



September 6, 2019

Docket Management Facility  
U.S. Department of Transportation  
Room W12-140  
1200 New Jersey Avenue SE  
Washington, DC 20590

**RE: Docket Number: FMCSA-2006-26367  
Automated Driving Systems-Equipped Commercial Motor Vehicles  
Written Comment from the National School Transportation Association  
to the Federal Motor Carrier Safety Administration, Motor Carrier  
Safety Advisory Committee**

Dear Sir or Madam:

The National School Transportation Association (NSTA) is committed to remain actively involved with committees and boards related to transportation safety to ensure the school transportation perspective is considered in the overall safety discussion. To that end, NSTA is pleased to offer written comments to the Motor Carrier Safety Advisory Committee in advance of the September 30, 2019 and October 1, 2019 meeting, to discuss the deployment of Automated Driving Systems (ADS) equipped Commercial Motor Vehicles (CMVs), as previously discussed by the Committee at its last public meeting in July 2018.

NSTA is the leading resource for school bus transportation solutions and the voice for private contractors for over 50 years. NSTA was formed in 1964 as a membership organization for school bus contract-operators engaged primarily in transporting students to and from school and school-related activities. Members range from small family businesses serving one school district, to large corporations operating tens of thousands of buses across multiple states committed to the safe, efficient and economical transportation of our nation's children and future leaders.

NSTA shares concerns over the future deployment of ADS-equipped CMVs related to school bus operation and ADS-equipped CMVs on the highway during school bus transit. **The NSTA position remains that it is opposed to the deployment of ADSs on school buses above Level 1 automation.** NSTA further advises caution regarding ADS-equipped CMVs on the highway, unless such vehicles can assess and identify school transportation vehicles and their unique patterns of multiple stops to discharge or pick-up children along a given route while also complying with light systems and stop arm mechanisms on school buses.<sup>1</sup> Finally, NSTA wishes

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<sup>1</sup>See also, NSTA Comment, May 10, 2019, FMCSA-2018-0037; NSTA Comment, July 13, 2017, NHTSA-2017-0114; NSTA Comment, November 22, 2016, NHTSA-2016-0090; NSTA Comment, dated May 9, 2016, NHTSA-2016-0026.

to ensure safeguards are in place to protect against the potential compromise of on-board computer systems.

According to the U.S. Department of Transportation, school bus transportation continues to be the safest mode of transportation over all other modes of transportation to transport children to-and-from school. Moreover, school bus carriers, both public and private, operate the largest mass transportation fleet in the country, which is 2.5 times the size of all other forms of mass transportation combined. Each day, 26 million children are transported to-and-from school on an estimated 480,000 yellow school buses. Daily, the lives of children on a school bus are entrusted to certified school transportation professionals, who have received special training<sup>2</sup> and have the experience to ensure the safe transport of children to school. At times, two or more adults may be required on a school bus depending on the route, state, and student needs at issue.

School bus safety is the top priority for NSTA and the school transportation industry. As such, we strongly believe that the “human driver” is an integral part of school bus safety, with the driver knowing the children, the neighborhoods, the dangers of picking up and dropping off children, the families of the children, and the school district. The presence of a human driver also ensures an added layer of security in the chance an on-board system is compromised.

NSTA is in agreement with the Federal Motor Carrier’s (FMCSA) position as noted on September 12, 2017, that its regulations require “a trained commercial driver must be behind the wheel at all times, regardless of any automated driving technologies available on the CMV, unless a petition for waiver or exemption has been granted.”<sup>3</sup> To that end, NSTA believes that no waiver or exemption should ever be permitted for school buses in this regard.

To the extent that FMCSA intends to reconsider its position on the assumption of a driver behind the wheel at all times because of the absence of specific regulatory text requiring a driver behind the wheel,<sup>4,5</sup> **NSTA is opposed to an ADS to perform the driver’s functions on a school bus without the presence of a trained commercial driver in the driver’s seat of a school bus.** The Volpe report specifically notes in the Executive Summary<sup>6</sup> that at the time Federal Motor Carrier Safety Regulations were drafted, there was no consideration of the possibility that such regulations might one day apply to CMVs that were partially or entirely driven exclusively by Automated Driving Systems [without input from a human driver]. Given that such ADSs were not contemplated at the time the regulations were drafted, such regulations should be strictly construed and not expanded in scope/interpretation without going through the appropriate regulatory process.

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<sup>2</sup>Volpe report, p. 70, part 380.609 and part 380.AppD; Volpe report, pp. 82-83, part 383.71; Volpe report, p. 89, part 383.123.

<sup>3</sup>FMCSA-2018-0037 at p. 12935.

<sup>4</sup>Federal Register, Vol. 83, No. 58, p. 12935; Volpe report, Summary of Findings, 3.1 Definitions and Applicability, p. 7.

<sup>5</sup>NSTA believes the definition of “driver”, as written in part 390, cannot be expanded in scope/interpretation without going through the property regulatory process. Thus, “driver” should be construed as written to mean an “onboard human.” NSTA also believes the definition of “operator” should also be strictly construed as written.

<sup>6</sup>Volpe report, p. v.

As it relates to the SAE international (SAE) 3016 standard's definitions for levels of automation (SAE Level 1-5), NSTA believes that a school bus or other school transportation vehicle is at the SAE Level 1, i.e., where some driver-assist features may be included in the vehicle design, however the vehicle must remain controlled by the driver. In the event that school buses and other vehicles that transport children to school are equipped in the future with driving automation system engagement capabilities that could change the SAE Level of the school bus or other vehicle at any given time, the NSTA will comment on such revisions at the appropriate time.

While NSTA acknowledges that the ADS-equipped CMVs may benefit the transportation sector and certain industries – such as over-the-road trucks – NSTA believes that the transportation of children on a school bus requires a human driver who has the requisite skills, professional training, and knowledge in order to make the split-second decisions that are necessary on a regular basis for the safe transport of children to and from school and other school-related activities. Furthermore, NSTA steadfastly opposes any waiver or exemption to the human driver requirement for school bus transportation. Finally, NSTA is also concerned that any ADS-equipped CMVs traveling on the nation's road should be capable of distinguishing a school bus or other school transportation vehicle from other types of vehicles on the highway. School buses stop frequently to discharge or pick up children, who may need to cross a roadway and require all other vehicles to identify light systems and stop signs on the bus and stop during the loading and unloading process.

We appreciate the opportunity to offer comments on the FMCSA Notice, Docket No. FMCSA-2006-26367, and look forward to continuing to work with FMCSA. If further clarification is required, please do not hesitate to contact me at 703-684-3200, ext. 700 or by e-mail at [cmacysyn@yellowbuses.org](mailto:cmacysyn@yellowbuses.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Curt Macysyn". The signature is fluid and cursive, with a large initial "C" and a long, sweeping tail.

Curt Macysyn  
Executive Director  
National School Transportation Association