![IIHS HLDI logo] **Insurance Institute for Highway Safety** **Highway Loss Data Institute**

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Ms. Sophie Shulman
Deputy Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Request for Comment on continuing information collection using the Voluntary Safety Self-Assessment described in "Automated Driving Systems 2.0: A Vision for Safety," Docket No. NHTSA-2024-0069

Dear Deputy Administrator Shulman:

The Insurance Institute for Highway Safety (IIHS) is pleased that the National Highway Traffic Safety Administration (NHTSA) will continue asking companies developing, testing, and deploying vehicles with automated driving systems (ADS) to submit voluntary safety self-assessments (VSSAs). The VSSA helps entities be more transparent in testing and deployment activities, but, as we commented in 2017 (Kidd, 2017), it does not ask entities to describe a plan for collecting and sharing information to support independent evaluations of the real-world safety of ADS that could validate or contradict safety claims. NHTSA has an opportunity to improve the VSSA by requesting that entities specify how they will make crash and exposure information from ADS operations publicly available. IIHS strongly encourages NHTSA to take this step.

Both NHTSA and the state of California systematically collect safety and performance information of ADS. While these efforts are valuable, both can be improved, including through the VSSA.

California requires that entities with permits to test or deploy ADS on California roads report crashes within 10 days and summarize exposure information in publicly available annual reports. These data can be used for independent evaluations comparing the crash involvement of vehicles with and without ADS in California (e.g., Teoh & Kidd, 2017). However, California does not require entities to report exposure information such as vehicle miles traveled (VMT) by deployment type (e.g., supervised or unsupervised), location, year, or time of day — all of which would make comparisons of ADS-equipped vehicles with human-driven vehicles more precise. In addition, the California data is obviously limited to that state, while the testing and deployment of ADS-equipped vehicles has expanded into other markets where similar information is not available.

In June 2021, NHTSA issued a standing general order (SGO) requiring entities to report information about any crash on public roads involving an ADS-equipped vehicle that results in a fatality, injury or property damage of any amount if the ADS was in use within 30 seconds of the incident. The resulting database provides a national list of crashes involving ADS-equipped vehicles, but, as NHTSA (2022) highlights, is limited by entities' access to crash data, the completeness and veracity of information, redundant reporting, and a lack of normalization. Researchers are using the SGO data in analyses (e.g., Cummings, 2024), but there are inherent problems with these studies. The inclusion criteria for the SGO database is different from collections of police-reported (human-driver) crashes and do not include information about exposure. Studies of ADS-equipped vehicles often do not adequately address known data limitations and thus arrive at erroneous conclusions. Several academic and industry partners,

along with IIHS, developed recommendations for using NHTSA SGO and other publicly available crash data to evaluate ADS safety and performance (Scanlon et al., in press). Entities testing and deploying ADS can work with NHTSA to improve the quality of information in the NHTSA SGO database. Some simple steps include:

- reporting VMT for ADS-equipped vehicles preferably disaggregated by deployment type (e.g., supervised and unsupervised/rider-only), deployment location and time;

- using existing coding, particularly crash type, consistent with those in the Crash Report Sampling System and the Fatality Analysis Reporting System;

- providing more complete and detailed narratives that describe the operating condition at impact (e.g., ADS active, rider-only), quantifying descriptions of damage (e.g., "estimated $1,000 in rear bumper damage" instead of "sustained minor damage") and minimizing redactions;

- submitting photos, videos, or other media describing the crash scene, vehicle damage, or moments prior to the crash; and

- marking the primary record for a crash, as crashes often involve multiple reports submitted to the SGO database.

Entities testing or deploying ADS also can support ADS safety and performance evaluations by making crash and exposure information publicly available on their own. Waymo publishes crash and exposure data from deployments in different markets on its website (https://waymo.com/safety/impact/) and cross-references the crash data with reports in the NHTSA SGO database. Waymo's actions demonstrate that entities testing or deploying ADS can publicly share crash and exposure data to increase transparency and public trust without compromising confidential business information.

In conclusion, although information collected by the VSSA will not directly support independent evaluations of ADS safety and performance in the real world, NHTSA can use the document to hold entities accountable for supporting safety assessment efforts. The VSSA should ask entities to describe how and where they will make crash and exposure data publicly available, independent of the reporting required by California, the NHTSA SGO, and future collection efforts. Open sharing of crash and exposure data by entities testing and deploying ADS will promote transparency, build public trust, and support independent evaluations of ADS safety.

Sincerely,

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Director of Statistical Services

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