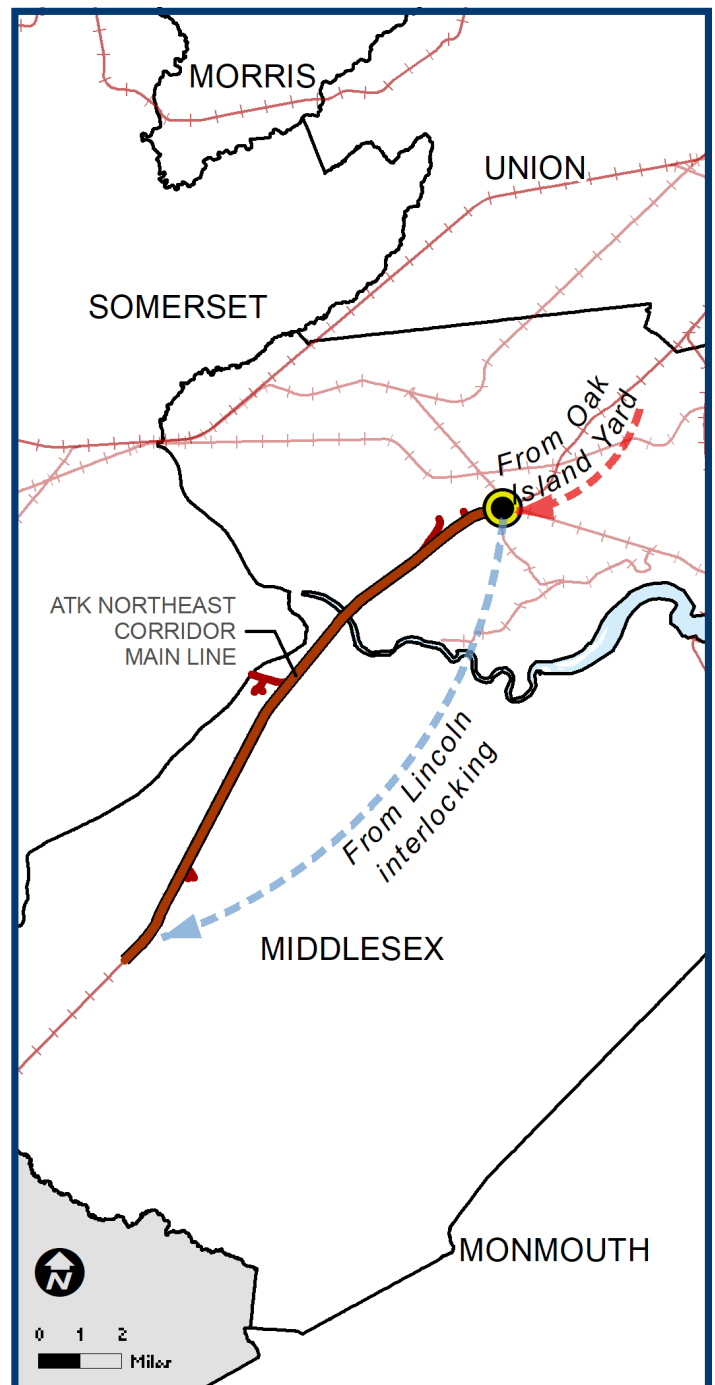


### Northeast Corridor

The Northeast Corridor consists of 15 miles of Amtrak’s Northeast Corridor main line through Middlesex County, along with 4 miles of connecting freight-only industrial tracks that branch off the main line to serve nearby warehouses, manufacturing facilities, and other sites. The Northeast Corridor is owned by Amtrak, which operates intercity passenger trains on the line at speeds of up to 135 miles per hour, and is used by NJ TRANSIT commuter trains. Local freight service on the Northeast Corridor is provided by Conrail, which owns the connecting freight-only branch lines. Conrail is North Jersey’s primary local freight railroad, and is jointly owned by the two large Eastern U.S. freight rail companies, CSX Transportation and Norfolk Southern. More than 100 Amtrak trains and more than 100 NJ TRANSIT trains per day use this section of the Northeast Corridor, between Metuchen, New Brunswick, and South Brunswick. The line is electrified with overhead catenary that provides power to the passenger trains. However, the 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 Northeast Corridor.

### How Freight Moves

The Northeast Corridor’s connection to the unrestricted rail network (where physical barriers no longer exist) is located at the Lincoln interlocking in Metuchen on Amtrak’s Northeast Corridor. Under an agreement signed in 2018, Amtrak has begun allowing 286,000-pound freight cars to operate on the Northeast Corridor north of Lincoln interlocking in Metuchen as far as Newark. Conrail local freight trains make daily trips on the Northeast Corridor to shuttle cars between the Oak Island Yard freight classification terminal in Newark and a local freight yard in Metuchen, off the Northeast Corridor and east of Lincoln interlocking. From the Metuchen yard, local freight trains re-enter the Northeast Corridor at Lincoln interlocking and operate south to serve customers between



Metuchen and South Brunswick. 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 Northeast Corridor has

4 identified weight restrictions, among 35 railroad bridges identified along the Amtrak-owned portion of the corridor. Data provided by Amtrak indicates that only the center two tracks of the four-track Northeast Corridor passenger line are cleared for 17-foot-high (Plate "F") rail cars. Estimated costs to alleviate these restrictions range from a low of \$0.4 million to a high of \$162.3 million.

## 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 Northeast Corridor include brick, food products, plastics, salt, and scrap metal. The Northeast Corridor has 14 identified rail freight customers that occupy approximately 228 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 Northeast Corridor with the potential for development or redevelopment after rail improvements were made total approximately 1,524 acres of land.

## Economic Impact of Modern Rail Car Access

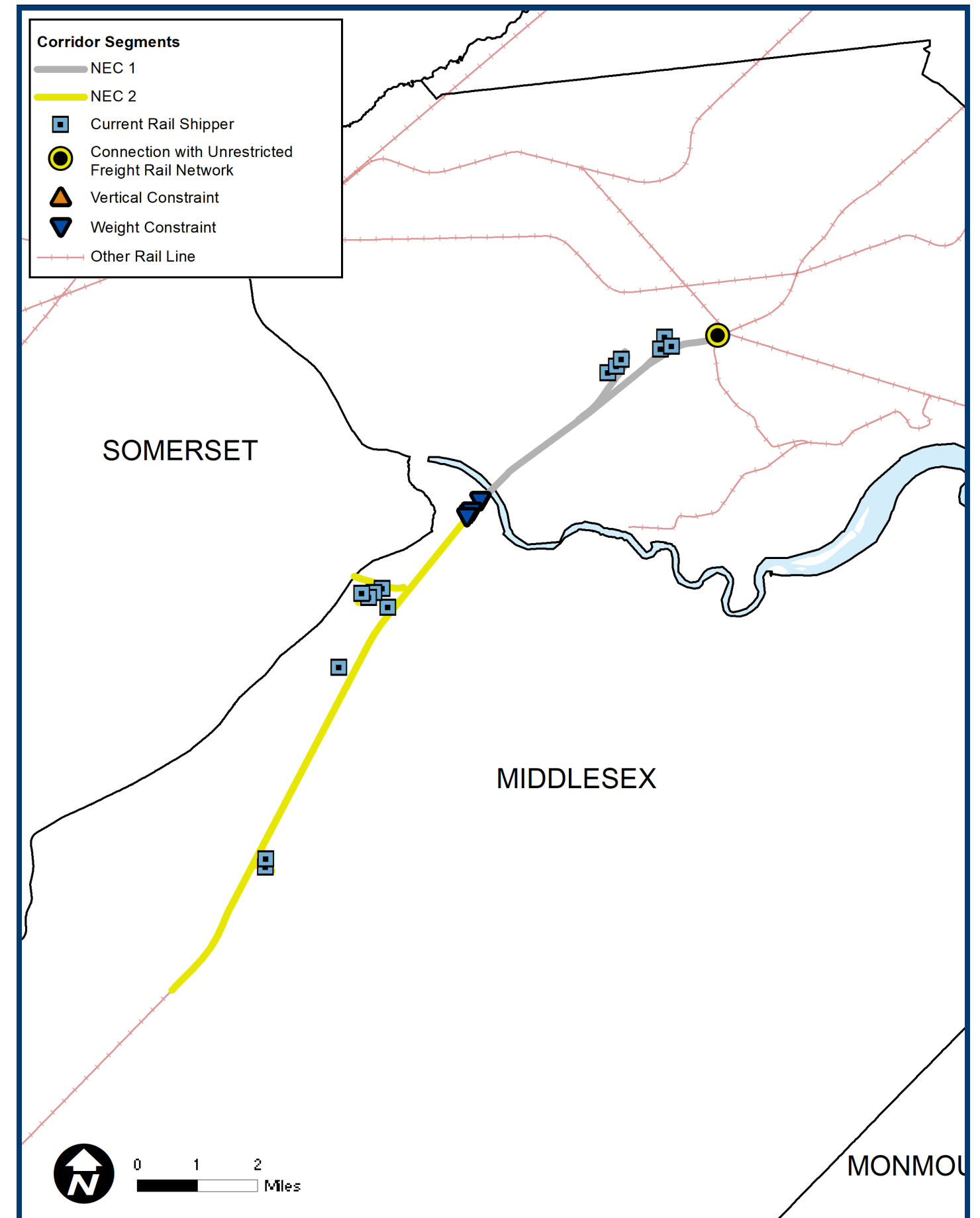
Based on the calculations of land occupied by both existing and potential rail customers, the NJTPA used a Multi-Regional Input-Output model to develop an economic impact assessment of the corridor, considering direct, indirect, and induced benefits that could accrue to municipalities, counties, and 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 Northeast Corridor is estimated to be more than \$1.3 billion.

## Northeast 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)
NEC 1	0	\$0.0 - \$0.0	\$0.0 - \$0.0	486	5,005	\$356.0
NEC 2	4	\$0.4 - \$162.3	\$0.4 - \$162.3	1,266	13,345	\$963.7
Total	4	\$0.4 - \$162.3	\$0.4 - \$162.3	1,752	18,350	\$1,319.7

## Northeast 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,

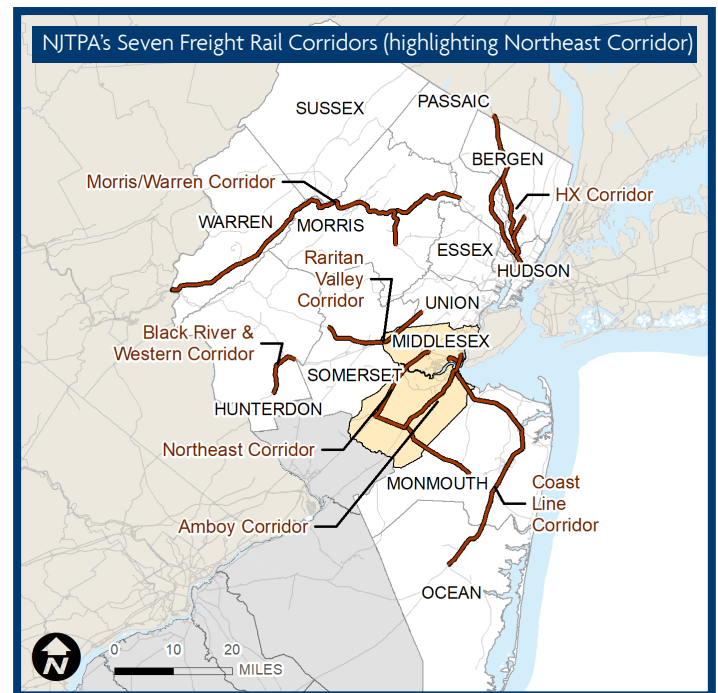
Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren—and the cities of Newark and Jersey City. The Board also includes a Governor's Representative, the Commissioner of the New Jersey Department of Transportation (NJDOT), the Executive Director of NJ TRANSIT, the 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](http://NJTPA.org).



**For further information on FRIO,  
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