



A bold voice for transportation workers

THE IMPACTS OF ZERO EMISSION BUSES ON THE TRANSPORTATION WORKFORCE

TTD and our affiliated unions recognize the serious impacts from climate change and the severe consequences we face if we fail to respond with responsible measures that reduce our carbon footprint. Like automation, however, discussions about reducing our carbon footprint often focus on the potential benefits from new technologies, without looking at the entire picture and taking intentional steps to ensure that the impacted industries' workers and the communities they live in benefit from technological change.

Advocates of automation and mobility-on-demand services, for example, often tout the exciting new job opportunities created by the technologies while turning a blind eye to the impacts those technologies have on the incumbent workforce, including job loss and life-long wage suppression. TTD's views and concerns about the impacts of those technologies are detailed in our past policy statement, [Principles for the Transit Workforce in Automated Vehicle Legislation and Regulations](#); comments on the Trump administration's ill-advised [AV 3.0](#) and [AV 4.0](#) policies, as well as its so-called [Automated Vehicles Comprehensive Plan](#); our [report on the disastrous anti-worker policies and efforts to undermine public transportation by ride-hailing companies](#); and testimony by former and current TTD presidents [Larry Willis](#) and [Greg Regan](#) before the House Transportation and Infrastructure Committee.

Federal and local policies have long ensured that expanding public transportation access plays a key role in greenhouse gas reduction strategy. CO₂ emissions per passenger mile are significantly lower on the existing fleet of diesel- and natural gas-powered bus transit vehicles than single occupancy vehicle trips. However, as the entire transportation industry seeks ways to continue reducing its carbon footprint, the move to zero-emission vehicles will continue to become a focus of federal, state, and local policies.

While the adoption of zero emission vehicles stands to make the transit sector an even stronger tool for reducing carbon emissions, years of underinvestment in workforce training combined with unfocused and sometimes non-existent policies on workforce support and training place tremendous strain on the incumbent workforce who may soon be asked to maintain complex electric infrastructure and vehicles. By way of example, at one major transit agency it was estimated that only 15% of bus mechanics have been trained to use a voltmeter, a basic diagnostic tool for electric engines. Without investment in worker training programs as a prerequisite for government support, transit agencies are likely to contract out this work leading to a large number of our existing mechanics seeing their jobs outsourced to lower-paying, lower-quality employers.

Furthermore, electric engines require fewer mechanics to maintain than their diesel and natural gas counterparts, which currently make up more than 99 percent of the domestic U.S. bus fleet. Policies that encourage or require a rapid transition to an all-electric fleet without an accompanying increase in transit service (which will serve to further reduce greenhouse gases) paired with strong labor protections will put tens of thousands of workers on the unemployment rolls.

For over 100 years, transportation workers, their unions, and their employers have worked together in the United States, bound by labor protections, to adopt and implement the extraordinary technological changes that have been the hallmark of this sector. Good, middle-class, union jobs must continue to be the focus for policymakers in the context of environmental technology, just as it has been for other innovations.

With that in mind, Congress and the Biden administration must take specific steps to better prepare for the challenges that zero-emission vehicles, including battery-electric buses, pose to our public transportation workforce. TTD calls on Congress and the administration to support the following policies:

- 1) Congress must require the Federal Transit Administration to promulgate regulations that require workforce impact assessments and labor standards, including application of 49 USC 5333(b) labor protections, to all new technology procurements intended for public transit revenue service including battery electric bus and autonomous vehicle projects. Such policies shall include:**
 - a) advance notification of procurements and workforce impact assessments including potential job displacements or significant changes in responsibilities due to the introduction of new technologies to employee representatives
 - b) right of first refusal for existing employees to newly created jobs;
 - c) create requirements for employers and employees to bargain in good faith over the terms of implementing the project, including requiring such changes to be a mandatory subject of bargaining;
 - d) career ladders, apprenticeships and training for incumbent workers for jobs created by these projects;
 - e) proactive policies to ensure the manufacturing and development of new technology is done within the U.S and that new jobs created are high quality and unionized to the extent allowed by law;
 - f) Clarification that 13(c) protections are designed to cover all areas that are clearly public transportation, including grants issued under title 23 for public transportation projects; research, development, and deployment programs; and the use of so-called local funds for public transportation projects funded by the federal government.

- 2) **Require Compliance by Private Contractors:** Require all providers of public transit service under contract with agencies to comply with the same safety mandates, labor standards, training requirements, ADA, drug and alcohol rules as apply to the contracting agencies.
- 3) **Require Workforce and Community Impact Assessments in all Zero Emission Vehicle Procurements:** As public transportation agencies continue to show growing interest in new technologies, including automation, demand-responsive transit, and battery electric buses, they must be required to conduct workforce- and community-impact assessments when procuring potentially disruptive new technologies to ensure transit equity.
- 4) **Establish a National Frontline Workforce Training Center:** As detailed in TTD's [previous policy statement on priorities for frontline public transportation workforce development](#), Congress should provide funding for a national training center that is focused on the frontline workforce and effective labor-management partnerships for training and safety. This center should be charged with creating frontline workforce standards based training in maintenance and operations including maintenance for BEB, through labor-management partnerships and apprenticeships. Additional dedicated funding should be provided for the creation of a national transit frontline workforce training consortium to coordinate the development of materials and training programs for skills related to operating and maintaining the new zero-emission buses and charging stations.
- 5) **Ensure Workers are Represented on Technology and Climate Change Taskforces, Advisory Councils, and Other Committees:** Advisory boards, task forces, stakeholder committees, and all other consultative groups formed by the federal government or state and local governments must include worker representatives from the appropriate workgroup in at least equal numbers as corporate, environmental, or other stakeholders. Furthermore, these groups must be structured so that public interest advocates—including representatives of local communities, labor unions, equity and accessibility advocates, and environmental organizations—carry the majority of decision-making authority.

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