

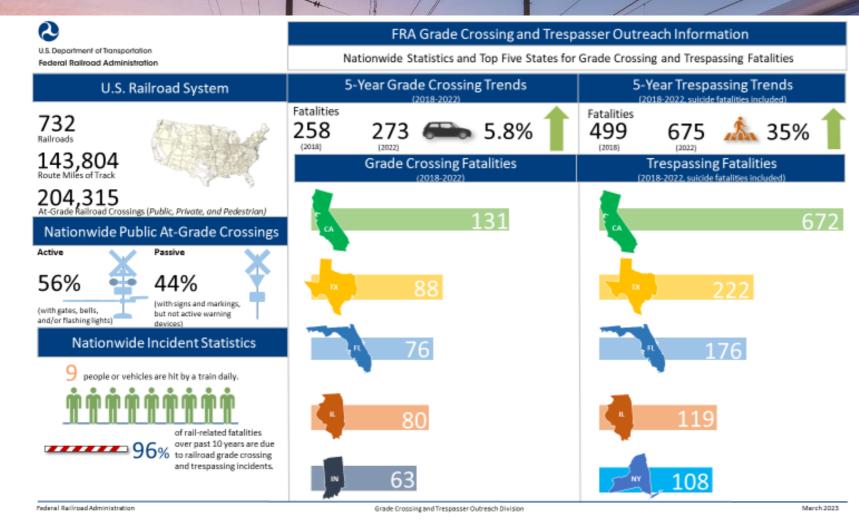
Highway Railroad Safety – FRA Updates WisDOT Conference 2023

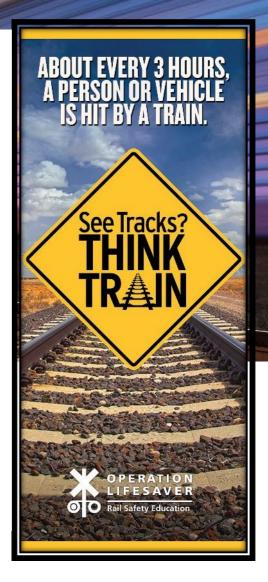
Tina Blumenberg, Supervisory Specialist for Grade Crossing & Trespasser Outreach, Office of Railroad Safety



MOVING AMERICA FORWARD

National Trends







MOVING AMERICA FORWARD



U.S. Department of Transportation Federal Railroad Administration

District 4 Trends

5-Year Grade Crossing Trends

FRA District 4 Grade Crossing and Trespasser Outreach Information

Illinois*, Indiana, Michigan, Minnesota, and Wisconsin *D4 & D6 data included for Illinois.

District 4 Railroad System

124 Railroads

21,469

37,266
At-Grade Railroad Crossings (Public and Private – Not Incl. Ped.)

Nationwide Public At-Grade Crossings

Active

56%

(with gates, bells, and/or flashing lights) Passive

44%

(with signs and markings, but not active warning devices)

Nationwide Incident Statistics

people or vehicles are hit by a train daily.

96%

of rail-related fatalities over past 10 years are due to railroad grade crossing and trespassing incidents.

(2018-2022) Fatalities **23.3%** 43 (2018)**Grade Crossing Fatalities** (2018-2022)











Trespassing Fatalities

(2018-2022, suicide fatalities included)

5-Year Trespassing Trends

(2018-2022, suicide fatalities included)

66.7%







Fatalities

42

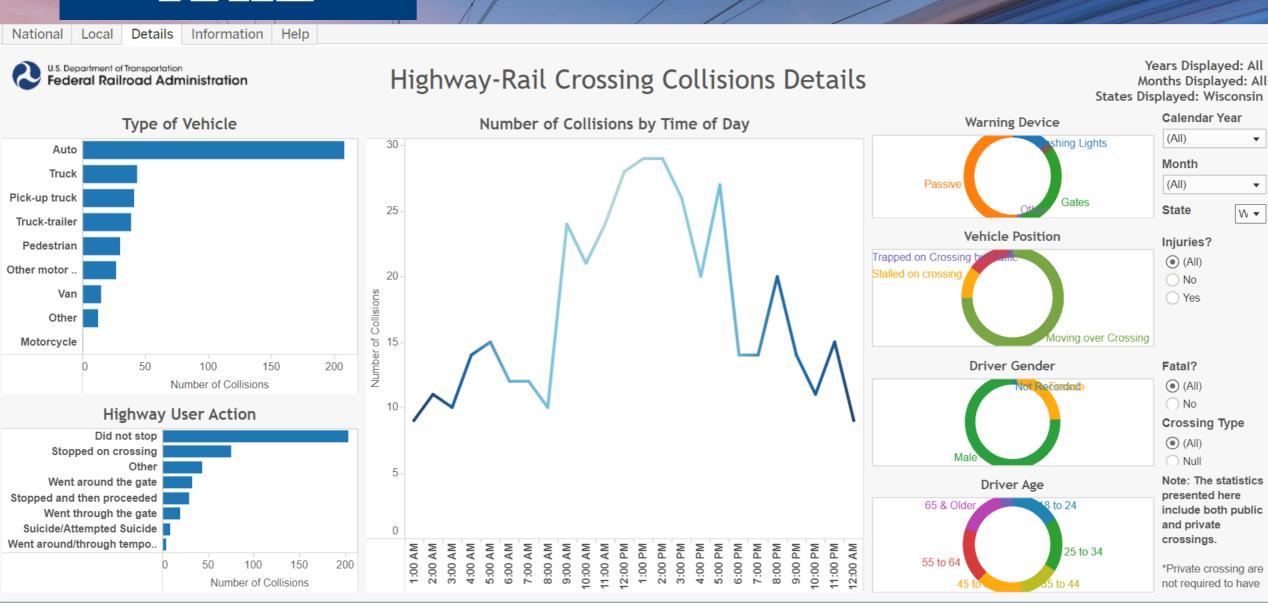
(2018)





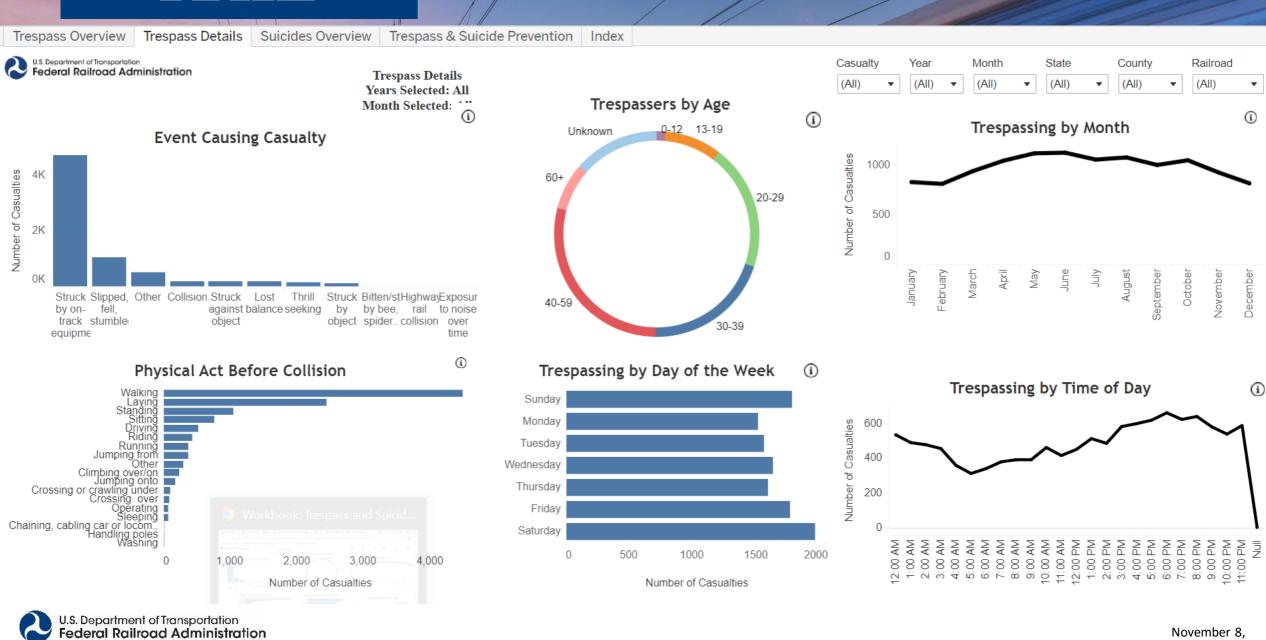


Details Information Help National Local Highway-Rail Crossing Collisions U.S. Department of Transportation Data is current through October, 2022. Years Displayed: All Federal Railroad Administration Months Displayed: All States Displayed: None Calendar Year Collisions Injuries **Fatalities Collisions Over Time** (All) 418 139 38 Jo 40 20 0 Month (All) State W. • 2015 2016 2018 2020 2013 2014 2017 2019 2021 2022 **Crossing Type** Injuries vs. Fatalities (All) O Null 20 Number of Fat. O Private O Public Fatalities Injurior 2013 2014 2015 2016 2017 2018 2019 2020 2021 Railroads with the Most Collisions by Railroad Collisions **Estimated 2019 Population** (by Zip Code) ATK Number of Collisions 0 to 499 BNSF 499 to 1,640 @ Mapbox @ OSM CP 1,640 to 5,010 UP 5,010 to 18,000 WC WC © 2023 Mapbox © OpenStreetMap Number of Collisions 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 27 20 10



Trespass Overview Trespass Details Suicides Overview Trespass & Suicide Prevention U.S. Department of Transportation
Federal Railroad Administration Years Displayed: All Fatality States Displayed: Wisconsin Counties Displayed: All Year **Total Casualties Fatalities** Injuries vs. Fatalities Injuries (All) 94 54 40 15 Month (All) State Wisconsin ▼ County Top 15 Counties by Trespass Fatalities (All) Casualty ● (AII) O Fatal... Railroad ATK BNSF Top 10 Railroads by Trespassing Incidents ① CN CP. 15 Casualities by Railroad NIRC UP WSOR





Trespass Overview Trespass Details Suicides Overview Trespass & Suicide Prevention Suicide Overview Year U.S. Department of Transportation
Federal Railroad Administration Suicide Casualties Years Displayed: 2012, 2013, 2014 and 6 more (Multi... ▼ Number of S... Month (All) State 🥫 ▼ Wisco... ▼ 20. 命 Status Death Suicide Casualties by Month March 11 32 Railroad ATK 24 13 Top 10 Railroads by Suicide CN 25 CP. 30 Number of Records NIRC 20 ■ UP 18



2012 2013 2014 2015 2016 2017 2018 2019 2020

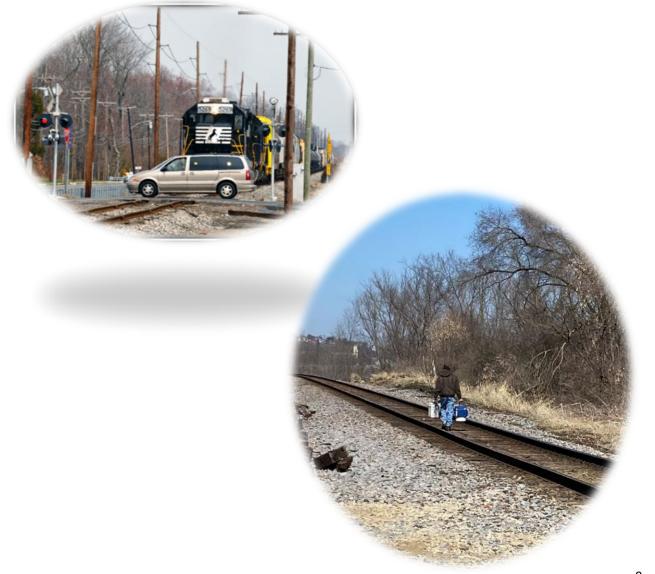
GX & Trespassing Casualties within the Last 5 Years

Highway-Rail Grade Crossing Incidents 2018 through August of 2023

<u>State</u>	# of Incidents	<u>Injuries</u>	Fatalities
Wisconsin	234	61	23
Minnesota	229	73	18
Michigan	297	108	22
Indiana	655	224	80
Illinois	674	185	102
Totals	2089	651	245

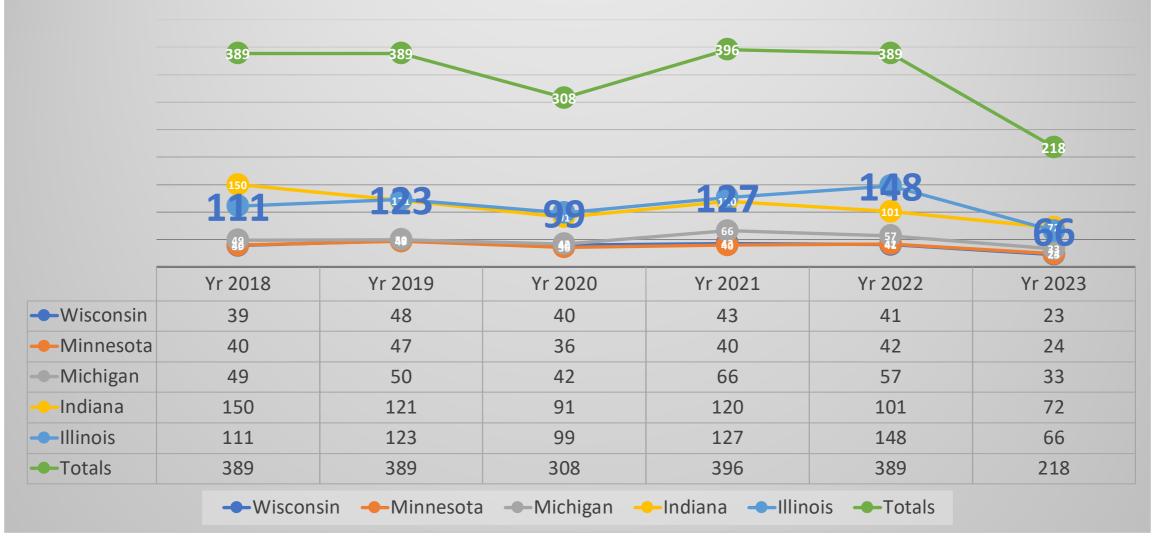
Railroad Trespassing Incidents 2018 through August of 2023

<u>State</u>	<u>Injuries</u>	<u>Fatalities</u>	<u>Totals</u>
Wisconsin	20	27	47
Minnesota	34	28	62
Michigan	25	29	54
Indiana	58	55	113
Illinois	124	140	264
Totals	261	279	540





Highway-Rail Incidents (2018 – Aug 2023)



Trespasser Fatalities (2018 – Aug 2023) Yr 2022 Yr 2018 Yr 2019 Yr 2020 Yr 2021 Yr 2023 Wisconsin -Minnesota -Michigan -Indiana -Illinois -Totals

The Train Horn Rule and Quiet Zones

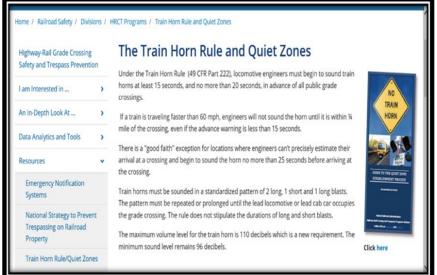
977 Established Quiet Zones in the United States as of November 3, 2023

5,625 Grade Crossings with a Quiet Zones



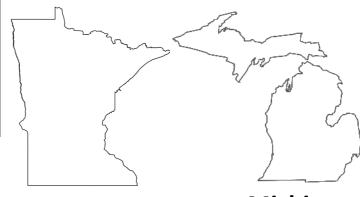
Wisconsin 95 QZs, 66 are Pre-Rule





The Six states account for 309 QZs District 4 accounts for 293 QZs





Minnesota 84 Quiet Zones

Michigan
9 Quiet Zones



La Crosse MTU bus vs. Train-June 26 2023 in a Partial Pre-Rule Quiet Zone

- DOT# 079828Y, Ward Ave, MP 295.708 Accident occurred at 10:27pm
- WisDOT held a diagnostic review meeting to discuss safety improvements in order to prevent future crashes; considering changing exemption status, warning devices, increase crossing visibility, night time visibility, SSM's relocate driveways, etc.
- Note: Pre-Rule Quiet Zone, it does not require flashing lights and gates, constant warning time and power out indicators like New Quiet Zones. However, an entity can improve the safety at the crossing and NOT lose it's Pre-Rule status, so the crossing can be upgraded with flashing lights or flashing lights and gates.



ICC is considering Solar powered street lights.





CN's Minneapolis Sub west of Chippewa Falls, WI, there is a crossing with a crossbuck, stop sign and bell₁₃





Highway-Rail Grade Crossing and Trespassing Division Activities



Focus of the Division

Regulations

- 49 CFR 222 Train Horn
- 49 CFR 234 Subpart E ENS Signs
- 49 CFR Subpart F FRA Inventory

Inspections

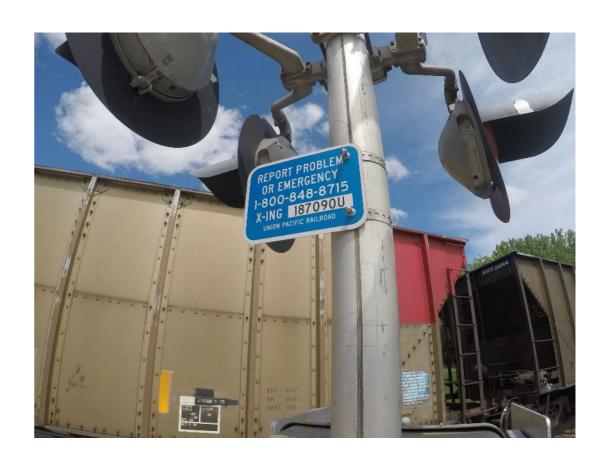
- Routine Inspections
- NEW Focused Inspections

Outreach

- Focused Inspections
- Connecting with Safety Partners
- Quiet Zones
- Operation Lifesaver

Investigations

- Complaints
- Incident Response (Sight Line Analysis)





Routine Inspections

Our Division continues to complete routine crossing inspections, especially at Quiet Zone locations

Common Issues and Problems:

- Median and Channelization Length
- Channelization Condition
- Median Height
- Sign Issues (Missing Signs)
- Inventory Corrections
- Quiet Zone Affirmation Notices
- Trespassing
- ENS Sign Issues



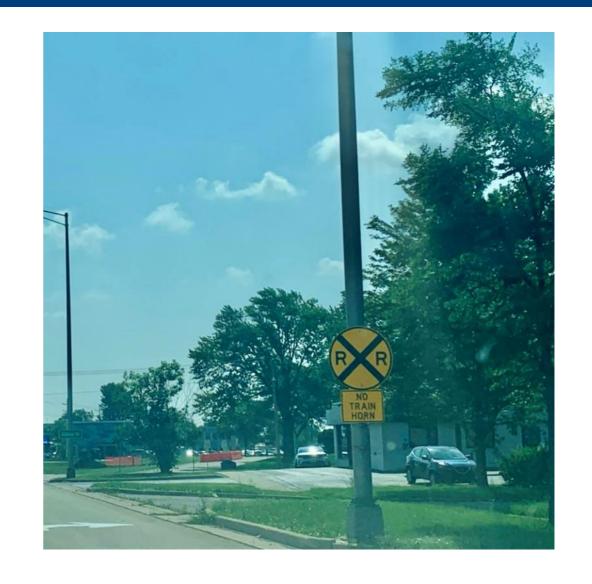


Outreach: Quiet Zones

Communities continue to initiate Quiet Zone projects across the country

We continue to work with safety partners on projects:

- Attend Diagnostic Meetings
- Review Notices
- Inspect Crossings, SSMs and ASMs
- Work with Communities on Affirmation Notices





Focused Inspections and Grant Outreach

Focused Inspections give us a chance to work with local safety partners (rail, city, county, state and PUC).

As part of this effort, we are:

- Inspecting crossings in the field
- Discussing potential safety issues and improvements with local safety partners
- Conducting meetings and/or town hall meetings with elected officials and the public
- Notifying municipalities of FRA Grants and Section 130 funding

J.S. Department of Transportation Federal Railroad Administration



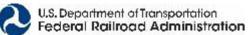
Focused Inspections and Outreach Continued



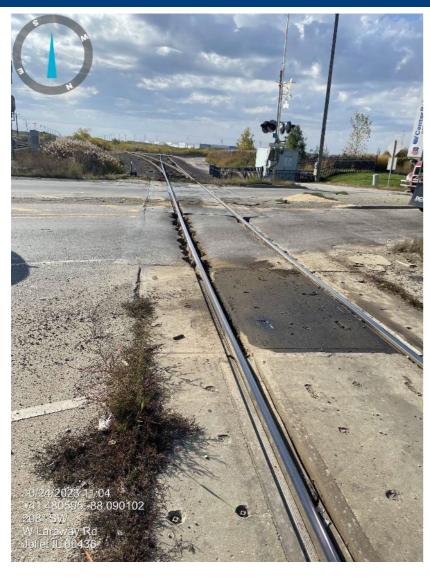
D4 Grade Crossing Inspectors participated in the following Focused Inspections in 2023:

- Illinois (Cook & DuPage County)
- Ft. Lauderdale, FL
- Atlanta, GA
- Oakland, CA





Investigations

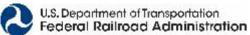


Complaints

- Train Horn/Noise
- Blocked Crossing Complaints (shared with OP)
- Blocked Crossing Website: https://www.fra.dot.gov/block edcrossings/
- Rough crossing surface

Accidents

- Grade Crossing Incidents
- Sight Line Analysis



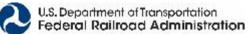
FRA Partners with Operation Lifesaver for Outreach



OLAV Events

- Presentations
- Safety Booths
- Operation Lifesaver Website:
 www.oli.org
- Law Enforcement Outreach
- Train Rides
- Rail Safety Week Events





FRA District 4 Staff

Tina Blumenberg – GX Supervisory Specialist
Thomas Domres – GX Inspector (WI/MN)
Levi Tompkins – GX Inspector (IL/IN/MI)
Robert Crawford – OP/GX Inspector (IN/MI)

Welcome our New Hire: Cecilia Diaz (IL/WI) →

- FRA is offering State Inspectors an opportunity to become FRA Certified State Inspectors for the Grade Crossing Division.
- FRA is hiring!

Contact Tina Blumenberg if you are interested.





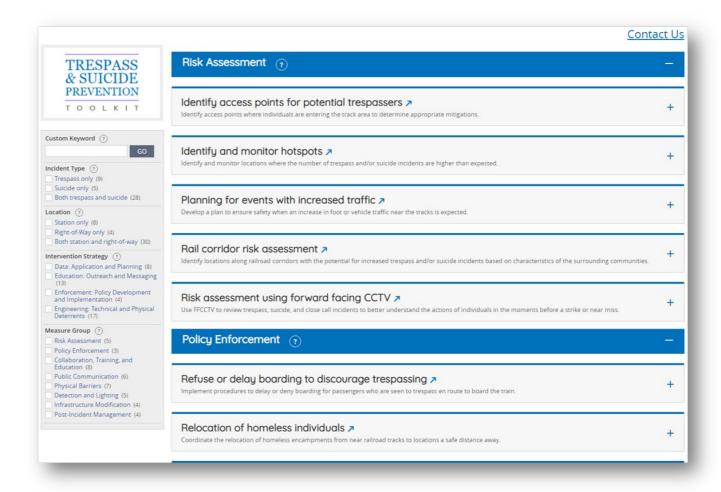


FRA Resources



Trespass & Suicide Prevention Toolkit

FRA launched a new interactive resource, the <u>Trespass & Suicide Prevention (TSP)</u>
<u>Toolkit</u>, to identify effective railroad trespass prevention strategies and suicide prevention measures. The TSP Toolkit is useful for individuals who work in railroad safety and for researchers, community members, suicide prevention groups, or other individuals or organizations with an interest in preventing trespassing and suicide.





Trespass & Suicide Prevention Toolkit

The TSP Toolkit allows you to easily find strategies and measures most relevant to your situation. You can enter search terms to narrow the search or filter by various factors including the incident type based on the intent of the individual (trespass, suicide, or both), the location of the incidents (station, right-of-way, or both), the type of strategies (education, enforcement, engineering, data-driven), or any combination of these categories. You also can look for specific types of measures, including:

- Risk Assessment Measures that focus on data-driven activities to identify areas most in need of mitigation efforts.
- Policy and Enforcement Measures that create or carry out safety policies on railroad property.
- Collaboration, Training, and Education Measures that focus on stakeholder coordination, employee training, and education.
- Public Communication Measures to inform the public.
- Physical Barriers Measures that act as physical deterrents within a specified location. Detection and Lighting Measures that use sensors and/or lighting to increase the detection of individuals and influence their behavior on railroad property.
- Infrastructure Modification Measures that create physical changes to stations, rights-of-way, or locomotives.
- Post-Incident Management Measures to improve post-incident procedures and mitigate the effects of incidents after they
 occur.



Problem-Solving Guide

C.A.R.E.: Community, Analysis, Response, and Evaluation

Community Trespassing Prevention Guide
December 2011
OF TRANSPORTATION POLICE OF AMERICA
U.S. Department of Transportation Federal Railroad Administration
Office of Railroad Safety

https://www.fra.dot.gov/eLib/Details/L02716

Community	Analysis	Response	Evaluation
Identify and describe the trespass problem. Identify community resources and begin involvement. Organize a problem-solving committee with community stakeholders and develop an action plan.	Develop data collection and analysis plan. Collect trespass data. Analyze the data to determine the underlying causes of the trespass problem. Establish baseline and identify measures to determine program's effectiveness.	Identify and implement feasible countermeasures - Develop countermeasures (CM) implementation plan. - Implement CM, such as: education, enforcement, engineering, and other strategies developed by the committee.	Assess impact of the response, and determine whether the trespass problem was displaced, reduced, unchanged, or eliminated. Evaluate the process used and assess whether the key stakeholders were identified and included, the underlying causes correctly identified, the response implemented as planned, and reasons why parts of the plan may not have been implemented. Develop and implement a long-term program monitoring plan if needed.



Goal

- Create safer communities by fostering the development of long-term trespass prevention strategies through collaborative community problem-solving partnerships.
- It's a <u>collaboration</u> between different entities, it is a shared responsibility between railways and other stakeholders.



"No mission is more important than saving lives, and FRA is fully committed to supporting states and communities in the collective effort to prevent avoidable tragedies. Through these grants, we will deter railroad trespassing and suicide through coordinated responses from a broad range of local organizations specializing in law enforcement, education, and mental health."

Amit Bose, FRA Administrator

Trespassing Enforcement & Suicide Prevention Grants







2022 Railroad Suicide Prevention Grants

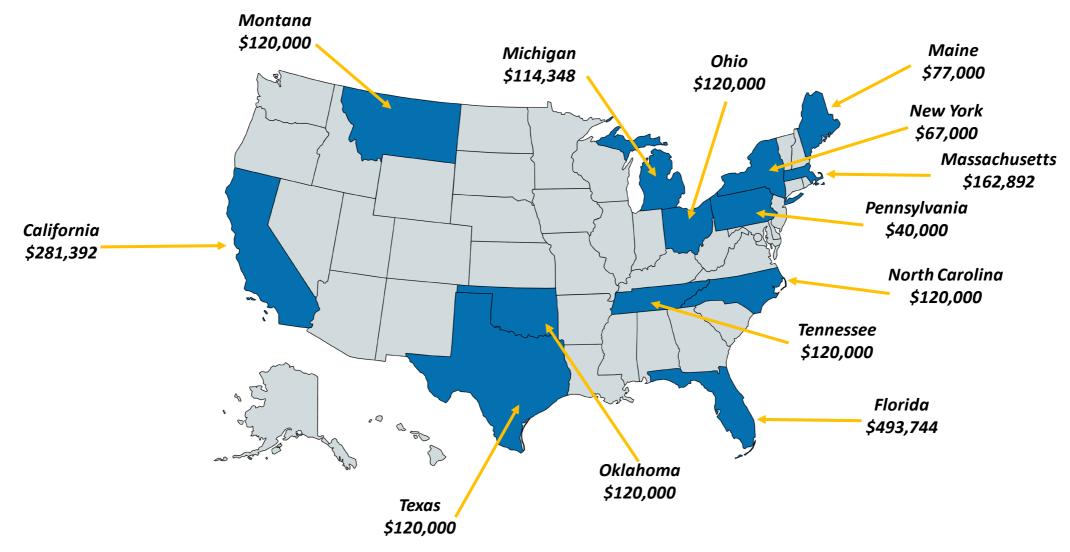
Goal: to prevent trespassing tragedies through three projects that will specifically address rail suicides using targeted outreach and education campaigns.

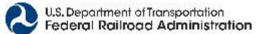
- The South Florida Rail Corridor Railroad Suicide Prevention Education and Outreach Campaign Project (up to \$56,500) South Florida Regional Transportation Authority
- *MBTA Suicide Trespass Prevention Project* (up to \$100,000) Massachusetts Bay Transportation Authority
- Expansion of Trespassing and Suicide Prevention Initiatives (up to \$50,500). Metropolitan Transportation Authority (MTA)





2022 Railroad Trespassing Enforcement Program





Grade Crossing and Trespassing Prevention Workshop

Engaging Stakeholders and Communities Across the Nation



- Raise awareness about trespassing
- Find low-cost solutions to trespassing
- Discuss action ideas for improving GX

A main goal of this workshop was to demonstrate how trespassing and grade crossing incidents touch all lives in a community.





Finding Opportunities How do we pay for this strategies?



BIL | FRA Advance Appropriations and Authorized Funds

[ADVANCE APPROPRIATIONS]

From FY22-FY26

\$66B in total funding

[FULLY AUTHORIZED FUNDS]

From FY22-FY26

\$36B in

Amtrak

[ADVANCE APPROPRIATIONS]

\$22B

[FULLY AUTHORIZED FUNDS]

\$19B

Consolidated Rail Infrastructure and Safety Improvements

[ADVANCE APPROPRIATIONS]

\$5B

[FULLY AUTHORIZED FUNDS]

\$5B

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Railroad Crossing Elimination

[ADVANCE APPROPRIATIONS]

\$3B

[FULLY AUTHORIZED FUNDS]

\$2.5B

00

Federal-State
Partnership for Intercity
Passenger Rail

[ADVANCE APPROPRIATIONS]

\$36B

[FULLY AUTHORIZED FUNDS]

\$7.5B

00

00

Restoration & Enhancement

[ADVANCE APPROPRIATIONS]

\$250M

[FULLY AUTHORIZED FUNDS]

\$250M





00

FRA Grant Program Opportunities Under BIL

Programs	Purpose	Appropriated	Additional Authorized Over Five Years	Total
Consolidated Rail Infrastructure and Safety Improvements (CRISI)	To fund projects that improve the safety, efficiency, or reliability of intercity passenger and freight rail.	\$5 billion (\$1 billion annually)	\$5 billion (\$1 billion annually)	\$10 billion
Railroad Crossing Elimination (New)	To promote highway rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods.	\$3 billion (\$600 million annually)	\$2.5 billion (\$500 million annually)	\$5.5 billion
Federal-State Partnership for Intercity Passenger Rail (Significantly Changed)	To fund capital projects that reduce the state of good repair backlog, improve performance, or expand or establish new intercity passenger rail service, including privately operated intercity passenger rail service if an eligible applicant is involved.	\$36 billion (\$7.2 billion annually)	\$7.5 billion (\$1.5 billion annually)	\$43.5 billion
Restoration & Enhancement	To provide operating assistance to initiate, restore, or enhance intercity passenger rail service.	\$250 million (\$50 million annually from Amtrak National Network fund)	\$250 million (\$50 million annually)	\$500 million
Interstate Rail Compacts (New)	This program will provide funding for interstate rail compacts' administrative costs and to conduct railroad systems planning, promotion of intercity passenger rail operations, and the preparation of grant applications.	\$15 million (\$3 million annually)	\$15 million (\$3 million annually)	\$30 million



CRISI – Program Overview

PROGRAM PURPOSE

• To fund projects that improve the safety, efficiency, and/or reliability of intercity passenger and freight rail systems

Notice of Funding Opportunity (NOFO)

- FY22: Published in the Federal Register on September 2, 2022
 - \$1.425 billion available; application period closed December 1, 2022
 - Selection Announcement August/September 2023
- FY23-24
 - NOFO Anticipated in December 2023/January 2024
 - Estimated total: at least \$2.5 billion (FY23 advance and annual, FY24 advance)



CRISI – Program Overview

ELIGIBLE APPLICANTS

- A State (including the District of Columbia) or group of States
- An Interstate Compact
- Public agencies or publicly chartered authorities established by one or more States
- Political subdivision of a State
- Amtrak or other intercity passenger rail carrier
- Class II or III railroads and associations that represent a Class II or III railroad New
- Any rail carrier or equipment manufacturer in partnership with at least one state entity, public agency, and/or local government
- Federally recognized Indian Tribe New
- The Transportation Research Board (TRB) together with any entity with which it contracts in the development of rail-related research, including cooperative research programs.
- A university transportation center engaged in rail-related research
- A non-profit labor organization representing a class or craft of employees of rail carriers or rail carrier contractors



RCE – Railroad Crossing Elimination Program

ELIGIBLE PROJECTS AND APPLICANTS

Eligible Projects:

- Grade separation or closure, including through the use of a bridge, embankment, tunnel, or combination thereof;
- Track relocation;
- Improvement or installation of protective devices, signals, signs, or other;
- Measures to improve safety related to a separation, closure, or track relocation project;
- Other means to improve the safety if related to the mobility of people and goods at highway-rail grade crossings (including technological solutions);
- The planning, environmental review, and design of an eligible project type.

Eligible Recipients:

- States, including the District of Columbia, Puerto Rico, and other United States territories and possessions;
- Political subdivision of a state:
- Federally recognized Indian Tribe;
- A unit of local government or a group of local governments;
- A public port authority;
- A metropolitan planning organization;
- A group of the entities described above.



How to Apply and Available Grant Resources

Information on how to apply:

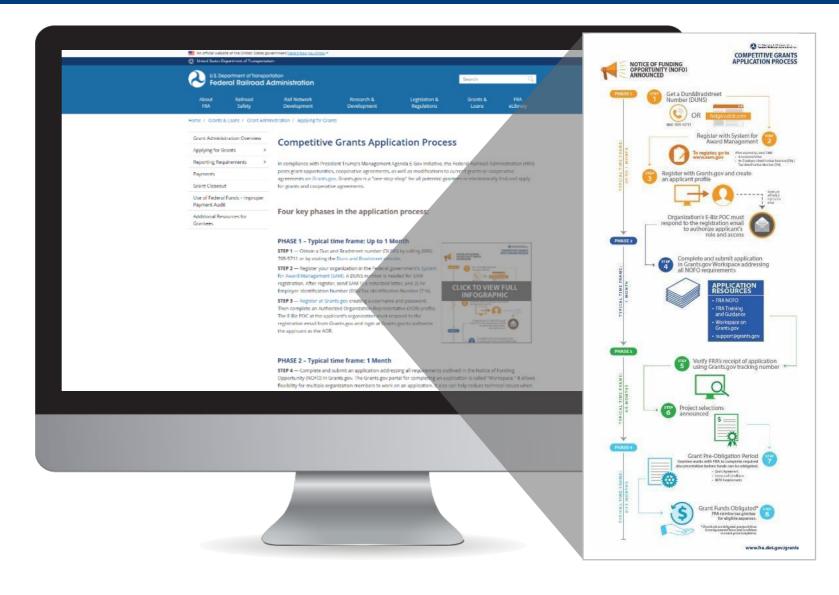
https://railroads.dot.gov/grantadministration/applyinggrants/competitive-grantsapplication-process

Webinars and Technical Assistance:

https://railroads.dot.gov/railnetwork-development/trainingguidance/webinars-0

White House Guidebook:

https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDI
NG-A-BETTERAMERICA FINAL.pdf#page=55

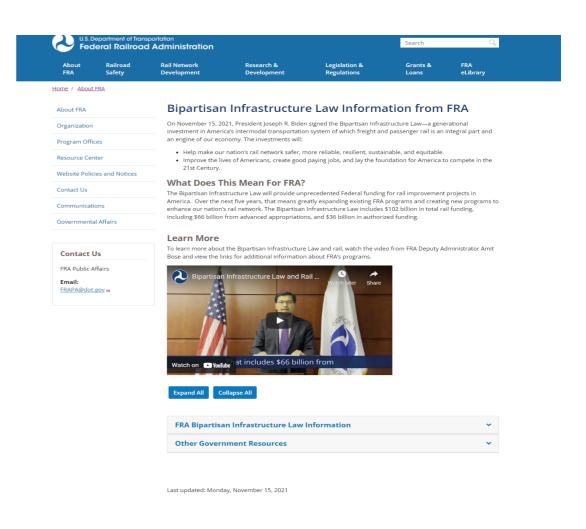




FRA Bipartisan Infrastructure Law Website

For more information about the Bipartisan Infrastructure Law and rail, please visit our website.





https://railroads.dot.gov/BIL



Emergency Notification System Informational Video



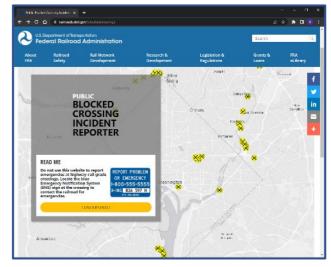
FRA launched two new Informational videos about the ENS System. The purpose of these videos is to educate the public and emergency responders on how to locate and use the ENS sign information.

ENS for the Public: <u>Pedestrian & Motorist Resources | FRA (dot.gov)</u>

ENS for 1st Responders: <u>Law Enforcement/First Responders</u>
<u>Resources | FRA (dot.gov)</u>

Blocked Crossing (BX) Portal

- Web-based tool—launched December 19, 2019
- Track submissions from first responders and public
- Various metrics collected
- As of May 8, 2023:
 - 69,889 submissions
 - 58,820 unique reports
 - Texas is ranked #1 (11,479)
- BX of interest in California: Industry, Redlands, and San Bernardino
- BX Portal Report to Congress



https://railroads.dot.gov/blockedcrossings





Maintenance of a Highway Rail Grade Crossing

- Varies from railroad to railroad
- Current trend is railroads are invoicing—the cities or the states to cover the monthly maintenance
 - Especially when new or upgraded grade crossing
- Cities are getting notified of this new policy by the railroads
- Local roadway authority is responsible for signs and pavement markings off railroad property



*FRA does not regulate maintenance expenses.



Common Questions from Wisconsin Safety Partners:

Pre-Rule Quiet Zones – How can DOT, OCR and FRA convince communities to improve passive Pre-Rule crossings?

When/if FRA opens the train horn rule, there is discussion on terminating pre-rule quiet zones. If this occurs, pre-rule quiet zones will have to make safety improvements to qualify under the new criteria. FRA will allow an implementation period. However, this is just simply a discussion at this time and has not taken effect.

 Multiple Crash Crossings – DOT and OCR are starting to focus on multiple crash crossings, particularly in Pre-Rule Quiet Zones.

FRA is also reviewing incident data within quiet zones. If a high risk crossing exists, this could lead to requiring the community to install safety measures or the quiet zone may be suspended.

Other Train Coming Signs – Do we have any experience with Other Train Coming Signs and have they been effective?

Yes. Metra Railroad uses them on the crossings along the UP Geneva Subdivision in the Chicago area.







Contact Us

Federal Highway Administration Federal Railroad Administration 1200 New Jersey Avenue, SE Washington, DC 20590







Connect with us at USDOTFRA

Tina Blumenberg Tina.blumenberg@dot.gov Federal Railroad Administration

FOR BIL AND CRISI FUNDING QUESTIONS

Monica Shaw

Monica.shaw @ dot.gov

Federal Railroad Administration

Michail Grizkewitsch
Michail.Grizkewitsch@dot.gov
Federal Railroad Administration