

Transit Safety and Oversight Spotlight

U.S. Department of Transportation
Federal Transit Administration

INSIDE THIS ISSUE:

Upcoming Safety Training

2-3

Understanding Safety Assurance Requirements in Agency Safety Plans

4-5

Data Spotlight: Worker Fatalities and Injuries

6

TSO Profile

7

NOW AVAILABLE: New Public Transportation Agency Safety Plan Resources

8

Public Transportation Agency Safety Plan (PTASP) Webinars

9

Upcoming TSO Speaking Events

9

Message from the Associate Administrator

Sept. 2019
Vol. 4 No. 8

Dear Transit Colleagues,

Earlier this week, FTA hosted 300 participants at the 2019 FTA Joint State Safety Oversight (SSO) and Rail Transit Agency (RTA) Workshop in Washington, DC with representatives from all 31 SSO programs and 53 RTAs. The workshop began with a day-long training on the Public Transportation Agency Safety Plan (PTASP) regulation requirements dedicated to RTAs. State Safety Oversight Agencies also took part in [Safety Management System \(SMS\)](#) training.

During the workshop, FTA Acting Administrator K. Jane Williams announced that FTA's focus will be on helping transit agencies reach another milestone—compliance with the PTASP regulation and meeting the July 20, 2020 [compliance deadline](#). Other workshop highlights included sharing best practices in human trafficking awareness and prevention; lessons learned from FTA's direct safety oversight of Washington Metropolitan Area Transit Authority Metrorail; an update from the Transportation Security Administration; and a session on efforts to prevent operator assault. We believe this well attended workshop provided our audience with useful and timely information to assist with their important safety and oversight duties.



Henrika Buchanan, Associate Administrator for Transit Safety and Oversight

This fall, FTA will continue its PTASP webinar series and launch a Technical Assistance Center (TAC) to further support transit agencies or states required to develop and certify their Agency Safety Plans (ASP). More details on webinar topics and the TAC will be announced later this fall.

If you have a suggestion on how we can better inform you of PTASP requirements, or any other FTA safety news, I would like to hear from you. Submit your questions or suggestions to FTASafetyStakeholder@dot.gov or call 202-366-1783.

Sincerely,
Henrika Buchanan

Upcoming Safety Training

FTA sponsors several safety training courses, including those listed below. The [complete schedule](#) of training courses offered through September 2020 is available on FTA's safety website. Please contact the FTA-sponsored [Transportation Safety Institute \(TSI\)](#) at (405) 954-3682 for safety training registration and course information. Individuals may contact FTA's Safety Promotion Team at FTASafetyPromotion@dot.gov to request an [Individual Training Plan](#) (ITP). Participants in the Public Transportation Safety Certification Training Program have three years to complete their ITP requirements.

Courses Required by the Public Transportation Safety Certification Training Program (RAIL)*		
Effectively Managing Transit Emergencies	Landover, MD	Nov. 4-7
	Tucson, AZ	Dec. 2-5
	Cleveland, OH	Dec. 16-19
SMS Awareness (eLearning)	On demand at tsi.dot.gov	Available 24/7
SMS Principles for Transit	Charlottesville, VA	Oct. 9-11
	Oakland, CA	Oct. 16-18
	Jersey City, NJ	Nov. 13-15
	Landover, MD	Dec. 10-12
SMS Safety Assurance	Virtual-Live Training at tsi.dot.gov	Oct.30
		Nov. 20
Transit Rail Incident Investigation	Boston, MA	Nov. 4-8
	San Jose, CA	Dec. 16-20
Transit Rail System Safety	Houston, TX	Oct. 21-25
	Charlotte, NC	Nov. 18-22
Voluntary Courses for the Public Transportation Safety Certification Training Program (BUS)**		
Fundamentals of Bus Collision Investigation	Landover, MD	Oct. 7-11
	Indianapolis, IN	Nov. 4-8
Transit Bus System Safety	Austin, TX	Oct. 28-Nov.1
	Atlanta, GA	Nov. 4-8

*Applies to SSOA personnel and contractors who conduct safety audits and examinations of public transportation systems not subject to Federal Railroad Administration regulation, as well as rail fixed guideway public transportation system personnel and contractors who are directly responsible for safety oversight. Other safety personnel, including those from bus agencies, are encouraged to participate in the voluntary program.

**The voluntary bus program also includes Effectively Managing Transit Emergencies, SMS Awareness, SMS Safety Assurance, and SMS Principles for Transit. If you would like to participate in the voluntary program please contact FTASafetyPromotion@dot.gov to request an ITP and see the rail schedule above for course availability.

ADDITIONAL COURSES: Bus and Rail Courses (In Person)

Instructor's Course for Transit Trainers	Seattle, WA	Nov. 18-22
	Orlando, FL	Dec. 9-13
Reasonable Suspicion and Post-Accident Testing Determination Seminar	St. Paul, MN	Oct. 28
Safety, Security, and Emergency Management Considerations for FTA Capital Projects	Arlington, VA	Dec. 17-19
Substance Abuse Management and Program Compliance	St. Paul, MN	Oct. 29-31
Transit Safety & Security Audit Course	Landover, MD	Dec. 4-6
Transit System Security	New York, NY	Oct. 21-25
	Columbia, SC	Nov. 18-22
	Las Vegas, NV	Dec. 16-20

ADDITIONAL COURSES: eLearning Courses (Web Based)

Roadmap to Drafting an Agency Safety Plan for Bus Agencies	On demand at tsi.dot.gov	Available 24/7
Curbing Transit Employee Distracted Driving	On demand at tsi.dot.gov	Available 24/7
Fatigue and Sleep Apnea Awareness for Transit Employees	On demand at tsi.dot.gov	Available 24/7
Rail Nomenclature	On demand at tsi.dot.gov	Available 24/7
Bus Nomenclature	On demand at tsi.dot.gov	Available 24/7



Understanding Safety Assurance Requirements in Agency Safety Plans

The [Public Transportation Agency Safety Plan \(PTASP\)](#) regulation (49 C.F.R. Part 673) requires recipients and subrecipients of Section 5307 funds to develop and certify Agency Safety Plans based on Safety Management System (SMS) principles and methods. This article focuses on the Safety Assurance component of SMS and describes Part 673 requirements and considerations for transit agencies developing the Safety Assurance section in their Agency Safety Plans.

Safety Assurance includes a set of processes for information collection, analysis, and assessment. These processes help transit agencies to ensure that safeguards are in place and effective, safety objectives are met, and assist with the early identification of potential safety issues.

Part 673.27 requires transit agencies to establish certain Safety Assurance activities¹ and develop the following in their Agency Safety Plans:

- ✓ Actions to monitor and measure safety performance,²
- ✓ Processes to manage change, and
- ✓ Methods to assess safety performance to support continuous improvement.



Safety Management System components

Safety Performance Monitoring and Measurement

Safety performance monitoring and measurement focuses on current agency activities and processes to monitor circumstances at a transit agency, validate expectations, and identify changes that may be potential safety concerns. Part 673.27 requires transit agencies to monitor operations to identify safety risk mitigations, information reported through internal safety reporting programs, and compliance with system operations and maintenance procedures. Additionally, transit agencies are required to conduct investigations of safety events to identify causal factors.

When designing a process to meet this requirement, it may be helpful to consider the scope of activities, defining methods to monitor and measure, and possible next steps once issues are identified. Additionally, transit agencies may find it helpful to consider different approaches that leverage subject matter experts to identify potential areas of concern, without relying entirely on operating departments to report them to agency leadership.

Management of Change

Management of change involves identifying proposed or future changes that may impact safety, and then analyzing, assessing, and mitigating the changes through the Safety Risk Management process, as necessary. This process should not be confused with change management, as it focuses on managing the safety risk of changes—mostly non-safety changes, such as new maintenance procedures to improve efficiency.

Transit agencies must first identify and assess changes that may introduce new hazards or impact safety performance. Next, agencies may choose to assess safety risk through the general Safety Risk Management process or develop a different process specific to management of change.

Continued on pg. 5

¹Transit agencies that operate rail transit and transit agencies that operate more than 100 vehicles in peak revenue service must satisfy all requirements specified in the Safety Assurance section of Part 673.

²Small public transportation providers, meaning transit agencies that have 100 or fewer vehicles in peak regular service and do not operate rail transit, must only meet requirements for safety performance monitoring and measurement.

Cont. from pg. 4

Tools such as standardized guidance, checklists, or other job aids, can help ensure that a common approach is adopted agency-wide. Alternatively, agencies could adopt a centralized approach, designating a person or group to carry out assessments.

Continuous Improvement

Continuous improvement focuses on establishing a process to assess agency-wide safety performance. Transit agencies may choose to assess safety performance by developing Safety Performance Indicators and Targets for the safety objectives described in the agency's Safety Management Policy Statement. Further, agencies may find it beneficial to adopt a small set of meaningful indicators that are tracked over time to show changes in overall safety performance. Additionally, agencies could consider required Safety Performance Targets (SPT), safety objectives, or additional agency-wide or mode-wide SPTs to conduct assessments.

In addition, agencies must develop and carry out, under the direction of the Accountable Executive, a plan to address identified safety deficiencies. Identified safety deficiencies could be in the transit agency's SMS or related to other agency processes and activities. A plan to address these deficiencies could include, but is not limited to, efforts to address underlying hazards and potential consequences through Safety Risk Management; changing data collection or analysis techniques to better understand what's really going on; or testing and evaluating new approaches to SMS processes.

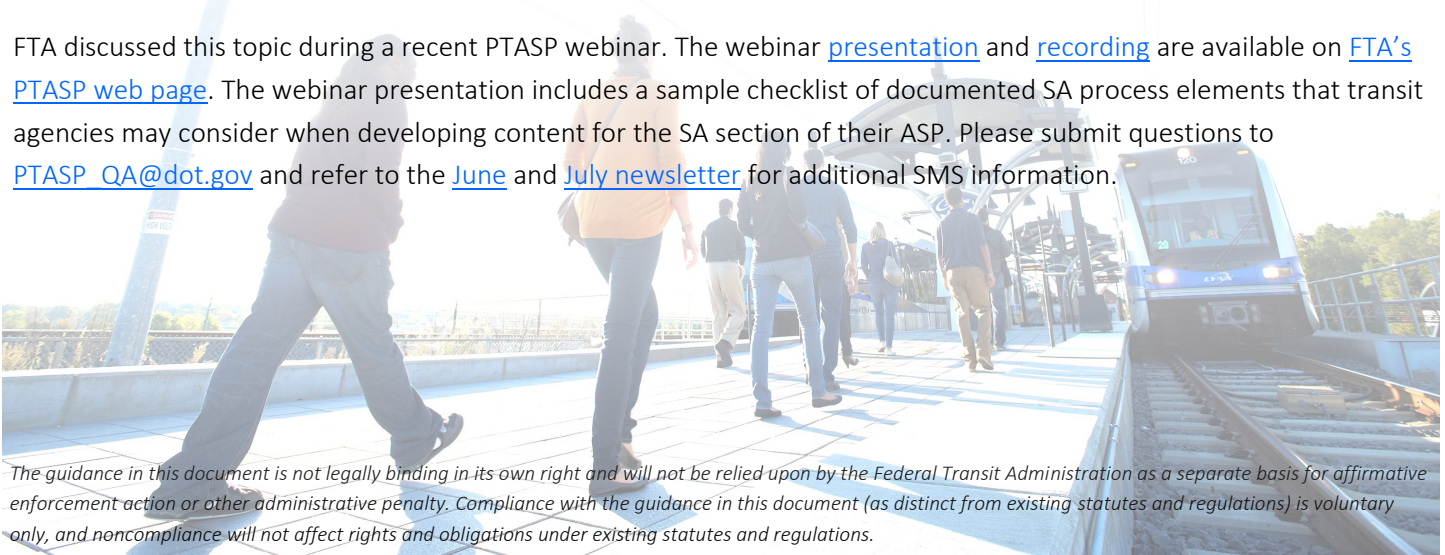
Although not a Safety Assurance requirement, transit agencies must develop Safety Performance Targets based on the safety performance measures established under the [National Public Transportation Safety Plan](#). The measures include fatalities, injuries, safety events, and system reliability. Agencies must make its Safety Performance Targets available and coordinate with States and Metropolitan Planning Organizations on their selection to the maximum extent practicable.

Part 673 does not specify how the targets must be set or what they must be based on; therefore, agencies can look to different sources to inform target setting. Examples of sources include transit agency and industry data, transit agency experience, benchmarking within the industry, and leadership priorities.

Finally, transit agencies should consider the requirements to maintain Safety Assurance-related documentation and records for a minimum of three years after they are created, and how to make them available to FTA and other oversight entities upon request (49 C.F.R. §673.31). Agencies may consider how to effectively collect and maintain the required documentation throughout the Safety Assurance process, by using SharePoint® or other information management tools.

FTA discussed this topic during a recent PTASP webinar. The webinar [presentation](#) and [recording](#) are available on [FTA's PTASP web page](#). The webinar presentation includes a sample checklist of documented SA process elements that transit agencies may consider when developing content for the SA section of their ASP. Please submit questions to PTASP_QA@dot.gov and refer to the [June](#) and [July newsletter](#) for additional SMS information.

The guidance in this document is not legally binding in its own right and will not be relied upon by the Federal Transit Administration as a separate basis for affirmative enforcement action or other administrative penalty. Compliance with the guidance in this document (as distinct from existing statutes and regulations) is voluntary only, and noncompliance will not affect rights and obligations under existing statutes and regulations.



Data Spotlight: Rail Transit Worker Fatalities and Injuries

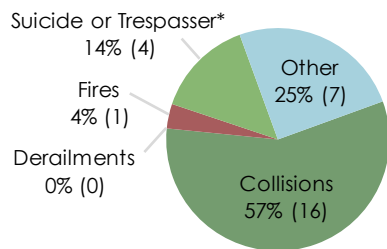
The Transit Safety and Oversight Spotlight includes a “Data Spotlight” to share safety data trends and highlight data sets that may help the industry identify safety performance targets for their [Agency Safety Plans](#).

This month, we focus on worker fatalities and injuries for rail transit modes as reported by State Safety Oversight Agencies (SSOAs). Workers include rail transit agency employees and contractors. Additional data is available in FTA’s [Rail Safety Data Report](#). Questions? Please contact FTA’s [Dharm Guruswamy](#).

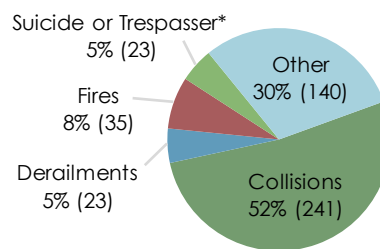
Between 2007 and 2015, FTA required SSOAs to report all rail transit fatalities and injuries resulting from events that exceeded 49 C.F.R. Part 659 thresholds. As part of these reports, SSOAs noted whether a fatality or injury involved a worker. During this nine-year period, SSOAs reported 28 **Worker Fatalities** and 462 **Worker Injuries**.

Over half of SSOA-reported **Worker Fatalities** (57 percent) and **Worker Injuries** (52 percent) resulted from collisions. Less than one in five **Worker Fatalities** (18 percent) and **Worker Injuries** (18 percent) occurred during derailments, fires, and suicide or trespasser events combined.

Rail Transit Worker Fatalities by Event Type, 2007-2015

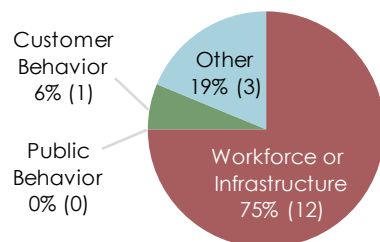


Rail Transit Worker Injuries by Event Type, 2007-2015

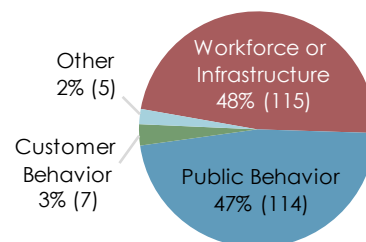


Between 2007 and 2015, SSOAs reported workforce behavior and infrastructure issues led to 75 percent of **Worker Collision Fatalities**, as well as nearly half of **Worker Collision Injuries** (48 percent). The next most frequent cause of **Worker Collision Injuries** was public behavior, including driver and pedestrian actions.

Rail Transit Worker Collision Fatalities by Cause, 2007-2015

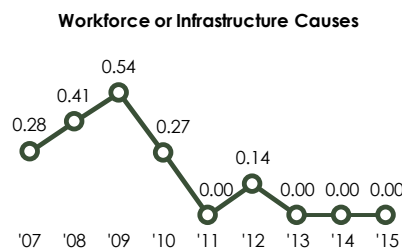


Rail Transit Worker Collision Injuries by Cause, 2007-2015

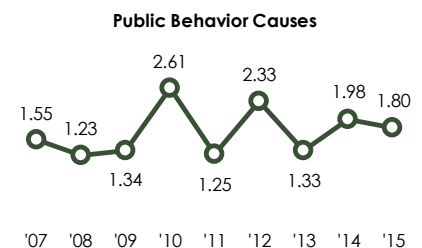
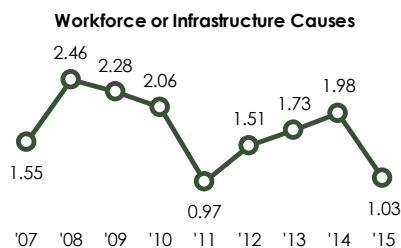


Below are **Worker Collision Fatality** and **Worker Collision Injury** rates per 100 million vehicle revenue miles (100M VRM), grouped by probable cause. From 2013 to 2015, SSOAs did not report any **Worker Collision Fatalities** resulting from workforce behavior or infrastructure issues.

Rail Transit Worker Collision Fatality Rate per 100M VRM



Rail Transit Worker Collision Injury Rate per 100M VRM



Note: Graphs not to scale

*All fatalities and injuries caused by suicide or trespassing are tallied in the “Suicide or Trespasser” category

TSO Profile

This month's profile includes a Q&A with Jeff Thompson, General Engineer, Office of System Safety.



Jeff Thompson, General Engineer,
Office of System Safety

How would you explain your job to someone you've never met? I work for FTA's Office of Transit Safety and Oversight (TSO) as a General Engineer. In this role, I review safety standard research reports and work with agencies and the transit industry to identify best practices and procedures for all transit modes. I also complete discretionary grant reviews for FTA initiatives, such as Low and No Emission Buses and Human Trafficking, and support the Transit Advisory Committee for Safety.

What is your favorite part of your job? I enjoy learning about new and emerging safety technologies. It is a very exciting time to be a part of the high-tech progress in transit safety.

What were you doing prior to this role? I held multiple positions working with and on various types of vehicles. I began my career as a naval aviator flying multi-mission, SH-60B helicopters off various types of small naval warships. As a combat veteran, I served at the "tip-of-the-spear" during Desert Storm, flew numerous other operations, served as a launch officer working the flight deck aboard the nuclear aircraft carrier USS Roosevelt, and performed collateral management duties as a division officer. After active duty, I served as a Department of Defense General Engineer in Norfolk, VA working on new weaponry and tactics before transitioning to the Washington Metropolitan Area Transit Authority as a vehicle and senior vehicle engineer for 16 years. Before joining FTA, I worked for STV, Inc. as a railcar and transit engineering consultant and CACI as an engineer and project manager. Now it is great to be back home in transit.

What led you to work in transit? I hold a bachelor's degree from the United States Naval Academy in Aerospace Engineering. I look back on my varied career paths, duties, and jobs and realize that I have always worked with and around different types of machines. I understand how machines work, and transit gives me a great opportunity to use all engineering disciplines.

What are some current projects or initiatives that you or your team are working on? I lead TSO's safety standards development and work closely with FTA's Transit Research and Innovation group to document and identify the latest applicable transit technologies and standards. FTA will soon publish numerous research reports ranging across all modes and subjects, including bus and railcar crash worthiness, bus and rail electronic data recorders, track inspection, vehicle cameras, rail tunnel construction, maintenance and repair, emergency lighting and signage, and tunnel egress. I feel that this project will greatly support the entire transit industry and look forward to partnering with transit agencies.

How do you work with people outside of the FTA? How would you like to be working with them in the future? I am currently working with the standards working group which consists of personnel from the Center for Urban Transportation Research, American Public Transportation Association, and various transit agency safety officers. This mix of transit and safety specialists generates discussions and ideas that are formulated into tasks, research topics, and eventually reports.

What is your favorite form of transportation and why? I prefer the mode of transportation that will get me where I need to go in the most efficient and cost-effective way. However, because I worked in the rail industry for a long time, I am partial to rail but have an avid interest in other modes.

What are your hobbies and interests outside of work? I swam and played water polo competitively in college and occasionally swim for a Masters swim club. Almost every Sunday, I hike with a local hiking club in places like Shenandoah National Park and along the Appalachian Trail. I like hiking better than swimming because every hike is different. I also enjoy gardening, home improvement projects, and working on cars.

Public Transportation Agency Safety Plan (PTASP) Webinars

The webinar slides and recordings will be posted to the [PTASP Resources](#) web page.

[PTASP Technical Assistance Center](#)

October 24, 2019

2:00 PM EST

[PTASP Refresher Training](#)

October 29, 2019

2:00 PM EST



U.S. Department
of Transportation

**Federal Transit
Administration**

Federal Transit Administration
Office of Transit Safety and Oversight
1200 New Jersey Avenue SE
Washington, DC 20590

<https://www.fta.dot.gov/regulations-and-guidance/safety/transit-safety-oversight-tso>

Upcoming TSO Speaking Events

[APTA TRANSform Conference](#)

October 12-15

New York, NY

APTA Mid-Year Safety Seminar

December 3-5

Seattle, WA