

NJTPA Freight Rail Industrial Opportunity Corridors Program

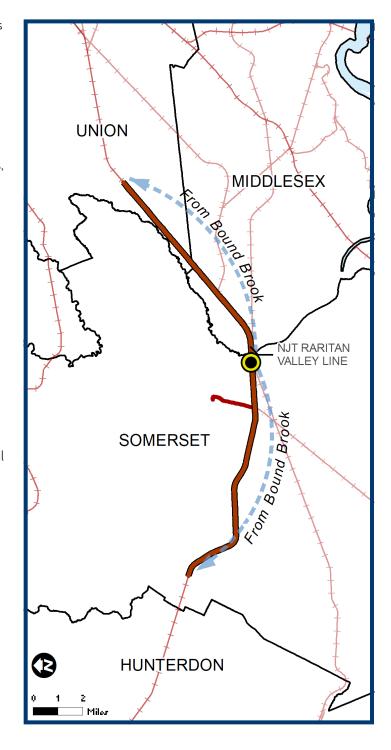
Raritan Valley Corridor Profile

Raritan Valley Corridor

The Raritan Valley Corridor consists of 19 miles of NJ TRANSIT's Raritan Valley Line between Plainfield and North Branch, along with a 2-mile connecting freight-only track in Bridgewater Township. Although primarily used as a commuter rail line, the Raritan Valley Corridor also has local freight rail service, which is provided by Conrail and Norfolk Southern. Conrail is 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. The Raritan Valley Corridor is located primarily in Somerset County, but also serves Middlesex County and Union County. The corridor has a high-density passenger rail operation with approximately 52 NJ TRANSIT trains per day. However, it 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 Raritan Valley Corridor.

How Freight Moves

The Raritan Valley Corridor's connection to the unrestricted rail network (where physical barriers no longer exist) is located at the Brook interlocking in Bound Brook on NJ TRANSIT's Raritan Valley Line. Local freight trains originate at a nearby rail yard in Manville, then operate on freight-only tracks until they reach the Raritan Valley Corridor at Brook interlocking. From there, trains can operate east or west as required to serve rail freight customers along the corridor. 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 Raritan Valley Corridor has 6 of these types of physical restrictions. Estimated costs to alleviate these restrictions range from a low of \$1.3 million to a high of \$23.5 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 Raritan Valley Corridor include plastics, chemicals, and aggregate. The Raritan Valley Corridor has 7 identified rail freight customers that occupy approximately 490 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 Raritan Valley Corridor with the potential for development or redevelopment after rail improvements were made total approximately 1,594 acres of land.

Economic Impact of Modern Rail Car Access

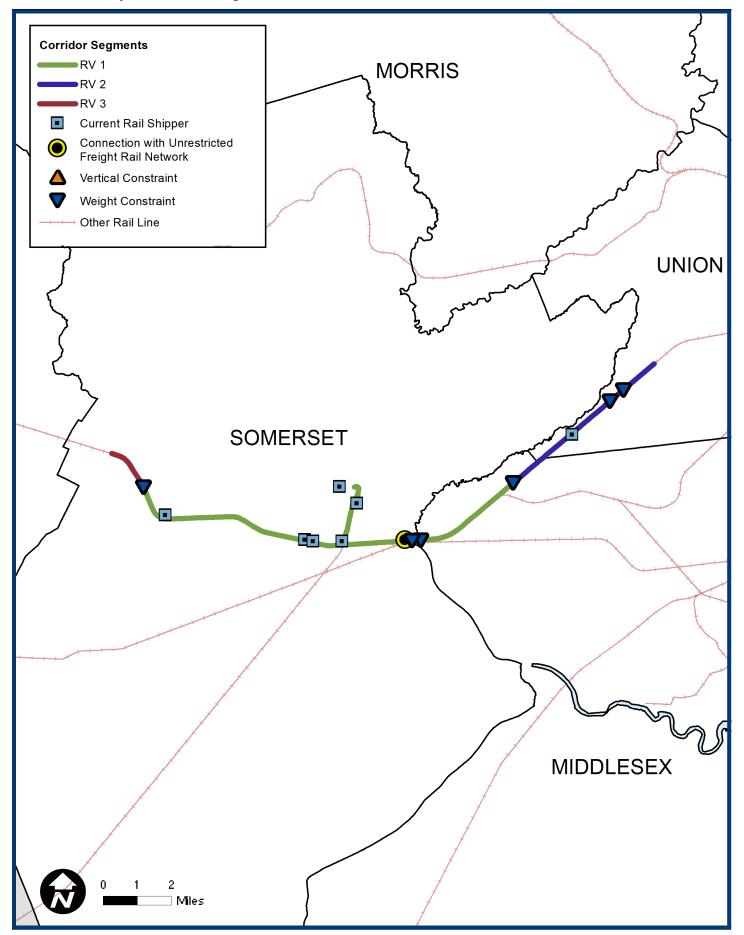
Based on the calculations of land occupied by both existing and potential rail customers, the NJTPA used a Multi-Regional Input-Output model to develop an economic impact assessment of the corridor, considering direct, indirect, and induced benefits that could accrue to municipalities, counties, and 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 Raritan Valley Corridor is estimated to be more than \$1.4 billion.

Raritan Valley 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)
RV 1	2	\$0.1 - \$5.3	\$0.1 - \$5.3	1,911	16,010	\$1,303.1
RV 2	3	\$0.1 - \$16.7	\$0.2 - \$22.0	65	700	\$50.6
RV 3	1	\$1.1 - \$1.5	\$1.2 - \$6.8	108	1,145	\$85.8
Total	6	\$1.3 - \$23.5		2.084	17.855	\$1,439.6

Raritan Valley 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,

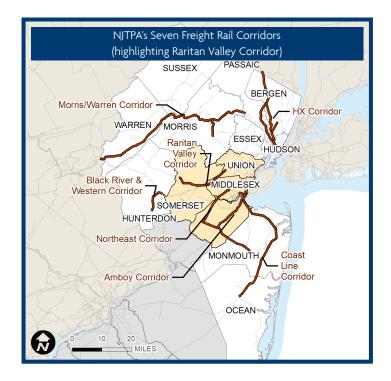
Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren—and the cities of Newark and Jersey City. The Board also includes a Governor's Representative, the Commissioner of the New Jersey Department of Transportation (NJDOT), the Executive Director of NJ TRANSIT, the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