U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

1200 New Jersey Avenue SE.
Washington, DC 20590

July 7, 2020

The Honorable Robert L. Sumwalt, III
Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW
Washington, DC 20594

Dear Chairman Sumwalt:

This letter responds to the safety recommendations issued by the National Transportation Safety Board (NTSB) to the National Highway Traffic Safety Administration (NHTSA) in the NTSB's October 30, 2018, *Highway Accident Report, Vehicle Collision with Student Pedestrians Crossing High-Speed Roadway to Board School Bus, Rochester, Indiana.* Our responses to the safety recommendations are discussed below.

NTSB Recommendations and Requested Designations:

H-20-10
When evaluating safety self-assessment reports from entities testing automated driving systems on public roads, evaluate how effectively the entities include school bus operations in their plans.

NHTSA Action:
NHTSA does not evaluate Voluntary Safety Self-Assessments (VSSAs) or their adequacy. NHTSA provides links to VSSAs from entities involved in the development and testing of Automated Driving Systems (ADS) on public roads. These are public-facing documents that aim to facilitate improved transparency to strengthen public awareness of the manner in which companies address safety issues in developing ADS technologies. In these documents, ADS developers explain to the public the necessity of on-road testing for ADS development, and how they are managing the risks associated with their development, testing and validation activities. Collectively, VSSAs document a variety of approaches, considerations, and best practices employed by numerous entities.

When there is greater understanding and consensus in best practices addressing the safety areas in developing, testing and eventually deploying ADS, NHTSA will examine the practicality and appropriateness of evaluating how entities are assessing and mitigating the risks of operating in ways that may intersect with school bus operations. So far, ADS are still in testing and development stages.

In the meantime, NHTSA and numerous industry and public stakeholder groups continue to research and evaluate the critical safety topic of potential methods and criteria that may be used to effectively and objectively evaluate the safety performance of future ADS-equipped vehicles.

NHTSA has recently launched its Automated Vehicles Transparency and Engagement for Safe Testing (AV TEST) Initiative with States, local governments, and private-sector stakeholders in the ADS community.[1] NHTSA has established the beginnings of a web-based portal through which automakers, ADS developers, States and local governments can voluntarily submit information to NHTSA as part of their testing of ADS vehicles, for NHTSA to make available for the public to view. Visitors to the website will be able to see what testing has been reported in their communities and learn more about the testing being conducted, such as by the type of motor vehicle tested (e.g., cars, low-speed shuttles, and driverless electric delivery vehicles), and by location of the testing. The AV TEST Initiative is another way that NHTSA is supporting the safe development, testing, and integration of automated vehicle technologies in the U.S.

NHTSA requests that recommendation H-20-1 be classified as **Closed, Acceptable Response**.

H-20-11
Evaluate the effectiveness of technologies designed to reduce the incidence of illegal school bus passing, and publish and disseminate the evaluation results.

NHTSA Action:
NHTSA has conducted case studies investigating the effectiveness of cameras as a deterrent to school bus stop-arm violations. This project investigated the use of stop-arm camera programs by examining the prevalence of illegal school bus passing before and after a public information program and implementation of a camera enforcement program. This report is expected to be issued this year.

Illegal passing is a frequent occurrence that can result in severe injury or death to children boarding or disembarking from school buses. To better understand the factors that contribute to illegal passing, NHTSA is engaged in research to evaluate drivers' knowledge of school bus passing laws and the effectiveness of camera-based enforcement systems, high-visibility enforcement, and targeted media and education efforts. This report is expected to be issued in 2024.

NHTSA requests that recommendation H-20-11 be classified as **Open, Acceptable Response**.

H-13-30 (reiterated recommendation)
Develop minimum performance standards for connected vehicle technology for all highway vehicles.

H-13-31 (reiterated recommendation)
Once minimum performance standards for connected vehicle technology are developed, require this technology to be installed on all newly manufactured highway vehicles.

NHTSA Action:
As noted in our response to the NTSB recommendations stemming from the November 5, 2019, report, *Bicyclist Safety on US Roadways: Crash Risks and Countermeasures*, the United States Department of Transportation (DOT) has made it very clear the value and importance of vehicle-to-

[1] https://www.nhtsa.gov/automated-vehicles-safety/av-test

vehicle (V2V) communication and a vehicle's communication with the surrounding environment, including infrastructure and other road users or, collectively, vehicle-to-everything (V2X) communications. NHTSA and other agencies within DOT have engaged extensively in efforts to preserve the 75 MHz of bandwidth located at 5.9 GHz allocated by the Federal Communications Commission (FCC) for Intelligent Transportation System applications (termed the "Safety Band").

NHTSA and DOT have encouraged the automotive industry, wireless technology companies, and other stakeholders to continue developing and deploying technologies that leverage the 5.9 GHz spectrum for transportation safety benefits. On April 23, 2020, the Alliance of Automotive Innovation announced its industry-wide commitment to deploy at least 5 million V2X radios on vehicles and roadway infrastructure by the end of 2025.[2] NHTSA appreciates the industry's strong commitment to V2X deployment. Based on the January 12, 2017, notice of proposed rulemaking for V2V communications and the December 18, 2018, request for comment on V2X communications technologies, NHTSA is working with its partners in DOT on its recent completed research and evaluation of the numerous public comments received to determine next steps. NHTSA has also focused recent efforts on working with the FCC, the National Telecommunications and Information Administration, and industry stakeholders to resolve the Safety Band issues before considering next steps and other actions to advance the deployment of V2X technology broadly.

NHTSA requests these recommendations H-13-30 and H-13-31 be classified as **Open, Acceptable Response**.

H-18-43 (reiterated recommendation)
Incorporate pedestrian safety systems, including pedestrian collision avoidance systems and other more-passive safety systems, into the New Car Assessment Program (NCAP).

NHTSA Action:
NHTSA is working to publish a Federal Register Notice in 2020 that will seek comment on planned upgrades to NCAP, including new technologies expected to contribute to the safety of pedestrians.

NHTSA requests this recommendation be classified as **Open, Acceptable Response**.

If you have any questions, or require additional information, please contact me or Steven Bayless, Director, Governmental Affairs, Policy and Strategic Planning at 202-604-8414.

Sincerely,

James C. Owens
Deputy Administrator

[2] https://www.autosinnovate.org/press-release/auto-industry-unites-behind-safety-technology-by-committing-at-least-5-million-v2x-radios-and-devices-by-the-end-of-2025/