



ADVOCATES
FOR HIGHWAY
& AUTO SAFETY

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**Incident Reporting for Automated Driving Systems (ADS) and
Level 2 Advanced Driver Assistance Systems (ADAS)
Agency Information Collection Activities; Notice and Request for Comments
86 Federal Register 54287, September 30, 2021**

Advocates for Highway and Auto Safety (Advocates) files these comments in response to the National Highway Traffic Safety Administration's (NHTSA, agency) request for public comments on the agency's intention to request an extension of information collection activities associated with Standing General Order 2021-01 (General Order).¹ Under the General Order, entities are required to report certain crashes involving vehicles equipped with Automated Driving Systems (ADS) and Level 2 Advanced Driver Assistance Systems (ADAS).² The General Order will provide the agency with the data necessary to determine the safety of these vehicle technologies. As such, Advocates supports NHTSA seeking approval from the Office of Management and Budget (OMB) for an extension of the previous authorization to collect the data required by the General Order.

Motor Vehicle Deaths Remain Unacceptably High and are on the Uptick

According to NHTSA, 36,096 people were killed and an estimated 2.74 million more were injured in traffic crashes in 2019.³ In addition, recent data shows a deadly upward trend in traffic fatalities with projected increases in 2020 and the first quarter of 2021, despite vehicle miles traveled being down since 2019. The NHTSA currently values each life lost in a crash at \$11.6 million.⁴ The crashes, injuries, and fatalities impose a financial burden of well over \$800 billion in total costs to society -- \$242 billion of which are direct economic costs, equivalent to a "crash

¹ 86 FR 52487 (Sep. 30, 2021).

² *Id.*

³ National Center for Statistics and Analysis. (2021, August). Traffic safety facts 2019: A compilation of motor vehicle crash data (Report No. DOT HS 813 141). National Highway Traffic Safety Administration.

⁴ John Putnam, US DOT Deputy General Counsel, Guidance on the Treatment of the Economic Value of a Statistical Life (VSL) in U.S. Department of Transportation Analyses – 2021 Update.

tax” of \$784 on every person living in the U.S.⁵ When adjusted solely for inflation, total costs reach nearly a trillion dollars annually. In 2018, crashes alone cost employers \$72.2 billion.⁶

In the future, vehicles equipped with ADS, including passenger vehicles and commercial motor vehicles, may bring about meaningful and lasting reductions in crashes. However, that potential remains far from a near-term certainty or reality. In the interim, NHTSA should be focusing on verified safety systems currently available that can prevent or mitigate the crashes that occur each year on our streets and highways that cause too many needless deaths and injuries. As the agency has stated, “[t]he prevalence of automotive crashes in the United States underscores the urgency to develop and deploy lifesaving technologies that can dramatically decrease the number of fatalities and injuries on our Nation’s roadways.”⁷ NHTSA estimated in 2015 that since 1960, more than 600,000 lives have been saved by motor vehicle safety technologies such as seatbelts, airbags, child seats, and electronic stability control.⁸ Furthermore, the National Transportation Safety Board (NTSB) has included increasing implementation of collision avoidance technologies in its Most Wanted Lists of Transportation Safety Improvements since 2016.⁹

Currently available proven collision avoidance systems include automatic emergency braking (AEB), lane departure warning (LDW), 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;
- BSD can diminish injury crashes involving lane changes by 23 percent;
- Rear AEB can reduce backing crashes by 78 percent when combined with rearview camera and parking sensors; and,
- Rear cross-traffic alert can reduce backing crashes by 22 percent.¹⁰

These crash avoidance safety systems are often sold as part of an additional, expensive trim package along with other non-safety features or included as standard equipment only in high end models or vehicles. In fact, a June 2021 report from Consumer Reports (CR) found an astounding upcharge of more than \$16,000 for AEB with pedestrian detection in the second most popular vehicle sold in the U.S.¹¹ This inordinate charge, putting these safety technologies out of reach for most families’ budgets, underscores the need for NHTSA to require them as standard equipment in all new vehicles. Moreover, the NHTSA must implement minimum performance standards to ensure these technologies function as expected and needed.

⁵ “The Economic and Societal Impact of Motor Vehicle Crashes, 2010,” NHTSA (2015).

⁶ Cost of Motor Vehicle Crashes to Employers 2019, Network of Employers for Traffic Safety, March 2021.

⁷ 85 FR 39976 (Jul. 2, 2020).

⁸ Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2012, DOT HS 812 069 (NHTSA, 2015).

⁹ NTSB Most Wanted List Archives, https://ntsb.gov/safety/mwl/Pages/mwl_archive.aspx.

¹⁰ IIHS, Real world benefits of crash avoidance technologies, available at: <https://www.iihs.org/media/259e5bbd-f859-42a7-bd54-3888f7a2d3ef/e9boUQ/Topics/ADVANCED%20DRIVER%20ASSISTANCE/IIHS-real-world-CA-benefits.pdf>.

¹¹ Douglas, E., A High Price on Safety, Consumer Reports (Jun. 1, 2020). Preston, B., Lawmakers Should Require Proven Safety Systems on All New Cars, Consumer Reports (Jun. 29, 2020).

Voluntary Initiatives Fail to Adequately Advance Safety Goals

The General Order is critical for public safety because voluntary industry agreements and agency undertakings have consistently been demonstrated to be insufficient. For example, the first edition of the AV Guidelines issued by the U.S. Department of Transportation (U.S. DOT) encouraged the submission of voluntary safety self-assessment (VSSA) reports and the subsequent three editions have not altered this process.¹² Despite the fact that approximately 80 entities are testing AV technology,¹³ just under 30 reports have been filed with U.S. DOT since the first Guidelines were released in 2016.¹⁴ Moreover, the U.S. DOT failed to implement standard requirements for the information to be provided in the VSSA. The end result has been manufacturers submitting incomplete, uninformative and sometimes outdated glossy, marketing-style brochures with little, if any, substantive or relevant information from which to ascertain critical and reliable information about safety and performance.

Another example of the defectiveness and failures of voluntary agreements is the March 2016 pact among 20 automakers to have AEB in most new light vehicles as standard equipment by 2023. As of December 2021, two manufacturers, which account for nearly a third of the U.S. auto market, demonstrate this lackluster response to the detriment of public safety. Only 58 percent of General Motors vehicles and 43 percent of Fiat Chrysler vehicles were sold with AEB between September 1, 2020 through August 31, 2021. Moreover, the performance requirements in the agreement are exceptionally weak and consequently can result in these systems not performing as well as they should.

The most recent voluntary agreement was announced by the auto industry in September 2019 to put inadequate technology to prevent hot car deaths of children into cars by 2025. Once again, this type of a pact unnecessarily prolongs the timeline to get effective equipment into new cars which is available at a very minimal cost.¹⁵ In fact, General Motors announced it would equip its new cars with technology that “can detect motion as subtle as the breathing of an infant sleeping in a rear-facing child safety seat” in 2001 with the intent to begin rollout in 2004.¹⁶ This technology was never installed. The 2019 voluntary agreement harkens back to that empty and unfulfilled promise while children continue to needlessly die or sustain serious injuries. The agreement also failed to include the vitally important component that the systems must detect

¹² U.S. DOT, Federal Automated Vehicles Policy (Sept. 2016); Automated Driving Systems: A Vision for Safety 2.0 (Sep. 12, 2017); Preparing for the Future of Transportation: Automated Vehicles 3.0 (Oct. 4, 2018); Ensuring American Leadership in Automated Vehicle Technologies: Automated Vehicles 4.0 (Jan. 8, 2020).

¹³ Brookings Institution, Autonomous cars: Science, technology, and policy (Jul. 25, 2019).

¹⁴ NHTSA, Safety Self-Assessments, available at: <https://www.nhtsa.gov/automated-driving-systems/voluntary-safety-self-assessment> (accessed Aug. 11, 2020).

¹⁵ Members of Congress, Safety Advocates and Grieving Parents Call for Technology Solutions to End Hot Car Tragedies as Fatalities Continue, Jul. 28, 2020, available at <https://conta.cc/30Sdt2w>.

¹⁶ General Motors News Release, “General Motors Announces Important New Technology to Help Save Children Trapped in Hot Cars,” (April 26, 2001).

and alert to the presence of children who have been unknowingly left in or gained access to hot cars.¹⁷

The common thread among all these voluntary initiatives is that at any time, any or all automakers can decide to no longer comply with the agreement or partially comply in whatever capacity they desire without any ramifications, underscoring the importance and benefit of regulatory action by the NHTSA such as the General Order.

The General Order Will Enable NHTSA to Fulfill its Statutory Obligation to Protect Public Safety

Vehicles equipped with Level 2 ADAS and ADS already have been involved in crashes resulting in multiple fatalities and serious injuries as the agency states in the current notice.¹⁸ In addition, NHTSA indicates that it believes the frequency of these types of crashes will increase.¹⁹ The General Order will provide the agency with invaluable data to properly assess the on-road performance of these technologies. This type of unique information can help the agency identify common problems or systematic issues with certain vehicles and/or equipment.²⁰ Moreover, the reporting requirements of the General Order are narrowly tailored so that the agency can collect the appropriate data necessary as they are limited to crashes involving fatalities, injuries requiring transportation to a hospital, substantial damage to the vehicle, air bag deployment or an incident involving a vulnerable road user. Lastly, NHTSA must have data from an extended period of time in order to obtain sufficient information to properly regulate these systems. Thus, the agency's request for an extension from six months to three years of the previous information collection approval granted by OMB should be granted.

Conclusion

Advocates supports NHTSA continuing to collect crash data on Level 2 ADAS and ADS through the General Order to determine if these technologies pose an unreasonable risk to the public as serious crashes have already occurred involving these systems.

Sincerely,



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¹⁷ Auto Alliance Driving Innovation and Global Automakers, Helping to Combat Child Heatstroke, Automakers Commit to Introducing New Vehicles with Rear Seat Reminder Systems (Sept. 4, 2019).

¹⁸ 86 FR 54287, 54288.

¹⁹ *Id.*

²⁰ *Id.*