

August 28, 2019

Michael Huntley
Division Chief, Vehicle and Roadside Operations,
Office of Carrier, Driver, and Vehicle Safety
Federal Motor Carrier Safety Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Safe Integration of Automated Driving Systems-Equipped Commercial Motor Vehicles

Docket FMCSA-2018-0037

Dear Mr. Huntley

On behalf of the Transportation Trades Department, AFL-CIO (TTD), I am pleased to respond to FMCSA's request for comment on its Advanced Notice of Proposed Rulemaking (ANPRM) regarding the deployment of automated commercial motor vehicle technologies. TTD consists of 33 affiliate unions representing workers in all modes of transportation, including commercial motor vehicle drivers who may operate vehicles with some level of automated driving systems (ADS) and will be impacted by the deployment of ADS with high levels of autonomy.<sup>1</sup>

First, we appreciate FMCSA taking action that recognizes the need for a federal role in the deployment of ADS vehicles. FMCSA and other agencies with regulatory authority over ADS technologies must not defer all oversight to manufacturers and developers. To do so would be to abdicate the integral safety responsibilities of the federal government to entities driven by profit, potentially at cost of safety. We hope that through this process and related dockets that FMCSA will avoid this pitfall.

<sup>&</sup>lt;sup>1</sup> Attached is a complete list of TTD's 33 affiliate unions

In this ANPRM, FMCSA describes several areas of current regulation that may need to be modified or adapted to comport with the changing realities of ADS vehicles, and is the first occasion on which FMCSA has stated its tentative policy on a number of items. Many of the impacted regulations are critical to the continued safety of our transportation network and to frontline employees. Below, we discuss several of these issues. We also encourage FMCSA to consider relevant information filed by TTD in previous dockets. <sup>2</sup>

#### **Hours of Service**

In the ANPRM, FMCSA states that it currently believes that HOS requirements should be modified to consider the circumstance where a human is in the vehicle but not actively operating it. Specifically, FMCSA proposes that

Any time a human is at the controls of an ADS-equipped CMV, either in the driver's seat or operating it remotely, the time should be recorded as on-duty, driving. Any time the human is working without having the responsibility for taking control of the ADS-equipped vehicle (because it is operating in a fully autonomous mode within its intended ODD) should be considered on-duty, not driving

TTD supports defining any time in which an operator could be asked to take control of an ADS vehicle as drive time. If an operator is required to maintain the same sense of vigilance and caution as they would driving a traditional CMV they would be subject to the same fatigue caused by these oversight duties as a traditional CMV driver. It is this constant oversight, not the physical operation of a wheel or pedal, that is most likely to cause the fatigue that drive time limits seek to curtail.

To this point, we urge FMCSA to provide further clarity on the status of a human working without the responsibility for taking control, because of the presence of a fully autonomous mode of operation. If that individual will never be asked to operate the vehicle, than we have no objection to this time being considered duty time. However, if there are any circumstances in which that individual would have to exert control, for example in the failure of the ADS system, than this must be considered drive time, for the reasons discussed above.

Automation brings with it new fatigue concerns that FMCSA should consider. As TTD has mentioned in prior comments, passive fatigue stemming from a lack of interaction with the vehicle due to the design of the human-machine interface, cannot be ignored. Numerous studies confirm that low workload situations, such as monitoring an ADS system may result in loss of alertness and task disengagement.<sup>3</sup> While NHTSA and manufacturers should address these concerns from

<sup>&</sup>lt;sup>2</sup> Docket Nos: DOT-OST-2018-0149, DOT-OST-2018-0150, FMCSA-2018-0037, PHMSA-2018-0001, FTA-2017-0024, FTA-2017-0025, NHTSA-2018-0009, NHTSA-2017-0082, FMCSA-2017-0114, and NHTSA-2016-0126.

<sup>&</sup>lt;sup>3</sup> Desmond & Hancock, 2001, Neubauer et al., 2012, Saxby et al., 2013

an engineering perspective, FMCSA should not exacerbate fatigue issues by permitting drivers to spend more time in an operational or oversight capacity. If there is any possibility that a human driver may be asked to exert control, this should be considered solely as drive time under HOS regulation.

Finally, we support FMCSA's intentions to cover remote operators under HOS rules, as well as the lack of a proposal to extend either duty or drive time limits.

#### Commercial Driver's License

In the ANPRM, FMCSA does not propose any current changes to CDL requirements, calling such modifications premature. In the event that FMCSA ultimately promulgates regulations that alter CDL requirements, the agency should do so with an eye towards including new skills as opposed to weakening requirements. TTD would strongly oppose any efforts to make available an abridged or lesser CDL because of the presence of ADS. For as long as a human operator is expected to exert any control over a vehicle at any time, they must be adequately trained to do so. Additionally, we encourage FMCSA to work with labor and frontline workers on any new CDL requirements or endorsements, as the agency did through the promulgation of the Entry Level Driver Training rulemaking.

#### Physical/Medical Qualification

For similar reasons as discussed above, we support the agencies' position to continue to require medical qualification and drug and alcohol testing for operators working in tandem with ADS. Introducing new risks to the transportation network by watering down standards for operators could defeat any safety advantages brought about by new technology.

### Part 396 Inspections

We agree with the agencies' assessment that the deployment of ADS will ultimately necessitate changes to Part 396 rules on inspections. While it is difficult to predict exactly what those changes may look like at this time, it is clear that ensuring that new technologies are safe and working properly will be just as important as currently required inspections of traditional equipment. We encourage FMCSA to be proactive in determining how to safely inspect these vehicles.

While outside of the scope of this docket, we also ask that the agency give consideration to the workforce implications of evolving maintenance and inspection requirements. As we have suggested in our comments to other dockets, FMCSA and DOT more broadly should take a handson role in preparing transportation workers for these changes. The federal government has a responsibility to ensure that these employees are not left behind due to technology it has taken an active role in promoting.

#### **Data and Transparency**

FMCSA asks if companies using ADS vehicles should have any duty to report that they are doing so. Given the safety ramifications of mass deployment of these vehicles, it is incumbent on FMCSA to collect meaningful safety data. FMCSA should collect and publish information on ADS

vehicle use and safety to inform both itself and the public. Internally, FMCSA could also consider the creation of a new Behavior Analysis and Safety Improvement Category (BASIC) percentile specifically geared towards the functionality of ADS that would be reflected in a carrier's safety rating. Regardless of the precise mechanism, the agency must be able to collect the data needed to develop an understanding of the overall safety of ADS vehicles and identify elements requiring additional study or regulation. Allowing private companies to retain all information on ADS vehicles and their operations would deprive FMCSA of its ability to carry out its safety mission.

#### **Voluntary Consensus Standards**

As stated in previous documents, FMCSA continues to propose that it rely on voluntary standards, that "offer flexibility and responsiveness to the rapid pace of innovation, can encourage investment and bring cost-effective innovation to the market more quickly". While this is certainly a convenient scheme for ADS developers and manufacturers, it is also a failure to regulate safety. Allowing entities to self-regulate out of expediency, particularly as it relates to new technologies on public roadways is a dangerous path forward. Further, FMCSA's comparison of the existence of codified regulations that were incorporated by reference from privately developed standards to allowing ADS companies to operate indefinitely under no purview but their own is unreasonable. FMCSA must not abdicate its safety responsibilities so that private corporations can more easily test new technology.

### **State Authority**

Given that FMCSA proposes to wash its hands of its safety authority over ADS, it must not, as it suggests, simultaneously call on States to not develop safety standards of their own. Several individual states have already developed their own requirements for the testing and deployment of ADS, and a substantial amount of the public understanding of the safety of these vehicles come from states that have taken a firm stance in support of transparency. If the federal government is unwilling to uphold its responsibilities to promote safety, it should stand in the way of States take action to fill this absence.

We thank FMCSA for the opportunity to comment on the ANPRM, as well as its proceeding dockets. We look forward to working with the agency on issues surrounding automation and ADS technology going forward.

Sincerely,

Larry I. Willis

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President



# Transportation Trades Department, AFL-CIO A bold voice for transportation workers

## 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 Automobile, Aerospace and Agricultural Implement Workers of America (UAW)
United Mine Workers of America (UMWA)

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (USW)

These 33 labor organizations are members of and represented by the TTD