



*A bold voice for transportation workers*

November 13, 2017

Steve Wood  
Chief Counsel  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue, S.E.  
Washington, DC 20590-0001

**RE: Automated Driving Systems: A Vision for Safety  
Docket No. NHTSA-2017-0082**

Dear Mr. Wood,

On behalf of the Transportation Trades Department, AFL-CIO (TTD), I am pleased to provide comments on the National Highway Traffic Safety Administration's (NHTSA) A Vision for Safety 2.0 guidance regarding autonomous vehicles. By way of background, TTD consists of 32 affiliate unions representing workers in all modes of transportation, including those who will be impacted by the development and deployment of automated driving systems. We therefore have a vested interest in the guidance.<sup>1</sup>

NHTSA states that the purpose of the guidance is to support industry innovators, States and other key stakeholders as they consider and design best practices relative to the testing and deployment of automated vehicle technologies, as well as to update and refine the 2016 Federal Automated Vehicles Policy. TTD understands that NHTSA's guidance is both voluntary and will continue to be updated going forward. However, we believe that the guidance as published is lacking several components that should be included to ensure the safe performance of any automated driving system (ADS).

In A Vision for Safety 2.0, NHTSA correctly identifies human-machine interface (HMI) as an important component of the design process. To this end, NHTSA recommends that ADS systems have the ability to inform a driver of its operability, when it is in use, and when the system requests the driver take back control. The agency also suggests manufacturers consider if driver engagement monitoring is appropriate. While these components are necessary, they are not sufficient to maintain human operator engagement. NHTSA should clearly encourage manufacturers to engineer HMI to ensure that drivers are engaged to the standard necessary for safe operation. Most notably, ensuring a safe transition between machine and human operator should be of paramount concern for the agency and the manufacturer, especially given recent crash incidents, including the Tesla accident of May 2016. Last second warning systems, which

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<sup>1</sup> Attached is a complete list of TTD's 32 affiliate unions.

**Transportation Trades Department, AFL-CIO**

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Larry I. Willis, President / Greg Regan, Secretary-Treasurer

may be too late, and passive solutions like owner's manual disclaimers are not sufficient on their own to mitigate the distraction and driver disengagement risks that come with ADS technology. NHTSA's guidance should recommend manufacturers design HMIs engineered to overcome these issues.

In updating its guidance, NHTSA has removed references to data sharing and publishing that were included in the 2016 document. While TTD appreciates that manufacturers have concerns about divulging trade secrets in a competitive industry, we firmly believe that NHTSA should amend its guidance to encourage the availability of certain data, particularly post-crash and near-miss information to best inform the public, legislators, and regulators. Much as current crash databases serve to inform regulators on vehicle standards, post-crash and near-miss information for ADS offers regulators the 21<sup>st</sup> century version of crash test dummies. The specter of proprietary information should not stand in the way of NHTSA collecting the information it requires to fully understand any risks or shortcomings of ADS technology and improve system safety. We encourage the agency to promote the collection and sharing of data through this guidance.

As ADS technology moves forward, design standards must ensure that a driver can operate the vehicle safely when needed, and that any automated technology improves, rather than diminishes safety. By offering stronger recommendations on HMI design and its function, as well as on data sharing requirements, NHTSA can better promote the development of autonomous vehicles that put safety first. We thank NHTSA for the opportunity to comment on this guidance and look forward to working with the agency and DOT's other modal agencies on autonomous vehicle issues going forward.

Sincerely,

A handwritten signature in cursive script that reads "Larry Willis".

Larry Willis  
President



**Transportation Trades Department, AFL-CIO**  
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***TTD MEMBER UNIONS***

Air Line Pilots Association (**ALPA**)  
Amalgamated Transit Union (**ATU**)  
American Federation of Government Employees (**AFGE**)  
American Federation of State, County and Municipal Employees (**AFSCME**)  
American Federation of Teachers (**AFT**)  
Association of Flight Attendants-CWA (**AFA-CWA**)  
American Train Dispatchers Association (**ATDA**)  
Brotherhood of Railroad Signalmen (**BRS**)  
Communications Workers of America (**CWA**)  
International Association of Fire Fighters (**IAFF**)  
International Association of Machinists and Aerospace Workers (**IAM**)  
International Brotherhood of Boilermakers, Iron Ship Builders,  
Blacksmiths, Forgers and Helpers (**IBB**)  
International Brotherhood of Electrical Workers (**IBEW**)  
International Longshoremen's Association (**ILA**)  
International Organization of Masters, Mates & Pilots, ILA (**MM&P**)  
International Union of Operating Engineers (**IUOE**)  
Laborers' International Union of North America (**LIUNA**)  
Marine Engineers' Beneficial Association (**MEBA**)  
National Air Traffic Controllers Association (**NATCA**)  
National Association of Letter Carriers (**NALC**)  
National Conference of Firemen and Oilers, SEIU (**NCFO, SEIU**)  
National Federation of Public and Private Employees (**NFOPAPE**)  
Office and Professional Employees International Union (**OPEIU**)  
Professional Aviation Safety Specialists (**PASS**)  
Sailors' Union of the Pacific (**SUP**)  
Sheet Metal, Air, Rail and Transportation Workers (**SMART**)  
SMART-Transportation Division  
Transportation Communications Union/ IAM (**TCU**)  
Transport Workers Union of America (**TWU**)  
**UNITE HERE!**  
United Mine Workers of America (**UMWA**)  
United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service  
Workers International Union (**USW**)

*These 32 labor organizations are members of and represented by the TTD*

