



ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

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**Impaired Driving Technologies
Request for Information
85 Federal Register 71987, November 12, 2020**

Advocates for Highway and Auto Safety (Advocates) files these comments in response to the National Highway Traffic Safety Administration's (NHTSA, Agency) request for information (RFI) regarding available or late-stage technology under development that prevent impaired driving.¹ While Advocates is supportive of NHTSA seeking such information, the Agency immediately must undertake more meaningful actions to reduce the scourge of impaired driving including requiring advanced impaired driving prevention technology in all new vehicles.

Advocates Consistently Promotes Proven Technology to Save Lives and Prevent Injuries

Advocates always has enthusiastically championed proven vehicle safety technology and for good reason -- it is one of the most effective strategies for preventing deaths and injuries. NHTSA has estimated that between 1960 and 2012, over 600,000 lives have been saved by motor vehicle safety technologies.² In 1991, Advocates led the coalition that supported enactment of the bipartisan Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991³ 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.⁴

Advocates continued to build on this success by supporting additional proven lifesaving technologies as standard equipment in all vehicles in other federal legislation and regulatory proposals. These efforts include: tire pressure monitoring systems;⁵ rear outboard 3-point safety

¹ 85 FR 71987 (Nov. 12, 2020).

² Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2012, DOT HS 812 069 (NHTSA, 2015); See also, NHTSA AV Policy, Executive Summary, p. 5 endnote 1.

³ Pub. L. 102-240 (Dec. 18, 1991).

⁴ Traffic Safety Facts 2018, A Compilation of Motor Vehicle Crash Data, DOT HS 812 981, NHTSA (Nov. 2020).

⁵ Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act, Pub. L. 106-414 (Nov. 1, 2000).

belts;⁶ electronic stability control;⁷ rear safety belt reminder systems;⁸ brake transmission interlocks;⁹ safety belts on motorcoaches;¹⁰ electronic logging devices for commercial motor vehicles (CMVs)¹¹; and, rear-view cameras.¹²

Further, Advocates has been a leading safety voice in the fight against alcohol-impaired driving. Our organization supported the development of breathalyzer technology which is essential to enforcement of impaired driving laws and keeping drunk drivers off the road. Additionally, together with Mothers Against Drunk Driving (MADD), Advocates was a leading supporter in federal and state efforts to reduce blood alcohol content (BAC) laws from .10 to .08 percent and achieve a national law.¹³ Lastly, Advocates has long supported a .05 percent BAC threshold for drunk driving and the enactment of all-offender ignition interlock device (IID), child endangerment and open container laws.¹⁴

Motor Vehicle Deaths Remain Unacceptably High and Impaired Driving is a Significant Threat to Public Safety

The carnage and expense borne from crashes on our roadways are unacceptable. The United States Department of Transportation (U.S. DOT) indicates that in 2019, there were 36,096 fatalities due to traffic crashes.¹⁵ That same year 10,710 people died in crashes involving impaired driving across the Nation.¹⁶ According to NHTSA, the estimated economic cost of all alcohol-impaired crashes in the United States in 2010 (the most recent year for which cost data is available) was \$44 billion.¹⁷ When inflation rates are factored into this figure, the annual cost is \$55.5 billion. Recognizing the serious danger posed to the public by drunk drivers, the National Transportation Safety Board (NTSB) included ending alcohol and other drug impairment in its 2019-2020 Most Wanted List of Transportation Safety Improvements.¹⁸ In addition, the Centers for Disease Control and Prevention (CDC) has decried the human and financial costs associated with impaired driving noting several commonsense preventative measures including the implementation of ignition interlock devices (IIDs).¹⁹

The positive news is that the number of lives lost to drunk driving has decreased from previous decades thanks to the enactment of strong laws, more effective enforcement, and the hard work and passion of dedicated federal and state elected officials, MADD, Advocates and numerous

⁶ Anton's Law, Pub. L. 107-318 (Dec. 4, 2002).

⁷ Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59 (Aug. 10, 2005).

⁸ *Id.*

⁹ *Id.*

¹⁰ Moving Ahead for Progress in the 21st Century (MAP-21) Act, Pub. L. 112-141 (Jan. 3, 2012).

¹¹ *Id.*

¹² Cameron Gulbransen Kids Transportation Safety Act of 2007, Pub. L. 110-189 (Feb. 28, 2008).

¹³ Department of Transportation and Related Agencies Appropriations, 2001. Pub. L. 106-346 (Oct. 23, 2000).

¹⁴ Advocates for Highway and Auto Safety, 2020 Roadmap of State Highway Safety Laws (Jan. 2020).

¹⁵ Traffic Safety Facts: Research note; Overview of Motor Vehicle Crashes NHTSA, Dec. 2020, DOT HS 813 060.

¹⁶ *Id.*

¹⁷ Traffic Safety Facts: 2018 Data; Alcohol-Impaired Driving, NHTSA, Dec. 2019, DOT HS 812 864.

¹⁸ NTSB, 2019-2020 Most Wanted List of Transportation Safety Improvements.

¹⁹ Centers for Disease Control, Transportation Safety, Impaired Driving, available at: https://www.cdc.gov/transportationsafety/impaired_driving/impaired-drv_factsheet.html

other public health, safety and law enforcement organizations. Nonetheless, far too many people are still being killed in impaired driving crashes. In fact, since the mid-1990s, the percentage of drunk driving fatalities has plateaued indicating that progress has stagnated and at times, even reversed.²⁰

Technology Can Prevent Impaired Driving Crashes

Solutions to meaningfully reduce the incidence of impaired driving and the resulting fatalities, injuries and costs include technology such as IIDs and other systems including sensing and monitoring technology. These systems can help identify impairment and prevent vehicles from being operated by an individual who is intoxicated from alcohol. Laws requiring all convicted drunk drivers to use an IID have been shown to be effective. For example, an IIHS study on the effects of Washington's interlock requirement found that the law was associated with an 8.3 percent reduction in single-vehicle late-night crash risk, suggesting a general deterrent effect of the expanded interlock requirement.²¹ Advocates supports a federal sanction on states that fail to enact an all-offender IID law, such as the withholding of a portion of a state's federal highway construction funds.

The further development of touch-based and/or passive breath sensor technology that detects if a driver is alcohol intoxicated also holds tremendous potential to help reduce impaired driving crashes. In fact, last summer the Insurance Institute for Highway Safety (IIHS) released research showing that impairment detection systems could save upwards of 9,000 lives each year.²² Regrettably, these technologies are not required as standard equipment.

Despite considerable research funded in large part by tens of millions of dollars of taxpayer funding over more than decade into developing the Driver Alcohol Detection System for Safety, known as DADSS, the auto industry continues to slow-walk installing this technology into vehicles.²³ In fact, according to the Congressional testimony of the Automotive Coalition for Traffic Safety (ACTS) in March of 2019, the systems being developed will not be ready to be installed into private vehicles until 2023 or 2024 at the earliest and has only been installed in four test vehicles.²⁴ As a frame of reference for how miniscule this number is, the auto industry sold over 17 million vehicles in 2019.²⁵

The problem of impaired driving is far from a new issue for automobile manufacturers. In fact, the industry has been working on a technological solution to drunk driving since at least the

²⁰ National Academies of Science, Engineering and Medicine, Getting To Zero Alcohol-Impaired Driving Fatalities .05% BAC Safety Brief, 2018.

²¹ Insurance Institute for Highway Safety, Interlocks cut alcohol-related crash deaths (May. 24, 2016).

²² Insurance Institute for Highway Safety, Alcohol-detection systems could prevent more than a fourth of U.S. road fatalities (Jul. 23, 2020).

²³ 23 USC 403(h); *See also*: Pub. L. 114-94 (2015); Pub. L. 112-141 (2012); Pub. L. 109-59 (2005).

²⁴ Enhancing Vehicle Technology to Prevent Drunk Driving, Hearing before Subcommittee on Consumer Protection and Commerce of the Energy and Commerce Committee, 116th Cong. (2019) (Testimony of Robert Strassburger); *See also*: <https://www.dadss.org/virginia/>. ACTS has indicated that additional federal funding could accelerate this timeframe.

²⁵ Michael Martinez, U.S. sales fall in 2019 but still top 17 million, Automotive News (Jan. 6, 2020).

1970s.²⁶ In 2007, a major manufacturer announced it was developing an alcohol detection system, but over a decade later the technology is still not in vehicles.²⁷ This tortured history, replete with the preventable fatalities of 10,000 people per year on average, demonstrates that a system to prevent impaired driving will not be in all vehicles until NHTSA issues a federal standard requiring such action. It is exceedingly past time that the Agency and the Automotive Coalition for Traffic Safety (ACTS) transfer this technology into vehicles without any further delay.

Moreover, other systems can identify impairment through varying means and show great promise. Specifically, technology for driver monitoring, eye tracking, hands-on-the-wheel detection, and other indicators is already being developed, and even installed by some manufacturers, to target many key crash causes such as impairment, distraction, and drowsy driving.²⁸ In fact, a feature that recently appeared in *MADDvocate*, “*Tragedy Inspires a New Direction for Advanced Drunk Driving Prevention Technology*,” recounted information from industry sources that “the technology has been available for six or seven years. But,...will only become available if the government mandates it.”²⁹

It is egregious and unacceptable that this requirement that could save thousands of lives each year languishes. While automakers have been spending millions of federal dollars on the development of DADSS, that sum is a pittance compared to the billions of dollars the industry has spent and continues to spend on developing unproven driverless cars.³⁰ In short, the DADSS program is a prime example of withholding a technological vaccine that could virtually eradicate impaired driving. It is of urgent import that the Agency, whose mission is to save lives, prevent injuries, and reduce economic costs due to road traffic crashes, take immediate action to require advanced impaired driving prevention technology in all new cars with a minimum performance standard.³¹ With each passing hour, another person is killed in an alcohol-impaired driving fatality, on average.³²

Additional Advanced Vehicle Technologies are Available Now that Can Prevent Impaired Driving Crashes

Research conducted by IIHS has demonstrated that current advanced driver assistance systems (ADAS), such as automatic emergency braking (AEB), lane departure warning and blind spot

²⁶ Thomas A. DeMauro, A GM onboard experimental alcohol and drug impairment detection device of the 1970s, Hemmings (Jan. 16, 2019).

²⁷ Associated Press, Toyota creating alcohol detection system (Jun. 3, 2007).

²⁸ Andrew J. Hawkins, Volvo will use in-car cameras to combat drunk and distracted driving, *The Verge* (Mar. 20, 2019); Christian Wardlaw, How Subaru’s Driver Focus Works, *Kelley Blue Book* (Sep. 25, 2020); Lexus Introduces World’s First Driver Monitoring System, *Bloomberg* (Sep. 7, 2007). Additional automakers are introducing driver monitoring systems as part of SAE level 2 and 3 automated driving systems.

²⁹ MADD, *MADDvocate*, Fight For a Future of No More Victims, pg. 10 (Dec. 2020).

³⁰ Erin Griffith, G.M.’s Cruise Unveils a Self-Driving Car. Don’t Look for It on Roads, *N.Y. Times* (Jan. 22, 2020); Matt McFarland, Ford just invested \$1 billion in self-driving cars, *CNN Business* (Feb. 20, 2017).

³¹ NHTSA.gov; *See also* Pub. L. 91-605 (1970).

³² National Center for Statistics and Analysis. (2019, December). Alcohol impaired driving: 2018 data (Traffic Safety Facts. Report No. DOT HS 812 864). Washington, DC: National Highway Traffic Safety Administration.

detection, have safety benefits by reducing crashes.³³ Yet, none of these systems are required to be standard equipment on all new vehicles. In fact, many of these technologies are offered on only the most expensive models or as part of costly luxury packages that include non-safety “bells and whistles” items. Thus, many consumers are not afforded the lifesaving benefits of this safety equipment. Moreover, the average age of a vehicle on roads in the U.S. is nearly 12 years, meaning significant fleet penetration of new technology takes a significant amount of time.³⁴ As such, NHTSA should issue minimum performance standards for ADAS technology and require them on all new vehicles without further delay. These technologies can address a number of the conditions leading to crashes regardless of driver impairment levels and can help address some of the impaired driving collisions until such time as the systems noted above are in all vehicles.

Conclusion

Our Nation loses far too many lives due to drunk drivers each year at a cost to society of \$44 billion.³⁵ NHTSA must take substantive immediate action to help prevent these senseless tragedies by requiring advanced impaired driving prevention technology subject to a minimum performance standard in all new vehicles.



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³³ IIHS, Real-world benefits of crash avoidance technologies (May 2018).

³⁴ Colin Beresford, Average Age of Vehicles on the Road is Approaching 12 Years, Car and Driver (Jul. 29, 2020).

³⁵ Traffic Safety Facts: 2018 Data; Alcohol-Impaired Driving, NHTSA, Dec. 2019, DOT HS 812 864.