

Safety Rulemakings and Safety Risk Management Updates

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Session Purpose and Agenda

The purpose of this session is to provide updates on the Federal Transit Administration's (FTA) safety rulemakings and Safety Risk Management program

Session Agenda:

- Safety Rulemaking Updates
- Safety Risk Management (SRM) Updates
- Transit Advisory Committee for Safety (TRACS)



SAFETY RULEMAKING UPDATES



Fall 2022 Unified Regulatory Agenda

Publication Date: January 4, 2023

Public Transportation Agency Safety Plans (PTASP)

- Incorporates new requirements established through the Bipartisan Infrastructure Law
- The Notice of Proposed Rulemaking has been published in the Federal Register for comment

State Safety Oversight (SSO)

- Introduces changes to clarify State Safety Oversight Agencies' (SSOA) oversight responsibilities and to incorporate authority to conduct inspections

NEW: Transit Worker Fitness for Duty (FFD)

- Seeks public comment about establishing minimum standards related to transit worker fitness for duty

Public Transportation Safety Certification Training Program (PTSCTP)

- Amends training curriculum to reflect new requirements and training course information

Rail Transit Roadway Worker Protection (RWP)

- Establishes minimum baseline standards and risk-based redundant protection requirements for rail transit roadway worker protection.



Public Comment Requested

- Public Transportation Agency Safety Plans
 - Please submit comments by June 26, 2023
 - Docket# FTA-2023-0007
- National Public Transportation Safety Plan
 - Please submit comments by July 31, 2023
 - Docket# FTA-2023-0010
- Please submit comments to <http://www.regulations.gov> in the applicable rulemaking docket



Role of the Safety Committee in SMS

Implement and Support an Agency's Safety Management System

Identify and recommend risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment

Identify mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended

Identify safety deficiencies for the purposes of continuous improvement

Establish safety performance targets for the risk reduction program

Review and approve the Agency Safety Plan



SAFETY RISK MANAGEMENT UPDATES



Safety Risk Management Safety Topics

Safety Topic	Step 1: Safety Risk Identification and Assessment	Step 2: Develop Mitigations	Step 3: Implement Mitigations	Step 4: Monitor Mitigation Performance
Inward- and Outward-Facing Cameras	✓	✓	✓	In progress
Roadway Worker Protection	✓	✓	In progress	
Transit Worker Assault Prevention	✓	✓	In progress	
Signal System Safety	✓	✓	✓	In progress
End-of-Railcar Door Messaging	✓	✓	✓	In progress
Bus-to-Person Collisions	✓	✓	In progress	
Transit Customer Assault Prevention	In progress			
Train-to-Privately Owned Vehicle (POV) Collisions at Rail Grade Crossings (RGX)	In progress			
Fitness for Duty	✓	✓	In progress	



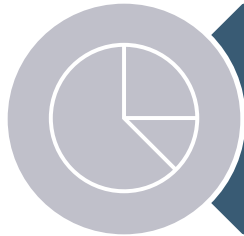
Roadway Worker Protection (RWP)



FTA onboarded RWP as a Safety Risk Management topic in 2019



There were 51 RWP-related fatalities from 1994-2020



The National Transportation Safety Board has 7 open safety recommendations to FTA about RWP programs



The Transit Advisory Committee for Safety (TRACS) has recommended that FTA regulate RWP programs

Rail Transit Agency (RTA) Worker Fatalities

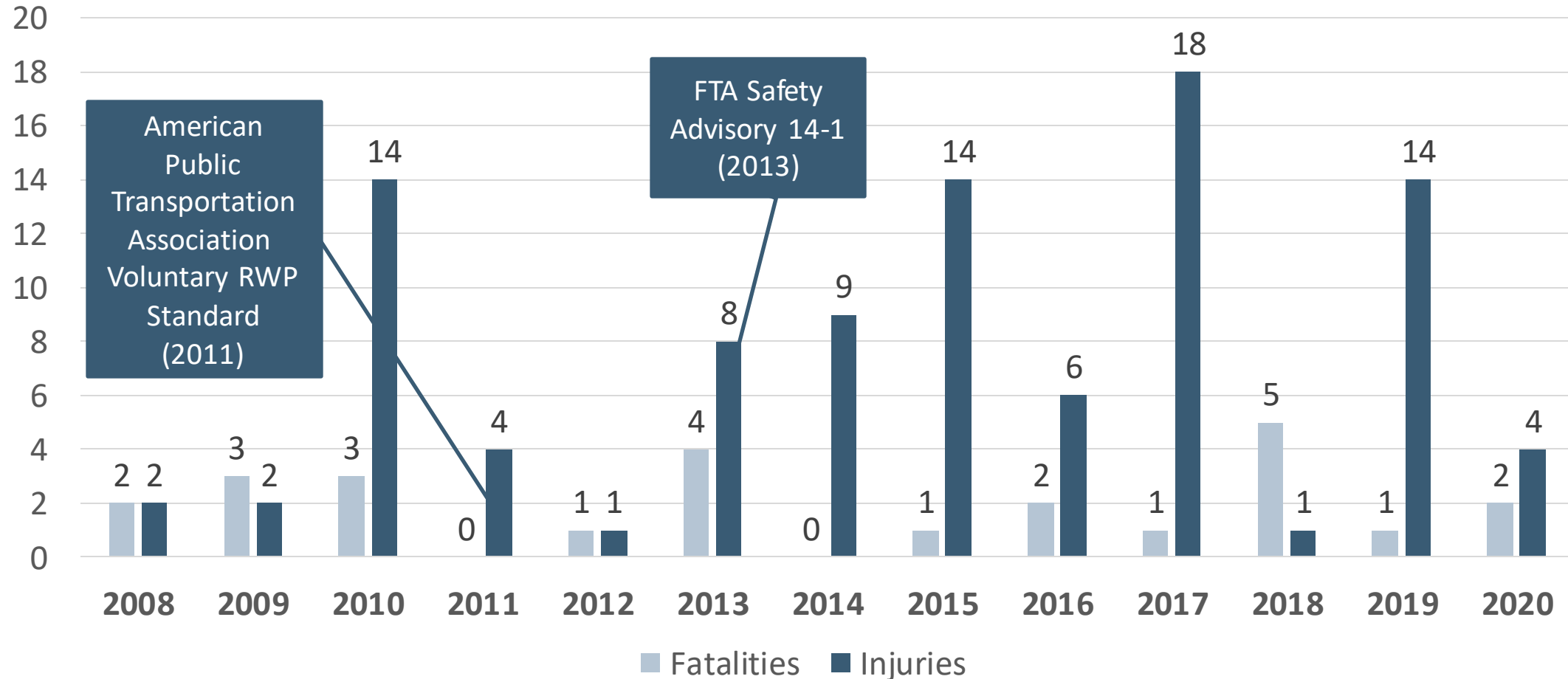
Event	Total Fatalities (2008 to 2020)	Percent of Total
Roadway Worker Events	26	64%
<i>Roadway Worker Collision</i>	<i>18</i>	<i>44%</i>
<i>Falls or Other Employee Action</i>	<i>8</i>	<i>20%</i>
Suicides	3	7%
Train-to-Train Collisions	2	5%
Medical	2	5%
Security Events	3	7%
Fires	0	0%
Derailments	0	0%
Other	5	12%
Total	41	-



RTA Roadway Worker Fatalities and Injuries

Transit Industry (2008 – 2020)

26 Total Fatalities
97 Total Injuries



RWP Hazard and Consequences

Identified Hazard

RTA employees working on/occupying the rail transit roadway

Identified Consequences

1

Rail transit vehicle collision with worker

2

Worker contact with traction power electrification element on roadway

3

Worker slip, trip, or fall on roadway

4

Lack of personal protective equipment, misuse of tools, poorly maintained tools or condition of work area

5

Fall from heights on roadway

6

Lack of oxygen, toxic gases, ignition sources, space limitations or other issues in a confined space on, near, over or under the roadway



RWP Safety Risk Assessment Results

Likelihood	5	Very High					
	4	High					1 2
	3	Moderate					3 4
	2	Low					5 6
	1	Very Low					
			Negligible	Marginal	Moderate	Serious	Catastrophic
			A	B	C	D	E
Severity							

Consequences	
1	Rail transit vehicle collision with worker
2	Worker contact with traction power electrification element on roadway
3	Slip, trip, or fall on roadway
4	Lack of personal protective equipment, misuse of tools, poorly maintained tools or condition of work area
5	Fall from heights on roadway
6	Lack of oxygen, toxic gases, ignition sources, space limitations or other issues in a confined space on, near, over or under the roadway



Train-to-Privately Owned Vehicle (POV) Collisions at Rail Grade Crossings (RGX) Background



FTA onboarded Train-to-POV Collisions at RGX as a Safety Risk Management topic in February 2023



From 2015 to 2021, ninety-nine percent (99%) of the rail collisions with POV reported to the National Transit Database involved light rail, hybrid, streetcars and cable car vehicles

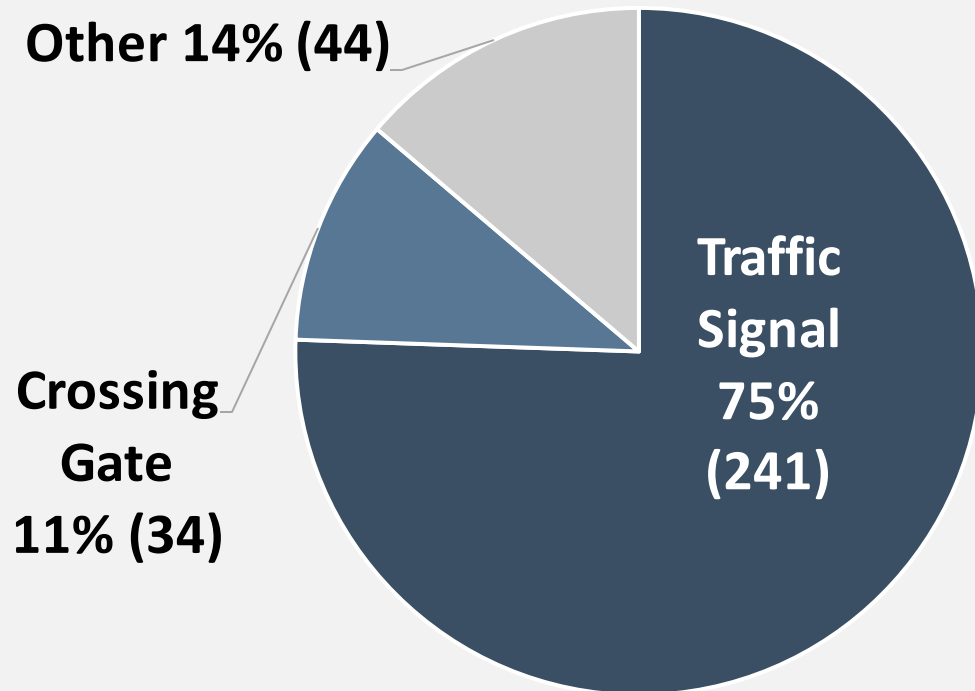


Rail transit agencies reported **211** rail-to-POV collisions resulting in a fatality, injury, or significant property damage per year from 2015 to 2021; of these, **184** per year, or **87%**, occurred at RGX

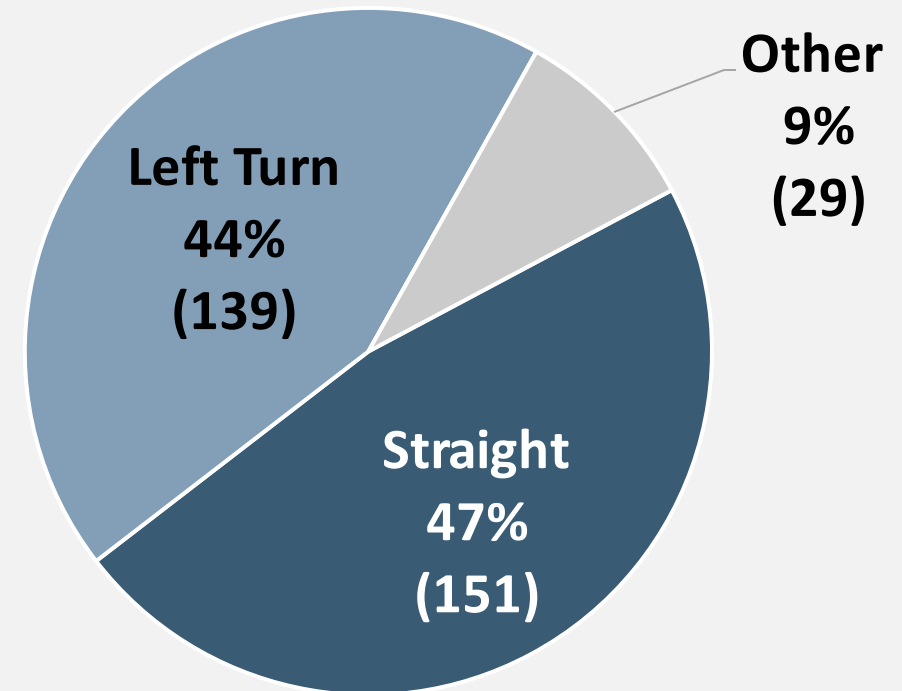
Train-to-POV at RGX Analysis Findings (1 of 2)

Analysis Sample 2020 – 2022 (319 events with investigation reports or narratives)

Train-to-POV Collisions by Control Device



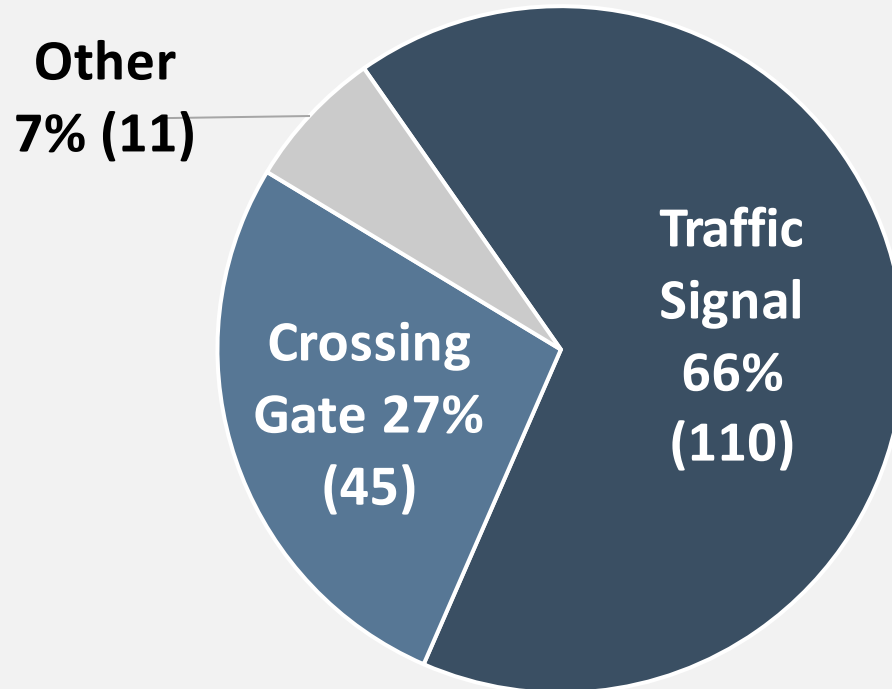
Train-to-POV Collisions by POV Direction



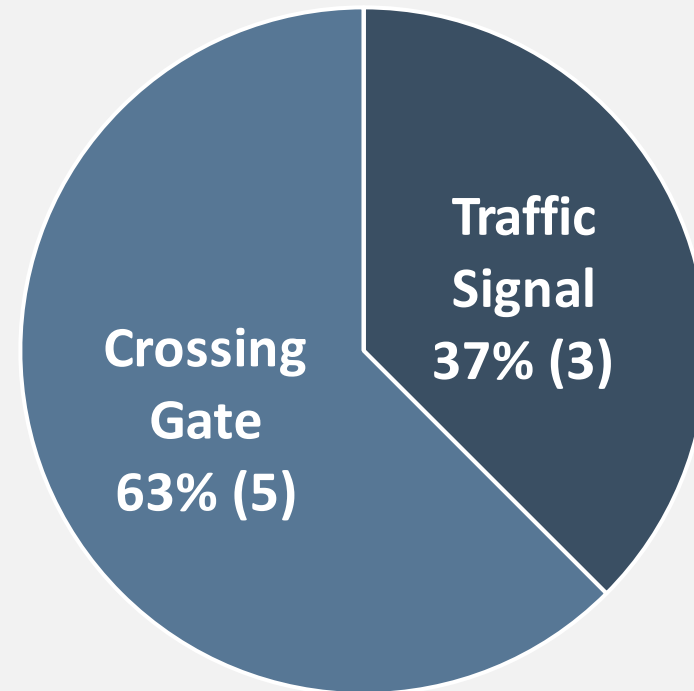
Train-to-POV at RGX Analysis Findings (2 of 2)

Of the 319 events in the analysis sample, 101 events (32%) resulted in injuries and fatalities

Injuries by Control Device



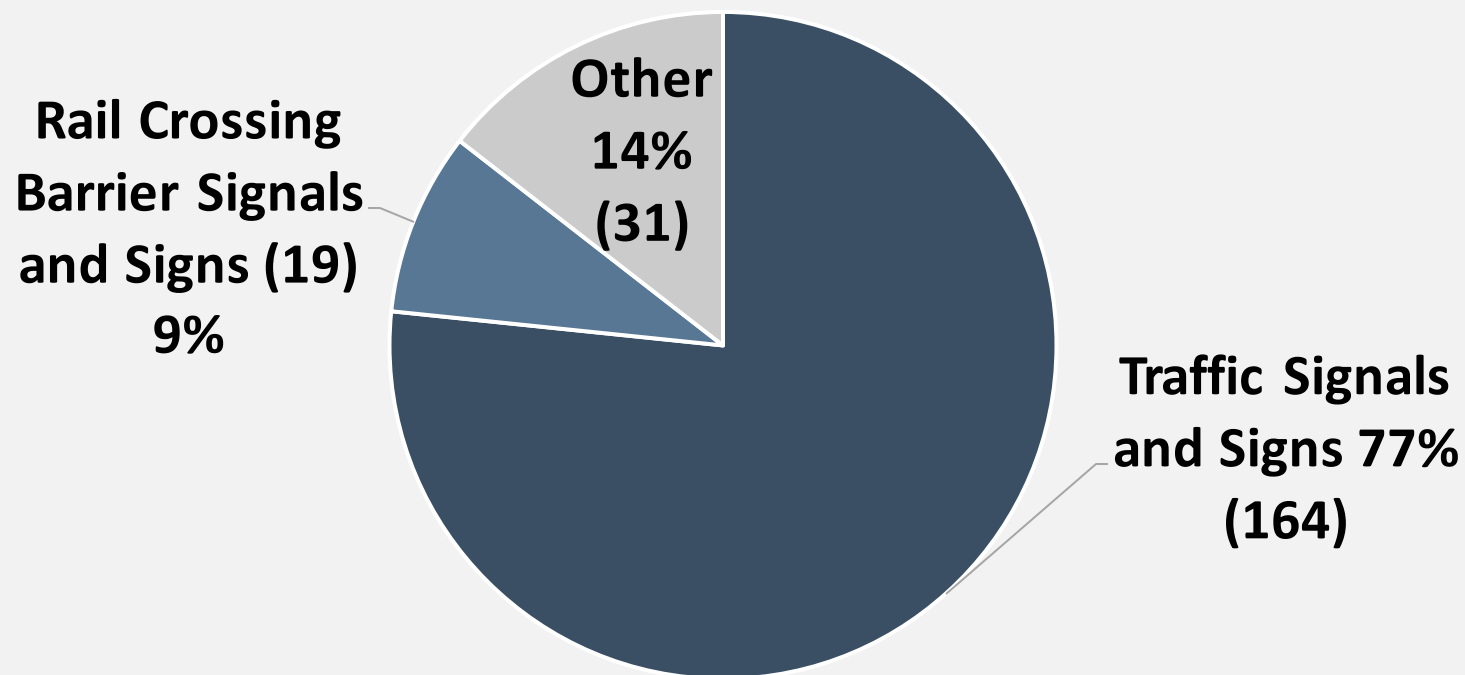
Fatalities by Control Device



Train-to-POV at RGX Causal Analysis

Of the 214 events with State Safety Oversight Reporting (SSOR) investigation reports in the analysis sample, 193 events (90%) were due to **POV failure to obey signs/signals**

Train-to-POV Collisions by Control Device Failed to Obey



TRANSIT ADVISORY COMMITTEE FOR SAFETY (TRACS)



Transit Advisory Committee for Safety (TRACS)

- FTA reestablished TRACS for a two-year charter in 2022
- The U.S. Secretary of Transportation appointed 24 members to TRACS, representing large and small transit systems, state departments of transportation, labor unions, academia, and non-profit organizations
- On January 31st, 2023, FTA tasked TRACS with developing recommendations on three safety focus areas:
 - Reducing Bus Collisions
 - Advancing Rider and Worker Safety
 - Cyber and Data Security Systems
- FTA expects TRACS to submit recommendations to FTA in early 2024



QUESTIONS & ANSWERS



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