Grade Crossing Safety

Key Takeaway: Freight railroads safeguard drivers and pedestrians at rail crossings by investing in maintenance, public safety campaigns, government and community collaboration, and technology. Although the collision rate has decreased by 25% since 2000, addressing these preventable accidents is still a challenge.

A highway-rail grade crossing is where a railway and roadway intersect at the same level. The U.S. has over 200,000 such crossings, equipped with either train-activated "active warning devices" or "passive warning devices." Safety at these crossings is mainly the responsibility of motorists because trains require a significant distance to stop and cannot change course.

States, not railroads, assess and prioritize grade crossing risks. The decision to install warning devices is made by state highway authorities and approved by the Federal Highway Administration. Railroads invest heavily in safety, spending millions on maintenance, public campaigns, education, and technology.

Thanks in part to these efforts, the grade crossing collision rate was down 25% 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.

Investing In Community Safety

Railroads spend hundreds of millions of dollars each year to maintain and improve grade crossings as well as to develop and implement new technologies, including "smart" crossings (shown in the video) and Waze directions that alert drivers and pedestrians to upcoming crossings.

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. They also participate in International Level Crossing Awareness Day (ILCAD), a worldwide initiative to improve awareness of level crossing safety.

Minimizing the Frequency of Blocked Crossings

Railroads block crossings in the normal course of business as trains move between terminals. While railroads strive to minimize the time trains block crossings, delays may occur for a variety of reasons, including weather events, switching operations or a train slowing to enter or depart nearby yards.

From adapting operations near busy intersections to supporting related infrastructure investments, the industry is dedicated to making meaningful, lasting progress in addressing chronically blocked crossings. As rail and vehicle traffic continues to grow, the railroad industry will continue working to serve customers safely and efficiently while minimizing the impact of operations on surrounding communities.

IIJA Grade Crossing Funding

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 Infrastructure Investment and Jobs Act 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.

Train Safety Tips

- **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.

- **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.

- **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.

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

- **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.

- **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.

- **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.

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