

Overview of America's Freight Railroads

Summary

America's freight railroads, almost all of which are privately owned, serve nearly every industrial, wholesale, retail, and resource-based sector of the economy. Railroads spend more than \$20 billion each year maintaining, renewing, and expanding their tracks and equipment. Along with their Canadian and Mexican counterparts, they form the world's most efficient and lowest-cost freight rail network.

Types of Freight Railroads

Freight railroads are critical to America's economic health and global competitiveness. They move more than 40 percent of our nation's freight (measured in ton-miles) — everything from lumber to vegetables, coal to orange juice, grain to automobiles, and chemicals to scrap iron — and connect businesses with each other across the country and with markets overseas. They also directly contribute tens of billions of dollars each year to the economy through wages, purchases, retirement benefits, and taxes. In 2006, the 561 freight railroads operating in the United States had aggregate freight revenue of \$54 billion.

Class I railroads are defined as those with revenue of at least \$346.8 million in 2006. There are seven Class I railroads.¹ Class I railroads comprise just 1 percent of freight railroads, but account for 67 percent of the industry's mileage, 90 percent of its employees, and 93 percent of its freight revenue. Ranging in size from 3,200 to more than 32,000 miles operated and from 2,600 to more than 53,000 employees, Class I railroads typically operate in many different states and concentrate largely (though not exclusively) on long-haul, high-density intercity traffic lanes.

Regional railroads are linehaul railroads with at least 350 miles and/or revenue of between \$40 million and the Class I threshold. There were 33 regional railroads in 2006. Regional railroads typically operate 400 to 650 miles in two to four states. Most regional railroads have between 75 and 500 employees; a few have more than 600 employees.

Local linehaul railroads operate less than 350 miles and earn less than \$40 million per year. (The vast majority earn less than \$5 million per year.) In 2006, there were 323 local linehaul railroads. They generally perform point-to-point service over short distances. Most operate less than 75 miles (around 20 percent operate 15 or fewer miles) in a single state.

¹The BNSF Railway (BNSF); CSX Transportation (CSX); Grand Trunk Corporation, which consists of the U.S. operations of Canadian National (CN), including the former Grand Trunk Western (GTW), Illinois Central (IC), and Wisconsin Central; Kansas City Southern (KCS); Norfolk Southern (NS); the former Soo Line (SOO), owned by Canadian Pacific (CP); and Union Pacific (UP). The Class I revenue threshold is set each year by the Surface Transportation Board, an independent agency within the U.S. Department of Transportation.

Switching and terminal (S&T) carriers are railroads, regardless of revenue, that primarily provide switching and/or terminal services. Rather than point-to-point transportation, they perform pick up and delivery services within a specified area for one or more linehaul carriers with whom they connect, often in exchange for a flat per-car fee. In some cases, S&T railroads funnel traffic between linehaul railroads. In 2006, there were 196 S&T railroads. The largest S&T railroads handle several hundred thousand carloads each year and earn tens of millions of dollars in revenue.

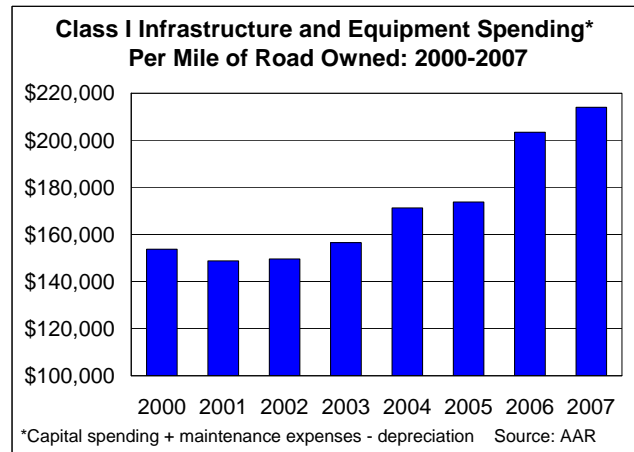
Type of Railroad	Number	Miles Operated*	Employees	Freight Revenue (\$ billions)
Class I	7	94,801	167,581	\$50.3
Non-Class I	552	45,128	19,376	3.7
Regional	33	16,713	7,742	1.7
Local Linehaul	323	21,960	5,449	1.2
S&T	196	6,455	6,185	0.8
Canadian**	2	561	n/a	n/a
Total	561	140,490	186,957	\$54.0

*Excludes trackage rights. **Includes CN and CP operations that are not part of a CN- or CP-owned Class I carrier. Source: AAR

In addition, the two major Canadian freight railroads (Canadian National Railway and Canadian Pacific Railway) each have extensive U.S. operations separate from the Class I railroads they own.

Freight railroads had approximately 187,000 employees in 2006. With average total compensation in 2006 of nearly \$93,000, freight railroading is one of America's highest-paying industries.

From 1980 through 2007, freight railroads spent approximately \$420 billion — more than 40 cents out of every revenue dollar — on maintaining, renewing, and expanding their track and equipment. Rail spending for these purposes was higher in 2007 than ever before. These massive investments help ensure that railroads have the capability to offer safe, cost-effective, high-quality service to meet our current and future freight transportation demands.



America's Freight Railroads Are Overwhelmingly Privately Owned

The overwhelming majority of U.S. freight railroads, including each Class I railroad and all but one regional railroad, are privately-owned and operated. Major U.S. freight railroads receive relatively little government funding. By contrast, U.S. passenger railroads, and both passenger and freight railroads in nearly every other country, are heavily subsidized.

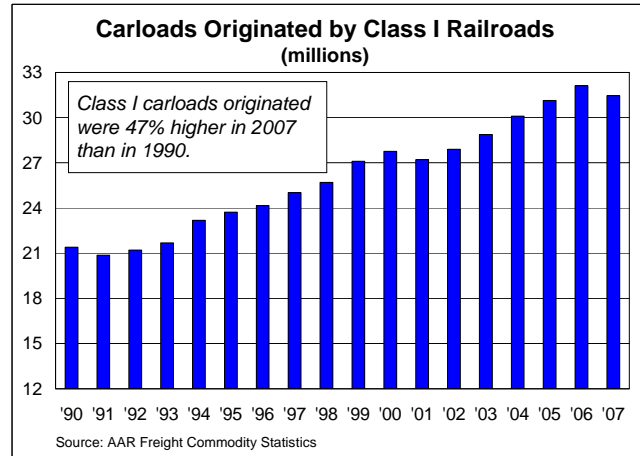
The vast majority of the tracks over which U.S. freight railroads operate are owned, built, and maintained by the railroads themselves. Each year, railroads invest billions of dollars to construct and maintain their tracks and other infrastructure, and pay hundreds of millions of dollars in property taxes on it. By contrast, railroads' primary competitors — trucks and barges — operate on publicly-provided highways and waterways, and enjoy huge subsidies from the government and other highway and waterway users.

Like all other privately-owned businesses, freight railroads must earn a reasonable profit to stay in business. Since 1980, when railroads were partially deregulated, rail profitability has improved from very low levels. Nevertheless, railroads' earnings have typically been insufficient to cover the total costs of their operations and provide a reasonable return on investment. In fact, freight railroads have consistently been in the bottom quartile of all U.S. industries in terms of profitability. Even in 2006 and 2007, when railroads had record traffic and earnings, the rail industry's profitability was still below average compared to other industries.

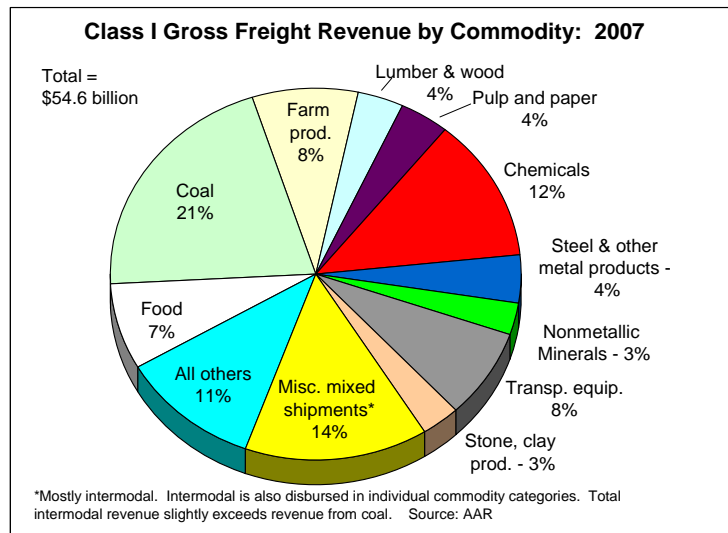
Freight Railroad Traffic

America's freight railroads operate in a highly-competitive marketplace. To compete effectively against each other and against other transportation providers, railroads must offer high-quality service at competitive rates.

Railroads account for 41 percent of freight ton-miles, more than any other mode of transportation. The rail ton-mile share has been trending upward over the past 15 years, after remaining flat or falling for decades. In part due to their superior cost effectiveness, railroads generate less than 10 percent of intercity freight revenues. Railroads' revenue share has been falling for decades, a reflection of the intensity of the competition they face and of the large rate reductions railroads have passed through to their customers over the years.



Coal is the most important single commodity carried by U.S. railroads. In 2007, coal accounted for 44 percent of rail tonnage and 21 percent of rail revenue. The vast majority of coal is used to generate electricity. Coal accounts for around half of U.S. electricity generation, and railroads handle more than two-thirds of all U.S. coal shipments.



Other major commodities carried by rail include chemicals, including industrial chemicals, ethanol, plastic resins, and fertilizers; grain and other agricultural products; non-metallic minerals such as phosphate rock, sand, and crushed stone and gravel; food and food products; steel and other primary metal products; forest products, including lumber, paper, and pulp; motor vehicles and motor vehicle parts; and waste and scrap materials, including scrap metal and scrap paper.

In 2006, America's railroads moved more freight than ever before. Rail traffic was down slightly in 2007 (mainly due to problems in the housing and auto sectors), but the long-term trend

is upward. The U.S. Department of Transportation recently forecast that freight railroad demand would increase 88 percent by 2035 from 2002 levels. Other forecasters predict substantial rail traffic growth — pointing to the urgent need for adequate rail capacity in the years ahead to meet that growth.

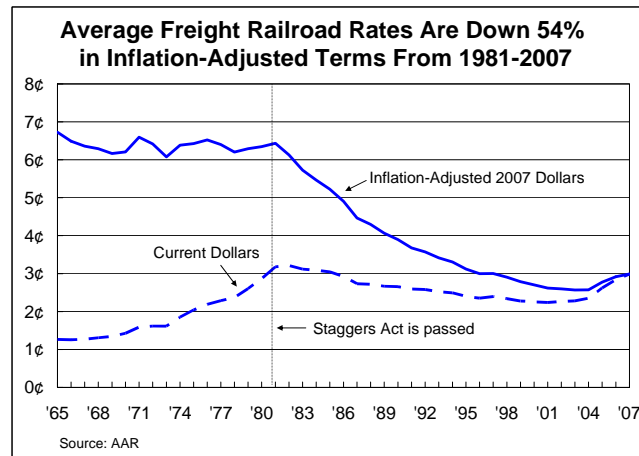
Intermodal (moving shipping containers or truck trailers on rail cars) has been the fastest growing rail traffic segment for many years. Intermodal combines the door-to-door convenience of trucks with the long-haul economy of railroads. Rail intermodal traffic has quadrupled in the last 25 years, rising from 3 million trailers and containers in 1980 to more than 12 million in 2006 and 2007. Today, intermodal accounts for 22 percent of rail revenue.



Rail intermodal transports a huge range of consumer goods — everything from bicycles to auto parts, lawn mowers to glassware, greeting cards to clothing, and toys to computers — and increasing amounts of industrial and agricultural products as well. The efficiency of intermodal, and of freight railroading in general, provides the United States with a huge competitive advantage in the global economy.

Railroad Rates

Based on revenue per ton-mile (a useful surrogate for rail rates), on average it cost 54 percent less in inflation-adjusted terms to move freight by rail in 2007 than it did in 1981. These rate reductions have saved our economy countless billions of dollars over the years.



Looking ahead, railroads are committed to continuing to provide cost-effective service. However, they must earn enough to maintain and replace their existing infrastructure and equipment and make major investments in new capacity that will be required to meet our future freight transportation needs. In order to expand infrastructure and service, railroads — like every other business in a free-market economy — must obtain from their customers the resources they need to support the growth their customers want and need.

Railroad Deregulation

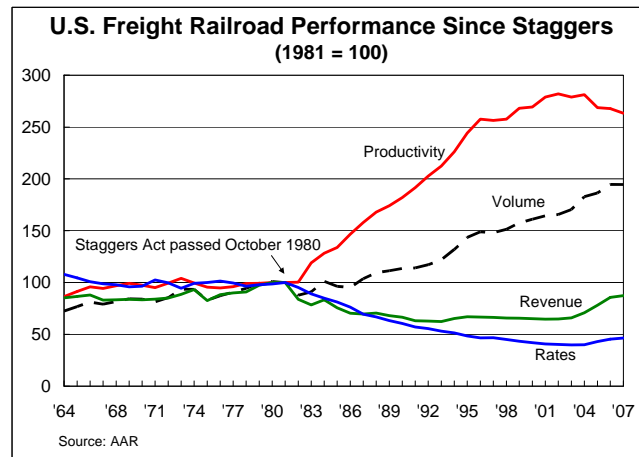
With passage of the Interstate Commerce Act in 1887, freight railroads became the first U.S. industry subject to comprehensive federal economic regulation. For the next 93 years, the federal government, mainly through the Interstate Commerce Commission (ICC), controlled wide areas of rail operations. As railroads faced increasingly-intense competition from highways

and waterways, the government proved to be a deeply-flawed substitute for the free market. By the 1970s, the rail industry was on the brink of ruin. Bankruptcies were common, earnings were too low to maintain tracks and equipment in good condition, rates were rising, and service levels were plummeting. Serious consideration was given to nationalizing the industry.

Fortunately, Congress passed the Staggers Rail Act of 1980. Congress recognized that railroads faced intense competition for most traffic, but prevailing regulation prevented railroads from competing effectively and earning adequate revenues. Survival of the rail industry required a new regulatory structure that allowed railroads to establish their own routes, tailor their rates and service to market conditions, and differentiate rates on the basis of demand. In short, Congress decided that railroads should be run by railroads, not by the government.

The Staggers Act did not completely deregulate railroads. In addition to retaining authority over a variety of non-rate areas, the ICC (now the Surface Transportation Board) retained authority to set maximum rates or take certain other actions if a railroad is found to have “market dominance” or to have engaged in anti-competitive behavior. Thus, rail customers have a safety net to protect against unreasonable railroad behavior.

The Staggers Act has been a great success for railroads and their customers. It has allowed railroads to reinvest hundreds of billions of dollars back into their systems; greatly improve service and the safety of their operations; and increase traffic volumes, productivity, and profitability — while sharply lowering their rates.



Railroad Reregulation

Some rail critics have proposed major changes in how U.S. freight railroads are regulated. Under their proposals, government regulators would once again have wide authority over crucial areas of rail operations.

Proposals to alter the current system of railroad regulation include a variety of different approaches. These proposals are not new: most have been advocated, and rejected by policymakers for good reason, in the past. The purpose of these proposals is usually to manufacture rail-to-rail competition where it does not already exist and/or to restrict the ability of railroads to price their services according to market conditions.

Regardless of the specific approach used, all proposals to reregulate railroads would have the government force railroads to lower their rates to favored shippers at the expense of other shippers, rail employees, rail investors, and the public at large.

Groups calling for railroad reregulation often claim that excessive market power exists whenever an individual shipper or receiver is served by a single railroad. This claim is a fallacy. It ignores the fact that railroads face extensive competition for the vast majority of their business — including cases where a shipper is served by only one railroad.

Moreover, rail-to-rail competition develops where demand justifies it. Stated another way, it is not economically feasible for two railroads to serve every shipper because many markets

do not have sufficient traffic to sustain that level of competition. Claiming that every market can sustain two railroads just because some markets can is like saying that every city can support two major league baseball teams just because New York can.

Railroads strongly oppose reregulation because it would prevent them from earning enough to cover their full costs; it would create major disincentives for continued investment in plant and facilities necessary to maintain and improve rail service; and it would lead to huge inefficiencies in railroad operations.

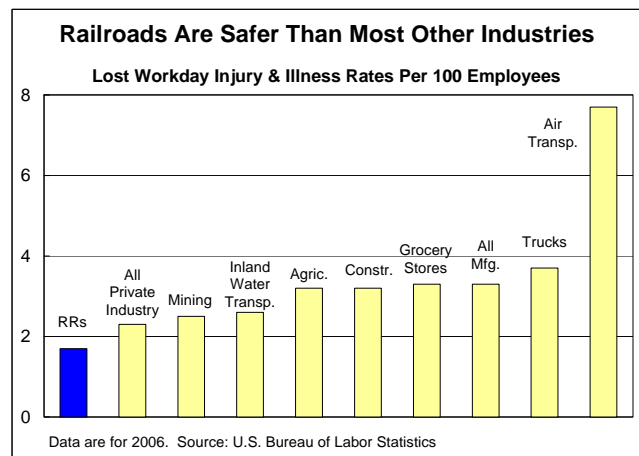
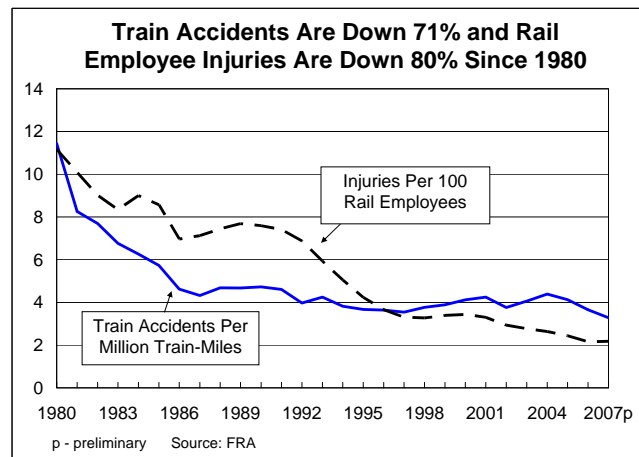
These points are especially important today. Since Staggers, U.S. freight railroads have worked off a significant amount of excess capacity. In fact, on many critical corridors and locations, the days of excess rail capacity are over. This means that as their traffic continues to grow, railroads will have to concentrate increasingly on building substantial new capacity in addition to maintaining and replacing their existing infrastructure and equipment.

Reregulation would, over time, force railroads to cut their costs by shrinking the size and/or quality of their networks. This would harm every rail customer, including those that reregulation is ostensibly designed to help. It would severely damage our global competitiveness by undermining the efficiency and cost-effectiveness of our freight transportation system, lead to more traffic on already-overcrowded highways, and harm the environment.

Railroad Safety

Nothing is more important to railroads than the safety of their employees, their customers, and the communities they serve, and the industry's safety record is excellent. From 1980 to 2007, railroads reduced their overall train accident rate by 71 percent and their rate of employee casualties by 80 percent. Overall, 2007 was the safest year ever for railroads. Railroads have lower employee injury rates than other modes of transportation and most other major industry groups, including agriculture, construction, and manufacturing. U.S. railroads also have employee injury rates well below those of most of their counterparts elsewhere in the world.

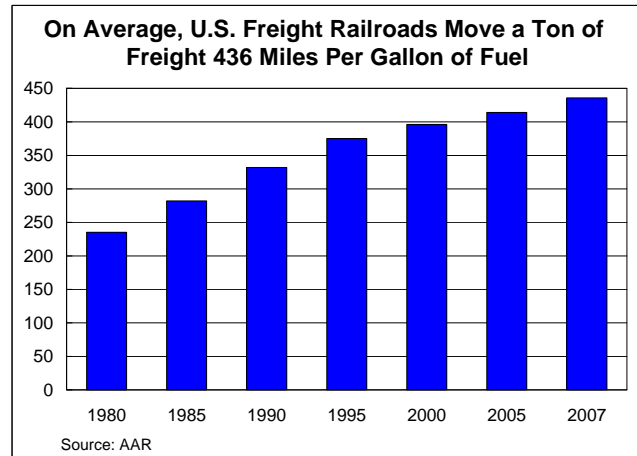
These significant safety improvements have come about precisely because railroads recognize their responsibilities regarding safety and devote enormous resources to its advancement. Through comprehensive employee training; massive investments in infrastructure and technology; cooperative efforts with labor, suppliers, customers, and the Federal Railroad Administration; and cutting-edge research and development; railroads are actively and consistently at the forefront of advancing safety.



Freight Railroads Offer Huge Public Benefits

Freight railroads offer major public benefits in addition to cost-competitiveness and efficiency.

First, railroads are more fuel efficient than other modes of transportation. On average, railroads are three or more times more fuel efficient than trucks, and railroad fuel efficiency is improving all the time. In 1980, railroads moved a ton of freight an average of 235 miles per gallon of fuel. In 2007, the comparable figure was 436 miles, an 85 percent improvement.



In fact, if just 10 percent of the freight that moves by highway moved by rail instead, annual fuel savings would exceed one billion gallons. And because of their fuel efficiency, every ton-mile of freight that moves by rail instead of truck reduces greenhouse gas emissions by two-thirds or more.

Second, railroads are environmentally friendly. The EPA estimates that for every ton-mile, a typical truck emits roughly three times more nitrogen oxides and particulates than a locomotive. Other studies suggest an even greater advantage for railroads.

Railroads: The Best Choice for the Environment (Emissions Per Ton-Mile)

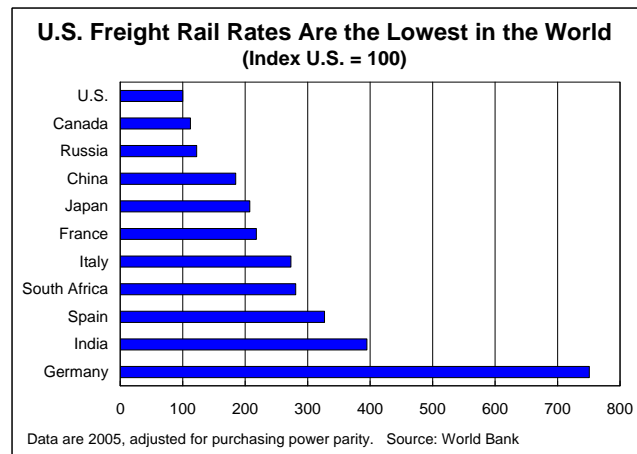
Rank (1= Most Desirable)	Oxides of Nitrogen	Volatile Organic Compounds	Particulate Matter	Carbon Monoxide	Carbon Dioxide
1	Rail	Rail	Air	Rail	Rail
2	Water	Water	Rail	Water	Water
3	Truck	Air	Water	Air	Truck
4	Air	Truck	Truck	Truck	Air

Source: Envirotrans

Third, freight railroads help reduce highway gridlock. A typical train takes the freight equivalent of several hundred trucks off our highways. Overcrowded highways act as an “inefficiency tax,” seriously constraining economic growth. Freight railroads help relieve this restriction by reducing congestion, enhancing mobility, and reducing the costs of maintaining existing roads and the pressure to build costly new roads.

International Comparisons

According to World Bank data, the U.S. freight railroad industry leads the world (often by large margins) or is near the top among all nations in terms of miles of track, traffic volume, productivity, affordability, and other measures. The U.S. dominance is a direct consequence of a market-based system under which economic regulation is limited. The World Bank’s railways adviser has noted that, “Because of a market-based approach involving minimal government intervention, today’s U.S. freight railroads



add up to a network that, comparing the total cost to shippers and taxpayers, gives the world's most cost-effective freight service.”

Over the years, countries in every corner of the globe have restructured and privatized their freight rail systems, looking to the United States for guidance. The most successful restructurings have imitated the U.S. model of “vertical integration,” in which a railroad both owns the track (and affiliated infrastructure) and operates the trains over that track.

The Relationship of Passenger Rail to Freight Rail

Freight railroads are successful partners with passenger railroads all over the country. Around 97 percent of the 22,000 miles of track over which Amtrak operates are actually owned by freight railroads. By law, freight railroads must give Amtrak access to their tracks upon request and must give priority to Amtrak trains over all other trains. Amtrak pays fees to freight railroads for the use of their tracks, but these fees do not come close to covering the full costs borne by freight railroads associated with hosting Amtrak trains.

In addition, hundreds of millions of commuter trips each year take place on commuter rail systems that operate at least partially over tracks or right-of-way owned by freight railroads. Numerous commuter rail systems throughout the country want to use freight rail tracks for future commuter service as well.

As noted earlier, U.S. freight railroads are moving more freight than ever before, and demand for freight rail service is projected to grow sharply in the years ahead. Passenger rail growth would come on top of growth in freight traffic. That's why, going forward, capacity will likely be the single most important factor determining our ability to provide the high quality rail service that will be essential for both freight and passengers.

Freight railroads recognize the significant potential benefits of a strong national passenger rail system and work to accommodate passenger trains when mutually-beneficial arrangements can be negotiated, as the many successful examples of passenger trains operating on freight-owned property make clear.

However, passenger service must not degrade freight railroads' ability to serve their freight customers. Freight railroads lower shipping costs by billions of dollars each year and produce an immense competitive advantage for our farmers, manufacturers, and miners in the global marketplace. If passenger railroads impair freight railroads and force freight that otherwise would move by rail onto the highways, those advantages would be squandered. Moreover, highway gridlock would worsen; fuel consumption, pollution, and greenhouse gas emissions would rise; and our mobility would deteriorate — outcomes that are completely contrary to the goals of expanding passenger rail in the first place.

Conclusion

America's freight railroads connect businesses with each other across the country and with markets overseas over a rail network spanning 140,000 miles. They form the most efficient and cost-effective freight rail system in the world, saving our economy billions of dollars each year — while reducing pollution, energy consumption, and greenhouse gas emissions; relieving highway congestion; and enhancing safety. Freight railroads provide a major boost to our global competitiveness and enhance our standard of living and quality of life. They are the vital link to our economic future.