Transit Advisory Committee for Safety (TRACS) Meeting Minutes

October 28-29, 2014

United States Department of Transportation Headquarters

***1200 New Jersey Ave, SE***

***Washington, DC 20590***

Table of Contents

[Attendance 3](#_Toc403033716)

[TRACS Members in Attendance 3](#_Toc403033717)

[Non-TRACS Members 3](#_Toc403033718)

[FTA/Volpe Center 4](#_Toc403033719)

[Welcome and Overview 5](#_Toc403033720)

[TRACS Briefing for Members 5](#_Toc403033721)

[Update of FTA Office of Safety and Oversight Activities 5](#_Toc403033722)

[TRACS New Tasks – Subject Matter Expert Presentations 6](#_Toc403033723)

[Fatigue Management 6](#_Toc403033724)

[Preventing Transit Employee Assaults 6](#_Toc403033725)

[Break-Out Groups and Discussion of New Tasks 8](#_Toc403033726)

[Fatigue Management Work Group Presentation 8](#_Toc403033727)

[Preventing Transit Employee Assaults Work Group Presentation 9](#_Toc403033728)

## Attendance

### TRACS Members in Attendance

**William H. Bates**, SMART-United Transportation Union

**Bernadette Bridges (TRACS Chairperson),** Maryland Transit Administration (MTA)

**Jeffry C. Carlson,** Via Mobility Services

**James Dougherty**, Washington Metropolitan Area Transportation Authority

**David Genova,** Denver Regional Transportation District

**William Grizard**, American Public Transportation Association (APTA)

**David Harris,** New Mexico Department of Transportation

**Susan Hausmann**, Texas Department of Transportation

**Georgina Heard-Labonne,** Illinois Department of Transportation

**Rick Inclima,** Brotherhood of Maintenance of Way Employees Division

**Jackie Jeter**, Amalgamated Transit Union (ATU)

**Cheryl Kennedy,** New York City Transit Authority (NYCT)

**Vijay Khawani,** Los Angeles County Metropolitan Transportation Authority

**Paul King (TRACS Vice Chairperson),** California Public Utilities Commission

**Richard Krisak,** Metropolitan Atlanta Rapid Transit Authority (MARTA)

**Tamara Lesh,** Southeastern Pennsylvania Transit Authority (SEPTA)

**Rad Nichols,** Cooperative Alliance for Seacoast Transportation

**Ronald W. Nickle,** Massachusetts Bay Transit Authority

**Alvin Pearson**, Memphis Area Transit Authority

**Karen Philbrick,** Mineta Transportation Institute

**Harry Saporta,** Tri-County Metropolitan Transportation District of Oregon

**Scott A. Sauer,** SEPTA

**Nagal Shashidahara**, New Jersey Transit

**Brian Sherlock,** King County Metro Transit, and Amalgamated Transit Unions

**Edward Watt**, ATU

**Victor B. Wiley,** Florida Department of Transportation

### Non-TRACS Members

**James Wincek,** NYCT

**Ronald Frazier,** Countermeasures Assessment and Security Experts

**Ron Pavlik,** Washington Metropolitan Area Transit Authority

### FTA/Volpe Center

**Dorval Carter,** FTA Acting Deputy Administrator

**Richard Gerhart,** FTA Office of Transit Safety and Oversight

**Candace Key, FTA Office of Chief Counsel**

**Tom Littleton,** FTA Office of Transit Safety and Oversight

**Ruth Lyons**, FTA Office of Transit Safety & Oversight

**Lynn Spencer,** FTA Office of Transit Safety and Oversight

**Tony Tisdale,** FTA Office of Transit Safety and Oversight

**Bruce Walker,** FTA Office of Chief Counsel

**Esther White**, FTA Office of Transit Safety and Oversight

**Richard Wong,** FTA Office of Chief Counsel

**Jeffrey Bryan,** U.S. DOT Volpe Center, TRACS Facilitator

**Stephen Popkin,** U.S. DOT Volpe Center

**Mirna Gustave**, U.S. DOT Volpe Center

**Emma Lucken,** U.S. DOT Volpe Center, Meeting Recorder

##

## Welcome and Overview

The Associate Administrator of the Federal Transit Administration’s (FTA) Office of Transit Safety and Oversight, Tom Littleton, welcomed the group and explained that his office would like TRACS’ assistance to advance safety in the areas of fatigue management and preventing transit employee assaults. He would like the work groups on these topics to present creative strategies for decreasing the number of transit worker deaths and assaults.

The Acting Deputy Administrator of the Federal Transit Administration (FTA), Dorval R. Carter, Jr., further explained that TRACS will help identify ways to improve transit safety in a time of tight fiscal budgets and infrastructure needs. He also provided additional information on the TRACS work group topics. For fatigue management, the Acting Deputy Administrator noted that FTA provides a collection of fatigue management resources on its website. TRACS’ assignment is to consider the complex personal and public contributors to fatigue and potential solutions for various modes of transit.

The Acting Deputy Administrator also informed the TRACS members that the Department of Transportation (DOT), Office of the Secretary (OST), hosted a meeting in July for stakeholders to share best practices on preventing driver assaults. He tasked TRACS with developing further recommendations to prevent assaults against transit employees.

## TRACS Briefing for Members

The meeting facilitator stated that the purpose of the meeting was to form work groups and develop an initial schedule and potential resources for the creation of reports on fatigue management and preventing transit employee assaults. He stated that the work groups will meet via webinars and in person over the coming months to address the tasks for their respective topics, which FTA chose after conversations with stakeholders during the past year. The work groups will present their reports on each topic to the full TRACS committee and vote as a group on a final version. The final reports are due to the full committee on May 30, 2015.

Richard Wong, FTA Office of Chief Counsel, reviewed the TRACS charter and mission and also explained the rules governing TRACS within the Federal Advisory Committee Act (FACA) legal framework. Under FACA, TRACS members are appointed as individuals for their personal expertise, and do not represent their organizations. He also noted that, while the work groups can invite outside experts to participate in meetings, only TRACS members can vote. The Associate Administrator of the Office of Transit Safety and Oversight serves as the Designated Federal Official (DFO) for TRACS.

## Update of FTA Office of Transit Safety and Oversight Activities

The Associate Administrator informed the group that the Secretary of Transportation signed the Office of Transit Safety and Oversight into existence in 2013 and that the office has grown 500% over the last year. The office aims to be honest brokers of information and a leader in safety promotion. It includes three offices: the Office of System Safety, which focuses on rulemaking and building regulatory support; the Office of Safety Review, which addresses emergency management and public safety; and the Office of Program Oversight, which conducts tasks like financial management.

Lynn Spencer, Director of the Office of System Safety at the FTA, updated the group on the office’s MAP21 implementation work. She said that 27-30 states have agreed to participate in the State Safety Oversight (SSO) certification process and that previous TRACS work on SSO is playing an important role in current rulemaking efforts. Ms. Spencer also briefed TRACS on the status of another of the group’s previous topics, Safety Management Systems (SMS), which plays an important role in the current TRACS tasks. SMS will help local transportation agencies identify and address their safety risks before emergencies arise, and agencies can modify SMS to meet risks specific to each agency’s size and location. The four pillars of SMS include a safety policy that addresses every level of the agency; safety risk management to identify risks and mitigation strategies; safety assurance to measure the effectiveness of risk mitigation efforts; and safety promotion, which involves training and communicating with all agency employees.

## TRACS New Tasks – Subject Matter Expert Presentations

### Fatigue Management

Stephen Popkin, Ph.D., Director of Safety Management and Human Factors Technical Center at the Volpe Transportation Systems Center, presented the main problems and contributing factors related to transit operator fatigue. Dr. Popkin stated that fatigue management presents a challenge because it requires considering what operators do in their off-time. Additionally, the increased use of personal technology at all times of the day also contributes to more disturbed sleep patterns. He further noted that the development of fatigue depends on the time of day; time awake and asleep; and task-related factors, which include the level of fatigue at which tasks can be adequately performed.

Fatigue management is especially important for transit workers because of the high risk of accidents and injuries, the aging worker demographic, irregular and long work schedules, and the severe effects of fatigue on the skills necessary to operate transit vehicles. Fatigue risk management systems (FRMS) include five levels: 1) providing transit operators with an opportunity to sleep, 2) determining how much sleep operators have obtained, 3) screening for behavioral symptoms, 4) preventing fatigue-related errors through environmental factors like rumble strips, and 5) accurately recording fatigue-related incidents. In developing and implementing FRMS, Dr. Popkin recommended partnering with the Federal Aviation Administration (FAA), the Federal Motor Carrier Safety Administration (FMCSA), the Federal Railroad Administration (FRA), the United States Coast Guard (USCG), and oil and gas companies like BP, all of which have developed fatigue risk management programs and/or plans. He said that transit agencies should adopt hours of service based on current science around fatigue, which requires agencies to collect better data on employees’ working hours and potential sleep apnea.

Karen Philbrick, Ph.D., Executive Director at the Mineta Transportation Institute (MTI), led a discussion on how best to measure and manage transit employee fatigue. Dr. Philbrick began by describing her work measuring railroad employees’ work-wake activity and her findings that reaction time, stress, and risk of cardiovascular disease increase with fatigue. She suggested educating workers about the factors that contribute to a better sleep environment and educating employers about the operational costs of fatigue, including staff turnover and higher fuel costs from fatigued operators’ more variable speed and brake use.

In response to the group’s questions, Dr. Philbrick described simple screening tools to determine potential sleep related issues. Dr. Popkin also noted BP started using take-home devices to measure sleep levels without the cost of attending sleep clinics. The group discussed the impacts of split shifts and whether employees use the off time for rest or for running errands and working other jobs, which would lead to greater fatigue. Participants agreed that overtime hours, break time for recovery and meals, commute time, access to bathrooms, the sleep environment in break rooms, and non-punitive close-call reporting, play important roles in transit employee fatigue management.

### Preventing Transit Employee Assaults

Ron Frazier, President of Countermeasures Assessment and Security Experts, and former Chief of Police of the AMTRAK Police Department, presented the challenges transportation agencies experience in addressing transit employee assaults. He began by defining assault as the unlawful attack on another with the intent to commit serious harm. Many transit employee assaults consisted of what he termed “simple assaults,” or actions like kicking and punching that do not involve the use of a weapon. The most common assaults transit employees face are verbal threats, intimidation, and harassment, followed by spitting and projectiles thrown within or at a bus. In addition to transit operators, other transit employees such as also customer service workers, revenue agents, ticket collectors, and security personnel face the threat of assault.

When developing recommendations for agencies to prevent transit employee assaults, Mr. Frazier stressed that TRACS should consider that most assaults are committed by non-criminal passengers, often in response to delays, during an attempt to evade fares, or when they are woken by transit employees at the end of a route. Operators on early-morning or late-night routes in isolated or high-crime areas or on routes that pass bars or nightclubs also face higher risk of assault. Alcohol, cigarettes, and operators’ emotional reactions to customers’ anger increase the likelihood of customers committing verbal or physical assaults. Moreover, low pay and constant exposure to often unhappy customers can make it difficult for transit operators to maintain a calm and neutral response to aggressive behavior.

Mr. Frazier presented best practices and potential solutions for preventing assaults, including installing driver partitions, escape hatches, security cameras, and warning signs; adopting strict punishments for assault; conducting public education and awareness campaigns; and assigning on-board or in-station police officers from the agency’s or local government’s police force to prevent or stop assault. Transit employee training also presents an effective prevention measure against assaults. Trainings like CARP—reasserting **c**ontrol, **a**cknowledging customers’ emotional state, **r**efocusing from emotions to the problem, and **p**roblem solving—help employees learn to calmly deescalate stressful situations. These strategies come from agencies like the Southeastern Public Transportation Authority (SEPTA), the Maryland Transit Administration, New York City Transit (NYCTA), New York Metropolitan Transportation Authority (MTA), as well as the American Public Transportation Association (APTA) and the Amalgamated Transit Union (ATU), all of which Mr. Frazier recommended as potential partners to help TRACS develop recommendations for preventing transit employee assaults.

Ron Pavlik, Chief of Police at the Washington Metropolitan Area Transit Authority (WMATA), and Ed Watt, Director of Special Projects at ATU, led a discussion about various causes of transit employee assault and strategies for preventing it. Chief Pavlik recommended plotting incidents and types of assaults by route and time of day to better inform efforts to prevent assault. He also advised training transit operators to simply quote the fare and providing technology that allows operators to silently notify nearby police forces of any fare evasions or other problems. Mr. Watt, meanwhile, stressed the importance of involving transit operators in discussions about strategies to prevent assault, particularly in efforts that involve bus design and protective barriers.

The TRACS group discussed the drawbacks and benefits of protective barriers, including their confining nature and the successful reduction of assaults following their implementation on NYC MTA buses. Other participants noted the additional challenges posed by demand response service in which transit operators may have to leave their vehicles to assist customers on board. The group cited the benefit of visible cameras (and video displays) as a deterrent in these situations. In regards to transit employee training, Dr. Philbrick noted that MTI published a free [Bus Operator Security Training Program](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCAQFjAA&url=http%3A%2F%2Ftransweb.sjsu.edu%2FPDFs%2Fresearch%2F2875-II-bus-operator-awareness-research-development-training.pdf&ei=E5VbVM_5G8icNtnvgUg&usg=AFQjCNHVCtkhiRdqTqWeX98Ag7aQwKqLIA&sig2=luaj1QDI2UuRsZ55sewxsQ&bvm=bv.78677474,d.eXY) in 2012 for use by any interested transportation agency. Other strategies suggested by the group included hiring customer-service oriented employees and providing regular trainings to help operators adapt to the communities and risks along their routes.

## Break-Out Groups and Discussion of New Tasks

TRACS reviewed each task and broke into work groups. The meeting facilitator reminded TRACS that the FTA Administrator’s tasking to the Fatigue Management Work Group (14-02) involves developing recommendations on the key elements that should be comprised of a Safety Management System (SMS) approach to a fatigue management system, and that these recommendations should identify major organizational and behavioral challenges in addressing transit employee fatigue and draw on the work of other modal organizations.

The tasking for the Preventing Transit Employee Assaults Work Group (14-01) asks TRACS to identify key elements of an SMS approach to prevent and mitigate assaults on all types of transit employees in all modes of transit. This includes identifying risks and impediments to a safe workplace and a process to reduce the hazards that enable assaults.

### Fatigue Management Work Group Presentation

The work group lead presented the group’s progress on determining next steps. The work group formed three subgroups for a first phase of work and a fourth subgroup for a second phase of work, which will be informed by the results of the first phase.

**First phase subgroups:**

1. **Operational Definitions.** The Operational Definitions subgroup will discuss the basic elements of fatigue management. This subgroup will address task 1, which involves recommending operational definitions and a methodology for assessing the likelihood that fatigue contributed to an accident, and task 2, identifying root causes and prevalence of fatigue within each mode of transit.
2. **Research.** The Research subgroup will identify existing best practices by examining aviation, rail, and other transportation agencies in the U.S.; European transit providers; Transport Canada; USCG; BP; Liberty Mutual Institute; the National Transportation Safety Board; and resources developed by APTA, the Transportation Research Board (TRB), and universities like the University of North Florida. This group will complete task 3, reviewing NTSB recommendations for inclusion as guidance in rulemaking and fatigue risk management plans, and task 5, review and identify applicability and gaps in available policies, training materials, and related tools for staff and managers on fatigue.
3. **Close Call Safety Monitoring and Data Collection.** The Close Call Safety Monitoring subgroup will begin addressing task 7 of the tasking by researching the elements required for an effective close call reporting system and such a system’s role in monitoring fatigue-related safety performance.

**Second phase subgroup:**

1. **Recommendations.** The Recommendations subgroup will address tasks 4 and 6 by making recommendations to successfully implement fatigue management. Task 4 involves recommending minimum performance-based safety standards for public transportation work schedules, while task 6 requires identifying and evaluating potential outreach and enforcement tools to optimize the effectiveness of fatigue risk management in transit agencies.

The Fatigue Management Work Group plans to hold webinars for each subgroup during the weeks of November 10th and December 15th and to meet face-to-face in conjunction with the TRB conference during the week of January 12th. The group also proposed developing the draft report by April 1st for the work group to review, receiving comments by April 15th, and delivering the revised draft to the full TRACS group on April 30th.

### Preventing Transit Employee Assaults Work Group Presentation

The work group lead summarized the group’s work on identifying next tasks and initial ideas. The Assault Work Group identified three next steps:

1. Identifying which transit employees to consider in the group’s research and recommendations.
2. Adopting an existing or developing a new definition for assault.
3. Analyzing data, including factors that might cause under-reporting of assaults, documenting strategies to improve national reporting, and the creation of a national transit employee assault database.

The group also suggested several potential categories of solutions to consider for their recommendations:

* **Policies and programs**, such as codes of conduct, civility campaigns, hiring practices, and transit agencies’ responses to assault,
* **Training**, including self-defense and de-escalation skills,
* **Protective devices/technologies**, like barriers and shields,
* **Public education** that teaches young riders about proper behavior,
* **Enforcement,** and
* **Legislation,** like making assault a felony rather than a misdemeanor.

The work group identified NYC MTA, VIA, the APTA Committee on Public Safety, MARTA, the Transit Cooperative Research Program (TCRP), and Eric Muntan at Long Beach/Miami-Dade, Elmer Coppage at MTA Baltimore, and Ron Frazier at Countermeasures Assessment and Security Experts, as potential resources for strategies to prevent assaults. The group also acknowledged the need to consider the situations faced by small agencies that might not have their own police forces.

The Preventing Transit Employee Assaults Work Group suggested a review of effective practices by November 14th, holding a conference call on December 5th, and meeting in person on January 8th and 9th in D.C.