

# A Short History of U.S. Freight Railroads

Since their birth nearly 190 years ago, railroads have played a crucial role in America's development. Thanks to partial deregulation in 1980, railroads have increased productivity, lowered rates and reinvested hundred of billions of dollars in private funds — not taxpayer funds — back into their networks to create what is now the safest and most efficient freight rail system in the world.

Looking ahead, the high quality of America's privately-owned freight railroads must be maintained so that they can continue to meet America's transportation needs and help our economy grow.

## 1830-1850: Railroads Critical to Early U.S. Development

America's first intercity railroad, the 13-mile Baltimore and Ohio Railroad, was completed in early 1830. By 1850, more than 9,000 miles of railroad were in operation. In these early years, railroads provided a means for previously inaccessible areas to be developed; for mineral, timber and agricultural products to get to market; and for the developed and undeveloped areas of a growing nation to be bound together.

The North's victory in the Civil War was due in part to its well-organized rail operations and the fact that most locomotive and railcar-building plants were in the North.

## 1887-1970: Regulation & the Big Slide

In 1887, the Interstate Commerce Act created the Interstate Commerce Commission (ICC) and made railroads the first U.S. industry subject to comprehensive federal economic regulation. Over time, excessive regulation would nearly destroy the rail industry.

By 1917, the 1,500 U.S. railroads operated around 254,000 miles and employed 1.8 million people — more than any other industry. Rail mileage had already peaked (in 1916), however, and rail employment would soon (around 1920).

The Great Depression devastated railroads. Rail industry revenue fell by 50% from 1928 to 1933. By 1937, more than 70,000 miles of railroad were in receivership, representing around 30% of all rail miles. On the eve of World War II, many railroads were in financial trouble. A surge in war-related traffic brought a temporary reprieve, but by 1949 rail traffic had fallen 28% from its 1944 level. Railroads were losing huge amounts of money on passenger operations, but government regulators often refused to allow railroads to discontinue money-losing passenger routes.

## Key Dates

**1830:** America's first intercity railroad — the 13-mile Baltimore and Ohio Railroad — is completed

**1850:** More than 9,000 miles of railroad are in operation

**1887:** Interstate Commerce Act creates the Interstate Commerce Commissions (ICC)

**1916:** Rail mileage peaks

**1917:** 1,500 U.S. railroads operate around 254,000 miles and employ 1.8 million people

**1920:** Rail employment peaks

**1928-1933:** Great Depression devastates railroads, with rail industry revenue falling 50%

**1937:** More than 70,000 miles of railroad are in receivership, representing around 30% of all rail miles

**1949:** Rail traffic has fallen 28% from 1944 level

**1950s-1960s:** Many railroads are bankrupt, have abandoned service and deferred maintenance

**1970:** The Rail Passenger Service Act creates Amtrak and relieves freight railroads of most of the huge losses (around \$850 million in today's dollars) incurred in passenger service. Freight conditions continue to deteriorate.

**1976:** More than 47,000 miles of track operated at reduced speeds because of unsafe conditions. Railroads have billions of dollars in deferred maintenance

**1978:** the rail share of intercity freight has fallen to 35%.

**1970-1979:** the rail industry's return on investment never exceeded 2.9% and averaged just 2.0%.

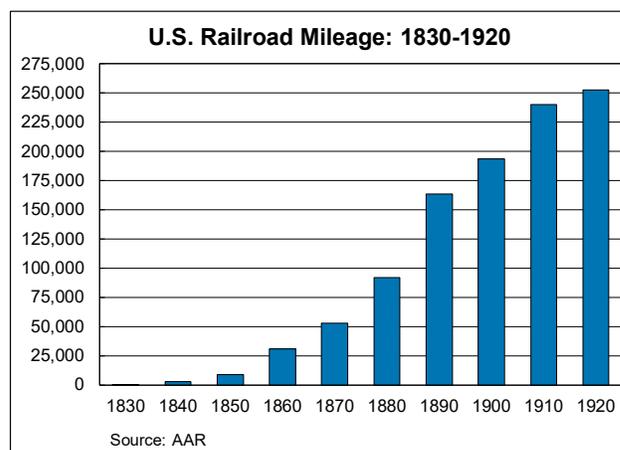
**1980:** Congress passes Staggers Rail Act

**Today:** The North American freight rail network is the safest, most efficient in the world.

Throughout the 1950s and 1960s, the rapid growth of truck and barge competition (aided by tens of billions of dollars in federal funding for construction of the interstate highway and inland waterway systems) and huge ongoing losses in passenger operations led to more railroad bankruptcies, service abandonments and deferred maintenance.

### **Misguided railroad regulation was a major factor behind the rail industry's decline.**

For example, the ICC set maximum and minimum rates for rail shipments, with rates often unrelated to costs or demand. The ICC generally tried to keep rates low for grain and other bulk commodities at the expense of higher rates for many kinds of manufactured goods that moved in smaller quantities. As a result, many shippers of this higher-rated freight diverted the freight to the highways instead.



The concept of "open routing" added to railroad problems. The rail network was much like a web: a number of possible routes could often be used to move freight between two points. The cost to a railroad of a more circuitous route is generally higher than the costs of a more direct route. However, regulation generally kept rates for routes between two points similar, even if railroads incurred much higher or lower costs to use some routes than others.

Because regulation made it so difficult for railroads to adjust individual rates, railroads typically resorted to across-the-board rate increases as their costs rose. This meant rail rates tended to reflect cost patterns that existed in the past. Subsequent changes in technology and traffic flow that may have significantly altered those cost patterns were often ignored.

Sometimes regulation simply made no sense. One infamous example involved "Big John" cars. In the early 1960s, the Southern Railway asked the ICC for permission to sharply reduce rates for grain shipments using new 100-ton hopper cars. The ICC refused, in part because the lower rates would take business away from waterways. Only after a U.S. Supreme Court decision in its favor was the Southern Railway able to introduce the new cars. Likewise, regulations prevented railroads from offering lower rates to shippers who used "unit trains." Consequently, it was not profitable for railroads to introduce this innovation until the 1960s, long after it otherwise would have been.

### **1970s: Railroads at the Brink**

By the 1970s, excessive regulations, intense competition from trucks and barges, and changing shipping patterns drove railroads to the brink of ruin:

- The Rail Passenger Service Act of 1970 created Amtrak and relieved freight railroads of most of the huge losses (then around \$200 million per year, or around \$850 million in today's dollars) incurred in passenger service, but conditions continued to deteriorate on the freight side.
- During the 1970s, most major railroads in the Northeast and several major Midwestern railroads went bankrupt. Bankrupt railroads accounted for more than 21% of the nation's rail mileage.
- Railroads lacked the funds to properly maintain their tracks. By 1976, more than 47,000 miles of track had to be operated at reduced speeds because of unsafe conditions. Railroads had billions of dollars in deferred maintenance, and the term "standing derailment" — when railcars that were standing still simply fell off poorly maintained track — was often heard.

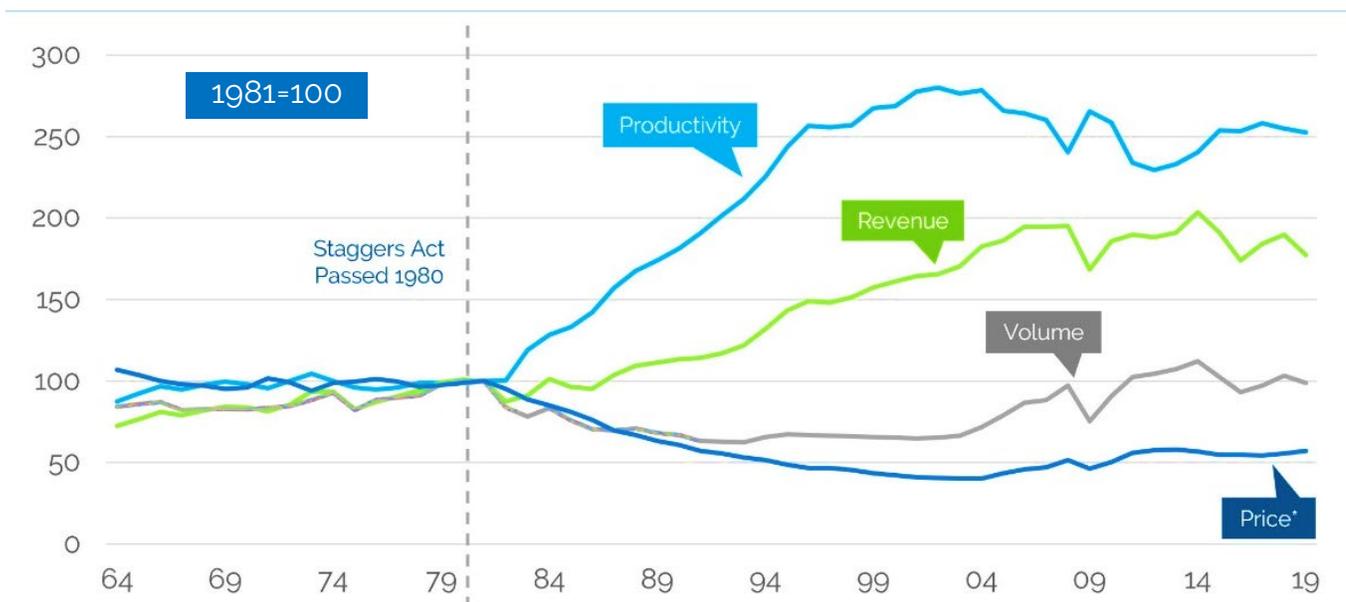
- By 1978, the rail share of intercity freight had fallen to 35%.
- Between 1970 and 1979, the rail industry's return on investment never exceeded 2.9% and averaged just 2.0%. The rate of return had been falling for decades: it averaged 4.1% in the 1940s, 3.7% in the 1950s, and 2.8% in the 1960s.
- Oppressive regulation continued to harm the industry. As the U.S. Department of Transportation said in 1978, "The current system of railroad regulation ... is a hodgepodge of inconsistent and often anachronistic regulations that no longer correspond to the economic condition of the railroads...or the often-conflicting needs of shippers, consumers, and taxpayers."

## The Staggers Rail Act of 1980: Balanced Regulation

The status quo was untenable, so Congress essentially had two options: nationalize the railroads at a continuing cost of untold billions of dollars or replace the excessive regulation of the past with a more balanced regulatory framework.

Congress wisely chose balanced regulation and passed the Staggers Rail Act of 1980. By passing Staggers, Congress recognized that railroads faced intense competition for most of their traffic, but excessive regulation prevented them from competing effectively. To survive, railroads needed a new regulatory system that allowed them to act like most other businesses in terms of managing their assets and pricing their services.

The Staggers Act ushered in a new era in which railroads could largely decide for themselves — rather than have Washington decide for them — what routes to use, what services to offer and what prices to charge. Railroads were allowed to base their rates on market demand; railroads and shippers could enter into confidential contracts; procedures for abandoning or selling unneeded rail lines were streamlined; and the need for railroads to earn adequate revenues to support their operations was explicitly recognized.

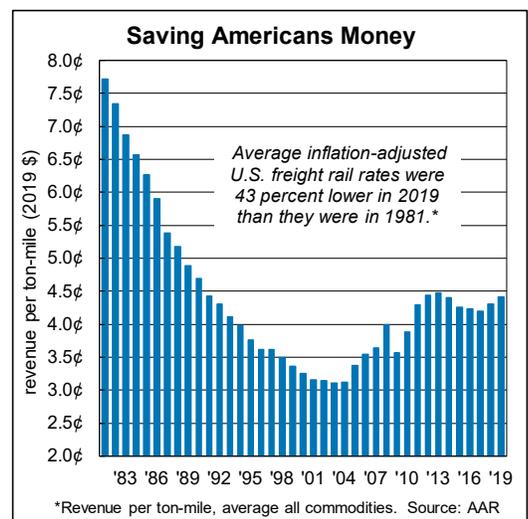
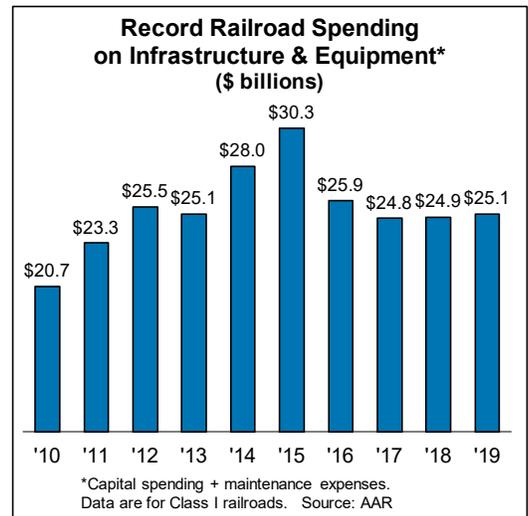


\*Based on average revenue per ton-mile in 2019 dollars. Source: AAR

## The Post-Staggers Era: Railroads are Reborn

The more balanced and reasonable regulatory environment created by Staggers has been a great success for rail shippers, railroads and the public at large:

- America's freight railroads operate almost exclusively on infrastructure that they own, build, maintain and pay for themselves. By contrast, trucks, airlines and barges operate on highways, airways and waterways that are financed by taxpayers. America's freight railroads have spent more than \$710 billion since 1980, including record amounts in recent years, to create a freight rail network that is second to none in the world.
- Average rail rates (measured by inflation-adjusted revenue per ton-mile) are 43% lower than in 1981. This means the average rail customer can ship far more freight for the same price it paid more than 35 years ago.
- Nothing is more important to railroads than safety and recent years have been among the safest in history.
- Railroads move a ton of freight an average of more than 470 miles per gallon of fuel. On average, trains are three to four times more fuel efficient than trucks. Railroads also reduce highway gridlock and greenhouse gas emissions.
- Freight railroads are stronger financially. Return on net investment averaged 4.4% in the 1980s, 7.0% in the 1990s, 8.0% from 2000 to 2009, and 11.9% since then. Improved rail earnings are a positive development because they allow railroads to make the massive investments needed to keep their networks in top condition, improve service and add the new rail capacity America will need in the years ahead.



## Moving More Freight by Rail is Good Public Policy

As America's economy grows, the need to move more freight will grow too. Recent forecasts from the Federal Highway Administration found that total U.S. freight shipments will rise from an estimated 18.6 billion tons in 2018 to 24.1 billion tons in 2040 — a 30% increase. Railroads are the best way to meet this demand, but that can happen only if they have adequate capacity. Railroads will continue to pour huge sums back into their networks, but policymakers have a role too. Policymakers can help ensure that America has the rail capacity it needs in the future by:

**Retaining a balanced regulatory system** that protects rail customers from unreasonable railroad conduct while giving railroads the freedom to largely decide for themselves how to manage their operations.

**Engage in public-private partnerships** that allow governments to expand the use of freight rail while paying only for the public benefits of a project, with the railroads paying for the benefits accruing to them.

**Retaining existing truck size and weight limits.** The taxes and fees heavy trucks pay are far less than the cost of the highway damage that heavy trucks cause. This multi-billion-dollar underpayment would become even greater if truck size and weight limits were increased.