



November 29, 2021

Office of the Administrator
c/o Steven Cliff, Deputy Administrator
National Highway Traffic Safety Administration (NHTSA)
Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue SE
West Building, Ground Floor, Room W12-140
Washington, DC 20590-0001

Submitted electronically via www.regulations.gov

Re: Agency Information Collection Activities; Notice and Request for Comment; Incident Reporting for Automated Driving Systems (ADS) and Level 2 Advanced Driver Assistance Systems (ADAS), Docket No. NHTSA-2021-0070.

Thank you for the opportunity to provide comments on NHTSA’s request for an extension of the information collection for incident reporting requirements for Automated Driving Systems (ADS) and Level 2 Advanced Driver Assistance Systems (ADAS).¹ The Center for Auto Safety (CAS), founded in 1970, is an independent, member supported, non-profit consumer advocacy organization dedicated to improving vehicle safety, quality, and fuel economy. In 2020, we celebrated 50 years of advocacy for automotive safety and consumer protection.

NHTSA’s Standing General Order 2021-01, (SGO) first issued on June 29, 2021, and amended effective August 12, 2021, requires each vehicle and equipment manufacturer and operator of vehicles with ADS or Level 2 ADAS to report specified information about certain safety-related incidents involving vehicles (including prototype vehicles) operating on publicly accessible roads using ADS or Level 2 ADAS. As NHTSA noted upon issuing the SGO, its primary purpose is to “... evaluate whether specific manufacturers (including manufacturers of prototype vehicles and equipment) are meeting their statutory obligations to ensure that their vehicles and equipment are free of defects that pose an unreasonable risk to motor vehicle safety, or are recalled if such a safety defect is identified.”² The SGO, however, was issued with a limited effective terminal date of three (3) years after June 29, 2021, the date Standing General Order 2021-01 was first issued. CAS supports NHTSA’s request for extension of data collection pursuant to the SGO.

¹Agency Information Collection Activities; Notice and Request for Comment; Incident Reporting for Automated Driving Systems (ADS) and Level 2 Advanced Driver Assistance Systems (ADAS), 86 FR 54287, September 30, 2021, <https://www.federalregister.gov/documents/2021/09/30/2021-21203/agency-information-collection-activities-notice-and-request-for-comment-incident-reporting-for>

² First Amended) Standing General Order 2021-01), Incident Reporting for Automated Driving Systems (ADS) and Level 2 Advanced Driver Assistance Systems (ADAS), https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-08/First_Amended_SGO_2021_01_Final.pdf

CAS also urges immediate public release of SGO information collected to date. The public has a right to know if vehicles on our roads pose a risk to vulnerable road users (VRUs), other vehicles, or property. The full text of public information included in incident reports should be promptly released to the public, as well as the results of subsequent investigations conducted by NHTSA ideally in a searchable database. Future incident reports and any subsequent investigations should also be released to the public without delay. Avoidable injuries and death as well as public skepticism about ADS/ADAS safety are consequences of delayed public release. NHTSA has the technical means to release the data from the approved SGO form, so there should be no reason for delay.

On November 18, 2018, over three years ago, CAS petitioned NHTSA to begin rulemaking to immediately mandate submission of safety information by companies testing self-driving technology on public roads.³ NHTSA has not responded to CAS's petition. The SGO is not a substitute for a response to the CAS petition and is not commensurate with the petition's demand. NHTSA should, as required by law, provide a response to the petition.

Whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility.

The proposed SGO data collection is necessary for the proper performance of the functions of the Department, and the information will have practical utility. There can be significant gains in vehicle safety for drivers, passengers, and all VRUs by standardizing and mandating existing advanced vehicle safety technology. Far too many deaths and catastrophic injuries are suffered on our roads that could be prevented or mitigated by existing technology. There should be no delay in data collection and public reporting to help ensure these advances are working safely as they do so. The SGO represents an initial, but necessary, approach by the federal government to take on the critical task of evaluating and overseeing all of the ADS and Level 2 ADAS technology being tested or commercially deployed on public roads.

The SGO is necessary, but not sufficient, as a means of collecting the information needed for NHTSA to assess ADS/Level 2 ADAS safety and have a means to provide that data and the relevant assessments to the public. Nevertheless, there are unfortunate and unnecessary limitations on data being collected. These limitations hinder the proper performance of the functions of the Department and need to be addressed.

³ Petition to Begin Rulemaking to Immediately Mandate Submission of Safety Information by Companies Testing Self-Driving Technology on Public Road, <https://www.autosafety.org/center-for-auto-safety-petitions-nhtsa-to-begin-rulemaking-to-immediately-mandate-submission-of-safety-information-by-companies-testing-self-driving-technology-on-public-road/>

Ways to enhance the quality, utility, and clarity of the information to be collected

The current SGO is a valuable extension to otherwise unavailable ADS/ADAS crash information but is inadequate to achieving the goal of adequate public visibility into the causes of these crashes. The SGO omits additional vital categories of crash and hazardous operational data that could be of great assistance in NHTSA's mission to encourage vehicle safety for all on the roads. There are other easily reportable indicators of safety-critical control system failures that could provide additional valuable insight into ADAS/ADS safety. These reportable data categories could be the basis for forward-looking metrics that could be useful for monitoring ADS/ADAS progress toward achieving their safety potential.

CAS has previously provided to NHTSA suggestions on data that should be collected and reported from ADS testing/ADAS use on public roads.⁴ These include:

- Significant deviations from planned control parameters such as trajectory and speed.
- Automated operation that deviates from traffic regulations but does not result in a crash (e.g., speeding, failure to stop or yield right of way, failure to recognize traffic light, failure to respond to manual traffic controls).
- Human takeover of ADAS/ADS to avoid collision.
- Other programmed or unprogrammed safety-diminishing incidents (e.g., stopping on a railroad track, critical computer/software or sensor fault).
- Instances of other vehicles or VRUs taking evasive action to avoid collision.

The SGO should be amended to include these additional events reported by either test drivers, vehicle occupants, or law enforcement. Additional recommended reportable data include:

- All traffic law violations,
- Near misses of VRUs, vehicles, or property regardless of whether the near miss resulted in evasive action,
- Failure to restore driver control on demand on automated control disengagement or otherwise as required,
- Unexpectedly slow or otherwise unsafe transfer from automated control to driver control,
- Failure to respond to law enforcement commands including hand signals,
- Failure to properly respond to emergency vehicles including stopped vehicles displaying emergency lights,
- Failure to respond to stopped school bus displays or lights,
- Failure to respond to other warning lights including railroad crossings,
- Failure to respond and navigate properly at staffed inspection or check points,
- Vehicle stability issues induced by automated controls (e.g., spinning tires in response to acceleration command),

⁴ Id; CAS Letter to Steven Cliff, July 20, 2021, <https://www.autosafety.org/wp-content/uploads/2021/07/Letter-to-NHTSA-re-garding-SGO-7-21-21.pdf>; CAS Comment to NHTSA on Agency Information Collection Activities; Submission to the Office of Management and Budget for Review and Approval; Automated Driving Systems 2.0 A Vision for Safety (ICR), June 23, 2021, <https://www.regulations.gov/comment/NHTSA-2021-0013-0007>

- Detection of driver distraction, displacement, impairment, or compromised situational awareness,
- Cybersecurity breaches, connectivity faults or lapses affecting connected vehicle operation.

By alluding to the possibility of subsequent detailed investigation of reported incidents, the SGO implies the need to preserve relevant vehicle information. That requirement should be made explicit. The SGO should require preservation of vehicle and component data involved in a reportable incident to assure availability and accuracy of evidence that may help determine causality.

Towards that need, the SGO should consider adding a requirement to preserve crash data stored after a reportable incident without alteration including its controls, sensors, propulsion system, and actuators.

Similarly, full details on vehicle software/firmware needed for incident investigation should be included in the SGO. The SGO should require preservation of software/firmware control logic details, and cyber configuration information following a reportable incident. Software/firmware updates, including but not limited to over-the-air updates will affect vehicle performance and safety and could be significant factors in incident causality. Similarly, updates that occurred prior to an incident might not be reflected in the currently reportable top-level ADAS/ADS version and thus should be preserved in the instance of a reportable incident.

The SGO should be reviewed and updated as needed to assure that its Service List continues to be current and that new entities testing or deploying ADS/Level 2 ADAS technologies are served with the SGO as quickly as possible.

These recommended critical SGO amendments and actions are necessary to assure NHTSA's ability to determine the cause of reportable incidents. These modest suggestions would enhance the quality, utility, and clarity of the information to be collected per the SGO.

Conclusion

Thank you for the opportunity to provide comments on NHTSA's request for an extension of the information collection for incident reporting requirements for Automated Driving Systems (ADS) and Level 2 Advanced Driver Assistance Systems (ADAS). CAS fully supports the request. This is an ideal time to address and correct deficiencies that would otherwise limit the accuracy and utility of safety data as ADAS proliferates and ADS continues to develop. This initiative has great promise to provide urgently needed information regarding ADAS/ADS vehicle operation on America's roads. We recommend that this initial step be followed up with NHTSA's long overdue response to the Center's petition for data collection rule making, and by mandating a needed comprehensive set of metrics and data collection to establish an ADAS/ADS safety baseline and track safety progress. Vehicles should only be permitted access to public roadways, either for commercial use, or for testing purposes, based on empirical evidence of safety not on promises of a speculative safety revolution.