

Economic Contribution of Rail in North Carolina

EXECUTIVE SUMMARY



JANUARY 2024



Economic Contribution of Rail in North Carolina

\$20+
Billion

Annual Statewide
Economic Output¹

\$990
Million

State & Local Tax
Revenue Supported¹

88,000

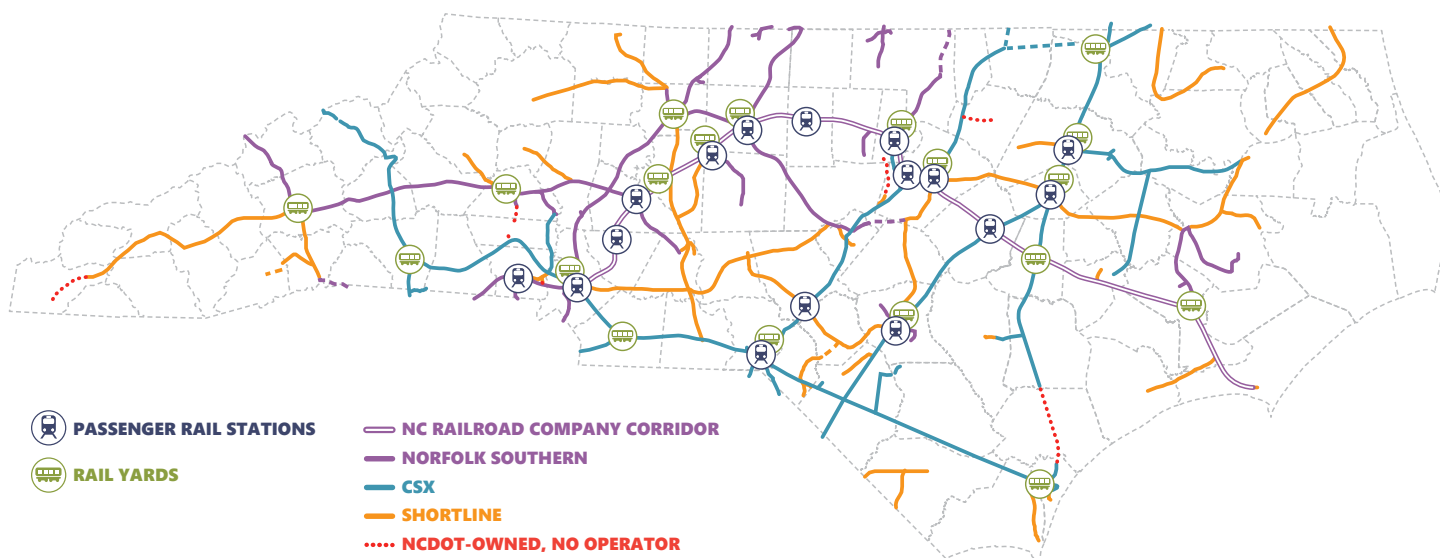
Jobs Supported
by Rail¹

860

Businesses Loading
Directly onto Rail¹

116

Rail Industry
Businesses¹



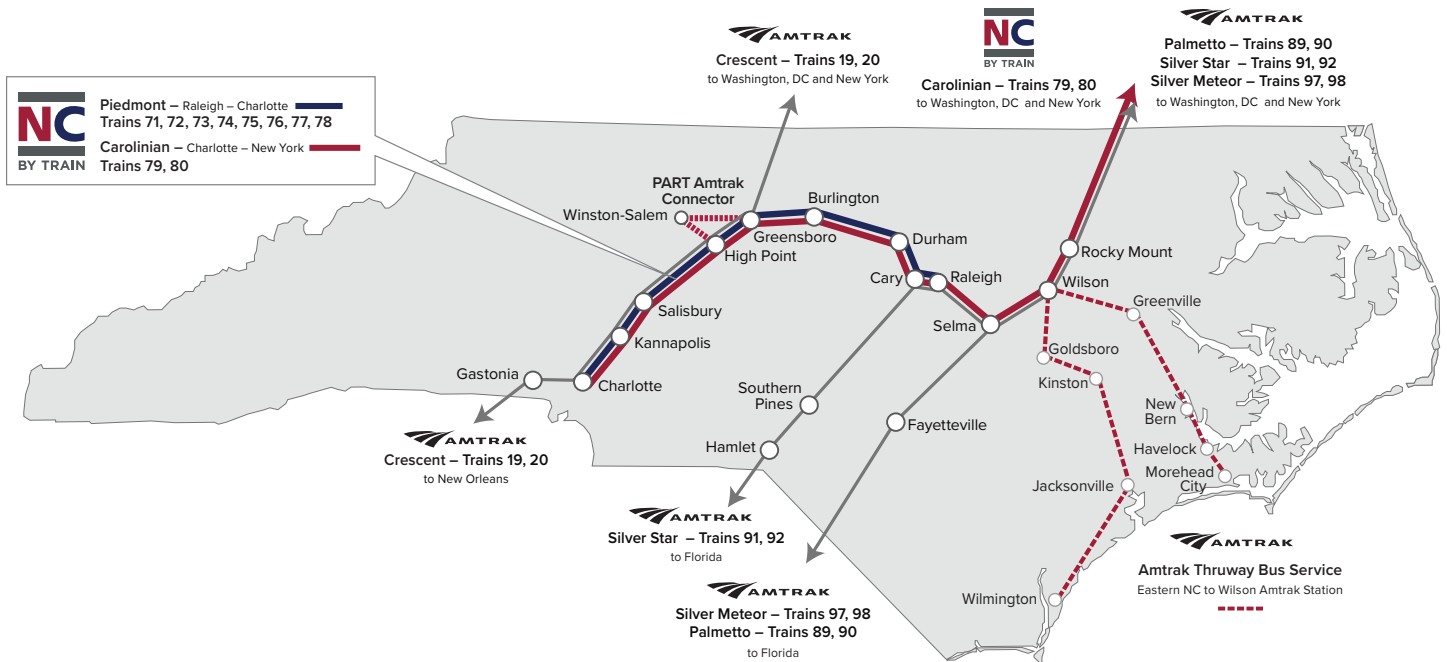
About the Study

This ITRE study was funded by a North Carolina Department of Transportation research grant (RP2022-19) and captures the statewide economic contribution of North Carolina's rail system. The research utilizes NCDOT data and ITRE collected data and analyzes the data using an IMPLAN model. The results of the study show that the North Carolina rail

systems has an economic impact of over \$20 billion and supports 88,000 jobs in the state. The economic contributions of North Carolina's rail system are dispersed throughout the state. This research analyzed 2019 economic data and 2022 ridership data to reflect the most recent complete data and economic impacts while avoiding pandemic induced disruptions.



EXECUTIVE SUMMARY



System Overview

North Carolina's 3,416 miles of rail are used by 26 railroads, including two Class I railroads and 24 shortlines, to move freight and people both within the state and across the eastern United States. The North Carolina Railroad Company manages the 317-mile rail

corridor that stretches from Charlotte to the port of Morehead City, and NC By Train and Amtrak together provide 18 daily passenger trains that carry over half a million people per year.



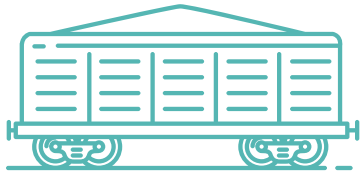
Freight Rail Contributions

North Carolina's rail system is a transportation backbone for many raw materials, manufactured goods, and over-sized cargo shipped around the state and across the country. Freight rail provides an important means to export North Carolina products to market and to provide vital manufacturing and agricultural inputs that support the North Carolina economy through business revenue and jobs. Freight rail also diverts truck trips from the highway which reduces wear on roadway infrastructure and creates a safer, less congested road network.

With more than 45 million tons of rail freight terminating in North Carolina and another 13 million tons of freight originating in the state, rail provides a cost-effective way to ship manufacturing inputs, finished goods, and raw materials. While most

commodities shipped into North Carolina are manufacturing and agricultural inputs (e.g. coal, farm products, chemicals, non-metallic minerals), goods from intermodal facilities account for 18 percent of shipments that originate in the state. Intermodal facilities are transportation hubs connecting multiple modes such as rail, truck, and waterways. The materials and goods transported through rail intermodal facilities include shipments moving through the state's two deepwater ports and other facilities on the North Carolina coast. North Carolina's lumber and wood industries account for 8 percent of rail freight commodities originating in the state.²





45 Million

Tons of Rail Freight Terminating in NC²



13 Million

Tons of Rail Freight Originating in NC²



18%

of shipments originating in NC are shipped from intermodal facilities²



3,667

Average tons of freight carried per train in 2019²



Passenger Rail Contributions

Passenger rail is an important mode of transportation for North Carolina travelers. It provides the state with economic benefits, including supporting jobs, enabling commercial and business activity and increasing tax revenues. Passenger rail also provides North Carolinians with the benefits of expanded mobility, enhanced community livability, and improved public health benefits (such as increased physical activity and reduction of single vehicle emissions). Additionally, diverting passengers from highways to rail reduces wear on roadway infrastructure, lowers carbon and particulate emissions and creates a safer, less congested road network.

NC By Train's Piedmont and Carolinian services provide 5 round-trips (10 passenger trains) per day

between Charlotte and Raleigh, with the Carolinian continuing once per day to New York City. NC By Train transports more than half a million total passengers annually, with over 450,000 starting and/or ending their trip in the state.³ Amtrak operates four additional long-distance routes (Crescent, Palmetto, Silver Meteor and Silver Star) that connect North Carolina to points across the Atlantic seaboard and the Gulf Coast. The reach of North Carolina's passenger trains is extended by Amtrak Thruway bus routes connecting eight eastern North Carolina counties with the rail network.

Altogether, over 970,000 passengers per year board or alight at the 16 passenger rail stations in North Carolina.⁴



18

Daily Passenger
Trains (9 Round Trips)



970,000+

Passenger Boardings
and Alightings⁴



175,000+

Amtrak Long Distance
Passengers Annually⁴



520,000+

NC By Train
Passengers Annually³



90+ Million

NC By Train Passenger
Miles Annually³



Rail Tourism Contributions

North Carolina is home to several rail tourism attractions. The Great Smoky Mountains Railroad (Bryson City), New Hope Valley Railway (Bonsal), and the North Carolina Transportation Museum (Spencer) account for 410,000 visitors annually. There are also several local rail museums and rail history centers throughout the state.



410,000

Rail Tourism Visitors Annually

Environmentally Sustainable



471

Ton-miles per gallon of fuel²

Freight rail is also an environmentally sustainable means of shipping goods and raw materials. Rail can ship 471 tons of freight with one gallon of fuel which creates shipping savings and reduced carbon footprint and greenhouse gas emissions by 75 percent.

Footnotes:

¹ ITRE analysis utilizing IMPLAN® model (see the methodology section on page six of the full report)

² AAR 2019 Fact Sheet: Freight Railroads in North Carolina, Association of American Railroads (2021)

³ ITRE analysis of 2022 NCDOT Passenger Rail Ridership Data

⁴ Amtrak Ridership Data: North Carolina 2022, Provided by NCDOT and Analyze by ITRE



Economic Contribution of Rail in North Carolina

EXECUTIVE SUMMARY

To view the full report, visit

ncdot.gov

Search... economic benefits rail report

