July 25, 2023

The Honorable Cathy McMorris Rodgers
Chair
House Committee on Energy and Commerce

The Honorable Frank Pallone, Jr.
Ranking Member
House Committee on Energy and Commerce

The Honorable Gus Bilirakis
Chair
Subcommittee on Innovation, Data, and
Commerce

The Honorable Jan Schakowsky
Ranking Member
Subcommittee on Innovation, Data and
Commerce

Dear Chair McMorris Rodgers, Ranking Member Pallone, Chair Bilirakis, and Ranking Member Schakowsky:

On behalf of the Transportation Trades Department, AFL-CIO, (TTD), I request that our comments detailing transportation labor's priorities and principles for legislation that ensures the safe and responsible deployment of autonomous vehicles (AVs) be entered into the record for the subcommittee's July 26 hearing, entitled "Self-Driving Vehicle Legislative Framework: Enhancing Safety, Improving Lives and Mobility, and Beating China." By way of background, TTD consists of 37 affiliated unions whose interests in automated vehicles span operations, maintenance, manufacturing, safety, and more.

AVs are often touted for their potential to increase safety, improve transportation access, produce environmental benefits, and create new American jobs in the manufacturing and technology sectors. Yet, for all the benefits promised by the AV industry, we too often overlook the serious impacts AVs will have on workers, safety, equity, and other important factors if this technology is not properly regulated by the federal government.

The snapshot of AV deployments today should concern policymakers. The AV industry has been permitted to engage in dangerous experimentation on our roads that has largely evaded the level of federal scrutiny needed to ensure safety isn't compromised. Federal and state policy leaders have been welcoming to AV developers and, too often, embraced a hands-off approach to regulating them and their equipment. Any legislation you advance must change the current irresponsible approach to AV deployments and finally put in place strong, enforceable safety guardrails.

While this committee's jurisdiction may not extend to crafting policies that address all of these impacts, TTD believes that you nonetheless have a responsibility to the American people to work within your committee and with your colleagues across other relevant committees to ensure any AV legislation takes full stock of its potential negative impacts and to craft policy solutions that ensure the transportation workforce has the skills they need to manage technological change in this industry and has a central voice in the shape of that technological change.

Ultimately, your committee will play a central role in determining whether AV technologies will be viewed by millions of Americans as positive progress or a degradation of safety. The outcome we achieve will be dependent on the decisions made by Congress and regulators in our executive branch. The following represents transportation labor's key priorities that Congress must consider as the foundation of any legislative framework for the testing, deployment, and regulation of AVs:

Transportation workers must be prioritized, and their voices enshrined in legislation

Technological change in the transportation sector is not new to transportation workers. They have lived through generations of new breakthroughs and have demonstrated their skill and adaptability as innovations accelerated and placed new demands on them while redefining our system of mobility. Meanwhile, their jobs and skills requirements have constantly evolved and Americans have benefited from their resiliency, precision, safety training, and know-how.

But the firsthand knowledge, skills, and experience of those workers will only be harnessed to ensure the safe testing and adoption of autonomous technologies if we craft policies that guarantee they have a seat at the table at every step of the way, from research to deployment. TTD recently offered a number of policy solutions to meet these goals in a joint letter with ITS America to the U.S. Departments of Transportation and Labor.

Policies like ensuring better data collection, building innovative partnerships between stakeholders and the federal government, and building new capacity for workforce training programs to ensure the current and future workforce have the skills they need to manage new technologies are not only common sense; they also have the broad support of labor, industry, employers, academia, and other important stakeholders. We encourage the subcommittee to review these recommendations and to work with TTD and our partners in innovation to guarantee they are foundational to any AV legislation.

Safety must be paramount in any AV legislation

News stories in recent years clearly demonstrate the need for a strong federal framework for AV testing and deployment that prioritizes safety and accountability. Consider the following, which represents a mere snapshot of incidents involving AVs:

- In 2019, a self-driving shuttle in Las Vegas crashed into a truck. While there was an operator on board, they did not have direct access to the manual override controls.
- In 2020, a self-driving shuttle in Ohio came to an abrupt stop, requiring a passenger who was thrown from their seat to receive medical attention for their injuries. This pilot project was a component of the 2015 Smart Cities challenge.
- In 2020, a self-driving shuttle in Utah sent a 76-year old man to the hospital after it came to an abrupt stop.
- NHTSA has opened investigations into 27 crashes involving Tesla vehicles. There have been at least 11 deaths in Tesla vehicles that involved their autopilot feature in the US alone.
- Recent stories out of California, a hotspot for AV testing, have highlighted incidents as innocuous as traffic jams caused by malfunctioning vehicles, to more serious incidents, like the one in which a Tesla using its autopilot feature crashed into a firetruck, killing the driver inside the vehicle.

TTD aligns itself with the Joint AV Tenets introduced by Advocates for Highway and Auto Safety, and believes they must be core to ensuring a true safety framework for the deployment of AVs. All workers deserve to know that an autonomous car or bot driving next to them is safe enough to be on the same road or in the worksite. Any legislation developed by Congress or regulations promulgated by the U.S. Department of Transportation (DOT) must strengthen the development of future Federal Motor Vehicle Safety Standards (FMVSS) for AVs and mandate tests of key components (i.e., a vision test) on any system whose performance is inseparable from the safe deployment of that vehicle. Congress and the federal government must focus on strong safety regulation and enforcement rather than hands-off policies sought out by the AV industry, such as waivers and exemptions that clear the way for widespread piloting and deployment of AVs.

2

Scope and context must be appropriately defined

Despite shortsighted calls from industry to apply the same set of policies to all classes of vehicles, Congress must recognize that different classes of vehicles operate in different contexts and come with their own unique set of challenges. A passenger vehicle operating on city streets is simply not the same as a Class 8 truck or a city bus.

In a 2022 paper published by Traffic21, a transportation research institute at Carnegie Mellon University, one of the world's leading robotics research institutions, the authors found that transit vehicles, including public transit buses and vans, are "highly likely" to require the presence of a qualified human operator, regardless of how far automated technologies come. The report notes that, "even with safety-enhancing technologies in place, there remains a need for operators on board to scan for latent hazards or threats to safety that aren't immediately visible to the system or the driver, but that may be predictable to an experienced operator."

Some of the challenges highlighted in the report are as simple as the fact that drivers, cyclists, and police use hand signals to communicate with other drivers or direct traffic. Eye contact between drivers is often used to determine if it is safe to proceed through an uncontrolled intersection, but for both, the report states, "there is no parallel mechanism to communicate between autonomous vehicles and the rest of the world." The report goes on to highlight a number of critical, non-driving tasks performed by bus operators, and draws attention to overlooked challenges, including those brought about by iterative advancements in automated technologies.

The human element in the context of public transportation simply cannot be overlooked, and the same is true for other classes of commercial vehicles. In a recent FMCSA waiver request by Waymo and Aurora, the AV companies self-identified that without a human operator, mandatory evidence-driven safety measures simply cannot be carried out. In the request, Waymo and Aurora admitted that "Compliance with [regulations requiring the placement of warning devices to alert drivers that a commercial motor vehicle is stopped in a traffic lane or on the shoulder] is not feasible for autonomous CMVs without a human on board." Instead, they proposed using cab-mounted warning lights, which are less safe for a variety of reasons including that cab-mounted lights may be obscured by the rear portions of the vehicle including trailers and cargo.

TTD raised a host of concerns with this waiver request, but for the purposes of today's hearing, we hope it serves to reiterate that this is just one of many unanswered questions about if, or even how, highly automated vehicles can safely operate in the context of commercial motor vehicles.

Global economic competitiveness cannot be met through hands-off policies

Like with today's hearing, we often see the claim that we are falling behind China and other countries in the development and deployment of automated driving system technologies. But for workers, the lingering question is what would "leading" in this sector even mean for their future employment opportunities? History tells us that without clear federal leadership American manufacturing workers will be the last to benefit from the economic benefits of these technologies. To ensure broadly shared prosperity and that jobs created in AV manufacturing are good jobs here in the United States, lawmakers must take clear steps. They must ensure that U.S. government assistance for the development of AV technologies, and federal procurements of AVs or procurements by transit agencies or state and local governments through federal assistance, come with strong Buy American policies and a U.S. Employment Plan or similar procurement standards that ensure the development and use of AVs also benefit communities and lead to good middle-class domestic manufacturing jobs.

Congress must work across the aisle and with key stakeholders to meet our policy needs

Finally, we want to be clear that TTD firmly believes that a federal framework is necessary to meet the workforce, safety, and technological challenges presented by automated vehicles. The current piecemeal landscape of legislation being led by state legislatures is a recipe for disaster, but is ultimately a reflection of the federal government standing on the sidelines. However, we strongly believe that the best way to achieve this goal and to meet the concerns of transportation labor is not to make partisan choices by lining up behind a Democratic- or Republican-led AV bill in today's hearing. Rather, we strongly urge all members of this committee to work together on a bipartisan basis, in close consultation with all stakeholders – not just the voices of industry – to craft a product that protects Americans, provides union workers with good jobs, and treats this technology with the seriousness we believe it ultimately deserves.

Sincerely,

Greg Regan
President
Transportation Trades Department, AFL-CIO