FREIGHT RAIL

Moving the Economy Mitigating Pollution Keeping Communities Safe

Freight railroads provide safe and efficient transportation for nearly every sector of the economy, playing a fundamental role in America's economic growth. Moving freight by rail also benefits the public by mitigating air pollution, conserving fuel, improving safety, reducing highway congestion and saving taxpayer dollars.

The engine that keeps our economy strong.

Freight railroads provide a foundation on which many other industries rely for their own success. Freight rail connects farmers, miners and manufacturers to markets across the country and around the world, and is a crucial part of the integrated network of trains, trucks and barges that ships about 54 tons of goods per American each year.

- America's freight railroads operate almost exclusively on infrastructure they own, build, maintain and pay for themselves — a vast network of nearly 140,000 miles.
- From the food on our tables to the cars we drive to the shoes on our feet, railroads account for approximately one-third of the nation's intercity freight volume.
- Railroads spend an average of 19 percent of revenue on capital expenditures — six times more than the average U.S. manufacturer.
- Freight railroads spend an average of $25 billion annually on infrastructure and equipment to maintain and expand their network, including locomotives, freight cars, tracks, bridges, tunnels and other equipment and technology.
- In 2017, freight railroads employed about 170,000 workers whose average compensation exceeded $125,000 — 60 percent higher than the average U.S. worker. Over 80 percent of Class I railroad employees are unionized and nearly 20 percent are veterans.
- According to Towson University's Regional Economic Studies Institute, Class I railroads supported over 1.1 million jobs, $219.5 billion in economic output and $71.3 billion in wages in 2017 alone, while also creating nearly $26 billion in total tax revenues.
- The companies that supply railroads with equipment, services and technology employed over 125,000 workers in 2017 and contributed more than $74.2 billion in GDP, according to a 2018 study by Oxford Economics.

"A one percent mode-shift [from highway transport to freight rail] was found to generate $19.3 billion in benefits. Of these, 44 percent accrued to shippers in lower transportation costs and 56 percent to the rest of society in cleaner air, less roadway congestion and improvements in safety." (AASHTO, 2018.)

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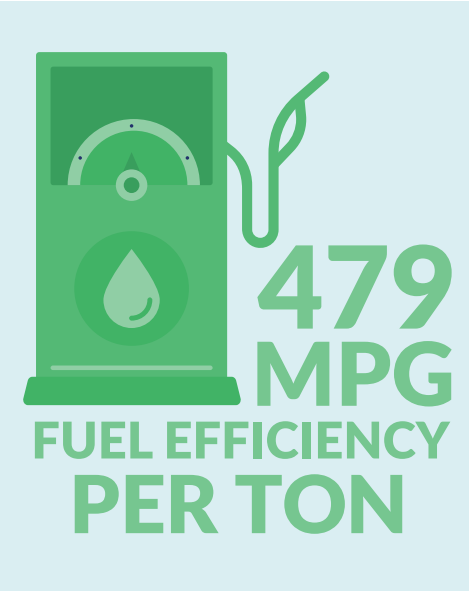
Conserving fuel, mitigating pollution.

Freight rail is the cleanest, most efficient, and most environmentally sound way to move freight over land. From advanced locomotive technology to zero-emission cranes, freight railroads leverage technology to minimize their environmental impact.

- U.S. freight railroads can move one ton of freight 479 miles on a single gallon of fuel, on average.
- Railroads are, on average, four times more fuel-efficient than trucks. Moving freight by rail instead of truck lowers greenhouse gas emissions by 75 percent.
- Freight rail accounts for only 0.5 percent of greenhouse gas emissions in the U.S., and just 2 percent of transportation-related sources, according to the U.S. Environmental Protection Agency.
- One train can carry the freight of several hundred trucks, reducing highway gridlock, the cost of maintaining existing highways and the pres sure to build expensive new highways.
- Since 1980, freight railroads have nearly doubled the amount of freight moved while using about the same amount of fuel.



Keeping communities safe.

There is a direct correlation between the increase in rail network investments and enhanced safety performance.

- Recent years have been the safest on record for the rail sector. According to the Federal Railroad Administration, since 2009, the train accident rate is down 10 percent, the equipment-caused accident rate is down 11 percent, the track-caused accident rate is down 26 percent, the derailment rate is down 9 percent and the employee injury rate is down 16 percent.
- From 2008 to 2017, the hazmat accident rate fell 48 percent while the grade crossing collision rate fell 37 percent between 2000 and 2018.
- In 2017, more than 99.999 percent of rail hazardous materials shipments reached their destinations without a release caused by an accident.
- Railroads rely on technologies including sonar, infrared and ultrasound to monitor the condition of passing trains and the track beneath them while drones assist in bridge inspection and extreme weather incidents.
- Intelligent sensors positioned across the rail network gather data on track, locomotives, and the components of 1.6 million rail cars. Analysis of these data sets allows railroads to move beyond detecting existing safety issues to predicting and preventing them.
- At the end of 2018, the nation's largest freight railroads were operating positive train control (PTC) across 83.2 percent of the required route-miles nationwide. PTC is a set of highly advanced technologies designed to automatically stop a train before certain human-error accidents occur. The system will be fully active and interoperable by 2020.