April 8, 2022

The Honorable Pete Buttigieg  
Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590  

RE: Docket No. DOT-OST-2022-0016; Non-traditional and Emerging Transportation Technology (NETT) Council; request for comments  

Dear Secretary Buttigieg:

The Transport Workers Union of America (TWU) represents 155,000 members across the transit, airline, railroad, university, utility, and service sectors. The vast majority of these members work with transportation technologies on a daily basis. Our members include bus and subway operators, flight attendants, station agents, airline ramp workers and gate agents, Amtrak onboard service workers, pilot instructors, airline dispatchers, mechanics in all modes, and others with a vested interest in the NETT council’s work. We appreciate the opportunity to comment on this important issue.

President Biden’s Task Force on Worker Organizing and Empowerment cited the NETT Council as an opportunity for the federal government to take pro-worker actions and to center frontline employees as emerging transportation technologies evolve. The Task Force recommended that the Council “focus on key priorities and ensure labor’s involvement in discussions of autonomous vehicles and automation in transit systems and trucking.”¹ The TWU views this docket as a step towards fully implementing this recommendation and ensuring that new technologies create, support, and expand high-quality, union jobs rather than undermine them.

The department has already taken a crucial step towards organizing an effective NETT Council by adopting a set of Innovation Principles\textsuperscript{2} to guide the Council’s work. The TWU has enthusiastically endorsed\textsuperscript{3} these principles and we believe they should be embedded in the Council’s governing documents. While these principles are not specific to any type or variety of technology, they are well-designed to address all future innovations in a pro-worker, pro-safety way.

As Congress recognized when it authorized the NETT Council, the DOT has desperately needed a mechanism for aligning its work across modal agencies – especially with regard to new and emerging technologies. Absent such a coordinating process, the macroeconomic and social effects of these technologies may be entirely ignored by federal regulators. At the same time, the safety focus of the modal administrations must never be in doubt. Unless these pieces are carefully balanced, the Department will run the risk of either undermining existing standards, potentially fast tracking unsafe or job-destroying projects, or enabling forum shopping between modal administrations, creating a race to the bottom for oversight.

The examples of hyperloop and autonomous vehicles serve as good case studies at the extremes. The hyperloop industry attempted to sidestep every modal agency and create its own set of authorities through the original incarnation of the NETT Council. Had they succeeded, two hundred years of railroad safety, environmental, and labor protections would have been abandoned – an outcome that the DOT correctly found to be unacceptable when it placed hyperloop technology squarely under the FRA’s jurisdiction. Autonomous vehicle companies, in contrast, are currently attempting to find the de minimus set of regulations by picking and choosing which modal agency to apply to for various rulemaking petitions, exemptions, and waivers. The industry’s collective goal appears to be to find the most lenient agency with the fewest restrictions and then move as many requests as possible through that modal administration. The approval of one agency is then used as evidence in dockets before other regulators. A strong, unified approach from the entirety of DOT is essential to preventing this strategy from undermining safety or evading regulation in our transportation systems.

While an active NETT Council would benefit the Department’s proceedings in many categories, today the most urgent issues for this Council all involve automation. Automated systems, processes, and vehicles are not new to transportation. The New

\textsuperscript{2} https://www.transportation.gov/priorities/innovation/us-dot-innovation-principles
\textsuperscript{3} https://www.twu.org/twu-president-samuelsen-dot-innovation-principles-will-ensure-transportation-workers-have-a-seat-at-the-table/
York City subway system ran a fully autonomous train from 1962-64.\(^4\) The first “automatic pilot” feature was demonstrated on an aircraft in 1912.\(^5\) The entire railroad industry converted to positive train control systems in the course of a little more than a decade.\(^6\) The modal agencies have independently demonstrated their abilities to oversee, regulate, respond to, and implement automation technologies. While the TWU has not always agreed with the modal agencies’ decisions and some of these automations have been used to by some companies to undermine workers’ interests, there is no doubt that significant expertise exists within each modal agency on specific pieces of equipment and processes in their modal domains.

However, we know from experience that these responses have been siloed. The FAA had little need to coordinate with the other agencies on its review of collision avoidance systems – no other mode was facing a similar issue at the time. Today, NHTSA and FMCSA would likely find significant value in reviewing the FAA’s actions on collision avoidance as they address automatic braking, lane assist, and other road technologies. Similarly, the labor protections provided to transit workers and partially enforced by the FTA were created, in part, to address new technologies’ effect on employment and should be adopted as models in other transportation industries. The department has a wealth of resources on automation buried within the modal agencies that should be shared and, where appropriate, implemented across all modes.

Additionally, automation is raising issues that cut across modal jurisdictions. For example, the FMCSA’s certification for commercial vehicle operators is intrinsically connected to the equipment and components certified by NHTSA. Training requirements for commercial driver licensees should naturally be based on the equipment available in their vehicles. Likewise, whether a piece of equipment is considered safe should be based, in part, on whether a worker responsible for that equipment is able to use and repair it based on their skillset and access to relevant training. Separating these two concepts runs the risk of delaying potential safety gains, destroying jobs, or forcing operators into impossible situations through conflicting regulations.

Zero-emission vehicles, similarly, present opportunities for coordination through a publicly interested NETT Council. The Department has prioritized reducing the carbon footprint of the entire transportation industry by moving to electric, hydrogen, or other

\(^5\) https://www.cnbc.com/2019/07/19/how-autopilot-was-born-a-century-ago1.html
\(^6\) https://railroads.dot.gov/train-control/ptc/positive-train-control-ptc
\(^7\) 49 USC 5333; also known as 13c protections
zero-emission engines. Cars, trucks, and buses all have similar safety and practical needs as part of this transition. Railroad and transit systems are substantially low-emission already and may present some best practices in this area, especially regarding upskilling and training the current workforce. Providing a space for the modal agencies to collectively undertake action on this issue and to prioritize workers’ needs across the entire department would help ensure that the next generation of transportation jobs are good, union jobs.

Beyond the DOT, automation and electrification are issues that cut across the entire executive branch. President Biden has issued several executive orders regarding these subjects. Implementing the Administration’s policies and following the President’s vision will be significantly easier if the NETT Council, can help coordinate the department’s actions on these and other issues.

Question Responses

1. *How can the NETT Council most effectively serve as an entry point for nontraditional and emerging innovation and technologies ready for integration into the transportation system?*

While technology may be rapidly changing, the DOT’s existing policy solutions have intentionally been built to be flexible and sustainable through these transitions. Acknowledging that most “nontraditional and emerging transportation technology” can and should be addressed through existing standards will be essential for navigating the next generation of innovation. The NETT Council should begin each of its reviews by asking whether any new framework is needed or if a new technology is better classified as the next iteration of an existing one.

This analysis will likely identify many technologies which are simply new applications of innovations that exist in other modes. The Council should be a forum that encourages modal agencies to share best practices and approaches for oversight of these kinds of technologies. For instance, safely integrating drones into our airspace may require similar principles and strategies that safely integrating connected vehicles on our roads would need. These common components should be the priority for regulators as they transition such technology from one mode to another.

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2. *What has worked well, and not well, about the current structure and activities of the NETT Council?*

The Council has not been served well by its continuous and, at times, sole focus on hyperloop. Most of the public communications from the Council have centered on this technology with only casual references to other issues. The effect has been that the messages coming from the Council read more like marketing glossies from a hyperloop company than government oversight. This cheerleading approach serves no public interest, undermines the agency’s core safety responsibilities, and distracts from the Department’s broader work.

Going forward, the Council should ensure that it is handling a diverse set of issues and that its materials fairly address new technologies’ obligations under current law, as well as their potential benefits.

3. *How can the NETT Council best incorporate the perspective of and engage with other Federal agencies and a broad range of stakeholders (e.g., academia, labor unions, state, local, and tribal governments, private sector) to fully understand potential issues and opportunities related to transportation innovation?*

The TWU appreciates the Department’s focus on the needs of working people. Workers are the first to know if a new technology is functional or safe – they are the ones who directly use these innovations. Workers also suffer through the failures of government policy when things go wrong. Facilitating and prioritizing workers’ representatives in Council proceedings will help ensure that policymakers know the drawbacks and trade-offs of new technologies so they can be properly regulated and safely integrated.

4. *How can the NETT Council more effectively reflect inputs from a broad range of transportation stakeholders to assess the positive and negative consequences of transportation innovation?*

The TWU applauds the Department for opening this comment period. This approach is the correct answer to this question. In addition to actively soliciting public comment on the Council’s agenda, NETT Council meetings must be open to the public. It is also critical that as stated in the Department’s own Innovation Principles, workers and unions have a “seat at every table” in the innovation process. We look forward to the opportunity of working with the Administration to help set an agenda for the Council that benefits and prioritizes working people.
5. Are there additional stakeholders the NETT Council’s analysis should reflect?

The Council must prioritize the voices of publicly interested groups rather than for-profit entities. Many DOT advisory bodies are stacked with corporate executives and their consultants, leaving workers, safety advocates, equity groups, and others out in the cold. This Council is, in part, an opportunity to correct the mistakes of previous generations and regulate new technologies under an inclusive process from the beginning – a process that elevates the needs of people, not companies. The Council should not do anything that would weight the scale further towards any stakeholder that doesn’t directly represent the interests of individuals using, building, or operating our transportation systems.

6. Are there stakeholder groups that have been marginalized in transportation technology innovation that should be better represented in the NETT Council’s analysis and work?

Workers have been historically and systematically ignored by innovation policymakers. For decades, our government’s public belief was that innovation for its own sake was inherently in the public interest. The result has been a widening income gap between the working class and the richest 1%, many of whose wealth was created by new technologies that undermined labor standards, demanded poorer working conditions, or destroyed jobs altogether. Innovation in and of itself is not in the public interest, in fact it can often run counter to our collective well-being.

Secretary Buttigieg, in announcing the Department’s new Innovation Principles, broke with this practice. He made it clear that “Innovation is not an end in itself, it’s a chance to improve everyday life. So our department’s efforts should always be serving key public policy priorities like creating economic opportunity…”9 Hewing to this goal – and mainstreaming the voices of working people through their elected representatives at unions – will help ensure that workers and their needs are always prioritized in the Council’s work.

7. Using DOT’s authorities, what nontraditional and emerging innovation and technologies should NETT Council prioritize for analysis as most impactful, positive or negative, for the transportation system? What emerging innovations have the most significant potential impact on DOT’s strategic goals of safety, economic strength & global competitiveness, including creating good-paying jobs, equity, climate and sustainability, transformation, and organizational excellence?

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9 Secretary Pete Buttigieg, speech at the Consumer Electronics Show. January 6, 2022
As mentioned above, addressing automation and zero-emission vehicles are currently the two most pressing issues that the Council should address. In both cases these topics cross the boundaries of DOT modal agencies and have many analogous frameworks in one agency that could be implemented in another. Additionally, if left unregulated or poorly regulated, these technologies threaten to reduce the safety of our transportation systems, undermine and deskill workers, worsen already rampant inequality, and weaken our economy as a whole.

8. What emerging innovations face gaps in focus, support, and/or regulation under DOT’s existing regulatory frameworks, and should be reviewed by the NETT Council?

As mentioned above, autonomous vehicles require significantly more attention from the department. While NHTSA has, so far, been in the lead on this issue, FMCSA, FTA, and PHMSA will be directly affected by whatever standards NHTSA ultimately adopts. The other modal agencies either have already or will also need to update their regulations and procedures to address automation. This is a conversation that must be had across the entire department since we cannot expect various automation adaptations to emerge or to remain solely inside of one modal agency’s jurisdiction.

Additionally, transportation network companies (TNCs) who rely on a perverse, anti-worker business model that increases congestion and pollution while decreasing wages\(^\text{10}\) should also be reviewed. These companies, which clearly have their sights on various mobility sectors including public transit, have intentionally skirted existing law to the detriment of our entire transportation system. Bringing attention to their business practices and seeking solutions to the public ills they cause would greatly benefit workers and the travelling public.

Thank you for the opportunity to comment on these important issues.

Sincerely,

[Signature]

John Samuelsen
International President

\(^{10}\) [https://ttd.org/the-cost-of-doing-business/](https://ttd.org/the-cost-of-doing-business/)