



**American
Public Transportation
Association**

FRA 2026 National Highway-Rail Grade Crossing Safety Conference

APTA Update– Grade Crossing Safety, APTA Safety Programs, & Member Outreach

April 8, 2026

Atlanta, GA

American Public Transportation Association (APTA)

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Senior Director, Safety and Advisory Services



Agenda

- **APTA Overview**
- **Safety**
 - APTA Safety Programs
 - APTA Standards
 - Monthly Safety Spotlight Webinars
 - Upcoming APTA Conferences
- **Grade Crossing Safety**
 - FTA/Data on Grade Crossings and Recent Safety Advisory 24-2
 - APTA Member Program Example: Caltrain
- **Safety, Security & EM Awards and APTA Peer Review/Safety Audit Programs**
 - Safety, Security & EM Awards Program
 - APTA Peer Review and Safety Audit Programs

American Public Transportation Association (APTA)

- The American Public Transportation Association (APTA) is a nonprofit international association of more than 1,600 public and private sector member organizations.
- Benefits to our members include advocacy for federal funding and policies, research, technical expertise and consulting, workforce development, educational conferences and seminars, standards and over 135 committees.
- APTA is the only association in North America that represents all modes of public transportation, including bus, paratransit, light rail, commuter rail, subways, ferries, and intercity and high-speed passenger rail.
- More than 90 percent of the people using public transportation and rail in the United States and Canada ride APTA member systems.

Safety Programs at APTA

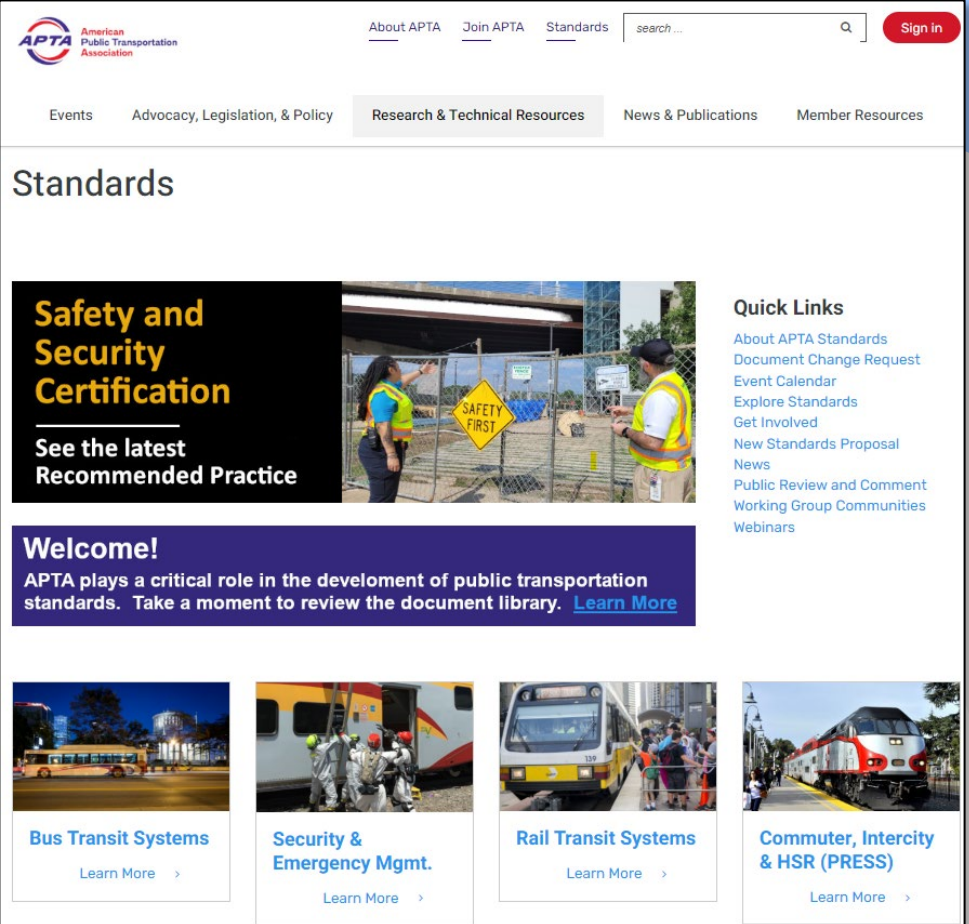
APTA Safety Programs

APTA provides a wide range of programs and initiatives that serve to promote safety throughout the public transportation industry and to APTA's members. These include APTA Safety Management Programs, Outreach, APTA Connect, Safety Standards, Safety Audits and Peer Reviews.



APTA Standards - Introduction

- APTA is an industry recognized **Standards Development Organization (SDO)** for public transportation and has published over 340 public transportation related documents.
- APTA Standards touch bus, rail transit, commuter and high-speed rail, safety, security, transit asset management, sustainability and urban design
- Strong partnerships with federal agencies: FTA, FRA and TSA



The screenshot shows the APTA Standards website homepage. At the top left is the APTA logo (American Public Transportation Association). To the right are navigation links: About APTA, Join APTA, Standards, a search bar, and a Sign In button. Below this is a secondary navigation bar with links for Events, Advocacy, Legislation, & Policy, Research & Technical Resources (which is highlighted), News & Publications, and Member Resources.

The main content area is titled "Standards". It features a large banner for "Safety and Security Certification" with the text "See the latest Recommended Practice" and an image of two workers in safety vests near a "SAFETY FIRST" sign. To the right of this banner is a "Quick Links" section with a list of links: About APTA Standards, Document Change Request, Event Calendar, Explore Standards, Get Involved, New Standards Proposal News, Public Review and Comment Working Group Communities, and Webinars.

Below the banner is a "Welcome!" section with the text: "APTA plays a critical role in the development of public transportation standards. Take a moment to review the document library. [Learn More](#)".

At the bottom, there are four featured categories, each with an image and a "Learn More" link:

- Bus Transit Systems**: Image of a bus at night.
- Security & Emergency Mgmt.**: Image of emergency responders in white suits.
- Rail Transit Systems**: Image of a yellow and white bus.
- Commuter, Intercity & HSR (PRESS)**: Image of a high-speed train.

APTA Standards



APTA STANDARDS DEVELOPMENT PROGRAM
RECOMMENDED PRACTICE
American Public Transportation Association
1300 I Street, NW, Suite 1200 East, Washington, DC 20005

APTA RT-RGC-RP-002-02, Rev. 2
First published: June 2002
First revision: Dec. 8, 2005
Second revision: Jan. 31, 2017
APTA Rail Transit Grade Crossings Working Group

Rail Transit Grade Crossing Public Education

Abstract: This Recommended Practice provides guidelines for developing rail transit grade crossing public safety and trespass prevention education programs.

Keywords: public education, rail grade crossing education, rail trespass prevention, safety

Summary: This document establishes recommended guidelines for establishing or enhancing rail transit grade crossing public safety outreach and education programs that can be applied to encourage the safe behavior of passengers, pedestrians and motorists who come in contact with rail transit systems at grade crossings and along rail transit rights-of-way.

Scope and purpose: For maximum impact and effectiveness, individual rail transit systems are encouraged, to the fullest extent possible, to deliver similar safety messages nationwide, although some adjustments for local circumstances may be unavoidable. The purpose of this Recommended Practice is to provide guidance to help rail transit systems reduce the number of collisions, deaths and injuries at grade crossings and along rail transit rights-of-way involving the public by ensuring that passengers, pedestrians and motorists understand the inherent dangers involved in rail transit operations and their own critical role in making safe decisions around tracks and trains.

This document represents a common viewpoint of those parties concerned with its provisions, namely operating planning agencies, manufacturers, consultants, engineers and general interest groups. The application of any standards, recommended practices or guidelines contained herein is voluntary. In some cases, federal and/or state regulations govern portions of a transit system's operations. In those cases, the government regulations take precedence over this standard. The North American Transit Service Association and its parent organization APTA recognize that for certain applications, the standards or practices, as implemented by individual agencies, may be either more or less restrictive than those given in this document.
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APTA STANDARDS DEVELOPMENT PROGRAM
STANDARD
American Public Transportation Association
1300 I Street, NW, Suite 1200 East, Washington, DC 20005

APTA RT-RGC-S-001-02, Rev. 3
First Published: June 8, 2002
First Revision: December 8, 2005
Second Revision: January 31, 2017
Third Revision: September 11, 2025
Rail Grade Crossing Working Group

Highway–Rail Transit Grade Crossing Warning Device Inspection, Testing and Maintenance

Abstract: This standard prescribes minimum requirements for inspecting, testing and maintaining highway–rail grade crossing warning devices installed and maintained on rail transit systems.

Keywords: grade crossing, highway–rail grade crossing, inspection, maintenance, testing, warning device

Summary: This standard provides guidance for rail transit system and other staff involved with the inspection, maintenance and testing of highway–rail grade crossing warning devices. It includes recommended minimum maintenance practices, testing procedures and recordkeeping for rail transit grade crossings. This standard is based on 49 CFR Part 234, Grade Crossing Safety.

American Public Transportation Association | 1300 I Street, NW, Suite 1200 East, Washington, DC 20005

Recently Published Standards & Recommended Practices:

- Safety & Security Certification Recommended Practice (includes Commuter Rail)
- Rail Transit Grade Crossing Public Education
- Rail Transit Grade Crossing Safety Assessment
- Rail Transit Vehicle Passenger Emergency Systems
- Processor-Based System Inspection, Testing and Configuration Control
- Vital Relay Tests

APTA Standards – Get Involved

- Standards program is open to all industry stakeholders including APTA member and nonmember organizations.
- APTA has 27 working groups including: Rail Transit Grade Crossing, Operating Practices, Signals & Communications, and Passenger Rail Equipment Safety Standards
- APTA Standards undergo a public commenting and review process, APTA places draft copies of documents on the APTA website for 30 days for anyone to review and comment on.
- For more information, email Standards@apta.com

Monthly Safety Spotlight Webinars

- Monthly Webinar Series takes place to discuss major safety issues in the public transit and rail industries, including:
 - Safety Management Systems;
 - Safety and Security Certification;
 - Part 270; and
 - Other topics of interest
- Usually have at least one guest speaker (i.e. FRA, FTA, OLI, NTSB and others)
- Next Spotlight Webinar taking place Thurs, April 16th (3-4pm ET)



Upcoming

APTA Conferences and Meetings

- 2025 APTA Mobility Conference
- Salt Lake City, UT
- May 17-20, 2026

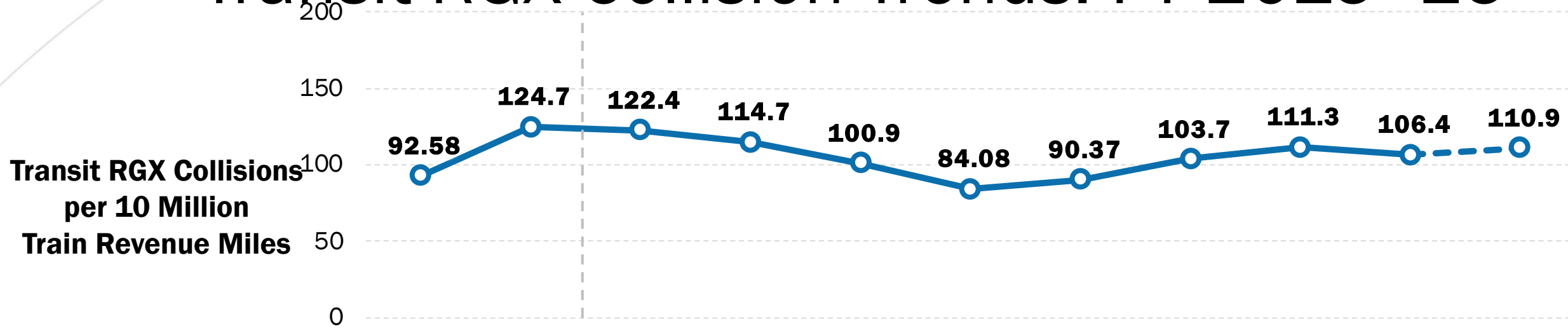
2025 APTA TRANSform/EXPO
Chicago, IL
October 4-7, 2026



2025 APTA Rail
Conference
Baltimore, MD
June 28 – July 1, 2026

Grade Crossing Safety – FTA/NTD Data and Safety Advisory 24-2

Transit RGX Collision Trends: FY 2015–25



**Raw Event,
Fatality, and
Injury
Counts**

FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Collisions	539	769	783	743	664	482	481	598	656	639	519
Injuries	242	259	244	205	198	147	116	137	226	189	160
Fatalities	17	19	21	15	15	17	14	23	12	20	12

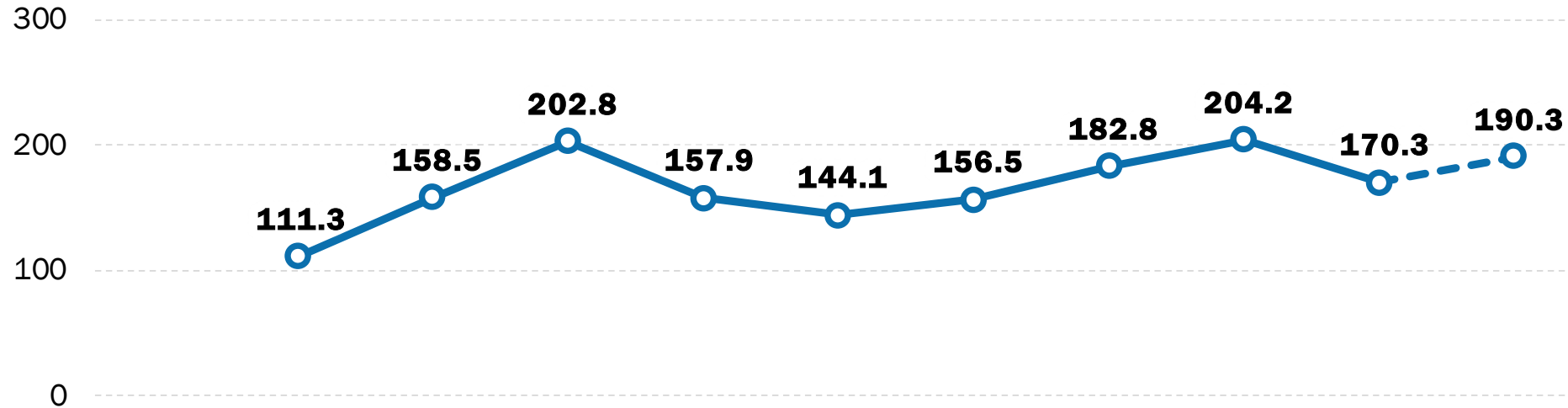


Source: National Transit Database (NTD)

Notes: FY 2025 data is through June 2025. FY 2025 data is preliminary.

Street-Running Rail-to-POV RGX Collisions: FY 2015–25

**Collision
Event Rate
per
100 Million Vehicle
Revenue Miles**



**Raw Event,
Fatality,
and Injury
Counts**

FY	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Collisions	N/A	134	200	260	206	165	168	216	245	208	183
Injuries	N/A	202	183	163	143	115	89	98	160	128	123
Fatalities	N/A	4	5	3	1	4	4	2	4	2	0



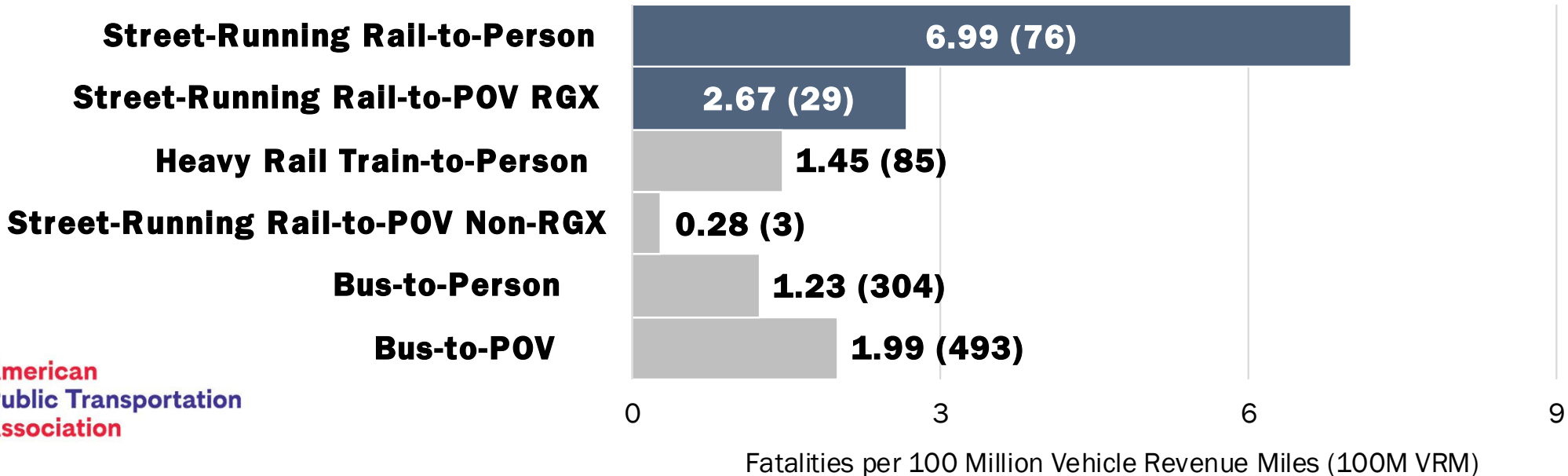
Source: National Transit Database (NTD); State Safety Oversight Reporting tool (SSOR), State Safety Oversight Program Legacy Event Data

Notes: FY 2025 data is through June 2025. FY 2025 data is preliminary.

Safety Advisory 24-2: Street-Running Rail Vehicle Collisions

Street-running rail vehicle collisions result in fatalities at a higher rate than other frequently reported collision types, across all modes, in National Transit Database (NTD) data.

**Fatality Rate for Frequently-Reported Collision Types,
Fiscal Year (FY) 2016 – 2024**



Safety Advisory 24-2: Recommended Actions

FTA recommends that SSOAs direct RTAs to consider the factors below when developing safety risk assessments:



Higher risk locations



Roadway and intersection design



Queueing space for both POVs and persons



Roadways and intersection traffic control devices



Factors that may cause signals and other warning methods to be ineffective in encouraging safe behavior at shared ROWs and RGX



[View the Safety Advisory 24-2 Webpage](#)

Grade Crossing Safety – APTA Member Program Example: Caltrain

At-Grade Crossings

51 along the Caltrain ROW plus 29 on UPRR ROW



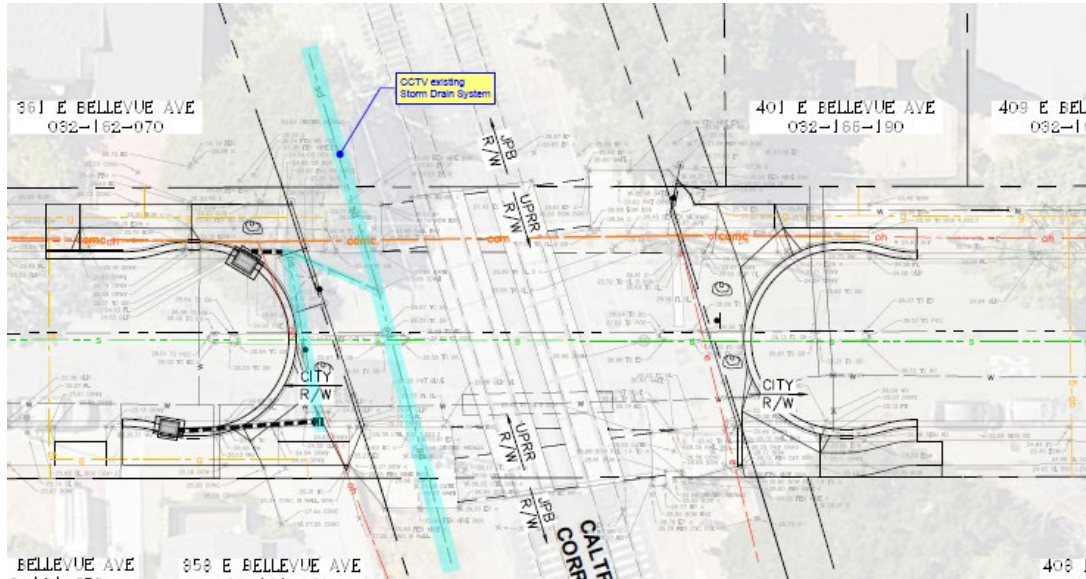
At-Grade Crossing Risks:

- Collisions with vehicles and pedestrians
- Intrusion from vehicles and trespassers
- Higher train frequencies = greater potential for occurrences

Data Gathering Challenges:

- Documented events that are reported such as collisions, near misses and those that require some sort of field response
- Less accurate data on leading indicators such as trespassing and track incursion events that may not have been observed, reported or logged
- Documented cases vs anecdotal evidence, reliability of the source

Grade Separation and Crossing Closures



Grade Separation and Crossing Closures remove the hazards related to at-grade crossings.

However.....

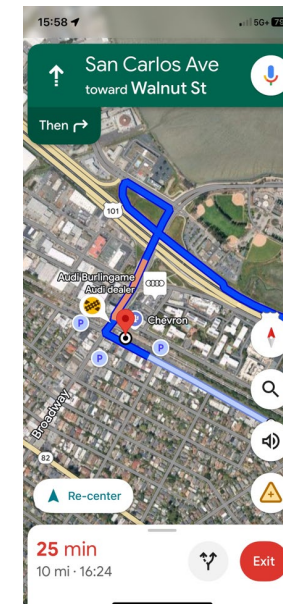
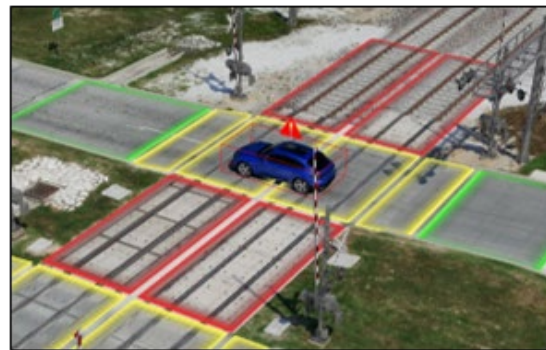
- Expensive to build
- Disruption for existing train operations and the surrounding community
- Political support
- Amount of time to complete a grade separation project from start to finish
- Until the project is completed, the hazard still exist
- Crossing Closures may not remove the demand for people to cross, potentially leading to trespassing

Enhancements

- Quad gates and pedestrian gates
- Fencing
- Channelization, medians
- Enhanced lighting
- Traffic Signals, adjustment to traffic timing and preemption
- Enhanced pavement markings

Cross hatches, visual dynamic envelope, “Keep Clear”
Tactile panels

- Enhanced visual and audible cues
 - Navigation
 - Delineators
 - Solar markers
- Trespasser deterrence devices
 - Anti-trespass panels
- Intrusion detection, CCTV



Churchill Crossing, Palo Alto

2024 has 8 logged incidents related to track incursions and 9 trespass events

2025 up to 11/21/2025 has 0 logged incidents related to track incursions on 4 trespass events

Added:

- Solar markers
- Delineators
- RailSentry (Herzog)

Plans for pilot project:

- Mobile camera tower
- Anti-trespass panels



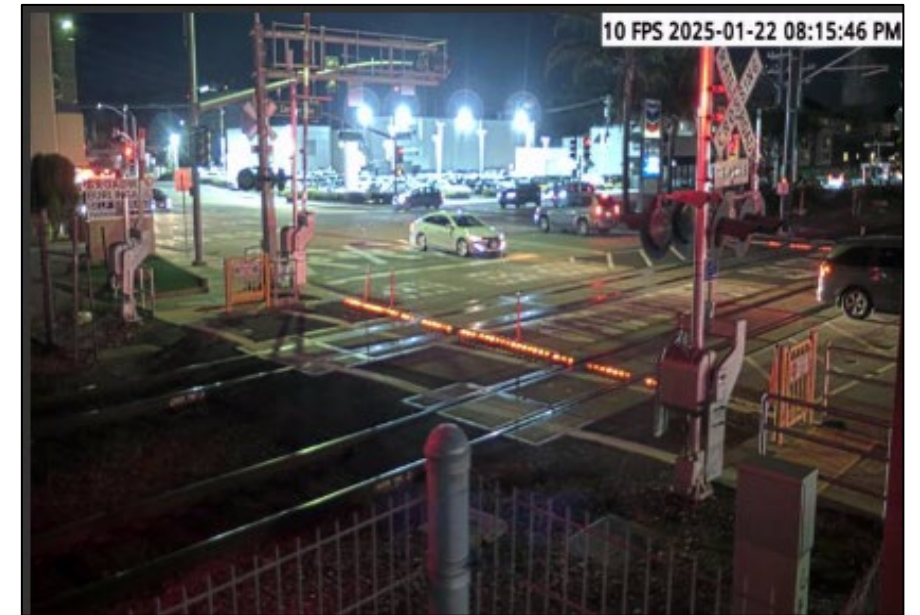
Broadway Crossing, Burlingame

2024 has 2 vehicle collisions, 2 track incursions and 1 trespass events

2025 up to 11/21/2025 has 0 logged incidents related to track incursions and 2 trespass events

Added:

- Solar markers
- Delineators
- RailSentry (Herzog)
- Adjustments in adjacent traffic signal timing



APTA Safety, Security & EM Awards and Safety Audits/Peer Reviews

APTA Safety, Security & Emergency Management Bus & Rail Awards

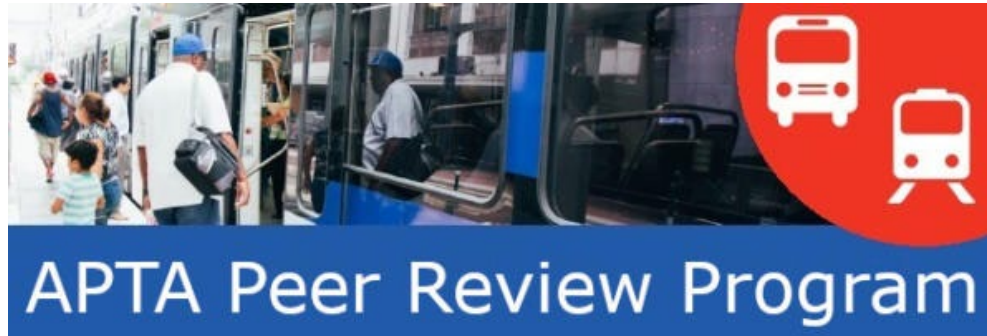
- Annual APTA Bus and Rail Safety, Security & EM Awards Program
- 2025 Gold Award Winners Included:
- The 2025 Awards Program for **RAIL** is now open until May 1, 2026. Apply on APTA web site with login info or please reach out at balberts@apta.com to get link

Bus	Rail
SJRTD – Safety & Security	Maryland MTA – Safety
JTA – Safety	MTA NYC Transit – Safety
SacRT – Safety	Caltrain – Safety
Foothill Transit – Security & Emergency Mngmt	MTA LIRR – Security
RTC – Security	WMATA – Security
Maryland MTA – EM	MTA MNR – EM



Peer Reviews

- Conducted with Subject Matter Experts from throughout Public Transportation/Rail
- Provide findings and recommendations to sr. management, including best practices
- Conducted 30+ peer reviews nationally and internationally from 2021-2026 on topics such as safety, security, operations and maintenance
- Please go to <https://www.apta.com/member-resources/member-benefits/peer-review/> if you'd like to schedule an APTA peer review



Safety Audits

- The APTA bus and rail safety audit programs use Safety Management Systems (SMS)-based criteria to reflect requirements from the FTA and Part 270 to reflect requirements from the FRA
- Through APTA's Safety Audit Program, agencies learn how to implement SMS, meet APTA Industry Standards, and prepare for FTA/SSO and FRA audits
- Over 20 US, Canadian & International transit agencies/railroads in program
- To sign up, please go here: <https://www.apta.com/research-technical-resources/safety-security/apta-safety-management-audit-programs/>



Rail Safety Collaboration with Outside Groups: CUTR, OLI, FTA, FRA and NTSB

- **Collaboration with outside transit safety-related groups, including:**
- Center for Urban Transportation Research (CUTR)
- Operation Lifesaver, Inc. (OLI)
- Federal Transit Administration (FTA)
- Federal Railroad Administration (FRA)
- National Transportation Safety Board (NTSB)



Federal Transit Administration



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QUESTIONS?