# **CROSS HARBOR FREIGHT PROGRAM**

# Draft Scoping Document Tier 1 Environmental Impact Statement





THE PORT AUTHORITY OF NY & NJ

# DRAFT SCOPING DOCUMENT

# Cross Harbor Freight Program Tier I Environmental Impact Statement

# A. INTRODUCTION

The Federal Highway Administration (FHWA) and the Port Authority of New York and New Jersey (PANYNJ) are preparing an Environmental Impact Statement (EIS) to evaluate alternatives to improve the movement of goods in the region by enhancing the transportation of freight across New York Harbor. The Cross Harbor Freight Program EIS will analyze alternatives that would provide near-term and long-term strategies for improving the regional freight network, reducing traffic congestion, improving air quality, and providing economic benefits.

FHWA and PANYNJ are serving as co-lead agencies for the preparation of the EIS, with New York State and New Jersey Departments of Transportation (NYSDOT and NJDOT) serving as cooperating agencies. The development of this EIS began with the publication of a Revised Notice of Intent (NOI) in the Federal Register on May 13, 2010. The notice revised the original NOI published on June 7, 2001. The revision included a change in project sponsorship to the PANYNJ and the intent of FHWA and PANYNJ to use a tiered process to facilitate project decision-making. A more detailed description of the tiering process is described below.

FHWA and PANYNJ are now undertaking an extensive public scoping process to assure that the full range of issues related to the proposed action is addressed in the Tier I EIS and all significant issues and potential adverse impacts are identified. The Draft Scoping Document has been issued to frame the environmental review to solicit public and agency input regarding the project alternatives and environmental issues currently under consideration in the EIS. This Draft Scoping Document outlines the project's purpose and need, the goals and objectives, the project study areas, the alternatives that will be studied in Tier I of the EIS, and introduces the methodologies by which environmental, economic, and transportation impacts will be assessed. The full extent of the process and methodology that will be used to evaluate alternatives and prepare the EIS, and all supporting analyses can be found in the report, *Cross Harbor Freight Program Environmental Impact Statement (EIS) Methodology*, being issued concurrently with the Draft Scoping Document. The *Cross Harbor Freight Program Needs Assessment* is also being issued concurrently with the Draft Scoping Document.

PANYNJ is leading outreach activities during the public scoping process, and will conduct a series of public scoping information sessions to solicit input on the Draft Scoping Document, the *Needs Assessment*, and the *EIS Methodology*. Five public scoping information sessions have been scheduled:

#### **Cross Harbor Freight Program**

# Bronx, New York

Tuesday, October 5, 2010, 6:00PM – 8:00PM Bronx Borough Hall Veteran's Memorial Hall, 1st Floor (located on the main level) Bronx Supreme Court 851 Grand Concourse Bronx, NY 10451

# Newark, New Jersey

Thursday, October 7, 2010, 1:00PM – 3:00PM NJTPA One Newark Center, 17th Floor Newark, NJ 07102

# Jersey City, New Jersey

Thursday, October 7, 2010, 6:00PM – 8:00PM City Hall 280 Grove Street, 2nd Floor—Chambers Jersey City, NJ 07302-3610

#### Brooklyn, New York

Tuesday, October 12, 2010, 6:00PM – 8:00PM Brooklyn Borough Hall 209 Joralemon Street—Courtroom Brooklyn, NY 11201

# Queens, New York

Wednesday, October 13, 6:00PM – 8:00PM Queens Borough Hall 120-55 Queens Boulevard—Room 213 Jamaica, NY 11424

FHWA and PANYNJ invite the general public and interested groups to participate in the scoping process. Comments are encouraged and may be provided in writing either at the public scoping information sessions, via email to <a href="mailto:feedback@crossharborstudy.com">feedback@crossharborstudy.com</a> or in writing to the following address:

Cross Harbor Freight Program c/o InGroup, Inc. PO BOX 206 Midland Park, NJ 07432

The public comment period will remain open until November 15, 2010.

# REGULATORY CONTEXT

The Tiered EIS will be prepared in accordance with the provisions of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.) of 1969 and all applicable FHWA regulations for implementing NEPA, as set forth in 23 CFR Part 771. The Tier I EIS will utilize FHWA Guidance for Preparing and Processing Environmental and Section 4(f) Documents (October 30, 1987). The EIS will also address the provisions of Section 6002 of Public Law 104-59, "The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

(SAFETEA-LU)" and will utilize FHWA Final Guidance on the SAFETEA-LU Environmental Review Process (Public Law 109-59; November 15, 2006).

In addition, the Tier I EIS will comply, as necessary, with:

- Federal Transportation Conformity regulations (40 CFR 51 and 93).
- Section 4(f) of the U.S. Department of Transportation Act of 1966, as amended.
- Section 106 of the National Historic Preservation Act of 1966.
- Executive Order 12898 ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations").
- Executive Order 11990 ("Protection of Wetlands").
- Clean Water Act (33 USC §§ 1251 to 1387), Sections 401 and 404.
- Coastal Zone Management policies. The Coastal Zone Management Act of 1972 (16 USC §§ 1451 to 1465) requires that activities within a state's coastal zone be consistent with that state's coastal zone management plan. The New Jersey Department of Environmental Protection (NJDEP) administers New Jersey's coastal zone management program under N.J.A.C. Section 7:7E, Coastal Zone Management Policies. The New York State Department of State (NYSDOS) administers the New York State Coastal Zone Management Program, which, in turn, encourages local governments to adopt local waterfront revitalization programs. The New York City Department of City Planning (NYCDCP) administers the New York City Waterfront Revitalization Program.

#### TIERED ENVIRONMENTAL IMPACT STATEMENT

The Cross Harbor Freight Program EIS is being conducted using "tiering," as described in 40 CFR 1508.28, which is a staged process applied to the environmental review of complex projects. The EIS will consist of two tiers: Tier I of the EIS allows the agencies to focus on general transportation modes and alignments for the proposed action, including logical termini and regional economic and transportation effects. Tier I of the EIS includes: a logistics and market demand analysis; a rail and highway operations and networks analysis; an economic and financial analysis; a capital investment estimation for each alternative; an operations and maintenance cost estimation for each alternative; a transportation analysis; and environmental impact assessments.

Tier I of the EIS will result in a Record of Decision (ROD) that will identify the transportation mode or a combination of mode(s) and alignment(s) for the proposed action, with the appropriate level of detail for corridor-level decisions. The ROD will also outline measures that are intended to avoid, minimize, or mitigate adverse impacts from the selected Build Alternatives. Tier II of the EIS will then explore in greater detail those alternatives that fulfill the project purpose within the mode(s) and alignment(s) chosen in Tier I, and will include analyses based on engineering designs and site-specific environmental impacts, development of site-specific mitigation measures, and cost estimates for the Preferred Alternatives as appropriate. Input from the public and from reviewing agencies will be solicited during both tiers.

# **B. PROJECT PURPOSE AND NEED**

The greater New York/New Jersey/Connecticut region is the financial center of the United States economy, the nation's largest consumer market, and a major hub of entertainment, services, fashion, and culture. The region receives, processes, and distributes raw materials, intermediate

products, and finished consumer goods, which move to and from the rest of the United States and countries around the world.

The region's highway system, especially the bridge and tunnel crossings and connecting routes, suffers from significant peak period congestion which continues to expand in duration beyond the typical hours. Planned highway improvements will address some chokepoints, but will not significantly alleviate congestion. Because the region is so dependent on trucking, highway congestion has a tremendous impact on freight movement—it increases the costs and environmental impacts, while decreasing reliability, speed, and safety of goods movement. By 2035, total freight tonnage into, out of, and within the region is expected to grow by approximately 26 percent. With future growth in freight and passenger movement, vehicle miles of travel (VMT) will increase, and the current truck-related impacts and inefficiencies will grow.

Overall, the region has a well-developed freight rail system, but it is far better developed west of the Hudson River than it is east of the Hudson River. Many historic and geographic reasons account for this condition, including that critical rail connections to the east-of-Hudson market are remote, inefficient, or have capacity restrictions, but the result is that east-of-Hudson counties are far more dependent on highway transportation for moving freight. For all surface transportation tonnage, east-of-Hudson counties have a rail share of just 1.6 percent, which is significantly lower than the west-of-Hudson counties rail share of 6.7 percent and the national average of 4.2 percent.

The primary purpose of the project is to improve the movement of freight across New York Harbor between the east-of-Hudson and west-of-Hudson regions. A detailed analysis of the need for the project can be found in *Needs Assessment*, being issued concurrently with the Draft Scoping Document. A glossary of terms pertaining to freight can be found in Appendix B.

# C. PROJECT BACKGROUND

#### PROJECT HISTORY

Several previous studies have been conducted to examine possible alternatives to improve freight movements across the Hudson River and New York Harbor. The Cross Harbor Freight Movement Major Investment Study (MIS), commissioned by the New York City Economic Development Corporation (NYCEDC) and completed in 2000, identified alternatives and strategies to improve regional freight mobility; expand shippers' choices of route and mode; enhance the region's environmental quality; and promote regional economic development. Fifteen alternatives—involving highway, rail, waterborne, and air systems, and a combination of these modes—were initially evaluated, with the most promising strategies advanced to a subsequent phase of refinement and evaluation. Four alternatives were advanced for study in a Draft EIS, which was published in April 2004 by FHWA and the Federal Railroad Administration (FRA), acting as co-lead agencies, and NYCEDC, acting as the project sponsor. The 2004 Draft EIS considered: a No Action Alternative; a Transportation Systems Management (TSM) Alternative; an Expanded Float Operations Alternative, which involved the expansion of capacity for the existing railcar float system across New York Harbor; and a Rail Freight Tunnel Alternative with two possible alignments and two potential tunnel designs.

The 2004 DEIS was the subject of public hearings in May and June in 2004 and an extended public comment period, with many substantive submittals by public agencies as well as stakeholder interests. Subsequent to the hearings, NYCEDC suspended active work on the DEIS.

In 2007 the Board of Commissioners of the Port Authority authorized the agency to assume responsibility for completion of the environmental review process. PANYNJ is the region's bistate transportation agency, and the agency that controls the cross harbor connections between New York and New Jersey. PANYNJ's mission to identify and meet the critical transportation infrastructure needs of the bi-state region uniquely positions the agency to direct the Cross Harbor Freight Program.

#### **CURRENT PLANNING CONTEXT**

In addition to PANYNJ, a number of planning and transportation agencies in the greater New York/New Jersey/Connecticut region continue to identify the need for improved freight transportation in the region, and are studying (or have previously studied) strategies to alleviate congestion in the region's major freight corridors.

#### NEW YORK METROPOLITAN TRANSPORTATION COUNCIL

The New York Metropolitan Transportation Council (NYMTC) is an association of governments and transportation providers that serves as the metropolitan planning organization (MPO) for ten counties comprising New York City, Long Island, and the lower Hudson Valley. NYMTC explores transportation-related issues from a regional perspective, develops long-range transportation plans and decides on the use of federal transportation funds. In recognition of the importance of streamlined freight movement to regional goals and objectives, NYMTC created a members' Freight Committee and a public Freight Transportation Working Group (FTWG) and developed a Regional Freight Plan. The Plan points out that the region suffers from a high level of congestion that "impacts the predominant mode of freight travel in the region—trucks," increasing the cost of living for residents and the cost of freight services for businesses. This congestion is a result of poor intermodal coordination, modal dependence (on highway infrastructure), and infrastructure and operational limitations (including vertical and horizontal clearances). The plan lays out strategies for improving regional freight movement, which include reducing barriers to east-of-Hudson rail service (via clearance and operational improvements), expanding east-of-Hudson yard facilities, and exploring expanded or new harbor crossings.

# NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

The North Jersey Transportation Planning Authority (NJTPA) is the MPO for a 13-county northern New Jersey region, comprising Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren Counties. NJTPA also has an active Freight Initiatives Committee chaired by a Board Member. NJTPA has recently adopted *Plan 2035: The Regional Transportation Plan for Northern New Jersey*, its federally mandated long-range transportation plan. Plan 2035 states that growth in population and freight—which is expected to double or more than double by 2035, in spite of the country's economic recession—places heavy demands on the region's roads and rails. The plan "recognizes the importance of freight to the region's economy, and calls for investments and policies that will help the region handle a projected doubling of cargo with multiple transportation modes, including more efficient truck shipment and a greater role for rail, air, and marine freight."

#### NEW YORK STATE DEPARTMENT OF TRANSPORTATION

NYSDOT—charged with ensuring the state's safe, efficient, balanced, and environmentally sound transportation system—prepares the state's transportation plan. The most recent plan, *Strategies for a New Age: New York State's Transportation Master Plan for 2030*, acknowledges that the "reliability and predictability of the freight transportation system is essential to the health of the State's and the nation's economy," and that congestion and capacity constraints are problems that must be addressed to keep New York State freight terminals' cost and service competitive. The plan also advocates corridor-based transportation management, designating the New York Harbor crossing as one of the primary New York State Trade Corridors. Two years ago, NYSDOT completed a comprehensive statewide Rail Plan that encompasses passenger and freight conditions and state policy objectives.

# NEW JERSEY DEPARTMENT OF TRANSPORTATION

NJDOT developed its first Comprehensive Statewide Freight Plan in 2007. The plan confirms that congestion, bottlenecks, and other system deficiencies on the state's major freight corridors—which include I-78, the New Jersey Turnpike, I-80, I-287, I-295, and Route 17—negatively impact users of the transportation system in New Jersey. The plan recommends that NJDOT undertake a multi-modal corridor study of these primary freight corridors to encompass land use, Intelligent Transportation Systems (ITS), modal alternatives, and shifting freight to off-peak periods. This study, currently underway, would be used to identify maintenance and capital projects within the major freight corridors that would have positive implications on freight and commuter travel.

# D. GOALS AND OBJECTIVES

The primary purpose of the project is to improve the movement of freight across New York Harbor between the east-of-Hudson and west-of-Hudson regions. A project's goals and objectives are the foundation of its purpose and need under NEPA. They are used as the basis for developing the criteria and methodology for evaluating the project alternatives. Four goals have been established for the Cross Harbor Freight Program. These goals are intended to remedy some of the problems stated in the *Needs Assessment* described earlier. Objectives have also been identified that further define the goals and provide specific and measurable means by which to evaluate and compare project alternatives. The four project goals and respective objectives are as follows:

# GOAL 1: Reduce the contribution of Cross Harbor trucks trips to congestion along the region's major freight corridors relative to no build conditions. Objectives:

- a. Reduce the vehicle miles traveled by freight trucks which cross the Hudson River.
- b. Reduce the travel-time and delay on regional highway network.
- c. Maximize efficient use of available capacity on existing transportation infrastructure.
- d. Maintain or improve regional rail network performance.

# GOAL 2: Provide Cross Harbor freight shippers, receivers, and carriers with additional, attractive modal options to existing interstate trucking services. Objectives:

a. Increase the number of modal options available for Cross Harbor freight transportation.

b. Provide modal options and choices that offer attractive and competitive performance, consistent with business requirements.

# GOAL 3: Expand facilities for Cross Harbor goods movement to enhance system resiliency, safety and security, and infrastructure protection. Objectives:

- a. Provide Cross Harbor freight facilities and services that improve system redundancy and resilience in the event of a major interruption of service on existing interstate highway corridors serving the region.
- b. Support contingency planning for emergency alternative Cross Harbor goods movement operations.
- c. Reduce the number of freight vehicle-related accidents.
- d. Develop effective alternative options for transporting overweight/non-standard cargo to support infrastructure protection for regional bridges and highway network.

# **GOAL 4:** Support development of integrated freight transportation/land use strategies. Objectives:

- a. Maximize underutilized freight transportation infrastructure and related land uses.
- b. Support services to existing freight distribution centers in the region.
- c. Integrate rail freight services with local land use and transportation planning objectives.
- d. Integrate rail freight development with statewide freight and passenger rail plans.

# E. PROJECT STUDY AREAS

To fully understand the origin and content of freight entering the New York/New Jersey/Connecticut region, and to forecast its future conditions, the Tier I EIS is modeling goods movement in a 54-county multi-state area (depicted on Figure 1) comprising portions of southern New York, northern and central New Jersey, western and southern Connecticut, and a portion of eastern Pennsylvania. The counties of this modeling study area have been selected by PANYNJ to reflect the following:

- PANYNJ core planning region, which includes the five boroughs of New York City (Bronx, Kings, New York, Queens, and Richmond Counties), Long Island (Nassau and Suffolk Counties), lower Hudson Valley (Westchester and Rockland Counties), and northern New Jersey (Passaic, Bergen, Morris, Essex, Hudson, Union, Somerset, and Middlesex Counties)
- Surrounding counties that are also part of NYMTC and NJTPA planning regions
- Counties that accommodate truck/rail terminals and freight corridors that are important in serving the region
- Additional counties that accommodate important Hudson River crossings that are or may be used to bypass infrastructure in the core planning region.

Framed by this understanding of freight flows into, out of, within, and through the larger 54-county area, the Tier I EIS analyses will focus on impacts to the regional study area depicted in Figure 1. This regional study area comprises counties served by NYMTC, which encompasses New York City, Long Island and the lower Hudson Valley, and NJTPA, which serves 13 counties in northern New Jersey and the cities of Newark and Jersey City. The regional study area includes: major interstate highways leading to the existing cross harbor connections (I-278, I-495, I-95); a number of highways serving northern New Jersey (such as New Jersey Turnpike/I-95, I-78, I-80, and I-287); and many state and local routes that are important for local

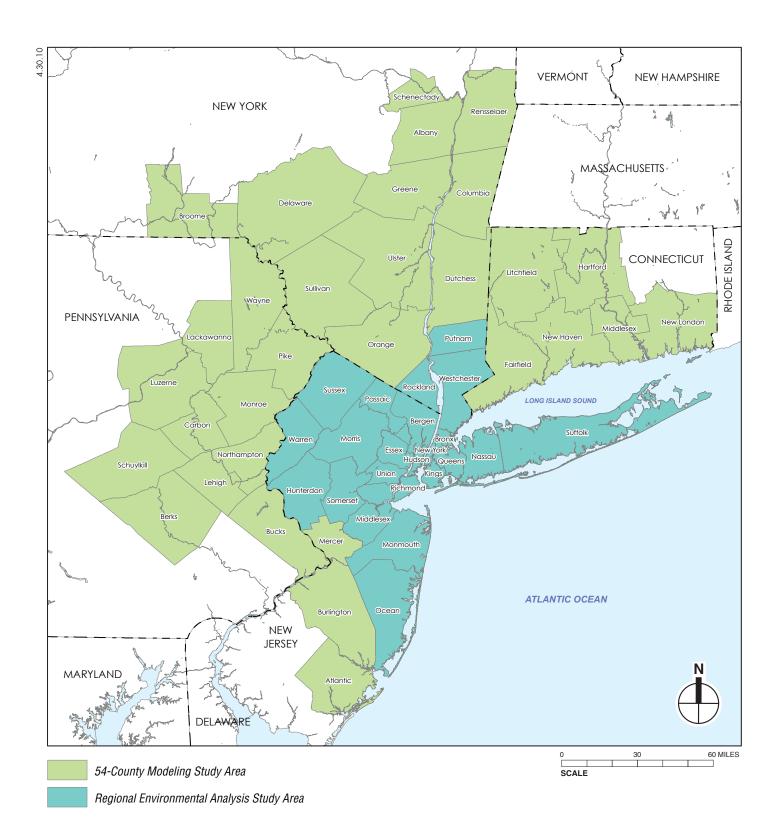


FIGURE 1
Study Areas
CROSS HARBOR FREIGHT PROGRAM

freight movement (see Figure 2). The Tier I EIS will also investigate major freight rail lines and facilities west of the Hudson River (such as lines within the Consolidated Rail Company (Conrail) Shared Assets Area, the CSX River Line, the Norfolk Southern Lehigh Line, Chemical Coast Line and important rail yards at Croxton, Kearny, Oak Island, Greenville, Port Newark/Elizabeth in New Jersey), as well as strategic rail assets east of the Hudson River, which may be affected by the proposed alternatives (such as the 65th Street Yard, the Bay Ridge Branch, Montauk Branch, Oak Point and Harlem River yards, and railcar float facilities at 51st and 65th Streets in Brooklyn; see Figure 3). The extent of the regional study area may be refined as project elements are defined and freight traffic demand modeling is conducted, and will be confirmed as appropriate for each technical analysis.

While much of the Tier I EIS is focusing on broad, corridor-level impacts, some analyses require an evaluation of local impacts from proposed or altered rail yards, rail lines, and/or intermodal facilities. An understanding and assessment of the local effects of the proposed alternatives is necessary, since a complete description of any proposal requires a discussion of specific project elements—e.g., rail yards, track and structural improvements, marine infrastructure, ventilation systems, and roadway improvements—that may result in adverse social and environmental effects on local communities. These adverse effects and the ability to avoid, minimize or mitigate them could influence the ultimate selection of a Preferred Alternative(s). Therefore, the study areas for the evaluation of local impacts will depend greatly on the elements of each specific alternative and, to a lesser extent, on the environmental analysis in question. For each analysis in the Tier I EIS, appropriate local study areas will be identified before each analysis, for each potential project site, and will likely vary among alternatives. The EIS Methodology describes the methodology by which local study areas will be chosen.

# F. ALTERNATIVES

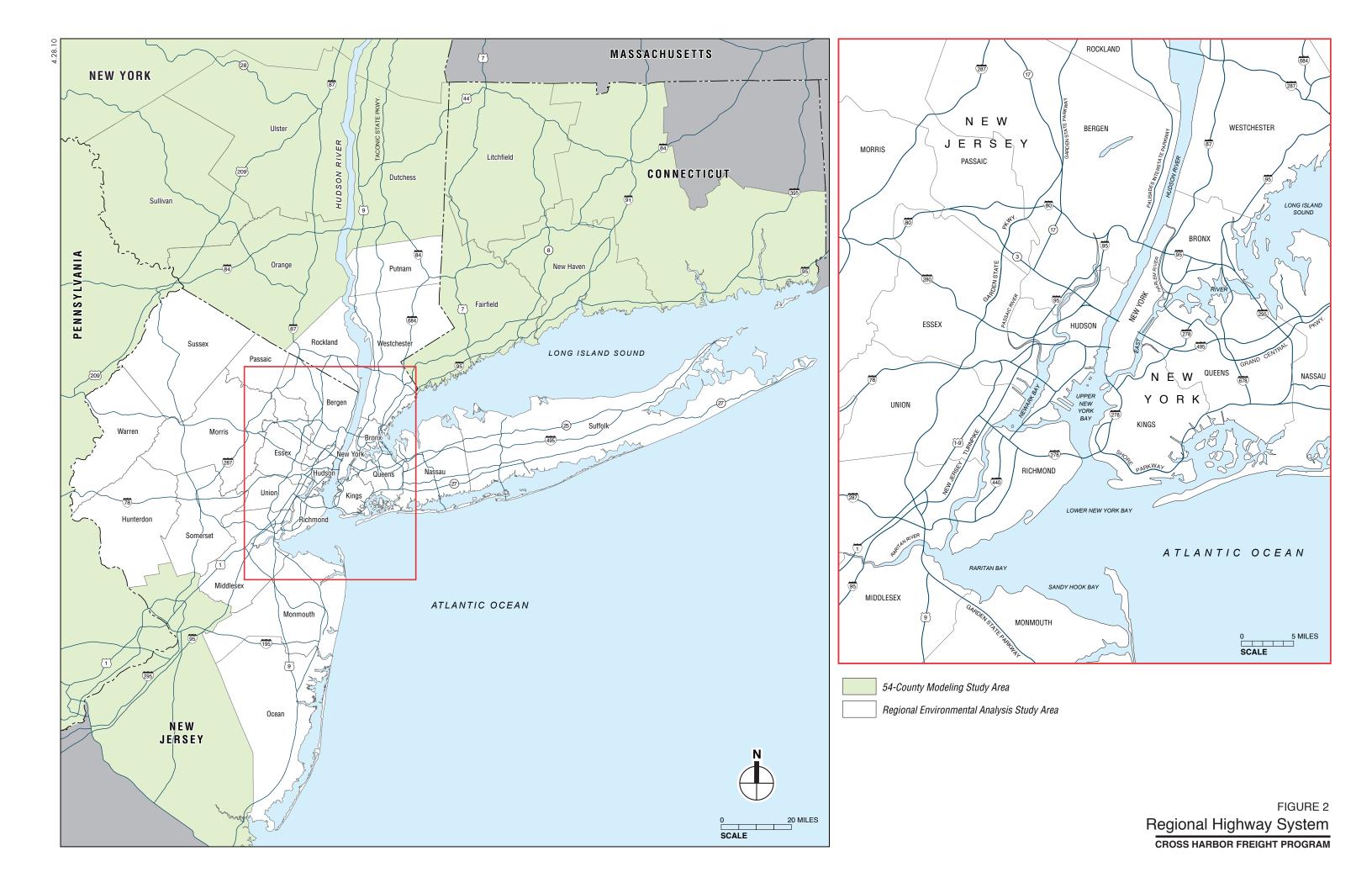
As described in *EIS Methodology*, the alternatives evaluation process begins with a long list of alternatives comprising combinations of freight movement methods and existing or potential facility locations. This universe of project alternatives is appropriate for a Tier I EIS, which aims to select a mode, alignment, and logical termini for the proposed action. The alternatives included in the long list generally fall into the following three classes:

- 1. No Action Alternative
- 2. Management Alternatives TSM and Transportation Demand Management (TDM)
- 3. Build Alternatives Float/Ferry Alternatives, Rail Tunnel Alternatives, and Rail/Vehicle Tunnel Alternatives.

The Build Alternatives may also include a combination of float/ferry and tunnel elements, possibly phased over a period of time. Some alternatives may be eliminated, modified, or combined as a result of agency or public comments received during the scoping process, or as the list of alternatives is moved though the various screening and analysis steps described in the *EIS Methodology*.

#### NO ACTION ALTERNATIVE

The No Action Alternative includes projects that are currently programmed, planned, or reasonably expected for the study area, independent of the Cross Harbor Freight Program.





- For highways, it includes improvements represented in the year 2035 "existing and committed" Build scenarios from NYMTC and NJTPA regional highway transportation models, as well as any project updates or adjustments identified by NYMTC, NYSDOT, NJTPA, NJDOT, or other responsible agencies.
- For rail, it includes any remaining improvements on PANYNJ east-of-Hudson and west-of-Hudson rail program lists that have not been constructed; other "independent utility" projects being advanced by PANYNJ, particularly at Greenville Yard; programmed or planned rail improvements with the participation of NJDOT or NYSDOT; and anticipated improvements from the region's freight and passenger railroads.
- Port projects may also impact the generation and/or distribution of truck and rail traffic within the region; therefore, these projects should also be defined for purposes of the No Action Alternative to enable highway and rail network models to be "tuned" accordingly.

To arrive at a list of No Action Alternative projects for the Tier I EIS, the No Action rail and other elements described in the 2004 Cross Harbor Freight Program DEIS served as a starting point. These elements (projects) were discussed with representatives of PANYNJ, NJTPA, and NYMTC, with agreement sought as to their status: completed and in operation; under construction; not constructed, but probably implemented by 2035; and not likely to be implemented by 2035. These agencies also identified other rail projects in the study area, from the respective State Rail Plans or other sources, which would be implemented by 2035 by NJDOT, NYSDOT, freight and passenger railroads, or PANYNJ.

Also reviewed were the NJTPA and NYMTC long-range transportation plans dealing with roadway improvements, and the assumptions regarding these planned or programmed improvements that were input to their respective transportation models. Meetings with these two agencies were again held to confirm the modeling assumptions. Also investigated with PANYNJ were any port or airport projects that could impact the generation and/or distribution of truck and rail traffic within the region. Based on this interactive process, a potential list of projects that will comprise the No Action Alternative has been compiled and is included in Appendix A. Figure A-1 depicts railroad projects in New York and New Jersey and Figure A-2 depicts highway projects.

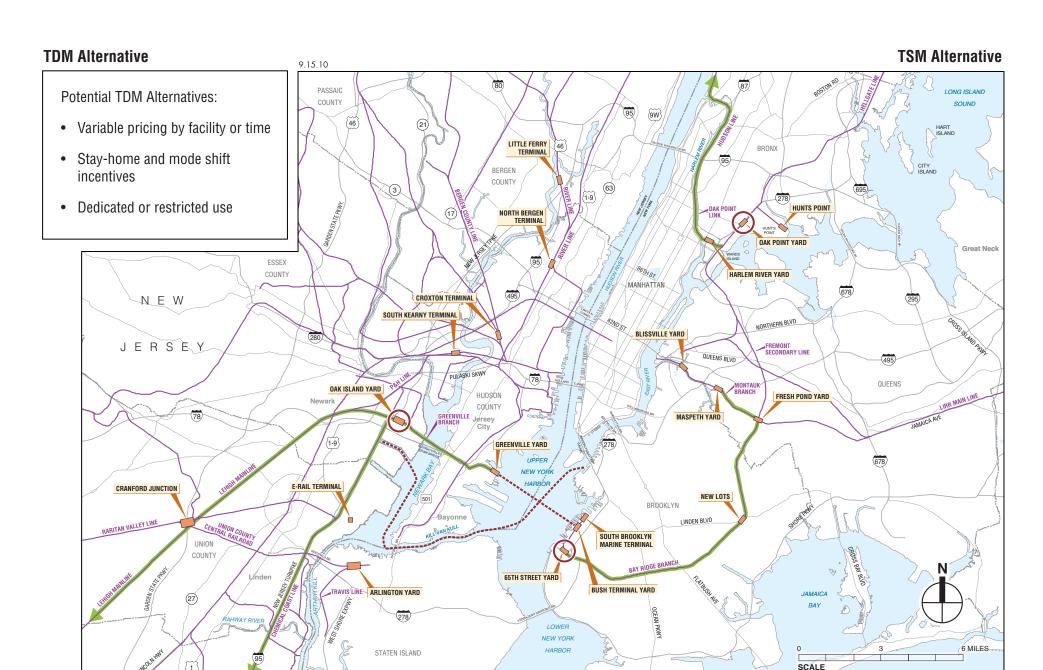
# MANAGEMENT ALTERNATIVES

#### TRANSPORTATION SYSTEM MANAGEMENT

TSM aims to maximize the utilization and efficiency of the existing transportation network with relatively low-cost improvements that can improve its functional capacity. These improvements would provide additional freight movement capacity beyond those committed projects that are included in the No Action Alternative described above.

In relation to the above definition, the TSM alternative could include (see Figure 4):

- Increased capacity of the Oak Island Rail Yard in Newark, NJ with additional tracks.
- Improvements to the existing Lehigh Valley Line, beyond the improvements that are proposed by NJDOT.
- Additional improvements to the Chemical Coast Line in New Jersey, in the vicinity of its junction with the Staten Island Rail Line, including increased storage capacity along the tracks.



------ Freight Rail Line
------ Potential Float Improvement

Potential Railroad Improvement

Potential Rail Yard Improvement

FIGURE 4

- Improved rail freight movement along the Hudson Line through better coordination of rail operators using the line, as well as upgraded signaling to enable tighter spacing between trains.
- Upgrading the existing rail bridge at Selkirk, NY, some 140 miles north of New York Harbor.
- Upgrading the existing railcar float service between Greenville Yard in Jersey City and 51st Street rail yard in Brooklyn, including rehabilitation of two Greenville float bridges and new track work in Greenville Yard.
- Upgrading the existing container float (the Red Hook Container Barge) between American Stevedoring facilities at Red Hook, Brooklyn, and Port Newark.
- Improving the existing rail yard at 65th Street in Brooklyn, and service to and from the 65th Street float bridge.
- Track and signal improvements to the Bay Ridge Branch and Montauk Branch rail lines.
- Expansion of intermodal facilities at the Oak Point Yard in the Bronx.
- Consideration traffic management strategies for vehicular crossings and connecting roadway corridors related to existing truck crossings, particularly Intelligent Transportation Systems applications.

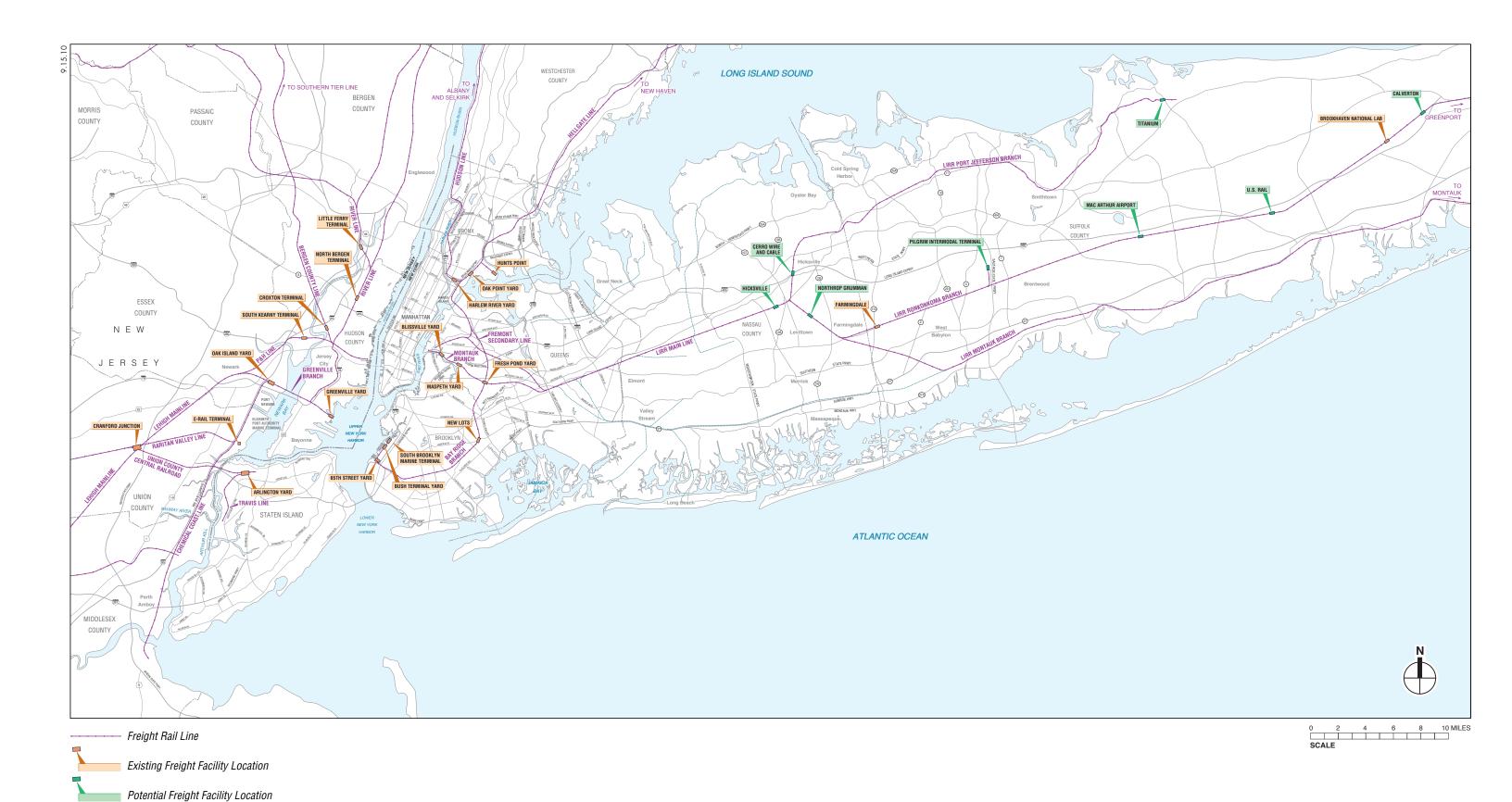
#### TRANSPORTATION DEMAND MANAGEMENT

TDM aims to reduce, redistribute or "better fit" the amount of demand to the available capacity. To achieve a better relationship between demand and capacity, TDM alternatives could include:

- Truck congestion pricing and improved tolling to optimize the magnitude of freight movement demand, its geographic distribution, and time-of-day distribution.
- Passenger vehicle congestion pricing and improved tolling, to move cars "out of the way" of trucks
- Capacity management strategies that provide priority treatment for truck movements where and when appropriate and feasible.
- Other fees, regulations, or policies affecting transportation behavior and choices.

#### **BUILD ALTERNATIVES**

As mentioned above, complete descriptions of the Build Alternatives will include the number, location, and size of required intermodal transfer facilities (i.e., float and ferry landings and rail yards and/or terminals) to process the bulk and/or intermodal shipments that are conveyed across New York Harbor. Based on field reconnaissance, secondary source data review, and coordination with local railroad operators and planning agency representatives, a list of 20 locations have been identified for potential yards and terminals in the east-of-Hudson region (Bronx, Queens, Brooklyn, and Long Island). Some of the locations currently support freight rail yards but would require expansion to accommodate the Build Alternatives; other locations are currently accessible by rail but would require the construction of a freight yard and supporting facilities. These 20 locations, which include 12 existing yards and 8 proposed sites, are shown on Figure 5 and summarized below.



Existing and Potential Regional Rail Freight Facilities

CROSS HARBOR FREIGHT PROGRAM

#### **BROOKLYN**

- **Bush Terminal Yard** a 6-acre facility located on the Brooklyn waterfront at First Avenue between 43rd and 51st Streets.
- **65th Street Yard** a 33-acre facility located on the Brooklyn waterfront between 65th and 63rd Streets.
- **South Brooklyn Marine Terminal** located on the Brooklyn waterfront between 29th and 39th Streets.
- New Lots an approximately 30-acre facility along, and connected to, the Long Island Rail Road (LIRR) Bay Ridge Branch, on Foster Avenue between East 83rd and East 87th Streets in Brooklyn.

# **QUEENS**

- Maspeth Yard and Phelps Dodge/West Maspeth Maspeth Yard is located adjacent to the Montauk Branch LIRR tracks. The yard runs along Rust Street near its intersection with Maspeth Avenue. The 37-acre Phelps Dodge site is located to the west of Maspeth Yard.
- **Blissville Yard** located adjacent to the Montauk Branch LIRR tracks, and approximately one mile from Yard A in Sunnyside.
- Fresh Pond Yard Fresh Pond Yard and Junction are located in Glendale, Queens, at the intersection of the LIRR's Montauk Branch and the Conrail freight tracks, approximately three miles east of Maspeth Yard. The 20-acre Fresh Pond Yard consists of a west yard and an east yard, divided by the Conrail Bridge.

### BRONX

- **Harlem River Yard** located at 132nd Street in the South Bronx.
- Oak Point Yard located in the South Bronx, along the East River waterfront.
- **Hunts Point** located in the South Bronx, along the East River waterfront.

# LONG ISLAND

- **Hicksville** a 16-acre Post Office site, located off the LIRR Main Line in Hicksville, Nassau County.
- **Cerro Wire & Cable** located between the Hicksville and Syosset Stations along the Port Jefferson Branch of the LIRR.
- **Northrop Grumman** a 91.3 acre property, located near the LIRR Main Line, in Bethpage, Nassau.
- **Farmingdale** an approximately 12-acre site, located on the LIRR Main Line, in the vicinity of the former Republic Station.
- **Pilgrim** The Pilgrim Hospital site is located approximately one mile north of the LIRR right-of-way, about ½ mile east of the Deer Park LIRR Station, in the Town of Brentwood, Suffolk County, on the Main Line/Ronkonkoma Branch.
- MacArthur Airport located just south of the LIRR Main Line in Ronkonkoma.

- **Titanium Site at Port Jefferson** known as the Lawrence Aviation Industries (LAI) site, located in the Town of Brookhaven, in Suffolk County. This site is close to the LIRR Port Jefferson Branch and Port Jefferson Station.
- US Rail's Brookhaven Rail Terminal (BRT) at Yaphank The 28-acre site is bounded by I-495 to the north, County Road 101 to the west, the Long Island Rail Road to the south, and a utility easement and a vacant parcel to the east. There are two other sites at this location: one site called Yaphank West, on the Main Line/Ronkonkoma Branch in Yaphank, and located on undeveloped land west of the existing Yaphank Station; and a second site, called Yaphank East, occupies the eastern portion of the Suffolk Country Department of Public Works facility and part of a privately owned tree farm.
- **Brookhaven National Laboratory** a site bounded by William Floyd Parkway to the west, the Long Island Expressway and LIRR to the south, Peconic River Park to the east, and Brookhaven State Park to the north.
- Calverton an approximately 50-acre site, located along a railroad siding near the LIRR Main Line, owned by the Town of Riverhead.

#### FLOAT AND FERRY ALTERNATIVES

Both float and ferry alternatives describe the movement of freight, by water, across New York Harbor. The main difference is that ferry service also carries the truck driver who stays with the truck for the duration of the trip. Alternatives involving these modes could include:

- Expanded Railcar Float System. The existing railcar float system operates between Greenville Yard in Jersey City and Bush Terminal Yard at 51st Street in Brooklyn. Alternatives for an expanded railcar float operation would include expanding this existing service, as well as offering new service routes to and from 65th Street in Brooklyn, South Brooklyn Marine Terminal, Long Island City in Queens, Oak Point Yard or Hunts Point in the Bronx, or other sites. This alternative might also involve operation of new vessel types. The current railcar float system pushes railcars onto a specially designed deck barge (with rail tracks), which is towed across the harbor by a tug boat; however, larger, faster, self-powered rail-carrying vessels could be employed.
- Expanded Container Float System. Containers on barges are currently moved across New York Harbor between Red Hook and Port Newark. Alternatives for an expanded container float operation would include a similar system provided at other marine cargo terminals. System expansion could provide an alternative for international container traffic arriving on one side of the harbor to move to the other side without involving truck transport; however, these moves represent a very small share of the total cross harbor freight movement.
- Truck Float System. This alternative could move truck trailers or integrated "single unit" trucks across the harbor, without their drivers. Only one example of this type of service operates in North America, between Detroit, Michigan and Windsor, Ontario. It is an "on demand" service typically chartered for shipments requiring special handling (e.g., oversize/overweight). Trucks are driven onto a simple deck barge and towed by a tug boat. As with railcar floats, larger and faster self-powered vessels are available. This type of system requires the coordination of two different drivers, one on each end of the trip, and reduces the total amount of driver hours devoted to the move, since some of the mileage is traversed without any driver "on the clock." This alternative would require truck staging areas and access.

• Truck Ferry. This traditional vehicle ferry service involves a truck that is driven onto a ferry boat and both the truck and driver are carried across the water body. The advantage of this mode is that it does not require the coordination of two drivers. The disadvantage is that the driver remains "on the clock," and unless ferry transit times can meet or beat the highway times, a net loss to the driver is experienced, and, therefore, it is unlikely that such service would be used. Truck ferries are most attractive in cases where they provide a "shortcut" between two points that would otherwise require a circuitous route, such as the ferry between Bridgeport, Connecticut and Port Jefferson, New York. This alternative would require truck staging areas and access.

Potential float and/or ferry service routes across New York Harbor are shown in Figure 6.

#### RAIL TUNNEL ALTERNATIVES

Previous studies conducted for the project, including the 2000 MIS and the 2004 DEIS, evaluated various alignments for a rail tunnel spanning New York Harbor. The 2004 DEIS selected a preferred alignment, spanning from Greenville Yard in Jersey City, New Jersey to the 65th Street Yard in Brooklyn (see Figure 7). The Tier I EIS will revisit this preferred alignment to confirm that all current socioeconomic and environmental factors have been considered.

All the rail tunnel alternatives for the Tier I EIS will assume the Greenville Yard to Brooklyn 65th Street Yard alignment. The rail tunnel alternatives consider different options for both construction and operation, which are described below. By considering various potential construction options (i.e., single track versus double track; single stack clearance versus double stack clearance) and uses (i.e., a rail-only tunnel versus a rail/vehicle tunnel), the proposed set of rail tunnel alternatives take into account the capital and operational costs and extensive regulatory coordination and approvals required for building and operating a rail tunnel in New York Harbor.

Each rail tunnel alternative would require intermodal terminals and logistics support facilities. As discussed above, some existing freight facilities may have to be expanded to accommodate increased freight traffic and other new facilities may need to be constructed.

#### Rail Tunnel

As mentioned above, the rail tunnel alternatives would generally accommodate rail equipment within a tunnel below the New York Harbor, running from New Jersey to Brooklyn. The rail tunnel alternatives vary with respect to dimensions, the number of tracks provided, and the types of railcar equipment and services accommodated:

- Rail tunnel with single versus double track. A two track tunnel would provide more flexibility in scheduling rail traffic, and would provide additional capacity to the system in case of emergency. With a double track tunnel, the design could comprise a single underwater tube or two separate tubes. The difference in construction is not important from a market demand or service standpoint, but may be important from engineering, safety, and cost perspectives.
- Rail tunnel with single versus double stack clearance. A double stack clearance rail tunnel would accommodate railcars carrying two stacked intermodal containers. Double stack containers require additional clearance (a total height of 20 feet, 6 inches) which increases tunnel construction costs.

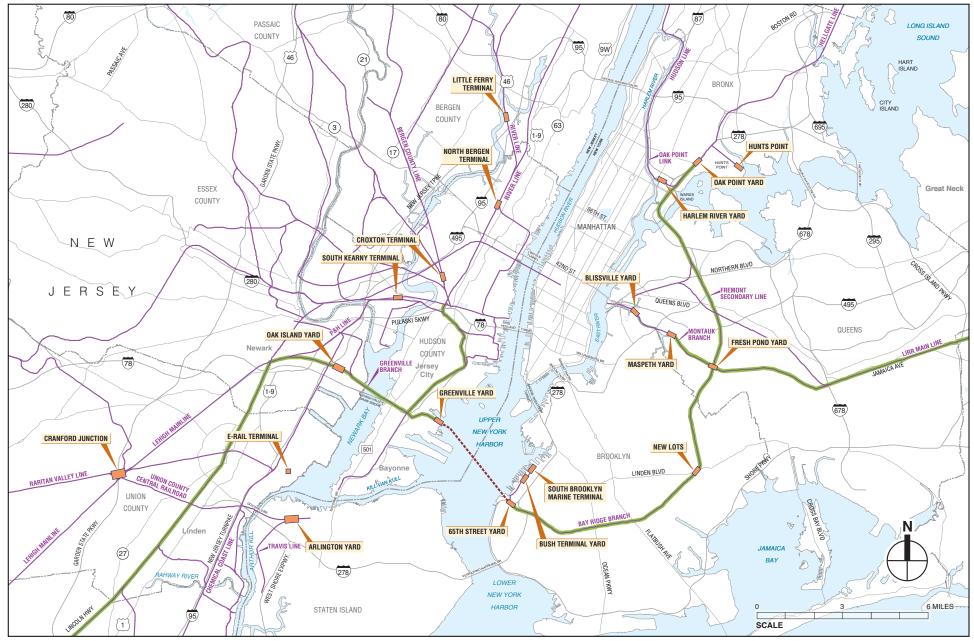
------ Freight Rail Line
----- Greenville Yard Hub Services
----- Harbor-Wide Intermodal Services

Expanded Railcar Float and Truck Float/ Ferry Alternatives — Potential Routes

CROSS HARBOR FREIGHT PROGRAM

SCALE

FIGURE 6



Freight Rail Line

Potential Rail Tunnel Alignment

Potential Railroad Improvements Required for Tunnel Alignments

FIGURE 7
Rail Tunnel Alternatives
CROSS HARBOR FREIGHT PROGRAM

- Rail tunnel with "Open Technology" equipment and service. "Open technology" describes a specialized type of rail equipment that allows trucks, truck chassis, and truck trailers to be driven onto and off of railcars, rather than being lifted on and off of railcars as in traditional intermodal services. This change in loading technology allows more types of trucks and trailers to be handled on rail. Open technology requires specially designed rail terminals at both ends of the rail trip, and may also require upgrading tracks.
- Rail tunnel with roll-on/roll-off vehicle trains. The Chunnel in Europe is a good example of this type of tunnel. For the vehicle trains, trucks and cars are driven onto the railcars at one end, vehicles and drivers are carried through the Chunnel, and trucks and cars drive off at the other end. The tunnel operates similarly to a ferry boat, except in a tube. This alternative might be attractive compared to a rail tunnel with emergency vehicle or scheduled truck access.

#### Rail/Vehicle Tunnel

Any of the rail tunnel alternatives described above could also be modified to accommodate non-rail traffic. The degree of design and operational modification required, and the corresponding impacts on performance, engineering, safety, and cost, will depend on the specific alternative. Generally, three types of rail/vehicle tunnel alternatives, combining rail and non-rail traffic in a tunnel, would be studied in the Tier I EIS:

- Rail tunnel with access for emergency vehicles. The tunnel floor would be designed to allow passage by rubber-tired vehicles during emergency conditions, during which time rail traffic would be prohibited. Such a design might accommodate evacuations or other emergency response activities. The design of the rail bed, ventilation systems, and vehicle access at each end of the tunnel could be significantly different than with an all-rail tunnel.
- Rail tunnel with scheduled truck access. This alternative may be similar to Alaska's Whittier Tunnel, in which a one-track/one-lane tunnel is shared by vehicles and trains. Each hour of the day is divided among access for eastbound vehicles, access for westbound vehicles, and access for trains. With higher levels of vehicle traffic than an emergency-use-only tunnel, the highway systems at each end would require considerably more attention relative to truck operations and capacity.
- Rail tunnel with Automated-Guided-Vehicle service. This alternative to scheduled truck access involves Automated Guided Vehicles (AGVs), which are self-guided power units that can carry loads or drag loads. Fleets of alternative-fuel AGVs could be used as truck cabs, hooking themselves to over-the-road truck chassis at designated transfer yards and dragging the chassis through a tunnel to transfer yards on the other side. The system might be very attractive for truckers, since they could drop off and pick up their loads outside of congested core areas. The system also avoids double handling of the cargo, since the cargo does not have to be lifted onto or off of its chassis. Several hurdles would have to be overcome with this alternative such as designing and locating the transfer yards, siting required guideways between the tunnel portals and the transfer yards, the cost of AGV equipment, and the management and scheduling of AGV traffic with conventional rail traffic.

# G. ALTERNATIVES EVALUATION PROCESS

Starting with the long list of alternatives, a series of evaluations will be undertaken to select a limited list of alternatives that will be carried forward for detailed evaluation in the Tier I EIS. The development and evaluation of project alternatives is central to the NEPA process. The

alternatives selection process will consist of five major steps—scoping, fatal flaw analysis, screening analysis, detailed evaluation, and the Tier I EIS—that are intended to winnow the number of alternatives through a comprehensive evaluation process. The 5-step process includes numerous tasks involving separate processes, decision points/action items, and analysis modeling that are described in full in *EIS Methodology*.

The following is an overview of the five major steps:

- 1. **Scoping** Determines the project's goals and objectives, alternatives to be considered, and scope of issues to be examined in the Tier I EIS. Also refines the project purpose and need.
- 2. **Fatal Flaw Analysis** Eliminates clearly infeasible alternatives from further consideration.
- 3. **Screening Analysis** Reduces the range of reasonable alternatives that do not meet the goals and objectives based on freight demand forecasting, mode choice, and broad qualitative criteria.
- 4. **Detailed Evaluation** Evaluates alternatives for potential regional and localized effects based on specific and more rigorous quantitative performance measures.
- 5. **Tier I EIS** Documents and presents the results of the detailed evaluation, summarizes the process and results of Steps 1-4, and includes additional environmental analyses and compliance with environmental laws and regulations, as appropriate.

# H. SOCIAL, ECONOMIC, AND ENVIRONMENTAL IMPACTS

As discussed above, the analyses being performed during Tier I are mainly tailored to support corridor-level decision-making, to determine the mode, alignment, and termini of the proposed action. At the same time, an understanding and assessment of the local effects of the proposed alternatives is also required, since a complete description of any proposal requires a discussion of specific project elements that may result in adverse social and environmental effects on local communities.

The regional study area, as described above in Section E, "Project Study Areas," will include major interstate highways and many state and local routes that are important for local freight movement, major freight rail lines and facilities east and west of the Hudson River. The study areas for the evaluation of local impacts will depend greatly on the elements of each specific alternative and, to a lesser extent, on the environmental analysis in question. For Tier I of the EIS, local study areas will be determined as appropriate before each analysis, for each potential project site, and may vary by alternative. In Tier I, mitigation measures would be presented as a range of options that would be available to avoid, minimize, or mitigate potential adverse impacts of the Build Alternatives. The analysis years for the assessment of these impacts will be determined during the scoping process.

# **TRANSPORTATION**

The transportation analysis for the Tier I EIS will consider the impacts from the project alternatives on the regional freight transportation network and on specific local components of the network in the vicinity of project elements as well as passenger rail services. Important elements of the regional highway network will be described in terms of Annual Average Daily Traffic (AADT) and peak traffic periods, and will include a characterization of vehicles utilizing

these roadways. The proposed action would likely provide an overall regional benefit by enhancing the movement of freight between the west-of-Hudson and east-of-Hudson regions. On the local level, the project could result in impacts on specific elements of the regional transportation system, such as the introduction of capacity constraints on local roadways in the vicinity of existing or proposed freight yards and potential local traffic impacts resulting from expanded rail activity on routes with at-grade crossings.

The analysis will create a representation of the relevant national rail infrastructure and—by combining factors, such as the number of tracks, track quality, operating speeds, and signaling systems on each line—will describe the capacity of the existing rail network. The results of the demand estimation process (described in the *EIS Methodology*) would serve as input to determine the volumes of traffic on each rail line or to each rail network element if each alternative would be implemented. A conceptual rail operations plan would be created for each alternative to evaluate the movement of freight on a network that includes the given alternative, and to assess whether each alternative can operate with acceptable operational impacts.

#### LAND USE, ZONING AND PUBLIC POLICY

This analysis for the Tier I EIS will include both a regional and a local examination of issues. On a regional basis, broad issues and trends will be discussed related to regional land use and, where appropriate, regional concentrations of industrial and commercial activity will be identified, since these areas may create additional demand for improved freight movement. The regional portion of the analysis will evaluate the project's compatibility with land use and development goals and regional public policy. The analysis will also include a general description of land use, zoning, and demographic characteristics in local study areas, where specific project elements may be located. The analysis will discuss the compatibility of project elements with existing land use, zoning, and neighborhood character, and whether project elements would significantly alter the character of local study areas or block access to area amenities. The analysis will discuss whether acquisition of property would be required for new or expanded project elements (such as rail yards), and the potential for direct displacement of residents and businesses. Potential impacts from the construction (short-term) and operation (long-term) of project elements will be described.

#### ECONOMIC CONDITIONS AND DISPLACEMENT

This analysis will focus on evaluating the direct, indirect, and induced effects of the project alternatives on the economic activity in the regional study area. The project stakeholders—asset providers, service providers, end users, and other parties that may be affected by the proposed action—will be introduced, along with the manner in which they may be affected. It is expected that on the regional basis, the project's potential impacts may be grouped into three categories: transportation-related benefits (which include congestion relief and increased highway performance), shipper cost savings, and business attraction and retention.

The project may also attract local economic development along the alignments of each alternative and in the vicinity of project elements, such as yards and float facilities. Localized adverse economic impacts may also occur from displacement and relocation of businesses due to construction or expansion of project elements. The analysis will be performed in conjunction with the land use, zoning, and public policy analyses. The regional and local study areas for the economic conditions analysis will be the same as the land use study areas.

#### **CULTURAL RESOURCES**

The archaeological and historic resources analysis will be conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA), Section 4(f) of the United States Department of Transportation Act, the New York State Historic Preservation Act of 1980 (SHPA), and the New Jersey Register of Historic Places Act of 1970 (NJSA). Areas of potential effect (APEs) will be delineated in consultation with the New York State Historic Preservation Officer (NYSHPO) and the New Jersey Historic Preservation Officer (NJHPO). It is expected that different APEs will be established for archaeological and historic resources, with the archaeological APE focusing on areas of potential physical disturbance and the historic resources APE including areas where visual and indirect impacts may occur. The analysis will compile an inventory of archaeological and historic resources in the project APEs and assess the potential for the project alternatives to impact these inventoried archaeological and historic resources.

#### VISUAL RESOURCES

The visual resources analysis will assess the potential effects of the Tier I alternatives on the visual character and aesthetic conditions of the study area. It will be prepared in accordance with the guidelines for visual analyses contained in federal documents prepared by FHWA, including *Guidance for Preparing and Processing Environmental and 4(f) Documents* (1987), *Environmental Impact Statement Visual Impact Discussion* (undated), and *Guidance Material on the Preparation of Visual Impact Assessments* (1986), which is the standard U.S. Department of Transportation (USDOT) methodology for assessing potential impacts on visual and aesthetic resources. The assessments will be based on the degree of change anticipated in the characteristics of the visual environment, and whether changes would affect visual quality or specific visual resources.

# **AIR QUALITY**

This chapter of the Tier I EIS will assess potential regional (mesoscale) effects and potential local effects from the proposed action on ambient air quality. The proposed action is expected to provide regional air quality benefits by shifting freight movement from truck to the more efficient and underutilized rail, thereby potentially reducing future truck VMT and congestion on study area roadways as compared with no build condition. The various project alternatives will generate emissions primarily from non-road sources, such as diesel-powered freight locomotives, marine engines, and/or new or expanded intermodal facility activities. Some local increases in emissions from trucks on roadways or diesel-powered rail locomotives in the vicinity of proposed yards may also occur. The analysis will determine pollutants of concern and then consider potential regional (mesoscale) effects on air quality to determine the proposed action's effect on air quality in the defined airshed. The analysis will also determine the project's conformity with the New York and New Jersey State Implementation Plans (SIPs), as required by the Clean Air Act and amendments. Transportation conformity determinations are required for the approval, funding, or implementation of any FHWA project. The Cross Harbor Freight Program's current status, relative to the Transportation Improvement Programs (TIPs) and Regional Transportation Programs (RTPs) in New York and New Jersey, will also be documented.

#### **ENERGY AND GREENHOUSE GASES**

The Tier I EIS will analyze potential impacts from the construction and operation of the project alternatives on greenhouse gas emissions and energy consumption in the regional study area. The proposed action aims to improve the movement of goods in the region by enhancing the transportation of freight through the region and, as a result, may shift some freight movement from trucks to rail, a more energy-efficient mode of transportation. This shift may also contribute to a reduction in roadway congestion and associated greenhouse gas emissions. The analysis will identify the state and federal energy policies and greenhouse gas emission reduction goals relevant to the proposed action and the action's consistency with these policies.

#### NOISE AND VIBRATION

The Tier I EIS will analyze the proposed action's potential to generate noise and vibration impacts due to increased rail activity along rail freight routes, activity at rail yards (such as loading and classification of freight, truck activity, equipment operation, and truck and employee vehicular trips on local streets), tunnel ventilation equipment, and construction activities. The Noise and Vibration analysis will consist of a screening-level assessment for potential impacts in the vicinity of project elements. The analysis will generally follow the FTA guidance manual, *Transit Noise and Vibration Impact Assessment* (May 2006), particularly as it relates to rail yards and lines. The analysis will consider potential noise impacts from rail freight and vehicular sources (such as rail yards), and also potential vibration and ground-borne noise impacts from construction and operation of project alternatives.

# NATURAL RESOURCES

Natural resource issues associated with project alternatives would be limited to local effects on aquatic and terrestrial resources from construction and operation. Through the use of New York State and New Jersey Geographical Information Systems (GIS) resources and a review of literature compiled by relevant federal, state, and local agencies, existing natural resources within each local study area will be identified. These resources may include aquatic biota, terrestrial biota, threatened or endangered species (and their associated habitats, such as wetlands), as well as other resources of special concern, such as essential fish habitat. The analysis will determine potential short- and long-term impacts on these resources, with emphasis on potential impacts on sensitive resources or other resources of special concern.

#### WATER RESOURCES

The Tier I EIS will analyze the potential effects to water quality from dredging and other inwater activities that may be required for the construction of the tunnel and float alternatives. The chapter will also assess impacts on resources located within the 100-year floodplain from the construction and operation of the project, as well as any proposed stream or river crossings. The study area for water quality will be the same as that developed for aquatic resources, and is expected to focus on Upper New York Harbor.

# CONTAMINATED AND HAZARDOUS MATERIALS

This analysis of the Tier I EIS will discuss the potential to encounter contaminated soil and groundwater during construction of project elements, especially those elements that would require excavation, transport, and disposal of contaminated soil. The project alternatives will focus on utilizing areas with previous maritime, industrial, or transportation uses, such as

existing railroad rights-of-way, which may have been contaminated by past or current uses. The analysis will be limited to the local study areas in the vicinity of project elements.

# INDIRECT AND CUMULATIVE EFFECTS

This chapter of the Tier I EIS will evaluate indirect and cumulative effects of the proposed action as required under NEPA. Indirect effects are "caused by an action and are later in time or farther removed in distance but are still reasonably foreseeable" (40 CFR 1508.8), and are generally induced directly or indirectly by the proposed action. Cumulative impacts result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions (40 CFR 1508.7). Cumulative effects of an action may be undetectable when viewed in an individual context but, when added to other actions, could eventually lead to a measurable environmental change.

#### **ENVIRONMENTAL JUSTICE**

Executive Order 12898 requires federal agencies to consider whether actions they might fund or approve may have any disproportionately high human health or environmental effects on communities containing low-income or minority populations. The Tier I EIS will consider both short-term and long-term impacts and their potential risk to such communities.

#### COASTAL ZONE MANAGEMENT

Each project alternative will be reviewed for consistency with the Coastal Zone Management programs of New York (administered by NYSDOS) and New Jersey (administered by NJDEP), as well as New York City local waterfront revitalization program policies, which are administered by NYCDCP.

#### **SECTION 4(f) EVALUATION**

Section 4(f) of the USDOT Act (49 U.S.C. Section 303(c)) of 1966, as amended, compels the Secretary of USDOT to cooperate with other federal departments and states in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. It states that the Secretary of USDOT shall not approve any program or project that requires the "use" of any land from a public park, recreation area, wildlife and waterfowl refuge, or historic site, unless there is no feasible and prudent alternative, and such project or program includes all possible planning to minimize harm. The analysis will identify historic and archaeological resources, public parks, recreation areas, and wildlife and waterfowl refuges that may be affected by construction of project elements. The analysis will determine potential impacts or "use" of resources from construction of project elements. "Use" may be direct (i.e., direct impact, disturbance, or demolition) or indirect (effects on context, setting, or access, which is known as a "constructive" use).

The Tier I EIS will include a consideration towards avoidance of 4(f) properties. A full section 4(f) analysis, including an examination of avoidance alternatives, would be conducted in the Tier II EIS.

# I. REVIEW PROCESS

Following the scoping process, a Tier I DEIS will be completed, and made available for public and agency review and comment. Public hearings will be held on the Tier I DEIS, and a

minimum of 45 days will be established for interested parties to formally submit comments. A Tier I Final EIS (FEIS) will be prepared on the basis of these comments. The co-lead agencies will issue a Tier I Record of Decision (ROD) to select a Preferred Alternative(s).

#### SAFETEA-LU COORDINATION

The EIS will also address the provisions of Section 6002 of Public Law 104-59, "The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA–LU)." SAFETEA–LU provisions and NEPA regulations, in general, call for public involvement in the EIS process. Section 6002 of SAFETEA–LU requires that agencies: (1) extend an invitation to other Federal and non-Federal agencies and Indian tribes that may have an interest in the proposed action to become "participating agencies"; (2) provide an opportunity for involvement by participating agencies and the public in helping to define the purpose and need for the proposed action, as well as the range of alternatives for consideration in the impact statement; and (3) establish a plan for coordinating public and agency participation in and comments on the Scoping Document. Letters were sent to those agencies with a fiduciary, regulatory, or permitting authority over the freight program as an invitation to be part of the coordination process.

A SAFETEA-LU Coordination Plan has been developed to facilitate and document the lead agencies' structured interaction with the public and other agencies, and to inform the public and other agencies of the manner in which the coordination will be accomplished. The plan includes: the plan purpose; project history; a list of lead, cooperating, and participating agencies and their responsibilities to the project; agency contact information; coordination points; and the project schedule.

#### **PUBLIC PARTICIPATION**

FHWA and PANYNJ invite the public to participate throughout the environmental review process for the Cross Harbor Freight Program. To this end, several forums have been or will be established to communicate information and to elicit public comments.

#### **WEBSITE**

The project's website contains project information, published documents, public meeting notes, and contact information. The website also serves to keep the public notified of upcoming public meetings. It is the primary resource for public information about the project, as well as for contacting the project. The website address is: <a href="http://www.crossharborstudy.com">http://www.crossharborstudy.com</a>

# E-NEWSLETTERS

FHWA and PANYNJ plan to distribute electronic newsletters ("E-newsletters") throughout the NEPA process. The E-newsletters will communicate project status, progress, and other pertinent issues. Persons interested in receiving project E-newsletters must provide contact information via the website, public meetings, or written request at the address noted above.

#### **PUBLIC MEETINGS**

Public meetings will be held during the scoping process and after the publication of the DEIS. As noted above, the scoping meetings will be held:

- Bronx, Tuesday, October 5: Bronx Borough Hall
- Newark, New Jersey, Thursday, October 7: NJTPA
- Jersey City, New Jersey, Thursday, October 7: City Hall
- Brooklyn, Tuesday, October 12: Brooklyn Borough Hall
- Queens, Wednesday, October 13: Queens Borough Hall

A notice for the public hearings on the DEIS will be published with the Notice of Availability in the Federal Register. Advertisements will appear in local publications and on the project website.

#### PROJECT SCHEDULE

A preliminary schedule for key milestone dates in the environmental review process is presented below. The schedule is subject to change as the project progresses.

# **Preliminary Schedule**

Activity	Estimated Date
Publication of Notice of Intent	May 13, 2010
Publication of Draft Scoping Document;	
Beginning of public comment period	September 16, 2010
	October 5 –
Public Scoping Information Sessions	October 13, 2010
Close of public comment period	November 15, 2010
Publish Tier I Draft EIS; Beginning of public comment period	Summer 2011
Close of public comment period on Tier I DEIS	Fall 2011
Response to comments on Tier I DEIS;	
Completion of Tier I Final EIS	Spring 2012
Anticipated Record of Decision	Summer 2012

# **APPENDICES:**

Appendix A: No Action Alternative Projects.

Appendix B: Glossary.

\*

The No Action Alternative includes projects that are currently programmed, planned, or reasonably expected to be completed and operational for the study area by the analysis year of 2035, independent of the Cross Harbor Freight Program.

#### NO ACTION ALTERNATIVE – RAILROAD PROJECTS IN NEW JERSEY

(see Figure A-1)

- Double track route in some portions from NY border/Northvale, NJ to Phillipsburg, NJ, including the following component projects:
  - Double track Northern Branch and River Line between NY border and Teaneck.
  - Second Mainline Track on Consolidated Rail Company (Conrail) through the Marion Connection.
  - Second track along the Passaic & Harsimus Line at South Kearny Yard.
  - Conrail Lehigh Line Construct third, and possibly a fourth track between Hunter interlocking Aldene Connection in Roselle Park.
- Raising clearances of tunnels on National Docks Railroad, part of Liberty Corridor initiative (Port Authority of New York and New Jersey [PANYNJ] interview).
- Northeast Corridor improvements
  - Signal, track straightening, and bridge improvements for high speed passenger service (Amtrak).
  - Establish 286K capability between Metuchen and Oak Island Yard (NJTPA interview).
- PANYNJ Greenville Yard Master Plan Global Terminal expansion; marine container terminal and new Express Rail link for connection to National Docks Railroad (PANYNJ interview).
- PANYNJ Port Newark and Port Elizabeth rail capacity improvements (PANYNJ interview).

# NO ACTION ALTERNATIVE - RAILROAD PROJECTS IN NEW YORK

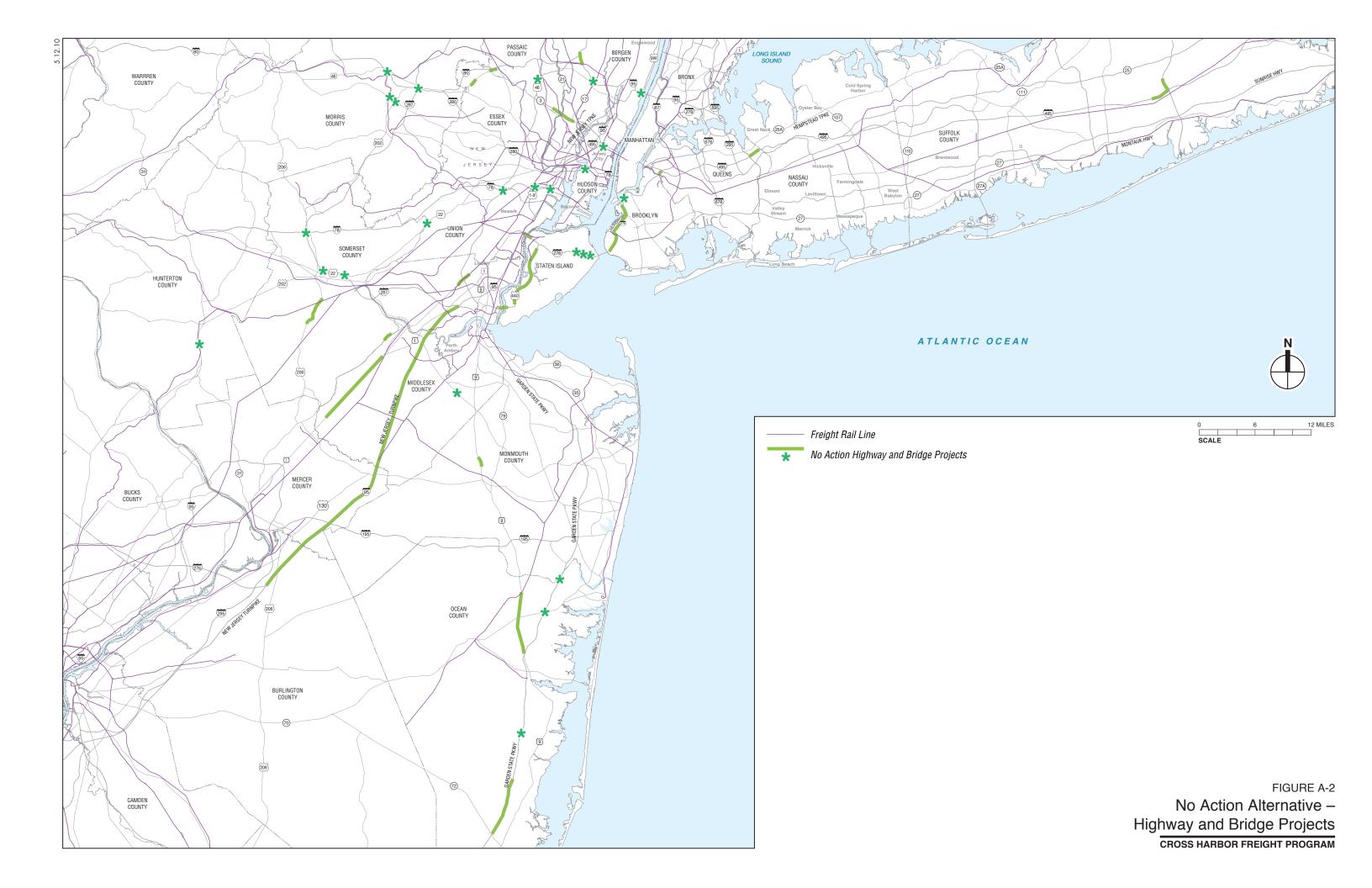
(see Figure A-1)

- 65th Street Rail Yard improvements (PANYNJ interview).
- First Avenue Line track curvature improvements (PANYNJ interview).
- Bay Ridge Branch rail line tracks (for storage) and signals improvements (NYMTC interview).
- New track connections between the Bay Ridge Branch and Montauk Branch (NYMTC interview).
- CSX (Fremont Secondary) tracks over Fresh Pond rail interchange (NYMTC interview).
- Extended siding on the Fremont Secondary Line (NYMTC interview).

Potential Rail Yard Improvement

No Action Alternative – Railroad Projects

CROSS HARBOR FREIGHT PROGRAM



- Lower Montauk Branch rail line track and signals improvements (NYMTC interview).
- Oak Point Yard (Bronx) expansion (track additions and reconfiguration, increased clearances, and possible land acquisition) (NYMTC interview).
- Second intermodal track at Harlem River Yard (NYMTC interview).
- LIRR Mainline additional third track (NYMTC interview).

# NO ACTION ALTERNATIVE – HIGHWAY AND BRIDGE PROJECTS IN NEW JERSEY

(see Figure A-2)

- I-278, Goethals Bridge: 1 additional lane in each direction (NJTPA RTM-E).
- NJ Turnpike: expansion to 6 lanes in each direction between Exit 10 and Exit 6 (NJTPA RTM-E).
- Garden State Parkway: 1 additional lane between Exits 63 and 69 (NJTPA RTM-E).
- US 1: 1 additional lane in each direction between Middlesex CR 682 and College Road (NJTPA RTM-E).
- US 1/9: 2 additional lanes in area around Tonnele Circle (NJTPA RTM-E).
- US 9: 1 additional lane in vicinity of Craig Road intersection in Freehold (NJTPA RTM-E).
- US 9: 1 additional lane between Indian Head Road and Ocean CR 528 (NJTPA RTM-E).
- US 46: 1 additional lane between Horseneck Road and Fairfield Road in Fairfield (NJTPA RTM-E).
- US 46: 1 additional lane between Passaic Avenue in Fairfield and NJ 23 in Wayne (NJTPA RTM-E).
- US 202: 2 additional lanes between Flemington Circle and Copper Hill (NJTPA RTM-E).
- US 202: 1 additional lane in vicinity of NJ 10 (NJTPA RTM-E).
- US 206: 1 additional lane between Belle Mead-Griggstown Road and Brooks Boulevard in Hillsborough (NJTPA RTM-E).
- NJ 3: 1 additional lane between NJ 17 in Rutherford and Passaic Street in Clifton (NJTPA RTM-E).
- NJ 7: one additional lane in each direction near Whitpenn Bridge and Charlotte Circle vicinity (NJTPA RTM-E).
- NJ 17: One additional lane in each direction between I-80 and NJ 4 (NJTPA RTM-E).
- NJ 17: One additional lane between I-80 and Williams Avenue in Hasbrouck Heights (NJTPA RTM-E).
- NJ 27: Reduction of one lane between Bennets Lane and Somerset Street in New Brunswick (NJTPA RTM-E).
- NJ 27: 2 additional lanes for ½ mile south from GSP, one additional lane for .8 mile north of GSP (NJTPA RTM-E).
- NJ 440: Additional ramp lane at Outerbridge Crossing (NJTPA RTM-E).
- Interchange/Intersection improvements (NJTPA RTM-E):
  - I-287 at I-78

- I-287 at I-80
- I-287 at US 22
- I-80 at US 46/NJ 23
- I-78 at GSP
- I-78 at NJ 21
- I-95 NB to PIP NB ramp
- GSP at Exit 74
- GSP at Exit 88
- GSP at Exit 91
- US 22 at North Bridge Street in Somerville
- US 22 at Park Avenue in Scotch Plains
- US 46 at NJ 3 in Clifton
- NJ 10 at NJ 53
- NJ 18 at CR 527 in Old Bridge

# NO ACTION ALTERNATIVE – HIGHWAY AND BRIDGE PROJECTS IN NEW YORK

(see Figure A-2)

- West Shore Expressway widening by two lanes in each direction (NYMTC BPM).
- Staten Island Expressway widening by one lane on ramps at Clove Road, Richmond Road, and Hylan Boulevard (NYMTC BPM).
- Gowanus Expressway/Brooklyn-Queens Expressway conversion of one existing lane to HOV lane from the Verrazano-Narrows Bridge to the Brooklyn Battery Tunnel (NYMTC BPM).
- Brooklyn-Queens Expressway: Kosciuszko Bridge Replacement Project widening by two lanes north bound and one lane southbound over Newtown Creek to the Long Island Expressway (NYMTC BPM).
- Long Island Expressway widening by one lane in each direction east of Cross Island Parkway to Little Neck Parkway (NYMTC BPM).
- Long Island Expressway and William Floyd Parkway increased capacity in the vicinity of Yaphank (NYMTC BPM).
- Columbia Street (Brooklyn) widening by two lanes between Atlantic Avenue and Kane Street (NYMTC BPM).

### NO ACTION ALTERNATIVE - SEAPORT PROJECTS

- Dredging harbor to 50'.
- Expansion of ExpressRail.
- Howland Hook Marine Terminal Berth Four a 38-acre expansion of an existing container terminal on Staten Island.
- South Brooklyn Marine Terminal a 74-acre modernization project, which includes the auto terminal, a breakbulk cargo facility, and Sims recycling facility.

\*

Appendix B: Glossary

The following is a glossary of terms related to freight.

**Backhaul**—Return transportation movement, usually at less revenue than the original move; to move a shipment back over part of a route already traveled.

**Bogie**—A set of highway wheels built specifically to be used as rear wheels under the container. Also an overseas term for a railroad car "truck" or wheel assembly.

**Bored Tunnel**—A method for constructing a tunnel. A tunnel-boring machine drills through rock and compacted soil to create a bored tunnel.

**Boxcar**—An enclosed railcar, typically 40 to 50 feet long, used for packaged freight and some bulk commodities.

**Breakbulk**—To reduce a large shipment of a single commodity to many small shipments, which are then dispersed to various buyers.

**Bulk Transfer Facility**—A facility for transferring liquid or solid bulk commodities, such as petroleum or gravel, between transport modes, typically between rail and truck. (See also "Transloading").

**Carfloat**—A barge with a railtrack fixed to the deck for carrying rail cars across a body of water. Typically, the carfloat is towed by a tugboat.

**Chassis**—A special trailer or undercarriage on which containers are moved over the road by truck.

Choice Model—Models are developed to help predict the amount of freight that could be diverted to alternative modes of freight transportation. After conducting a quantitative survey of shippers and receivers, the Project Team will develop a series of "demand curves" for each alternative mode of shipment. This demand depends on travel time, cost, reliability, commodity type, origin/destination and the current travel route. These findings are then compared to the service characteristics for the region to indicate the mode by which freight would move.

**Classification Yard**—A railroad terminal area where train units are assembled (as opposed to an intermodal yard).

Clean Air Act (CAA) of 1970—A United States law that created national air pollution standards. Under the regulations promulgated as the Clean Air Act, areas that do meet the clean air standards are classified as Non-Attainment Areas.

The Clean Air Act Amendments of 1990—These regulations contain stringent and rigorously-defined legislative mandates for dealing with air quality and transportation issues in areas that have not attained the EPA-established National Ambient Air Quality Standards.

**Commodity Flows**—Data that describes the movement of goods. This information is used for transportation planning and decision-making.

**C.O.F.C.** (Container-on-Flatcar)—The transport of containers on railroad flatcars, either single-stack or double-stack.

**Container**—A box for transporting cargo, constructed with varying dimensions to withstand shipment conditions in transportation. (See "TEU").

**Diversion**—A shift from one transportation mode to another. For example, diversion can refer to the shift from goods moving by truck to goods moving by rail.

**Double-Stack**—A type of train service that utilizes two intermodal containers stacked one on top of another. This service requires a vertical clearance of 20'-6".

**Drayage**—Transporting freight by truck, typically for short distances.

East-of-Hudson Sub-Region—To better analyze the movement of goods across the Hudson River, the New York region has been split into the West-of-Hudson sub-region and the East-of-Hudson sub-region. The East-of-Hudson sub-region is comprised of the five boroughs of New York City (Manhattan, Queens, Bronx, Brooklyn and Staten Island), Nassau and Suffolk counties on Long Island, New York, mainland downstate counties (Westchester, Putnam, and Dutchess) and Fairfield County in Connecticut.

Float Bridge—A bridge for rolling rail cars on and off carfloats to a railyard.

**Freight Forwarder**—An individual/company that accepts shipments and consolidates them into truckloads. An agent who helps expedite shipments by preparing necessary documents and making other arrangements for moving freight.

**Immersed-Tube Tunnel**—A method for constructing a tunnel involving laying pre-constructed tunnel sections in a deep trench dug in the bottom of a water body.

**Intelligent Transportation Systems (ITS)**—A generic term for advanced technology applications that provide real-time monitoring and information to enable the more efficient and safer use of transportation systems, such as highways.

**Intermodal**—As broadly defined within the commercial transportation industry, the transfer of freight between and among those modes involved in general cargo transportation (e.g., ship, rail and truck). This term is also commonly used to mean the movement of passengers between transportation modes (e.g., from train to bus).

**Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)**—The landmark federal transportation legislation that implemented broad changes in transportation planning and funding. ISTEA and its successor, Transportation Equity Act for the 21st Century (TEA-21) of 1998, emphasize use of a diversity and balance of modes and the preservation of existing systems over the construction of new facilities, especially roadways.

**Intermodal Yard**—A rail facility designed to accommodate intermodal transfers with trucks and containers.

**International Flows**—Waterborne trips that have either an origin or destination in the region's port.

**Interregional Flows**—Trips that have either an origin or destination within a region.

**Intra-regional Flows**—Trips that have both an origin and destination within a region.

**Just-in-Time Delivery (JIT)**—A growing practice of minimizing warehousing costs by delivering goods for manufacturing, assembly or wholesale/retail replenishment. Refers to the growing premium placed on reliability, transit time and efficiency by the shipping industry.

**Level of Service**—A measure of the quality of operation of a transportation facility, with Level of Service "A" being very good operation with few traffic delays, and Level of Service "F" being severely congested operation with significant traffic delays.

**Major Investment Study**—A federal process for identifying, evaluating and selecting transportation alternatives that address specific problems.

**Metropolitan Planning Organization** (MPO)—As specified in TEA-21 and ISTEA, a federally-mandated organization required to carry out the transportation planning process for urbanized area with a population of more than 50,000.

**Modal Split**—The relative use of the modes of transportation; the statistics used include tonmiles, passenger-miles and revenue.

**Multimodal**—Using more than one transportation mode to move a load of goods.

**Pallet**—A platform on which cargo is loaded, which can be stacked and be handled by forklift or sling, usually constructed of wood.

**Piggyback**—The hauling of road vehicles and containers on wheels or railroad flatcars.

**Railhead**—End of the railroad line or point in the area of operations at which cargo is loaded and unloaded.

**Reefer** (**refrigerated container**)—A specialized container that holds perishable goods at controlled temperatures.

**Road Railer**—A specialized truck chassis that either has retractable rail wheels or is lifted onto bogies that allows it to operate directly on rail.

**Roll-on/Roll-off** (**ro/ro**)—A specially constructed ship that allows cargo to be rolled in and out doors on wheeled loading devices or under the cargo's own propulsion, such as motor vehicles.

**Selkirk Hurdle**—The 280-mile detour necessary for a freight train to travel from New Jersey to New York City. Selkirk is located just south of Albany, New York, and is the closest freight rail bridge across the Hudson River to the New York/New Jersey/Connecticut region.

**Surface Transportation Board (STB)**—An independent adjudicatory body within the U.S. Department of Transportation that is responsible for the regulation of interstate surface transportation, primarily railroads.

**Third-party Logistics Provider**—An intermediary who manages the transportation or arranges the logistics for the movement of goods.

**Through Flows**—Trips that have neither an origin or destination within the region, but are simply passing through the region

**TEU**—Twenty-foot equivalent unit. A standard unit for counting containers of various lengths. One standard 40-foot container equals two TEU's.

**T.O.F.C.** (**Trailer-on-Flatcar**)—A transportation arrangement in which a truck trailer is moved by train to a destination. Also called "Piggybacking."

**Trailer**—The truck unit that carries freight in a tractor-trailer combination. Trailers are commonly seen as the cargo unit of an "18-wheeler" or five-axle "truck."

**Transportation System Management (TSM)**—Methods to improve the operation of a transportation system without expanding capacity.

**Transloading**—The practice of breaking (transferring) bulk shipments from the vehicle/container of one mode to that of another, at one or a series of terminal interchange points.

West-of-Hudson Sub-Region—To be able to better analyze the movement of goods across the Hudson River, the New York region has been split into the West-of-Hudson sub-region and the East-of-Hudson sub-region. The West-of-Hudson sub-region is comprised of the following counties in northern New Jersey: Ocean, Monmouth, Mercer, Middlesex, Somerset, Union, Hunterdon, Warren, Morris, Essex, Hudson, Bergen, Passaic, Sussex, and the following counties in southwestern New York: Pike, Sullivan, Ulster, Orange and Rockland.