This comprehensive overview explores the three rail systems that operate on the national rail network: intercity passenger rail (Amtrak), commuter rail and freight rail. From Amtrak's vital role in connecting cities to commuter rail's impact on local communities, and the unparalleled productivity of freight railroads, the intricate rail network moves people and goods, promotes sustainability and drives economic growth.

**Intercity Passenger Rail (Amtrak)**

Intercity passenger rail primarily refers to Amtrak's intercity passenger services that connect people from one city to another. Congress created The National Railroad Passenger Corporation — also known as Amtrak — in 1970 to continue and improve intercity passenger rail for the nation. Headquartered in Washington, D.C., Amtrak is an important part of America's surface transportation system, providing an environmentally friendly way for millions of people to reach their destinations each year. In fact, Amtrak is 47% more energy efficient than traveling by car and 33% more energy efficient than domestic air travel on a per-passenger-mile basis.

**Operations**

Amtrak operates passenger trains across a national system consisting of three service lines: Northeast Corridor (NEC), Long-Distance and State-Supported.

- **NEC Services:** The NEC stretches 457 miles from Washington, D.C., to Boston, MA, of which Amtrak owns 363 miles. This is the most heavily traveled portion of the intercity passenger rail system. Amtrak operates the Northeast Regional, Acela service, and portions of other long-distance and state-supported routes on the NEC. The NEC also hosts extensive commuter rail operations and freight rail service.

- **Long-Distance Routes:** Amtrak currently operates 15 long-distance routes through 39 states. These are routes of more than 750 miles between endpoints.

- **State-Supported Routes:** Amtrak operates 28 state-supported routes on behalf of 17 states, funded in partnership with 20 entities, including state departments of transportation and authorities specifically chartered to administer individual corridors. These routes are under 750 miles in length between endpoints.
Amtrak owns 623 route miles (primarily in the Northeast) and operates, maintains, and dispatches another 229 route miles in Michigan and New York. The vast majority of the remaining 96% of Amtrak’s more than 21,400-mile system consists of tracks owned and maintained by freight railroads. More than 70% of the miles traveled by Amtrak trains are on tracks owned by other railroads.

Amtrak’s relationship with host railroads is governed by federal statutes and negotiated bilateral operating agreements. These operating agreements can include key terms such as train schedules, performance standards and related incentives and penalties. Amtrak and host freight railroads each have designated staff that work together to manage the operations on these lines.

Ownership & Funding

The federal government created Amtrak in 1970 and owns all preferred shares of Amtrak stock, while the President of the United States appoints its board of directors, which are subject to confirmation by the U.S. Senate. Pre-pandemic, most of Amtrak’s daily operating costs were covered by non-federal sources, including ticket revenues and support from state partners. However, Amtrak relies on federal funding for most of its capital expenditures. Currently, the federal government’s contribution to Amtrak is subject to annual appropriations.

Commuter Rail

Commuter rail is a form of passenger rail service that traditionally operates within a metropolitan area connecting suburban or “commuter towns” with a central city. Public transit plays a major role in fueling America’s economy, with most transit trips connecting employees to work, retail and entertainment venues. Commuter trains typically operate mainly on weekdays, with the highest frequency during morning and evening commute hours, and many have reduced weekend service. Most riders make trips of less than 50 miles for work, school or errands, although some commuter operations provide services for considerably longer distances.

Operations

According to the American Public Transportation Association, 32 nationwide agencies operate commuter railroads. Some operate their own trains, while others contract out for the service. Some major commuter railroads include the Long Island Rail Road (LIRR) and Metro-North in New York and Connecticut; the Maryland Area Regional Commuter (MARC); the Virginia Railway Express (VRE); Metra in Chicagoland and Metrolink in the Los Angeles region.

Half of the commuter systems operate at least partially on freight-owned tracks, and approximately 25% of the miles commuter railroads operate are owned by freight railroads or, in the case of the NEC, Amtrak. Before operating on freight-owned property, the freight and commuter railroads reach voluntary agreements governing the relationship, including hours of operation, access and number of trains.
These partnerships have led to significant growth in commuter rail, increasing from six commuter rail systems 40 years ago to 27 today.

Ownership & Funding

Generally, commuter railroads are owned by state authorities or agencies. Half of commuter systems operate at least a little on freight track, but the combination of freight railroads and Amtrak is not most of the miles on which commuter rail operates. Funding for commuter railroads typically comes from federal funds from the Federal Transit Administration (FTA) as well as state and local funds and fares.

Freight Rail

America’s 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. Shippers from nearly every industrial, wholesale, retail and resource-based sector of the U.S. economy rely on freight railroads to move their raw materials and finished goods to market domestically and globally. Freight rail accounts for around 40% of long-distance ton-miles — more than any other mode of transportation.

Operations

Operations are fully integrated across the North American rail network. The U.S. rail network consists of approximately 630 mostly privately-owned railroad companies. There are two major categories of freight railroads:

- **Class I**: The six Class I railroads are the largest railway carriers, accounting for most of the rail infrastructure in the country. Outside of the Northeast Corridor, Class I owned tracks host much of Amtrak’s intercity passenger rail operations and, in many places, also host commuter rail operations.

- **Short Lines**: Approximately 630 short line railroads (Class II and III) operate over approximately 45,000 route miles in 49 states. Short line rail service connects farmers and businesses to the national railroad network for large areas of the country, particularly for small town rural America.

Ownership & Funding

America’s freight railroads overwhelmingly own, build, maintain, operate and pay for their infrastructure with little government assistance. With balanced economic regulation, America’s freight railroads spent well above $23 billion a year over the past five years on capital expenditures and maintenance expenses. These include locomotives, freight cars, tracks, bridges, tunnels and other infrastructure, equipment and technology. On average, freight railroads spend six times more on capital expenditures as a percentage of revenue than the average U.S. manufacturer.
Frequently Asked Questions

What’s the difference between European and American rail systems?

Infrastructure, train characteristics, overall operating procedures and regulations vary widely between European and American rail systems. There are two important points to know. First, America’s freight rail network is one of the world’s most efficient and cost-effective transportation networks.

Second, railroads operating in the United States have a much higher share of the U.S. freight transportation market than European railroads have of the European freight transportation market. The situation is reversed for passenger railroads: railroads have a much higher share of the passenger transportation market in Europe than passenger railroads do in the United States. When Americans talk about European trains, they often refer to passenger rail, not freight rail.

European freight and passenger railroads also receive substantially more government subsidies than freight railroads in the United States (which receive very little government funding) and passenger railroads in the United States.

Do Amtrak and freight railroads both have to have Positive Train Control (PTC)?

Yes. The FRA recently announced that all 44 of America’s intercity passenger, commuter and freight railroads required to have PTC have met or surpassed the statutory requirements outlined in the Rail Safety Improvement Act of 2008.

After years of tireless, methodical work, the nation’s railroads have created a fully interoperable PTC system capable of automatically stopping a train before certain human error related accidents occur. Specifically, PTC is required for rail operations on tracks over which intercity passenger or commuter rail operations take place and over which certain types and amounts of hazardous materials are transported.

What’s freight rail’s policy position on passenger rail?

Policymakers should ensure that the passenger rail service on corridors owned by freight railroads is done safely and does not impede freight rail service.