



## Federal Railroad Administration Highway-Rail Grade Crossing Safety Fact Sheet

- ✓ A highway-rail grade crossing is a location where a public or private road, street, sidewalk or pathway, intersects railroad tracks at the same level. There are approximately 212,000 grade crossings in the U.S.
- ✓ State highway traffic safety laws generally require motorists to slow, yield or stop between 15 to 50 feet from highway-rail crossings and not to proceed until it is safe to do so.
- ✓ Flashing lights or lights with gates do improve safety at grade crossings, but they do not prevent all collisions. Approximately half of all collisions at grade crossings occur where active warning devices are present, and, nearly one-quarter of all crossing collisions involve a motor vehicle striking the side of a train already occupying the crossing.

### Role of the Federal Railroad Administration (FRA)

Ensuring safety at highway-rail grade crossings is a shared responsibility among roadway users, railroads, state transportation agencies, local governments, and the Federal government. To prevent and reduce collisions between trains and motor vehicles at grade crossings, the FRA oversees a comprehensive safety program focused on three major areas.

- **EDUCATION:** Motorists must learn how to be safe at grade crossings as an estimated 94 percent of collisions and 87 percent of fatalities result from risky driver behavior or poor judgment.
- **ENFORCEMENT:** Consistent enforcement by local or state police of traffic safety laws, and a sustained effort by the courts to impose penalties on violators, discourage and deter motorists from making poor decisions at grade crossings.
- **ENGINEERING:** Engineering improvements such as installing flashing lights and gates, adding traffic dividers that deter motorists from driving around lowered gates, or physically separating the highway from the tracks greatly reduce or prevent the potential for train-vehicle collisions.

As the result of cooperative efforts by many safety partners and stakeholders, the number of collisions at grade crossings has been reduced by 85 percent from a high of 13,557 incidents in 1978 to just over 2,000 in 2011 despite significant increases in both highway and rail traffic. Likewise, the number of persons killed as a result of grade crossing collisions has decreased by 77 percent from a high of 1,115 in 1976 to just over 250 in 2011.

FRA collects and analyzes extensive data on grade crossing accidents and incidents, and is the custodian of the National Grade Crossing Inventory, which contains information submitted by railroads and states on the physical and operating characteristics of crossings. FRA systematically uses this data to: develop regulations and safety standards; conduct research in support of new grade crossing safety strategies and technologies; and to issue guidance and best practices for its safety partners. FRA also provides technical assistance and support to railroads, states and communities to address local conditions or safety issues. FRA inspectors enforce federal rail safety regulations governing the operation of grade crossing signal systems, railroad accident/incident reporting, as well as investigate a select number of grade crossing incidents.

## **Role of Railroads**

- By law, trains have the right-of-way at highway-rail grade crossings since they cannot stop or change direction to avert collisions with motor vehicles or people. Given the size and mass of freight and passenger trains, grade crossing collisions can rarely be avoided through the actions of a train crew. However, railroads have important responsibilities that are critical to safety at grade crossings, including requirements to: Inspect, test, and maintain grade crossing active warning systems,
- Provide for alternate means of warning motorists in the event of a grade crossing signal malfunction or when it is necessary to remove one from service, avoid interference in the normal functioning of these devices, and repair malfunctioning signals without undue delay;
- Report either telephonically and/or in writing as required all grade crossing collisions, as well as incidents involving the failure of an active warning device.
- Maintain the track structure including proper drainage to avoid disrupting the electrical operation of grade crossing signal systems and removing vegetation on railroad property that could interfere with the visibility of grade crossing warning signs and signals by both motorists and train crews;
- Sound the locomotive horn on approach to, and until occupying, all public grade crossings unless the crossing is part of an FRA recognized Quiet Zone;
- Properly maintain the event recorder (black box) on all locomotives to preserve data following any collision or incident which can aid law enforcement in their investigations
- Increase the visibility of trains by ensuring properly functioning auxiliary alerting lights on all lead locomotives and by affixing reflectorized tape to locomotives and rail cars.

## **Role of States and Local Governments**

States and local governments also play critically important roles in ensuring grade crossing safety by exercising their own responsibilities, including:

- Selecting appropriate highway traffic control devices, including grade crossing warning systems, advance roadway signage, and pavement markings;
- Determining, with the railroad, the need for, and design of, interconnections between grade crossing active warning systems and other highway traffic control signals.
- Investigating motor vehicle accidents occurring on public roads, including grade crossing collisions;
- Instructing, examining and licensing motor vehicle operators; and
- Enforcing state requirements, if any, regarding clearance of sight obstructions on railroad (or other) property at grade crossings.

## **Role of Operation Lifesaver**

Operation Lifesaver, Inc. (OLI) is an international, nonprofit, continuing public education program that was first established in 1972 to end collisions, deaths, and injuries at places where roadways cross train tracks, and along railroad rights-of-way. Its programs are sponsored cooperatively by the railroad industry, Federal, State, and local government agencies, highway safety organizations, and others. OLI's trained and certified volunteer speakers offer free audience and age-specific safety presentations in order to increase public awareness and safety around railroad tracks.

Additional information is available at: [www.oli.org](http://www.oli.org).

**For additional information, please contact**

**FRA Public Affairs**

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