Grade Crossing Safety

KEY TAKEAWAY

Freight railroads safeguard drivers and pedestrians at rail crossings through significant investments in maintenance, public safety campaigns with organizations like Operation Lifesaver, Inc., government and community collaboration, and technology use. States evaluate and prioritize improvements. Although the collision rate has decreased by 23% since 2000, challenges remain in addressing these preventable accidents.

Railroads invest heavily in grade crossing safety, spending hundreds of millions of dollars each year to maintain crossings, develop public service campaigns and educational resources, and invest in new technologies. Thanks in part to these efforts, the grade crossing collision rate is down 23% last year compared to 2000.

However, along with trespass incidents, these preventable accidents remain persistent challenges across the rail industry. Over 95% of rail-related fatalities are trespassers or grade crossing users. The combined total of trespasser and suicide fatalities for 2022 increased by 4% from 2021.

What Are Highway-rail Grade Crossings?

A highway-rail grade crossing is where a railway and roadway at the same level intersect. There are more than 200,000-grade crossings in the U.S. Grade crossings are equipped either with train-activated “active warning devices” (such as gates and flashing lights) or with “passive warning devices” (such as crossbucks, stop signs and yield signs). Trains often require a mile or more to stop, and they cannot deviate from their course. That is why safety at grade crossings, by its nature, is primarily a motorist’s responsibility. The warning devices are there to protect motorists, not trains.

States, not railroads, are responsible for evaluating grade crossing risks and prioritizing grade crossings for improvement. The decision to install a specific type of warning device at a particular public grade crossing is made by the state highway authority, not by a railroad, and approved by the Federal Highway Administration. Once installed, the maintenance of grade crossings and their warning devices is generally the railroads' responsibility.

Funding

Railroads appreciate the robust funding Congress included for grade crossing projects in the Infrastructure Investment and Jobs Act (IIJA). Congress provided $600 million per year for the newly-established Railroad Crossing Elimination program while also authorizing $500 million per year for these competitive grants. Since 2005, the total number of public grade crossings has declined by 10%, and the Elimination Program will help drive this number down further. The IIJA funding also includes a set-aside for a highway-rail grade crossing safety education program.
Additionally, Congress maintained a set aside of $245 million per year within the Highway Safety Improvement Program for the Railway-Highway Crossings (Section 130) program. Together, these programs will significantly reduce collisions, fatalities, and injuries at highway-rail crossings. Railroads are also appreciative of several reforms to the Section 130 program in the IIJA, including increasing permissible incentive payments for grade crossing closures from $7,500 to $100,000 and enabling the replacement of functionally obsolete warning devices.

**Technology Investments & Safety Partners**

Railroads spend hundreds of millions of dollars each year to maintain and improve grade crossings as well as to implement new technologies, such as public-private partnerships with Waze and smart crossings that know how fast a train is approaching.

From launching the See Tracks, Think Train! campaign to participating in the annual Rail Safety Week, railroads support Operation Lifesaver, Inc. (OLI), a non-profit public safety education and awareness organization that has helped eliminate risky behavior around rail tracks and crossings since 1972. Railroads also participate in International Level Crossing Awareness Day (ILCAD), which is an annual worldwide initiative to improve level crossing safety. Railroads also work closely with community leaders, government partners, first responders, the public and their own operational teams to manage and mitigate the impact of blocked crossings on communities.

**Train Safety Tips**

1. **Always expect a train.** Freight trains don’t travel at fixed times, and schedules for passenger trains often change. Always expect a train at each highway-rail intersection at any time.

2. **All train tracks are private.** Never walk on tracks; it’s illegal to trespass and highly dangerous. Trains can’t stop quickly enough to avoid a collision. It takes the average freight train traveling at 55 mph more than a mile to stop.

3. **Think of a soda can.** The average locomotive weighs about 400,000 pounds or 200 tons: it can weigh up to 6,000 tons. This makes the weight ratio of a car to a train proportional to that of a soda can to a car.

4. **Trains have right of way.** Trains have the right of way 100% of the time over emergency vehicles, cars, the police and pedestrians.

5. **A train can extend three feet or more beyond the steel rail.** The safety zone for pedestrians is well beyond the three-foot mark. If there are rails on the railroad ties, always assume the track is in use, even if there are weeds or the track looks unused.
6. **Trains can move in either direction at any time.** Sometimes, a train's cars are pushed by locomotives instead of pulled, which is especially true in commuter and light rail passenger service.

7. **Stay alert.** Today's modern, highly technological trains don't produce that “clackety-clack” you see in old movies. Any approaching train is always closer and moving faster than you think. You could easily miss an oncoming train if you have headphones on or you are distracted by your phone.

8. **Obey the signs.** Cross train tracks ONLY at designated pedestrian or roadway crossings, and obey all warning signs and signals posted there.