

APTA Safety Spotlight Webinar: FTA Safety Updates

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Agenda

- Crashworthiness RFI Background
- RFI focused on Crashworthiness Standards
- Background - Safety Advisory 22-2: Signal System Safety and Train Control
- RFI related to Safety Advisory 22-2
- 2023 FTA Joint State Safety Oversight (SSO) and Rail Transit Agency (RTA) Hybrid Workshop



Crashworthiness RFI Background

In April 2006, NTSB issued Safety Recommendation R-06-006 to FTA:

“Develop minimum crashworthiness standards to prevent the telescoping of transit railcars in collisions and establish a timetable for removing equipment that cannot be modified to meet the new standards.”

In response, FTA funded the development of two sets of railcar crashworthiness standards issued by the American Society of Mechanical Engineers (ASME):

- **ASME-RT-1:** Safety Standard for Structural Requirements for Light Rail Vehicles
- **ASME-RT-2:** Safety Standard for Structural Requirements for Heavy Rail Transit Vehicles

RFI focused on Crashworthiness Standards

On April 5, 2023, FTA distributed a Request for Information to SSOAs to analyze RTA adoption and implementation of established industry crashworthiness standards.

FTA requested that SSOAs obtain the requested information from RTAs in their jurisdiction and complete the RFI form. This RFI is intended to:

- Provide an account of current rail transit vehicle fleets and planned rail transit vehicle procurements that are designed with established crashworthiness standards;
- Help FTA determine what percentage of current rail transit vehicles and planned rail transit vehicle procurements adopt crashworthiness standards; and
- Help FTA understand prospective timelines for the removal of rail transit vehicles that do not meet established crashworthiness standards.

Background - Safety Advisory 22-2: Signal System Safety and Train Control

On October 13, 2022, FTA issued Safety Advisory (SA) 22-2: Signal System Safety and Train Control.

SA-22 recommended that SSOAs:

- Direct Rail Transit Agencies (RTAs) in their jurisdiction to consider signal system safety and train control as part of their Safety Risk Management (SRM) process;
- Incorporate SA 22-2 into SSOA oversight activities;
- Obtain the completed risk assessments and any associated mitigations from the RTAs within 180 days of the issuance of the advisory.



U.S. Department
of Transportation
**Federal Transit
Administration**

Office of Transit Safety and Oversight
Washington, DC

SA-22-2
Safety Advisory
10/13/2022

Subject: Signal System Safety and Train Control

Purpose: The Federal Transit Administration (FTA) issues Safety Advisory 22-2 (SA 22-2) to recommend that State Safety Oversight Agencies (SSOAs) direct Rail Transit Agencies (RTAs) who operate Rail Fixed Guideway Public Transportation Systems in their jurisdictions to consider signal system safety and train control as part of the RTA's Safety Risk Management (SRM) process. In addition, FTA advises SSOAs to incorporate SA 22-2 into their oversight activities.

Background: Signal systems and train control systems control and monitor the movement of trains. They can be used to locate and maintain safe separation between trains and can control speeds and movements. RTAs deploy different designs and technologies based on their respective system configurations, vehicle selection, available funding, and self-defined system performance requirements. For example, some RTAs do not use formal signal systems, relying instead on operator compliance with traffic signals, and others use sophisticated signal system technology that can automatically control train movements. While FTA has not issued minimum safety standards governing the use of signal systems in the transit industry,¹ the American Public Transportation Association (APTA) developed and issued a series of voluntary safety standards and recommended practices to support these activities.

Signal system safety and train control are top safety priorities for FTA. A variety of inputs and data sources have indicated that Federal action is needed to ensure safety within the transit industry:

- **National Transportation Safety Board (NTSB):** In 2009, the NTSB issued recommendation R-09-008 to FTA after a Massachusetts Bay Transportation Authority (MBTA) train rear-ended another MBTA train that was stopped at a red signal. The NTSB recommended that FTA "facilitate the development and implementation of

¹ Commuter railroads and some RTAs with shared-use waivers from the Federal Railroad Administration (FRA) must comply with 49 CFR part 236, which governs the installation, inspection, maintenance, and repair of signal and train control systems, devices, and appliances. RTAs that are not subject to FRA's jurisdiction may determine their own system testing and maintenance standards, though many transit agencies adopt elements of part 236 to design, operate, inspect, and maintain signal systems.

RFI related to Safety Advisory 22-2

This RFI seeks to collect the safety risk assessments and associated safety risk mitigations completed by RTAs in response to SA 22-2.

Information collected from this RFI will be reviewed to:

- Examine how agencies analyzed the hazards, and implemented mitigations to the risks, associated with signal systems and train control;
- Assist FTA in considering future actions related to train control and associated National Transportation Safety Board recommendations.

Documents should be uploaded to State Safety Oversight Reporting (SSOR) no later than September 11, 2023.

Access SSOR at <https://faces.fta.dot.gov/suite>



2023 FTA Joint SSO and RTA Hybrid Workshop

Save the Date!

November 14 – 16, 2023

St. Louis, MO

Audience: SSO staff,
RTA Chief Safety Officers
and Safety Directors

Contract staff that collaborate with
the safety office are
also encouraged to attend



2023 FTA Joint SSO and RTA Hybrid Workshop

Location: Hyatt Regency St. Louis at The Arch

Registration: **Available Soon!**

Topics Include: Risk-Based Inspections, Transit Safety Policy Updates, Safety Data, Transit Worker and Customer Assault



Questions

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