

FRA Grade Crossing Toolkit: Enforcement

Measure Name: Enforcement

Definition: Use of law enforcement to deter grade crossing violations and increase compliance with warning devices.

Tags:

Type of Incident:

- ☐ Non-Motorized Users Only
- ☐ Motor Vehicles Only
- ☒ Both

Intervention Strategy:

- ☐ Data: application and planning
- ☐ Education: outreach and messaging
- ☒ Enforcement: policy development and rulemaking
- ☐ Engineering: technological and physical deterrents

Type of Problem:

- ☒ Non-Motorized Users Violating Warning Devices
- ☒ Motor Vehicles Violating Warning Devices
- ☐ Vehicle ROW Incursion
- ☒ Vehicle Congestion
- ☐ Blocked Crossing
- ☐ Vehicle Hang-up

Measure Category:

- ☐ Risk Assessment
- ☒ Policy and Enforcement
- ☐ Collaboration, Training, and Education
- ☐ Public Communication
- ☐ Physical Barriers
- ☐ Detection and Lighting
- ☐ Infrastructure Modification
- ☐ Post-Incident Management
- ☐ Warning Devices

Description

Enforcement refers to the use of local law enforcement resources to monitor, cite, and deter grade crossing violations by both motorized and non-motorized users. It is a tool to punish unsafe behavior by issuing citations for grade crossing traffic law violations or other unsafe actions. It typically consists of uniformed police officers being present at a grade crossing to enforce pedestrian and driver traffic laws and encourage safe behaviors around grade crossings. Another form of enforcement is the use of an “officer on a train” who rides with the engineer and reports violators to nearby police [1].

Grade crossing laws are likely to be ineffective if they are not enforced [2]. Many state and local law enforcement agencies regularly conduct grade crossing enforcement “blitzes” in coordination with railroads. Grade crossing safety enforcement campaigns can focus on specific infractions, such as grade crossing gate violations, or combined with an education campaign composed of distributing general grade crossing safety information to the public. One such example is a one-day enforcement operation targeting violating drivers in Portage County, WI where some drivers were issued tickets and others handed a warning and a railroad crossing safety pamphlet [3].

State and local law enforcement agencies are responsible for the enforcement of traffic laws at grade crossings. The FRA has published a compilation of state laws and regulations affecting highway-rail grade crossings [5]. Police officer education of related laws and regulations is a key component of any enforcement initiative. The objective of this education is to increase officer’s awareness of applicable laws within their jurisdiction and their authority to enforce those laws [1]. There have been several evaluations of grade crossing enforcement campaigns. A study of a public education and enforcement initiative conducted in Illinois demonstrated a reduction in grade crossing violations, with the biggest impact to pedestrian behavior [4].

Additional search terms: *photo enforcement, violation, citation, fine*

Advantages

- Safety research has shown that one of the most effective education and enforcement programs has been one of focused law enforcement efforts, often known as “crossing safety blitzes.” [6]
 - Violation rates have been reduced during blitz activity. [6]
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Drawbacks

Include citations (use bracketed #s from research section)

- Funding and staffing are a challenge for enforcement of grade crossing safety laws. [1]
- This type of effort is a “harder sell” with local law enforcement agencies when there is no accompanying funding. [1]

- Jurisdictional issues are a challenge to enforcing crossing laws because laws can vary from state to state and county to county. [1]
- When the enforcement ends, people continue to violate the law. Only the immediate threat of a penalty seems to be a deterrent. [2]

Notable Practices

- FRA recommends that any pedestrian crossing safety enforcement campaign be supplemented by clear, conspicuous signing that is visible and legible for pedestrians within the campaign area. Similar, larger signing will be needed to provide the same warning to motorists and other road users in the campaign area. [6]
- An effective way to reach many people to educate them on highway-rail grade crossing laws is to align law enforcement education blitzes with existing major events. [1]
- Judicial commitment to upholding highway-rail grade crossing safety laws is a critical part. Some successful safety initiatives engaged the judiciary by educating them to the practical dangers and consequences of violating grade crossing laws and seeking their buy-in on discouraging unsafe behavior at highway-rail grade crossings. [1]
- Ongoing officer education is a necessary part of a safety approach so that local law enforcement is not only well aware of railroad laws within their jurisdiction but also of their authority to enforce those laws. [1]

References

[1] Thompson, A., & Horton, S. (2019). [Law Enforcement Strategies for Mitigating Highway-Rail Grade Crossing Risk Factors](#). Technical Report No. DOT/FRA/ORD-19/24. Washington, DC: U.S. Department of Transportation, Federal Railroad Administration.

Abstract: There has been heightened awareness of and re-commitment to highway-rail grade crossing safety. Both the U.S. Department of Transportation and the Federal Railroad Administration have pledged to show a greater presence at grade crossings and to adopt a new, multi-faceted campaign aimed at strengthening enforcement and safety awareness at grade crossings.

The Law Enforcement Strategies for Improving Highway Rail Grade Crossing Safety Working Group convened with the goal to engage representatives from law enforcement agencies to solicit examples of innovative strategies, success stories, challenges, and lessons learned.

Successful law enforcement initiatives shared certain themes: coordination in and among various organizations, alignment with major events, judiciary commitment, and officer education.

[2] Transportation Research Board. (2009). [TCRP Report 137: Improving Pedestrian and Motorist Safety Along Light Rail Alignments](#).

Excerpt: TCRP Report 137: Improving Pedestrian and Motorist Safety Along Light Rail Transit Alignments addresses pedestrian and motorist behaviors contributing to light rail transit (LRT) safety and describes mitigating measures available to improve safety along LRT alignments.

[3] [Police Coordinate Special Railroad Crossing Enforcement Operation](#). (n.d.). Stevens Point, WI: WSAW TV. Last accessed August 8, 2022.

Excerpt: Law enforcement in Portage County launched a "Grade Crossing Enforcement Blitz", which means they are targeting drivers who are breaking the rules at railroad crossings. The enforcement blitz is a one-day coordinated operation with the Wisconsin State Patrol, Portage County Sheriff's Office, the Stevens Point Police Department, and the CN Railroad Police.

[4] Sposato, S., et al. (2006). [Public Education and Enforcement Research Study](#). Technical Report No. DOT/FRA/ORD-06/27. Washington, DC: U.S. Department of Transportation, Federal Railroad Administration.

Abstract: The Public Education and Enforcement Research Study (PEERS) was a collaborative effort between the Federal Railroad Administration, the Illinois Commerce Commission, and local communities in the State of Illinois. The purpose of the project was to promote safety at highway-rail intersections by reducing incidents, injuries, and fatalities through new technologies and methodologies. The role of the John A. Volpe National Transportation Systems Center was to monitor and evaluate highway-rail intersections in Illinois communities using video data collection while the communities conducted education and enforcement campaigns. The data collection and analysis efforts focused on three highway-rail intersections in Arlington Heights, IL. The effectiveness of the programs was determined by counting the number of motorists and pedestrians that violated the crossing warning devices during three project phases. These violations were divided into three types based on highway-user assumed risk. The crossings in Arlington Heights saw an overall reduction in violations from the pre-test to the post-test of 30.7 percent. The largest reduction, 71.4 percent, occurred in the most risky type of violation, type III. Pedestrians most often committed these types of violations. At the crossing with an adjacent commuter rail station, a reduction of 76.3 percent occurred in the most risky pedestrian violations. Overall, highway-user behavior changed for the safer during the study, and pedestrians, especially commuters, were the most affected by the PEERS programs.

[5] US Department of Transportation Federal Railroad Administration. (2021). [Compilation of State Laws and Regulations Affecting Highway-Rail Grade Crossings – Seventh Edition](#).

Excerpt: The Seventh Edition is intended to provide an up-to-date look at the various state laws and regulations concerning highway-rail grade crossings and expected driver behavior at those crossings. Laws and regulations of the 50 states and the District of Columbia that address highway-rail grade crossings have been compiled into this easy-to-use document.

[6] US Department of Transportation Federal Railroad Administration. (2012). [Guidance on Pedestrian Crossing Safety at or near Passenger Stations](#).

Excerpt: FRA has intended this guidance primarily for both passenger railroads and freight railroads that operate trains over trackage that also supports passenger operations. The presence of pedestrians within station areas and moving toward or across tracks to access station platforms can create numerous potential conflict areas where pedestrian movement must be restricted once an approaching train is detected.

This guidance is also intended to provide railroads, as well as State and local agencies and other stakeholders, with strategies and methods that can help them to prevent pedestrian incidents and fatalities specifically in areas within or near passenger stations.

Additional Resources

Related Measures

- Photo enforcement
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Images



*Figure 1. Example of grade crossing enforcement activities in West Palm Beach, FL
Image Credit: Volpe Center*

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*Figure 2. Example of grade crossing enforcement activities in West Palm Beach, FL
Image Credit: Volpe Center*



*Figure 3. Example of grade crossing enforcement warning signage in Elmhurst, IL
Image Credit: Volpe Center*