TRANSIT ADVISORY COMMITTEE FOR SAFETY (TRACS)

2022-2024 Charter

ADVANCING RIDER AND WORKER SAFETY REPORT
TRANSIT RIDER AND WORKER ASSAULT PREVENTION

REPORT 22-01

Table of Contents

Executive Summary	
TRACS Members	6
Introduction	7
Background on FTA's Tasking of Advancing Rider and Worker Safety to TRACS	7
Advancing Rider and Worker Safety and Transit	8
Transit Worker Assault Trends	8
Transit Rider Assault Trends	8
Related Rider and Worker Safety Federal Activities	g
TRACS Recommendations for FTA	11
Recommendation 1: Research, Develop, and Implement Mandated Conflict De Course Elements for Transit Workers	
Background of Committee Findings	11
Implementation Suggestions	12
Recommendation 2: Research and Develop Standardized Suicide Prevention a Training and Preparing for Distressing Events Training Courses; Provide Best P Transit Worker Support	ractices for Post-Event
Background of Committee Findings	
Implementation Suggestions	15
Recommendation 3: Require Consistent and Accurate Data Collection and Imp Requirements for Transit Worker and Rider Assaults	
Background of Committee Findings	16
Implementation Suggestions	18
Recommendation 4: Improve Security Features for Transit Vehicles and Facilit Likelihood and Severity of Transit Rider and Worker Assaults	
Background of Committee Findings	20
Implementation Suggestions	23
Recommendation 5: Support Community, Labor, and Transit Management Pa Involvement to Advance Transit Rider and Worker Safety	•
Background of Committee Findings	25
Implementation Suggestions	27
Recommendation 6: Conduct Research and Analysis to Advance Industry Undand Transit Worker Safety Opportunities	
Background of Committee Findings	

Appendix A: Report References	32
Conclusion	
Implementation Suggestions	31
Background of Committee Findings	29
Recommendation 7: Establish Formal Labor and Management Involvement to Collaboratively Advance Rider and Worker Safety	29
Implementation Suggestions	28

Executive Summary

The Federal Transit Administration (FTA) established the Transit Advisory Committee for Safety (TRACS), a diverse panel of professionals, in 2009. TRACS provides information, advice, and recommendations to the U.S. Secretary of Transportation (Secretary) and FTA Administrator (Administrator), and ultimately improves safety and public confidence in the nation's public transportation systems. TRACS consists of three subcommittees, and this report represents the Advancing Rider and Worker Safety Subcommittee's published recommendations that define best practices to prevent rider and worker assaults and suggests FTA actions for implementing those recommendations.

Transit rider¹ and worker assault prevention is a critical issue. Assaults on transit workers and riders are a significant and growing concern in the transit industry and particularly in the United States. Transit workers are left vulnerable to assault due to their working conditions. Many transit workers report stress and negative impacts due to the possibility of being assaulted by a rider. Transit riders are also concerned about personal safety on the transit system, and the level of crime on the transit system directly affects transit ridership. Addressing rider and worker safety is critical not just for protecting the personal safety of these individuals but is necessary to restore the public system safety confidence, which contributes to the fiscal health and overall viability of the public transportation networks.

The Federal government has begun intervening to address the growing trend of assault on transit systems. These include but are not limited to the following:

- FTA's Enhanced Transit Safety and Crime Prevention Initiative
- Additional data reporting requirements for the National Transit Database
- TRACS committee reports
- Public Transportation Agency Safety Plan (PTASP) requirements
- The Bus Operator Compartment Redesign Program
- The National Transit Institute's Assault Awareness and Prevention for Transit training
- The Transit Worker and Rider Safety Best Practices Research Project
- Proposed updates to the National Public Transportation Safety Plan

After meeting several times throughout the course of the year, the TRACS Advancing Rider and Worker Safety Subcommittee developed seven recommendations related to the topic of rider and worker safety, which are detailed in this report. Each recommendation is followed by implementation suggestions that FTA can consider as actionable strategies to implement the recommendation.

TRACS Recommendation for FTA	Implementation Suggestions
Recommendation 1: Research, develop,	1. Develop a universally available standard de-
and implement mandated conflict de-	escalation training course or certification.
escalation training course elements for	2. Provide clear guidance and minimum
transit workers	requirements for de-escalation training.
	3. Create a repository or hub for sharing de-
	escalation training materials.

¹ The term "rider" is intended to be inclusive of all transit customers, in all phases of the transit trip, including the time they enter the transit facility or wait at a bus stop and during the transit ride.

TRACS Recommendation for FTA	Implementation Suggestions
Recommendation 2: Research and develop	Research and develop standardized training
standardized suicide prevention and	courses for suicide prevention and awareness
awareness training and preparing for	and preparing for distressing events.
distressing events training courses;	2. Research and develop post-event support for
provide best practices for post-event	transit workers.
transit worker support	
Recommendation 3: Require consistent	1. Require consistent, accurate data collection
and accurate data collection and improve	procedures that are easily accessible and
data reporting requirements for transit	understandable.
worker and rider assaults	Monitor accuracy of National Transit Database (NTD) safety incident reports.
	3. Modify NTD reporting requirements to require
	additional information.
	4. Develop a mechanism for transit agencies to
	share assault-prevention initiatives.
	5. Require transit rider assault reporting for all
	transit agencies.
Recommendation 4: Improve security	Mandate security features for vehicles and
features for transit vehicles and facilities	facilities.
to reduce the likelihood and severity of transit worker and rider assaults	2. Require that transit agencies perform a safety
transit worker and rider assaults	risk analysis to determine if cameras should be
	installed on existing bus and rail vehicles.
	3. Require that transit agencies perform a safety
	risk analysis to determine if
	barriers/enclosures should be installed.
	4. Expand access to state-of-the-art barriers.5. Research best practices for security features.
Recommendation 5: Support community,	Identify funding channels for transit agencies
labor, and transit management	to leverage community partnerships.
partnerships and involvement to advance	Research and provide guidance on best
transit rider and worker safety	practices for establishing or strengthening
•	community and emergency responder
	partnerships.
Recommendation 6: Conduct research and	1. Research legislative disparities between States
analysis to advance industry	and their impact on worker safety and
understanding of rider and transit worker	determine Federal opportunities for transit
safety opportunities	worker protections.
	2. Research rider assaults.
	Research emerging technologies.
Recommendation 7: Establish formal labor	Define best practices for how transit safety
and management involvement to	committees address transit rider and worker
collaboratively advance rider and worker	safety.
safety	2. Define best practices for how smaller transit
	systems effectively engage frontline transit
	workers regarding the previous topic areas.

TRACS Members

The following are members of the TRACS Advancing Rider and Worker Safety Subcommittee:

Name	Agency/Organization
Edward Abel*	Southeastern Pennsylvania Transportation Authority
Brian Alberts*	American Public Transportation Association (APTA)
Johanna Cockburn	City of Greensboro (NC)
Enjoli DeGrasse*	International Brotherhood of Teamsters
Beverly Edwards	First Transit
Rebecca Frankhouser	King County Metro (WA)
David Harris	New Mexico Department of Transportation (DOT)
Molly Hughes	Washington State DOT
Donna Johnson*	Dallas Area Rapid Transit
Laura Karr*	Amalgamated Transit Union
James Keane**	New Jersey Transit (NJT)
Thomas Lamb*	Metropolitan Transportation Authority, New York City Transit
Brian Lapp*	Port Authority of New York and New Jersey
Raymond Lopez*	Los Angeles County Metropolitan Transportation Authority
Rachel Maleh*	Operation Lifesaver, Inc.
Santiago Osorio*	Metropolitan Transit Authority of Harris County (TX)
Karen Philbrick	Mineta Transportation Institute, San Jose State University
Ashley Porter	Florida DOT
Patrick Preusser*	Department of Transportation Services City and County of Honolulu
Reggie Reese	Pierce Transit (WA)
Adam Sharkey*	River Cities Public Transit (SD)
Justin Sobeck	Missouri DOT
Lisa Staes*	Center for Urban Transportation Research, University of South Florida
Gardner Tabon	Capital Metropolitan Transportation Authority (TX)
Curtis Tate	Transport Workers Union of America

^{*} Advancing Rider and Worker Safety Subcommittee member

^{**} Advancing Rider and Worker Safety Subcommittee chair

Introduction

Established by the Federal Transit Administration (FTA) in 2009 to respond to transit industry safety concerns, the Transit Advisory Committee for Safety (TRACS) is designed to cooperatively address transit safety issues. TRACS convenes a diverse panel of professionals who provide information, advice, and recommendations to the U.S. Transportation (U.S. DOT) Secretary and FTA Administrator. TRACS does not make determinations of fact or policy but identifies potential problem areas and accelerated corrective actions. As a result, TRACS improves safety and public confidence in the nation's public transportation systems.

The TRACS committee structure consists of three subcommittees, each of which addresses a different topic determined by the FTA Administrator. Each subcommittee addresses a different issue within that topic for each of the two years of its 2023–2024 charter. At the end of each year, the subcommittee publishes its recommendations for that issue.

The Advancing Rider and Worker Safety Subcommittee consists of representatives from large and small bus and rail operators, state safety oversight agencies, academia, non-profit organizations, and labor unions from communities of all sizes, from rural communities to America's most populous cities. The subcommittee focuses on topics to improve the safety of both transit riders and workers, such as transit rider and worker assault prevention, transit accessibility, and transit rider and worker safety amid public health crises. This report represents the Committee's published recommendations to the. Secretary of Transportation and the FTA Administrator.

Background on FTA's Tasking of Advancing Rider and Worker Safety to TRACS

In 2023, FTA tasked the Advancing Rider and Worker Safety Subcommittee with developing recommendations that define best practices to prevent rider and worker assaults and how FTA can support agencies in developing and implementing mitigations. ² This is the first of two reports by the Advancing Rider and Worker Safety Subcommittee.

For the purposes of this report, the National Transit Database (NTD) definitions of "assault" are used. The term "assault" is defined by the NTD as "[An] attack by one person on another without lawful authority or permission" [1]. Until recently, that definition applied to assaults on both transit workers and riders. However, recently, the term "assault on a transit worker" has been given a distinct definition that differs from the general definition of assault: "[A] circumstance in which an individual knowingly, without lawful authority or permission, and with intent to endanger the safety of any individual, or with a reckless disregard for the safety of human life, interferes with, disables, or incapacitates a transit worker while the transit worker is performing the duties of the transit worker" [1].

After meeting several times throughout the course of the year, the TRACS Advancing Rider and Worker Safety Subcommittee developed seven recommendations related to the topic of rider and worker

² The subcommittee will be responsible for addressing a new topic in 2024. The 2024 topic has not yet been finalized; the current proposal is "developing recommendations that define transit accessibility hazards, best practice mitigations, and how FTA can support safe and accessible transit."

safety, which are detailed in this report. Each recommendation is followed by implementation suggestions that FTA can consider as actionable strategies to implement the recommendation.

Advancing Rider and Worker Safety and Transit

Transit rider and worker assault prevention is a critical issue. Assaults on transit workers and riders are a significant and growing concern in the transit industry. The possibility of assault on transit can cause stress to transit workers, contractors, and riders. The United States now leads the world in total public surface transportation fatalities³ (when the high-fatality attacks in Madrid, London, and Daegu, South Korea(?) are excluded). This is a relatively recent occurrence; analysis of transit attack data from 2004 through 2021 found that the 20 attacks in the United States (against transit facilities, vehicles, or personnel) resulted in 22 fatalities, all occurring between 2016 and 2021 [1].

Transit Worker Assault Trends

The working conditions and job responsibilities of transit workers leave them particularly vulnerable to assault. Reasons for transit worker vulnerability to assault may include factors such as working alone, working non-traditional hours, and operating buses or trains in communities that have high levels of crime [3]. Societal factors may also play a role in contributing to worker assault, such as riders misusing substances or experiencing mental health crises.

The National Transit Database indicates that assaults on transit workers are increasing. From 2008 to 2021, there was an average of 241 bus and rail transit worker assault major events per year. Between 2008 and 2021, the number of reported bus and rail transit worker assaults per 100 million vehicle revenue miles (VRM) increased by an average of 8 percent per year. This represents a 121 percent total increase from the 2008 transit worker assault rate [4].

Assaults on transit operators are often underreported. An Amalgamated Transit Union (ATU) member survey concluded that the top three reasons bus operators do not report assault is that they 1) believe nothing will be done, 2) fear retaliation, and 3) feel shame or embarrassment [3]. Almost 60 percent of respondents to the ATU survey said they experience stress due to assault by riders or that the fear of assault by riders impacts their personal life daily [3].

Transit Rider Assault Trends

Personal safety on transit systems is also a significant concern for riders. Between 2008 and 2015, there was an upward trend in assault-related injuries of transit riders [5]. The growing level of transit violence is an issue for which the causes are not fully understood. Experts have speculated that increased assault rates may be due to the stress of modern society, growing violent crime, coarser public behavior, mental health concerns, or fewer police [5]. This trend appears to have preceded COVID-19 [5]; however, some transit researchers say that lower ridership levels post-pandemic have lead those who wish to commit a crime on a transit system to feel emboldened because there are fewer riders on the transit system who could potentially witness an incident [6].

³ The article's analysis focuses on "a subset of target groups: passenger trains; passenger train stations; passenger buses (including tourist, school, and chartered buses); bus stations and stops; all rail infrastructure, including railway tracks, tunnels and bridges, and signaling, control and power systems; and operating personnel and facilities and security personnel—persons deployed to operate, service, and protect the public surface transport services."

There is evidence that the level of crime on a transit system directly affects transit ridership [7]. This is compounded by the fact that ridership on many transit systems still hasn't recovered to pre-pandemic levels, as many people employed in professional and clerical occupations continue to work from home rather than commute to work [6]. In fact, over half of U.S. transit agencies responding to a 2023 American Public Transportation Association survey reported facing a fiscal cliff over the next five years [8].

Addressing rider and worker safety is critical not just for protecting the personal safety of these individuals but is necessary to restore the public system safety confidence, which contributes to the fiscal health and overall viability of the public transportation networks.

Related Rider and Worker Safety Federal Activities

The Federal government has been taking action to protect transit riders and workers. These Federal activities include the following:

- Since 2014, FTA has issued nine special directives (SD 22-14 through SD 22-22) to transit agencies to collect information on transit worker assault [9].
- FTA's 2014 Transit Advisory Committee for Safety published TRACS Report 14-01, Preventing and Mitigating Transit Worker Assaults in the Bus and Rail Transit Industry [10], which included the following recommendations:
 - Develop guidelines to implement protective infrastructure.
 - o Develop guidelines for training and education to prevent assault.
 - o Conduct data collection and analysis on transit worker assaults and mitigating them.
- On May 24, 2019, FTA issued a notice in the Federal Register (84 FR 24196) alerting transit
 agencies to the need to address the risk of transit operator assault when identified through the
 processes required under the Public Transportation Agency Safety Plan (PTASP) regulation at 49
 CFR Part 673.
- The PTASP regulation requires transit agencies to develop and implement Safety Management Systems (SMS) and associated processes for all elements of a public transportation system. In cases where a transit agency identifies hazards associated with operator assault, the PTASP regulation requires the agency, as part of its SMS, to use its documented safety risk management processes to assess the associated safety risk and, based on the results of the safety risk assessment, identify safety risk mitigations or strategies as necessary to address the safety risk. The agency would use these mitigations or strategies to reduce the likelihood and severity of the potential consequences related to transit worker assaults, based on the agency's assessment of the risk. The PTASP rule became effective on July 19, 2019, and all applicable transit providers certified to having an Agency Safety Plan in place on or before July 20, 2021 [11].
- In 2020, FTA launched the Bus Operator Compartment Redesign Program. This safety-focused program supports the redesign of bus operator compartments [12].
- FTA launched the Enhanced Transit Safety and Crime Prevention Initiative in 2021 [13]. Through this initiative, FTA provides information and resources to help transit agencies address and prevent crime on their systems and protect transit workers and riders.

- The Bipartisan Infrastructure Law, enacted as the Infrastructure Investment and Jobs Act of 2021, significantly expanded the data that FTA will collect through NTD on transit worker assaults in the future [4].
- In 2021, the National Transit Institute began offering the Assault Awareness and Prevention for Transit training course sponsored by FTA [14].
- In 2022, FTA launched the Transit Worker and Rider Safety Best Practices Research Project to help transit agencies address transit worker and rider assaults [15].
- In 2023, FTA published proposed new PTASP requirements for public comment [16].
- In 2023, FTA published proposed updates to the National Public Transportation Safety Plan (NSP), FTA's primary guidance document to improve transit safety performance [17].

TRACS Recommendations for FTA

The following sections provide in-depth information on the Committee's recommendations to FTA. Each recommendation is followed by implementation suggestions that FTA can consider as actionable strategies to implement the recommendation.

Recommendation 1: Research, Develop, and Implement Mandated Conflict De-Escalation Training Course Elements for Transit Workers

Background of Committee Findings

Conflict de-escalation is the use of communication skills—both verbal and nonverbal—to calm a person who is angry, out of control, or disturbed [18]. The Committee finds value in training transit workers on the use of conflict de-escalation as an assault-prevention tool, and many agencies do provide conflict de-escalation training to at least some of their staff. With the passage of the Bipartisan Infrastructure Law, many agencies are now required to provide workers with conflict de-escalation training [19] and FTA's Public Transportation Agency Safety Plan (PTASP) Notice of Proposed Rulemaking (NPRM) reinforces this requirement [16].

However, transit agencies face challenges in implementing effective de-escalation training. Currently, there are a wide range of practices among transit agencies in implementing de-escalation training among staff. The transit industry does not have clear information about what de-escalation training should "look like" in areas such as course length, content, and implementation (e.g., delivery methods, frequency) for initial and ongoing training requirements. Funding is also a barrier for certain transit agencies to implement de-escalation training.

Additionally, there may be differences in the training needs of different types of transit workers. For example, transit agencies find that rider-facing positions require more in-depth de-escalation training compared to other positions at the transit agency. For purposes of de-escalation training requirements, transit workers could be divided into two major groups: rider-facing positions that frequently interact with the public (including, but not limited to, bus and rail operators, frontline field supervisors, ambassadors and passenger assistance positions, fare inspectors, and security staff) and positions that interact less frequently with the public (including, but not limited to, control center operations staff and vehicle maintenance staff). Even workers who interact less frequently with the public are often expected to interface with riders when they are out on the system and could be exposed to assaults as well. Therefore, it may be beneficial to tailor the depth of the de-escalation according to the transit agency staff's job classification and training needs analysis for positions.

The wide variety of possible de-escalation training course characteristics combined with a lack of knowledge around what is needed for successful conflict de-escalation training may result in transit agencies inadvertently adopting subpar de-escalation training courses for their staff. For example, the Committee noted that many transit agencies provide 30-minute training courses, which is usually not enough time for a staff member to learn a new skill. Some transit agencies provide only virtual training courses, which appear to be less effective than in-person training. Further, many de-escalation training courses have no interactive component even though incorporating role playing into training is found to be very effective. The Committee members stated that offering initial de-escalation training to workers

in person is essential to effective training, however, there could be flexibility in whether any ongoing or refresher training would be virtual or in person. Additionally, some de-escalation training courses currently available on the market may be inadequate in terms of the minimum number of training hours for initial and ongoing training requirements. One Committee member suggested that an appropriate frequency for de-escalation skills could be every 2-3 years.

Another consideration is that de-escalation training courses provided by local police departments may not be transferrable to a transit setting, as the essential duties of police officers are different than that of transit workers, which may aggravate situations. De-escalation expertise may be better sought from sources such as emergency medical services and fire departments, mental health first responders, and social workers, which may have better applicability to the transit setting.

Committee members have also observed instances of unintended negative consequences for transit workers after receiving de-escalation training. Sometimes transit workers may be held accountable or disciplined for not utilizing de-escalation skills learned in training when confronted with an issue, even if the de-escalation training that they received was ineffective. On the other hand, transit workers may sometimes be critiqued and disciplined by the transit agency after attempting to use the de-escalation skills learned in training. Although it is valuable for transit workers to be skilled in de-escalating conflict, failure to successfully de-escalate a conflict should not result in punitive measures. Transit agency best practices should include a policy that a worker is not subject to discipline when techniques learned in de-escalation training prove ineffective in diffusing a particular situation or when the worker reasonably concludes that it is too dangerous to engage a threatening individual to attempt de-escalation. Likewise, workers must be empowered to exercise their expert safety judgment as to when de-escalation is and is not appropriate.

At this time, the Committee does not recommend including self-defense training as a requirement for transit workers since there are some differing perspectives in the area; some Committee members expressed that self-defense training has the potential to increase a transit worker's risk of injury. Several Committee members suggested workers acting on self-defense training could be at greater risk if it increases their likelihood of being involved in physical conflict. This can be especially dangerous if perpetrators are armed. Committee members mentioned awareness of self-defense training that focuses on helping employees get away rather than fighting back; they indicated a belief that unions are generally supportive of that kind of training. Other Committee members mentioned situational awareness training that focuses on helping employees identify, assess, and mitigate risks associated with assaults.

Implementation Suggestions

1. Develop a universally available standard de-escalation training course or certification.

The Committee recommends that FTA works with the Transportation Safety Institute or similar organization to develop a standard course that all transit agencies could use or access. FTA could identify a curriculum incorporating the best practices for pedagogy. The Committee recommends that the curriculum includes classroom and practical training to incorporate relevant transit work scenarios with a role-playing component. FTA should consider sources of de-escalation expertise from industries

such as emergency medical services and fire departments, mental health first responders, and social workers. In conjunction with the de-escalation training course, the committee recommends that FTA include a train-the-trainer course so that trainers implementing the course understand the goals and elements.

2. Provide clear guidance and minimum requirements for de-escalation training.

The Committee recommends that FTA develop a de-escalation training regulation. The regulation could include minimum requirements for transit agencies to implement initial and ongoing de-escalation training that would impart appropriate core competencies among training participants. The regulation would allow transit agencies to implement the standard de-escalation training course developed by FTA (detailed in the first implementation suggestion) or to develop an agency-specific de-escalation training course that meets the evidence-based requirements detailed below. This regulation could provide flexibility for transit agencies of various sizes and budgets to adapt the training to fit their agencies' specific needs.

The Committee recommends that FTA require the de-escalation training format be in-person for each transit worker's initial de-escalation training, at a minimum.

As funding is often a barrier to certain transit agencies in implementing de-escalation training, FTA should also specify in the regulation that transit agencies are permitted to use the agency's formula funds to implement de-escalation training. Furthermore, FTA should research the possibility of funding sources to support transit agencies in implementing the regulation.

The regulation should include evidence-based requirements, using research and best practices to accomplish the following:

- Inform a minimum length for the training course and the recurring frequency that transit workers would be required to take the training course
- Identify job classifications at transit agencies that would be required to take the training course, whether scaled back training may be appropriate for certain job classifications depending on their level of rider contact, and include the course in the relevant Individual Role Training Plans
- Inform classroom training, practical sessions, and course competency assessments
- Be evidence-based and related to contemporary situations and vehicles
- Inform minimum qualifications/competency for trainers
- The training format, including whether the training should be offered virtually or in-person, and if scenarios and role-playing are incorporated

In addition, the Committee recommends that FTA provides guidance on the following:

- Core competencies and terminal outcomes
- Recurring frequency of the training (this may be useful information for transit agencies that may consider providing the training more frequently than the minimum required frequency that would be established by FTA)
- A list of de-escalation training vendors that offer training courses that meet FTA standards
- Evaluation metrics (e.g. effectiveness of the training)

- Training records (e.g. training feedback, course surveys)
- Best practices for train-the-trainer programs among transit workers

3. Create a repository or hub for sharing de-escalation training materials.

The Committee recommends that FTA create a repository or hub for sharing training materials among transit agencies. These materials may include course syllabi, presentations, and practical session role-play exercises. The platform could be an electronic document management software (EDMS) system or a web-based collaborative platform. The platform should include a search mechanism and include filters such as organization name and job classification for which the training materials were developed. Transit agencies could be given the opportunity to opt in to participate, with privileges to upload and download content. It could also include a mechanism for dialogue among transit agencies regarding the training materials. A potential model for this repository is the Agency Safety Plan (ASP) Directory.

Recommendation 2: Research and Develop Standardized Suicide Prevention and Awareness Training and Preparing for Distressing Events Training Courses; Provide Best Practices for Post-Event Transit Worker Support

Background of Committee Findings

In addition to the potential for experiencing assault, transit workers may be exposed to other distressing events or to suicide as part of their duties. Suicide rates are increasing across the country, and this is a significant concern for transit agencies. There is often an overlap between an agitated rider and someone who may be contemplating suicide. Transit agencies can give their workers tools to deal with a multitude of interactions, including someone who is contemplating suicide. It is the transit industry's responsibility to make sure that transit workers are prepared for and equipped in advance of these types of events and are provided with the resources that they need to process these types of events.

Distressing-events training also equips transit workers with skills to interact with colleagues at the transit agency. Committee members report that employee-on-employee assaults have been increasing, so this could be a useful mitigation tool.

Some transit agencies are already implementing these types of training opportunities. LA Metro is developing a distressing-events training, which prepares and equips frontline workers with tools they would need if they were to witness a distressing event, like an accident or a suicide.

In terms of post-event support, Committee members report anecdotes of transit workers having little support after involvement in a distressing event. Another common issue at transit agencies is that transit workers often do not take advantage of agency-provided support, like employee assistance programs (EAP). One transit agency has provided post-traumatic event counseling for many years but has not seen many employees use the service, even when they are exposed to a distressing event. Transit workers may be suspicious of an employer-offered service and have concerns that it could jeopardize their reputation or job. Workers may not have other outlets for processing distressing events. One promising anecdote is that a transit agency utilizing a third-party service for post-event support has had some preliminary success with employee participation.

Implementation Suggestions

1. Research and develop standardized training courses for suicide prevention and awareness and preparing for distressing events.

The committee recommends that FTA develop suicide prevention and awareness training and preparing for distressing events training course regulation. The regulation could include minimum requirements for transit agencies to implement suicide prevention and awareness and preparing for distressing-events training that would impart appropriate core competencies among training participants. This regulation could provide flexibility for transit agencies of various sizes and budgets to adapt the training to fit their agencies' specific needs.

Course development should be evidence-based, using research and best practice information to accomplish the following:

- Inform a minimum length for the training course and frequency with which transit workers would be required to take the training course
- Identify job classifications at transit agencies that would be required to take the training course and include the course in the relevant Individual Role Training Plans
- Inform classroom training, practical sessions, and course competency assessments
- Relate to contemporary situations and vehicles
- Inform minimum qualifications/competency for trainers

In addition, the Committee recommends that FTA provides guidance on the following:

- Clear guidance for core competencies and terminal outcomes
- Training format, including whether the training should be offered virtually or in-person, and if scenarios and role-playing are incorporated
- Recurring frequency of the training (this may be useful information for transit agencies that may
 consider providing the training more frequently than the minimum required frequency that
 would be established by FTA)
- A list of training vendors that offer training courses that meet FTA standards
- Evaluation metrics (e.g. effectiveness of the training)
- Training records (e.g. training feedback, course surveys)
- Best practices on the agency's policies on worker's individual implementation of the skills learned in de-escalation training
- Best practices for train-the-trainer programs among transit workers
- 2. Research and develop post-event support for transit workers.

The committee recommends that FTA develop a post-event support regulation. This would include best practices for the level of support and the type of support that transit agencies should provide workers who have been involved in a distressing event. FTA should conduct research to determine which types of support programs are preferred and are most likely to be utilized by transit workers, such as third-party vendor-provided programs compared to an internal program.

Recommendation 3: Require Consistent and Accurate Data Collection and Improve Data Reporting Requirements for Transit Worker and Rider Assaults

Background of Committee Findings

Transit data can be beneficial in many ways, such as supporting planning efforts, helping governments and decision-makers make multi-year comparisons and performing trend analyses, and providing the public with information and statistics [2]. The Committee finds that current data collection practices and NTD requirements do not always lead to the best data available. The Committee has identified areas for improvement in data collection and data reporting so that transit rider and worker assault data, and initiatives to prevent assault, are recorded and reported clearly and consistently.

Data Collection

Across transit agencies, there tends to be a discrepancy in how different stakeholders define and collect data on transit rider and worker assaults. It can be difficult to compare and report different datasets. Within many transit agencies, the police, dispatchers, operators, and risk management typically have different sets of assault data based on each stakeholder's definition of "assault." At most transit agencies, the transit workers' compensation group would base the number of incidents on the number of claims. The police would have a different definition of assaults based on the legal definition of "assault" within their jurisdiction's and agency's policies. For example, at Houston Metro, law enforcement uses a different definition of "assault" than the NTD definition, which makes their reporting different than NTD's. Transit worker-reported incidents may also vary from other sources, typically based on each employee's personal interpretation of an event.

There are areas where NTD data collection could be increased related to rider assaults. Some transit agencies report that rider assault incidents do not always get reported to NTD because they find the reporting requirements ambiguous. If there are not consistent reporting guidelines, there may not be consistency among what transit agencies across the country report. NTD data does not include information on riders' perception of safety on transit, nor how many agencies have preventive community-based programs in place; these would be useful data points.

Interpreting NTD Data

NTD data can be difficult for a layperson to access and decipher. Local and international unions sometimes find it challenging to interpret NTD data with the system's existing structure and search tools. Layperson NTD users report that time-intensive tutorials and training are necessary to find and interpret data from the database. The search functionalities make it difficult for the user to identify specific datasets and create custom data reports.

In addition, without access to the underlying Safety and Security reports that transit systems submit to NTD, there's no way for transit workers and their representatives (and their safety committees, where they exist) to hold transit systems accountable for submitting accurate information. This causes a barrier for safety committees in their effort to understand the assaults that have been reported.

Easily accessible and understandable NTD data is important for transparency and accountability.

Monitoring Accuracy of NTD Safety Incident Reports

FTA does not currently have a system for monitoring the accuracy of transit systems' NTD safety incident reports and imposing consequences for underreporting. Due to instances of incongruent reporting, with large agencies reporting few incidents, some stakeholders have speculated that instances of underreporting occur. While FTA cannot necessarily determine whether a given transit system underreported the number of incidents, FTA could potentially recognize cases of extreme underreporting (e.g., when a large urban system reports five incidents over a multi-month period).

Data Reporting

There is no current means of using NTD data to track factors that may cause or contribute to assaults. As a result, transit agencies don't always record the root causes of an assault, which often include multiple factors. The Federal Railroad Administration's incident reporting requirements appear to be more robust and provide the reporting party the option of selecting more than one contributor or causal factor. If this type of causal data were available, transit agencies could explore factors that may contribute to or be correlated with assault rates, such as time of day or approaches to fare enforcement. Transit agencies could use such information to inform decisions about mitigations addressing worker and rider assault.

For example, anecdotal evidence at LA Metro indicates that most assaults are related to fare disputes. If that could be verified with NTD data, then transit agencies would have clear reason to put their resources towards considering fare-related changes (e.g., re-examining their fare structure, fare collection system, and fare enforcement policies) that may prevent or reduce the likelihood of assaults related to fare disputes.

Without data indicating what factors may be related to assaults and the nature of those relationships, it may be difficult for agencies to determine the best way to focus their resources.

Furthermore, rider assaults are not always recorded clearly. Rider assault incidents may be coded in transit agencies' data tracking as "miscellaneous." Without clear definitions and coding, it can be difficult to analyze data and may require an analyst to review each report. For full reporters⁴ to the NTD, the S&S-40 form—which is used for "major events"—would capture rider assaults, but reduced reporters to the NTD are required to provide only safety events, injuries, and fatality totals (excluding assaults on a transit worker). On the S&S-50 form, transit agencies report monthly tallies of "other safety occurrences" and "non-major fires."

The Bipartisan Infrastructure Law (BIL) changed the NTD reporting requirements for transit worker assaults; changes under BIL went into effect in April 2023. Before BIL, full reporters to NTD were only required to report transit worker assaults that qualified as "major events" or generally incidents resulting in injury beyond first aid. Reduced reporters to the NTD were required to give an annual combined tally of safety events, injuries, and fatalities; therefore, the number of each type of event was indiscernible. Physical and non-physical assaults on transit workers (e.g., spitting, verbal assault) are now required to be reported to the NTD. These minor events now will be captured in transit agencies'

⁴ An agency's reporting requirements depends on which type of reporting category the agency falls into. The various reporting types are defined in the <u>2023 NTD Reporting Policy Manual</u>.

monthly tallies. Form S&S–40 captures safety and security "major event" reports such as fatalities. NTD form S&S–50 collects monthly counts from full reporters related to "non-major" events.

Tracking Initiatives

Transit agencies pilot initiatives to prevent transit rider and worker assaults. Tracking these initiatives is beneficial so that previous efforts can be fully understood. If it is unclear if these initiatives at transit agencies have been successful, resources may be expended on efforts that have not returned benefits. Without a mechanism to share the results of these initiatives, transit agencies may repeat an initiative proven to be unsuccessful.

Rural Agency Data Reporting

Prior to BIL, reduced reporters and tribal and rural agencies were only required to report numbers of safety events, injuries, and fatalities once a year. BIL requires that these agencies report physical and non-physical assault data using a matrix format that breaks down counts by major and nonmajor event totals, injuries to operators and workers, and fatalities to operators and workers. These changes will start in 2024, and the agencies will report the data from 2023.

In terms of rider assault, reduced reporters are only required to provide safety events, injuries, and fatality totals (excluding assaults on a transit worker) to the NTD.

Implementation Suggestions

1. Require consistent, accurate data collection procedures that are easily accessible and understandable.

The Committee recommends that FTA develop a new structure for reporting data through the NTD for public access, with the intent of improving accessibility and transparency. This should include improved data search functionality so that the public can readily filter data and find a specific dataset. The new structure should also include the capability to generate customized reports. The Safety and Security reports should also be easily accessible.

The Committee recommends that FTA address the issue that police, dispatchers, transit operators, and risk management typically have different sets of assault data by developing and encouraging transit agency adoption of a single definition of "assault." This goal is to streamline reporting thresholds and move away from legal assault definitions that vary jurisdictionally. FTA could offer training for transit managers concerning when the varying definitions apply. The definition of "assault" for NTD reporting purposes is very clear in the expanded NTD assault reporting requirements that have come along with the updated definition of "assault on a transit worker" in the Infrastructure Investment and Jobs Act (IIJA (now codified at 49 U.S.C. § 5302(1))), and FTA must enforce transit systems' compliance with the expanded reporting requirements.

2. Monitor accuracy of National Transit Database safety incident reports.

FTA needs to establish a system for monitoring the accuracy of transit systems' NTD safety incident reports and imposing consequences for underreporting. FTA could flag these issues, investigate whether the transit system is reporting accurately, and impose consequences for repeat offenders and those that

fail to come into prompt compliance. FTA needs to be able to receive complaints of underreporting from transit workers and their representatives, then proceed to investigate and impose consequences as appropriate.

3. Modify NTD reporting requirements to require additional information.

The Committee recommends that FTA reexamine the minimum NTD reporting requirements so that, when assaults occur, reports include information related to possible causal factors. The categories may include the following:

- "fare dispute"
- "altercation among passengers"
- "reaction to transit vehicle arriving off schedule"
- "apparent intoxication"
- "racial/gender-based animosity"
- "rules dispute" (e.g., when a passenger reacts violently to being asked to take a seat, to turn off loud music, to stop smoking)
- "route dispute" (e.g., when a passenger reacts violently to the operator refusing to pick them up or drop them off between stops)
- "apparent mental health concern"

The time of the incident should also be included in the report so that transit agencies could analyze time-of-day trends among causal factors. FTA could work with researchers to determine the best approach to capturing causal factors.

4. Develop a mechanism for transit agencies to share assault-prevention initiatives.

The Committee recommends that FTA put a structure in place for transit agencies to share with each other about their assault-prevention initiatives and their outcomes. This structure could be a website with high-level information on the initiatives and a dashboard that produces reports. FTA could have minimum reporting requirements around evaluation of rider and worker assault-prevention initiatives. For example, transit agencies could be asked to report on objective(s), investment, and result(s) of initiatives. FTA could also require transit agencies to develop and report on qualitative and quantitative evaluation factors. Other transit agencies could use this information-sharing structure to understand the initiatives used by agencies and their results throughout the country.

5. Require transit rider assault reporting for all transit agencies.

In terms of rider assault, reduced reporters are only required to provide safety events, injuries, and fatality totals (excluding assaults on a transit worker) to the NTD. The Committee recommends that FTA require all transit agencies to report on rider assaults, as distinguished from worker assaults. The Committee recommends that FTA have a subcategory, like altercation reports, in the data tracking to report rider assaults. Categorizing these types of incidents will improve data analysis and interpretation.

Recommendation 4: Improve Security Features for Transit Vehicles and Facilities to Reduce the Likelihood and Severity of Transit Rider and Worker Assaults

Background of Committee Findings

Security features refer to both equipment and designs that are intended to improve worker and transit rider safety within transit vehicles or transit facilities. Some security features have been proven to increase safety, while others require additional research to prove their efficacy. The security features with proven efficacy include cameras, rider reporting systems, bus operator barriers/enclosures, and silent alarms.

Additional research could benefit the transit industry's understanding of the efficacy of body-worn cameras and crime prevention through environmental design (CPTED) in the transit setting. An industry roundtable, including transit workers' representatives and transit managers, may result in innovative approaches to security features advancing rider and worker safety. Emergency communication in rural areas remains a significant challenge for small transit system employees and their agencies.

Cameras

Cameras are an effective security feature for many transit agencies. Camera footage can be used as evidence to hold perpetrators accountable for an incident. Camera footage can provide a profile of the perpetrator and help operators identify and ban certain individuals from a transit system. Transit agencies can study camera footage to understand the facts of the incident and as a tool to train staff on how to approach similar incidents in the future. Signage letting riders know that cameras are installed can be effective for deterring crime.

Several examples of transit agencies using cameras to advance rider and worker safety include the following:

- At River Cities Public Transit, cameras provide a mechanism for the transit agency to identify areas of improvement in communication between riders and staff.
- At LA Metro, after an assault occurred, the agency was able to send the security camera footage to the news. Law enforcement was able to apprehend the suspect using the photos provided.
- At Honolulu Authority for Rapid Transit, camera footage helps with prosecution after a crime occurs on a transit vehicle and limits the burden on the operator.
- San Bernardino posts photos of individuals who were suspended from the system so that they can be easily identified.

The Committee identified several challenges with cameras on transit vehicles. It is imperative that the camera systems are working, so cameras must be maintained in operational condition. Some of the camera systems that transit agencies own are antiquated and need updating. It can be less expensive to install multiple cameras, but it is very cumbersome to manually download videos. Some agencies are not able to afford to do a Wi-Fi download or to make it an easier process.

Rider Reporting Systems

Rider reporting systems can be used to connect operators and riders to safety resources. Transit agencies use rider reporting systems as a mechanism for riders to contact the dispatcher or police. These systems can provide a greater sense of overall safety for riders.

Rider reporting systems enable riders to report security instances, such as real-time reports to the operations control center. Cell phone applications are available to enable riders and employees to submit information from a security event. For example, Dallas Area Rapid Transit has a "see something, say something" app.

One potential drawback of rider reporting systems is that they can create a dangerous situation if the reporting mechanism is conspicuous. For example, if riders are required to make a report on a cell phone application, it might be apparent to the perpetrator that they are being reported.

Bus Operator Barriers/Enclosures

Bus driver seat location and position can leave operators in a vulnerable position where they could become an easy victim to an assault. Barriers/enclosures that prevent people from reaching around to access the operator can prevent an operator from becoming an assault victim. State-of-the-art bus barriers/enclosures are retractable, and the operators can decide when to retract the barrier.

There are some challenges to transit agencies in the United States acquiring state-of-the art barriers/enclosures. State-of-the-art barriers/enclosures are available now and ready to be engineered for specific vehicle types that are in service. However, they are mostly manufactured by European and Canadian companies, so Buy America requirements can prevent transit agencies from ordering them.

There are some concerns about barriers/enclosures that are not retractable. Some transit agencies and operators do not prefer barriers/enclosures because of their optics, comparing a bus with a barrier to communities with bars on the windows of apartments, homes, and businesses. Some of the smaller agencies and universities that do not have a problem with assault have not wanted to put up barriers/enclosures because the devices separate the operators from the public. These agencies have said that the barriers/enclosures would also prevent good interactions with the public.

It is also important for the barriers/enclosures to be capable of fully enclosing and protecting the operator. At Miami-Dade Transit System, the agency installed barriers that do not completely prevent assault because people can reach around the barrier to assault the driver.

State-of-the-art barrier/enclosure designs are not available yet for all types of transit vehicles. Barriers/enclosures are not usually installed on smaller transit vehicles, like a 16-passenger bus. It would be advantageous to install assault prevention equipment on smaller vehicles.

In addition, there are other concerns about the false sense of security a barrier/enclosure may give a transit operator. A barrier/enclosure might contribute to the driver's decision not to employ deescalation tactics because they feel that they are protected. Some agencies have not adopted barriers/enclosure because of cost or political views in the local area.

Silent Alarms on Buses

Transit agencies report the effectiveness of silent alarms available to riders. At most transit agencies, silent alarms are traditionally connected to dispatch, and ultimately to the police department. Silent alarms can also alert the rider of an issue. These systems can be installed on the bus and rail system.

There are some concerns regarding silent alarms. Silent alarms may present a problem for rural agencies due to lack of connectivity in areas. While not an issue with the silent alarm technology itself, there have also been concerns at some transit agencies about dispatch responsiveness to the threat reports, which may stem from inadequate training and supervision.

Emergency Communications in Rural Areas

In rural areas with limited cell phone connectivity, emergency communications for transit operators can be a challenge. Most rural transit agencies use radio dispatch. Operators report concerns that calls take too long to connect to dispatch, that they experience the inability to connect to dispatch, or that the communication is not clear between the dispatcher and the operator.

An example of a transit agency that struggles with emergency communication is River Cities Public Transit. There are many dead spots where communication is unavailable, especially in the Tribal areas in South Dakota where the agency operates. Some of the transit routes span 50–60 miles with no means to communicate.

Transit Agency and Manufacturer Interface

The current relationship between transit agencies and manufacturers is typically one where the transit agencies request their preferred transit vehicle security feature design. The manufacturers often respond to requests with the high cost of the new design and say that a new design could potentially be manufactured. There may be missed opportunities to make the designs even more advanced or innovative. A collaborative design process may be the solution to engaging manufacturers in brainstorming potential designs to help solve the safety challenges facing transit agencies. Furthermore, if FTA mandates a security feature, standards can be put into place that will spur the industry to design a standard protective package.

Crime Prevention Through Environmental Design

Station and bus stop design can have an impact on safety for transit operators and riders. Transit riders occupy these spaces when traveling to and from transit vehicles. Transit workers are vulnerable to assaults in stations and when walking end-to-end on the train. Crime prevention through environmental design (CPTED) is a multi-disciplinary approach to crime prevention that uses urban and architectural design to reduce crime. Strategies include lighting, landscaping, cleaning, maintenance, and more.

One example of a CPTED mitigation is using music to deter loitering. For example, LA Metro piloted the approach of playing classical music at one of its stations and found that most of the loiterers moved to different stations, and there was a reduction in incidents at the station where the pilot was completed. However, one challenge to this program is that riders were complaining that the music was too loud.

Body-Worn Cameras

Body-worn cameras are prevalent among law enforcement agencies, and transit agencies are increasingly adopting these devices as a measure to prevent crime. Concerns from transit agencies and unions include privacy, need for agreements between labor and management, and maintenance.

Implementation Suggestions

1. Mandate security features for vehicles and facilities.

Cameras

The Committee recommends that FTA requires transit agencies to install cameras on all new bus and rail vehicles. (For existing vehicles, see implementation suggestion #2.) The requirement should include provisions for the cameras to remain operational and requirements to update outdated camera systems and should encourage adoption of camera systems that allow for easy downloads of camera footage. Standards such as video quality, audio, fire-and crash- protection features, and whether cameras are both inward- and outward-facing could be considered. Standards should be considered for camera systems to be included in vehicle acquisition and facility design.

Rider Reporting

The Committee recommends that FTA requires transit agencies to have a system for riders to report security instances, such as real-time reports to the operations control center. FTA should also require transit agencies to consider the most appropriate party to contact for help and the mechanisms to contact them; this may include the dispatcher, police, or operations control center.

Silent Alarms

The Committee recommends that FTA requires all transit agencies to install silent alarms on all new bus and rail vehicles with activation tracking and response requirements.

2. Require that transit agencies perform a safety risk analysis to determine if cameras should be installed on existing bus and rail vehicles.

Implementation Suggestion 1 would require that cameras be installed on all new bus and rail vehicles, however, the Committee notes that the risk could be high enough at certain transit agencies to require cameras be installed on all existing bus and rail vehicles. The Committee recommends that FTA requires transit agencies to perform a safety risk analysis to determine if cameras should be installed on all existing bus and rail vehicles based on risk. Transit agencies could examine data available, including historical data, and consider the probability and severity of assault occurring. FTA could establish a baseline risk and require cameras be installed on existing bus and rail vehicles only for those transit agencies where barriers are warranted. Transit agencies shall work with their employees — via joint labor-management safety committees, where they exist - to determine if cameras should be installed on existing bus and rail vehicles. For smaller transit agencies that don't have a joint labor-management safety committee, worker representation should be included as part of the process.

3. Require that transit agencies perform a safety risk analysis to determine if barriers/enclosures should be installed.

It is important for the barriers/enclosures to be capable of fully enclosing and protecting the operator, prevent people from reaching around to access the operator, and extend all the way to the ceiling to prevent items from being thrown on or liquids spilled on the operator. The option for barriers/enclosures to be retractable should be available for an agency to choose what option is best for their operating environment.

The Infrastructure Investment and Jobs Act (IIJA) requires transit agencies serving an urbanized area with a population of 200,000 or more implement a risk reduction program for transit operations to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on NTD data. Among other requirements, it would include deployment of assault mitigation infrastructure and technology on buses, including barriers.

For any transit agency that is not required to deploy barriers based on the stipulations in the IIJA outlined above, the Committee recommends that FTA requires the transit agency to perform a safety risk analysis to determine if barriers/enclosures are warranted based on risk [19]. Transit agencies could examine data available, including historical data, and consider the probability and severity of assault occurring. FTA should also require transit agencies to consult with workers and their representation to understand their priorities and stance on installing barriers/enclosures. FTA could establish a baseline risk and require barriers/enclosures only for those transit agencies where barriers are warranted. Transit agencies shall work with their employees — via joint labor-management safety committees, where they exist — to determine if barriers/enclosures should be installed on existing bus vehicles. For smaller transit agencies that don't have a joint labor-management safety committee, worker representation should be included as part of the process.

Expand access to state-of-the-art barriers.

The Committee recommends that FTA grant Buy America-waivers for state-of-the-art European- and Canadian-manufactured barriers.

5. Research best practices for security features.

Emergency Communications in Rural Areas

The Committee recommends that FTA conduct research to identify the scope of the issue of emergency communications for transit agencies in rural areas. After defining the issue, FTA should identify best practices and technology (such as Satcom) to overcome limitations to operator communications, especially in rural areas where cell phone service is unavailable.

Industry Roundtable

The Committee recommends that FTA facilitate an industry roundtable, which could be in partnership with the American Public Transportation Association and with transit workers' representatives. The roundtable could include transit unions and agencies and manufacturers and encourage collaboration on potential designs to prevent assaults on transit vehicles.

Crime Prevention by Environmental Design

The Committee recommends that FTA researches the effectiveness of crime prevention through environmental design to prevent transit rider and worker assaults. If research proves the effectiveness of CPTED on assault prevention, CPTED could be integrated into requirements for FTA-funded projects. FTA could also develop a CPTED training requirement for relevant transit agency positions.

Body-Worn Cameras

The Committee recommends that FTA researches the effectiveness of having body cameras worn by transit operators.

Recommendation 5: Support Community, Labor, and Transit Management Partnerships and Involvement to Advance Transit Rider and Worker Safety

Background of Committee Findings

Public Marketing Campaigns

Public marketing campaigns can be effective in preventing disputes. Transit agencies need to consider who their riders are and select communication methods that are most likely to reach the rider base. Campaigns to educate riders on the transfer process can help avoid frustration and ultimately disputes. Another solution to avoid disputes over fares or rules is to post the rules on the bus, and placement of the rules is most effective when it is posted at the back of the bus. At some agencies, the operator is directed to avoid enforcing the fare but simply quote the fare. However, riders may interpret the operator quoting the fare as enforcing the fare. At LA Metro, there is a recording on buses quoting the fare amount and asking people to have their fare ready to avoid this perception.

Public marketing campaigns can use a variety of media, but transit agencies must be intentional about selecting the media channel. Social media is an effective channel for promoting safety, but a dedicated staff position is usually required to support consistent updates. Some transit workers are not comfortable with technological outreach and would still prefer traditional outreach.

Other examples of transit campaigns include the following:

- BART has a "Not one more girl campaign" that targets gender-based violence on transit. It
 collaborated with organizations such as the Alliance for Girls and Black Girl Magic. The goal of
 the program is to educate potential victims and advise girls to be watchful to prevent incidents.
- MARTA has a campaign called "Ride with Pride," encouraging riders to take transit to Pride Month events.
- Many agencies have their code of conduct posted on their buses and transit agencies.
- A campaign with a university could address the fact that students often use their phones when
 riding a train or bus, which is not advised, especially at night. Transit riders need to be aware of
 their surroundings.
- Transit agencies can partner with Operation Lifesaver, Inc. on rail safety initiatives. Operation Lifesaver's outreach materials can be especially effective for smaller agencies with limited resources. In addition, when transit agencies are developing outreach plans, they can connect

with their local Operation Lifesaver program to see if they have insight into working with certain populations or demographics.

Partnerships

Transit agencies are encouraged to form partnerships with community organizations and emergency responders for several reasons. Partnerships help transit agencies stretch limited resources and work with specialists to achieve goals that may be outside the purview of transit agencies. Partnerships can also magnify the impact of outreach campaigns. For example, if the transit agency provides a local school with safety materials for students to take home to their parents, it expands the education to their siblings and families.

Examples of transit agency partnerships include the following:

- Denver RTD partners with mental health clinics and dispatches mental health professionals to respond to emergency calls with violent events where there may be mental health issues.
 Mental Health Center of Denver pays 50 percent of the cost through Medicaid.
- LA Metro has a transit ambassador program, and the main function is to interact with the public. This has proven successful; crime on the LA Metro rail system has decreased by about 50 percent through multifaceted approaches, including the transit ambassador program.
- Several transit agencies engage with children and youth. LA Metro has a grassroots school-based program. River City Public Transit provides transit education to children by partnering with Boys & Girls Clubs of America and the local YMCA. New Jersey Public Schools holds an art contest, and the winners are displayed on transit vehicles.
- The Island of Oahu's mayor holds town halls across the island and includes transportation and safety as discussion topics. The discussions are well received and provide stakeholders with awareness on the transit agency's initiatives. Town halls also help the transit agency understand what is most important to the community.
- River Cities Public Transit went through a Transportation Security Administration (TSA) assessment. It was a review and assessment of operations, staffing, and how incidents are handled. TSA gave the agency guidance on how to deal with unruly riders.
- CAP Metro has a community intervention program that has received positive feedback. Through
 the program, specialists support transit riders experiencing homelessness and struggling with
 poor mental health conditions or substance abuse. With this program, operators don't have to
 call on police for non-police matters.
- River Cities Public Transit partnered with the police on training and to provide law enforcement presence at transit stops. As a result, there have been fewer assaults on the transit system.
- There may be an opportunity for transit agencies to partner with universities to address rider assaults through video campaigns.
- City and County of Honolulu Department of Transportation Services is doing research and
 exploring recommendations associated with creating funding opportunities and partnerships
 with emergency responders and transit agencies. The Substance Abuse and Mental Health
 Services Administration (SAMHSA) has funds for reaching out to the unhoused.
- Chicago Transit Authority works with family and support services to help unhoused people on its property. The agency has a support structure in place to dispatch mental health professionals.

Funding for Community Partnerships and Public Marketing Campaigns

Community partnerships and public marketing campaigns help transit agencies prevent assaults on transit and promote rider and worker safety. However, these programs are often underfunded, and there are few options to transit agencies for grant programs to fund these initiatives.

Implementation Suggestions

1. Identify funding channels for transit agencies to leverage community partnerships.

The Committee recommends that FTA provides funding for transit agencies to leverage community partnerships. This could be through a program that provides safety and security grants to transit agencies.

2. Research and provide guidance on best practices for establishing or strengthening community and emergency responder partnerships.

The Committee recommends that FTA initiates additional research into the best practices and resources, such as case studies or additional research on best practices for community partnership and public marketing campaigns. FTA could investigate opportunities for joint or complimentary awareness campaigns for the community.

Recommendation 6: Conduct Research and Analysis to Advance Industry Understanding of Rider and Transit Worker Safety Opportunities

Background of Committee Findings

The Committee has identified several areas where additional research could advance the transit industry's understanding of how to prevent rider and worker assaults.

Legal Protections for Transit Operators

Protection for public transit employees in their working environment is critical. There is a wide range of penalties at the State level for assaulting a transit operator. Some States have very robust protection laws for frontline employees. Some States are either in the process of passing legislation or modifying existing legislation.

There are no current protections for transit operators at the Federal level; a Federal statute would provide consistent protection for transit operators across the country. There have been three or four attempts at Federal legislation to protect transit workers, but the legislation was never passed. Operator assault rates have increased since the last attempt at legislation, so there may be momentum to reignite these efforts. This is an important issue for labor unions; unions would be a natural partner in the effort to pass Federal legislation and have driven much of the work on Federal legislation on the topic.

Even in States with robust legal protections for transit operators, perpetrators are not always charged with crimes. In some areas, the local district attorney may not pursue legal action on transit assault

cases for various reasons, such as the political environment or because the corrections systems are operating above capacity.

Rider Assault

The issue of rider assault is of great importance to the transit industry; there is a safety imperative to make public transportation as safe as possible for riders and restore confidence to the commuting public. Additionally, rider assaults may affect ridership as well since they may impact perceptions of safety for both victims and others who witness an assaultive event.

Most research on transit assaults pertains to worker safety rather than rider safety. This gap is increasingly being addressed. FTA recently funded a research project focused on rider assault [20]. And there is research in-progress being conducted that focus on transit assault more generally, rather than focusing exclusively on transit workers. This includes the FTA-funded project with the working title *Examining Transit Assault Causation and Presenting Stakeholder-driven Mitigation Strategies and Tools to Reduce Assault Risk* as well as other in-progress work [21], [22]. The U.S. Department of Human Services Data is also collecting data and sending rider alerts about crimes with riders as victims. As this work is completed, it will be important to think about whether there are still knowledge gaps in the area of rider assault that future research can address.

Emerging Technology

There are technologies emerging that transit agencies could consider as a mechanism to improve safety conditions for riders and workers. One example is the use of DNA kits to collect saliva from a spitting incident to be used to identify the perpetrator or use of artificial intelligence for assault prevention measures.

Implementation Suggestions

1. Research legislative disparities between States and their impact on worker safety and determine Federal opportunities for transit worker protections.

The Committee recommends that FTA research legislative disparities between States for the penalties applicable for transit worker assault. This could help determine if any States do not have a stipulation of an assault on a public servant or public transit employee. If deemed necessary, FTA could then determine options at the Federal level for protecting transit workers in collaboration with unions.

In addition, the Committee recommends that FTA pursues research on the frequency with which cases of transit assault fail to be prosecuted. There may be an opportunity to research the extent to which repeat offenders are causing incidents on transit. This may be an argument to push for prosecution or prohibit from transit systems certain individuals who cause multiple events.

2. Research rider assaults.

The Committee recommends that FTA supports research on rider assaults on transit systems. This research may include NTD data and rider surveys on transit assaults. These surveys could include questions to determine whether riders currently know how to report an assault and how they would prefer to report assaults. The research could also explore the causal factors that contribute to rider

assaults. A better understanding of this would support the development and use of mitigations that directly affect factors most linked to transit assaults.

3. Research emerging technologies.

The Committee recommends that FTA supports research on emerging technologies, such as the use of DNA kits to identify the perpetrator of a spitting incident or use of artificial intelligence for assault prevention measures. Emerging technologies may provide transit agencies with innovative solutions to identify people who have caused incidents on transit vehicles on other transit systems and prevent assault.

Recommendation 7: Establish Formal Labor and Management Involvement to Collaboratively Advance Rider and Worker Safety

Background of Committee Findings

Worker involvement includes more than participation and can include meaningful roles and responsibilities for front-line staff to take a lead role and drive the program and results with the workforce. Transit managers can delegate some level of authority and autonomy to transit workers to lead initiatives during and outside meetings. Transit agencies can create opportunities for workers to complete the follow-on work and implement countermeasures, after actions, and safety promotion activities.

Joint Labor-Management Safety Committees are an established body within transit agencies and can be leveraged to encourage and facilitate greater worker involvement. At smaller transit agencies, best practices for engaging workers may differ from those of larger transit agencies.

Safety Committee Meetings

The Committee has identified several best practices for transit agencies to leverage their transit safety committees as partners in advancing rider and worker safety. These best practices include the following:

- Setting the tone for the safety committee meetings: Committee members should approach the discussion topics in good faith and in the spirit of cooperation. It is important for the safety committees to engage in partnership, including between labor and management, to identify hazards and develop solutions to them. Safety committee decisions should be made democratically, where all the voices in the room receive equal weight. Safety committees should focus safety meetings on the topic of safety; often, other agenda items take up the time needed to discuss safety issues.
- Safety committee approach to solving transit assault issue: Safety committees should advocate for data collection consistency so that there is accurate understanding of the assault issues. The safety committee should address any barriers that may exist to frontline workers reporting incidents. Safety committee members should be directly involved in completing the required work to achieve safety committee goals and objectives. For example, members should be delegated an appropriate level of authority to independently follow-up and complete specific tasks. Safety committee work occurs during and outside of recurring meetings.

- Leveraging safety committee meetings to solicit operator input on security features: Transit worker input is crucial to any decision regarding safety. Safety committee members have been selected for their interest and knowledge in these areas and can easily funnel questions and surveys back to the workforce and then channel those opinions back up to management.
- Requiring safety training for safety committee members: The safety committee members
 should be required to take, at a minimum, the Transportation Safety Institute's Safety
 Management Systems Awareness course. This safety training would provide the safety
 committee members with knowledge and understanding of safety best practices. Frontline
 worker representatives would need to be paid at their regular rates, including any applicable
 overtime, for the time spent on training courses.

With a larger study, FTA may identify additional best practices to recommend transit agencies adopt for their safety committees.

Small Transit Agencies

Small transit agencies are not immune to assaults on transit. It's important for smaller transit agencies to recognize rider and worker assault as an issue, listen to staff, and do what is possible to improve the situation. However, the best approach to address transit rider and worker safety may be different from larger transit agencies due to the small transit agencies' differences, such as their operating environments and riders.

Small transit systems are not required by law to have joint labor-management safety committees where processes of hazard identification, data collection, and mitigation development activities typically take place at larger transit agencies. When performing risk assessments, many small transit agencies may establish that rider and worker safety is not reflected as a significant area of risk as you may find in an urban area system.

While many larger transit agencies can, or already have, implemented the recommendations contained within the report, smaller transit agencies may not have the resources or structure to implement these recommendations.

The Committee identified several best practices for smaller transit agencies to engage frontline workers on safety issues:

- Holding mandatory safety training on a quarterly basis, such as trainings provided by the Transportation Safety Institute. The training requirement would need to come with no loss of pay.
- Establishing mentorship programs with more experienced staff and newer staff.
- Including a robust safety introduction during operator orientation.

With a larger study, FTA may identify additional best practices to recommend transit agencies for their safety committees.

Implementation Suggestions

 Define best practices for how transit safety committees address transit rider and worker safety.

The Committee recommends that FTA define best practices for transit safety committees to address transit rider and worker safety. The Committee has identified several best practices for FTA's consideration, outlined above. In addition, the Committee recommends that FTA supports additional research to establish best practices and advise transit agencies of these best practices. Safety committee members should be directly involved in completing the required work to achieve safety committee goals and objectives. For example, members should be delegated an appropriate level of authority to independently follow-up and complete specific tasks. Safety committee work occurs during and outside of recurring meetings.

2. Define best practices for how smaller transit systems effectively engage frontline transit workers regarding the previous topic areas.

The Committee recommends that FTA defines best practices for how smaller transit systems can effectively engage frontline transit workers in addressing transit rider and worker safety. This includes an ongoing formalized system for frontline employees to have input on safety matters when they don't have the benefit of the regular committee meetings that they would at a large transit agency. The Committee has identified several best practices for FTA's consideration, outlined above. In addition, the Committee recommends that FTA supports additional research to identify or develop best practice recommendations.

Committee members suggested that FTA may allow smaller agencies to seek waivers for certain requirements (e.g., barriers) if there is a belief and data to support exclusion.

Conclusion

The Federal Transit Administration is committed to addressing the significant and growing concern and issue of assaults on transit workers and riders. This report outlines actionable recommendations and implementation suggestions that can advance rider and worker safety through assault-prevention measures. Through implementation of these requirements, best practices, and research studies, FTA can support transit agencies and workers in advancing rider and worker safety.

Appendix A: Report References

- [1] "National Transit Database (NTD) Glossary | FTA." Accessed: Mar. 07, 2024. [Online]. Available: https://www.transit.dot.gov/ntd/national-transit-database-ntd-glossary
- [2] B. M. Jenkins and B. R. Butterworth, "Changing Patterns of Violence Pose New Challenges to Public Surface Transportation in the United States," 2022.
- [3] "Amalgamated Transit Union Comments on Transit Worker Assault Prevention: FTA Docket No. FTA 2021-0012."
- [4] "FTA-Special-Directive-22-14-to-the-Metropolitan-Transportation-Authority.pdf." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/2022-10/FTA-Special-Directive-22-14-to-the-Metropolitan-Transportation-Authority.pdf
- [5] L. Staes, J. Davis, and J. Godfrey, "USF Center for Urban Transportation Research," Final Rep..
- "More police and riders a deterrence for New York subway violence, experts say The Washington Post." Accessed: Dec. 19, 2023. [Online]. Available: https://www.washingtonpost.com/transportation/2022/04/16/brooklyn-new-york-subway-shooting/
- [7] T. B. Reed, R. R. Wallace, and D. A. Rodriguez, "Transit Passenger Perceptions of Transit-Related Crime Reduction Measures," *Transp. Res. Rec.*, vol. 1731, no. 1, pp. 130–141, Jan. 2000, doi: 10.3141/1731-16.
- [8] "APTA-Survey-Brief-Fiscal-Cliff-June-2023.pdf." Accessed: Dec. 19, 2023. [Online]. Available: https://www.apta.com/wp-content/uploads/APTA-Survey-Brief-Fiscal-Cliff-June-2023.pdf
- [9] "FTA Special Directives | FTA." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/regulations-and-guidance/safety/fta-special-directives#SDSSOA
- [10] "Preventing and Mitigating Transit Worker Assaults in the Bus and Rail Transit Industry | FTA." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/about/preventing-and-mitigating-transit-worker-assaults-bus-and-rail-transit-industry
- [11] "Protecting Public Transportation Operators From the Risk of Assault," Federal Register. Accessed: Dec. 19, 2023. [Online]. Available: https://www.federalregister.gov/documents/2019/05/24/2019-10281/protecting-public-transportation-operators-from-the-risk-of-assault
- [12] "Redesign of Transit Bus Operator Compartment to Improve Safety, Operational Efficiency, and Passenger Accessibility (Bus Operator Compartment) Program | FTA." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/research-innovation/redesign-transit-bus-operator-compartment-improve-safety-operational-efficiency
- [13] "Enhanced Transit Safety and Crime Prevention Initiative | FTA." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/regulations-and-programs/safety/enhanced-transit-safety-and-crime-prevention-initiative
- [14] "FTA-Sponsored Training Courses | FTA." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/regulations-and-guidance/safety/fta-sponsored-training-courses
- [15] "Transit Worker and Rider Safety Best Practices Research Project | FTA." Accessed: Dec. 19, 2023. [Online]. Available: https://www.transit.dot.gov/funding/grants/TWRS
- [16] "Public Transportation Agency Safety Plans," Federal Register. Accessed: Dec. 19, 2023. [Online]. Available: https://www.federalregister.gov/documents/2023/04/26/2023-08777/public-transportation-agency-safety-plans
- [17] "National Public Transportation Safety Plan," Federal Register. Accessed: Dec. 19, 2023. [Online]. Available: https://www.federalregister.gov/documents/2023/05/31/2023-11551/national-public-transportation-safety-plan

- [18] "Conflict Management and de-escalation strategies for Transit Staff, Transit Association of Maryland (TAM) Ream Lazaro Safety Consulting, LLC," [Online]. Available: https://www.taminc.org/assets/TAM_Conflict_Mgmt_Deescalation.pptx
- [19] "49 U.S. Code § 5329 Public transportation safety program | U.S. Code | US Law | LII / Legal Information Institute." Accessed: Dec. 19, 2023. [Online]. Available: https://www.law.cornell.edu/uscode/text/49/5329
- [20] Melnik, Gina, France-Peterson, Megan, Brodeur, Alyssa, Mallett, Mirabel, and Battel, Kayli, "Transit Agency Perspectives on Customer Assault: Summary Report," Federal Transit Administration, Washington, D.C., 2024. [Online]. Available: https://www.transit.dot.gov/regulations-and-programs/safety/transit-agency-perspectives-customer-assault-summary-report
- [21] "TCRP A-48: Mitigation Strategies for Deterring Transit Assaults." Accessed: Jan. 16, 2024. [Online]. Available: http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=5255
- [22] "Understanding the Prevalence of Mental Health and Behavioral Distress in Transit Assaults and Presenting Targeted Response and Mitigation Methods to Reduce Victimization Trends." Accessed: Jan. 16, 2024. [Online]. Available: https://rip.trb.org/View/2260516