation that would require the U.S. Department of Transportation (U.S. DOT) to issue a final rule for all new cars to be equipped with a visual, auditory and haptic alert to detect occupants unknowingly left in vehicles.

Proven, Advanced Vehicle Technologies Should be Standard in All Vehicles

Every day on average, over 100 people are killed and 7,500 people are injured in motor vehicle crashes. Advanced vehicle technologies, also known as advanced driver-assistance systems (ADAS), can prevent and lessen the severity of crashes and should be required as standard equipment on all vehicles. These include automatic emergency braking (AEB), lane departure warning (LDW), lane keeping assist, adaptive cruise control (ACC), blind spot detection (BSD), rear AEB and rear cross traffic alert. The Insurance Institute for Highway Safety (IIHS) has found that AEB can decrease front-to-rear crashes with injuries by 56 percent, LDW can reduce single-vehicle, sideswipe and head-on injury crashes by over 20 percent, and BSD can diminish injury crashes from lane change by nearly 25 percent. However, these safety systems are often sold as part of an additional, expensive trim package along with other non-safety features, or included only in high end models or vehicles. Moreover, there are currently no minimum performance standards to ensure they perform as expected. Additionally, the IIHS has found that while nighttime visibility is essential for safety, few vehicles are equipped with headlights that perform well.

On the path to AVs, requiring minimum performance standards for these building block technologies will ensure the safety of motorists in vehicles and all roads users sharing the driving environment with them, and build consumer confidence in the capabilities of the technologies.

Recommendation: Advanced vehicle technologies that have proven to be effective at preventing and mitigating crashes should be standard equipment with minimum performance standards and Federal Motor Vehicle Safety Standard (FMVSS) 108 should be upgraded to improve headlight performance.

Crash Data Must be Collected and Available

At a minimum, data reflecting the performance of the vehicle including how the safety systems perform in a crash should be collected, recorded, accessible, and shared with appropriate federal agencies and researchers so that safety-critical problems can be identified. Currently, vehicles are not required to be equipped with an event data recorder (EDR). While there is a requirement for what data voluntarily-installed EDRs must capture, this information is insufficient to properly ascertain facts about crashes, especially as vehicles become more highly automated.

Recommendation: Essential data documenting a vehicle's performance in a crash should be collected, recorded, accessible, and shared with appropriate federal agencies and researchers in order to identify safety-critical problems. EDRs must be mandated for all

vehicles and required to collect sufficient, standardized information to aid investigators and regulators in assessing performance, including for AVs.

Vulnerable Road Users Must be Protected

Deaths and injuries of pedestrians and bicyclists remain unacceptably high. In fact, in 2016, pedestrian and bicyclist fatalities hit their highest levels in nearly 30 years. Vehicles can be designed, specifically in the front end, to reduce the severity of impacts with pedestrians and/or bicyclists. Additionally, collision avoidance systems for pedestrians, like advanced AEB, have promise to further reduce deaths and injuries. Advocates continues to monitor research on the effectiveness of these systems and will support data-driven solutions to crashes involving vulnerable road users. Moreover, the New Car Assessment Program (NCAP) must be updated to include pedestrian crashworthiness and pedestrian crash avoidance, among other improvements. Upgrades to infrastructure could also offer pedestrians and bicyclists better protection to reduce the occurrence and severity of crashes.

Recommendation: NHTSA should be directed to issue a standard for improved vehicle designs to reduce the severity of impacts with vulnerable road users. In addition, NCAP must be updated to include pedestrian crashworthiness and pedestrian crash avoidance, among other issues.

Improving Safety for Older Americans

In 2017, over 6,500 people age 65 and older were killed in traffic crashes – representing 18 percent of all traffic fatalities. Advocates has developed federal legislative proposals addressing both human factors and vehicle design issues to improve the safety of older adults. These recommendations include development of a crash test dummy representative of older occupants, revising NCAP to include a “Silver Car Rating”, and modifying the injury criteria used in crash tests to address the specific injury patterns suffered by older occupants. Additionally, Advocates supported the mandate that hybrid and electric vehicles be manufactured to make sounds when operating at speeds below 18 miles per hour in order to enable child and adult pedestrians and bicyclists, especially those with visual-impairments and older adults, to identify the presence and movement of these very quiet vehicles. This final rule was issued in December 2016 and compliance is required by September 2020.

Recommendation: NHTSA should be required to develop a crash test dummy representative of older occupants, revise NCAP to include a “Silver Car Rating”, and modify injury criteria used in crash tests to address the specific injury patterns suffered by older occupants.

The Epidemic of Distracted Driving Must be Addressed

In 2017, crashes involving a distracted driver claimed 3,166 lives. Crashes in which at least one driver was identified as being distracted impose an annual economic cost of \$40 billion dollars, based on 2010 data. Issues with underreporting crashes involving cell phones remain because of differences in police crash reporting, database limitations, and other challenges. It is clear from an increasing body of safety research, studies and data that the use of wireless electronic devices

for communications (such as mobile phones and text messaging), telematics and entertainment can readily distract drivers from the driving task.

Numerous devices and applications, which pose a substantial risk for distracted driving, are being built into motor vehicles. Yet, NHTSA has merely issued non-binding guidelines which recommend, but do not require, that clearly unsafe electronic devices should not be installed in vehicles. This does not prohibit manufacturers from installing electronic communications devices that have highly distracting features and will not prevent manufacturers from disregarding the agency guidelines.

Recommendation: NHTSA should issue regulations to strictly limit the use of electronic communication and information features that can be operated while driving, and to prohibit the use of those features that cannot be conducted safely while driving. Additionally, improvements to the incentive grant program are needed to encourage states to pass strong safety laws and qualify for money to undertake efforts to combat distracted driving. Congress should pass the SAFE TO DRIVE Act, HR 2416, which would add opportunities for states to improve distracted driving laws and qualify for distracted driving incentive grant awards.

Impaired Drivers Must be Kept Off the Roads

On average, an alcohol-impaired driving fatality occurs every 48 minutes on America's streets. In 2017, 10,874 people were killed in crashes involving a drunk driver, accounting for nearly a third of all traffic fatalities. The National Transportation Safety Board (NTSB) has consistently listed ending impaired driving on their Most Wanted List of Transportation Safety Improvements, including the 2019-2020 list released earlier this year. Moreover, when drug and alcohol use are combined, known as "polyuse", the effects of impairment for a driver can be amplified.

Recommendation: Congress should direct the U.S. DOT to take a number of actions that would curb impaired driving. Specifically, they should issue a minimum standard requiring all new vehicles to be equipped with passive sensor technology that prevents a vehicle from moving if the blood alcohol content (BAC) of the driver is above a certain level. Additionally, states should be incentivized to lower the BAC while driving limit to 0.05 percent or lower. Moreover, 17 states still do not have a lifesaving law requiring ignition interlock devices (IIDs) for all offenders. States that do not yet have this vital law should be required to enact it by a date certain or face a sanction.

Connected Vehicle Technology has the Potential to Offer Added Safety Benefits

Connected vehicle technologies allow a vehicle to send and receive communications with other vehicles (vehicle-to-vehicle (V2V)) and the infrastructure (vehicle-to-infrastructure (V2I)). These messages can relay information ranging from the relative location and direction of motion of other vehicles to warning messages that traffic lights are about to change or weather conditions are soon to be encountered. These systems will likely help fill in gaps in the performance of AVs. For instance, V2V communication can provide safety applications for ADAS such as Left Turn Assist (LTA) and Forward Collision Warning (FCW). LTA warns

drivers to the presence of oncoming, opposite-direction traffic when attempting a left turn. FCW warns drivers of stopped, slowing or slower vehicles ahead.

Recommendation: In 2017, NHTSA issued a Notice of Proposed Rulemaking to require V2V technology. However, despite the identified safety benefits of V2V technology, this rule is languishing at the U.S. DOT. NHTSA should be directed to complete this rulemaking by a date certain.

Safety Standards are Necessary for Keyless Ignition Systems

Keyless ignition vehicles present certain safety risks including carbon monoxide poisoning and vehicle rollaway. As more vehicles that are equipped with keyless ignitions are sold, prevalence of the dangers from problems associated with them is increasing.

Recommendation: Congress should pass the PARK IT Act (S. 543), which would require NHTSA to issue standards for keyless ignition vehicles including an automatic shutoff and preventing a vehicle from rolling away.

NHTSA Must be Sufficiently Funded and Given Additional Authorities

Ensuring NHTSA has adequate resources, funds and staff is a crucial priority. In recent years, millions of motor vehicles have been recalled for serious and sometimes fatal safety defects including faulty GM ignition switches and exploding Takata airbags. Nonetheless, used cars can still be sold and leased with open recalls – a significant loophole that should be closed. NHTSA must also have the ability to take immediate action when the agency determines that a defect involves a condition that substantially increases the likelihood of serious injury or death if not remedied immediately. Further, NHTSA must also be given the authority to pursue criminal penalties in appropriate cases where corporate officers who acquire actual knowledge of a serious product danger that could lead to serious injury or death and knowingly and willfully fail to inform NHTSA and warn the public.

Recommendation: Considering the unacceptably high number of fatalities and injuries on our Nation’s roads, the prevalence of recalls, and the new responsibilities incumbent upon the U.S. DOT as AVs are developed and deployed, NHTSA must have additional resources and authorities to effectively oversee vehicle safety.

Commonsense Regulation of Experimental Driverless Car Technology is Essential

Autonomous vehicles (AVs), also known as driverless cars, are being developed and tested on public roads without sufficient safeguards to protect both those within the AVs and everyone sharing the roadways with them without consent. Numerous public opinion polls show a high skepticism and fear about the technology, and for good reason. At least six crashes resulting in four fatalities have occurred in the U.S. involving cars equipped with autonomous technology that are being investigated by the NTSB.

While AVs have tremendous promise to meaningfully reduce traffic crashes, fatalities and injuries once they are proven to be safe, they must be subject to minimum performance standards set by the U.S. DOT. These standards should include, but not be limited to, cybersecurity,

vehicle electronics, driver engagement for AVs that require a human driver to take over at any point, and a “vision test” for driverless cars to ensure they can properly detect and respond to their surroundings. Additionally, minimum performance requirements and protections will be especially critical as autonomous systems are deployed in commercial motor vehicles. Additionally, although AVs may increase access to mobility in the future, the varying needs of diverse disability communities, such as wheelchair users, must be addressed and safety must be ensured.

The recent crashes involving the Boeing 737 MAX airplane tragically highlight the catastrophic results that can occur when automated technology potentially malfunctions and is not subject to thorough oversight. Reports have indicated that many aspects of the plane’s certification were delegated to Boeing. In addition, safety systems that could have assisted the pilots were not required as standard equipment. Lastly, both planes were being operated by experienced pilots that had extensive training. Yet, there are no federal training requirements for individuals testing or operating automated vehicle technology or for the consumers who purchase these vehicles and are using them on public roads.

Along with sensible regulations for AVs, consumers must be given essential information about the limitations and capabilities of the technology in the owner’s manual and at the point of sale, as well as via a public website searchable by the vehicle identification number (VIN) that includes, at a minimum, vehicle information such as any exemptions from federal safety standards and the AV’s operational design domain (ODD).

Recommendation: AVs must be subject to minimum performance standards set by the U.S. DOT including for cybersecurity, vehicle electronics, driver engagement for AVs that require a human driver to take over at any point, and a “vision test” for driverless cars to ensure they can properly detect and respond to their surroundings. In addition, consumers must be given essential information about the specific limitations and capabilities of AVs in the owner’s manual and at the point of sale, as well as via a public website searchable by VIN.

Conclusion

America’s roads are needlessly dangerous. Far too many lives are lost and serious injuries sustained in crashes each year especially considering commonsense solutions are available. Advocates’ recommendations enumerated above can help to drastically improve the safety of all road users. With leadership and action from this Committee, these measures can be implemented and lives can be saved.