From one end of the country to the other, America is connected by the best freight rail system in the world. The seven large “Class I” railroads, working with hundreds of smaller railroads and tens of thousands of rail customers, deliver economic growth, support job creation, and provide crucial environmental benefits today while preparing to meet the freight transportation challenges of tomorrow.

**A Nationwide Network**

America's freight railroads are almost entirely privately owned and operated. Unlike trucks and barges, freight railroads operate overwhelmingly on infrastructure they own, build, maintain and pay for themselves.

Approximately 630 freight railroads operate across the nearly 140,000-mile U.S. freight rail network. The seven “Class I” railroads —with 2021 revenue of at least $900 million — account for around 68% of freight rail mileage, 88% of employees, and 94% of revenue. Each Class I railroad operates in multiple states over thousands of miles of track. Non-Class I railroads (also known as short line and regional railroads) range in size from small operations handling a few carloads a month to multi-state operations close to Class I size. Together, they provide a safe, efficient, cost-effective transportation network that reliably serves customers and the nation’s economy.

**Powering American Life**

From the food on our tables to the cars we drive, freight rail is part of an integrated network of trains, trucks and barges that ships around 61 tons of goods per American every year. Railroads carry enormous amounts of finished goods and raw materials. Just a few examples:

- **Intermodal:** The movement of shipping containers and truck trailers by rail has been the fastest growing major rail traffic segment over the past 25 years. If you find something on retailers’ shelves, there is a good chance railroads moved it.

- **Energy:** Railroads safely move commodities such as crude oil, ethanol and coal to help meet America’s energy needs. Coal delivered by rail to power plants for electricity generation and to ports for export is the single highest-volume commodity carried by rail.

- **Chemicals:** America’s freight railroads continue to meet the growing demands of chemical producers by transporting the chemicals that make modern life possible. These include moving fertilizers to farmers, plastic resins to auto parts producers, caustic soda to pulp and paper manufacturers, and countless other chemical products to intermediaries and end users throughout the U.S. and the world.

**Key Takeaway**

America’s privately owned freight railroads are the most productive and cost-effective in the world, connecting consumers and businesses across the country and the world while benefitting the environment and promoting safety.

Learn more at [AAR.org/Railroad-101](http://AAR.org/Railroad-101)
The Right Track for Economic Growth

America’s freight railroads connect producers and consumers across the country and the world, expanding existing markets and opening new ones.

• Vital Employer: In 2020, U.S. Class I freight rail employees earned an average annual compensation of $135,700, including wages and benefits. The average Class I freight railroad employee earns total compensation higher than the average compensation of industries that employ 94% of U.S. workers.

Affordable & Reliable

Optimizing operations has resulted in greater capacity, reliability and productivity across the rail network while delivering record performance and service levels. Efficiency and productivity that improve the cost-effectiveness of rail benefit rail customers. The affordability of freight rail saves rail customers (and, ultimately, American consumers) billions of dollars each year and enhances the global competitiveness of U.S. products. Average rail rates (measured by inflation-adjusted revenue per ton-mile) are 44% lower today than in 1981, meaning the average rail shipper can move much more freight for around the same price it paid more than 35 years ago.

Investing for the Future

As America’s economy grows, the need to move more freight will grow too. The Federal Highway Administration forecasts that total U.S. freight shipments will rise from an estimated 19.3 billion tons in 2020 to 25.1 billion tons in 2040 — a 30% increase. Railroads are getting ready today to meet this challenge.

• Large Investments: From 1980 to 2021, America’s freight railroads spent approximately $760 billion — their funds, not taxpayer funds — on capital expenditures and maintenance expenses related to locomotives, freight cars, tracks, bridges, tunnels and other infrastructure and equipment. That is more than 39 cents out of each revenue dollar. Railroads spent around 19% of revenue between 2011 and 2020 on capital expenditures, six times more than the average U.S. manufacturer.

Always Improving Safety

Freight railroads’ holistic approach to safety encompasses ongoing substantial investments, comprehensive employee training, innovative technologies and cooperative community outreach. Virtually every aspect of rail operations is subject to safety oversight by the Federal Railroad Administration (FRA), from track, equipment and facility inspections to employee certification and operating regulations. Railroads are also subject to oversight by the Occupational Safety and Health Administration, the Pipeline and Hazardous Materials Safety Administration and the Department of Homeland Security.

• Safe & Getting Safer: Between 2000 and 2021, the train accident was down 33% and between 2000 and 2020, the hazmat accident rate was down 60%. The rail employee injury rate in 2020 was an all-time low.

• Keeping Employees Safe: Railroads today have lower employee injury rates than most other major industries, including trucking, airlines, agriculture, mining, manufacturing and construction — even lower than food stores.
• **New Technologies:** Railroads are constantly developing and implementing new technologies to address safety challenges. Just a few examples: Trains pass through inspection stations without slowing down. Positive Train Control (PTC) helps reduce certain types of human-caused errors; sophisticated detectors along tracks identify defects on passing rail cars; ground-penetrating radar identifies problems below ground, such as excessive moisture, that could destabilize track; and specialized rail cars use sophisticated instruments to find defects in tracks. Policymakers should provide a regulatory environment that incentivizes industry to constantly develop innovative technologies like these that will further improve rail safety and enhance rail operational efficiency.

**Essential to a Greener, Less-Congested Future**

Railroads are the most fuel-efficient way to move freight. They are well ahead of other modes of transportation for limiting greenhouse gas emissions, increasing fuel efficiency and reducing their carbon footprint.

• **Lower Greenhouse Gas Emissions:** Greenhouse gas emissions are directly related to fuel consumption. According to EPA data, freight railroads account for just 0.5% of total U.S. greenhouse gas emissions and just 1.9% of transportation-related greenhouse gas emissions.

• **More Fuel Efficient:** U.S. freight railroads, on average, move one ton of freight nearly 500 miles per gallon of fuel. On average, railroads are three to four times more fuel efficient than trucks. That means moving freight by rail instead of trucks lowers greenhouse gas emissions by up to 75%, on average.

• **Sustainable Choice:** AAR analysis of federal data finds: If 25% of the truck traffic moving at least 750 miles went by rail instead, annual greenhouse gas emissions would fall by approximately 13.1 million tons; If 50% of the truck traffic moving at least 750 miles went by rail instead, greenhouse gas emissions would fall by approximately 26.2 million tons.

• **Reducing Highway Congestion:** A single freight train can replace several hundred trucks, freeing up space on the highway for other motorists. Shifting freight from trucks to rail also reduces highway wear and tear and the pressure to build costly new highways.

**A Need for Reasonable Regulation**

Thanks to regulation founded on strong economic principles spurred by the Staggers Act of 1980, railroads have invested billions into their networks, improving safety and customer reliability and dramatically lowering rates. To meet changing customer demands, railroads need a common-sense regulatory system that provides effective oversight but allows railroads to earn enough to provide the rail system our economy needs to grow. Policymakers must maintain regulatory and legislative policies that allow for innovative solutions, whether it is safety improvements, supporting new markets or evolving to maintain our competitive edge. Rail’s role as a transportation solution for tomorrow hinges on these smart policies.