

### Coast Line Corridor

The Coast Line Corridor is made up of 59 miles of railroad lines in northern New Jersey. The corridor includes segments of NJ TRANSIT commuter lines that host local freight service and contains the corridor's connection to the unrestricted national freight rail network:

- *NJ TRANSIT's North Jersey Coast Line* between Perth Amboy and South Amboy, 2.3 miles
- *NJ TRANSIT's freight-only Church Running Track* in South Amboy, 0.5 miles
- *NJ TRANSIT's North Jersey Coast Line* between South Amboy and Red Bank, 14.6 miles

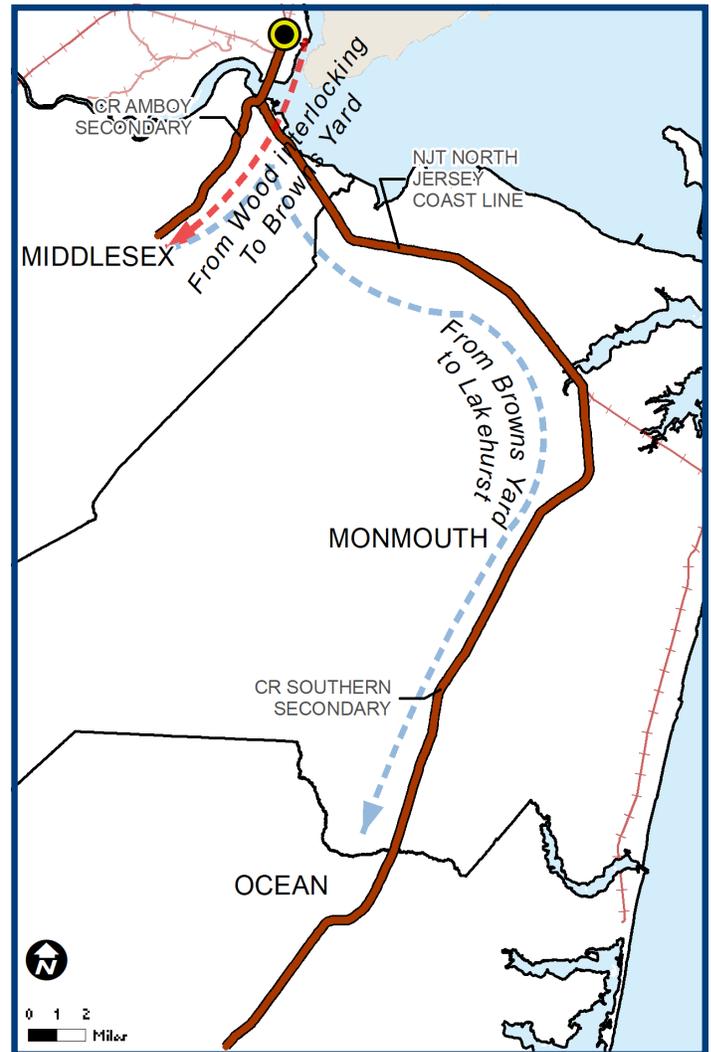
The Coast Line Corridor also includes two rail lines owned and operated by Conrail, North Jersey's primary local freight railroad, which is jointly owned by the two large Eastern U.S. freight railroad companies, Norfolk Southern and CSX Transportation:

- *Conrail's Amboy Secondary* between South Amboy and Old Bridge, 6.9 miles
- *Conrail's Southern Secondary* between Red Bank and Lakehurst, 27.6 miles

Several connecting freight-only tracks in Lakehurst that are currently inactive also depend on the Coast Line Corridor for access to the national freight rail network. The Coast Line Corridor is located in Middlesex County, Monmouth County, and Ocean County. In Perth Amboy, the corridor has a high-density passenger rail operation with approximately 85 NJ TRANSIT trains per day. This section of NJ TRANSIT is electrified with overhead catenary that provides power to the passenger trains. However, the Coast Line Corridor was not built with clearances to accommodate the taller and heavier rail freight cars used today in many other locations. The NJTPA's Freight Rail Industrial Opportunity (FRIO) Corridors Program was created to evaluate the barriers to modern rail freight car access on these legacy lines, and the associated economic benefits of alleviating those restrictions. This profile presents the study's findings for the Coast Line Corridor.

### How Freight Moves

The Coast Line Corridor's connection to the unrestricted rail



network (where physical barriers no longer exist) is located at the Wood interlocking in Perth Amboy on NJ TRANSIT's North Jersey Coast Line. From that location, freight trains operate west nonstop along the North Jersey Coast Line across the Raritan River to South Amboy, then use the Conrail Amboy Secondary to reach Browns Yard at Old Bridge. This is the base of operations for the local freight trains that will then make the final delivery of freight cars to rail customers along the Coast Line Corridor between South Amboy, Red Bank, and Lakehurst. The FRIO study's evaluation of physical restrictions and economic opportunities takes into consideration the rail operating patterns in place to deliver freight cars to customers.

## Weight Limitations and Clearance Restrictions

Two types of physical restrictions prevent the use of national standard rail freight cars on FRIO corridors: (1) weight restrictions that prevent the use of modern freight cars weighing 286,000 pounds fully loaded and (2) height restrictions that prevent the use of freight cars measuring 17 feet above the top of the running rails. Restrictions can include bridges, catenary clearances, culverts, and other physical elements on the rights of way. The Coast Line Corridor has

22 of these types of physical restrictions. Estimated costs to alleviate these restrictions range from a low of \$16.4 million to a high of \$139.3 million. Under a separate project, NJ TRANSIT's Raritan River drawbridge in Perth Amboy will be replaced with a new bridge that will be capable of handling national standard rail freight cars. This project is underway, and is not included in the FRIO analysis or cost estimates.

## Modern Rail Car Access: Who Would Benefit?

### Known Rail Customers

The existing freight rail customers identified by the FRIO study are involved in manufacturing and distribution activities that contribute to the economic vitality of northern New Jersey. They make and distribute products used by New Jersey residents every day, including food and beverages, home-building supplies, plasticware and household products, recyclable materials, shipping cartons and pizza boxes, and more. Common commodities transported on the Coast Line Corridor include brick, chemicals, and lumber. The Coast Line Corridor has 4 rail freight customers at 3 identified rail-served locations that occupy approximately 81 acres of land.

### Industrial Opportunities

Additional properties have been identified that offer significant potential for development or redevelopment as rail-served industrial sites along the corridor. These sites include properties previously served by rail, industrial redevelopment areas, and properties that were already of interest to counties, municipal officials, or developers as favorable locations for industrial activity. It is estimated that properties in the Coast Line Corridor with the potential for development or redevelopment after rail improvements were made total approximately 8,281 acres of land.

## Economic Impact of Modern Rail Car Access

Based on the calculations of land occupied by both existing and potential rail customers, the NJTPA used a Multi-Regional Input-Output model to develop an economic impact assessment of the corridor, considering direct, indirect, and induced benefits that could accrue to municipalities, counties, and the State if the sites were fully developed. These economic measurements include employment effects,

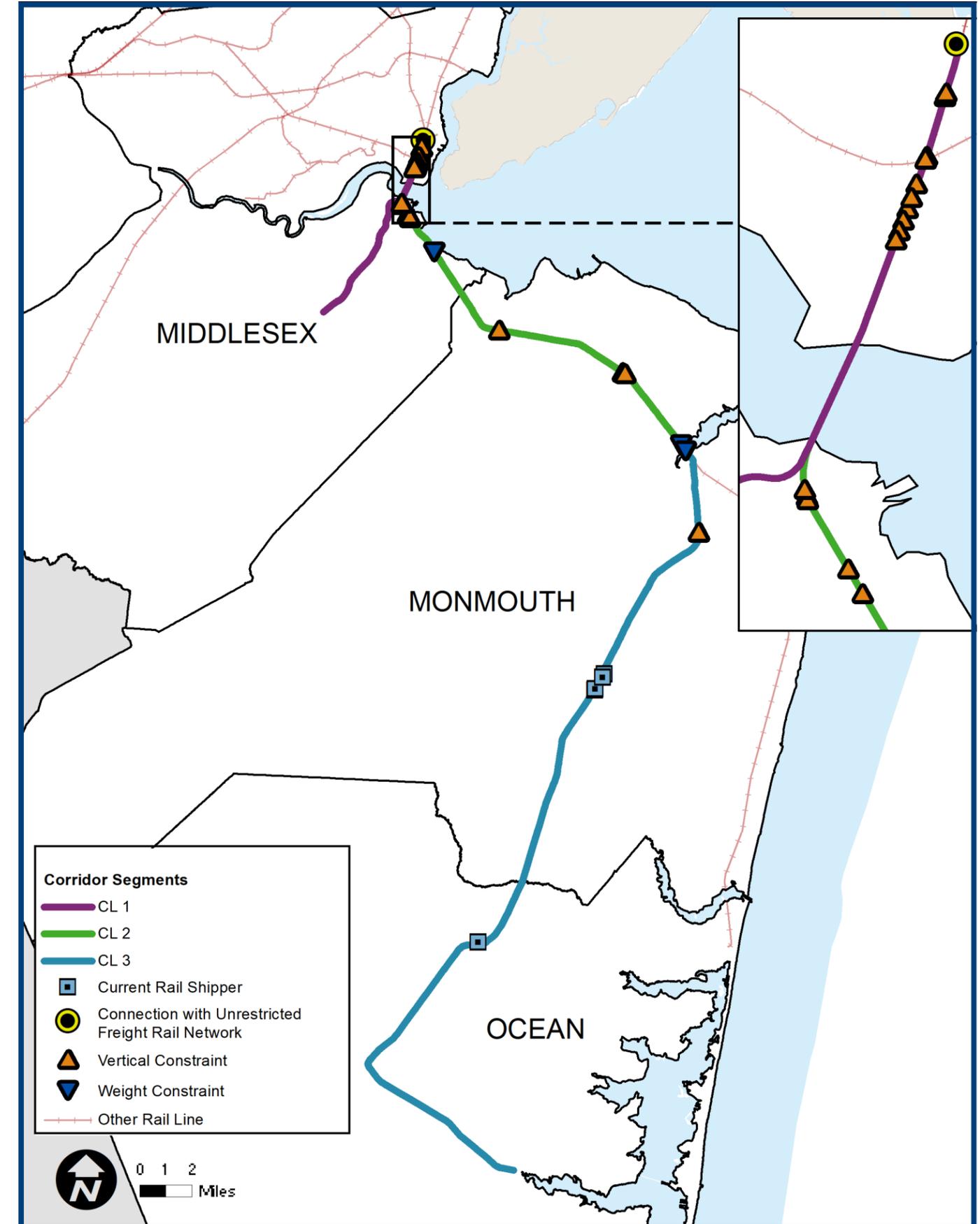
business output and revenue, personal income effects, and the effect of taxes, based on a mix of known industrial activities that occur in the corridor. The maximum potential economic value of new development attributable to alleviating the barriers to modern rail freight car access in the Coast Line Corridor is estimated to be more than \$6.7 billion.

## Coast Line Corridor Potential Engineering Solutions and Economic Benefits

Corridor Segment	Restrictions in Corridor Segment	Range of Estimated Improvement Costs by Segment (\$2019 millions)	Cumulative Segment Cost Estimates (\$2019 millions)	Total Area (acres)	Estimated On-Site Jobs	Estimated Annual Tax Revenue (\$2019 millions)
CL 1*	10	\$9.6 - \$64.9	\$9.6 - \$64.9	278	2,960	\$221.8
CL 2	9	\$5.9 - \$20.7	\$15.5 - \$85.5	279	2,970	\$222.4
CL 3	3	\$1.0 - \$53.8	\$16.4 - \$139.3	7,805	83,170	\$6,266.9
<b>Total</b>	<b>22</b>	<b>\$16.4 - \$139.3</b>		<b>8,362</b>	<b>89,100</b>	<b>\$6,711.2</b>

\*Note: The segment of trackage identified as CL 1, located between Wood interlocking in Perth Amboy and Browns Yard in Old Bridge, is shared by two FRIO corridors: the Amboy Corridor and the Coast Line Corridor. Improvements made to provide modern freight rail access for one corridor will also benefit the other corridor in that segment of shared trackage and, if made, can be deducted from the other corridor's improvement needs.

## Coast Line Corridor Map



## About the NJTPA

The North Jersey Transportation Planning Authority (NJTPA) is the federally authorized Metropolitan Planning Organization (MPO) for the 13-county northern New Jersey region, home to 6.7 million people. It evaluates and approves transportation improvement projects, provides a forum for cooperative transportation planning, sponsors and conducts studies, assists county and city planning agencies and monitors compliance with air quality goals. The NJTPA Board includes 15 local elected officials representing 13 counties—Bergen, Essex, Hudson,

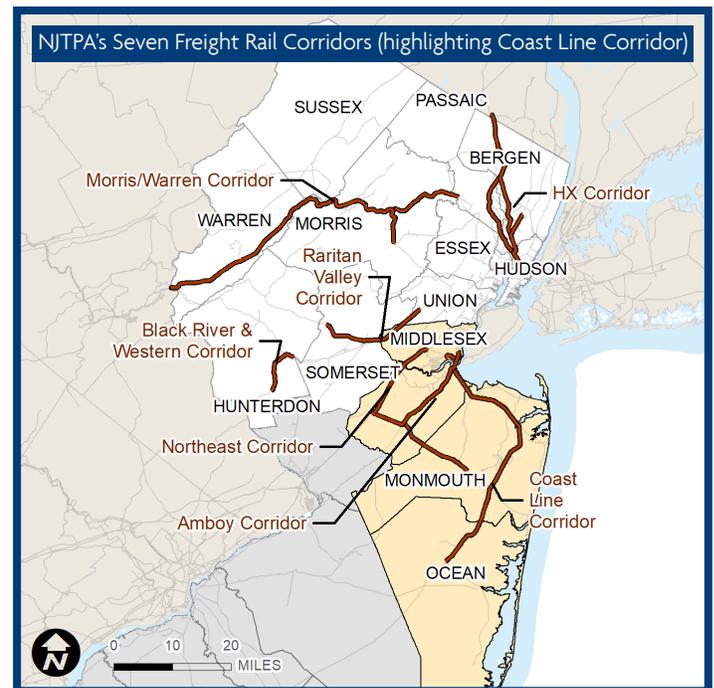
Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren—and the cities of Newark and Jersey City. The Board also includes a Governor's Representative, the Commissioner of the New Jersey Department of Transportation (NJDOT), the Executive Director of NJ TRANSIT, the Chairman of the Port Authority of New York & New Jersey and a Citizen's Representative appointed by the Governor.

## About the Study

The NJTPA created the Freight Rail Industrial Opportunity (FRIO) Corridors Program to foster collaboration among public and private entities to address barriers to freight access to industrial properties. Industry and modern freight movement rely on heavier and taller rail cars. Current standards permit cars weighing 286,000 pounds loaded, and measuring 17 feet high. The legacy rail lines serving New Jersey's industrial areas cannot handle many modern rail freight cars, placing industries and sites along these lines at a competitive disadvantage. FRIO addresses this situation by evaluating the improvements needed to handle modern rail cars and the resulting economic potential for seven rail corridors in northern New Jersey. Two databases have been developed to advance decision-making and investments:

- **Industrial opportunity database:** Identifies potential properties along the affected rail lines that could benefit through improved access.
- **Restriction location database:** Inventory of physical height and weight restrictions on the rail lines.

This study will serve as an important roadmap in planning and funding improvements to enhance freight rail transportation and further economic development opportunities in



the region. FRIO advances the NJTPA's mission by linking transportation planning with economic growth, environmental protection and quality of life goals for the region. A final report for the study is available on the NJTPA website, NJTPA.org.



For further information on FRIO, please contact Anne Strauss-Wieder at [strauss-wieder@njtpa.org](mailto:strauss-wieder@njtpa.org)

The preparation of this document has been financed in part by the U.S. Department of Transportation, North Jersey Transportation Planning Authority, Inc., Federal Transit Administration, and the Federal Highway Administration. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or its use thereof.