

National Transportation Safety Board

Office of the Chair

Washington, DC 20594



December 17, 2024

Docket Management
US Department of Transportation
1200 New Jersey Avenue SE
West Building, Ground Floor
Room W12-140
Washington, DC 20590

Attention: Docket No. NHTSA-2024-0069

Dear Sir or Madam:

The National Transportation Safety Board (NTSB) has reviewed the National Highway Traffic Safety Administration's (NHTSA) notice and request for comment (NRFC), published at 89 *Federal Register* 84669 on October 23, 2024, regarding extending the deadline of a currently approved information collection titled "Automated Driving Systems 2.0: A Vision for Safety." In the NRFC, NHTSA requests public comments regarding the agency's intent to continue collecting voluntary safety self-assessment (VSSA) documents from developers of automated driving systems (ADS) in which the developers describe their approach to safe deployment of ADS-equipped vehicles. The current collection period is set to expire on February 28, 2025; NHTSA seeks a 3-year extension.

The NTSB recognizes NHTSA's efforts and supports the agency's intent to continue collecting VSSA documents. We also maintain that, based on our previous review of VSSA documents and our associated safety recommendations, simply extending the collection period is insufficient.

Elements of the Notice

The Automated Driving Systems 2.0 policy document, which NHTSA published in September 2017, described 12 safety elements of ADS design and provided basic guidance to ADS developers for use in preparing the safety self-assessment documents.¹ The policy stated that the assessment documents, if submitted, would not be subject to federal approval.

¹ For more information, see [Automated Driving Systems: A Vision for Safety](#).

In the current notice, NHTSA:

- restates the intended purpose of the VSSA, which includes demonstrating to the public, including the individual states, that ADS developers are
 - considering the safety aspects of ADS,
 - communicating and collaborating with NHTSA, and
 - building public trust through transparent testing and deployment of these systems;
- highlights the expressed intentions of the states to use the VSSA information to assess the safety of ADS-equipped vehicles on their roadways, and
- says that the VSSA “allows companies an opportunity to showcase their approach to safety.”

NHTSA reports that, of the 59 entities developing ADS in the United States, only 27 have submitted a VSSA report or made one public since 2017. That is fewer than half. Further, NHTSA is not aware of any of those 27 entities having updated their VSSA since 2017, except for 2 that updated only their appendices. NHTSA concludes that considering the rate of VSSA submissions in the preceding 7 years, of the remaining 32 entities developing ADS, likely only 4 will submit a VSSA each year.

Although the NTSB has no objections to extending the period for collecting safety self-assessment reports, our comments are focused on the structural limitations of the ADS 2.0 policy and the previously issued NTSB safety recommendations to alleviate those limitations.

NTSB Safety Recommendations and Comments on Notice

The issues raised in NHTSA’s notice and highlighted in the previous section are largely the same as those the NTSB discussed in our investigation report of a 2018 fatal crash in Tempe, Arizona, involving an ADS-equipped test vehicle and a pedestrian walking her bicycle across a roadway.² The vehicle was controlled by a developmental ADS and was occupied by a safety monitor who was distracted by her phone as the vehicle approached the pedestrian. The ADS failed to accurately predict the path of the pedestrian and, as a result, did not respond. The safety monitor raised her gaze toward the pedestrian just before impact but too late to take an evasive maneuver, thus the pedestrian was fatally struck. The NTSB identified several factors as causal to this crash, including the safety monitor’s distraction and the inadequate

² See [*Collision Between Vehicle Controlled by Developmental Automated Driving System and Pedestrian, Tempe, Arizona, March 18, 2018*](#), NTSB/HAR-19/03.

safety culture of the ADS developer, as well as the Arizona Department of Transportation's insufficient oversight of automated vehicle testing.

As a result of the Tempe crash, the NTSB issued several safety recommendations, including two to NHTSA; one to *require* ADS developers to submit safety self-assessment reports, instead of a voluntary submission, ([H-19-47](#)), and the other for NHTSA to establish a process for ongoing evaluation of those safety self-assessment reports ([H-19-48](#)). Due to NHTSA's lack of action, both safety recommendations are classified Open–Unacceptable Response.³

In the Tempe report, the NTSB recognized the potential benefits of the safety self-assessment reports as outlined in the ADS 2.0 policy, but also the substantial limitations that preclude those benefits from being fulfilled if the assessments are not required to be submitted and NHTSA does not perform substantive let alone any review of the submitted reports.

The outcome of the voluntary nature of the ADS 2.0 policy is apparent in NHTSA's own reporting that since 2017, only 27 of the 59 current potential ADS developers have submitted a VSSA report or made one public.

The impact of the nonexistent review (by NHTSA or other federal agency) of the submitted VSSA documents is multifold. The level of detail in the submitted VSSA documents varies substantially, as we examined in the Tempe report. Further, the lack of review also leaves the states, the public, and stakeholders uninformed about the readiness and capability of ADS developers to safely test and deploy ADS-equipped vehicles on public roadways.

Finally, the lack of NHTSA review also severely limits the benefits that states might obtain—assessing the safety of the submitted VSSA documents. Without NHTSA providing any level of safety assessment of the currently tested or deployed ADS, the safety assessment of such systems falls largely to the states. States are then forced to evaluate—on their own, with or without the VSSA—the safety of ADS-equipped vehicles being tested and deployed on their roadways to try to provide effective oversight.

As we recommended following the Tempe crash, NHTSA can and should require ADS developers to submit safety self-assessment documents, and NHTSA should evaluate them to indicate whether each developer, at a minimum, satisfies the agency's 12 safety elements as described in the ADS 2.0 policy document. Through

³ Additionally, the NTSB recommended that Arizona require ADS developers to submit an application for testing their ADS-equipped vehicles in the state ([H-19-49](#)) and to establish a group of experts to evaluate those applications ([H-19-50](#)). Due to Arizona's inaction and the lack of response, H-19-49 and -50 are classified Open–Await Response.

these steps, NHTSA can enhance the quality, utility, and clarity of the information to be collected.

The NTSB appreciates the opportunity to provide comments on NHTSA's notice to extend the document collection related to ADS development under the ADS 2.0 policy. We recognize the need for and importance of continuing the document collection, but a more meaningful use of the received safety self-assessment documents necessitates implementing the relevant NTSB safety recommendations. As such, we urge NHTSA to take a more active role in ensuring safe deployment of ADS-equipped vehicles on public roadways.

Sincerely,

Jennifer Homendy
Chair

cc: darren.hall1@dot.gov