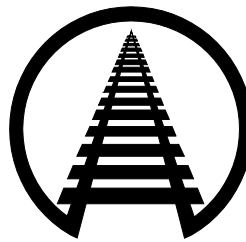


STATEMENT OF
IAN JEFFERIES
PRESIDENT & CHIEF EXECUTIVE OFFICER
ASSOCIATION OF AMERICAN RAILROADS



BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON RAILROADS, PIPELINES,
AND HAZARDOUS MATERIALS
HEARING ON:
EXAMINING THE STATE OF RAIL SAFETY IN THE AFTERMATH OF
THE DERAILMENT IN EAST PALESTINE, OHIO

JULY 23, 2024

Association of American Railroads
425 Third Street SW
Washington, DC 20024
202-639-2100

Introduction

The Association of American Railroads (AAR) freight railroad members account for the vast majority of railroad mileage, employees, and freight traffic in Canada, Mexico, and the United States. For freight railroads, safety is not an option, it's an imperative. Given the critical importance of this topic, it is surprising and concerning that I was not invited to testify in person. Despite this, our commitment to taking focused, data-driven steps to prevent accidents remains unwavering. I appreciate the opportunity to address you in writing and stand ready to answer any questions the Committee might have at any time in the future

Every rail accident is one too many, and railroads aim to eliminate accidents altogether. The accident in East Palestine, Ohio, last year demonstrated the importance of reaffirming our commitment to keeping our employees, our communities, and our customers safe.

Railroads will continue to learn from accidents and take meaningful actions to enhance safety through good-faith, cooperative efforts with policymakers, suppliers, customers, and rail employees; sustained private investment in infrastructure, equipment, and safety technologies; the modernization of operating and maintenance practices; effective employee training; the continuous strengthening of a true safety-first culture; and steadfast adherence to pertinent laws and regulations.

FRA Safety Data Point to Overall Rail Safety Improvements

Data from the Federal Railroad Administration (FRA) indicate that, for the rail industry as a whole, progress on safety has been substantial: the train accident rate in 2023 was down 22 percent from 2000; the grade crossing collision rate was down 25 percent; and the employee

injury rate fell 48 percent. For Class I railroads, the employee injury rate in 2023 was the lowest ever. Derailments on all railroads combined were down 26 percent from 2000 to 2023 and collisions were down 54 percent. Mainline accidents, potentially the most serious, were down 40 percent over this period. For Class I railroads, the mainline accident rate in 2023 was the lowest ever.

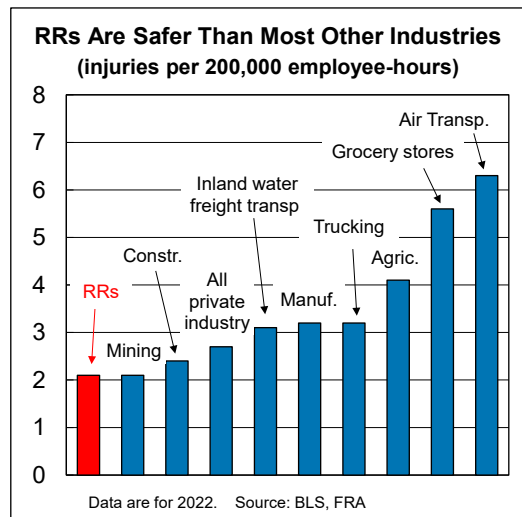
According to data from the Bureau of Labor Statistics, in 2022 (the most recent year available), railroads had 2.1 reportable injuries per 100 full-time equivalent employees. That’s a lower employee injury rate than most other major industries, including trucking, airlines, agriculture, manufacturing, construction, and even far lower than grocery stores.

Safety extends to hazardous materials. More than 99.99% of rail hazmat shipments reach their destination without a release caused by a train accident.

These safety improvements are driven by sustained investment in infrastructure, safety technologies, and the modernization of operating and maintenance practices. The strong safety culture of the railroad, which permeates everything our workers do, allows us to operate with the highest level of safety awareness.

Changes in Railroad Accident and Injury Rates	
	2000-2023
Total train accidents	-22%
Collisions	-54%
Derailments	-26%
Track-caused	-46%
Equipment-caused	-26%
Human factors-caused	-11%
Mainline accidents	-40%
Employee injuries	-48%
Grade crossings	-25%
Hazmat incidents	-75%

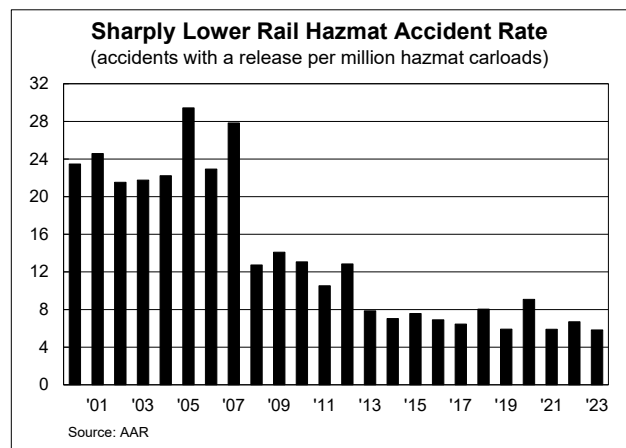
Source: FRA, AAR



Railroads Safely Move Large Amounts of Hazardous Materials Every Day

Most commodities carried by rail are not dangerous, but in a typical year, U.S. railroads transport approximately two million carloads of hazardous materials. Ethanol, crude oil, and propane make up the highest volume of hazardous material carried by rail, but other hazmat products that are indispensable to our nation’s economy, health, and standard of living are also moved by rail.

Railroads are the safest mode for transporting hazardous materials. Rail hazmat accident rates — accidents that result in hazmat releases as a percentage of total hazmat carloads — fell 75 percent from 2000 to 2023. In 2023, there were 12 train accidents that involved the release of hazardous materials, with 35 hazmat carloads releasing their contents.¹ In 2022, there were 14 train accidents that involved the release of



hazardous materials, with 19 hazmat carloads releasing their contents. According to the Bureau of Transportation Statistics, the last fatality caused by hazardous materials transported by rail in the United States occurred more than a decade ago. That safety record compares very favorably to hazardous materials moved on highways.²

The rail industry will not rest until it can eliminate all accidents and will continue to meaningfully boost safety, prepare communities, and make them whole following an incident.

¹ An accident involving hazmat can lead to the release of product from more than one railcar.

² <https://www.bts.gov/content/hazardous-materials-fatalities-injuries-accidents-and-property-damage-data>

Railroads want all our shipments to travel safely, and they have consistently taken steps to make hazmat transportation safer and hazmat accident training, response, and mitigation more effective:

- Training:

- Railroads help communities develop and evaluate emergency response plans. They also provide training to thousands of emergency responders each year – 35,500 responders in 2023 and 24,000 responders to date in 2024 – through our own efforts and through the Transportation Community Awareness and Emergency Response Program (TRANSCAER). In addition, since the East Palestine accident, approximately 2,800 first responders received specialized training through the rail industry’s Security and Emergency Response Training Center (SERTC) in Pueblo, Colorado.
- Railroads provide hazmat awareness training to all employees who are involved in hazmat transportation. Employees responsible for emergency hazmat response efforts receive far more in-depth training.

- Response:

- In the aftermath of an accident, emergency responders take the lead and work closely with railroads and local, state, and federal officials to ensure proper community protection. Railroads reimburse local authorities for the costs associated with this response. Major railroads also have teams devoted to emergency response, as well as hazmat response contractors and environmental consultants, on call 24/7.
- The AskRail app allows emergency responders to input the identification number of a particular rail car and immediately determine the commodity contained in that car, its hazard class, emergency response information associated with the commodity, the train consist, and other information. Following the East Palestine accident, the industry worked to dramatically expand access to AskRail through extended outreach efforts with CHEMTREC and CANUTEC emergency call centers, as well as with dispatchers in Emergency Communications Centers (ECC) across the country. Today, AskRail is available to more than 2.3 million first responders across the United States and Canada, and more than 220 ECCs across the nation have been fully onboarded and dozens of others are in the onboarding process.
- Railroads provide detailed information to emergency response agencies on hazardous materials moving through their cities and towns with appropriate security protections to ensure the right information gets to the right people at the right time.
- Railroads equip train dispatchers and crews with information about hazmat on individual trains and detailed emergency response information in addition to contact lists for local emergency responders along a train’s route.

- Mitigation

- Railroads have invested more than \$23 billion a year, on average, in recent years on capital expenditures, maintenance, and technology like wayside detection equipment, track geometry technology, and positive train control.
- Around half of all hazardous materials, and nearly all Toxic Inhalation Hazard materials, are transported in tank cars. All but a tiny fraction of the 437,000 tank cars in the North American rail car fleet are owned by rail customers and leasing companies, not by railroads. While tank cars built today are vastly improved over earlier generations, with higher grade steel, better thermal protection, improved valves and fittings, and other improvements, railroads have pushed DOT, Congress, and rail customers and suppliers for years to speed up the deployment of newer, safer tank cars across the network.
- Railroads work closely with chemical producers through CHEMTREC, a 24/7 resource for emergency responders that provides access to experts and assists in the mitigation of hazmat incidents.
- Railroads and several federal agencies jointly developed the Rail Corridor Risk Management System (RCRMS), a sophisticated statistical routing model that incorporates 27 risk factors (including hazmat volume, trip length, and population density along the route) to aid railroads in identifying the safest and most secure rail routes for transporting high risk hazardous materials.
- Railroads provide services (e.g., lodging, food) to those displaced by rail hazmat accidents and establish assistance centers and claims teams to assess and meet the needs of displaced community members.

After an initial emergency response is complete, railroads have a less visible, but vital two-fold mission: making things right and taking action to prevent another incident. Railroads work to make communities affected by an accident whole, including taking care of affected individuals' immediate needs and partnering with federal and state agencies and independent experts to address any long-term environmental or health impacts. In addition, when accidents occur, railroads assess our operations and apply the lessons learned to drive safety enhancements.

Using Technology to Identify and Address Safety Defects

Research, data, and years of experience have proven that a layered approach combining our highly trained, experienced workforce with new technology can identify potential problems before they cause an accident and improves safety outcomes. Noteworthy technological initiatives include:

- Brake system technology that makes it easier and more efficient to identify and repair issues with brakes.
- Voluntary deployment and continued expansion of the national network of more than 15,000 various trackside detectors—including hot bearing detectors and acoustic bearing detectors—to identify equipment defects, many of which cannot be seen by the naked eye or on stationary trains.
- Automated Track Inspections complement manual inspections and enable more precise identification of track defects, a leading cause of train derailments, by evaluating each foot of track.

Collecting and analyzing data allows railroads to track the health of rail equipment, find patterns that can predict when repairs are needed, manage our equipment and infrastructure, and create new standards to make America's safe rail network even safer.

The rail industry is entering an exciting new era of innovation. Promising advances being tested today include the use of artificial intelligence to better understand and analyze data generated by the industry's growing network of detectors and inspection technologies; GPS-equipped on-board sensors to monitor the real-time status, location, and condition of individual rail cars to improve equipment tracking and proactive safety efforts; increasingly sophisticated imaging systems to monitor track and equipment across the rail network, allowing workers to remotely analyze conditions and proactively address safety issues; and electro-magnetic field imaging that could revolutionize rail surface defect detection, helping determine when maintenance is needed to keep rail infrastructure in top-notch condition.

Railroads' Response to the NTSB's East Palestine Accident Report

Railroads have taken steps to further improve safety and respond to the February 2023 derailment in East Palestine, Ohio. Concurrently, the National Transportation Safety Board (NTSB) undertook its investigation and, in Summer 2024, released its report and recommendations to identify the causes of the accident and make recommendations to prevent future accidents.

Since NTSB released its recommendations, the industry has collaborated to review the findings and take concrete action. The NTSB made three recommendations to AAR regarding data collection for bearing failures, tank car standards, and the definition of key train. In response, AAR has taken the following steps:

- 1. Develop a database of bearing failures and replacements and make it available to railroads, regulators, and investigators to help determine and address failure risk factors.*

AAR Actions: The rail industry tracks rail car equipment repairs and replacements, including its wheels and bearings, through an existing shared electronic records system. Railroads also have an active program to tear down failed bearings and report the information gathered. Those tear down reports are shared with an AAR Committee made up of railroads and rail suppliers who review the information to identify any systemic issues, which enables railroads and car owners to take proactive steps to prevent future accidents. These Committee meetings have been, and will continue to be, open to the FRA.

- 2. Revise the Manual of Standards and Recommended Practices, M-1002, Specifications for Tank Cars, to establish criteria and procedures for manufacturers of tank car service equipment to demonstrate compatibility of pressure relief devices and other Association of American Railroads-approved service equipment with intended ladings.*

AAR Actions: AAR is establishing requirements for manufacturers to demonstrate compatibility of tank car devices with the commodities those cars transport (lading).

- 3. Revise the definition of key train in Circular OT-55 to designate as a key train any train containing tank cars transporting hazardous materials that do not meet the DOT117 standard.*

AAR Actions: AAR and its members are conducting a data-driven analysis around expanding the key train definition.

Beyond the recommendations explicitly made to the AAR, railroads have been reviewing recommendations NTSB made to other parties and federal agencies:

- Inward Facing Cameras: Railroads voluntarily deployed inward facing cameras several years ago, and they are now ubiquitous on Class 1 locomotives. The industry stands ready to constructively engage with FRA as it acts on NTSB's recommendation to establish appropriate standards.
- Vent and Burn Procedures: Railroads have convened a working group, which includes the FRA, to review and update current vent and burn procedures.
- Wayside Detectors: For decades, railroads voluntarily deployed tens of thousands of wayside detectors across the network. Following the East Palestine accident, the industry worked together to standardize and lower temperature thresholds and add thousands more detectors to the network. The industry stands ready to actively engage with FRA should it undertake the research recommended by NTSB.
- Safer Tank Cars: the freight rail industry has long supported, and will continue to support, accelerating the timeline for removing DOT-111 tank cars from service as quickly as possible.

Despite allegations to the contrary, railroads have repeatedly engaged with policymakers to explore how a data-driven approach could improve safety outcomes while mitigating unintended consequences. Any legislative effort that purports to respond to the East Palestine accident must be laser focused on data-driven, performance-based policies that will prevent similar accidents from happening in the future, and the railroads stand ready to work with this Committee on developing that response.

Policymakers Have a Crucial Role

To promote a safer rail network, policymakers and regulators must work with the rail industry to develop regulations that emphasize innovation and adaptability and ensure that the rail industry remains a safe, efficient, and vital component of America's infrastructure and economy, now and in the future.

A successful rail safety regulatory framework should:

- Promote equal consideration and opportunities to develop, test, and deploy new technology across all modes of transportation.
- Use performance-based regulations to encourage investment in cost-effective, innovative solutions that enhance safety and efficiency.
- Base regulations on solid data and sound science.
- Encourage innovation and avoid "locking in" existing technologies and processes.
- Ensure transparency and engage in meaningful dialogue with industry stakeholders and the public.
- Assess the benefits of regulations against their costs, considering the overall regulatory burden.
- Encourage waivers and pilot programs that allow for the demonstration of new safety technologies and practices and pave the way for industry adoption when proven to successfully enhance safety

Conclusion

Our nation's freight railroads share this committee's and the public's urgency in augmenting the safety of all rail transportation. Railroads are committed to continuing our work with local, state, and federal officials, our employees, our customers, our communities, our suppliers, and other stakeholders to identify additional safety enhancing steps that will make our nation's rail network safer.