

A man with a beard and a cap is seen in profile, looking out of the window of a transit vehicle at night. The interior of the vehicle is dimly lit, and the window shows blurred lights from the outside. A sign with the text "RECOVER SLOWLY" is visible on the window. The overall mood is somber and reflective.

HEALTH & SAFETY SIDELINED

The Need For Effective And Non-Punitive
Reporting Mechanisms In Transit Work

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Executive Summary

Through the accounts of frontline transit workers we describe the persistence of severe health and safety issues. Too many transit workers are not treated with respect and dignity at work. We outline the reasons for the widespread underreporting of these issues. These include a burdensome process, perception of futility, and hostile responses from management. We also highlight positive changes at some agencies that have centered around enhancing worker voice. Following these examples and calls from workers themselves, we argue that immediate and bold action is needed to address transit worker safety. We follow many of the recommendations made by FTA reports starting in 2015 calling for just that, as well as an effective data collection process. Recently, the FTA has made critical efforts towards accountability for transit agencies and enhancing the participation of transit agencies. Enforcement with labor partners and technical guidance that ensures rigorous standards will help make PTASP regulations effective at improving safety. Together, these measures could go a long way towards enhancing dignity for our essential frontline transit workforce.

WORKER VOICE

- The FTA should encourage transit agencies to proactively seek out and act on worker feedback.
 - > Mechanisms for eliciting frontline worker feedback include holding office hours, listening sessions, and speaking with frontline employees directly.
 - > High-road joint-labor management partnerships also encourage more feedback directly from frontline workers and their representatives and should be encouraged.
- Reporting should become a required part of transit workers' job function. Workers should be paid the same hourly rate for reporting and be given accommodations to do this at their worksite.
- The FTA should set more detailed guidelines for effective and non-punitive reporting that have been recommended by prior research reports.

EXPANDING PTASP REGULATIONS

- Transit agencies should be required to have Employee Assistance Programs (EAP) that provide immediate assistance to drivers after a safety event.
- Agencies should be required to share safety or incident reports directly with safety committee representatives.
- Guidance for performance targets should be both realistic and require a safer work environment.
- We encourage the FTA to mandate response times to assaults and other safety incidents be a metric that is tracked, reported, and that targets are set for.
- Agencies should be required to train frontline workers on new definitions for "transit worker assault" and discuss changes in requirements for the types of information agencies need to collect and report to the FTA regarding assault incidents.

PTASP ENFORCEMENT

- Safety committees should be given an expanded role in investigating and reporting transit agency non-compliance with PTASP regulations.
- FTA should establish a formal process for receiving and investigating reports of non-compliance.

Introduction

In an in-depth study on the work experiences of bus drivers across the U.S., we found a number of severe health and safety issues, which are not adequately being reported, investigated, or mitigated (Akridge et al. 2025). We are a team of researchers at Carnegie Mellon University who study how technologies, like autonomous driving systems, might complement, rather than replace, transit workers. In partnership with AFL-CIO Technology Institute, the Transport Workers Union of America, and the Amalgamated Transit Union, we have sought to gain a better empirical understanding of the current conditions and work process of skilled bus operators to inform human-machine teaming. However, in our in-depth diary study where we collected over 2,000 daily diary or journal entries about bus operators' work days and over 100 hours of interviews, the emphasis on health and safety concerns was overwhelming. About half of the drivers we interviewed self-reported experiences of assault – despite this not being something that was asked about directly. Moreover, drivers reported, again and again, “inhumane schedules” that left them without practical access to short breaks most of us take for granted. On top of these concerns were issues raised about maintenance and air quality.

Such findings confirm recent transit research (Wasserman et al. 2024) that emphasizes a core reason for current staffing shortages in bus transit is the persistence of hazardous working conditions. This includes “a culture of exhaustion, burnout, and physical injuries” (ibid, 28), including “ordered call-backs” that require an operator to come in on their day off to work an additional shift or more ad-hoc forms of mandatory overtime such as an operator being required to work an additional trip or two after having worked a full day. Additionally, chronic issues with schedules leave little or no time for breaks, keeping drivers in their seats with limited access to restroom facilities (see also Van Eyken 2022). Finally, a growing body of research, including our own, suggests that assaults on transit workers are widespread and severe (Akridge et al. 2025; Wasserman et al. 2024; Van Eyken 2022; Rennert 2023) and frequently instigated by operators' role in policy and fare enforcement (TRACS 2015). Yet, notably, many of the accounts of assaults, inhumane schedules, and unsafe operational conditions that we collected were not reported to supervisors or the National Transit Database (NTD). Our immense body of empirical data on the work experiences of bus operators thus supports the claim that underreporting remains widespread and severe, especially of assaults.

Prior research suggests the need to develop a more comprehensive data infrastructure on transit worker safety, and to better understand underreporting.

Prior research suggests the need to develop a more comprehensive data infrastructure on transit worker safety and better understand underreporting. For example, a 2011 report from the Transit Cooperative Research Program indicates that the NTD “does not capture the true extent of workplace violence.” In 2017, the FTA reported they could not definitively assess safety standards due to lack of data. Since then, the FTA has taken important steps to expand the types of assault reported to the NTD. This will be crucial to transit agencies taking on data-driven hazard identification and safety risk mitigation in order to achieve reductions in workplace violence. Our study began in the first month of the new requirement to report “non-major” assaults on transit workers, April 2023, and continued for twelve months. While we did not have visibility into whether reports transit workers filed to their agencies were reported to the NTD, we found that many workers did not report safety incidents in the first place. A report from the FTA Transit Advisory Committee for Safety (TRACS) argues that there needs to be research on why assaults are unreported so that this problem can be addressed (2015, 7). Our work provides insights into this research question. In what follows we outline barriers to effective reporting and emerging best practices. We also offer a set of policy recommendations based on our data and an analysis of the current state of efforts to enhance transit worker safety.

Findings

BARRIERS TO EFFECTIVE REPORTING

BURDENSOME REPORTING PROCESS

In part due to onerous schedules, it can be difficult for bus operators to stay late or come in early to fill out reports. Helen, a driver in Minneapolis, Minnesota, makes this clear. In the weeks before our interview she had done 60–70 hour weeks in order to make up for lost wages due to taking time off for bereavement. This meant long days with breaks few and far between. On top of this, she had a young daughter at home she had to care for. In the interview, we discussed these impossible circumstances and her recent experience of an assault. A passenger had spat at her and threatened to kill her over a misunderstanding about fare. We asked her if she reported the incident. She did not. Helen emphasized, “I don’t want to have to stay an extra 30 minutes and write paperwork.” This kind of incident was so common for her she reflected that if she really reported all safety incidents she would be staying late nearly every day. On the front end of the workday, many bus operators feel pressure to complete rushed inspections of their vehicles, often fearing more severe consequences for delaying service than for taking a bus with issues out on the road. In part due to not being allocated enough time, Cheryl reflected, “I do question sometimes whether or not operators pre-trip their buses or they just look at it and walk around real fast.”

Even when agencies try to improve the ease of reporting it can worsen these issues. Lashay, an operator in Atlanta, Georgia, told us about an initiative that was supposed to improve transparency and accountability in reporting but ended up producing new burdens. The structure of this program puts the onus on employees to take the time and initiative to write up a report. Bus operators must then come in for a “close loop” session, where they meet with supervisors, during regular business hours. This Atlanta driver reported that they are not paid for this time and have to accommodate the schedule of supervisors and managers (i.e., scheduled for the driver’s day off). Many operators describe avoiding an onerous process, even if it is paid or is less burdensome than the example provided above, having accepted the implicit message from their supervisors that all that matters is on-time performance. Helen reflected that over time you learn that management just wants you to “shut up and drive.”

PERCEPTION OF FUTILITY AMONG DRIVERS

Across our interviews we find a pervasive normalization of unsafe conditions. A driver in Houston described radios at her garage being broken more often than not. When she was asked if this was something that was checked during the pre-trip, she said no and that if they did practically no one would be leaving the garage. After another driver in Minneapolis described a horrific assault and indicated that she did not report it, we asked her why. “I did not do a report because Metro Transit knows exactly what we are dealing with on a regular basis,” she replied. This includes mechanical and roadway safety issues too. We heard from a driver in Houston who reported a bus with retrofitted mirrors as being unsafe, received no follow up, and then received a disciplinary action when an incident happened with the mirror.

Many drivers feel alone and unsupported while driving. This theme came up again and again in our interviews. Camilla, an operator in Long Beach, California described how a man threatened to shoot her as he continued to berate her for no apparent reason. She was close enough to her garage to pull aside towards the gates. As the abuse continued she called her dispatchers.

***“Somebody needs to come and get this person off this bus! He’s threatening bodily harm on me. He’s carrying [a gun]. He was going to shoot me... I don’t feel safe with this person continuing on my bus.’ Nobody showed up. Nobody. No supervisor. By this time, this guy, he’s hearing me say this on the radio, and he gets off the bus. And he’s looking at me and he’s like, you know, ‘I’m gonna fucking walk up into this yard and they’re not gonna do anything.’ And that’s what he did. He walked into the yard. And I just closed the doors. And I continued on and when I got to the end of the line, still, no supervisor, nobody checked to see if I’m okay.*”**

I just broke, I had a breakdown. I had this where I was like, F— this job, F— these people, F— this bus. I was so upset, you know, just nobody came out. And I, in detail, told over the radio what happened.”

At this point in the interview Camila began to tear up and had to pause given the weight of this incident, even a year after the fact. It was not only the trauma of the event, but being unsupported. Even when she did speak with a supervisor, she stated, they did not offer empathy for what happened to her on the road. Camila's experience also speaks to other aspects of shared experience with other drivers, including dangerously slow response times. In this context, many drivers feel as though their management has a preference for operators who will not say anything at all.

HOSTILE AND PUNITIVE RESPONSES FROM MANAGEMENT

Drivers fear speaking up because of responses to reporting from their management. We heard from Jane, a driver in San Francisco, California who reported a man making violent threats only to be criticized by her supervisor. The idea that supervisors would rather not know about incidents came up from drivers across the country. Another operator described how,

“I know, a lot of drivers, like I said, I’ve been spit on a couple times and I don’t say anything anymore. You know, people spit at me or whatever. And I just clean it up and just go on my way. You know, like, you don’t want to say anything, because what management’s gonna say, ‘Well, what did you do to instigate it? Why didn’t you just shut up?’”

This operator described how she was issued disciplinary action for blowing a passenger a kiss after the assailant harassed her for several minutes.

We also heard from an operator in Fairfax County, Virginia who described a colleague at her agency who was targeted by management for reporting safety issues on her buses and eventually fired. She described how in this context her management prefers “submissive” drivers who don’t report.

IMPROVEMENTS IN REPORTING

Several operators described organizational changes that improved the reporting process. This includes a driver at the Valley Transit Authority (VTA) who described how her supervisors had made an effort to make the reporting process more transparent. They printed charts and educated drivers. “It kind of brings me back to not everything is going to happen instantly. And understanding why. So it’s improved greatly.” This contrasts with “prior to a year ago, we were just told to fill out a comment form. And then you fill it out and you don’t know where it goes. You may hear back that it was received, you may not.” She went on to emphasize the importance of their apprenticeship program run through a joint-labor management partnership that had increased worker voice and improved communication between drivers and management. Others, including several drivers in Eugene, Oregon, emphasize the positive impact of management making an effort to elicit feedback from drivers.

“I never met the old GM [general manager]. I worked there for four and a half years, and I couldn’t even have picked her out of a lineup. I mean, I never met her and I don’t know what that was about. And I never met any of the members of the board either. And now I’ve met three of them. So, and the...the GM, when he first started working he, and he still does this, he’ll come into the lounge where we all are, and just kind of hang out for, you know, 15 or 20 minutes. So if you have a thing that you’ve been wanting to tell him, you could, and I actually made a pitch... they didn’t use it. But I felt like my input was welcome, right?”

In some ways it really is that simple, having time with management, being listened to in a substantive way.

Recommendations

ENHANCING WORKER VOICE

From their experiences, bus operators suggest a path forward. This includes operators calling for worker voice at every level of transit operations. “Why can’t we take a risk – do anything we want to re-envision this whole project so that drivers have a stake in this too,” one operator asked. Practically, this could look like operators having designated time with their supervisors. One driver suggested, “everybody that gets off a shift gets five minutes to talk to an administrator gets checked in. How did it go today? Any troubles? Anything we can do better? You know, we really value you.” Another driver in Houston emphasized that they used to have something like this with a designated safety liaison present at their garage, but that the position was taken away.

“If we had a Safety Liaison that could come there and see what’s going on. Not only would it make us feel better, like someone actually cares, but possibly get something that, as it stands now, it’s like no one cares.”

Our recommendations align with these calls for enhanced worker voice. Management should proactively engage with transit workers and safety committee representatives to develop ideas and plan for improving reporting policies and processes. The results might look like what these operators in our study describe, having designated safety supervisors or supervisors making time to check in with employees one-on-one. It might also look like management holding office hours or town hall meetings where frontline workers can learn about safety initiatives and educate management about current conditions and the effectiveness of specific risk mitigation measures. These approaches have proven effective at agencies, like the ones we briefly discuss in the prior section and at the Baltimore MTA (Richardson 2019).

Other examples of best practices come from joint-labor management training partnerships which have proven effective at enhancing skill-building opportunities while also enhancing worker voice (Mackey et al. 2018). Across California high-road training partnerships have been established through the California Transit Works! (CTW) initiative. Many of these partnerships include a peer mentorship program, which helps provide support for drivers and can help encourage a safety-first workplace culture. Given these successes we suggest that FTA should take steps to encourage the expansion of high-road partnerships in training.

EXPANDING PUBLIC TRANSPORTATION AGENCY SAFETY PLANS (PTASP) REGULATIONS

Effective engagement of joint labor-management safety committees is another mechanism for enhancing worker voice. Earlier this year the FTA made important steps towards this outcome with updated PTASP regulations. Safety committees are tasked with identifying current shortfalls “for purposes of continuous improvement.” As noted by prior policy work (TRACS 2015), this will require effective data collection and safety reporting systems. This includes the proactive and participatory approaches to identify hazards and evaluate risk mitigation measures that we describe above. The FTA can encourage these practices through PTASP technical guidance and further regulatory action.

Through our findings we can identify best practices for these reporting systems. Effective reporting mechanisms need to be: 1) transparent, ensuring frontline workers have visibility on the reporting process, 2) responsive, having clear expectations on when an operator should expect a follow-up, 3) accessible, ensuring multiple channels of communication for frontline workers to report safety incidents, including ones that involve management proactively seeking out operator perspectives and experiences, and 4) fair, ensuring transit workers are paid for their time and are not met with disciplinary action or scapegoated for the incident. To this last point, having a confidential and/or anonymous option is critical. In the context of on the road near misses there are examples of this approach that can be applied from other agencies (BTS 2024). At WMATA, transit workers have a confidential way to report close calls to help the agency enhance

safety. Accessibility also requires that workers are properly compensated for their time reporting. Ideally this would mean daily reporting becomes a required part of their job function such that reporting is scheduled and paid at the same hourly rate as driving and occurs on a daily basis.

Parameters for an effective reporting process can be clarified through PTASP technical guidance and/or future FTA action. We encourage the FTA to enforce and require assurances of this provision outlined in the new PTASP rules. In “Characteristics of Non-Punitive Employee Safety Reporting Systems for Public Transportation,” Staes and Godfrey (2021) further outline best practices through a review of current non-punitive employee safety reporting systems that are aligned with these recommendations.

Training is another important aspect of the new PTASP rules. For example, de-escalation training is mandated and, in response to a public comment, the FTA emphasizes that this should not just be a “check-the-box exercise.” However, given what we heard from drivers across the country, we suggest there is a need to set parameters in the technical guidance that ensure a regular cadence for re-trainings, workers have designated time to complete the training, and are properly compensated for time spent on training. In a blatant example of management cutting corners, Lashay, a driver in Atlanta, Georgia, reported being asked by her supervisor to sign for having completed a de-escalation training without having been offered the option to take the training. We also suggest that the FTA help elevate best practices in de-escalation training that may include operators taking a designated in-person course and bringing in experts from community and local government organizations. One positive example of this is at Metro Transit in Minneapolis, MN where operators take a de-escalation course with outside experts over three days. Additionally, training for transit workers should also include the agency protocol for reporting safety incidents. There is currently some inconsistency in how non-major assaults are reported. To address this and ensure proper data collection for the NTD, frontline workers need clear and practical training on how to report these events.

Our findings make clear that management should engage in safety training, including topics such as how to respond to an assault incident, how to encourage safety-first behavior, and their obligations under PTASP regulations.

Our findings also make clear that *management should engage in safety training*. This includes how to respond to an assault incident, how to encourage safety-first behavior, and details on their obligations under the PTASP regulations. Think of Camilia’s experience being brushed off by dispatchers and then receiving no follow-up from a supervisor. Employee Assistance Programs (EAP) that provide immediate assistance to drivers after a safety event are critical. The FTA encourages EAPs, but stops short of mandating them. All transit agencies should have EAPs in place. Not only that, but management should make it clear that the use of these services are confidential and will not negatively impact how workers are treated on the job. This is a documented barrier to transit workers using these services (TRACS 2024, 14) and is also backed up by our data. Protocols for investigations should also be in place to ensure management adequately follows up on safety incidents. Our findings indicate this often not happening.

Relatedly, response times to assaults need to be tracked. Bus operators we spoke to frequently pointed to egregiously long response times to safety incidents that left them vulnerable on the road. This is a metric the FTA should consider being collected by the NTD and eventually mandating safety committees establish performance targets on response times to be included in their ASP. To accomplish improvements in response times, the FTA should encourage agencies to collaborate with local and state agencies. This is a key recommendation coming out of the 2015 TRACS report that is supported by our findings.

More generally, we encourage the FTA to help agencies establish achievable performance targets that will improve safety. One critical area to be tracked is assaults on transit workers. We encourage the FTA to ensure that these performance targets are based on accurate data that reflects all assaults (both those classified as major events and those classified as minor events by the NTD).

ENFORCING PUBLIC TRANSPORTATION AGENCY SAFETY PLANS (PTASP) REGULATIONS

For agencies to make meaningful progress on improving transit worker safety there needs to be meaningful accountability. We echo recommendations from the 2024 TRACS report (p. 19) on Transit Worker Safety that there should be a formal mechanism for transit workers and their representatives to report non-compliance. Our findings demonstrate the importance of having accountability mechanisms in place to verify the accuracy of data reported to the FTA. We also go further and suggest that safety committees should be able to conduct independent investigations, submit formal data requests to management, and be a part of FTA inquiries. The safety committee should be notified when an FTA investigation or tri-annual review is taking place and be given the opportunity to take part. Where possible enforcement should take place with labor partners.

A working example of these practices can be found with the Canadian Internal Responsibility System (IRS). The IRS establishes roles and responsibilities for management and workers in ensuring a safe and healthy workplace required under the Occupational Health and Safety Act (OHSA). Joint health and safety committees (JHSC) are actively engaged conducting regular workplace inspections, making information requests and recommendations to the employer, and have mechanisms for reporting non-compliance. All of these roles are laid out in detail in guidance documents and the IRS regulations under a framework of transparency, feedback, and accountability. We suggest that the IRS can serve as a model for how the FTA can help ensure safety committees in the U.S. are able to act effectively.

Team Description

Our team is composed of a set of experts across the domains of transportation, human-computer interaction, and autonomous vehicle research, all affiliated with Safety21, a transportation research institute at Carnegie Mellon University. Hunter Akridge is a Ph.D. student of Anthropology at Princeton University and Alice Tang is a Ph.D. student in the School of Computer Science at Carnegie Mellon University. Sarah Fox and Nikolas Martelaro are faculty in the Human-Computer Interaction Institute at Carnegie Mellon University whose work focuses on perceived trust in automated vehicle (AV) technologies, situation awareness in automated vehicle operation, and the impacts of AI and automation technologies on transit work.

Any questions about this report or the research upon which it is based should be directed to Sarah Fox at sarahfox@cmu.edu.

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