

3.5 Freight Movement

A. INTRODUCTION

This section describes the characteristics of the existing rail freight services and railroad operators in the project area. Also addressed is the relationship between those services and Build Alternative long-term operations.

The study area contains several rail freight lines and yards that play key roles in the movement of goods to and from the Port of New York and New Jersey, the largest port on the east coast, as well as in the movement of goods vital to businesses and residents in multiple states. However, no long-term freight movement impacts are anticipated with the Build Alternative, and no mitigation measures will be required.

B. SERVICE TYPES

The following freight rail services are offered in the project area:

- **Containerized or “inter-modal”** consists primarily of containers or truck trailers moved on rail cars.

Intermodal rail traffic is considered the fastest growing rail freight market, and is anticipated to grow in the region between 3.9 and 5.6 percent annually through 2030, based on the NJTPA Freight System Performance Study (see **Table 3.5-1**).

Example of Doublestack Train with Maritime Containers



- **Carload traffic** consists of products that are typically moved in boxcars, hopper cars, tank cars, and special lumber cars over a long distance by rail, and then either transported directly by rail or shifted to truck for delivery to more local customers. The characteristics of these commodities (e.g., bulk, heavy or over-dimensional) make rail the preferred option for long-distance movement.

Examples of carload movements include “non-flowing,” such as steel, lumber, and paper and “flowing” commodities, such as corn syrup, petroleum products, and plastic pellets. When shifted between rail and truck for final delivery, non-flowing commodities are considered “transload” operations. “Transflo” operations refer to the shifting from rail to truck of flowing or bulk commodities.

Example of Carload Rail Traffic



In contrast to intermodal rail freight traffic, carload traffic is growing, but at a slower pace. Carload traffic is anticipated to grow by over 2 percent annually through 2030, based on the NJTPA Study.

- **“Automotive”** is the movement of vehicles in special cars, and another service offered by the freight railroads. In this FEIS, the NJTPA carload forecast is assumed applicable to automotive traffic. Note that some vehicles are moved in specially equipped containers and, when shipped in this manner, would be considered part of the intermodal traffic handled by the railroads.

TABLE 3.5-1: UNCONSTRAINED FREIGHT FORECASTS FOR NJTPA REGION – EXTRAPOLATED TO 2030

Mode	Type	Annual Growth	Base Year Volume (NJTPA Region)	Year 2030 Forecast
Rail (ExpressRail and private terminals)	All Container, Scenario 1	5.6%	1,827,734 TEUs (2003)	7,889,914
	All Container, Scenario 2	3.9%	1,827,734 TEUs (2003)	5,057,878
	Non-Container	2.4%	12,819,526 tons (2003)	24,574,752

Sources: Comprehensive Port Improvement Plan, USACE Harbor Navigation Study, NJDOT Portway Extensions, USDOT Freight Analysis Framework, NYMTC Regional Freight Plan, and Cambridge Systematics/Edwards and Kelcey/A. Strauss-Weider/Moffatt and Nichol

C. RAIL FREIGHT OPERATORS

NEW JERSEY

The rail freight system in the project area contains three components:

- **Northern New Jersey has access to three Class I railroads – CSX Transportation (CSX), Norfolk Southern (NS) and Canadian Pacific (CP).** As of 2005, the Association of American Railroads (AAR) defined Class I railroads as having operating revenues exceeding \$319.3 million annually.¹ These railroads may, in turn, “interline” or connect with the other Class I rail carriers in North America, including the Burlington Northern Santa Fe (BNSF), and the Union Pacific (UP).
- **Northern New Jersey is also served by Conrail Shared Asset Operations (CSAO) –** When Conrail was acquired by NS and CSX in 1997, the railroad was converted into a terminal switching railroad, operating trains for both CSX and Norfolk Southern and interfacing Class I railroads, port operators, and short-line railroads, as needed, in three shared asset areas – Northern New Jersey, Philadelphia/South Jersey and Detroit. Within each shared asset area, all customers can be served by both NS and CSX via Conrail. Conrail operates almost 200 miles of rail lines in the northern half of New Jersey. Operations are concentrated in Essex, Hudson, Middlesex, Monmouth, Ocean, and Union Counties. The hub of Conrail activities in the region is Oak Island Yard in Newark, with smaller local serving yards in Bayonne, Greenville (Jersey City), Linden, Manville, Metuchen, Newark, Old Bridge, Port Reading (Woodbridge), and Red Bank. In addition to providing local service for customers along the *shared assets* lines, Conrail also provides local freight service along Amtrak’s Northeast Corridor between Newark and Trenton, and operates an automobile distribution facility in Northern New Jersey for NS and CSX.²
- **Short-line, terminal and regional railroads.** Within or related to the project area, seven carriers exist: the East Jersey Railroad and Terminal Company in Bayonne; the Morristown and Erie Railway

¹ <http://www.aar.org>

² <http://www.conrail.com/freight.htm>

in Morris and Union Counties; New Jersey Rail Carrier LLC at the Columbia Terminal in Kearny; the New York New Jersey Rail LLC; the New York Susquehanna & Western Railway (NYS&W); the Port Jersey Railroad Company; and the Raritan Central Railway.

The NYS&W operates over 400 miles of track in New York, New Jersey, and Pennsylvania, and is 286,000-pound gross-weight-capable on all of its lines. NYS&W serves over 85 customers and transports a wide range of commodities, such as feed ingredients, lumber and other building materials, chemicals and aggregates for customers in New York State; and plastics, lumber, food products, paper products, motor vehicles, chemicals, aggregates, and metals in New Jersey and Pennsylvania.³ The railroad connects with three Class I railroads – CSX, NS, and CP.

Rail Freight Service on NJ TRANSIT-owned Lines. No freight services operate on NJ TRANSIT-owned lines in the project area, but they do operate on these lines outside of the project area. Systemwide, NJ TRANSIT reports that the amount of local and through freight service on its lines has steadily decreased over the last two decades, due to the decreased number of on-line shipper/receivers who utilize rail freight, and the restructuring of through train movement to lines owned by freight railroads. With the exception of the Raritan Valley Line, freight service on NJ TRANSIT lines operates outside peak commuter periods, as described below. NJ TRANSIT lines on which freight service currently operates include:

- **Pascack Valley Line:** Limited NS freight service operates north of Essex Street in Hackensack. Service south of that point is limited to a daily mid-day local. Controlled sidings are under construction at four locations. As part of that project, specific improvements are being implemented to accommodate additional freight service.
- **Main/Bergen County Lines:** Freight operations are limited to a daily freight train by NS that operates during the night between Croxton Yard and Campbell Hall. Local freight service has declined with a decrease in on-line shippers and receivers. NS also uses the Main/Bergen County lines to access the Newark and Suffern Industrial Tracks and the Paterson Yard. The Main/Bergen County lines have also experienced a decrease in freight traffic. Locals operating during mid-day and nighttime periods include:
 - *Suffern-Based Local* – covers the upper portion of the Main Line plus the industrial tracks mentioned above and Paterson Yard during the mid-day and nighttime period
 - *Croxton-Based Locals* – covers the Bergen County Line and the lower portion of the Main Line during the midday period

The capacity of Pascack Valley and Main/Bergen rail lines noted above has recently been increased with double-tracking and a three-track section between Ridgewood Junction and Waldwick. These upgrades provide increased passenger service and reduce conflicts between freight and passenger service.

- **Morris & Essex (M&E)/Montclair-Boonton Lines:** According to NJ TRANSIT, no through freight service is provided on these lines, and the NS sees only limited local service from Dover east to Summit and then continuing west on the Gladstone Branch to Berkeley Heights. The remaining portions of the M&E see no freight service except for an occasional crossover movement at Harrison between CSAO Center Street Branch and the Harrison Industrial by NS. The Montclair-Boonton Line sees limited local freight service by NS from Denville to Montclair. East of Montclair, no freight service is provided. The Morristown & Erie Railway Company has trackage rights over much of the M&E Lines, and operates daily between Baker and Chester Junction.

³ <http://www.nysw.com>

- **Raritan Valley Line:** The portion of the line owned by NJ TRANSIT no longer has any through freight service, and local service is greatly diminished. Freight service is provided by Conrail. Presently, nighttime service is provided west of Bound Brook two days a week and once a week to the east. NJ TRANSIT Raritan Valley Line trains also use a five-mile segment of the CSAO Lehigh Line. This segment is heavily used by both freight and commuter trains. NJ TRANSIT is reviewing options for adding capacity in this area.
- **North Jersey Coast Line:** Freight service on this line by Conrail is limited to local service, with the exception of a 1.8-mile section that Conrail uses to connect the Chemical Coast Secondary with the Amboy Secondary. Local freight service operates during mid-day and nighttime periods, and has been eliminated south of Red Bank.

HUDSON RIVER

The New York New Jersey Rail LLC, successor to the New York Cross Harbor Railroad, operates a railcar barge between Greenville Yards in New Jersey and Brooklyn, New York.

NEW YORK

Rail freight service in the New York metropolitan area is less extensive and more reliant on passenger transit lines than in New Jersey. New York City is served by CP, CSX, the New York New Jersey Rail LLC, the South Brooklyn Railway, and New York and Atlantic Railway.

In addition, PANYNJ has completed a new rail freight connection between the Chemical Coast rail line in New Jersey and a new rail yard in Staten Island, New York. CSX is providing intermodal and containerized waste movement from the new rail yard, connecting with the Chemical Coast in New Jersey.

PANYNJ and NYSDOT have undertaken a rail freight infrastructure improvement initiative to rehabilitate tracks and yards to allow the freight railroads to grow the East-of-Hudson market.

Amtrak's Empire Service operates on the east side of the Hudson River. CSX has freight operating rights on this line.

D. FREIGHT RAIL CAPITAL IMPROVEMENTS

NEW JERSEY

Rail freight is enjoying a renaissance, as the mode is increasingly used for long distance goods movement, as well as direct service to some industrial customers. Expansion in rail freight service is actively encouraged by public agencies as a means to mitigate regional highway congestion and air pollution. In New Jersey, a return to a multiple railroad freight system resulting from the acquisition of Conrail by CSX and NS, and a rapid increase in international freight at west coast and New York/New Jersey ports, has required more extensive and efficient inland rail freight connections. In response, the public and private sectors are investing capital to expand and improve the rail freight system in northern New Jersey, as detailed below:

- **The North Jersey Freight Rail Program:** A public/private effort by PANYNJ, CSX and NS to alleviate a series of bottlenecks for intermodal and carload trains serving northern New Jersey terminals.
- **New County Road:** An additional investment by PANYNJ to eliminate a grade crossing at the NS Croxton Yard in Secaucus, New Jersey by building a bridge to carry New County Road over the yard.

- **Port Newark/Elizabeth On-Dock Intermodal Rail Yards:** PANYNJ is completing a new ExpressRail facility between the Maher and Maersk Terminals in Port Elizabeth, including an additional track. The expanded facility will handle the increase in inland movement of international marine containers. Introduction and development of on-dock rail service at the Port Newark Container Terminal (PNCT), referred to as ExpressRail Newark, is also underway.

HUDSON RIVER

The New York City Economic Development Corporation (NYCEDC), in coordination with the FHWA and FRA, has completed a DEIS for the Cross Harbor Freight Movement Project in April 2004. An FEIS was not issued. The DEIS evaluated alternatives to improve freight movement with the development of a rail freight tunnel under the Hudson River and the New York Harbor. The project is now in the process of being transferred to PANYNJ.

NEW YORK

Several rail freight improvement initiatives are underway or have been completed in New York City:

- **The New York State/Port Authority Rail Freight Initiative:** A jointly funded program by PANYNJ and NYSDOT to increase rail car clearances and rehabilitate tracks and yards in strategic locations to accommodate additional rail freight traffic east of the Hudson River.
- **On-Dock Intermodal Yard on Staten Island:** As referenced previously, PANYNJ has completed a new ExpressRail yard adjacent to the New York Container Terminal in Staten Island. The yard is served by CSX.
- **Expanded and Reactivated Service on Staten Island:** PANYNJ and the NYCEDC have completed a new connection between the new ExpressRail yard and Arlington Yard, replaced three older wooden rail bridges, and rehabilitated rail freight track on Staten Island that will provide connections to Visy Paper, VanBro Corp and other industrial users in the borough. Containerized municipal solid waste is being shipped by CSX from Staten Island via the new Chemical Coast connection.

E. LONG-TERM IMPACTS OF THE BUILD ALTERNATIVE

Once the Build Alternative would be implemented, commuter rail service would increase and additional passenger train operations would occur. No plans exist to increase freight service on NJ TRANSIT lines. If any of these lines eventually would carry freight service, scheduling requirements and potential conflicts between these types of rail service would occur. Passenger rail needs for track slot availability during conventional peak AM and PM periods would need to be reconciled with freight delivery needs of the varied clients along the respective rail lines. Many freight clients are unable to receive shipments in off-peak or nighttime hours, because of the shift arrangements of their employees, requirements of freight forwarders to and from these clients' factories or warehouses, and the nature of the commodity being shipped—fresh produce compared to non-time-sensitive goods, for example. In this regard, existing agreements with freight railroads relative to operations would need to be amended.

F. MITIGATION

No long-term freight movement impacts are anticipated with the Build Alternative; therefore, no mitigation will be required.