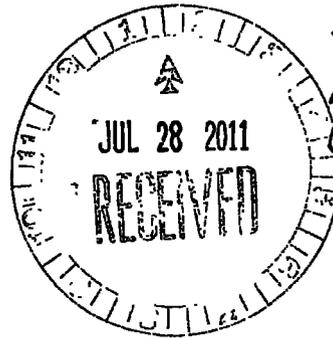


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July 27, 2011

VIA FEDERAL EXPRESS

Ms. Cynthia T. Brown
Chief, Section of Administration
Office of Proceedings
Surface Transportation Board
395 E Street, S.W., Room 1034
Washington, DC 20024

Re: **Finance Docket No. 35468**
Pinelawn Cemetery -- Petition for Declaratory Order

Dear Ms. Brown:

On behalf and with the authorization of the New York State Department of Transportation, I am forwarding for filing in the above-captioned proceeding an original and ten copies of the **Verified Statement of John Rondinaro**, dated July 15, 2011.

I certify that a copy of this pleading has been served by overnight delivery on parties of record in this proceeding.

If you have any questions regarding this filing, please feel free to contact me. Thank you for your assistance on this matter.

Very truly yours,

A handwritten signature in black ink, appearing to be "Thomas J. Litwiler".

Thomas J. Litwiler

TJL:tl

Enclosures

cc: Jessica P. Driscoll, Esq.
Jay Safar, Esq.

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**BEFORE THE
SURFACE TRANSPORTATION BOARD**

FINANCE DOCKET NO. 35468



**PINELAWN CEMETERY --
PETITION FOR DECLARATORY ORDER**

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Public Record**

**VERIFIED STATEMENT SUBMITTED ON BEHALF OF
NEW YORK STATE DEPARTMENT OF TRANSPORTATION**

**ENTERED
Office of Proceedings**

JUL 28 2011

**Part of
Public Record**

**John Rondinaro
Acting Director, Office of Integrated Modal Services
New York State Department of Transportation
50 Wolf Road
Albany, NY 12232
(518) 457-6700**

Dated: July 15, 2011

**Verified Statement
Of
JOHN RONDINARO**

1. I, John Rondinaro, am the Acting Director of the Office of Integrated Modal Services for the New York State Department of Transportation (“NYSDOT”) and my responsibilities include the administration of the Freight and Passenger Rail Bureau. I am fully familiar with the facts and circumstances set forth herein, based upon my own personal knowledge, and from records and documents of the NYSDOT with which I am familiar.

2. I submit this Verified statement under STB Finance Docket 35468 for the purpose of preserving rail transportation infrastructure that supports NYSDOT’s policies for increased use of freight rail transportation in the East-of-Hudson market, which reduces highway congestion, wear-and-tear on the region’s roads and bridges and reduces diesel emissions.

3. NYSDOT is an executive agency of the State of New York and is administered by the Commissioner of Transportation having general powers, functions and duties more fully described in Article 2 of the New York Transportation Law, as amended (“Powers, Duties and Jurisdiction of NYSDOT of Transportation”) and in Article II of the New York Highway Law, as amended; its legislative mandate confers broad responsibility for the management of complex transportation matters within New York, including but not limited to the establishment of statewide transportation policies, funding and administration of capital investment programs across all modes of transportation.

4. The State’s extensive rail network, currently comprised of more than 3,500 miles of track, ships over 68 million tons of freight annually is integrated into America’s national rail transportation system.

5. Although New York's railroad network has experienced 35 years of decline through loss of track, fewer shippers, reduced service and closed yards, it remains an essential mode of freight transportation for the State, with 61 of the State's 62 counties having at least one active rail line running through it, and 59 of New York's 62 cities being located along active rail lines.

6. NYSDOT recently completed a broad policy and planning initiative for the State's rail infrastructure, resulting in the adoption of the "New York State Rail Plan 2009 – Strategies for a New Age". A copy of the 2009 State Rail Plan, with Appendices, is attached hereto as Exhibit 1.

7. New York recognizes the critical role that freight railroads play in New York's transportation network and economy, with rail being the most energy efficient mode of transport, reducing highway congestion, improving safety and protecting environmental quality by transporting thousands of tons of freight that would otherwise move on New York's heavily burdened highways.

8. The success of NYSDOT's policies and initiatives to reverse past disinvestment in rail infrastructure and build a thriving rail transportation system for New York, is dependent upon preserving and developing new rail sidings, rail-truck transfer facilities, yards and 'last-mile connections serving terminals and shippers. In the past, "excess" sidings and yard tracks were often removed to limit railroad costs and taxes. The resultant loss of runaround sidings, yard tracks and interchange tracks now compromises NYSDOT's policies and initiatives.

9. Specific to the New York City metropolitan region and Long Island, is NYSDOT's goal to eliminate 300,000 truck trips annually from the region's congested roadway infrastructure through increased rail-truck transfer activity in existing or additional intermodal

yards and facilities. Lack of access to the railroad through the limited availability of yards, rail-truck transfer facilities and warehouse facilities is one of the most significant constraints to rail market share east of the Hudson River. This shortage has been documented by the New York Metropolitan Transportation Council Rail Freight Yard Requirements Land Assessment for East of Hudson Area, issued in March 2003. A copy of the East of Hudson Study is attached hereto as Exhibit 2.

10. Since the availability of land is the single most important criterion necessary to allow for the increase in rail yards and terminals, and given the shortage of available rail-truck transfer facilities on Long Island,, any action that would foreclose the continued use of rail-truck yards or the potential development of feasible new facilities, is against NYSDOT policy and contrary to freight rail transportation plans of the State. Once again, this shortage has been independently confirmed in the recent academic study conducted by Paaswell and Eickemeyer, entitled "Consideration of Potential Intermodal Sites for Long Island", City University of New York Institute for Urban Systems" dated June 9, 2011. A copy of the study is attached hereto as Exhibit 3.

11. Recognizing New York's rail policy to preserve, maintain and develop rail-truck transfer yards, particularly on Long Island, NYSDOT has consistently supported such facilities in proceedings before the Surface Transportation Board, so long as appropriate environmental reviews have been performed. A copy of NYSDOT's comment letter on the US Rail Corporation - Brookhaven Rail Terminal, Finance Docket No. 35141, is attached hereto as Exhibit 4.

12. While NYSDOT is afforded certain protections under New York State Transportation Law for the retention of property used for rail transportation purposes, the State's

programs and funding assume that the protection afforded by the primary and exclusive jurisdiction of the Surface Transportation Board over railroad rights of way, spurs, team tracks, side tracks and facilities, will assure that these critical assets of the State and national rail transportation system will not be diverted to non-rail purposes. NYSDOT has been aware of and has supported the current transload operation at Farmingdale Yard from the outset. Attached as Exhibit 5 is a copy of a letter from NYSDOT to the MTA/LIRR reflecting support for the project and enlisting the cooperation of the commuter agency.

13. NYSDOT has also supported the continuation of transload facility operations at the Farmingdale Yard by urging several Governors to veto legislation that would have led to its closure. Copies of the Governors' subsequent veto messages are attached as Exhibits 6, 7 and 8.

14. NYSDOT believes that the New York & Atlantic Railway Company's rejuvenation of the 4.9 acres of wye, yard track and rail-truck transfer capacity at the Farmingdale Yard supports the key components of the State's freight rail transportation plan, policies and initiatives, in that: (a) an important rail transportation property has been retained and is actively operating as a component of both the State and national rail transportation system; (b) private capital has been invested to improve Long Island's rail infrastructure in furtherance of the State's policy preference for financing freight rail investments through public-private partnerships; and (c) the facility has increased the freight tonnage transported by rail from Long Island, removing more than 190,000 trucks from State roadways since 2004, while increasing energy efficiency and lowering carbon emissions.

15. Based upon the foregoing, NYSDOT endorses the position taken by the Long Island Rail Road, the New York & Atlantic Railway, and Coastal Distribution LLC in opposition to the petition of Pinelawn Cemetery presently before the Surface Transportation Board

VERIFICATION

I, John Rondinaro, verify under penalty of perjury under the laws of the United States that the foregoing is true and correct. Further, I certify that I am qualified and authorized to file this Verified Statement.

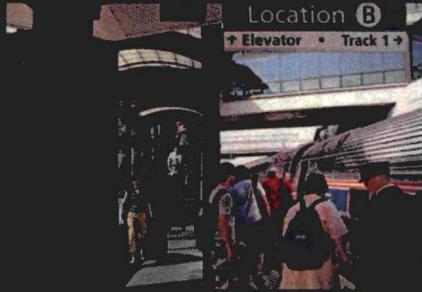
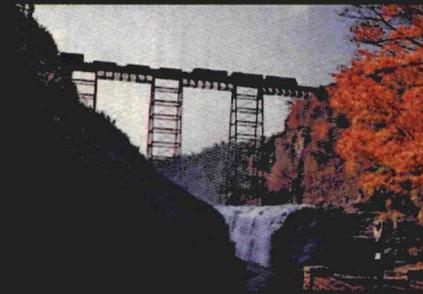
Executed on 7/15, 2011.

A handwritten signature in black ink, appearing to read "John Rondinaro", written over a horizontal line.

Name

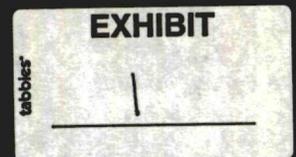
Title: ACTING DIRECTOR, OFFICE OF INTEGRATED MODAL SERVICES
NEW YORK STATE DEPARTMENT OF TRANSPORTATION

NEW YORK STATE RAIL PLAN



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Strategies for a New Age



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STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
ALBANY, N.Y. 12232
www.nysdot.gov

ASTRID C. GLYNN
COMMISSIONER

DAVID A. PATERSON
GOVERNOR

February 2009

Dear Governor Paterson:

I am pleased to submit to you the *2009 New York State Rail Plan*, the State's first in 22 years. This Plan articulates a vision for New York's future rail transportation system that will make it a preferred choice for travelers and shippers, connecting New York's cities and businesses to the national and international transportation network. The Plan identifies a set of strategies and initiatives aimed at achieving this vision, and is a blueprint to guide planning and investment for the State's passenger and freight rail system for the next 20 years.

The Plan stresses our continuing commitment to the State's extensive rail transportation infrastructure. It discusses the importance of providing mobility for people and goods in an energy efficient manner to improve the state's economy and support future economic development. The Plan recognizes that the State's rail system serves businesses and industries, that it creates jobs for New Yorkers, and also transports many of the goods that we use each day. New York State's strong support for rail reflects the fact that rail consumes less energy and produces fewer emissions than other modes. The Plan advocates a continued partnership and increased collaboration between government and both private and public rail operators. Together, we seek to cooperatively make the strategic investments that will enable the freight and passenger rail system to enhance New York's transportation network and help the State better compete in the global economy.

This Plan is the product of extensive participation from the public and the rail industry. The draft Plan was released in June 2008, and four public informational workshops were then held across the State. Many comments were received and used in preparing this final document.

The final Plan presents a compilation of rail freight and passenger needs and a recommended investment policy that will guide our funding decisions for the next 20 years. A proposed investment program for rail passenger service, as required by recently enacted federal legislation, is included in the Plan, as well as a broader companion capital investment program to guide future freight rail improvements. The Plan looks to a time when the resources may be available – constrained as they are now and may be for some time – and seeks to get us ready to deliver rail improvements as part of the economic recovery for which we are all striving.

I hope that you, other elected officials, the rail industry, and other stakeholders find this plan informative and useful.

Sincerely,

A handwritten signature in black ink, appearing to read "Astrid C. Glynn".

Astrid C. Glynn
Commissioner

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EXECUTIVE SUMMARY

Introduction

What could a vibrant rail system mean to New Yorkers? It could be a system that provides high-quality, faster, frequent and reliable passenger service between major cities across the state that is competitive with automobile and air travel times. It could provide reliable and cost-efficient freight service, using modern rail equipment, to businesses and shippers throughout the state, reducing the cost of many goods we purchase. These rail services would increase market share for passenger and freight rail transportation in the state, promote the state's competitive position in the global economy and decrease highway and aviation congestion to significantly cut energy use, greenhouse gases and motor vehicle emissions. Importantly, this system would include safety improvements that reduce rail's already low accident rate.

These are the goals of the future rail system envisioned in this plan. What follows are the policies and strategies to get there.

The 2009 New York State Rail Plan, the state's first in 22 years, presents a 20-year plan for the state's rail system (through 2030) and describes strategies and initiatives aimed at reversing past disinvestment in rail infrastructure and building a thriving rail transportation system so that it can effectively fulfill its critical role in the state's multimodal transportation network. This rail plan outlines what New York State's rail system can achieve from full, cooperative partnerships among federal, state, and local governments, railroad operators, shippers, businesses and rail passengers. The plan also presents New York State's rail infrastructure needs over the next 20 years and outlines recommended rail passenger and freight infrastructure investments for the future.

The passenger and freight rail system in New York State provides mobility for people and goods in an energy efficient manner that is essential to the state's economy and future economic development. The state's rail system serves businesses and industries that create jobs for New Yorkers and transports many of the goods that we use each day. Our existing rail infrastructure must be maintained in a state of good repair to provide safe, faster, efficient rail service now and for future generations. All levels of government must work together, with private and public rail operators, to make the strategic investments that will enable the freight and passenger rail system to enhance New York's transportation network.

New York's rail service consumes less energy and reduces congestion and vehicle emissions compared to other modes of long-distance travel, while supporting smart land use policies and environmental protection goals. In fact, a single intermodal freight train removes as many as 280 trucks from the highway system while using significantly less energy than highway travel in the process. Railroads can move a ton of freight an average of 436 miles with each gallon of fuel. Intercity passenger rail uses 20 percent less energy per passenger mile traveled than automobiles and 17 percent less than airline travel.

This report describes goals, objectives and strategies, developed through considerable public outreach, to implement the state's proposed vision for improved and expanded rail freight and passenger service. It also outlines the opportunities

Executive Summary

and challenges we face by presenting an inventory of the freight and passenger rail system in New York, trends in usage, available funding programs, rail safety issues and a description of rail's benefits to the economy and environment. This report is the result of considerable public comment from stakeholders and concerned residents at four public workshops held across the state and from other comments submitted to the New York State Department of Transportation (NYSDOT).

The 2009 State Rail Plan and its recommended investment programs is a living document that will be updated and revised as future conditions require. The plan is intended to meet all state and federal rail planning requirements.

2020 Vision for Rail

The state's vision for intercity passenger and freight rail is a system that will serve New Yorkers well – a preferred choice for travelers and shippers, connecting cities across New York State and connecting businesses to the national and international freight network. As the most energy efficient way to transport people and goods, a significantly improved rail system can make the intermodal connections to allow seamless, reliable movement from origin to destination. The rail system of the future would be "green" and support sustainable economic growth throughout New York and strengthen its premier position in the rapidly changing global economy.

The vision for the freight rail system is an energy efficient transporter of long-distance cargo with intermodal connections that function seamlessly for local deliveries and reduce the cost of freight movement. Short line railroads provide efficient service to the state's industries and shippers by providing connections to national and international markets and by supporting an expanding state economy.

The vision for intercity passenger rail is a safe, faster, reliable, frequent service that is highly competitive with the other intercity modes for intermediate travel distances and is connected to local and regional transit services and intercity buses. Between Albany and New York City, and in the Hudson Valley, intercity passenger rail is the preferred choice for travelers providing energy efficient service directly to Manhattan. West of Albany, intercity passenger rail is recast to improve service and economic connections. The intercity passenger rail system will also provide reliable connections from a new Moynihan Station in New York City to other large metropolitan areas in the Northeast including Montreal, Toronto, and Chicago.

Although this state rail plan focuses on a 20-year planning horizon, it also describes a more near-term vision for New York State's rail system that can be achieved by 2020. This vision includes the following freight and intercity passenger elements:

A freight rail system that:

- Increases freight rail market share by 25 percent, reducing the growth in truck traffic and energy consumption;
- Allows modern freight cars to access the New York metropolitan region and Long Island along the east of Hudson route, thereby eliminating more than 300,000 truck trips from the region's highways each year;
- Moves more freight across New York Harbor through the identified recommendations of the Cross Harbor Freight Movement Project

Executive Summary

Environmental Impact Statement to be completed by the Port Authority of New York and New Jersey;

- Includes at least three new intermodal facilities/inland ports, at least two of which are located upstate, serving the rapidly growing container segment of rail traffic, helping to remove long-haul trucks from the highways and delivering products to consumers quicker;
- Incorporates rail sidings, rail-truck transfer facilities, and “last mile” connections serving all rail terminals and shippers who need access to the rail network to facilitate economically competitive industries throughout New York;
- Transports hazardous commodities by rail by taking advantage of the well-documented safety benefits of rail;
- Serves as a national model with the first “green” short line railroad industry locomotive fleet in the nation, through assisting the short line railroads in replacing current fleets with clean, energy-saving locomotives;
- Moves toward positive train control as a means to reduce the risk of accidents; and,
- Serves business upstate as well as downstate via an integrated rail network that is restored to good condition and maintained in a state of good repair.

An intercity passenger rail system that:

- Transports double the total intercity passenger rail ridership as it does today on New York’s three major rail corridors – New York City to Albany, Albany to Buffalo and Albany to Montreal -- as new passenger equipment becomes available, reducing highway congestion, energy use and air emissions;
- Provides reliable and frequent rail travel connecting Albany and New York City, with an on-time performance of at least 95 percent, providing a time-competitive alternative mode of transportation to driving;
- Provides reliable, faster, and frequent rail travel between Albany and Buffalo, also connecting Syracuse, Utica, Rochester and the upstate cities in between, making rail travel more time-competitive with driving;
- Provides 6 1/2-hour rail travel between Albany and Montreal, making rail a more viable option compared to driving;
- Moves toward positive train control technology as an improvement over existing automatic train stop systems;
- Provides rail passengers with a fully functioning and convenient Moynihan Station in New York City;
- Has Northeast Corridor rail infrastructure (including the Empire Corridor feeder line) in a state of good repair through increased federal investment;
- Provides high-speed intercity passenger service throughout the Northeast Corridor;
- Integrates commuter, intercity passenger, and freight rail operations by improving efficiency and lowering overall service costs;
- Provides greater intercity passenger service frequencies where there is market demand; and
- Evaluates and develops new or additional passenger services where viable, potentially including commuter services connecting Saratoga Springs with Albany and Niagara Falls with Buffalo and intercity services connecting Binghamton with New York City.

Rail Infrastructure Needs and Investment Program

The future success of passenger and freight rail transportation in New York State can only be achieved through a concerted effort by public and private sectors to increase rail investment. While New York previously has invested considerably in the passenger and freight rail system, federal leadership is clearly needed to develop national policy and funding for rail transportation. Federal investment in rail has declined by 50 percent over the past three decades; it now represents only about 2 percent of all federal transportation funding while federal investment in other modes has increased significantly. A stable, predictable funding partnership is needed, consisting of the railroads, the Federal government (including Amtrak) and state government to invest in rail transportation, just as there are similar partnerships for shared infrastructure investments in other transportation modes, such as highways, transit and aviation. The National Surface Transportation Policy and Revenue Study Commission earlier this year recommended creating national intercity passenger rail and freight policies with a strong federal role in funding rail infrastructure. New York fully supports these recommendations.

The enactment of the Federal Passenger Rail Investment and Improvement Act of 2008 shows the commitment by Congress to be a partner in improving intercity passenger rail service. That act has considerable potential to fund much-needed rail infrastructure improvements. Congress needs to fully appropriate the funding programs authorized in the act to allow the states and railroads to plan and to implement necessary rail improvements. Consideration should be given to expanding future federal investment in freight rail improvements that benefit interstate commerce and the public, such as the removal of network bottlenecks that impede interstate commerce, last-mile access to nationally significant ports of entry and constructing rail-truck intermodal transfer facilities.

A dedicated, predictable funding source for future rail investments is needed at both the federal and state level. Federal funding for rail passenger and freight programs should be from sources above and beyond those already used to finance highway and transit programs. Continuing and supplementing rail funding through a state dedicated fund will provide an advantage to New York in leveraging future federal aid and leveraging longer-term commitments from the private railroads.

A major purpose of this plan is to present New York State's rail passenger and freight needs and future investment requirements. NYSDOT's comprehensive survey of the rail industry's capital needs for all railroads operating in New York State reveals more than \$10.7 billion of investment will be needed over the next 20 years, including the third track initiative, with \$4.8 billion of this investment contained in the first five years. This includes the cost to achieve a state of good repair on the freight and passenger systems and to enhance and to expand service capacity. These needs include the state's regional and short line railroads; the New York State portions of Class 1 railroads; intercity passenger services in New York operated by Amtrak; and portions of commuter rail needs that affect intercity passenger services. These needs do not include the projects along Amtrak's Northeast Corridor, other than improvements yet to be determined at Moynihan Station in New York City. The Cross Harbor Freight Improvement project in New York City is included in the summary of rail needs but with a cost and content to be determined pending completion of the Environmental Impact Statement by the Port Authority of New York and New Jersey and selection of a preferred alternative.

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This plan also describes the proposed rail investment policy that will be used to guide the state's future rail passenger and freight infrastructure investments. Responsibility for funding the necessary investments in the rail system that serves both the state and interstate commerce should be shared among the private railroads that own much of the rail infrastructure and the various levels of government, where appropriate. New York State's investment policy supports sharing project funding among the partners in relation to benefits received. The share of funding for specific investments attributable to each of these partners will differ based on the specific type of investment and the weighting of project benefits between the public and the railroad. The Long Range Service and Investment Program (LRSIP) contained in Appendix B to this plan presents the recommended cost-sharing responsibilities for future passenger rail investments in New York State. The projects in the initial LRSIP are subject to future discussions on costs and funding with the involved railroads and funding partners. Adjustments to the plan may be needed in the future based on the results of ongoing planning studies, including the Empire Corridor West Railroad Passenger Transportation Planning Study and the Binghamton Rail Passenger Service Study.

The long range investment program for rail passenger service has greater funding specificity for the nearer-term projects than for those projects that are later in the funding period. The investment program includes projects that solely benefit passenger rail service and projects that benefit passenger rail service and improve infrastructure of the owning railroads, either commuter railroads or freight railroads. These projects will improve rail infrastructure including track, control signals and passenger stations across the state and will produce significant improvements to intercity passenger rail service. The proposed investments address critical capacity and bottleneck constraints and the operational improvements that will improve the multipurpose rail network's fluidity. The combination of these projects will reduce delays, increase speed, improve reliability and safety, and create increased market demand for passenger rail service.

NYS DOT has also developed a companion investment program for freight rail that describes, at a broad level, the state's investment priorities to maintain and to improve the state's freight rail system. It creates a blueprint for the state's funding decisions for future freight rail investments. Projects that improve the railroads' ability to divert truck traffic from overburdened highways, including removing vertical clearance restrictions; increasing the weight-carrying ability of track to increase efficiency; constructing rail/truck intermodal facilities; and increasing safety at rail-highway crossings all have clear public benefits. Further, many rail investments, such as sidings to serve a business or a port facility, significantly benefit economic development. This rail plan recommends that the state continue to support rail freight infrastructure improvements that have significant and measurable public benefits.

These combined recommended infrastructure investment programs address many of the goals, objectives and strategies for improving rail passenger and freight service in New York State that are presented in this rail plan. These passenger and freight investment programs will be regularly updated as the state's investment priorities are refined, as project costs and schedules are better known and as funding commitments become more certain. In addition, the results of future rail studies will

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be incorporated into the plan via appendices, prior to the next full update of the plan.

In addition, the near-term projects in the investment program will be discussed with Metropolitan Planning Organizations (MPOs), as well as local officials outside metropolitan areas, and merged into the MPOs' federally required Transportation Improvement Program and Statewide Transportation Improvement Program as appropriate.

CHAPTER 1 – STATE RAIL VISION, GOALS, OBJECTIVES AND STRATEGIES

1.1 Role of Railroads in New York State

New York State's multimodal transportation system encompasses a diverse mix of facilities that are owned and operated by public and private entities. This transportation network includes: rail lines; highways and local roads; public transit systems; bicycle and pedestrian facilities; ports and waterways; airports; and intermodal terminals. It provides energy efficient mobility for passengers and freight and also supports the state and national economy by contributing to the economic vitality and security of the United States.

New York is fortunate to have one of the largest and most diversified rail passenger and freight transportation systems in the nation, providing essential mobility as shown by the following statistics:

- More than 73 million tons of freight moves on 4,200 miles of rail annually.
- 400,000 containers were shipped in 2007 by rail from the Port Authority of New York and New Jersey's on-dock Express Rail terminals, illustrating how intermodal freight has become the freight railroad's most rapidly growing traffic segment.
- Each year, approximately 1.5 million riders use Amtrak's Empire and Adirondack services, and 8 million rail passengers travel through Penn Station in New York City on Amtrak's Northeast Corridor system, the nation's busiest station.
- Each day, Metro-North Railroad and Long Island Rail Road carry 278,000 and 289,000 passengers, respectively, on the extensive commuter rail network in the New York metropolitan region.

On the freight side, while providing the most energy efficient mode of transport, our rail system reduces highway congestion, improves safety and protects environmental quality by transporting thousands of tons of freight that would otherwise move on New York's highways. Freight rail in New York State allows our industries and our farmers to extend the markets for their goods. It provides competition, thus lowering shipper costs and promoting industry expansion and job creation.

Our passenger rail service is equally important. The intercity passenger rail and commuter rail networks provide New York State's residents and the nation's travelers with safe, convenient, reliable, and energy efficient transportation. Passenger rail service offers travel alternatives and essential mobility to the public.

In addition to contributing to the state's economic vitality, rail transportation reduces the need for investments in highways, relieves congestion, provides redundancy in the transportation system, and is a more energy efficient and cleaner transportation alternative than many other transport modes. Overall, the rail transportation system in New York State is highly efficient, but there are challenges that require new and

innovative ways to improve passenger and freight rail transportation services to our users.

To meet these challenges, this document presents a 20-year plan for the state's rail system encompassing a 2030 planning horizon and it articulates a near-term vision of what the rail system can achieve through 2020.

Changes in Transportation

Transportation has undergone major changes over the last decade. Some contributing factors to this phenomenon are outlined below:

- Growing concerns with the environment and recognition that climate change must be addressed have affected public views and political sentiment regarding transportation and its impacts. This realization and higher energy costs have contributed to changes in our travel patterns. Most notable is the increase in public transportation ridership levels, including commuter rail lines and intercity passenger rail. On the freight side, railroads are recognized as the most energy efficient choice for moving goods. For each 1 percent of long-haul freight that switches from truck to rail, fuel savings would be approximately 111 million gallons per year and annual greenhouse gas emissions would fall by 1.2 million tons.
- The movement of goods and information is being transformed by the converging forces of globalization, a dramatic growth in trade volume and rapid technological innovation. Greater volumes of goods are moving within new global and regional trading blocs, and the timing and routing of goods movement is changing.
- Population growth, particularly in the New York metropolitan area, has brought corresponding growth in freight movement and commuter rail service levels. New York State's population, as of the 2000 Census, is slightly less than 19 million, an increase of almost 1 million people since 1990. As the population expands and ages, we must look at alternative transportation modes and safety measures, particularly regarding the transportation needs of older New Yorkers.
- Finally, travel in New York State and throughout the nation clearly was changed with the terrorist attacks on 9/11/2001. Our transportation system's security is paramount and the need for redundancy in our transportation network is more important than ever. Technology advances and other security measures will be important in the management and operation of all transportation facilities and services in New York State.

All of these changes in transportation are straining our state and national rail transportation network. Thus, the railroads in New York State are faced with major capacity issues and an aging infrastructure that could compromise the reliability and safety of our transportation system.

Funding for Rail

New York State and the nation must address the growing rail infrastructure needs for passenger service and freight. At the federal level, there has not been a consistent and dedicated source for funding rail transportation improvements; as a result, funding for rail infrastructure has greatly lagged behind other federal transportation funding. From 1980 to 2003, overall federal transportation expenditures have increased almost threefold, primarily for highway, while aviation has almost quadrupled. In contrast, federal rail expenditures have declined in real dollar numbers by almost half and have decreased from 10 percent to only 2 percent of federal transportation expenditures.¹

| Federal Transportation Expenditures by Mode | | | | |
|--|-----------------|-------------------|-----------------|-------------------|
| (Millions of current dollars) | | | | |
| MODE | 1980 | % of total | 2003 | % of total |
| Highway | \$11,706 | 47% | \$32,663 | 49% |
| Transit | 3,307 | 13% | 4,922 | 7% |
| Rail | 2,395 | 10% | 1,206 | 2% |
| Air | 3,762 | 15% | 14,153 | 21% |
| Water | 3,308 | 13% | 5,495 | 8% |
| Pipeline | | | 57 | 0% |
| General Support (a) | 183 | 1% | 8,585 | 13% |
| TOTAL | \$24,661 | 100% | \$67,081 | 100% |

(a) includes Federal-only; administrative and operating expenses of selected offices within USDOT

Figure 1 Federal Transportation Expenditures by Mode

The *National Surface Transportation Policy and Revenue Study Commission* recognized the need for increased rail investment; as part of advocating for a National Rail Transportation Policy, the Commission called for the federal government to become a strong rail investment partner.² The Passenger Rail Investment and Improvement Act of 2008 authorizes a total of slightly more than \$13 billion over the next five years to Amtrak and states to encourage the development of new and improved intercity rail passenger services. This act substantially increases the federal government's commitment to enhancing the nation's intercity rail passenger network. At the state level, rail funding has been accomplished through small, ongoing programs and public bond referendums, although the need for rail system improvements far outweighs available state resources.

In addition, unique to passenger and freight rail services is the mix of public-private operation that characterizes the mode: largely private ownership of infrastructure and facilities in conjunction with public use and benefits. The Passenger Rail

¹ USDOT BTS, Table 5-12, Government Transportation Expenditures by Mode and Level of Government from Own Funds,

http://www.bts.gov/publications/pocket_guide_to_transportation/2007/html/table_05_12.html

² National Transportation Policy and Revenue Study Commission, *Transportation For Tomorrow*, December 2007. http://www.transportationfortomorrow.org/final_report/

Investment and Improvement Act of 2008 provides the state, the rail industry and other stakeholders the opportunity to begin a new era in developing a modern intercity rail passenger service that is safe, reliable and attractive.

1.2 Vision of Rail Transportation in New York State

Developing a long-term plan for future rail transportation over the next 20 years (through 2030) is a process that involves many stakeholders, including public, federal, state and local entities and private entities, such as the rail industry, various interest groups and citizens. The process is informed by existing plans, such as New York State's *Transportation Master Plan*³ that establishes a long range vision for transportation, including rail, and by the state's October 2007 *20-Year Multimodal Investment Needs Assessment*⁴ that recommended future transportation capital investments strategies. Additional rail planning information includes various freight studies and passenger rail studies under way statewide, as well as this report. An important consideration is the Passenger Rail Investment and Improvement Act of 2008 that also establishes a national rail passenger policy and provides requirements for developing state rail plans. Finally, the state's Transportation Authorities and local Metropolitan Planning Organizations (MPOs) have a vital role in identifying rail system needs and problems through their Long Range Plans and through selected planning studies.

The input and direction from the rail industry, including railroad owners, operators and rail association partners, are critical to the state's rail planning efforts. Other stakeholders, including shippers, business, interest groups and residents and government planning partners, add valuable input. All of these stakeholders contribute to developing the state's Vision, Goals, Objectives, and Strategies for rail transportation.

NYSDOT's vision for passenger and freight rail service in New York State focuses on improving our environmental sustainability (including energy conservation), quality of life, and economic competitiveness, all of which are important to the state, its residents, businesses and rail stakeholders. The vision is:

"A rail system that improves mobility for people and goods, contributes to environmental sustainability and quality of life, while supporting and expanding economic development."

Enhanced rail services contribute to environmental sustainability through decreased fuel use and improved air quality with reduced highway vehicle and aircraft miles traveled and corresponding vehicle emissions.

Quality of life is enhanced by providing improved and expanded intercity passenger, commuter rail and freight rail services. Resulting benefits include efficient and lower-cost access to goods and products and travel opportunities for business and

³NYSDOT, *Strategies for a New Age: New York State's Transportation Master Plan for 2030*, 2006, <https://www.nysdot.gov/portal/page/portal/main/transportation-plan/transportation-plan>

⁴ 20 Year Needs Assessment, 2007, <https://www.nysdot.gov/portal/page/portal/programs/20yearneedsassessment>

shopping trips, for visits to friends and family, for recreational travel and for work commutes.

Improved rail service supports city revitalization and also encourages Smart Growth, including transit oriented development that provides housing options, jobs, retail, and services within easy walking distance of a station.

Economic development in New York State will be achieved by improved services that expand the use of rail by existing industries and travelers and promote the location of new industries on rail lines. As a result, more jobs, services and expanded economic activity will occur and development will be directed toward predictable and cost-effective locations.

Economic development and mobility will also be promoted by improved passenger rail services that connect cities across the state, facilitating business travel and tourism. Commuter rail services help employers attract more qualified workers by providing access to a larger pool of workers.

2020 Vision for Rail

The state's vision for intercity passenger and freight rail is a system that will serve New Yorkers well - a preferred choice for travelers and shippers, connecting the cities across New York State and connecting businesses to the national and international freight network. As the most energy efficient way to transport people and goods, a significantly improved rail system makes the intermodal connections to allow seamless, reliable movement from origin to destination. The rail system of the future would be "green" and support sustainable economic growth throughout New York and strengthen the state's premier position in the rapidly changing global economy.

The vision for the freight rail system is an energy efficient transporter of long-distance cargo, with intermodal connections that function seamlessly for local deliveries and reduce the cost of freight movement. Short line railroads provide efficient service to the state's industries and shippers by providing connections to national and international markets and supporting an expanding state economy.

The vision for intercity passenger rail is a safe, faster, reliable, frequent service that is competitive with the other intercity modes for intermediate travel distances and is connected to local and regional transit services and intercity buses. It is an integral part of the existing travel and trade corridors. Between Albany and New York City, and in the Hudson Valley, intercity passenger rail is the preferred choice for travelers, providing energy efficient service directly to Manhattan. West of Albany, intercity passenger rail is recast to improve service and economic connections. The intercity passenger system will also provide reliable connections from a new Moynihan Station in New York City to other large metropolitan areas in the Northeast including Montreal, Toronto, and Chicago.

The state rail plan focuses on a 20-year planning horizon, but it also describes a more near-term vision for New York State's rail system that can be achieved by 2020. This vision includes the following freight and intercity passenger elements:

A freight rail system that:

- Increases freight rail market share by 25 percent, reducing the growth in truck traffic and energy consumption;
- Allows modern freight cars to access the New York metropolitan region and Long Island along the east of Hudson route, thereby eliminating more than 300,000 truck trips from the region's highways each year;
- Moves more freight across New York Harbor through the identified recommendations of the Cross Harbor Freight Movement Project Environmental Impact Statement to be completed by the Port Authority of New York and New Jersey;
- Includes at least three new intermodal facilities/inland ports, at least two of which are located upstate, serving the rapidly growing container segment of rail traffic, helping to remove long-haul trucks from the highways and delivering products to consumers quicker;
- Incorporates rail sidings, rail-truck transfer facilities, and "last mile" connections serving all rail terminals and shippers who need access to the rail network to facilitate economically competitive industries throughout New York State;
- Transports hazardous commodities by rail by taking advantage of the well-documented safety benefits of rail;
- Serves as a national model with the first "green" short line railroad industry locomotive fleet in the nation, by assisting the short line railroads in replacing current fleets with clean, energy-saving locomotives;
- Moves toward positive train control to reduce the risk of accidents; and
- Serves business upstate and downstate via an integrated rail network that is restored to good condition and maintained in a state of good repair.

An intercity passenger rail system that:

- Transports double the total intercity passenger rail ridership as it does today on New York's three major rail corridors – New York City to Albany, Albany to Buffalo, and Albany to Montreal -- as new passenger equipment becomes available, reducing highway congestion, energy use and air emissions;
- Provides reliable and frequent rail travel connecting Albany and New York City, with an on-time performance of at least 95 percent, providing a time-competitive alternative mode of transportation to driving;
- Provides reliable, faster, and frequent rail travel between Albany and Buffalo, also connecting Syracuse, Utica, Rochester and the upstate cities in between, making rail travel more time-competitive with driving;
- Provides 6 and 1/2-hour rail travel between Albany and Montreal, making rail a more viable option compared with driving;
- Moves toward positive train control technology as an improvement over existing automatic train stop systems;
- Provides rail passengers with a fully functioning and convenient Moynihan Station in New York City;
- Has Northeast Corridor rail infrastructure (including feeder lines such as the Empire Corridor) in a state of good repair through increased federal investment;
- Provides high-speed intercity passenger service throughout the Northeast Corridor;

- Integrates commuter, intercity passenger and freight rail operations by improving efficiency and lowering overall railroad costs;
- Provides greater intercity passenger service frequencies where there is market demand; and
- Evaluates and develops new or additional passenger services where viable, potentially including commuter services connecting Saratoga Springs with Albany and Niagara Falls with Buffalo and intercity services connecting Binghamton with New York City.

1.3 Goals, Objectives and Strategies for Rail Service in New York State

NYS DOT's goals and objectives for freight and passenger rail service in New York State are presented below. Each goal is followed by the objectives necessary for implementation.

Proposed improvement strategies for rail passenger and rail freight service in New York State that implement the vision, goals, and objectives are also presented. These goals, objectives and strategies were developed in collaboration with many of this plan's stakeholders (as described in Chapter 10 of this report) especially rail industry representatives, state, local, Metropolitan Planning Organization partners, and various interest groups and residents. Responsibility for implementing these proposed strategies may lie with the public sector, the private railroads, or jointly.

Additionally, the goals, objectives, and strategies are aligned, as appropriate, with the goals and strategies in existing plans and programs, such as: the New York State Transportation Master Plan; the New York State Multimodal Transportation Program Submission 2009-2014; the investment and assistance principles from the 2007-2008 Regional Blueprint Initiative that is part of the Governor's Statewide Economic Development Fund; and the state Metropolitan Planning Organizations' Long Range Plans.

Safety and Security

Goal: *Personal safety and infrastructure and property security.*

Objectives:

- Increased safety of passenger and freight train travel using positive train control technology as an improvement over existing automatic train stop systems to reduce the risk of accidents.
- Maintained and, where possible, improved security of passengers, consistent with federal and state policy.
- Improved safety of vehicles and pedestrians at rail-highway at-grade crossings.
- Enhanced security of rail rights-of-way and reduce illegal trespassing.

Strategies:

- Work with the Federal Railroad Administration (FRA) and the rail industry in developing and deploying positive train control technology.

- Upgrade fencing, secure assets and install other tamper-resistant devices for critical rail facilities and infrastructure assets such as rail yards, railroad undergrade structures, rail equipment and train control signal systems.
- Install security video surveillance monitoring of key assets.
- Prevent unauthorized vehicular and pedestrian access to railroad rights-of-way.
- Increase coordination with law enforcement.
- Increase the penalty for violation of rail safety statutes.
- Expand communications among railroad and all security-cleared state officials, emergency responders and police agency personnel to track the location of trains with any high-risk contents hauled through the state in real time.
- Promote utilization of rail for freight movement when it provides enhanced safety and security over trucks.
- Partner with the Federal Railroad Administration and the rail industry in developing crash avoidance technology.

System Preservation

Goal: *Preserve the existing rail system as a long-term transportation asset.*

Objectives:

- Maintenance of New York's rail network through strategic programs to keep rail operators viable.
- Maintenance of rail system infrastructure assets in a state of good repair.
- Preservation of essential local rail corridors to retain the availability of rail service for the future.
- Preservation of rail rights-of-way that may be candidates for use in future transportation networks.

Strategies:

- Maintain the rail system in a manner that will provide safe and reliable operation and preserve a rail line's track structure commensurate with its anticipated level of train service.
- Replace rail infrastructure components within their useable service lives. The core rail infrastructure elements include:
 - Track, switches, and roadbed.
 - Drainage and culverts.
 - Undergrade bridges (railroad carried).
 - Railroad tunnels.
 - Train signal control systems and communications.
 - Maintenance, repair and crew support facilities.
 - Freight transfer facilities and terminals.
 - Passenger stations.
- Partner with the FRA and railroad owners to ensure safe railroad infrastructure.
- Identify all current rail rights-of-way with potential for abandonment and ensure they are preserved for potential future use for rail service or alternative transportation uses.

- Identify poor condition rail lines for which a temporary abatement from real property taxation would be a significant incentive for the owning railroad to upgrade its assets to a state of good repair.
- Perform a comprehensive analysis of the implications and benefits to New York State of exempting rail infrastructure and rights-of-way from real property taxation.
- Identify and create cost-effective incentives to encourage owners of rail freight lines to upgrade their infrastructures to a state of good repair and eliminate disincentives that discourage infrastructure investment.

System Capacity, Reliability and Travel Time

Goal: *Develop a rail network capable of supporting the future needs of New York State residents and businesses and manage it for optimum efficiency.*

Objectives:

- Expanded rail capacity to promote and to meet projected growth in freight and passenger demand.
- Removal of bottlenecks to increase system capacity.
- Increased market share of passenger and freight rail services.
- Improved on-time performance and reliability for both freight and passenger services.
- Optimization of rail network operations.
- System redundancy, reliability and viability to support other modes of transportation.

Strategies:

- Manage shared-use trackage on shared corridors to maximize efficient freight and passenger rail operations.
- Remove or reduce bottlenecks.
- Install additional or extended controlled sidings where needed.
- Develop rail yard bypasses and/or modify yard approaches.
- Provide additional crossover interlockings along multiple track rail lines.
- Construct additional main line track to meet capacity needs on rail corridors.
- Separate passenger and freight rail operations whenever feasible and warranted.
- Develop a program of projects to reduce travel time and improve reliability in the Empire Corridor.
- Study potential passenger rail service expansion in developing markets, such as the Southern Tier and Western New York.
- Build rail network additions or modifications to provide system redundancy of regionally significant infrastructure.
- Develop additional freight yard capacity in the New York City metropolitan area.
- Support completion of the Cross Harbor Freight Movement EIS by the Port Authority of New York and New Jersey to identify long term solutions.
- Revitalize existing railroad real property tax abatement programs targeted at network enhancements (non-maintenance), including active NYSDOT management and outreach of abatement program.

Intermodalism, Accessibility and Mobility

Goal: *An integrated rail system that facilitates the efficient movement of people and goods, expands choices, and improves access to and interconnectivity of all transportation system modes.*

Objectives:

- Improved coordination among freight, intercity passenger and commuter rail systems with other modes of transportation.
- Improved access to commuter and intercity passenger service via other modes or through the proximity of new stations.
- Seamless transfers of passengers between transport modes.
- Americans with Disabilities Act (ADA)-compliant access on trains and at passenger station facilities and train loading platforms.
- Increased intermodal freight traffic through improved highway-rail and water-rail intermodal connections.
- A rail network in New York State that is fully integrated with the North American rail system, including compatibility with current standards for rail car size and weight.

Freight Strategies:

- Provide 286,000-pound rail car load capacity for all freight railroad infrastructures.
- Provide 315,000-pound rail car load capacity on railroad infrastructure where market demand is identified.
- Eliminate vertical and horizontal rail car load clearance restrictions to accommodate today's larger freight cars.
- Develop strategic rail connections to facilitate efficient and effective interchange of rail cars between railroads.
- Develop freight intermodal facilities where market demand is identified.
- Improve rail access to and within ports, freight terminals and intermodal freight facilities.

Passenger Strategies:

- Improve passenger intermodal connections, including seamless integration with local transportation and other modes of intercity passenger transportation by through-ticketing, through-scheduling and cross-marketing.
- Support the construction of Moynihan Station in New York City to improve efficiency and system capacity.
- Expand park-and-ride capacity and rail station parking where required to support increased ridership.
- Introduce new passenger rail, along with rail feeder bus service to communities where feasible, practical and financially viable.
- Upgrade passenger stations to provide ADA-compliant access.
- Revitalize and improve passenger station facilities, amenities and operations.
- Evaluate fare structure and pricing to maximize ridership while sustaining the financial viability of passenger rail service in New York State.

- Upgrade, modernize and/or replace passenger rail car equipment to enhance and to improve the rail travel experience (i.e. food service cars, baggage cars, dome vista coaches).
- Improve inspection and passenger processing procedures to reduce travel time and to improve reliability for passenger services to Canada.

Energy Efficiency, Environmental Sustainability and Economic Competitiveness

Goal: *Provide a rail system that is energy efficient and environmentally sustainable and that promotes the integration of transportation, land use and economic development to support New York's economic competitiveness and quality of life.*

Objectives:

- Mitigation of highway congestion and reduced energy use and air pollution through the greater use of intercity passenger, commuter and freight rail systems.
- Improved air quality through decreased railroad locomotive emissions.
- Greater economic competitiveness of the rail system by maximizing efficiency and customer access.
- Implementation of policies that provide competitive pricing for passenger and freight rail travel.
- Freight rail facilities to serve shippers currently without rail connections.
- Improved rail network competitiveness in the global economy through targeted infrastructure and technology investments.
- Exploitation of the energy efficiencies available through a better utilization of railroad and contiguous property consistent with sound environmental and smart growth policy.

Freight Strategies:

- Expand the existing rail and port programs to include project eligibility requirements and selection criteria based on transportation benefits to be accrued.
- Enhance and expand the existing rail and port multimodal program to address local freight transportation infrastructure needs.
- Increase state investment in rail freight transfer yards, team tracks, freight sidings, intermodal freight facilities and cross-dock transfer terminals to serve multiple customers and shippers within a community or region.
- Increase state investment in freight rail and facility revitalization targeted "at the last mile" to attract new (or retain existing) freight customers.
- Encourage the use of rail, where feasible, for NYSDOT procurements.
- NYSDOT will work with state agencies, including the Empire State Development Corporation and the Department of Environmental Conservation, to implement rail alternatives where they support economic development.

Passenger Strategies:

- Provide capital and/or operating support of additional daily passenger trains and/or additional coaches per train along existing service corridors when feasible, practical and financially viable.

- Implement rail feeder bus service along existing passenger rail routes.
- Study the pricing structures of passenger rail services in New York State to determine their competitive impact on other transport modes.
- Connect to the Northeast Corridor to provide effective alternatives to long-distance air and highway travel.

Energy and Environmental Strategies:

- Support transit oriented development at intercity passenger and commuter rail stations.
- Retrofit equipment to reduce diesel engine idling, fuel use and emissions for locomotives operating and based in New York State.
- Work with railroads based in New York State to acquire locomotives that meet new environmental standards.
- Purchase ultra-low-emission locomotives intended for yard switching and local train service in New York State.
- Develop a “buyers program” for railroads operating in New York State to obtain regular and sufficient supplies of ultra-low sulphur fuel or other environmentally friendly fuels for use in locomotives.
- Assist railroads in developing “green” rail yards and track facilities.

Program Funding and Delivery

Goal: *Adequate, stable and predictable funding through public and private sources for rail investments.*

Objectives:

- Balanced federal investment in rail passenger and freight transportation consistent with federal investment in other transport modes.
- A federal and state funding program that facilitates planning and implementation of public investment in rail transportation.
- Public policies that support increased investment by private railroads.
- Dialogue and cooperation among NYSDOT and the railroads to maximize system efficiency and investments.
- Public-private partnerships to increase investment in New York State’s rail network.
- Rail investments in New York State that provide public benefits, including enhanced commercial productivity, reduced traffic congestion, energy savings and air quality improvement in excess of their costs.
- A state real property tax structure for railroads that removes disincentives for and encourages investment in rail service and infrastructure.
- An up-to-date state railroad law that reflects current federal law and railroad operating environment.

Strategies:

- Continue to advocate for a stronger policy and a federal role for passenger and freight rail transportation.
- Advocate for creation of dedicated federal and state programs for investment in rail infrastructure similar to those available for other transport modes.

- Obtain funding under the Passenger Rail Investment and Improvement Act of 2008 to enhance the state's intercity rail passenger system.
- Invest public funds in private rail infrastructure where there is a public benefit.
- Implement public-private partnerships to secure increased investment in New York State's rail system.
- Update New York State's railroad law, as the last comprehensive update occurred in 1964. Since that time, the Interstate Commerce Commission Termination Act of 1995 has pre-empted much of the statute, while changes in railroad technology and operations have rendered other sections of the law obsolete or ineffective.
- Streamline the state grant process to reduce the time to implement rail projects.
- Establish regular meetings, not less than twice a year, among NYSDOT and the passenger and freight rail industries to coordinate rail policy, planning and funding.
- Review options for governance, roles and staffing to best implement the goals, objectives, and strategies recommended in the New York State Rail Plan.
- Develop a multiyear investment plan to guide program and project development consistent with the New York State Rail Plan.

Conclusion

The State Rail Plan lays the foundation for an improved and sustainable rail system in New York State by identifying a vision for passenger rail service and freight rail service and establishing goals, objectives and strategies to achieve that vision. All of this has been accomplished by working with various stakeholders, including the rail industry, rail advocates, elected officials, and many other concerned groups and individuals. This collaboration is essential to creating a vision that reflects the needs of the community and ultimately to having a responsive, efficient and sustainable rail transportation network.

A freight rail system that increases the freight rail market share by 25 percent and an intercity passenger rail system that doubles its ridership on its major rail corridors are ambitious goals requiring dedicated investment by government and the private railroads. The Passenger Rail Investment and Improvement Act of 2008 is a first step toward reaching these goals by authorizing funding to Amtrak and the development of new and improved intercity rail passenger service. Additional funding from all sources, federal, state, and private will be needed to accomplish all of the rail improvements identified in this plan.

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CHAPTER 2 – PLAN PURPOSE and AUTHORITY

2.1 Purposes of the State Rail Plan

The 2009 New York State Rail Plan (SRP) is developed to provide a framework for the management, promotion and improvement of New York State's rail system. The 2009 Plan serves as New York's official State Rail Plan fulfilling all federal requirements of Title 49, Chapter 227 and is in compliance with the requirements of Section 22102. The 2009 Plan will be amended as appropriate in conjunction with the state's ongoing rail and transportation planning activities and will be formally updated and revised within five years of this issuance. State rail transportation policy and strategy is articulated in the state's federally required Long Range Transportation Plan and, as such, is an extension of that Plan.

The SRP presents NYSDOT's proposed vision, goals, objectives and strategies for rail service in New York State. All the SRP elements guide NYSDOT's efforts to provide improved and expanded rail service for New York State and its rail-related industries.

Specifically, the SRP is prepared for the following purposes:

- Provide statements of vision, goals and objectives.
- Describe potential strategies to implement goals and objectives.
- Present an inventory and review of the rail system in the state, including freight, intercity passenger and commuter rail services.
- Present intercity passenger rail service objectives and performance evaluations and identify system and service needs and high-speed rail corridor development plans.
- Present freight rail service objectives and performance evaluations and identify system and service needs and facility development plans.
- Include stakeholder and public involvement to develop and update the SRP, including railroads, shippers and passengers.
- Present the Long Range Service and Investment Program for current and future freight and passenger rail infrastructure in the state, including a capital program list for passenger improvements.
- Present a funding plan for the projects in the Long Range Service and Investment Program.

These efforts strongly support New York's rail policies, as expressed in state statutes. Numerous states have embraced the concept of coordinating and integrating their modal plans with their overall statewide transportation plans (such as in *New York State's Transportation Master Plan for 2030* and in NYSDOT's *2009–2014 Multimodal Transportation Capital Program*). This is particularly important when the volume of freight transportation in the United States is predicted to double over the coming two decades. The state will need to look at opportunities to improve interconnectivity and to foster efficiencies in moving both goods and people.

With major changes in the railroad industry over the past decade and projected future changes, a new SRP is essential to reflect the impact of these changes on state rail policy and transportation planning. The SRP will establish the basis for the state's rail transportation policy and will be a springboard for future rail-planning

efforts. A new SRP is also required to comply with state and federal legislation and related planning requirements.

2.2 State and Federal Legislation and Planning Requirements

NYSDOT's rail-planning efforts are implemented within the context of specific state and federal legislation and related planning requirements that are summarized below.

State Legislation

The history of rail planning in New York State begins with the creation of NYSDOT under Chapter 717 of the Laws of 1967. Chapter 717 established NYSDOT as of 9/1/67 and required NYSDOT to produce the first long range statewide master plan addressing transportation facilities and services for the following modes: highways, rapid transit, railroad, omnibus, marine and aviation. Under the Laws of 1975 and 1979, the New York State Legislature directed the Commissioner of Transportation to prepare and to submit to the Governor a report evaluating the state's intercity rail passenger service, rail service preservation and rail energy conservation programs. The New York State *Rail Preservation Program Annual Report* was prepared regularly in compliance with this mandate.

Subsequently, an *Annual Update to the Report* was regularly prepared in accordance with federal regulations and was submitted to the Federal Railroad Administration. Updates were prepared through 1986 to document any significant changes in rail policy, regulations and/or legislation and to document the state's rail planning process.

Under Chapter 54 of the laws of 1985, as amended by the laws of 1986, the New York State Legislature directed the Commissioner of Transportation to prepare and to submit to the Director of the Budget, the Chairman of the Senate Finance Committee and the Chairman of the Assembly Ways and Means Committee a report on the impact of local rail service preservation programs and recommendations for future rail programs. This combined document addressed the rail planning requirements of all of the above-mentioned reports, as well as Chapter 54, and served as a reference document on the status of the rail industry in New York. The requirement to prepare this report ended in 1995 when the federal funding for the Local Rail Service Assistance Program was eliminated.

State Planning Requirements

NYSDOT's rail planning efforts since the 1990s have focused on implementing major rail capital projects, primarily bond-funded, that improved both passenger and freight rail service.

Also, since 1985, there have been numerous and significant changes in the rail industry, including:

- Changes in ownership and operation of rail lines in New York State.
- Establishment of new state rail policies, especially regarding vertical clearances.
- Adoption of 286,000-pound rail cars as the new interline standard nationwide.

- Rapid growth in intermodal traffic nationwide.
- Growth in number of regional and short line railroads nationwide.
- Other important national rail issues, including increased freight traffic straining and exceeding rail line capacity.
- Changes in rail traffic origins and terminations in New York and the rest of the North America.
- Federal legislative and regulatory changes.
- Unprecedented climate changes and fuel price increases.
- The end of federal Local Rail Freight Assistance funding in 1995.

The SRP recognizes that rail passenger and freight services are a critical part of New York State's overall transportation system. Cost-effective investment of the state's transportation resources must consider other modes, including highways, aviation and water, as well as rail. Decisions on the preferred mode for investments to improve the movement of freight traffic in New York depend on the type of such traffic, as well as its origin and destination. Investments for passenger traffic depend on the nature of the movements, whether commuter or intercity, and specific origin and destination.

The SRP is coordinated with New York's long range transportation plan that is updated periodically. The 2006 update of the long range plan (titled *Strategies for a New Age: New York State's Transportation Master Plan for 2030*) included strategies for improving intercity and commuter passenger rail and rail freight service as key elements of initiatives designed to increase mobility and to provide additional services throughout the state. The SRP is also aligned with the *2009-2014 Multimodal Capital Program* that articulates priorities, principles and goals related to rail transportation in New York.

Federal Legislation

A long series of federal legislation has established the framework for federal involvement in and assistance to rail passenger and freight services throughout the nation.

The Rail Passenger Service Act of 1970 provided for the establishment of the National Railroad Passenger Corporation (Amtrak); this took over the operation of most intercity rail passenger service from the private railroads on May 1, 1971. In New York, this included the Empire Service between New York City, Albany, Buffalo, and Niagara Falls that has operated ever since as part of Amtrak's national system.

The Railroad Revitalization and Regulatory Reform Act (4R) of 1976 and the Staggers Act of 1980 made it easier for railroads to abandon their least-productive lines. However, the 4R Act also established a nationwide local rail service assistance program to help continue service on such abandoned lines and required a formal rail planning process.

Nevertheless, the federal government retained regulatory authority over railroad mergers, line abandonments or realignments and, in some cases, rates. This authority is held by the Surface Transportation Board (STB), the successor agency to the Interstate Commerce Commission (ICC) that was abolished via the ICC Termination Act of 1995. Although federal law now pre-empts state authority in

these areas, New York State has and will continue to participate in significant STB proceedings that affect rail service in New York.

In 1978, the passage of the Local Rail Service Assistance Act (LRSA) broadened project eligibility and the funding allocation formula while instituting specific requirements for project justification. In 1989, the LRSA program was reauthorized by Congress and was renamed the Local Rail Freight Assistance (LRFA) program. Federal authorization continues for this program but no funding has been provided by Congress since 1995.

In 1991, Congress enacted the Intermodal Surface Transportation Efficiency Act (ISTEA) that greatly expanded the nation's focus on intermodal transportation and movement of people and goods. It provided federal funding for multimodal transportation from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to state and Metropolitan Planning Organizations (MPOs). ISTEA required the states and the MPOs to "explicitly consider, analyze as appropriate and reflect in the planning process international border crossings and access to ports, airports, intermodal transportation facilities and major freight distribution routes." Also, ISTEA required plans to be developed using a coordinated process, including coordination with operators of airports, ports, rail terminals and other intermodal transportation facilities and with the state rail plans.

ISTEA included the Congestion Mitigation and Air Quality (CMAQ) program, a source of funds for passenger rail projects that are designed to assist in improving air quality. CMAQ funds are distributed to states for projects that will have a positive impact on air quality.

In 1998, Congress enacted the Transportation Equity Act for the 21st Century (TEA-21) that carried forward the intermodal focus of ISTEA. In 2005, the latest surface transportation legislation was passed, titled the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This law requires each state to carry out a transportation planning process that provides for consideration and implementation of projects, strategies and services that would:

- Support the economic vitality of the United States, the states, metropolitan areas and non-metropolitan areas, especially by enabling global competitiveness, productivity and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase accessibility and mobility of people and freight.
- Protect and enhance the environment, promote energy conservation, improve quality of life and promote consistency among transportation improvements and state and local planned growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, throughout the state, for people and freight.
- Promote efficient system management and operations.
- Emphasize the preservation of the existing transportation system.

A number of changes also created more opportunities to obtain funds for rail freight projects and intercity rail passenger service.

The Americans with Disabilities Act (ADA) provides that new rail passenger equipment and facilities must be fully accessible and meet the requirements of this act. Implementing these requirements has had a significant cost impact on rail station improvement projects in New York State. This situation affects all owners of rail stations. In New York, station ownership is generally divided between Amtrak and local entities, such as cities or transportation districts. Thus, Amtrak and such entities must bear the cost of necessary improvements, such as compliance with ADA requirements, at the stations they own.

The Amtrak Reform and Accountability Act of 1997 (PL 105-134) expired on September 30, 2002. This legislation:

- established the Amtrak Reform Council that began an extensive study of the future of national intercity passenger rail service;
- restructured Amtrak governance by establishing the Amtrak Reform Board;
- modified labor protections, most notably "C2" protections that enabled Amtrak to eliminate onboard food service without incurring significant employee severance payments; and
- required a study of Amtrak's financial requirements, including:
 - cost allocation process and procedures;
 - expenses;
 - strategic business plan;
 - assets and liabilities (including Northeast Corridor State of Good Repair); and
 - bidding practices.

Congress has also promulgated federal Intercity passenger rail policy through annual transportation appropriations legislation, where Amtrak accountability remains a key issue. Previously, Congress enacted financial oversight provisions through appropriations legislation. There have been attempts through the annual appropriations legislation to find ways for state and local governments to increase payments to Amtrak. In particular, the Fiscal Year 2006 Transportation Appropriations Act included a provision requiring transit operators to pay the fully allocated cost of utilizing Amtrak Northeast Corridor facilities. This provision would have directly affected the Metropolitan Transportation Authority (MTA) commuter rail operations. However, after extensive analysis of the value of capital facilities provided by MTA and Amtrak, the provision was never implemented.

The Rail Safety Improvement Act of 2008 and the Passenger Rail Investment and Improvement Act of 2008 were signed by the President on October 15, 2008. The Passenger Investment and Rail Improvement Act of 2008 contains the most aggressive language in history regarding a federal requirement for states to undertake comprehensive rail planning. This act also establishes for the first time an intercity passenger rail capital grant program for states. States must identify rail intercity passenger rail corridor improvement projects in their current state rail plans to be eligible for the federal capital grant programs that are proposed.

The 2009 New York State Rail Plan will serve to fulfill all applicable federal planning requirements, including:

- The planning regulations of the federal Local Rail Freight Assistance Program remain in effect (see 49 CFR 266.15), although the program is not currently funded.
- Federal planning guidelines, as contained in Title 49, Part 266 of the Code of Federal Regulations, require the SRP to provide a description and assessment of the condition of the state's rail system.
- The designation of the Empire Corridor as a qualified high-speed rail corridor under Section 1010 of the Intermodal Surface Transportation Efficiency Act (ISTEA) provides specific regulations for funding of grade crossing improvement projects under this section.
- The federal planning regulations as delineated in the Passenger Rail Investment and Improvement Act of 2008 under sections 303, 307 and 501.
- Legislation for the federal reauthorization of Amtrak: the Passenger Rail Investment and Improvement Act of 2008 contains the most aggressive language in history regarding a federal requirement for states to undertake comprehensive rail planning.

Conclusion

The State Rail Plan provides the framework for the management, promotion and improvement of New York State's rail system, including the vision, goals, objectives and strategies for rail service in New York State. The plan also summarizes the state and federal legislation and planning requirements relating to the operation and management of such rail services.

The most recent federal legislation is the Passenger Rail Investment and Improvement Act of 2008; it establishes the first-ever intercity passenger rail capital grant program for states. This legislation requires eligible rail capital projects to be identified in the State Rail Plan and specifies the planning requirements to be included in the State Rail Plan. This plan meets these federal requirements.

CHAPTER 3 – THE RAIL SYSTEM IN NEW YORK STATE

3.1 Overview of New York State's Rail Network

New York State's rail network has evolved over nearly two centuries to serve a wide range of markets and extends to all geographic regions of the state. Fifty-nine of the state's 62 counties are served by one of New York's freight railroads. Amtrak provides intercity rail passenger service across the state, linking the nation's busiest railroad station -- New York City's Pennsylvania Station -- with upstate cities, including Albany, Utica, Syracuse, Rochester, Buffalo and many other intermediate points. The three largest commuter railroads in the country (the Long Island Rail Road (LIRR), Metro-North Railroad and New Jersey Transit) radiate out from New York City to serve the surrounding suburbs. Small tourist railroads preserve the history of the industry in some of the most scenic areas of the state.

The rail network in New York State has three distinct types of railroads: intercity passenger, commuter and freight railroads. Amtrak is the sole provider of intercity rail passenger services in New York State and nationally and operates principally over rail lines owned by freight railroads. New York has two major commuter railroads, Metro-North Railroad and the LIRR; they operate in the downstate region, largely over their own rail lines providing rail commuter services radiating out from New York City. Metro-North and LIRR are part of the Metropolitan Transportation Authority (MTA). Lastly, there are numerous freight railroads that own and maintain the majority of rail lines. They move interstate freight through New York and provide rail freight services to shippers large and small, upstate and downstate.

In many areas, the rail services share the same tracks. For example, Amtrak operates over 782 route miles in New York, of which 732 route miles are operated under trackage rights over three freight railroads and one commuter railroad. Similarly, two commuter railroads and two freight railroads operate via trackage rights over the 50 route miles of railroad controlled directly by Amtrak. Throughout the state, freight, intercity passenger, commuter and tourist operations share common infrastructure to meet their customers' needs.

The map (Figure 9) found in Section 4.1 of this report depicts the comprehensive freight railroad network in New York State and its rail connections with railroads in adjoining states and Canadian provinces.

Subsequent chapters in this report, including the freight, passenger and commuter rail chapters, provide a detailed profile of the state's rail system. In overview, the multiyear trends documenting use of the state's passenger and freight rail system show a system of stabilized to moderate growth.

- For 20 years, intercity passenger rail ridership in most years has averaged between 1.3 million and 1.4 million riders annually, as shown in Figure 2. In the last three years, ridership has increased above the 20-year trend.

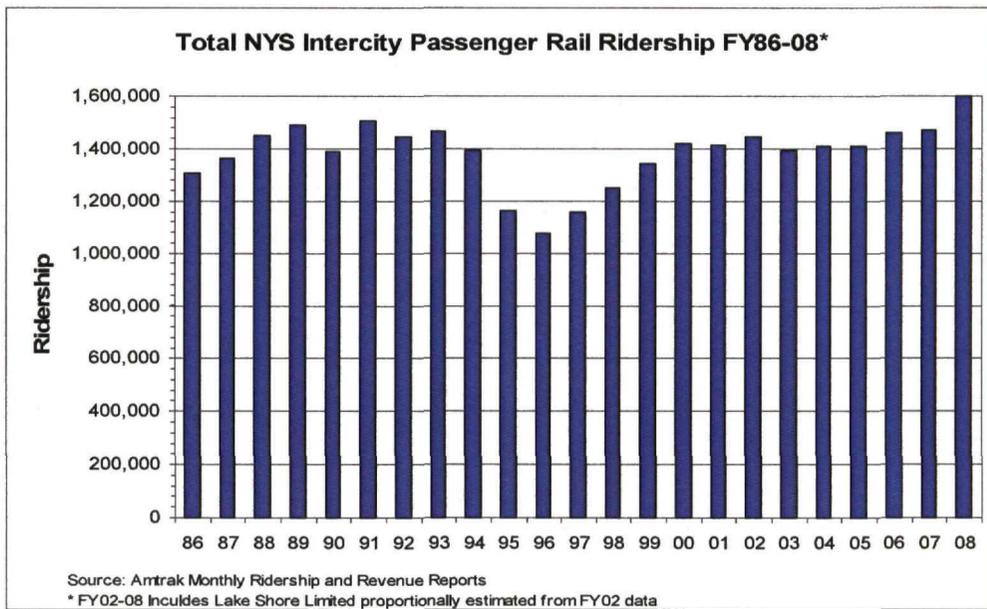


Figure 2 Intercity Rail Passenger Ridership Growth 1986-2008

- More recently, as shown in Figure 3, intercity rail passenger ridership is growing significantly. From FY 07 to FY 08, overall intercity passenger rail ridership is up 9 percent; notably, ridership on the Empire West service between Albany and Niagara Falls is up 23 percent.

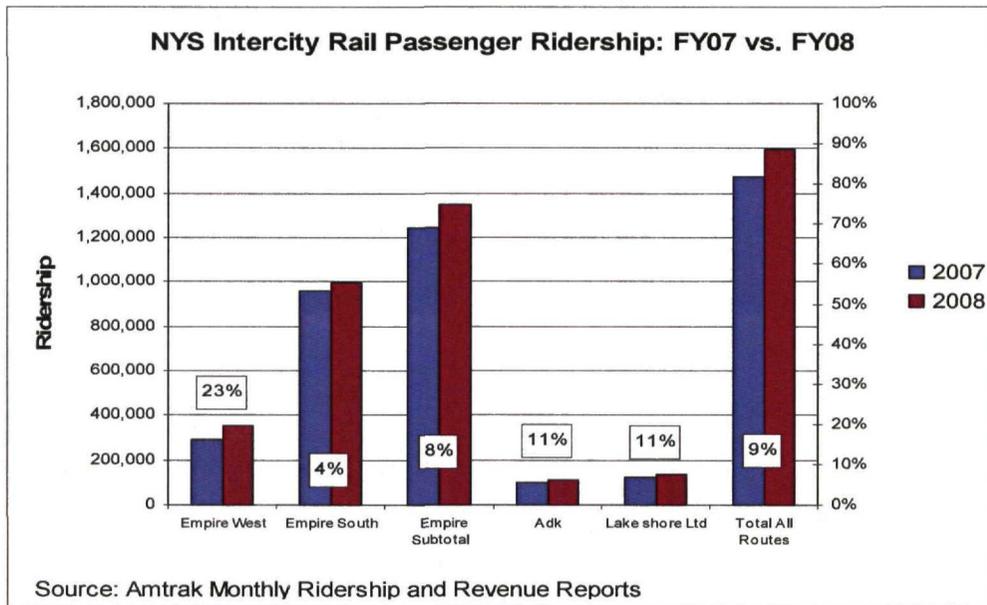


Figure 3 Recent Intercity Rail Passenger Ridership Growth

- Ridership on the state’s two commuter railroads, Metro-North and Long Island Rail Road, has grown annually over the past 13 years, an average of 0.9 percent and 1 percent per year, respectively. This amounts to a total increase of

approximately 12 percent for both Metro-North and the Long Island Rail Road. The trend in ridership growth is shown in Figure 4.



Figure 4 Commuter Rail Systems Ridership Growth 1994-2007

- Total freight carried on the state’s rail system over the past 15 years, measured by carloads (Figure 5) and tonnage (Figure 6), has increased an average of 1.8 percent and 1.4 percent, respectively, per year.

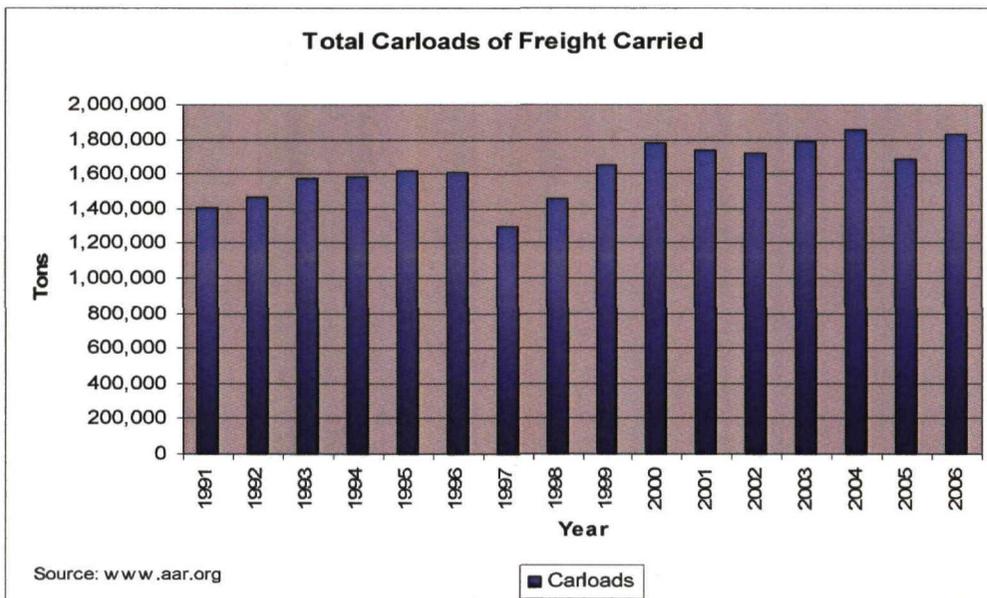


Figure 5 Total Carloads of Rail Freight Carried 1991-2006

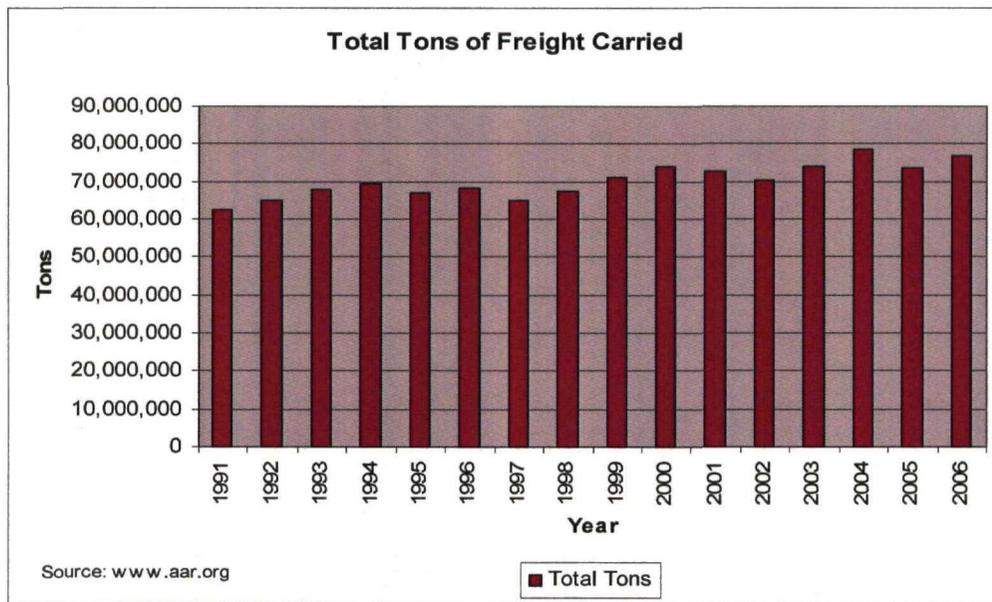


Figure 6 Total Tons of Rail Freight Carried 1991-2006

While the yearly data that support these trends fluctuates with the economy, the trend is toward increased use of the overall rail system; this holds great potential for the rail system playing an increased role in the state's transportation network.

3.2 Summary History of Railroads in New York State

Construction of New York's first railroad, the Mohawk & Hudson, was completed on a 16-mile route from Albany to Schenectady in 1831. Construction of rail lines continued through the 19th century and into the next century, until there were more than 8,000 route miles within New York State. This development paralleled and supported the robust industrial and commercial development of New York State during the same era.

Railroad industry growth in New York hit a plateau early in the 20th century and briefly experienced resurgence during World War II. In the second half of the 20th century, multiple factors caused a decline in New York's aging industrial base and the aging freight rail system that served this base. Highways were taking market share from the railroads for the remaining traffic; labor costs were not controlled consistent with the new economic realities; and the regulatory climate prohibited the railroads' ability to react to markets. In response, the railroad industry consolidated into fewer and larger companies but management efforts could not stem their large operating losses. As a result, most of the rail route system in New York and the Northeast had fallen into bankruptcy by the early 1970s.

Deregulation

Deregulation of the railroad industry by the federal government under the Staggers Act of 1980 and the Interstate Commerce Commission Termination Act allowed railroads to more easily adjust services and rates, enter into service contracts,

abandon tracks and sell off unprofitable routes. Railroads could improve their competitive position with other modes of transportation and retain their profitability.

Local Rail Freight Assistance Funding

The federal Local Rail Assistance program began after the passage of the Regional Rail Reorganization Act of 1973. The program was designed to provide temporary financial support for rail service continuation on lines not included in the newly created Conrail system. After 1995, the program ceased being funded, although the program is still authorized by federal law.

Short Line and Regional Railroads

As regulatory changes allowed for Class I railroads to rationalize their networks by selling off unprofitable routes, more new enterprising, innovative and customer-oriented rail companies emerged. Although some have failed, many more have lowered the cost structures of marginal, neglected rail lines and turned them into prosperous operations. Short line and regional railroads now comprise 40 percent of the active railroad route system in New York.

During the 1990s, many short line railroads were acquired by larger holding companies, each operating a group of such lines to realize economies of scale through acquisition and operation of several lines.

Heavy Axle Load Railcars

In the 1970s, many coal-originating railroads increased rail car weight limits for coal cars from 263,000 pounds to 286,000 pounds as a result of heavier track structures being implemented. In 1994, the Association of American Railroads (AAR) approved the same increase in weights for covered hopper cars. The latter change had a much bigger impact because covered hoppers circulate throughout the North American rail system hauling a variety of commodities on Class I railroads, as well as on short lines and regional railroads.

A lengthy and costly effort was undertaken by the Class I railroads and some short line and regional railroads to upgrade their lines from 263,000 pounds to 286,000 pounds to carry the heavier cars. However, track and bridge structures of many national and New York short line and regional railroads are still in many cases insufficient to support the interline standard 286,000-pound gross weight rail car. Unfortunately, these railroads are least able to afford the high track upgrade cost necessary to handle these cars. The railroads maintain that such track upgrades are a high priority so these lines can serve shippers who must take advantage of the economies of using the 286,000-pound cars.

More recently, the Class I railroads across the nation are now carrying 315,000-pound cars on main routes that have been certified for them. Again, upgrading track to handle the increase in weight from 286,000 pounds to 315,000 pounds is a major, costly effort; it is unlikely that short line and regional railroads could afford to upgrade their tracks to handle such cars in the near future.

Intermodal Traffic

Most intermodal traffic is now handled in containers that are transferred freely between railroads, trucks and ships. Some traffic is handled in conventional trailer-on-flat car (TOFC) service. For at least 20 years, there has been enormous growth in rail intermodal traffic. In fact, the Association of American Railroads reports that intermodal traffic tripled from 1980 to 2002, from 3.1 million trailers and containers to 9.3 million. This growth in intermodal, coupled with the projected doubling of the nation's freight volumes over the next 20 years, will mean increasing reliance of the nation's economy on the railroad system.

3.4 Recent Major Rail System Changes Impacting New York

Over the last 20 years, there have been several major regional rail system developments and substantial changes that have profoundly affected New York's passenger and freight rail system. These major developments and changes reflect the changes affecting the rail industry nationally, including deregulation, mergers and rail line rationalization. Major changes that have occurred in New York are summarized below.

Sale of Delaware and Hudson

Conrail, which was created by the federal government in 1976, had acquired an extensive rail freight network throughout the Northeast. This subsequently led to the marginalization of a number of northeastern regional railroads and short lines through the control of rail freight traffic at interchange points and gateways. In particular, Conrail's absorption of the former Erie Lackawanna's Southern Tier Line, which was subsequently downgraded, led to events that culminated in the bankruptcy of the Delaware and Hudson Railway (D&H) in 1988. The D&H was finally sold to the Canadian Pacific Railway (CPR) in 1991. While CPR has invested heavily in upgrading D&H's infrastructure and has stabilized that route structure by consolidating operations with Norfolk Southern (NS), the former D&H system remains relatively weak economically compared to the former Conrail routes in New York.

New York & Atlantic Railway

In 1997, after a long decline in freight traffic, the Long Island Rail Road franchised its freight operations to the New York & Atlantic Railway (NYAR), a subsidiary of Anacostia & Pacific, Inc.

Oak Point Link

In the fall of 1998, Conrail initiated service over the Oak Point Link, a new connection between Highbridge Yard and Harlem River Yard in the Bronx built by NYSDOT. This connection eliminated interference between freight and commuter operations at the junction of the Hudson and Harlem lines at Mott Haven and the clearance restrictions of the St. Mary's tunnel. In addition, the new route provides adequate clearances for enclosed multilevel auto carrier cars (19'0") when other clearance restrictions are removed in the future.

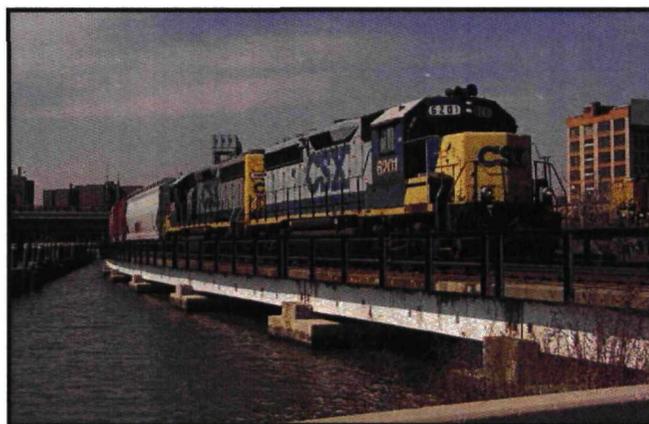


Figure 7 CSXT Operating on NYSDOT Oak Point Link Trestle

The entire route between Selkirk and Harlem River Yard can clear conventional TOFC equipment (17'3"). The route via the Oak Point Link is rated for 286,000-pound GRL axle loading and is far superior for freight train handling due to elimination of tight curvature, undulating profile and movements through crossovers at several interlockings.

Sale of Conrail

A major event was the sale and splitting of Conrail by Norfolk Southern (NS) and CSX Transportation, Inc. (CSXT) on June 1, 1999. While many states have been negatively affected by this event through a reduction in competitive access points to the Class I rail network, the opposite has been true in New York, where the number of Class I railroads increased from three to four. However, it should be noted that direct competitive rail freight service is generally only available when two or more railroads serve both the origin and destination points of the shipment, not just one or the other. This significantly limits the number of points among which real competitive rail service is available.

Southern Tier Line

In 2005–2007, NS and CPR consolidated and coordinated much of their operations in New York State to improve the traffic base on retained lines. As part of the consolidation, NS leased the Southern Tier Line between Binghamton and Port Jervis to the Central New York Railway (a Delaware-Otsego subsidiary and affiliate of the New York Susquehanna and Western Railway). The Port Jervis to Suffern segment of the Southern Tier Line was leased by NS to Metro-North with NS retaining local trackage rights to serve the freight customers.

Conclusion

The history of railroads in New York State begins with a 16-mile rail line completed in 1831; this expanded to more than 8,000 route miles at its peak. As highway competition and other factors took their toll on the railroads, the system was consolidated into fewer and larger companies, but ultimately most of the New York rail system fell into bankruptcy by the early 1970s.

New York State's rail network provides many services to New Yorkers, including freight rail service, intercity rail passenger service, commuter rail service and tourist rail operators. Total freight carried by rail is increasing, measured by either total carloads or total tonnage. In addition, passenger rail ridership is increasing for both intercity and commuter rail services with a significant recent gain in intercity passenger ridership.

Nationally, the creation of Amtrak, the deregulation of the railroads, the creation of new short-line railroads from lines being spun off by the larger railroads, progress made in accommodating heavier rail cars and the growth in intermodal traffic have affected New York's rail network.

There also have been several important events to rail consolidations and restructurings. The sale and splitting of Conrail to Norfolk Southern and CSX in 1999, which resulted in an increase in the number of Class I railroads service New York State from three to four, was the most important event.

CHAPTER 4 – FREIGHT RAIL

4.1 Freight Rail Network in New York State

Freight railroads are categorized as Class I, Class II (Regional) Class III (Short Line or Terminal). A railroad may be classified as Class I if it has annual revenues exceeding \$319.3 million. Class II Regional railroads have annual revenues between \$40 million and \$319.3 million or provide at least 350 miles of service. Class III railroads have annual revenues less than \$40 million. A Short Line railroad is one that does not meet either the Class I or Class II definitions and is engaged primarily in line-haul service. Terminal railroads do not provide line-haul service but instead perform switching and terminal related activities.

As to mileage, just as passenger rail service providers use freight facilities, freight railroad companies can run on track owned or controlled by Amtrak or commuter railroads. While a freight railroad operates over its own tracks, it may also operate by agreement over tracks owned by a competitor via trackage rights. This exemplifies the complexity of the rail system. It is primarily a private enterprise, from right-of-way to tracks to equipment to terminals. This is a different dynamic from the highway world, where the roads and bridges are primarily publicly owned and all forms of cars, buses, trucks and taxis operate over the network. The complexity of the North American railroad network is also very different from how airports, airport access and air service are viewed with direct involvement of local authorities and the federal government.

Nationwide, the primary rail freight corridors are owned and operated by the seven Class I freight railroads:

- BNSF Railway Company (BNSF);
- CSX Transportation, Inc. (CSXT);
- Grand Trunk Corporation (GTC);
- Kansas City Southern Railway Company (KCS);
- Norfolk Southern Railway Company (NS);
- Soo Line Railroad Company (Soo); and
- Union Pacific Railroad Company (UP).

Freight railroad categorization can vary, for example, between the Association of American Railroads (AAR) and the Surface Transportation Board (STB), so certain statistics shown in this chapter, such as numbers of railroads and track miles, may also vary.

The total rail freight network in New York State consists of approximately 4,208 route miles of railroad right-of-way (ROW), covering .59 of the state's 62 counties, and with connections to all adjacent states and Canadian provinces. While this total rail route mileage differs from the following chart, the 4,208 includes all freight rail mileage – that of freight railroads and freight mileage over Amtrak and commuter railroads.

| Rail Freight Network in New York State | | | | |
|---|-----------------------|----------------|-----------------------|----------------|
| Railroad Category | New York State (2000) | | New York State (2006) | |
| | Number | Miles Operated | Number | Miles Operated |
| Class I (U.S. Only) | 2 | 1,919 | 2 | 1,606 |
| Class I (Canadian) | 2 | 403 | 2 | 389 |
| Class II - Regional | 4 | 304 | 4 | 330 |
| Class III - Local | 19 | 961 | 22 | 1,170 |
| Switching & Terminal | 8 | 96 | 7 | 127 |
| Total | 35 | 3,683 | 37* | 3,622** |
| * Does not include Commuter, Amtrak or Tourist trains (see text). **Excludes Amtrak, commuter mileage (see text). Source: AAR Railroad Statistics | | | | |

Figure 8 Rail Freight Network in New York State

There are four Class I railroads operating in New York State; CSX Transportation, Canadian Pacific Railway and Norfolk Southern Railway have a significant statewide presence, while Canadian National Railway extends only a short distance into the state at the Buffalo and Rouses Point gateways. Thirty-three regional, short line and terminal railroads also provide freight services throughout the state. These operations (see Figure 9) range from large regional railroads serving a multistate area to small terminal railroads serving a single industrial park. Based on 2005 AAR statistics, for New York State, the Class I, Class II and Class III railroads are:

- **Class I (Freight – Major Carrier):** There are four Class I Railroads: CSX Transportation (CSXT), Canadian Pacific Railway, Norfolk Southern Railway and Canadian National Railway (CN). CSXT is the largest, operating 1292 route miles; CN is the shortest, with three route miles.
- **Class II (Regional):** There are four Regional Railroads: Buffalo & Pittsburgh Railroad; New York Susquehanna & Western Railway (NYS&W); Pan Am Railways; and the Providence & Worcester Railroad, which operates in New York State on trackage rights only and does not own any facilities. NYSW is the largest, operating 249 route miles; Pan Am Railways is the shortest, with 53 route miles in New York.
- **Class III (Short Lines/Terminal):** There are 29 Class III Railroads. The Western New York & Pennsylvania is the largest, operating 136 route miles; the Massena Terminal Railroad is the shortest, with four route miles. The Housatonic Railroad operates in New York State on trackage rights only and does not own any facilities. Terminal Railroads include the Albany Port Railroad (APRR); New York New Jersey Rail (NYNJ), recently acquired and now owned by the Port Authority of New York and New Jersey (PANYNJ); and the South Brooklyn Railroad. The APRR is 10 miles long; the NYNJ is only two route miles. Some of the Short Line railroads host tourist trains on their railroad, either through a separate corporation or as part of their operations.

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4.2 Freight Activity, Traffic Density and Service Description

Freight Movements and Trends

A Bureau of Transportation Statistics Special Report (July 2007) states that domestic freight traffic totaled more than 4.5 trillion ton-miles in 2005 – an increase of more than 350 billion from 1996. However, within this 8.7 percent increase, the rail mode grew by 25.9 percent and truck by 21.8 percent. The growth of these two modes reflects the continued growth of the goods sector of the economy generally. Railroads carry the largest share of ton-miles, with a market share of 38.2 percent in 2005, up from 33 percent in 1996. While ton-miles is the primary physical measure of freight transportation output, further review will need to center on mode share as indicated by revenues earned or value of commodities.

NYS DOT used these three sources to produce a more comprehensive view of New York State goods movement: Commodity Flow Survey [2002 and 1997]; Trans-Border Surface Freight Transportation Data; and U.S. Waterway Data.

- More than \$555 billion in goods were transported to/from/within New York State in 2002 – an 8.2 percent increase over 1997. According to the *2002 Commodity Flow Survey*, nationally, 67 percent of the commodities by weight were moved by truck and 16 percent by rail; in New York State, 90 percent went by truck and only 3 percent by rail. In the New York City area, 80 percent of freight by weight was moved by truck and only 1 percent by rail.
- New York State plays a key role in the trade between the United States and Canada and the resultant freight movement between the two countries. In 2005, the value of goods entering the United States from Canada through New York State border crossings was \$63.2 billion (23.8 percent of total U.S.); for exports, the value of goods traveling through New York State crossings was \$44.3 billion (23 percent of total). The Buffalo and Niagara crossings accounted for 60 percent of the imports and 73.4 percent of the exports. Of this total traffic, trucks hauled 68.2 percent of all imports and 90.1 percent of exports; rail carried only 16.6 percent of imports and 4.7 percent of exports.
- The USDOT Freight Analysis Framework forecasts that demand for freight transportation is expected to increase from 19.3 billion tons to 37.2 billion tons by 2035, or about 93 percent. According to this forecast, trucks will see a 98 percent gain in freight traffic, while rail freight is expected to grow by 88 percent by 2035.

A Niagara Frontier urban area freight transportation study now under way estimates a major increase in rail freight shipments – from 47 million tons in 2004 to 93 million tons by 2035. This is notable particularly in intermodal shipments involving containers that are projected to increase nearly 130 percent. Despite this dramatic increase, for rail freight, carload traffic would continue to account for the largest volume of tonnage through 2035. Due to the continued growth of the transportation and chemical commodities, cross-border rail traffic is projected to nearly triple by 2035 – from 6.4 million tons in 2004 to 18.2 million tons. The ongoing Niagara Frontier study will look at other localities in the United States similar to the Buffalo/Niagara region and will analyze what they have done as a basis for future freight rail investments.

One example of strategic freight rail investments is the November 2007 opening of the CSX Intermodal (CSXI) Buffalo Intermodal Container Transfer Facility (ICTF) at Seneca Yard with an estimated capacity of 60,000 annual lifts. The new terminal is a result of public-private partnership efforts by the State of New York and CSX Corporation to expand transportation services into the western New York region. CSXI will offer new container rail service between the New York metropolitan area and the new Buffalo ICTF as part of the Port Authority of New York and New Jersey's (PANYNJ) Port Inland Distribution Network (PIDN). The opening of the new Seneca Yard container terminal represents the second such rail-served terminal in the PANYNJ's PIDN network joining the established Worcester, Mass., PIDN terminal.

The new Buffalo ICTF service also enables domestic and international containers to reach the Buffalo and Toronto markets six days per week. The Buffalo ICTF will also have frequent service with the Chicago market. This new intermodal operation will be a vital part of the container traffic and is expected to become an important rail business segment in the region.

Note that area-wide freight studies similar to that of the Niagara Frontier are being done for the Binghamton and Ogdensburg areas. Further, these studies will look at truck freight increases; it will be important to use this information to decide strategies for investments in the freight systems.

Commodities

In terms of tonnage, roughly half of all commodities traveling within New York State are actually traveling through the state. Most of the state-related traffic is terminating in New York. Of the nearly 7.6 million tons originating in New York State, slightly more than one-fifth relates to chemicals and about one-third relates to waste and scrap haulage. For a single category terminating in New York State, more than one-third is coal.

| New York State Freight Service 2006 (tons) | |
|---|-------------------|
| Originating | 7,567,850 |
| Terminating | 26,924,604 |
| Through | 42,224,051 |
| Total | 76,716,505 |

Figure 10 NYS Freight Service

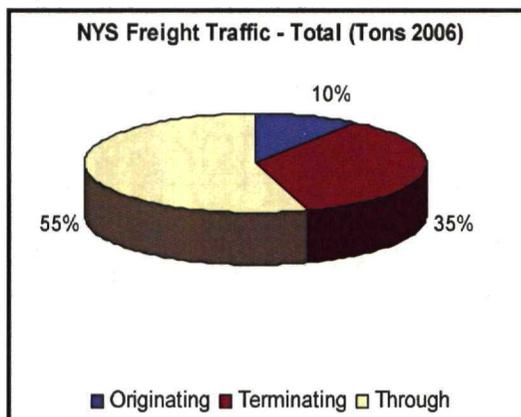


Figure 11 NYS Freight Traffic - Total

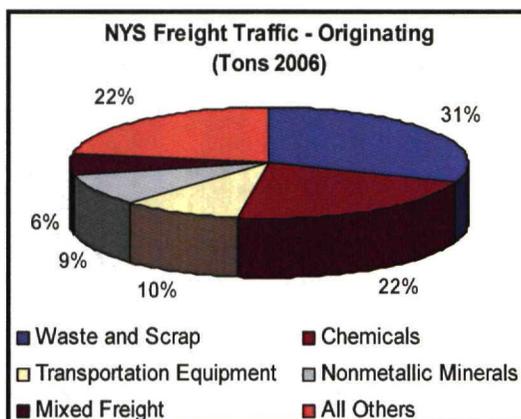


Figure 12 NYS Freight Traffic - Originating

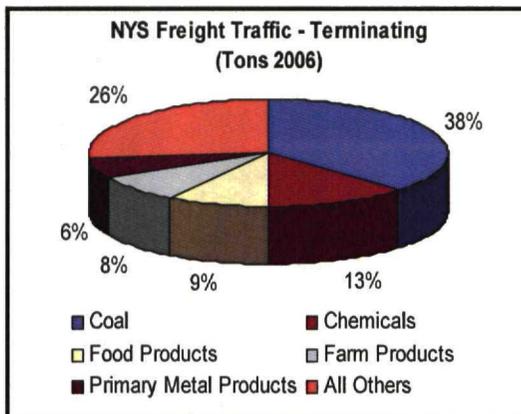


Figure 13 NYS Freight Traffic - Terminating

Capacity and Investment

Congress formed the *National Surface Transportation Policy and Revenue Study Commission* in 2005. The Commission was charged with completing a study of the nation's surface transportation network and, then developing a conceptual plan to meet the nation's 21st century transportation needs. The Commission requested the Association of American Railroads (AAR) to begin a study to identify freight rail infrastructure needs, estimated costs and potential financing methods to meet the estimated increase in rail freight traffic by 2035. This was the first time the nation's freight railroads collectively sought to assess the industry's long-term capacity expansion and investment needs. In September 2007, the AAR completed its *National Rail Freight Infrastructure Capacity and Investment Study*.

The Continuing Congestion Issue: For 20 years, highway lane-miles have remained relatively level while the highway vehicle-miles of travel have increased exponentially, producing a dramatic increase in highway traffic congestion. Both public officials and shippers turned to the railroads as an alternative for moving more freight; however, the freight rail system is facing capacity constraints similar to the highway mode. As freight rail traffic in terms of ton-miles increased significantly over the past two decades, track-miles have been declining. By 2035, the estimated growth in rail freight traffic is expected to absorb all of the existing excess main line capacity in the national rail freight system.

The Rail Freight Network: The AAR study focused on the 52,340 miles of primary rail freight corridors within the United States. The designated primary rail freight corridors depicted in the following map represent one-third of the nation's rail miles and carries the majority of all rail freight traffic. The primary rail freight corridors are owned and operated by the seven Class I freight railroads. The study did not include a forecast of passenger rail or an estimate of future rail passenger capacity needs. However, existing rail passenger services comprised of long-distance, intercity and commuter are included but held at existing volumes; these are then added to the study's projected overall changes freight train volumes.

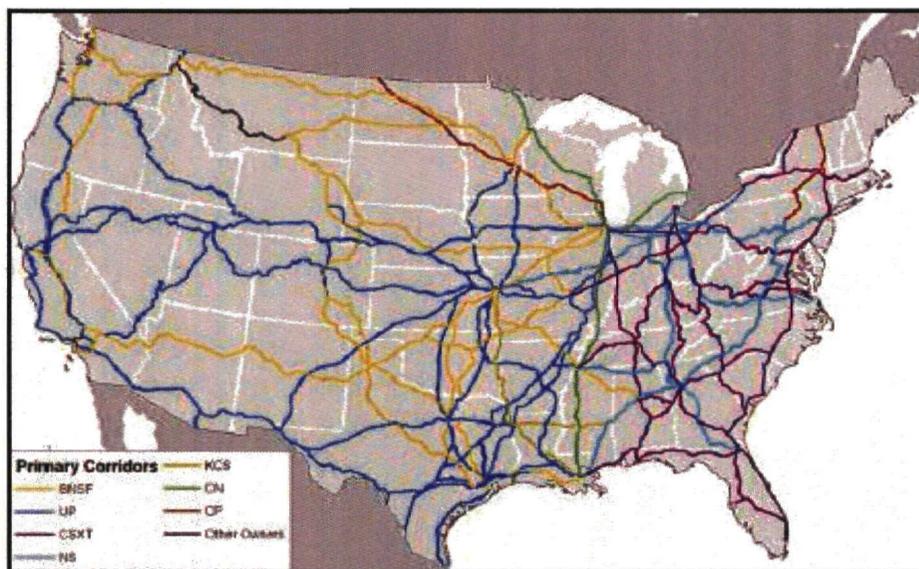


Figure 14 AAR Primary Rail Corridors

Determining Current Train Capacity Conditions: The AAR study compared current freight rail traffic volumes to existing capacity to ascertain the level of congestion along the nation's Primary Rail Corridors. Capacity was determined by three major factors: number of tracks; type of traffic control system; and the mix of train types. The freight rail level of service (LOS) ratios noted in the following map are similar to the highway LOS format of levels A through F used for evaluating highway traffic congestion. Levels A, B, and C (green) indicate rail corridors or segments that are below capacity. Level D (yellow) represents near capacity. Level E (orange) depicts corridors or segments that are at capacity. Level F (red) represents corridors or segments above capacity. The majority, or 88 percent, of Primary Rail Corridor mileage is currently below capacity (green) while 12 percent is near or at capacity (yellow and orange). Less than 1 percent of Primary Rail Corridor mileage is above capacity (red).

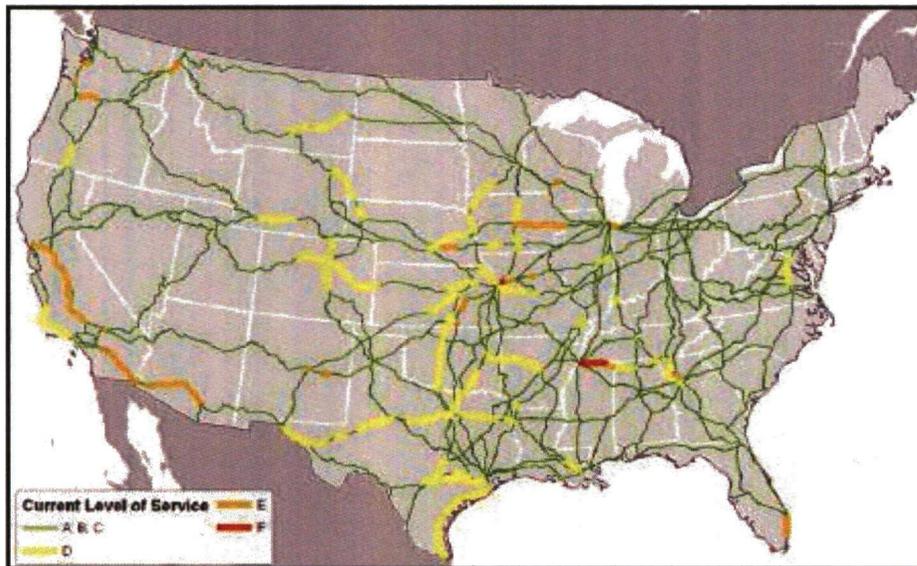


Figure 15 Existing Train Volume to Existing Corridor Capacity

Future 2035 Growth in Rail Traffic Compared to Existing Corridor Capacity: The map below from the AAR study depicts estimated future growth in freight rail traffic by 2035 and overlays the growth in rail traffic over the existing rail corridor system.

According to the AAR Study, three western freight rail hubs (Chicago, Kansas City and Cleveland-Toledo) are major bottlenecks for rail freight traffic. They will likely continue as major obstacles to rail traffic as rail freight traffic volumes increase. For example, 37,500 rail cars, or 40 percent of the nation's rail freight volume pass through Chicago daily; that is expected to increase to 67,000 per day by 2020.

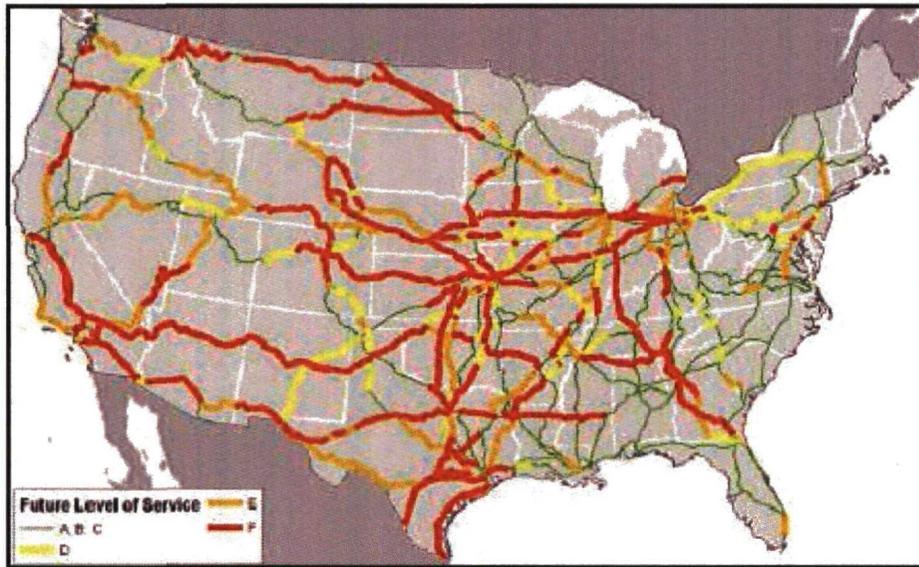


Figure 16 Future 2035 Rail Traffic Volumes Compared to Existing Corridor Capacity

Under a “no build” scenario, the result would be a dramatic increase in the miles of Primary Rail Corridors or rail line segments that are above capacity. Specifically, Primary Rail Corridor mileages along which freight train volumes will be above capacity (red) and congested are estimated to increase to 30 percent from less than 1 percent in 2007. Primary Rail Corridor mileages along which train volumes will be below capacity (green) are estimated to decrease to 45 percent from 88 percent in 2007. Corridor mileages along which train volumes will be near or at capacity (yellow and orange) are estimated to increase to 25 percent from only 12 percent in 2007.

Estimated Cost and Financing: The AAR study estimated that \$148 billion of infrastructure capacity improvements will be needed over the next 28 years just to keep pace with economic growth and meet USDOT’s projected rail freight traffic demand. Of this \$148 billion, the Class I freight railroads portion is estimated at \$135 billion (91 percent); Regional and Short Lines represent the estimated \$13 billion balance (9 percent).

As examples, the CREATE (Chicago Regional Environmental Transportation Efficiency) Program consists of constructing six rail flyovers and eliminating 25 highway at-grade crossings at an estimated cost of \$1.5 billion. The funding shares of the \$1.5 billion CREATE program is as follows: freight railroads, \$212 million; METRA commuter railroad, \$20 million; federal government, \$900 million; State of Illinois, \$100 million; the City of Chicago, \$30 million; and \$272 million other, which represents the program’s funding shortfall. It is assumed that the shortfall is to be closed as future funding becomes available. CREATE is scheduled to take six years to complete and the cost is to be shared by the railroads and federal and state governments.

The AAR study estimated that the nation’s Class I railroads will be able to generate only \$96 billion for needed improvements through their increased earnings, productivity enhancements, and higher traffic volumes. The estimated \$39 billion (33 percent) shortfall - or \$1.4 billion annually - will have to be made up through

other sources, such as investment tax incentives, public-private partnerships or other means. Since the study is focused only on Class I freight railroads, it does not address how the regional and short lines will be able to finance the estimated \$13 billion in small railroad capital needs.

Potential Effect on New York State and the New York Metropolitan Region

NYS DOT is reviewing the AAR-based analysis of freight rail congestion as it applies to New York State, and specifically the New York metropolitan region. Initial findings conclude that if the proposed track and facility improvements are not implemented, the projected growth in rail traffic by 2035 would cause increased capacity constraints and more congestion to the principal rail corridors serving the state. In particular, CSXT's main line across upstate New York (former Conrail "Chicago Line") from the Pennsylvania state line to Buffalo, the Capital District and the River Line to northern New Jersey would see an increase in congestion. Under the "no build" scenario, the "Chicago Line" would go from below capacity (green) to near capacity (yellow). The River Line along the west side of the Hudson River would go from below capacity (green) to capacity (orange).

The major western freight rail hubs greatly affect New York State rail freight service. Transit time for a typical freight train through the Chicago Terminal (a distance of 30 miles) can take as long as a trip from the west coast to Chicago (a trip of more than 800 miles). Delays at the nation's critical rail freight gateways in the Midwest cascade through the rail system, diminishing the quality of rail service for New York rail shippers.

NYS DOT has long recognized the issues and implications of limited rail capacity and related cascading delay combined with the forecasted increases in rail freight traffic on the nation's rail system, as highlighted in the AAR study. The 2005 Hudson Line Joint Users Study is an example of a study that examined these issues in greater detail respective to the Hudson-Line corridor.

The Hudson Line Joint Users Study analyzed the impacts of the mixed speeds, types of equipment and the mixed loads of the various users. These variations in operating requirements often resulted in congestion; potential solutions cited operator-specific benefits and costs and indirect benefits to the other users. While some of the focus was the Metro-North territory south of Poughkeepsie, it became apparent that a delay occurring in the Albany area causing a train to miss window further south can cause additional delays for all operators. When a train misses its scheduled time slot, this results in a series of delays down line or what is known in the railroad industry as "cascading delays."

The AAR Study and the New York's Hudson Line Joint Users Study are attempts to identify the nature and size of the rail capacity issue. The AAR Study is a macro-level study, analyzing capacity issues from a network or systemwide basis and proposing systemwide improvements, such as adding a new signal system for the network. The Hudson Line Study is a micro-level study, analyzing the capacity of a specific rail line and identifying individual chokepoints, which are locations or facilities that constrain the flow of rail traffic. The study proposes individual project upgrades, such as track crossover switches, and high-level rail station platforms to improve rail traffic flow at identified chokepoints.

NYSDOT staff identified other areas for continued analysis of rail congestion:

- The remaining two Primary Rail Corridors serving the New York Metropolitan Region via the Northern New Jersey rail network, under the “no build” condition, could also see more congestion. Currently, the Norfolk Southern Pennsylvania Main Line and the CSXT Baltimore Line are below capacity for freight rail service. Without capacity and terminal improvements, greater congestion on segments of these major rail corridors is possible.
- The AAR study noted that the projected shortfall in rail capacity by 2035 would likely mean a significant diversion of freight from rail to highway. It does not consider additional capacity needs for a significant diversion of freight from truck to rail. Significant diversion of freight from truck to rail would likely not take place under the “no build” scenario. Rather, it is more likely that increased rail congestion under the “no build” condition may actually divert rail freight to trucks due to increased schedule trip durations and reduced schedule reliability.
- The AAR study only looks at the projected increases in rail freight traffic by 2035. A very important point not addressed is the desire or need for additional passenger rail capacity over the designated primary rail freight corridors. This would likely limit any public policy initiatives to add intercity passenger rail frequencies along the Empire Corridor (CSXT Chicago Line).
- Although not discussed in the AAR report, a “no-build” future condition could likely cause a significant diversion of ocean imports from the U.S. and Canadian west coast Pacific ports to Atlantic and Gulf ports to avoid the overburdened national rail land bridge. This could put additional pressure on Atlantic and Gulf ports and the highway and rail systems that support those eastern and southern U.S. port regions.
- The need for Primary Rail Corridors and small railroad capacity improvements within New York, to keep pace with the estimated growth in rail freight traffic, will likely require some degree of state participation, particularly within the capital program.

Revenue Adequacy of Class I Railroads

The railroad industry requires adequate revenues to generate a sufficient rate of return for attracting capital investment or for borrowing funds at reasonable rates. Without adequate capital investment for maintaining and improving the rail system, the system could collapse from under investment.

The Surface Transportation Board (STB) announced on May 6, 2008, that it had made its determinations of revenue adequacy for the seven Class I freight railroads (the Nation’s largest) for 2006. The board found that three Class I railroads, the BNSF Railway Company, the Norfolk Southern Railway Company and the Soo Line Railroad Company (a subsidiary of Canadian Pacific Railway Company), were revenue adequate for 2006. All other Class I freight railroads were found to be revenue inadequate for that year.

A railroad is considered to be revenue adequate if it achieves a rate of Return On net Investment (ROI) equal to at least the current cost of capital (i.e., the “cost of borrowing”) for that railroad. Congress directed the board to conduct such revenue adequacy determinations on an annual basis. Revenue adequacy (or inadequacy) does not directly relate to whether the railroad actually has funds available to invest in capital improvements. Rather, being a private enterprise, and needing to be responsive to its shareholders, a railroad must make a rational decision whether to spend its money on tracks or locomotives or other capital (or even to borrow the necessary funds) based on whether it can make money.

If a railroad does not have the funds, and the cost to borrow is too high, the railroad will not undertake the investment; if it does have the funds but the ROI is too low, the railroad could make more by “leaving it in the bank” or investing elsewhere. Historically, the rail industry has been one of the most capital-intensive industries; therefore, finding funds for investment in railroads can be difficult, especially under a “revenue-inadequate” condition.

In its April 15, 2008, decision in the board proceeding titled Railroad Cost of Capital-2006, the agency determined that the 2006 rail industry cost of capital was 9.94 percent. By comparing that figure to 2006 ROI data filed with the agency by the Class I railroads in their Annual Report filings, the board made revenue adequacy calculations for each railroad operating as of December 31, 2006. A summary of the ROIs for all Class I freight railroads (representing their “cost of borrowing”) follows:

| | |
|--|---------------|
| BNSF Railway Company | 11.43 percent |
| CSX Transportation, Inc. | 8.15 percent |
| Grand Trunk Corporation ⁵ | 9.47 percent |
| Kansas City Southern Railway Company | 9.31 percent |
| Norfolk Southern Railway Company | 14.36 percent |
| Soo Line Railroad Company ⁶ | 11.60 percent |
| Union Pacific Railroad Company | 8.21 percent |

Using the STB’s 9.94 percent cost of capital measure, only three of the nation’s Class I railroads either met or exceeded the STB’s threshold in 2006: BNSF Railway, Norfolk-Southern and the Soo Line Railroad.

New York State Freight Railroad Bottlenecks

There are a number of “bottlenecks” that restrict rail freight flow in New York State. A bottleneck is a localized constriction in the rail transportation network that reduces the efficient flow of rail traffic. The elimination of a bottleneck allows for higher capacity on the existing line; this increases the amount of rail traffic a specific line can accommodate. The identified bottlenecks in New York State include:

A. Buffalo Rail Terminal Area

The terminal area is served by four Class I railroads: CSX Transportation (CSXT), Norfolk Southern (NS), Canadian National (CN) and Canadian Pacific Railway (CPR). Each railroad has its respective terminal facilities, classification yards and

⁵ Grand Trunk Corporation Consolidated (Including all Canadian National U.S. affiliates)

⁶ Soo Line Railroad Company (Including all Canadian Pacific U.S. affiliates)

interchange and main line tracks. The terminal serves as a major hub for international rail movements, car classifications and intermodal through movements. A major expansion of intermodal transfer operations is planned. Rail operations are periodically hampered by a physical bottleneck at the drawbridge over the Buffalo River (CP Draw) and yard capacity problems at peak periods. The complex network of tracks and yards is subject to congestion and delays due to trains operating over the maze of trackage and limited yard capacity.

B. River Line

This main line route is essentially a single track rail line between the northern New Jersey Terminal area and the Selkirk Yard. Along with the Chicago Line, this line is CSXT's principle intermodal route between the Port Authority of New York and New Jersey and Chicago. It is near or at capacity, experiencing congestion, and causing delays for CSXT's time-sensitive intermodal traffic. Also, a tunnel beneath West Point limits maximum clearances, and periodic yard capacity problems at Selkirk can cause congestion and delays that affect freight flow on the adjacent main line. The line has been upgraded with the addition of two new sidings that went into service in 2007.

Efforts are being made to address the worst at-grade crossings. To develop support for double tracking the line, it may be necessary to combine the initiative with quiet zones, selected grade crossing eliminations, grade crossing improvements, guarantees of no blocking of crossings by stopped trains and, possibly, some provisions for a third track for future transit use.

C. Hudson Line

This line is a multiple track main line that handles a substantial volume of intercity and commuter passenger traffic, specifically between Poughkeepsie and Manhattan. Freight service consists of through freight limited to a nighttime window and several locals per day. In addition to competing high passenger train volume, there are substandard clearance issues, and a lack of modern freight terminal facilities that impede the development and expansion of freight service along the Hudson Line. The *Hudson Line Railroad Corridor Transportation Plan* study identified a list of projects required to meet increasing capacity needs in the future.

Whenever station structures and bridges over the line are reconditioned or replaced, possible vertical clearance improvements are included in the design effort. Some structures are problematic where raising a bridge a few feet can cause collateral impact. Restrictions in the Bronx are more critical and harder to resolve. There is also the question of how much rail traffic of what size would use the Hudson Line. Questions exist about the use of the Hudson Line for freight, except for major shippers with their own sidings, citing the lack of a place where a major intermodal facility could be built.

D. New York City Rail Terminal Area

The Bronx, Brooklyn and Queens freight rail network suffers from a lack of terminal facilities required to accommodate increasing rail freight service levels. Other deficiencies include low operating speeds, substandard clearances, rail car weight restrictions over the existing track infrastructure and reduced capacity, time limits

and schedule conflicts due to the high volume of rail commuter traffic over the main lines within the terminal. There are no modern rail freight facilities within the terminal area, and the existing rail freight terminals are obsolete, inefficient and lack spare capacity. The problem is amplified with the high cost and lack of space.

E. Fremont Industrial Track/Bay Ridge Branch

These lines, together with the New York & Atlantic Railroad's Fresh Ponds Yard, comprise the only overland freight route facilities available to provide rail freight service to Brooklyn, Queens and Long Island. This rail freight route starts at Oak Point Yard in the Bronx and extends through Queens and Brooklyn, with rail freight connections for Long Island at Fresh Pond and the Brooklyn Waterfront at 65th Street Yard. It is primarily a non-signalized single-track line with substandard clearances, speed restrictions, and weight limitations – it can not handle 286,000-pound cars. These limitations preclude use of intermodal equipment or heavier rail cars for bulk movements.

F. Trans Hudson Freight Rail Barrier

The Hudson River from the Albany area to New York Harbor and the Atlantic Ocean forms a significant barrier to freight rail goods movement to and from New York City, Long Island, and southern New England. The closest freight railroad bridge crossing of the Hudson River to New York City is between Selkirk and Castleton. Owned by CSX Transportation, the Castleton Bridge is approximately 140 miles north of the New York Harbor area. Thus, an all-rail connection from the American South and mid-Atlantic regions to Long Island, Brooklyn, Queens and the Bronx is forced to take a circuitous 280-mile-long trip up and down each side of the Hudson River. Today, most such freight rail movements instead are drayed by truck between the Northern New Jersey terminal area and the east of Hudson freight customers in the metropolitan region. Interestingly, there are a few rail cars floated on barges across New York Harbor for rail interchange in Brooklyn. This rail car float service is principally used for Norfolk Southern rail moves for customers in Brooklyn, Queens and Long Island.

G. Long Island Rail Road Main Line

The LIRR Main Line is a high-volume rail commuter line and the only rail line available for freight movement across Long Island. Freight rail operations are of low-priority status along this critical corridor due the high volume of commuter trains serving Long Island. As a result, freight rail operations are restricted in terms of train length, speed, time of day and track capacity issues (number of trains). There are rail car weight and clearance restrictions that preclude the use of the most modern conventional rail freight cars, such as high-capacity covered hoppers, auto racks and trailer-on-flat car loads. Also, there are no modern truck-rail intermodal freight terminals on Long Island to handle this significant rail freight market segment.

H. Rouses Point

This crossing serves as Canadian Pacific's international rail crossing between New York State and Quebec. Freight trains are often delayed at Rouses Point for border inspection, especially for cargo that has not been pre-cleared by customs. The

placement of a Vehicle and Container Inspection System (VACIS) at this location by U. S. Department of Homeland Security requires stopping southbound freight for inspection. Since 9/11, border inspection, in addition to regular inspection, now requires that an entire train consisting of up to 150 rail cars be X-rayed. This increases train dwell time at the border on the single track line, causing delay to passenger trains and erratic delivery of rail shipments. Construction of a siding for conducting inspections is limited due to the number of road crossings in the area.

I. Binghamton Rail Terminal Area

The terminal is a medium-sized rail freight hub accessed by Canadian Pacific, Norfolk Southern, New York Susquehanna & Western (NYS&W), and the Central New York and CSXT. The railroads have terminal, rail yard facilities and interchange tracks in and around the City of Binghamton. Changes in operating procedures among the railroads and limited yard capacity have caused delays for intermodal through movements and local deliveries in the area. Reaching the various rail facilities requires crossing the tracks of through and local freight trains of different railroads, thus causing conflicting train movements that cause congestion. In general, the Binghamton yard has issues relating to conflicting movements, and the Conklin yard has capacity concerns. The current Binghamton Area Freight Demand Study will complete a freight systems analysis, identify specific problems and identify projects to address area needs.

J. Portage Bridge

Portage Bridge located on Norfolk Southern's Southern Tier Line north of Hornell is a single tracked, long steel deck truss that is 105 years old. The bridge has been identified as being near the end of its useful life and could be closed at any time. It is currently weight restricted and has a speed restriction of 10 mph. The weight restriction and low operating speeds significantly impact the line's overall operating capacity. Any long-term closing of the Portage Bridge would threaten the viability of the entire route between Buffalo and Binghamton.

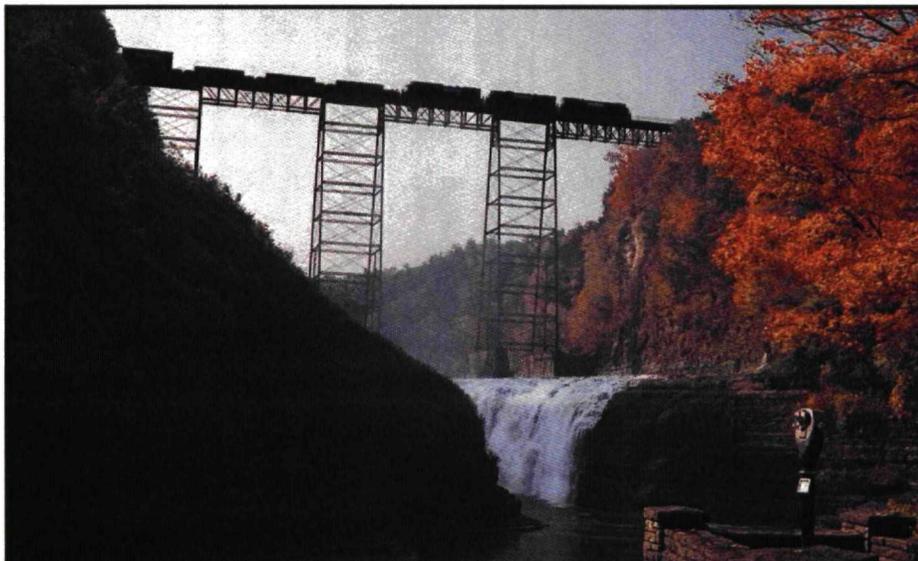


Figure 17 NS Portage Bridge over Genesee River, Letchworth State Park

The Northeast Corridor

The Northeast Corridor (NEC) rail system connecting Boston, New York City and Washington, D.C., is an important component of the nation's transportation network and a critical alternative to congested interstates in the densely developed Northeast. The NEC provides connectivity to the national freight network and contributes significantly to the economic vitality of the Northeast and the nation by providing essential freight rail access to ports and industries from Maine to Virginia. The NEC moves freight traffic to and from Brooklyn, Queens and Long Island.

There are a total of seven freight railroads moving 14 million car-miles of freight per year along the length of the NEC. On a typical day, these freight railroads operate 50 trains over various portions of the NEC. While most freight operations take place at night when fewer passenger trains are operating, a limited number of freight trains operate during the daytime with operators noting that daytime operations are vital for sustaining service to certain local customers and capturing new business.

Factors that had contributed to the shift of freight traffic away from the NEC in the 1980s and 1990s included less availability of NEC freight maintenance and yard sites, higher NEC access and maintenance fees, limited freight operating windows and an industry trend towards larger freight trains unsuitable for certain NEC structures such as Baltimore's B&P tunnels.

While the volume of freight movements has been relatively constant, freight railroads now envision more expansive freight use of the NEC. National rail freight volume is projected to increase 44 percent to 888 million tons, with a commensurate increase expected on the NEC. On some segments between Boston and New York, volumes are expected to increase 200 percent or more by 2030.

Due to this substantial anticipated growth in freight movement, projects to identify and to eliminate bottlenecks and to improve the north-south flow of freight traffic on the NEC are under way. The freight railroads have also set as a goal protecting and improving freight rail car load clearances on the NEC when constructing or reconstructing station platforms and overhead catenary wire; they recommend that the need for daytime operations to meet customer needs on non-freight-owned portions of the core network be considered in developing plans for future services.

The Patriot Corridor

In the fall of 2008, NS and PAR submitted an application to the Surface Transportation Board for the creation of a new joint venture entity, Pan Am Southern LLC (PAS), to establish the "Patriot Corridor" between the Capital District and Ayer, Mass. NS intends to make capital investments to upgrade the track in this corridor to 286,000-pound capacity and for speeds of 40 mph and to make vertical clearance improvements in the corridor to allow unrestricted operation of enclosed multilevel rail cars. NS also proposes improvements for Ayer, Mass., including upgrades to the existing intermodal terminal and a new automotive terminal. These capital investments will combine to take long-distance trucks off New York's highways.

NS is also proposing construction of a new joint intermodal and automotive terminal in Mechanicville. This will replace the existing capacity-constrained facility that NS

leases from CPR in downtown Albany. Overall, this transaction produces a significant benefit to the State of New York.

4.3 Freight Terminals, Intermodal Facilities, and Major Yards

Freight Terminals are facilities where freight cars are gathered up in to trains or where trains are broken down so that cars can be distributed to shippers. Intermodal facilities are locations where freight containers or trailers are transferred between the freight modes involved in the intermodal freight trip. Typically, this includes some combination of rail, truck and water modes. Major yards, known in the rail industry as classifications yards, are facilities where individual rail cars are grouped together (blocked) by destination and then made up in to trains containing multiple blocks of cars.

Intermodal Facilities

There are five major intermodal terminals located in New York State serving the intermodal container market:

1. The Buffalo Intermodal Container Transfer Facility (ICTF) at Seneca Yard - which serves the greater Buffalo area and western New York - was opened in November 2007. It is managed by CSX Intermodal (CSXI). This facility replaced the Williams Street Intermodal Terminal which was at capacity. Located on the CSXT Lakeshore Subdivision in the City of Lackawanna and Village of Blasdell, N.Y., this IT facility handles domestic containers, international containers and TOFC/COFC⁷.

This facility is a component of the Port Authority of New York & New Jersey's Port Inland Distribution Network (PIDN). As part of the PIDN, NYSDOT, PANYNJ and CSXT jointly funded the design and construction of facilities to relieve the Port Authorities on-dock congestion. International containers are off-loaded from ocean-going vessels at the terminals in Northern New Jersey. They are moved from the CSXT South Kearny Intermodal Terminal to the Buffalo ICTF for further sorting for truck distribution or onward rail movement to Chicago.

2. CSX Transportation's DeWitt Yard is located near Syracuse and serves the central and northeastern portions of New York. This terminal is serviced by a network of 13 trains which reach intermodal terminals throughout CSXT's system and beyond. This former rail car hump classification yard was converted into a major intermodal terminal by Conrail. It consolidated previous intermodal terminal operations in Selkirk, East Syracuse and Rochester into one new, larger capacity facility for upstate New York. This facility handles international containers to and from Chicago, domestic containers and TOFC. The facility primarily handles double-stack container traffic. Containers for upstate New York are "filleted" from the top layer of double-stack container well cars and transloaded to container chassis for tractor-trailer distribution. The containers in the bottom layer remain in the well car and continue on to Beacon Park Intermodal Terminal in Boston, Mass.

⁷ TOFC – Trailer on Flat Car; COFC – Container on Flat Car

This route does not have sufficient vertical clearance for current generation 20'-03" double-stack container trains.

3. Norfolk Southern's Bison Yard is located in Buffalo and serves the western portion of the state. Service from the facility includes five-day-per-week trains from Chicago and Toledo. This facility handles TOFC/COFC/Stack Car as well as both bottom and top lift EMP⁸ (48' and 53') containers. This facility handles international and domestic traffic, primarily between Chicago and Buffalo.
4. Kenwood Yard in Albany is located on CPR's Voorheesville Running Track and is adjacent to the Port of Albany. The facility is owned by CPR and leased to Norfolk Southern (NS), which operates the intermodal terminal providing five-day-per-week service. NS reaches this facility by means of trackage rights agreements with CPR. The facility handles TOFC/COFC/Stack Car, as well as both bottom and top lift EMP (48' and 53') containers. This facility handles domestic traffic only, primarily between Chicago and Albany.

Note that neither the NS Albany nor Buffalo Intermodal Terminals can be reached by current generation double stack container trains (20'3" ATR⁹).

5. The New York Container Terminal (NYCT) is a full-service international container and general cargo-handling facility. It is located at Howland Hook, Staten Island, and is the only operating rail intermodal terminal located within the five boroughs of New York City. In 2005, the former Howland Hook Marine Terminal officially changed its name to New York Container Terminal, Inc. NYCT covers 187 acres and is a three-berth container facility operated under a long-term lease agreement from the PANYNJ. Both CSX Transportation and Norfolk Southern Railway can serve this facility. However, NYCT cannot be reached by current generation double-stack container trains (20'-03" above top of rail).

Recent expansion - a 500-foot berth expansion, dredging and newly commissioned cranes able to service post-Panamax vessels - provides NYCT with the highest-volume cargo capacities of any facility in the New York Harbor. It is strategically located near the Goethals Bridge, is readily accessible to major truck routes and has capability for on-dock rail service connecting to the North American intermodal rail network. The rail terminal opened in 2007 following the reconstruction of the Staten Island Railroad and rehabilitation of Arthur Kill Lift Bridge by the New York City Economic Development Corporation.

CSXI also manages four intermodal terminals identified in their network as in the New York City area, though all are physically located in northern New Jersey. These are included here as they are reached via the CSXT River Subdivision from Selkirk Yard south on the west shore of the Hudson River to the NY/NJ border. The entire route south is cleared for current generation double stack container cars at least 20'-

⁸ EMP is a domestic interline container service offered by Union Pacific and Norfolk Southern, which provides a fleet of nearly 25,000 48' and 53' domestic containers and chassis that may move throughout a large network.

⁹ ATR – Above Top of Rail

2" ATR. From north to south, the four intermodal terminals in northern New Jersey are:

- Little Ferry. This facility handles domestic containers, international containers and TOFC.
- North Bergen. This facility handles domestic container, international TOFC and domestic TOFC.
- North & South Kearny. This facility handles domestic containers; North Kearny also handles international containers.
- Dockside. This is the CSXT name for the PANYNJ Elizabeth Marine Terminal and the Port Newark Terminal; it handles only international containers.

A similar situation occurs with the development of rail facilities in western Massachusetts rather than in New York. In both cases, the question is why the freight railroad or terminal developer located the facility outside of New York State.

Major Yards

CSX Transportation operates three major rail car classification yards in New York:

- Frontier Yard, Buffalo (1083 rail cars per day);
- DeWitt Yard, Syracuse (376 rail cars per day); and
- Selkirk Yard, Bethlehem, south of Albany (1729 rail cars per day).

4.4 Rail System Asset Conditions: Freight Rail Service

Track

The Federal Railroad Administration has established regulations governing the safe operation of trains over various track conditions (Track Safety Standards, 49 CFR Part 213). These regulations establish the minimum track conditions necessary for safe train operations in 10 different speed regimes (Classes 1 thru 9 and Excepted). However, the track conditions allowable under the Track Safety Standards are not adequate for sustained, cost-effective rail operations.

In 2007, the Department of Transportation conducted a comprehensive review of track conditions throughout the state. Track conditions varied with the operational requirements of each rail line and ranged from "Excepted" track, with a 10-mph speed limit and prohibitions against movement of hazardous materials and passengers, to Class 6 track, with a maximum allowable speed of 110 mph. In general, these track conditions were found to be adequate for current operations, but additional investments would be required for significant increases in future traffic levels.

The AAR National Rail Freight Infrastructure Capacity and Investment Study forecasted that New York's major rail routes, primarily the CSX Chicago and River Lines, could see an increase from 30 to 80 freight trains per day by 2035. Other New York State main lines, such as the Canadian Pacific's former Delaware and Hudson Railway, could see an estimated increase up to 30 freight trains per day by 2035.

Bridges

When most of New York's rail lines were originally built in the latter half of the 19th century, timber bridges and trestles were an economical solution to bridging the many streams, rivers and valleys that cross the state. These bridges utilized readily available local materials and were adequate to carry the loads of early railroading. The turn of the century saw many changes in the industry as new steel freight cars that could carry much heavier loads replaced earlier wooden cars. Public outcry over rail safety led to the grade separation of many highway crossings, and the coming of age of the American economy led to ever-increasing traffic levels. These events combined to drive the reconstruction of the rail network and replacement of most of the early bridges with new structures early in the 20th century. Many of these rail bridges are still in use today.

The Department of Transportation's bridge inventory contains the built dates of 1,942 of the approximate 6,000 rail bridges in the state. The oldest bridge dates to 1868; the newest bridge was built in 2006. More significantly, the mean built date for rail bridges in New York is 1923. These bridges had been built to withstand the dynamic impact of the much heavier steam locomotives, with an average age of 85 years; but these structures represent a future vulnerability in the rail network as operations are expected to increase and heavier axle load rail cars become the norm.

Under existing federal regulations and New York State Law, railroads are required to inspect their bridges regularly; the results of those inspections are to be submitted to NYSDOT. The Rail Safety Improvement Act of 2008 strengthens bridge condition reporting requirements. (Please refer to Section 7.3 titled Rail Safety in this report.)

Train Control Signal Systems

Control of train movement is usually exercised at three varying levels of sophistication. The highest level is that of a signalized railroad, where a train dispatcher controls movement of trains over the line by means of either a wayside or cab signal control system and by remotely controlled switches to transfer a train from one track to another and to Controlled ("passing") Sidings.

The next lower level of control is still performed by the train dispatcher but there is no signal system. The train dispatcher still controls movement over the line in question but this is done through a combination of radio and telephone conversations and written documentation, sometimes referred to as "Train Orders" or a "Form D."

The lowest level of control is usually performed by a yardmaster, again on a track on which there is no signal system. The authority to operate on this track is granted by the yardmaster, using rules and documentation requirements that are not as rigorous as used by the train dispatcher. When a yardmaster is not on duty, the train dispatcher usually controls the line in question.

Within the basic description provided above, there are two key issues: safety and capacity. Given the speeds and weight of trains, any collision could be catastrophic. The lengths of today's trains, along with speed, also mean that decisions, such as train moves through switches and onto passing sidings, must be carefully calculated in advance. These decisions can only be made if a signal system exists that allows

the “controller” to see the operations and to communicate with the train. The better this communications system works, the greater safety will occur and more capacity can be exacted from the network.

The mix of train types and speeds on the system increases the complexity and, therefore, requires a more complex signal system. The type of signal system directly affects the allowable speeds. With an advanced signal and control system, train speeds can be increased. Such a system allows Amtrak to achieve 110-mph service on portions of the Hudson Line; without such a system, these higher speeds would require exclusive passenger rights-of-way along Amtrak’s Empire Corridor across upstate New York.

The main line between Albany and Buffalo is one of CSXT’s highest volumes on its entire system, with much of its freight traffic (approximately 55 trains per day) traveling during daytime hours. Current operating speeds up to 79 mph are allowed by the signal system for this critical freight and passenger rail shared-use corridor. For higher allowable passenger train speeds, signal improvements become increasingly important west of Albany. To increase allowable operating speeds above 79 mph there would be a need, per FRA regulations, to install a state-of-the-art Positive Train Control (PTC) system based on a real-time, moving block. This improvement would allow optimized time savings and more efficient operations by increasing freight and passenger train on-time performance and the ability to add more train frequencies.

One issue is that such a system would require trains – passenger and freight – to be equipped with what are called CAB signals¹⁰ (such as used on the Hudson Line) or with PTC equipment to accommodate higher-speed passenger service along shared-use rail corridors. For main line across upstate New York used by Amtrak’s Empire Corridor service, CAB signal or PTC installation would be a significant cost to equip the many freight locomotives in use throughout the entire CSXT system that would be expected to see service in New York State.

Positive Train Control

Positive Train Control (PTC) is not a single technology; it is a term used to describe a number of different technologies with different capabilities that control train operations. Positive train control is not an “off-the-shelf” system or software that can be implemented overnight. To be effective, a PTC system must be “interoperable.” That is, it must be able to operate over the vast 140,000-mile national network that trains travel, pieces of which are owned by various freight railroads, Amtrak and commuter railroads. Braking issues also remain to be resolved in terms of the distance requirement posed by variables such as train length, weight, grade of track and track curvature. This is a safety critical issue, as improper braking can cause derailments and accidents.

Nationwide, there are 11 different PTC projects in one stage or another of development and implementation, involving nine different railroads, in at least 16 different states and consisting of more than 4,000 track miles. Significant expansion of these systems is expected soon. A summary listing of the major PTC system

¹⁰ A CAB signal is a signal located in a locomotive or operating cab that indicates the conditions affecting train movement.

projects currently in progress in the United States is available on the Federal Rail Administration Web site <http://www.fra.dot.gov>.

With the enactment of the Rail Safety Improvement Act of 2008, all Class I railroads must submit to the USDOT Secretary for approval by the end of 2015 plans for the deployment of a Positive Train Control system on their respective systems.

Under the Rail Safety Improvement Act of 2008, the state, working in partnership with the FRA, Amtrak and CSXT, should deploy Positive Train Control technology on the Empire Corridor as it becomes feasible to reduce the risk of accidents, improve the capacity of the corridor and increase reliability of service.

4.5 Rail Line Abandonments: Recent, Proposed and At-Risk Lines

Rail line abandonment is a concern, just as the tearing up of track and other facilities by Conrail during the 1970s to 1990s to avoid tax assessments was a critical issue to New York State. In both cases, the loss of track may achieve a short-term objective but the long-term impact is diminishing freight rail capacity.

As freight rail volumes have increased, we have felt the impact of the capacity loss on the system. The cost to now replace that previously deleted capacity is an impediment to growth. In many cases, abandoned rail rights-of-way (ROW) have been lost to other forms of development and reassembling that ROW is now either impossible or very expensive. Therefore, as part of this plan, NYSDOT will continue to analyze lines that have been lost and those that stand at risk.

Rail Abandonments 2002 - 2007

At one time, the rail network in New York encompassed more than 8,000 route miles; that network has been reduced to approximately 4,208 active route miles today. The frequency of rail line abandonment within New York has slowed dramatically since the widespread rail system rationalization of the late 1970s and early 1980s.

While abandonments still do occur, they have differed from earlier abandonments where entire corridors were eliminated. Over the last five years, eight abandonment applications have been approved by the Surface Transportation Board (STB). Six of those lines were short stub-ended spurs of only a few miles in length. Another line, although a through route, had been operated as a short stub-ended spur prior to its abandonment. Another abandoned rail line (CSXT's Port Morris Branch) had significant clearance restrictions and this through route was made redundant following the construction and 1998 service introduction of the NYSDOT Oak Point Link in the Bronx.

Rail Lines for which Abandonment or Discontinuance Applications were Approved in 2008

There have been three abandonment or discontinuance proceedings involving rail lines in New York State approved by the federal STB. These are:

- CPR Green Island Branch, Cohoes to Green Island – The Surface Transportation Board issued a Notice of Interim Trail Use on June 30, 2008. If

no trail use agreement is reached, abandonment authority is effective December 27, 2008.

- M&NJ Main Line, Slate Hill to NJ State Line – The Surface Transportation Board granted abandonment authority on June 19, 2008.
- NYS&W Utica Main Line, Chenango Forks to Sherburne – The Surface Transportation Board granted a discontinuance of service, effective October 1, 2008.

Rail Lines for which Abandonment or Discontinuance Applications are Pending in 2008

There is one abandonment proceeding involving rail lines in New York State pending before the federal Surface Transportation Board as follows:

- B&P Main Line, Ashford to Orchard Park – The Buffalo & Pittsburgh Railroad filed for abandonment of this line segment on September 16, 2008. This abandonment will be effective on November 5, 2008, unless stayed pending reconsideration.

Significant Rail Line Segments Not Currently In Service

In addition to previously abandoned and pending rail line abandonments, rail lines not in service are of large concern to the state. Rail line segments not in service represent economic development assets whose potential is unfulfilled. The concern is that the longer a rail line segment remains “out of service,” the more likely it might be removed from the rail network. An example of a rail line segment not in service and of concern follows:

- MA&N Newton Falls Line, Carthage to Newton Falls – This 46-mile rail line has been out of service for several years after its sole customer ceased operations in the fall of 2000. The Newton Falls paper-making plant was reactivated in 2007. However, the rail line remains unused as it now requires substantial rehabilitation to bring its condition to a safe, operational state. It has not been determined whether sufficient freight rail revenues could be generated to operate and maintain the line if the repairs were performed.

Railroad Corridor Preservation

New York State Transportation Law Article 2, Section 18 provides the State of New York with a preferential right to acquire any real property which has been abandoned for railroad transportation purposes and prohibits the disposal of real property without a determination from the Department of Transportation that Section 18 does not apply or a release of the State’s preferential right.

This authority, combined with the STB’s regulations regarding public use of abandoned rail rights-of-way, has been used to preserve critical pieces of railroad rights-of-way for reuse as restored rail lines, highways, pedestrian-recreational trails and utility corridors. The aforementioned STB abandonment proceedings in New York are open for trail-use negotiations with various public entities.

4.6 Corridor and Freight Planning Efforts

NYSDOT is pursuing several studies that are examining how the transportation network can help the state capitalize on existing and emerging economic development opportunities. Each study recognizes that an integrated, multimodal transportation policy is needed to address concerns of transportation agencies, modal operators, user groups and stakeholders (including shippers), such as bridge authorities and the traveling public. One such completed study, discussed in greater detail elsewhere, is the *I-87 Multimodal Corridor Study*, undertaken to address the substantial growth in trade and tourism that had occurred in the Interstate 87/Autoroute 15 NAFTA corridor between New York City and Montreal.

An example on the regional level is the *Niagara Frontier Urban Area Freight Transportation Study* conducted under the auspices of the Greater Buffalo-Niagara Regional Transportation Council (GBNRTC). The study was initiated in 2007 to assess the Niagara Region's freight transportation network capacity to handle freight needs now and in the future, while identifying and assessing new economic development opportunities. Tasks include estimating the level of cross-border trade; review of freight origin/destinations; forecasting future trade volumes in 5-year increments through 2025; assessing the ability of the network to handle those volumes; and developing proposals to address any future deficiencies.

Also, the Ogdensburg Bridge and Port Authority (OBPA) and NYSDOT are undertaking the *North Country Freight Needs Study and Comprehensive Plan for the Port of Ogdensburg* to develop a regional freight plan for the surrounding counties. The study will analyze truck, rail, air and marine freight flows to identify the role of the Port of Ogdensburg in meeting the region's current and future needs, as well as the role of the Ogdensburg international bridge and the New York & Ogdensburg Railway (which links to the CSXT main line serving this region).

The *Cross Harbor Freight Movement Project* (the Cross Harbor Project) proposes the near-term rehabilitation and the long-term improvement of the underutilized rail freight network connecting the New York City and New England markets to national markets west of the Hudson River. The Port Authority of New York and New Jersey (PANYNJ), which has undertaken the local sponsorship of the Cross Harbor Project, is prepared to work with federal, state, local and industry partners to take on the near-term and long-term issues regarding the Cross Harbor rail network.

If the regional rail network that can supply goods to the nation's largest consumer market is not maintained in the near term, the window of opportunity to create long-term improvements that benefit the national movement of goods by rail will close. Thus, it is PANYNJ's intention to utilize the SAFETEA-LU Section 1301 funding to return the existing rail network to a state of good repair in keeping with the intent of the No Action Alternative as defined in the existing Draft Environmental Impact Study.

Parallel to this activity and in coordination with its project partners, the Port Authority will work to identify a preferred alternative for continuing the national rail service across the New York Harbor into the east of Hudson region by supplementing the existing Draft Environmental Impact Study (EIS), completed by the New York City Economic Development Corporation in 2004, and by completing a Final EIS and

Record of Decision. A Notice to Proceed for the supplemental EIS is being drafted and will be published in the Federal Register. Goals for the EIS will include:

- Improve the movement of goods into, out of and through the metropolitan region;
- Create a more modally balanced goods movement system in the New York City region;
- Improve environmental quality in the region by diverting freight movements to less- polluting modes of transportation;
- Provide strategic redundancy to the region's vital Hudson River crossings.
- Provide seamless rail connections and handle train operations, particularly at the float connection, efficiently.
- Restore efficiency, integrity and uniform performance standards to the regional rail system.

Strategic Rail Corridor Network

NYS DOT continues to work with the United States Military Surface Deployment and Distribution Command's Transportation Engineering Agency to provide updates affecting the national Strategic Rail Corridor Network (STRACNET). The most recent update was March 2008. STRACNET and its associated connector lines are the civilian rail lines most important to national defense. STRACNET is a 32,000-mile interconnected network of rail corridors (not actual rail lines).

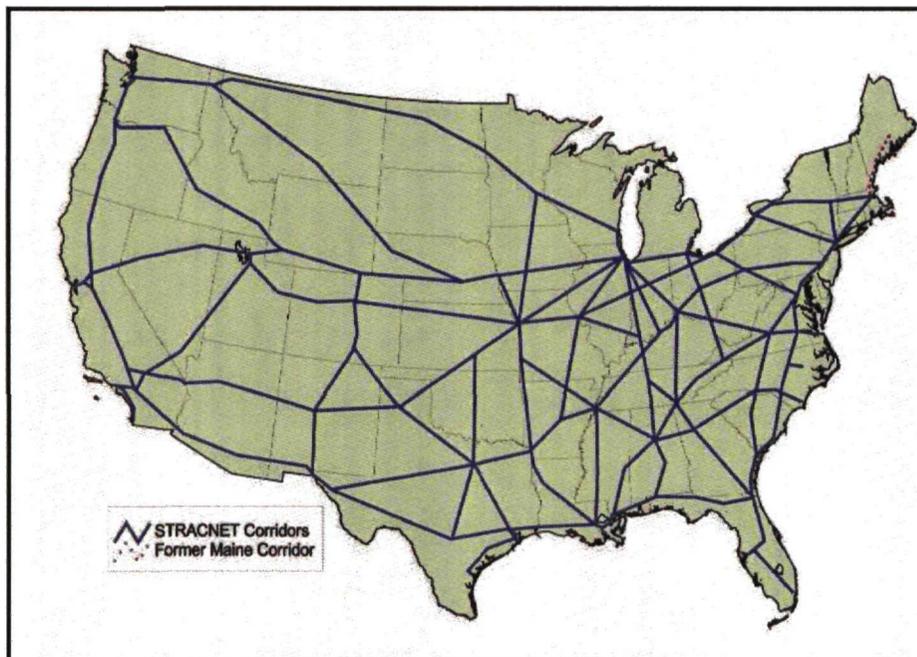


Figure 18 Strategic Rail Corridor Network (STRACNET)

The lines designated for STRACNET within each corridor, and for most connectors to military installations and activities requiring rail service, meet defense readiness requirements for maintenance condition, clearance and gross weight capability.

The following map depicts freight rail lines (shown in red) that are within STRACNET corridors, with the operating railroad identified. These rail lines provide access through New York State to the Port of New York and New Jersey in northern New Jersey and to military installations in eastern Massachusetts. Included on the map are Defense Connector Lines depicted by dashed black lines. These Defense Connector lines include the CSXT St. Lawrence Subdivision north from Syracuse to Fort Drum near Watertown, N.Y., and the PAR Rotterdam Branch from Rotterdam Junction, N.Y. to the CPR Freight Subdivision in Mechanicville, N.Y., thence south along the CPR Colonie Subdivision to the Watervliet Arsenal in the Capital District.

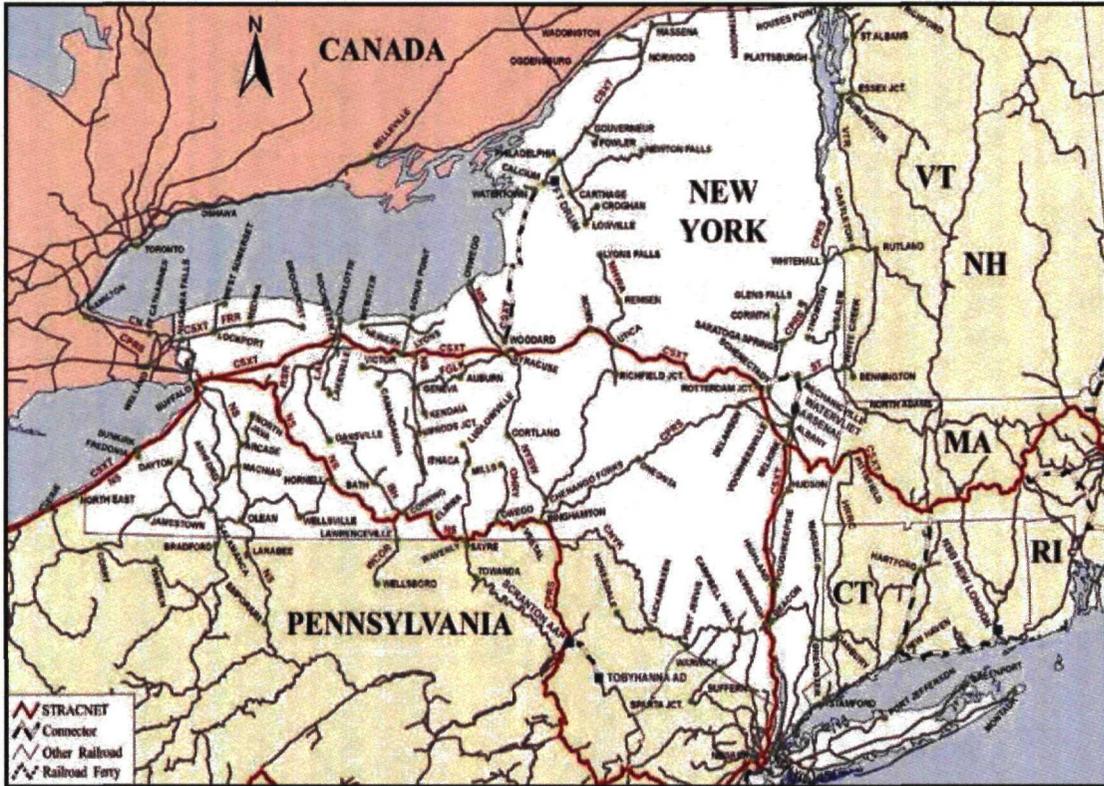


Figure 19 STRACNET & Defense Connector Lines in New York State

Freight Rail Service Planning in Upstate MPOs

Freight rail is part of the area-wide and long range transportation planning responsibilities of the Metropolitan Planning Organizations (MPOs). Further, if federal funds are to be used for freight rail improvements, the project must first be included in an approved Transportation Improvement program (TIP). Below are examples of upstate MPO efforts on freight rail planning:

Binghamton: The *Binghamton Area Freight Transportation Study* is examining the critical role as a freight hub and changing transportation needs in the freight network. The Binghamton Metropolitan Transportation Study (BMTS) is the metropolitan transportation planning organization for the Binghamton area, which is a critical freight transportation hub that is well served by Interstates 81, 88, and 86 (NY-17) and three freight railroads: Canadian Pacific, Norfolk Southern and New York Susquehanna & Western. Despite access to three freight railroads, very few

companies utilize rail shipping, mostly for bulk commodities. This is not likely to change soon but it is important that the rail infrastructure be maintained to support local rail shippers. Because freight movement is important to the state's economy, NYSDOT has adopted the "trade corridor" model of evaluating freight flow, so any evaluation of I-81 or I-86 will include adjacent railroads. An integrated corridor management approach is proposed to manage these freight flows.

Buffalo-Niagara Frontier: The Buffalo-Niagara region has four major Class I rail freight carriers: CSX Transportation, Norfolk Southern, Canadian Pacific Railway and Canadian National. This western New York region also has several local short line operators that interchange with one or more of the four major railroads. The Greater Buffalo-Niagara Regional Transportation Council (GBNRTC) is the metropolitan transportation planning organization for this region. It recognizes the importance of reliable travel movements for freight shipments and preserving and improving existing facilities. Globalization and international and trans-border trade opportunities to promote the efficiency and reliability of freight movement (truck and rail) within and through the region and to improve multimodal facilities and system connectivity to capitalize on growing international and trans-border trade opportunities. Further, the GBNRTC long range plan anticipates that economics will drive the push for increased efficiencies in freight logistics across all modes. Truck traffic will increasingly compete with auto travel for scarce highway capacity; rail and waterborne freight networks will be more attractive alternatives to truck movements. As noted earlier, the *Niagara Frontier Urban Area Freight Transportation Study* is examining the critical role of a freight hub and the changing transportation needs in the freight network.

Utica-Rome: The Herkimer-Oneida Counties Transportation Study (HOCTS) is the metropolitan transportation planning organization for the region. Freight movement is provided by CSXT and short line operators. The rail recommendations in the MPO's long range plan are based on the NYSDOT mission to preserve, maintain and enhance an efficient rail network to move freight and people at economical rates now and in the future. The plan states that rail transportation is an efficient way to move freight while saving energy, reducing air pollution relieving traffic congestion and reducing maintenance and repair on the highway network. Recommendations include the elimination or correction of unsafe grade crossings. Redevelopment efforts for Utica's Union Station have focused on maintaining and enhancing the station's multimodal transportation functions in part to serve the Adirondack Scenic Railroad. New and relocated track allow use of the station for passengers and for freight service. The long range plan calls to continue to promote upgrading the physical and operating quality of essential freight rail service.

Freight Rail Service Planning in the New York Metropolitan Area

The New York metropolitan area includes New York City, Nassau and Suffolk counties on Long Island, and Putnam, Rockland, and Westchester counties in the Hudson Valley. Along with its neighboring communities in New Jersey and Connecticut, the metropolitan area is the core of the nation's largest consumer market. The region's seaport freight facilities form the third-largest container port in the nation and the largest on the East Coast. Modally balanced freight access to and from the region is key to serving the region's consumers and businesses and other national markets.

Freight planning has been a focus for the New York Metropolitan Transportation Council (NYMTC), the federally recognized metropolitan planning organization (MPO) for the New York City metropolitan area. The update of its NYMTC Regional Freight Plan will start in 2008-09. As part of the ongoing freight planning effort, NYMTC has held outreach and listening sessions to gather stakeholder and public comment. Development of a freight model is anticipated soon to complement this MPO's passenger modeling capacity. NYMTC is also undertaking several other studies: the Feasibility of Freight Villages in NYMTC Region and, working in conjunction with NJTPA and ConnDOT, the *Multi-State Truck Stop Inventory and Assessment*.

In addition, some of NYMTC's member agencies have begun individual efforts focusing on their individual facilities. The New York City Economic Development Corporation investigated improvements to freight rail facilities on Staten Island and the south Brooklyn waterfront. This investigation sought opportunities for new maritime and economic development while balancing environmental sustainability -- Brooklyn waterfront improvements were identified and Staten Island improvements were implemented in partnership with the Port Authority of New York and New Jersey (PANYNJ). Specific NYSDOT project-related studies continue on LIRR undergrade bridges and AAR Plate F and Trailer on Flat Car (TOFC) rail clearances in Brooklyn and Queens.

Improving the reliability of goods and package delivery without increasing congestion on the transportation system also shared by passengers is vital to the region's growth. For that reason, PANYNJ is investing \$600 million in a port rail system called *ExpressRail*. ExpressRail will create on-dock rail at PANYNJ's container terminals in New York and New Jersey and a very critical rail storage area to allow for more 10,000-foot-long trains to move in and out of the port. When the system is fully built by 2011, it will have the capacity to handle 1.5 million cargo containers a year, taking an estimated 2.5 million trucks off the road.

As recently as 1994, only 9 percent of port traffic moved by rail. Currently, 13 percent of the port's increasing volume moves by rail and that share is expected to grow. Additionally, PANYNJ has invested more than \$50 million in infrastructure enhancements that support domestic and other non-port rail shipments. Moving forward, PANYNJ has several planning efforts to identify projects aimed at shifting freight from truck to rail. However, additional public and private rail improvements will be needed locally and nationally to realize this winning strategy.

East of Hudson Market Access Initiatives

MoveNY&NJ is a coalition of concerned leaders from New York's business, labor, environmental, community and planning sectors dedicated to improving the region's freight transportation system through the construction of a Cross Harbor Rail Freight tunnel underneath New York Harbor. The Cross Harbor Rail Freight Tunnel would provide a Hudson River crossing to connect freight railroads in New Jersey to railroads in Sunset Park, Brooklyn. Such a connection would enable freight to travel to east-of-Hudson destinations by rail to access east of Hudson markets.

Environmental Defense and the East of Hudson Rail Freight Operations Task Force released a report in 2004 on freight rail investment in New York City and northern New Jersey; it cited the need to invest in freight transport in the Hudson Region.

The report outlines the region's growing congestion problem and how to address it through investments in freight rail for the east of Hudson region to increase its mobility and economic competitiveness.

Other Studies

Canadian Studies: In 2007, the Canadian government announced a \$2.1 billion Gateway and Border Crossings Fund as a part of a framework for strategic gateways and trade corridors. Strategies advanced are to enhance the multimodal integration of major transportation systems. One of the first initiatives funded was the *Ontario-Quebec Continental Gateway and Trade Corridor Study*, which could have a direct impact on freight travel to and through New York State. This corridor was identified as strategic because of its importance in moving trade between Quebec and Ontario, and to/from the United States, which remains Canada's most important trade partner. More than 70 percent of Canada's international trade is with the United States and more than 60 percent of Canada's Gross Domestic Product is generated within the Ontario-Quebec region.

Approximately 80 percent of Canada's trade-by-truck moves through Ontario-Quebec border crossings. The top five U.S.-Canada border crossings for truck freight are along the Ontario-Quebec Corridor, including Buffalo-Fort Erie, Champlain-Lacolle and Alexandria Bay-Lansdowne, Ont. Similarly, more than 80 percent of Canada's trade-by-rail moves through this corridor, including Buffalo-Fort Erie, Rouses Point-Lacolle and Fort Covington, N.Y.-Dundee, QC.

In addition to these large corridor studies, the Ontario Transportation Ministry (MTO) is heavily involved in the *Greater Toronto Area Corridor Planning and Environmental Study*. This will provide analysis for highway and rail facilities that will have an impact on the southern Ontario/Niagara region and, therefore, on the border crossings and freight movement into New York State.

The St. Lawrence Seaway and the Great Lakes: The Great Lakes-St. Lawrence Seaway System is the largest marine corridor in North America and includes the Port of Montreal, the second-largest in Canada. In November 2007, the U.S. and Canada announced the completion of a study that looked at this transportation system, including the potential to alleviate congestion on the highway and rail networks and at border crossings and to better integrate the three modes, given the projected growth in economy and trade for all modes in both countries. Further on the St. Lawrence Seaway is the Port of Ogdensburg that serves as the principal intermodal facility in New York's North Country. The port facility services truck, rail, and marine freight and is the first U.S. port on the Seaway.

4.7 Rail Freight System Issues and Needs

High Axle Loads

By emphasizing the economies of scale, railroads have been able to reduce their costs and, in some cases, recapture traffic lost to other modes. A key element has been the increased use of high axle load cars with gross weights of 286,000 pounds and up to 315,000 pounds (286k and 315k, respectively). For Class II and III railroads to accommodate this traffic, it is critical that investments are made to return the track structure to a state of good repair, as previously noted, but the

infrastructure needs go much deeper. Bridges have been less of a concern as railroads have lived off the structural capacity in their bridges built for steam locomotives. However, high axle load traffic is consuming the remaining fatigue life of these bridges. Significant capital investments will be needed to address these assets in the future.

Currently, the only routes that are 315k-capable are the CSXT main lines across upstate New York from the Ontario/New York border crossings at Niagara Falls and Buffalo International Bridge, and from Pennsylvania/New York border, east to Selkirk Yard. From the Capital District, the CSXT 315k routes continue east into Massachusetts and south into New Jersey.

The 286k-capable routes are primarily the remaining main lines of the Class 1 and Class 2 railroads. These include the CPR main lines from the Quebec/New York border crossing at Rouses Point, south to the Capital District, thence south through Binghamton into Pennsylvania; the CSXT Hudson Subdivision from the Capital District south to Highbridge Yard in the Bronx and connection with the NYSDOT 286k-capable Oak Point Link to Oak Point Yard; the NS main lines from the from Pennsylvania/New York border east through Buffalo and across the southern tier of New York to Binghamton (except the weight restriction of 273k in the vicinity of the Portage Bridge over the Genesee River); the BPRR main line from Buffalo south through Olean into Pennsylvania; and the NYSW main lines from Syracuse and Utica (the latter currently out of service) through Binghamton to Port Jervis. The project to achieve 286k capability by replacing or rehabilitating the NS Portage Bridge is in the scoping stage. The proposed joint venture by NS and PAR to create the "Pan Am Southern" includes the upgrade of the PAR main lines from Rotterdam east through Mechanicville into Vermont and Massachusetts. This will achieve 286k capability.

With the exception of the Major Class I freight railroads, most of the rail lines in New York State are not physically capable of carrying high axle load (286k) rail cars. These restricted rail lines include those owned by Amtrak and the Long Island Rail Road in the downstate metropolitan area. Within downstate New York, select portions of the Metro-North Commuter Railroad's Hudson Line are rated to safely and effectively accommodate 286k rail cars. A state rail network map of Rail Car Weight Limits follows in Figure 20.

State of Good Repair

Before discussing the infrastructure needs to accommodate future traffic, it is necessary to assess the infrastructure needs for today's traffic. The railroad infrastructure must accommodate existing traffic safely and efficiently. The four Class I railroads must dedicate the resources necessary to ensure well-maintained track and bridge structures.

The ability to maintain the existing infrastructure to a state of good repair is a challenge for the Class II and Class III railroads. Many of these lines suffered from years of deferred maintenance before being spun off by the larger carriers. These lines typically lack the resources of the larger railroads but are forced to catch up to bring the railroad back to a state of good repair. Unfortunately, many of these lines find it difficult to catch up as their limited resources are expended in making emergency repairs.

Clearances

The primary main line corridors through New York are either cleared for double-stack traffic or have ongoing capital projects to address the last remaining obstructions. However, in the critically congested New York City metropolitan region, outdated overhead clearances hinder the ability of the railroad to serve the market with today's larger freight cars. If rail use is to increase in the downstate region, these restrictions must be addressed by some combination of raising bridges or lowering tracks. The number of structures to be cleared and their complexity add dramatically to the cost of making these improvements.

There are a number of primary and secondary rail routes in upstate New York affected by limited horizontal and vertical clearances. These restrictions hamper the rail freight industry's ability to institute new services or capture additional market share. A fold-out state rail network map of Allowable Rail Car Clearances follows in Figure 21.

The most significant obstruction is on Canadian Pacific Railway's Canadian Subdivision, which is not cleared for double-stack rail cars. This rail line corridor runs between the Capital District and the international border at Rouses Point and is CPR's primary freight route in the eastern United States. In partnership with NYSDOT, Canadian Pacific has addressed seven obstructions, including two rock tunnels; two overhead highway bridge obstructions remain. These last two structures are scheduled for replacement in 2008 and it is anticipated that this key route will have suitable clearance by mid-2009. This is an example of how NYSDOT and a railroad, working together, can develop an overall program with focused investments to address specific problems. These final two bridges will allow proper clearance for the entire length.

The downstate region is more significantly affected by the lack of railroad clearances. Metro-North's Hudson Line is equipped with both high-level passenger platforms and 3rd rail electrification. While both are crucial to efficient commuter operations, they also restrict access to the New York City metropolitan region for wide rail car loads. NYSDOT has invested in improving vertical clearances in the corridor, providing clearances from Selkirk Yard south to Tarrytown and, more recently, TOFC clearances from Tarrytown south to Harlem River Yard.

Beyond Harlem River Yard, the freight lines in the Bronx, Queens and Brooklyn also have clearance restrictions limiting rail service. These restrictions hinder the economies of rail transportation. Beyond the current impacts, the North American rail industry's prevailing trend for rail car fleet replacement and new car construction is toward larger rail cars – both longer and taller (width has remained consistent) often with greater weight-carrying capacity. As the shorter-height rail car fleet ages, the decreasing car supply able to negotiate the existing rail line clearance restrictions will further affect and reduce the ability of New York City and Long Island shippers to utilize rail for their freight transportation needs.

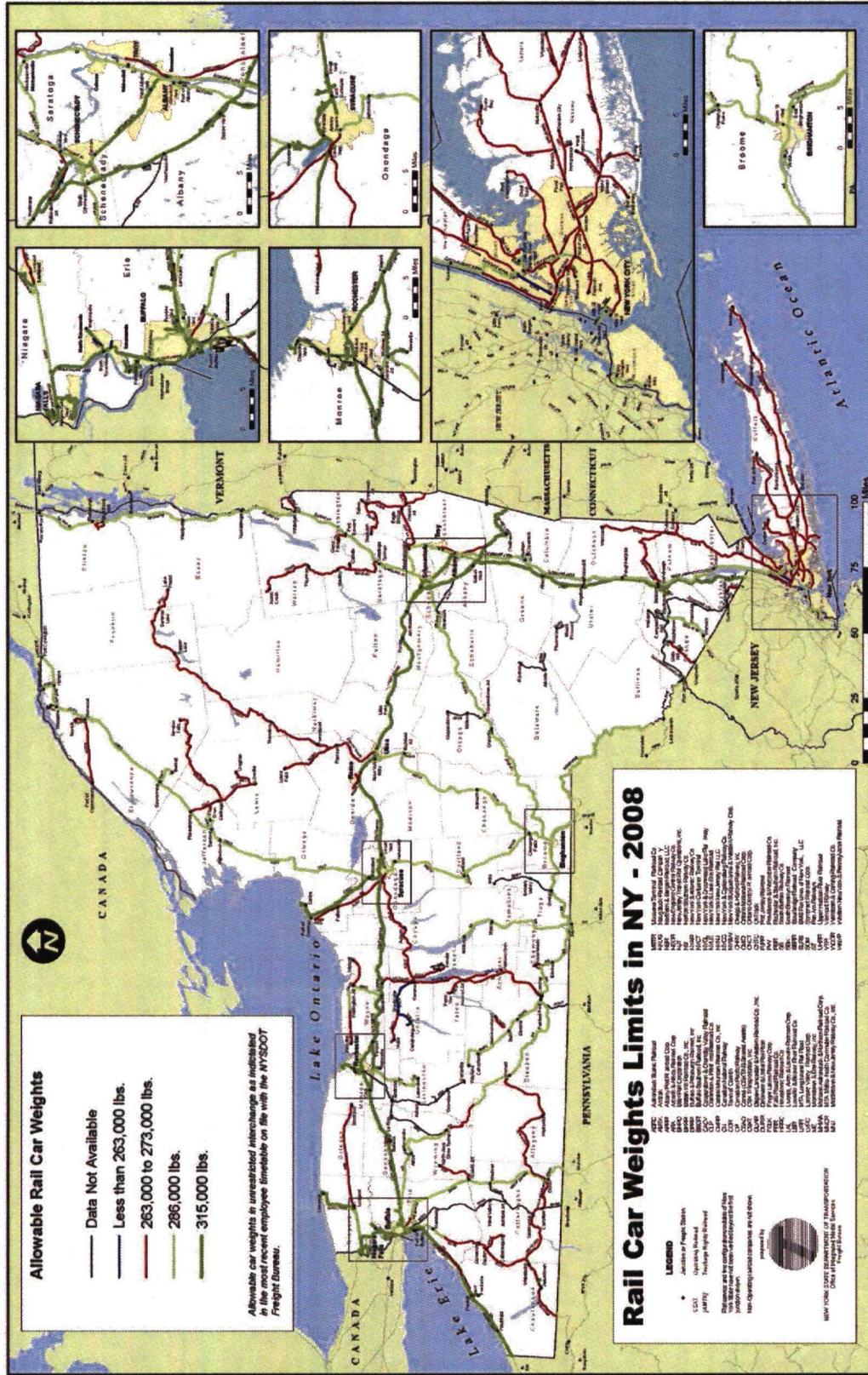


Figure 20 Rail Car Weight Limits in NY

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Capacity Issues

The New York State Department of Transportation has categorized capacity constraints on the freight rail network into four distinct issues. Each is discussed in detail below:

Line Haul Freight Issues: The growth in rail traffic is straining the current rail infrastructure. Bottlenecks, such as CSX Transportation's single-track River Subdivision, can limit the economic growth of the Port of New York and New Jersey or an entire region. For the Class I railroads, the primary issues are capacity and fluidity. The expansion of containerized foreign trade through the Port of New York and New Jersey has caused major increases of intermodal rail movements on New York's main line in the rail network. This expansion is occurring on lines that were rationalized only 20 years ago to reduce rail operating costs necessary to attain a financially stable rail system following the massive rail bankruptcies in the Northeast.

Although New York's Class I railroads have invested substantially in additional passing sidings and signal technology, often with state financial assistance, the freight growth exceeds the capacity gains being made.

Freight – Intercity Passenger Issues: Amtrak operates four distinct services within New York. Its primary main line, the Northeast Corridor (NEC), cuts across the New York City metropolitan region and includes New York's Pennsylvania Station, the nation's busiest passenger rail station. East of Penn Station from New Rochelle to the Connecticut line (and beyond to New Haven, Ct.), the NEC is under the control of Metro-North.

Penn Station also serves as the eastern/southern terminal for Amtrak's *Empire Service* and several long-distance trains: the *Maple Leaf*, *Lake Shore Limited* and the state-supported *Adirondack* (N.Y.) and *Ethan Allen Express* (Vt.). All share the Hudson Line between New York City and Albany-Rensselaer in the Capital District. The *Adirondack* and *Ethan Allen Express* continue north on the Canadian Pacific Railway, while the *Maple Leaf*, *Lake Shore Limited* and other *Empire Service* trains continue west on CSXT main line facilities between Albany, Buffalo and beyond.

These routes traverse the primary main lines of Class I railroads and are generally kept in a state of good repair. However, each corridor has unique physical characteristics and a mix of train operations that require future infrastructure investment. On CSXT's double track main line between the Capital District and Buffalo, freight train volumes (number of freights per day, time of day) are paramount. This route is the state's busiest freight route, handling approximately 55 freight trains per day. This critical freight rail corridor also accommodates eight intercity passenger trains per day (four in both directions) across upstate New York. Any disruption to the corridor operating plan, either from scheduled maintenance or construction, unscheduled freight train delays or additional train volumes, hampers passenger and freight train on-time schedule performance.

North of Schenectady, Amtrak's *Adirondack* and *Ethan Allen Express* trains share Canadian Pacific Railway's single track Canadian Subdivision as far as Whitehall, where the *Ethan Allen* heads east on the Clarendon & Pittsford to Rutland, Vt., while the *Adirondack* continues north on the Canadian Subdivision to the international border crossing at Rouses Point. Canadian Pacific's recent haulage arrangements

with Norfolk Southern and CSX Transportation, while beneficial for the freight railroads, may present additional interference to Amtrak operations in this corridor as freight train volumes are expected to increase significantly. Canadian Pacific, with some state assistance, has invested in the corridor to enable this new freight traffic to move reliably; Amtrak's operations have benefited from these investments.

Earlier, this chapter discussed the importance and expected benefits of an improved signal and train control system, in part because of the mix of freight and passenger service in shared-use rail corridors. Each rail service has its own speeds and travel capabilities that produce in both safety and capacity concerns. One suggested solution has been a dedicated passenger track, especially for the CSXT Buffalo-Albany rail corridor; but, as also noted previously, in some areas that ROW has been lost due to past railroad policies and the cost may be prohibitive. Further, as part of the discussion of the AAR *National Rail Freight Infrastructure Capacity and Investment Study*, the growth anticipated for passenger and freight is leading to increased potential conflict. Amtrak is seeing some of its largest percentage ridership increases along the Buffalo-Albany rail corridor despite the level of freight-related delay. With high gas prices, ridership is expected to keep growing; this increase will create pressure for more reliable service and, eventually, more frequency of passenger trains. At the same time, CSXT is expecting increase in freight rail business activity. New York State will continue to work with both rail companies so they can effectively and efficiently serve their respective passenger and freight rail service customers, markets, and business goals.

Freight-Commuter Issues: The New York City Metropolitan Area is served by three of the largest commuter railroads in the country: the Long Island Rail Road, Metro-North Railroad and New Jersey Transit (NJT). Each of these is a government-owned entity whose primary mission is to provide commuter service to and from New York City. In most cases, these entities own (or lease) the rail infrastructure and control maintenance, operations and dispatching (the most notable exception is NJT operations over Amtrak's Northeast Corridor).

However, rail freight service continues to operate over most of these lines. CSX Transportation, Norfolk Southern Railway, Canadian Pacific Railway, New York Susquehanna & Western, Providence & Worcester, Housatonic Railroad and New York & Atlantic Railway each operate at least a portion of their route mileage in the state on commuter routes. Conversely, there is little trackage in metropolitan New York that is used exclusively for freight operations. For example, there are approximately 811 main line track miles in the seven counties that comprise New York City and Long Island, but only 61 main line track miles (7.5 percent) are utilized exclusively for freight.

As the region's population grows and congestion delays on the regions highways and bridges increase, so will public demand for commuter rail service. NJT and the Long Island Rail Road are progressing mega-projects to increase passenger capacity into Manhattan. NJT is developing the Trans-Hudson Express (THE) Tunnel into the Penn Station area and LIRR is constructing its East Side Access into Grand Central Terminal; both are intended to address the commuter growth needs in the coming years. It is anticipated that the corresponding growth in both service frequencies and geographic reach will be accomplished, in part, by effectively shrinking the operating windows for freight rail service along the commuter railroad networks in the New York metropolitan region. A comprehensive approach to corridor planning is

in the *Hudson Line Railroad Corridor Transportation Plan* study: Metro-North, Amtrak, CSX Transportation, Canadian Pacific Railway and the New York State Department of Transportation jointly funded a study to determine the infrastructure needed for future operating plans and traffic projections of the four operating railroads and for NYSDOT's transportation policy goals. The final report of this "Joint Users" study identified a program of specific capital investments along the Hudson Line corridor that will significantly improve the operating metrics for all four railroads over the no-build scenario. The "Joint Users" study also quantified the anticipated benefits to each rail service provider in the corridor and recommended a cost allocation for each recommended capital investment. These conclusions were fully endorsed by all five stakeholders.

Class II/Class III Issues: Generally speaking, these two classes of railroads have lower operating speeds and track conditions in comparison to Class I rail lines. Further, it is clear that the need for capacity improvement is not limited to the Class I railroads. Prior to being sold to a short line railroad, the "excess" sidings and yard tracks of Class I-owned branch lines were often removed to minimize maintenance costs and real property tax liabilities. Those actions made business sense under the regulatory and tax framework of the time. However, today, under the management of short line operators, rail traffic has returned to many of these light branch lines; the lack of runaround sidings, yard tracks and interchange tracks can cause inefficient operations that increase the railroads' costs to serve the shippers or can decrease safety.

Development of New Railroads

A recent trend in the rail industry has been the conversion of private industrial spurs and sidings, ranging from a single side track to an extensive network of track within an industrial park, to common carrier railroad operation. Occasionally, these transactions have included proposals for new construction. While in many cases this is a legitimate business transaction, in other cases, there is growing concern that these transactions are designed to take advantage of the pre-emption of state and local zoning and environmental regulation associated with common carrier railroads. For five years, there have been several number of such transactions proposed in New York with varying results. Note that Surface Transportation Board (STB) authority over new railroad construction pre-empts state and local regulations.

Development of New Rail Freight Services

In October 2007, the partnership of CSXT, Union Pacific and Raillex initiated a new twice-weekly unit train service carrying perishables (fresh fruits and vegetables) from Wallula, Wash., to Schenectady (Rotterdam). The cross-country trip takes 128 hours, a time very competitive with over-the-road truck.

The 55-car train has next-generation refrigerated boxcars that have the most efficient insulation, use an environmentally friendly and energy efficient refrigeration unit and have a Global Positioning System (GPS) to monitor the "health" of the refrigeration unit and the temperature inside the rail car. In October 2008, a second 55-car produce train began operating weekly from Delano, Calif., to Schenectady (Rotterdam) using the same of state-of-the-art refrigerated boxcars as the Wallula, Wash., train.

Each train carries the same amount of produce and perishable items that would have been moved by more than 200 over-the-road trucks. With the produce moving by rail rather than by truck, 100,000 fewer gallons of diesel fuel are used each time the produce unit train operates.

Real Property Taxation of Rail Transportation Infrastructure

Historically, property taxes on railroad property in New York State have been among the highest in the nation. The state's tax structure actually discourages -- rather than encourages -- greater investment by the private railroads in their infrastructures. As a result, it often made sound business sense to remove existing track or sell off the rail lines to short line railroad companies if the lines were low density to avoid local real property tax levies.

Presently, railroad ownership falls into three basic categories with direct implications on the taxable status of the transportation rights-of-way and infrastructure in the state. As shown in the state rail map (Figure 22) depicting Taxable Status of Rail Rights-Of-Way, the categories are:

- Freight rail lines that are Tax Exempt or receive some form of abatement due to their ownership by a local government entity such as a municipality, IDA, local rail authority, federal government or public benefit corporation.
- Freight Rail Lines that have Full Taxable Status.
- Rail lines with freight trackage rights owned by the state or a state authority.

New York State Real Property Law, Sections 489-d and 489-v, were changed in 2003 to provide some limited real property tax relief to freight railroad companies. While the benefits of this measure are just now going into effect, local real property tax levels in New York State are expected to be closer to those in our neighboring Northeast states, even though they will still be above the national average.

Any reduction to local real property taxes likely will have a positive effect on future capital infrastructure investment decisions of many freight railroads. The competing modes of freight transportation generally do not pay real property taxes on major portions of the transportation infrastructure that they use. For example, publicly owned, built, and maintained highway; airport; and waterway facilities typically are not subject to such local taxes. Therefore, continuing attention to the effect of local property taxes on freight railroads is needed.

In addition to considering public comments on the state's real property tax methodology regarding railroads that were received during the Rail Plan public outreach phase, NYSDOT will also review other states' railroad-related tax methodologies. The goal is to identify positive incentives for private investment in freight rail infrastructure and services.

Conclusion

New York State's freight rail network serves 59 of the state's counties on more than 4,200 route miles. Service is provided by four Class I (major) railroads, supplemented by 32 regional, short-line and terminal railroads. However, New York

State lags the nation in handling commodities by rail, as only 3 percent of commodities by weight moved by rail in New York State in 2002, compared to 16 percent nationally. Numerous "bottlenecks," such as vertical clearance restrictions in a tunnel or elsewhere, restrict the flow of rail freight.

Five major intermodal terminals facilitate the transfer of freight (generally in containers) among rail lines and highway and waterborne modes. Several corridor and freight planning efforts are under way to develop integrated multimodal transportation policies that address the concerns of all parties involved in freight transportation in New York.

Key issues affecting the freight rail network in New York include accommodation of heavy rail cars over the standard weight of 286,000 pounds; bringing rail lines to a state of good repair; upgrading limited horizontal and vertical clearances to allow movement of today's larger rail cars; expanding the capacity of freight lines, as well as lines shared by freight and passenger trains, to handle more train movements; and the level of real property taxation of rail lines.

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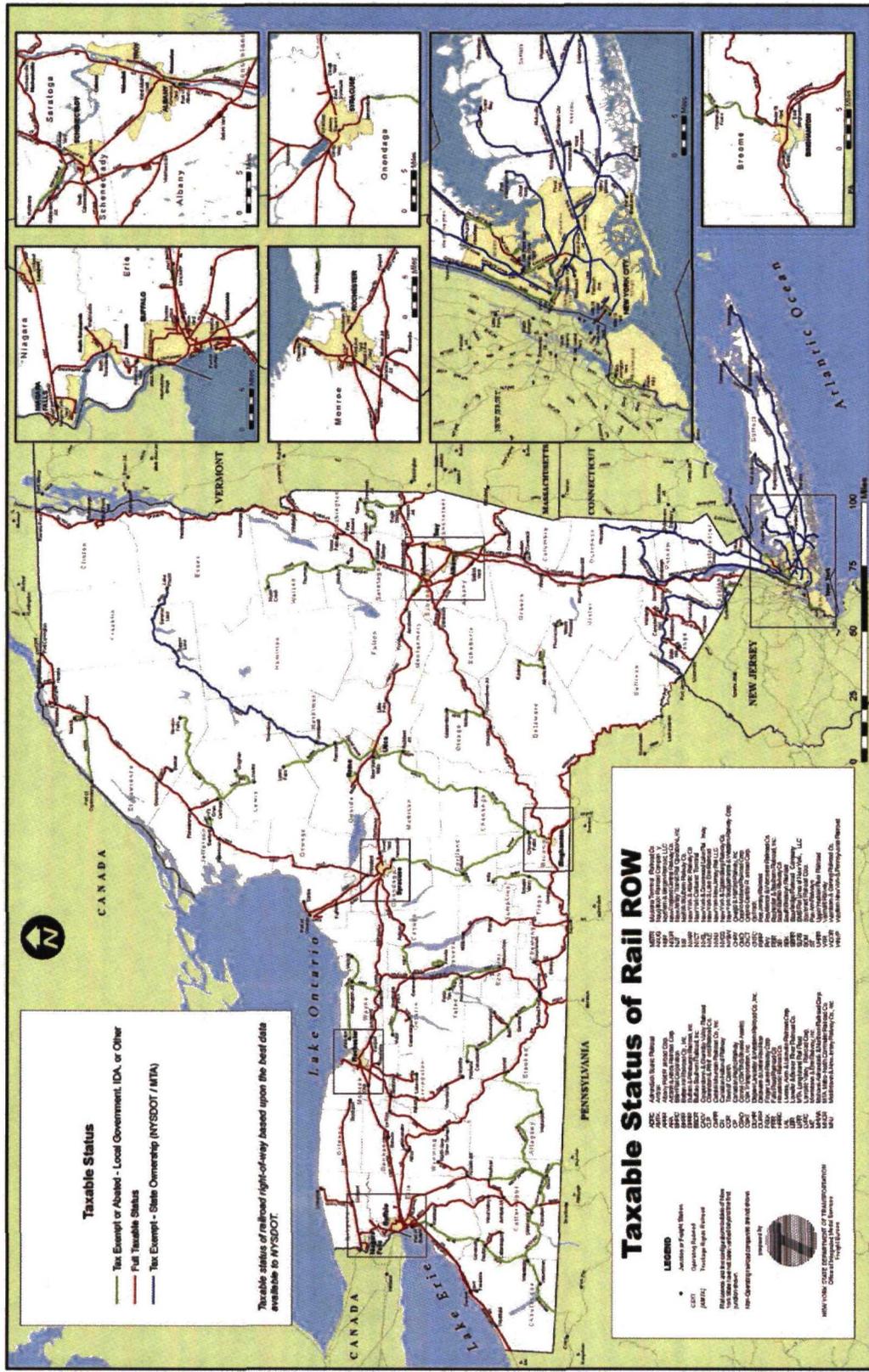


Figure 22 Taxable Status of Rail ROW

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CHAPTER 5 – INTERCITY PASSENGER RAIL

5.1 The Intercity Passenger Rail Network in New York State

Overview

Intercity passenger rail service in the United States and in New York State is provided by Amtrak, officially the National Railroad Passenger Corporation. Amtrak's national passenger rail system currently covers 22,000 miles of rail, serving more than 500 communities in 47 states. During federal fiscal year 2007, a record 25.8 million passengers rode Amtrak. The latest nationwide ridership numbers, for the period from October 1, 2007, to July 31, 2008, show an 11.3 percent increase over the same period last year.

Amtrak was created in 1970 through enactment of the Railroad Passenger Service Act (P.L.91-518) to retain national passenger rail service and began operations on May 1, 1971. Prior to the creation of Amtrak, intercity passenger rail service in the United States had been provided by private freight railroad companies. Ridership on these lines had been declining since World War II due to increased competition from automobile and air travel. Congress recognized the need for a national system of rail travel, charging Amtrak to operate a core network of 23,000 miles on tracks owned mostly by private freight railroads.



Figure 23 Amtrak at Syracuse Intermodal Transportation Center

States such as New York recognized the need to preserve and to invest in intercity passenger rail. The first priority was to continue "core" routes essential to their constituencies. In New York State, this core service included routes from New York City to Albany and west to Niagara Falls. Section 403(b) of the Rail Passenger Service Act allowed states to retain services not included in Amtrak's core system or to introduce a new Amtrak service by paying part of the operating losses incurred by that service. On July 1, 1978, New York State, in cooperation with Amtrak, established one of the first state-supported Amtrak services -- the *Adirondack* from Albany-Rensselaer to Montreal. New York State continues to provide operating support for the *Adirondack* service. In August 2000, the *Adirondack* was named one of the Top Ten Most Scenic Train Trips in the World by National Geographic Traveler magazine.

5.2 Existing Passenger Rail Services, Stations, and Routes

Service Summary

Amtrak markets and provides Intercity passenger rail service in upstate New York as follows: *Empire Service*, *Adirondack*, the multistate *Lake Shore Limited* and the *Maple Leaf* to Toronto, Canada. Those services reach 25 passenger rail stations of various size and ridership.

Seven passenger rail stations are served from Penn Station in New York City to the Albany-Rensselaer station in Rensselaer, along the southern portion of Amtrak's Empire Corridor and located east of the Hudson River. Another nine passenger rail stations are served between Albany-Rensselaer and Niagara Falls, N.Y., along the western portion of Amtrak's Empire Corridor. *Adirondack* service reaches an additional nine passenger rail stations in New York north of Schenectady to the international border at Rouses Point on its route to Montreal, Quebec. New York State is also served by Amtrak's Northeast Corridor service at Penn Station in Manhattan. That service operates on the main line between Boston, Mass., and Washington, D.C.

a. *Empire Service*:

The rail corridor for Amtrak's *Empire Service* lies entirely within New York State and includes the following segments:

- | | |
|--|------------------|
| • Niagara Falls-Buffalo (Niagara Branch) | 29 miles |
| • Buffalo-Albany (Chicago Line) | 290 miles |
| • Albany-Rensselaer-Penn Station (Hudson Line) | <u>142 miles</u> |
| | Total 461 miles |

Connections to cities and other services include:

Northeast Corridor from Penn Station;
Boston from Albany-Rensselaer Station;
Montreal and VIA Rail from the *Adirondack*;
Chicago from the *Lake Shore Limited*;
Toronto and VIA Rail from the *Maple Leaf*.

b. *Adirondack*:

The route of the state-supported *Adirondack* includes the following segments:

- | | |
|---|------------------|
| • Albany-Rensselaer-Penn Station (part of Empire Corridor) | 142 miles |
| • Albany-Rensselaer-Montreal (Adirondack Corridor-subsidized part) | <u>240 miles</u> |
| | Total 382 miles |

Connections to other services include:

Northeast Corridor from Penn Station;
Boston from Albany-Rensselaer Station;
Western N.Y./Chicago from *Lake Shore Limited*;
Rutland, Vt. from *Ethan Allen*;
Montreal and VIA Rail from the *Adirondack*.

The state-supported *Adirondack* service is important for tourism and economic development, provides rail passenger service to residents of the Adirondack area and is a connection to Montreal.

c. Lake Shore Limited:

The *Lake Shore Limited* provides long-distance service with endpoints in New York City's Penn Station and Chicago's Union Station. In New York State, it includes the following segments:

- Buffalo–Albany-Rensselaer (Chicago Line) 290 miles
 - Albany-Rensselaer-Penn Station (Hudson Line) 142 miles
- Total 432 miles
- There are no stops along the approximate 90 miles from Buffalo to the Pennsylvania state line in western New York.
 - The Albany-Rensselaer–Boston portion of the *Lake Shore Limited* is served by a connecting train operating only between these points.
 - The primary route of the *Lake Shore Limited* runs from Albany-Rensselaer to Penn Station in Manhattan.

Connections to other services include:

Northeast Corridor from Penn Station;
Rutland, Vt. from the *Ethan Allen*;
Montreal and VIA Rail from the *Adirondack*;
Chicago and the many Amtrak routes originating at that station;
Toronto and VIA Rail from the *Maple Leaf*.

d. Maple Leaf:

The *Maple Leaf* is grouped as part of Amtrak's *Empire Service*, providing service between the Penn Station in New York City and Niagara Falls, N.Y.. The train continues on to Toronto, making four intermediate stops. The service between Toronto and Niagara Falls, Ont., is operated by VIA Rail.

- U.S./Canada border, Niagara Falls–Buffalo 23 miles
 - Buffalo–Albany-Rensselaer (Chicago Line) 290 miles
 - Albany-Rensselaer-Penn Station (Hudson Line) 142 miles
- Total 455 miles

Connections to other services include:

Northeast Corridor from Penn Station;
Rutland, Vt. from the *Ethan Allen*;
Montreal and VIA Rail from the *Adirondack*;
Chicago from *Lake Shore Limited*;
Toronto and VIA Rail.

e. Intercity Passenger Train Services

There are 13 round-trip trains that provide the services described above. All 13 travel between Penn Station and Albany-Rensselaer stations:

- Seven round-trip trains serve only the Hudson Line between Penn Station and Albany-Rensselaer.
- Four additional round-trip trains continue west:
 - Two are *Empire Service* trains that continue to Niagara Falls;
 - The *Maple Leaf* provides service through Niagara Falls to Toronto;
 - The fourth is the *Lake Shore Limited* providing service through Buffalo to Chicago.
- Two additional trains are state-supported with a terminus in Penn Station. State support for the portions of each train north of Albany-Rensselaer are as follows:
 - New York's state-supported *Adirondack* providing service to Montreal;
 - Vermont's state-supported *Ethan Allen* providing service to Rutland via Whitehall on the Adirondack Corridor.

The following map shows the number of round-trip trains currently in service in New York State.

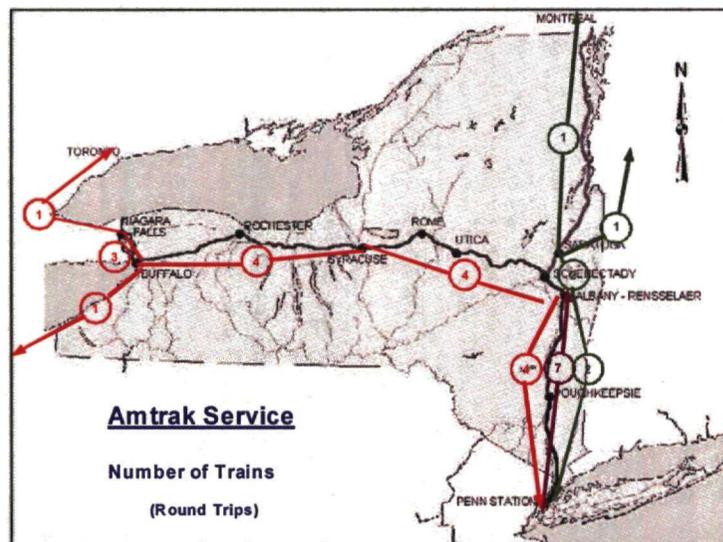


Figure 24 Amtrak Service - Number of Round-Trip Trains

Intercity Passenger Rail Service Compared to Other Modes

As demonstrated on the Northeast Corridor, where intercity passenger rail has been reported to serve a majority of the market, rail service can be and is competitive with other modes. Empire Service between Penn Station in New York City and Albany-Rensselaer is also highly competitive with other travel modes and is particularly popular with business travelers. These services demonstrate that people will choose to travel by rail regularly if it meets their needs; this will produce less congestion for other modes of travel. Rail passengers have the advantage of traveling from one city center to another city center. For example, rail passengers traveling to Penn Station in Manhattan enjoy direct connections to the subway and commuter rail networks. Rail travel in all of the route segments in the table below, except Albany to Montreal, are relatively competitive with automobile travel in terms of travel time.

Amtrak has changed its fare structure to emulate the “yield management” practices of the airline industry by utilizing a system that maximizes the fare at peak times on peak days and offers a cheaper off-peak fare. Amtrak’s *Revenue Management System* also sets ticket fares for high-demand trains at prices higher than fares for lower-demand trains. Amtrak’s fare structure also is generally time-dependent. The earlier a ticket is purchased prior to the travel date, the lower the price; a purchase closer to the travel date will generally be at a higher price. Historically, Amtrak has set *Empire Service* and *Adirondack* fares considerably higher than other similar Amtrak routes in the nation. In addition, Amtrak often excludes these upstate New York routes from special promotions or discounts often given on comparable intercity passenger rail routes in other areas of the country.

| Approximate Travel Time (Hours) | | | |
|---|-------------|--------------|--------------|
| Segment | Rail | Auto* | Air** |
| Albany - NYC | 2.5 | 2.5 | 1 |
| Albany - Buffalo | 4.8-5.25 | 4.4 | 1 |
| NYC - Buffalo | 7.3 | 6.7 | 1.5 |
| Albany - Montreal | 8.8 | 3.7 | 3.5 |
| *NYS Thruway or I-87 North **Air travel time is airport to airport and does not include travel time to/from airport or security. Travel to/from Manhattan can be significant. For example, a subway trip from Penn Station to John F. Kennedy Airport Terminal #1 is approximately one hour. | | | |

Figure 25 Approximate Travel Times

The travel times for the route segments in the above table do not consider factors for automobile and air travel that increase the cost and travel time of these modes of travel. Some factors include traffic congestion, road work delays, parking (especially in New York City where parking is limited and costly), air travel security check-in, growing plane delays and cancellations, air passenger dissatisfaction and rising air fares.

In 2008, NYSDOT conducted an analysis comparing travel times of scheduled airline and rail service between the Northeast Corridor cities of Boston, Providence, New Haven, New York City, Newark, Philadelphia, Baltimore and Washington, D.C. This analysis showed that Amtrak travel times among Northeast Corridor cities beat air travel times in most instances when considering a one-hour standard for security clearance and travel from midtown (where train stations are typically located) to the airport. This was especially evident in travel from New York City to every other Northeast Corridor city where there is scheduled airline service (Boston, Providence, Philadelphia, Baltimore and Washington, D.C.).

Continued improvements to intercity passenger rail service, specifically those that reduce travel time, increase schedule reliability and/or make pricing more competitive with other modes, will increase the attractiveness of this invaluable asset.

5.3 Passenger Rail Intermodal Facilities

Amtrak provides service to 25 stations in New York State (see Figure 28). Some of those stations, such as Hudson and Amsterdam, are owned by Amtrak; others, such as Albany-Rensselaer and Syracuse, are owned by other entities. Regardless of station ownership, it is reasonable to expect that transportation providers who utilize a facility bear some responsibility for that station's infrastructure.

Intermodal connectivity strives for a convenient, seamless service between modes at transportation hubs to enhance regional mobility. The availability of information on connecting travel modes is essential to coordinated service.



Figure 26 Amtrak Stations in New York State

The intermodal facility in Syracuse is a good example. The Central New York Regional Transportation Authority (CNYRTA) owns and operates an intermodal facility that is served by Amtrak, *Greyhound* and *Trailways* intercity bus services and local CNYRTA bus services. The facility has extensive transit information available to arriving Amtrak passengers. Local buses and destinations are announced, as are all intercity trains and buses. Although coordinated service does not exist, transfer among modes is relatively simple.

Among the difficulties related to better intermodal coordination is the poor on-time performance along the corridor, especially for longer-distance trains and the limited train frequencies beyond Albany to the west and north.

The Capital District Transportation Authority's Rensselaer Rail Station is more commonly known as the Albany-Rensselaer station. The station opened in September 2002 and is Amtrak's 9th- busiest station in the country, serving more than 650,000 people each year. The multilevel facility features retail, commercial and meeting space as well as ticketing, customer comfort and travel features and conveniences. High-level boarding platforms eliminate the need to cross tracks, ensuring passenger safety and convenience.

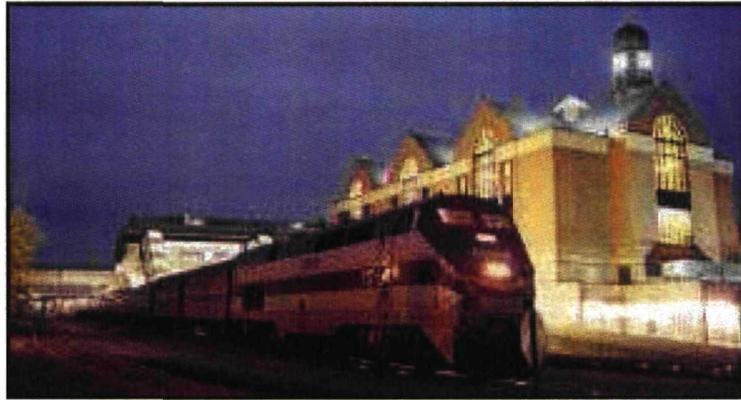


Figure 27 Rensselaer Rail Station

Penn Station in New York City – Pennsylvania Station in midtown Manhattan is the nation’s busiest Amtrak station. Transportation providers serving this station include: New Jersey Transit (NJT), the Long Island Rail Road (LIRR) and the New York City Transit Authority.

Moynihan Station in New York City – The expanded Moynihan Station project is being developed to improve passenger circulation and platform access at the Pennsylvania Station complex. Improved passenger movements are expected to expand railroad capacity and train throughput. All railroads using the completed Penn Station/Moynihan complex -- serving Amtrak, LIRR, and NJ Transit – likely would benefit from the improvements in platform access, pedestrian circulation, and other modifications.

In September 2008, Governor Paterson announced specific conditions for state investment in developing the Moynihan Station project. This represents a significant infrastructure priority for the state. The conditions are to ensure that the improvements in transportation capacity at the station are coordinated with other major development and infrastructure projects. The Governor called for all of the project’s partners, from both the public and private sectors, to discuss the challenges in implementation and to report back with an assessment of the challenges and potential solutions.

The Governor’s conditions include:

- Ensuring an increase in transportation capacity by expanding the number of tracks and platforms at the station and instituting operational changes by the LIRR, NJ Transit, and Amtrak.
- Coordinating the station’s development in tandem with other major development projects, including New Jersey’s Access to the Region’s Core (briefly discussed in Chapter 6, Section 6.5).
- Ensuring that the project helps to revitalize the surrounding community.

| Amtrak-served Stations in New York State | | |
|---|---------------------------------------|---|
| STATION | OWNER | INTERMODAL CONNECTIONS |
| Empire Corridor - West | | |
| Niagara Falls | Amtrak-Old Station | |
| Buffalo - Exchange Street | City of Buffalo | Guaranteed Thruway bus connections to Dunkirk, Fredonia and Jamestown |
| Buffalo/Depew | Amtrak | |
| Rochester | Amtrak | |
| Syracuse | CENTRO | Connections with Greyhound and Trailways intercity Bus, and Centro local/regional transit service. |
| Rome | City of Rome | |
| Utica | Oneida County | Connections with Greyhound, Trailways and Birney Bus services; and Adirondack Scenic Railway. |
| Amsterdam | Amtrak | |
| Schenectady | Amtrak | Connections with CDTA (Capital District Transportation Authority) local bus service. |
| Hudson Line / Empire Corridor - South | | |
| Albany-Rensselaer | CDTA | Connections with CDTA bus service. |
| Hudson | Amtrak | |
| Rhinecliff | Amtrak | |
| Poughkeepsie | Metro-North Railroad | Connecting Service with Metro-North Commuter Rail Service and local transit buses. |
| Croton | Metro-North Railroad | |
| Yonkers | Metro-North Railroad | Connections with Metro-North Commuter Rail Service and city buses. |
| Penn Station (New York City) | Amtrak | Connecting service with Long Island Rail Road, New Jersey Transit and MTA (Metropolitan Transportation Authority) subway and bus services |
| Adirondack Corridor | | |
| Rouses Point | CPR - Delaware & Hudson Railway (D&H) | |
| Plattsburgh | Plattsburgh Depot Partnership | |
| Port Kent | Town of Chesterfield | Connection with Lake Champlain Ferry to Burlington, Vt. |
| Westport | Town of Westport | Connecting bus service to Lake Placid. |
| Port Henry | CPR - Delaware & Hudson Railway (D&H) | |
| Ticonderoga | Town of Ticonderoga | |
| Whitehall | Village of Whitehall | |
| Fort Edward | Fort Edward Local Development Corp. | Connection to Greater Glens Falls Transit bus service to Glens Falls |
| Saratoga Springs | CDTA | Connections with CDTA bus service. |

Figure 28 Amtrak-Served Stations in New York State

5.4 Route Ownership/Facility Assets/Conflicts

Most intercity passenger rail service in New York State runs on track that is owned by freight railroads or other private entities.

CSXT is the primary owner of the Empire Corridor route from Poughkeepsie to Niagara Falls. Amtrak leases a portion of the double-track CSXT Hudson Subdivision from the Stuyvesant area through the Albany-Rensselaer Station and the single-track portion from this station over the Livingston Avenue Bridge across the Hudson River west through Schenectady Station.

An important fact is that CSXT controls the train dispatching along the corridor from Niagara Falls/Buffalo to Poughkeepsie (start of Metro-North territory) and, thus, is responsible for freight and passenger train movements along this route.

Amtrak owns and maintains the southernmost 10.8 miles of track from the Spuyten Duyvil Bridge across the Harlem River (northern tip of Manhattan) into Penn Station. Amtrak also owns roughly seven miles of track just west of the Schenectady Station. In addition, Amtrak owns what is called the Post Road Subdivision that connects to the CSXT Berkshire Subdivision that allows for service between Albany-Rensselaer and Boston.



Figure 29 Host Railroads along Amtrak Service Routes

The Metropolitan Transportation Authority's Metro-North Railroad leases the track along the east side of the Hudson up to Poughkeepsie from Midtown Trackage Ventures LLC (the company that now owns the assets of the former Penn Central Railroad). The lease runs through 2274. Metro-North operates, maintains, and makes capital improvements to the rail line.

The Canadian Pacific Railroad owns and maintains the track in New York north from Schenectady Station to Rouses Point. At Rouses Point near the international border, the *Adirondack* service switches to Canadian National Railway Company (CN) track for its connection into Central Station in Montreal.

The Niagara Falls Bridge Commission (NFBC) owns and maintains the Whirlpool Rapids Bridge that crosses the U.S.-Canada international border and connects Niagara Falls, N.Y. and Niagara Falls, Ont.



Figure 30 CN Whirlpool Rapids Bridge, Top Tier, Amtrak Service Only

The top tier of the bridge accommodates railroad operations while the bottom tier is automobile highway traffic. The NFBC and CN have a long-term use agreement; since CN no longer runs freight service over this bridge, it passes on any maintenance expense to Amtrak.

5.5 Intercity Passenger Rail Service Performance

Unless otherwise noted, all figures in this section are based on the Federal Fiscal Year that runs from October 1^t through September 30^h.

Ridership

Total passenger rail ridership in New York State for the most recent Federal Fiscal Year (FFY 2008: 10/1/07 to 9/30/08) was 1,598,221, with most of this associated with the Albany–Penn Station segment (994,293; 62 percent). The *Lake Shore Limited* ridership is only that portion associated with New York State. Ridership along the Northeast Corridor at Penn Station is not included in this total, although in excess of 8 million Amtrak passengers board or alight at this station annually.

Annual Trend:

Total New York State ridership is up 8.6 percent from FY 2007 levels. For the Empire Corridor south of Albany, ridership increased by 3.8 percent, while west of Albany ridership grew substantially by 22.9 percent.

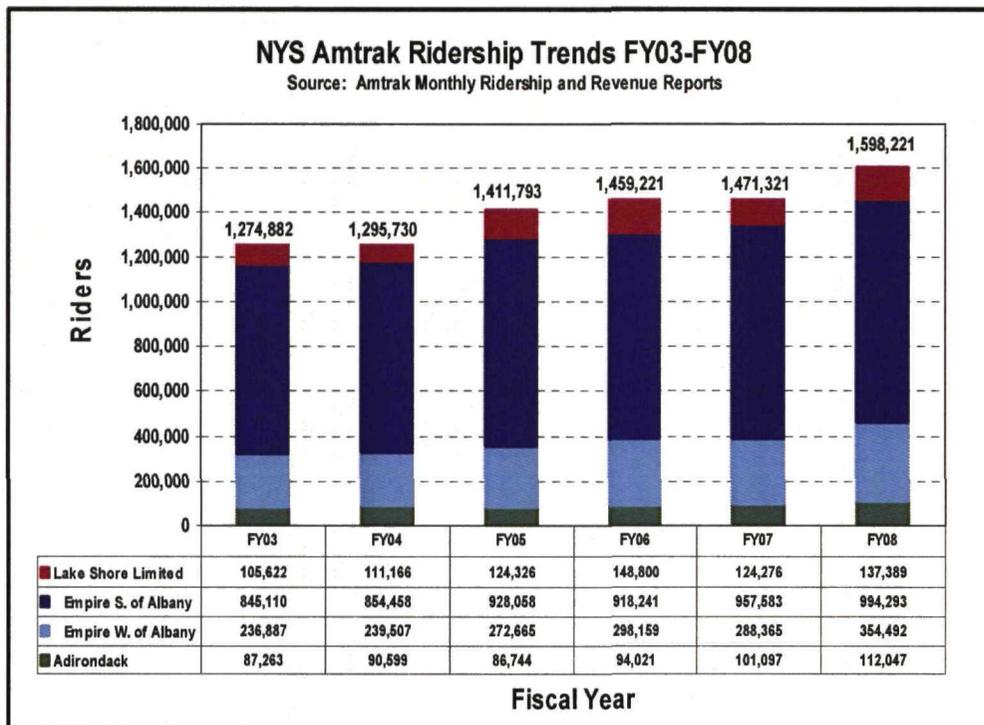
Five-Year Trend:

Figure 31 NYS Amtrak Ridership Trends

As represented in the preceding chart, total Amtrak ridership in upstate New York has grown significantly in all corridors. Total statewide ridership grew by more than 25 percent during the last five years. Most notably, *Empire Service* west of Albany-Rensselaer has increased by 50 percent since FY 2003, while ridership on *Empire Service* south increased by 18 percent. Adirondack ridership increased 28 percent over the five-year period.

On-Time Performance

On-Time Performance (OTP) is defined as the percentage of trains that arrive at their final destination at the scheduled arrival time plus the tolerance allowed for that segment. The tolerances for New York State trains are: Penn Station to Albany-Rensselaer - 10 minutes; Penn Station to Montreal - 20 minutes; and, Penn Station to Niagara Falls, 25 minutes.

OTP Annual Trend:

Overall OTP for all Amtrak trains statewide was 63.9 percent in FFY 2008. Amtrak’s goal is 90 percent. Empire service trains had an average OTP of 73.0 percent. Those Empire trains traveling only between Penn Station and Albany had an OTP of 80.1 percent, while trains between Penn Station and Niagara Falls had an OTP of 44.2 percent. The Maple Leaf to Toronto was on time only 42.8 percent of the time, while Adirondack OTP was 43.9 percent. The Maple Leaf and especially the Adirondack can be subjected to lengthy delays at the border in addition to other factors.

OTP Five-Year Trend:

As represented in the following trend line chart, total on-time performance had declined significantly from FFY 03 to FFY 07. However, in FFY 08, OTP shows signs of recovering toward FFY 03 levels as a result of efforts among Amtrak, the railroads and NYSDOT to identify and to address the OTP issues.

Although on-time performance along the Empire Corridor had declined over this period, ridership has grown, as noted above. Several positive ridership factors may be offsetting the negative ridership impact of declining OTP, including: greater driving costs (i.e. fuel, tolls), changes in airline and bus fares and reduced mobility options as airlines discontinue flights in upstate New York.

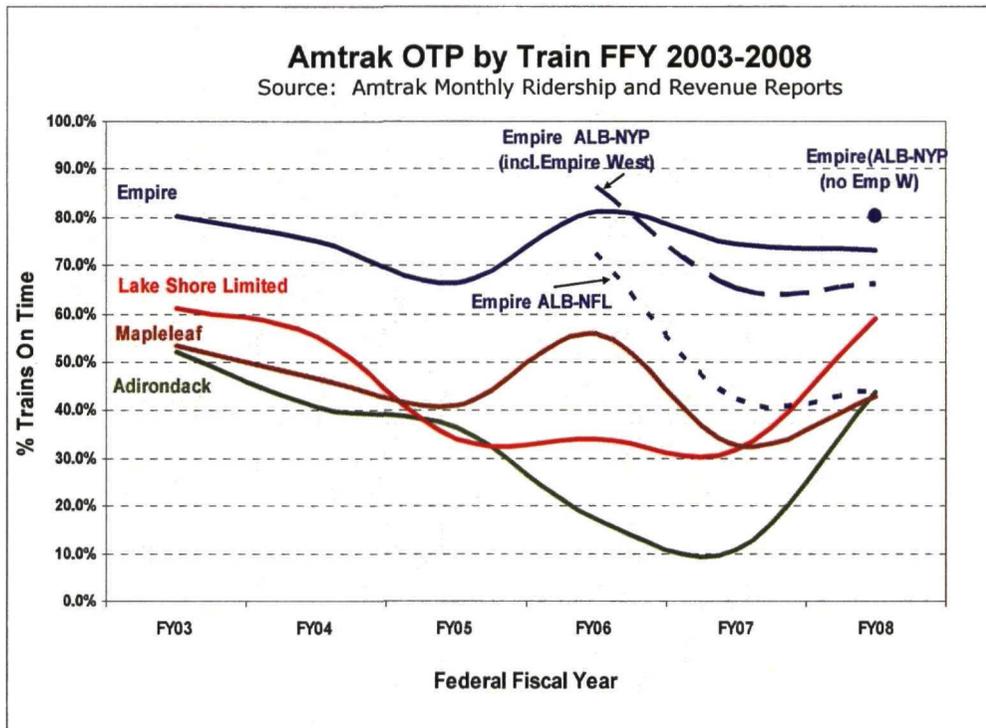


Figure 32 Amtrak On-Time-Performance by Train FFY 2003-2008

Causes for OTP Delays:

Amtrak routinely collects information on the causes of train delays. FFY 08 OTP delay data is under analysis. The following table summarizes delay data for FFY 07 for all NYS passenger rail service.

| Segment | Source of Delay | Share of Responsibility 2007 | Major Causes of Delay |
|------------------------|-----------------|------------------------------|---|
| Albany – Penn Station | Host | 76% | Speed Restrictions; Commuter Train Interference |
| | Amtrak | 17% | Engine Failure; Passenger Related |
| | Other Causes | 7% | Waiting on Time, Police Related |
| Albany - Niagara Falls | Host | 82% | Freight Train Interference; Speed Restrictions |
| | Amtrak | 10% | Passenger Issues; Crew Related Delays |
| | Other Causes | 8% | Customs & Immigration; Waiting on Time |
| Schenectady - Montreal | Host | 77% | Speed Restrictions |
| | Amtrak | 7% | Passenger Issues |
| | Other Causes | 16% | Customs & Immigration |

Figure 33 Major Causes of OTP Delay FFY 2007

Host Railroad-Caused Delays:

Host railroads include: CSXT, Canadian Pacific Railway, Metro-North and Canadian National. All three service corridor segments describe at least 76 percent of all delays are associated with the host railroads.

The major cause of host railroad delays varies depending on the segment examined. For Albany–Penn Station and Schenectady–Montreal, speed restrictions, including defect and slow orders, cause the most delays. The speed restrictions are the result of the track condition and the large amount of work being done on the line. The interference of commuter trains is the second-most common cause of delay between Albany–Penn Station. Albany–Niagara Falls service is most often delayed by freight train interference; this is a heavily used freight rail line.

Amtrak-Caused Delays:

For FFY 07 from Albany, Amtrak-related delays caused 17 percent of the problems to Penn Station and 10 percent to Niagara Falls. From Schenectady to Montreal, Amtrak is accountable for only 7 percent of the problems. For all delays attributed to Amtrak, passenger-related is either the first- or second-most common cause.

Other Causes of OTP Delay:

For the Albany-Niagara Falls and Schenectady-Montreal segments, reasons for delay that cannot be attributed to Amtrak or the host railroad are border-crossing delays; customs and immigration review is the cause of most other delays on the Schenectady-Montreal and the Albany-Niagara Falls service. Between Albany and Penn Station, inclement weather caused most other delays.

Root Causes and Financial Impacts of Amtrak Delays

The diverse and problematic reasons for delays along the Empire Corridor are mirrored nationwide on virtually all corridors. On September 8, 2008, the USDOT Office of Inspector General analyzed the root causes of delays to Amtrak trains operating outside the Northeast Corridor (NEC). The objectives of the audit were to: (1) identify the root causes of delays for Amtrak trains operating outside the NEC; (2) assess whether Amtrak's passenger trains have been granted preference over freight trains as prescribed by law; (3) identify practices in dispatching trains that influence delays; and (4) evaluate whether delays in maintaining track have affected Amtrak train delays.

The report found several root causes of Amtrak train delays, including: (1) host railroad dispatching practices, some of which result in preference violations; (2) track maintenance practices and the resulting speed restrictions; (3) insufficient track capacity; and (4) external factors beyond the host railroads' control. They also identified host railroad dispatching practices that violate Amtrak's preference rights. However, lack of agreement among Amtrak and the host railroads, both on how to measure delays and how to define Amtrak's right to preference in the use of rail infrastructure, make measuring violations of preference and allocating the exact causes of delay difficult.

An earlier 2008 Federal Railroad Administration Inspector General report (March 28, 2008), which focused on the effects of poor OTP on Amtrak's performance, found that improving Amtrak's OTP on routes outside the NEC to 85 percent in fiscal year 2006 would have reduced Amtrak's operating loss by \$137 million (primarily by increasing ticket revenues and decreasing labor and fuel costs). This constituted more than 30 percent of Amtrak's \$452 million FY 2006 cash loss.

Both reports referenced the root causes and found that steps can be taken, within current law and with statutory changes, to reduce Amtrak train delays and to improve its OTP.

5.6 Rail System Asset Condition: Intercity Passenger Service

Amtrak maintains a fleet of 57 passenger coaches and 16 Food Service/*Business Class* cars to provide 16 train sets for the Empire Corridor operations in the state. This includes the Hudson Line service from New York City to Albany, full corridor service to Niagara Falls and the *Adirondack* to Montreal. In addition, it covers the Albany-Boston run. The equipment is roughly 30 years old and was built by the former Budd Company of Philadelphia, Pa.

Due to greater ridership levels, particularly west of Albany, the equipment pool is inadequate to increase the service levels. Amtrak states that no additional equipment is available to New York State from the national Amtrak pool.

The 16 food service cars used throughout the Empire Corridor also contain a select number of Amtrak *Business Class* seats. The food service in these rail cars is staffed only for those eight daily trains with routes that travel west of Albany–Rensselaer. Amtrak practice is to not provide food service staff for these food service cars that run on the 13 daily round-trip trains traveling only between Penn Station and Albany–Rensselaer. With no food service staff, these cars are included in the respective trains solely to provide *Business Class* seating on this busy portion of the Empire Corridor.

5.7 Passenger Rail Issues at International Border Crossings

The border crossings between New York and Canada present unique issues that affect intercity rail passenger service connections to Montreal (the Adirondack) and Toronto (the Maple Leaf). Two top issues are where customs and immigration reviews occur (on-train or off-train – given that such inspections cannot be conducted either at the passenger’s boarding or de-boarding station) and where baggage is placed on the train (baggage car vs. with passenger). The new procedures implemented in response to the events of September 11, 2001, have magnified the challenges of reducing delays at the borders.

Regarding Amtrak’s *Adirondack* service, there are ongoing discussions to create a sealed train between Rouses Point and Montreal; this would allow for clearance or pre-clearance to be conducted at the Montreal station instead of en route. Recent federal legislation requires a report on rail border crossings. As part of H.R. 1, Section 1523 called for a passenger rail border crossing study to be submitted to Congress by August 2008. The study considered many factors necessary to make pre-screening and pre-clearance of Amtrak passengers a reality.

Canadian Passenger Rail Inspection Procedures and Requirements:

There have been changes affecting rail service. Amtrak is working with the Canada Border Services Agency (CBSA) to discuss issues regarding those impacts. NYSDOT is participating and will assist Amtrak in an analysis of a joint-use facility in Montreal.

Future Investments:

Currently, there are improvements under consideration that collectively would improve the border crossing for intercity passenger rail operations and custom inspections. Improvements specifically related to individual trains include the introduction of baggage cars, a sealed train and pre-clearance. The sealed train improvements would require changes to either the current Montreal terminus at Central Station or Windsor Station to allow for customs and immigration improvements.

Relevant border station improvements under review include a new CBSA facility within the Niagara Falls station in Ontario, a new station at Customs House in Niagara Falls, N.Y. (the two are connected by the Whirlpool Bridge), and remodeling of the Rouses Point Station. Any such review should consider potential freight rail impacts as well as passenger service, and the impact on

border-related delay. As with any station evaluation, any impact the station might produce, either at the local or regional level, as well as connectivity to local transportation systems and destinations, must be considered, along with any impact on current Amtrak service and construction and maintenance costs and responsibilities.

5.8 Intercity Passenger Rail Studies in New York State

Hudson Line "Joint Users" Study

Completed in November 2005, the *Hudson Line Railroad Corridor Transportation Plan* "Joint Users" study identified and evaluated potential projects to improve operational capacity and flexibility and travel time for commuter, intercity passenger and freight service along the Hudson Line between New York City and Schenectady as demand increases over the following 20 years. The "Joint Users" study final report was issued in November 2005.

High Speed Rail (HSR)

There have been many efforts to study high-speed passenger rail service in New York State. The most recent study was completed by the New York State Senate Task Force on High Speed Rail in January 2006. The study area included the *Empire Service's* south corridor (i.e. Empire Corridor South), generally described as the Hudson Line between New York Penn Station and Albany-Rensselaer, and the *Empire Service's* west corridor from Albany-Rensselaer to Buffalo (i.e. Empire Corridor West). The purpose was to investigate implementation and operation of high-speed rail (HSR) routes in New York State through:

- Examination and analysis of potential HSR routes and stations;
- Economic impact of a HSR system;
- Environmental impacts from construction and operation of a HSR system;
- Economic feasibility of HSR, including ridership and revenue forecasts; and/or
- Coordination with existing intercity passenger rail and commuter rail services.

Secondary efforts investigated potential extensions that would integrate any New York State system with other rail transportation systems within the Northeast and potential connections to the Mid-west. The final Task Force Report is available at: <http://www.cdta.org/hsr/>.

Corridor Studies

The *I-87 Multimodal Corridor Study* was undertaken to address the substantial growth in trade and tourism in the Interstate 87/ Autoroute 15 NAFTA corridor between New York City and Montreal. The corridor, through its connections to crossing highways, rail lines and other modal connectors, serves a broad area that includes the Mid-Atlantic states, New England and eastern Canada, representing a total population of approximately 80 million people.

In addition to I-87 and its parallel highway facilities, the study focused on needs and improvements for freight and passenger rail, aviation and waterborne modes and any intermodal connectors. The *I-87 Multimodal Corridor Study* and the concurrently conducted *I-87 Corridor High Speed Rail Prefeasibility Study* recommended specific improvements for both passenger and rail service, some of which have been implemented while others are under design or require further study. Specifically, \$27 million in strategic investments have been made along the Canadian Pacific Railway's Canadian Main Line between Schenectady and the international border at Rouses Point. Other initiatives, such as a *Secured Montreal Rail Passenger Facility* that would allow both U.S. and Canadian border enforcement personnel to conduct security operations from a shared, single facility, are still in the early conceptual development stages.

Ohio and Lake Erie Regional Rail Cleveland Hub Study

The Ohio Rail Development Commission undertook a multipart study, beginning in 2001, to develop a passenger rail service plan for Ohio, utilizing Cleveland as a service hub. NYSDOT participated in this study because of overlapping interests in the Cleveland-Buffalo-Toronto corridor. NYS participated in the inspection of existing rail services from Cleveland to Niagara Falls and existing and proposed Buffalo and Niagara Falls station locations. The Ohio study's objectives dovetailed with the proposed improvements to New York's Empire Service, and modeling efforts indicated a synergistic opportunity for both sets of improvements. System developments in Ohio rail service would also provide improved connections to the proposed Midwest Initiative's system development and improvement goals

Empire Corridor West Railroad Transportation Plan Study

The Empire Corridor West (ECW) study is a rail network modeling, operations simulation analysis, and infrastructure improvement feasibility assessment capacity study of the Empire Corridor from Rensselaer to Niagara Falls. Funding for this rail corridor study was provided by the New York State Senate Task Force on High Speed Rail. The ECW study focus is identifying the potential infrastructure and operation elements beneficial to improving passenger and freight rail services on the current rail corridor west of Schenectady. The study will propose recommendations for improving passenger and freight operations over the Empire Corridor's shared use trackage. Begun in September 2008, the ECW Study will take approximately one year to complete with a final report, including infrastructure capital improvement recommendations, to be released in fall of 2009.

Binghamton Rail Passenger Service Study

In cooperation with New York State Department of Transportation, local governmental entities and the railroads, Amtrak will conduct a study on the feasibility of establishing rail passenger service from Binghamton to New York City. The study will look at several options, including from Binghamton to Scranton (with ongoing service to the New York City area), and from Binghamton to Syracuse. Recommendations from the Binghamton Rail Passenger study effort will be incorporated into the statewide rail network as embodied in the State Rail Plan.

5.9 Intercity Passenger Rail Issues and Needs in New York State

In New York State, there are few tracks dedicated solely to passenger service. Intercity passenger rail service operates on tracks owned or controlled by freight railroads, commuter railroads and, only to a small degree, Amtrak.

Federal legislation creating Amtrak requires that passenger trains are to be given priority over freight trains. However, as owners of the track, freight railroads recognize that passenger train schedules and frequency have a direct, negative impact on their business. From the freight railroad standpoint, each additional passenger train reduces the railroad's ability to accommodate freight services; if a freight train has to wait on a siding for a passenger train to pass, the run time of the freight train increases, adding costs for the railroad. Freight carriers, therefore, have concerns that new passenger services or increased train frequencies not diminish their ability to operate existing freight service or increase freight capacity in the future. Their interest is to optimize the limited capacity for potential freight growth, so their willingness to accept additional passenger service is directly proportional to the amount of capital investment available to create added capacity or operating flexibility to accommodate passenger trains without reducing freight rail operational effectiveness.

In addition to the limitation on capacity imposed by available trackage, speed variations reduce capacity and affect passenger and freight trains. Freight trains generally operate at speeds slower than Amtrak trains, in accordance with FRA track class operating restrictions. Slower-moving freight trains would have to move to a siding to let the Amtrak train pass or the faster-moving Amtrak train has to slow down behind the slower freight train. This does not allow for optimal usage of tracks.

Operating Issues and Needs

In New York State, Amtrak provides primarily intercity service. Some of those services are, however, operated in a commuter rail environment and some people use Amtrak as a commuter service.

The federal Railroad Passenger Service Act of 1970 that created Amtrak also identified a "core" network of intercity rail passenger service that included the Empire Corridor across upstate New York. Individual states were given the ability to offer financial assistance to Amtrak to provide passenger service to routes that were not included in the final system plan. This state-supported service became known as "403(b)" service. The *Adirondack* is the only passenger rail service supported by the State of New York.

The formula for state-supported service has undergone changes, including which operating and capital costs related to the service are to be considered and at what percentage level. The current formula covers 100 percent of "fully allocated" operating losses.

There were also agreements with Amtrak that saw NYSDOT undertaking capital projects (e.g., track or station improvements) in lieu of the subsidy payment. Therefore, it is difficult to analyze subsidy payment trends. That said, in 1984, New York State paid Amtrak \$583,770 to support the *Adirondack* service, rising to more

than \$1 million in 2000. In 2004, this amount was more than \$4 million and for FY 2008 (current year) it is \$4.8 million.

In 2006, Congress directed Amtrak to develop the *Strategic Reform Initiative (SRI)* that would require states to pay 100 percent of fully allocated costs for all Amtrak services. Based on FFY 2006 revenues and costs, the estimated annual costs in FFY 2012 would total nearly \$60 million (this does not include any capital or overhead). This encompasses all Amtrak service in New York State, with the exception of the Lake Shore Ltd. The SRI was proposed to be phased in over a five-year period.

As discussed, NYSDOT has provided support for *Adirondack* service. It is reasonable to expect that if Amtrak provides new or improved service that there would be a state role in supporting that service. States should not be required to provide additional funding for existing service. Determination of the level of state contribution should take into account all funds that a state provides, including capital investments they have made either directly or via a third party. Any change in the current maintenance of effort would result in New York and other states having to pay to support the current passenger rail system rather than providing more or better service.

Passenger Station Issues and Needs

Beyond New York's investment in rail infrastructure is the need to improve the interface with localities. In addition to newly constructed stations in Syracuse, Albany-Rensselaer and Saratoga Springs, there are proposals for new or renovated stations in Buffalo, Dunkirk, Rochester, Niagara Falls, Lyons and Schenectady.

NYSDOT is working with Amtrak, freight railroads and public transportation providers to develop a station action plan. This action plan should incorporate schedule, fare and information systems and service.

Capital Issues and Needs

State investments in tracks, signal systems, bridges and grade crossings on the Empire Corridor helped create and maintain the nation's only high speed passenger service outside of the Northeast Corridor. More recently, over the last 12 years, New York State has invested \$168.5 million in track, signal, grade crossing and station improvement projects to maintain and improve rail service.

Many of these investments were done to benefit both freight and passenger service but are located primarily on freight rights-of-way where the majority of Amtrak's intercity passenger route miles exist in the State. Investments in the rail infrastructure used jointly by Amtrak and Metro-North between New York City and Poughkeepsie often benefited both railroads.

The following table summarizes New York State's capital investments for intercity passenger rail service for the period 1995 through 2007:

| NEW YORK STATE CAPITAL INVESTMENT IN INTERCITY RAIL PASSENGER SERVICE <i>By Project: 1995 thru 2007</i> | | | |
|---|-----------------------------------|----------------------------|----------------------|
| Corridor | Project | Description | Amount |
| EMPIRE | RTL-II: TRACKWORK | 125 MPH DEMONSTRATION | \$2,000,000 |
| | MAINTENANCE FACILITY | RENSSELAER STATION | \$3,590,000 |
| | SYRACUSE | NEW INTERMODAL CENTER | \$19,000,000 |
| | RENSSELAER | NEW INTERMODAL CENTER | \$62,760,000 |
| | ROME | RENOVATED STATION | \$4,325,000 |
| | UTICA | RENOVATED STATION | \$15,500,000 |
| | DEPEW | REMODELED STATION | \$150,000 |
| | POUGHKEEPSIE | STATION/PARKING | \$16,800,000 |
| | GRADE CROSSINGS | MULTI YEAR PROGRAM | \$17,844,324 |
| | CSXT/AMTRAK CAPACITY IMPROVEMENTS | WEST ALBANY | \$2,000,000 |
| | | EMPIRE SUBTOTAL | \$143,969,324 |
| ADIRONDACK | SARATOGA SPRINGS | NEW STATION | \$6,050,000 |
| | CP: CANADIAN MAIN LINE | TRACK & SIGNAL WORK | \$18,435,295 |
| | CP: CANADIAN MAIN LINE | CAPACITY IMPROVEMENTS | \$57,628 |
| | | ADIRONDACK SUBTOTAL | \$312,481,571 |
| | | GRAND TOTAL | \$168,512,247 |

Figure 34 NYS Capital Investment in Intercity Rail Passenger Service

The current poor on-time performance for intercity passenger rail service cited in Section 5.5 of this report is a concern. NYSDOT is extending its Hudson Line Joint Users study to western New York. NYSDOT also continues to work with other states regarding the effectiveness of given investments. For example, NYSDOT has coordinated study efforts with Ohio to understand potential joint benefits of any investments along a Cleveland-Buffalo-Toronto corridor.

As part of the *I-87 Multimodal Corridor Study* in 2004, Canadian Pacific Railway presented a proposal that identified \$40.9 million in capital needs on its Canadian Subdivision between Schenectady and Rouses Point. This investment was expected to allow CPR to raise the maximum allowable speed to 79 mph at the northern and southern ends, along with increases of 5 to 10 mph in train speeds between Whitehall and Port Kent. The program anticipated a 38-minute reduction in run time between Schenectady and Rouses Point. CPR sought financial support from NYSDOT for these capital investments on a 50/50 basis. NYSDOT subsequently funded a number of capital improvements, while CPR made equal or greater investments.

5.10 Empire Corridor Mainline Third Track Initiative: Albany - Buffalo

To improve rail service through upstate New York, this initiative proposes to expand, enhance, and support capacity growth for intercity passenger and freight rail services in the Albany-Buffalo portion of the Empire Corridor. A multi-year, three-phase, implementation plan is being developed to accomplish the necessary environmental, financial, and regulatory changes to increase freight and passenger train capacities and operating speeds by investing in a third mainline express track primarily within the corridor's existing railroad rights-of-way.

For many decades, the former New York Central Railroad Water Level Route from Albany to Buffalo was a four-track speedway carrying passenger and freight trains along express and local tracks. Starting in the 1960s, the New York Central (and later Conrail) rationalized their system by strategically removing track infrastructure to reduce maintenance and operating expenses and to lessen the railroad's real property tax liabilities. As the current owner, CSX Transportation operates this shared use corridor as a high-volume, two-track railroad that is heavily used by 50 to 60 daily freight trains and eight daily scheduled intercity passenger trains. The existing corridor includes a single-track segment between Albany and Schenectady with portions having 110 mph passenger train service and limited freight train activity.

Proposed passenger rail service benefits of this proposed Empire Corridor mainline third track initiative include: increased separation of freight and passenger train operations, passenger schedule time reductions, increased schedule reliability, additional train frequencies, and improved railroad and highway safety of corridor operations. This initiative would create the Empire State Passenger Rail System, reaching across the state and to the national network.

5.11 Northeast Corridor

Amtrak's *Northeast Corridor* service operates on the Northeast Corridor (NEC) main line from Boston to New York to Washington, D.C., and is the most heavily used rail corridor in North America. In addition to service within the Northeast region, the NEC provides connectivity to the national passenger and freight network and contributes significantly to the economic vitality of the Northeast and the nation.

The NEC provides intercity rail service throughout the corridor and hosts commuter rail service in all major Northeast cities. In the densely populated Northeast, the NEC provides a critical alternative to travel via the region's overburdened airports or congested Interstate highways. Amtrak's NEC routes now handle 54 percent of the New York- - Washington air-rail travel market and 39 percent of the New York-Boston air- - rail travel market. A primary reason for this majority market share is that the NEC is successful in the states in which it is located. The NEC states have invested heavily in rail infrastructure. That investment, while not exclusively on the NEC, has ensured that the services feeding the core are strong. Having strong services feeding the NEC is essential to its continued success.

The NEC hosts a complex and unprecedented mix of high speed rail, intercity rail, commuter rail and freight service. Capital investment to date has been insufficient to maintain the infrastructure in a state of good repair, much less provide additional capacity. Key elements of the network are, therefore, in inadequate condition.

Although states and railroads throughout the Northeast are calling for greatly expanded rail services, the NEC is not poised to accommodate future growth. Substantial investment is needed to ensure a vigorous future for the NEC.

Although the main line of the NEC lies primarily outside the borders of New York State, those portions carry a significant portion of the rail traffic. The prime terminal for the New York metropolitan market is Penn Station in New York City. Besides Amtrak intercity service from Boston and Washington, the corridor carries Metro-North Railroad and Long Island Rail Road commuter operations. Metro-North operates between New York City and the northern suburbs on 56 state-owned NEC right-of-way miles. Metro-North operates 423 trains between New Haven, Ct., and New Rochelle, N.Y., via the New Haven Line; and between Poughkeepsie and Manhattan, via the Hudson Line. The LIRR operates between Long Island and terminals in Queens, Brooklyn and Manhattan. The LIRR operates 566 trains on five miles of the NEC between Harold Interlocking (Queens) and Penn Station.

Approximately 500,000 passengers a day pass through Penn Station. The terminal is served by Amtrak intercity passenger trains and LIRR and New Jersey Transit commuter trains, together constituting more than 1,000 weekday trains. Amtrak ridership at Penn Station totaled 8.0 million riders in 2007, with approximately one in every three Amtrak riders nationally using this station.

5.12 National Issues & Implications for New York State

Reauthorization of Intercity Passenger Rail

Federal legislation for authorizing intercity passenger rail, known as the Passenger Rail Investment and Improvement Act of 2008, was signed into law by the President on October 16, 2008. Besides reauthorizing Amtrak, the act establishes a federal requirement for the states to undertake comprehensive rail planning. In addition the act provides for the first time an intercity passenger rail capital grant program for the states.

The law addresses issues important to New York State. However, the state will continue to seek the following goals and objectives for federal intercity passenger rail legislation that were either not addressed in the rail legislation or need changes to address its concerns more fully:

Stable Dedicated Federal Funding from Diverse Portfolio of Revenue

There must be a comprehensive, sustainable, diversified portfolio of federal revenue to address the varied investment needs of the nation's entire surface transportation system. Such a strategy can provide stability in revenue and lay the foundation for federal funding mechanisms that are more compatible with sound federal energy policy and provide dedicated federal funding for both freight and intercity passenger rail.

Climate Change Revenue

Greenhouse gas reduction programs, whether from a cap-and-trade program or a carbon tax, may be a potential source of dedicated federal funding for rail. According to the Annual Energy Outlook 2007 by the U.S. Department of Energy, Energy Information Administration, "Amtrak (intercity passenger rail) is 17 percent more energy efficient than either commercial airlines or automobiles. Passenger rail-driven improvements have helped increase rail line capacity, which benefits freight trains that use the same tracks. Freight rail has a fuel consumption rate 11.5 times more energy efficient on a BTU per ton-mile basis than trucks." Federal investment in intercity passenger rail could be a vital element in a comprehensive strategy to reduce greenhouse gas emissions associated with the transportation sector. When enacting climate change legislation, Congress should consider allocating to intercity passenger rail the portions of any carbon tax or cap-and-trade auction proceeds reflective of transportation's impact on greenhouse gas emissions.

Capital Assistance for Intercity Passenger Rail Service

The Passenger Rail Investment and Improvement Act of 2008 establishes a multiyear state capital grant program for intercity passenger rail capital investments for new service, additional frequencies, or enhancements and improvements to existing service, with a federal/state share of 80/20. The next challenge is for the state to work with Congress to secure dedicated funds for this program. Although, the approximately \$1.9 billion over five years is a strong start, it is only a portion of deferred national needs.

State-Supported Routes

- An adequately funded – 80 percent federal share - federal capital program needs to be in place before the states begin to share costs.
- Implementation of standardized methodology to allocate costs should occur only after Amtrak implements an improved financial accounting system. The rail bill requires such a system, but it does not require the new system to be in place before implementing the cost-allocation methodology.
- States may share in the cost for providing new or improved services but should not pay more for current routes and frequency of service nor for achieving state of good repair on the existing Amtrak system.
- States that provide funding for routes must have input on the operations decisions for these routes.

Alternate Passenger Rail Service Provider(s)

Section 214 of the rail bill initiates a pilot program for carriers that own the infrastructure over which passenger service operates to petition the Federal Railroad Administration to operate intercity passenger service. This is a critical first step to introduce competition in passenger rail service. The pilot program should be carefully monitored and evaluated to maximize its usefulness in developing a more comprehensive program.

Northeast Corridor

The Passenger Rail Investment and Improvement Act of 2008 requires Amtrak, in consultation with USDOT and states, to develop a capital plan to bring the Northeast Corridor to a state of good repair by 2018. It also directs USDOT to establish a Northeast Corridor Infrastructure and Operations Advisory Commission to promote mutual cooperation and planning pertaining to rail operations in the Northeast Corridor. The act also directs Amtrak to determine the infrastructure and equipment improvements necessary to provide regular high speed service between Washington, D.C., and New York City and between New York City and Boston within specified periods of time. New York State together with other states have long sought this type of corridor planning effort and recognize that it requires commitment and cooperation by the states and Amtrak.

Improved Accountability

The rail bill includes provisions to improve the accountability of Amtrak. These include an improved financial accounting system within three years of enactment, the annual development and submission to Congress of a five-year financial plan and performance metrics and standards. It is important to monitor the implementation and effectiveness of these reforms.

Dispute Resolution Process

The rail bill implements a process to resolve track and right-of-way disputes between commuter rail operations and freight railroads. However, it does not create a similar dispute resolution process to address conflicts between intercity passenger and freight rail services. Congress should establish an efficient, fair and equitable dispute resolution process to address conflicts between passenger and freight rail service, such as access to the rail lines, scheduling concerns and other issues that may arise as plans are developed and projects are advanced.

National and Regional Transportation Organizations

New York has been active in national and regional organizations that work to improve national and regional rail passenger and freight service. Those in which NYSDOT is a member include:

The American Association of State Highway and Transportation Organizations (AASHTO) Standing Committee On Rail Transportation (SCORT) mission is to spearhead the effort to achieve enactment of legislation that creates a stable structure for developing intercity passenger rail service into the future.

AASHTO policy asserts that states must play a leadership role in ensuring that any solution will meet the mobility needs of passengers.

The States for Passenger Rail Coalition (S4PRC) is a coalition of state departments of transportation that supports intercity passenger rail initiatives and advocates for federal funding. The coalition's mission is to promote the development, implementation and expansion of intercity passenger rail services with involvement and support from state governments.

The mission of the American Public Transportation Association (APTA) is to strengthen and improve public transportation, serving and leading its diverse membership through advocacy, innovation and information sharing. APTA works to ensure that public transportation is available and accessible for all Americans in communities across the country. NYSDOT and MTA are active members.

The Coalition of Northeastern Governors (CONEG) is a nonpartisan association of the governors of the eight Northeastern states --Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island and Vermont. CONEG encourages intergovernmental cooperation in the Northeast on issues relating to the economic, environmental and social well-being of the Northeast states. Transportation/rail, energy and the economy are the current focal points for CONEG's regional initiatives. Governor Paterson is the Vice Chair of CONEG and will become Chair of CONEG in 2009.

The I-95 Corridor Coalition is an alliance of transportation agencies, toll authorities and related organizations as well as law enforcement from the Maine to Florida with affiliate member organizations in Canada. The Coalition provides a forum for key decision- and policy-makers to address transportation management and operations issues of common interest. It has been a successful model for multistate/jurisdictional interagency cooperation and coordination for more than a decade.

Conclusion

Intercity rail passenger service in New York State is provided exclusively by Amtrak. Empire Service, which serves the corridor between New York City, Albany-Rensselaer, Buffalo, and Niagara Falls, is part of the Amtrak federally funded core system. The State of New York provides operating support for the Adirondack Service, from Albany to Montreal. The Maple Leaf Service extends one Empire Service daily round trip from Niagara Falls to Toronto. The State of Vermont supports the Ethan Allen Service from Albany-Rensselaer to Rutland. These corridor services are supplemented by Amtrak's Lake Shore Limited; this train also serves the Empire Service corridor from New York City to Buffalo and then continues west to Cleveland and Chicago. Penn Station in New York City is the hub of Amtrak's Northeast Corridor, operating north to Boston/Springfield and south to Washington/Richmond/Newport News.

Overall, 12 round trips operate between New York City and Albany/Rensselaer, with two extended to Buffalo and Niagara Falls, one to Montreal, and one to Rutland. The trains mentioned above serve 25 passenger stations in New York State. Several stations are intermodal facilities, providing a seamless transfer between Amtrak rail service and connecting bus and local transit services.

In Federal Fiscal Year 2008 (October 1, 2007, through September 30, 2008), total ridership in New York State was almost 1.6 million, with 62 percent of these trips being taken between Albany-Rensselaer and New York City. Ridership in New York has grown almost 25 percent since 2003 and has increased 9 percent since 2007.

Amtrak services run almost entirely on track owned and controlled by private freight and commuter railroads; this can cause in delays to these services due to freight and commuter train interference, track work and slow orders.

Several important studies of intercity rail passenger service have been completed or are under way in New York State. They range from a study of potential high speed rail development to a study on potential new rail passenger services to Binghamton and studies on capital needs to upgrade the Empire Service infrastructure both south and west of Albany-Rensselaer.

Key issues facing New York State intercity rail passenger service include delays on freight railroads, future funding for state support of Amtrak services, station development needs and the need for stable federal funding for the state's intercity rail passenger services.

CHAPTER 6 – COMMUTER RAIL

6.1 Commuter Rail Networks of New York State

New York State is home to the two largest commuter rail providers in North America -- the Long Island Rail Road (LIRR) and Metro-North Railroad (Metro-North) -- subsidiary corporations of the Metropolitan Transportation Authority (MTA). MTA is required by statute to develop and implement five-year capital program plans for its commuter rail services. These plans establish systemwide goals, set service standards for operations and relate capital investments to the accomplishment of the goals and service standards.

The Long Island Rail Road provides commuter rail service between Nassau and Suffolk counties and New York City. LIRR is the largest and busiest commuter railroad in North America, carrying 86.1 million passengers in 2007, a 4.9 percent increase over 2006. LIRR infrastructure includes 594 miles of main line track, 296 at-grade-crossings and 124 stations on 11 branch lines. On an average weekday, the LIRR carries 289,586 passengers on 735 trains.¹¹

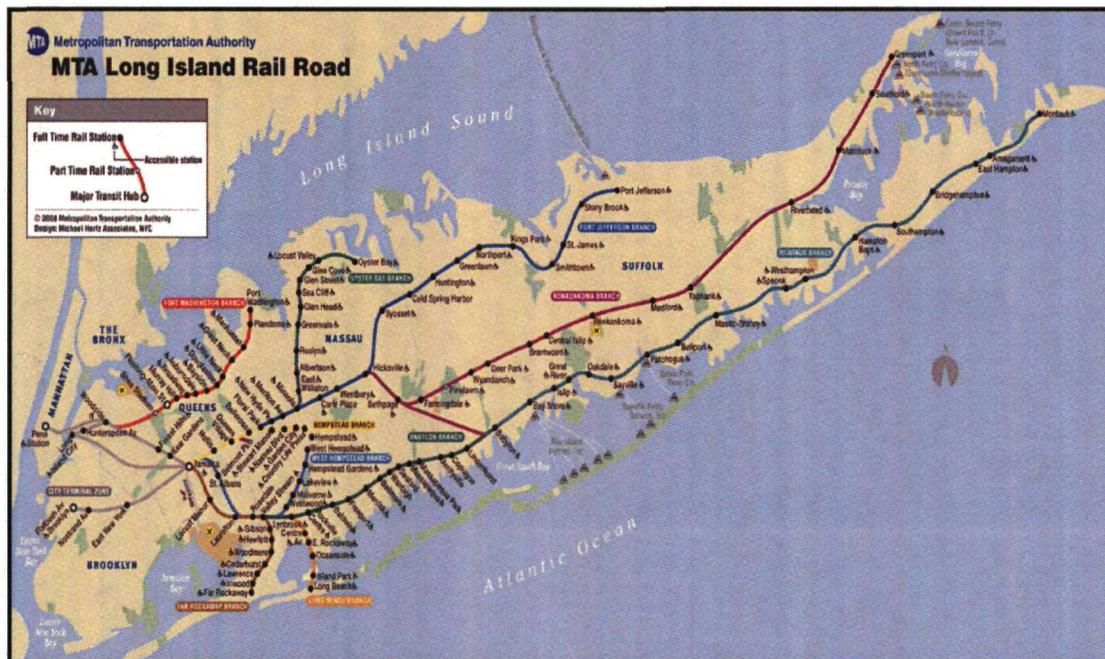


Figure 35 Long Island Rail Road

Metro-North provides commuter rail service between the northern suburbs of New York City and Grand Central Terminal (GCT). Metro-North provides service on the Harlem and Hudson Lines in Dutchess, Putnam, Westchester, and Bronx counties, and the New Haven Line in Connecticut and Westchester and Bronx counties. Metro-North also contracts with New Jersey Transit (NJT) to provide west of Hudson service on the Pascack Valley and Port Jervis Lines, through Rockland and Orange counties

¹¹ MTA LIRR 2008-2013 Capital Program, p. 3

to the Hoboken Terminal and via the Secaucus Junction Station, to Penn Station, New York.

Metro-North carried 80.1 million riders in 2007, 4.3 percent more than in 2006. Metro-North's infrastructure includes 387 route miles (279 miles – 73.0 percent – within New York State), 795 track miles (552 miles – 70 percent – within New York State), 121 fulltime stations (89 of those – 73 percent – within New York State) on eight lines. On an average weekday, Metro-North carries 278,000 passengers on 652 trains (expanded to 661 trains on April 6, 2008). Metro-North trains achieve an on-time performance of nearly 98 percent.¹²



Figure 36 Metro-North Railroad

6.2 Existing Commuter Rail Services, Ridership and Performance

Ridership:

Commuter rail ridership continues to increase. The following two ridership charts¹³ show monthly ridership for Metro-North and the LIRR during the past three years. In each month, 2007 ridership outpaced the ridership for that month in both 2005 and 2006.

¹² "MTA Capital Program – 2008-2013" Metropolitan Transportation Authority, Feb. 2008, 29 May 2008 <<http://www.mta.info/mta/budget/pdf/2008-2013%20Capital%20Plan.pdf>> (February 2008) 75.

¹³ Report on Revenue Passengers and Vehicles, Ridership Data thru Dec. 2007, issued on 2/13/08

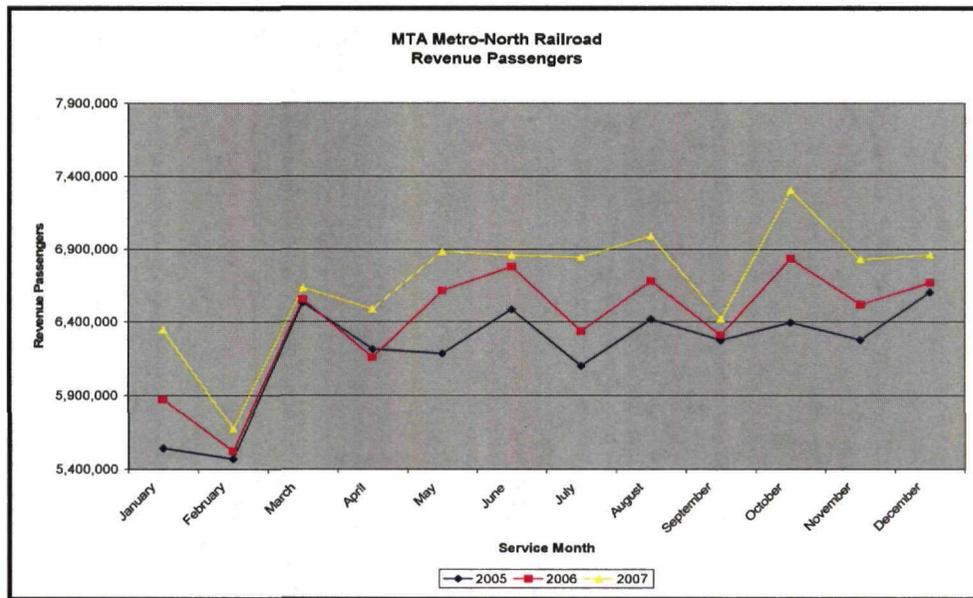


Figure 37 Metro-North Ridership

Metro-North’s ridership growth has outpaced employment in the region, both in terms of Manhattan-bound as well as overall ridership, rising even when employment in key ridership markets falls. Metro-North’s market share of weekday commuter trips to Manhattan has increased from 70 percent in 1991 to 81 percent in 2006.

The LIRR’s market share of Long Island to Manhattan journey to work trips has remained relatively constant at 78 percent.

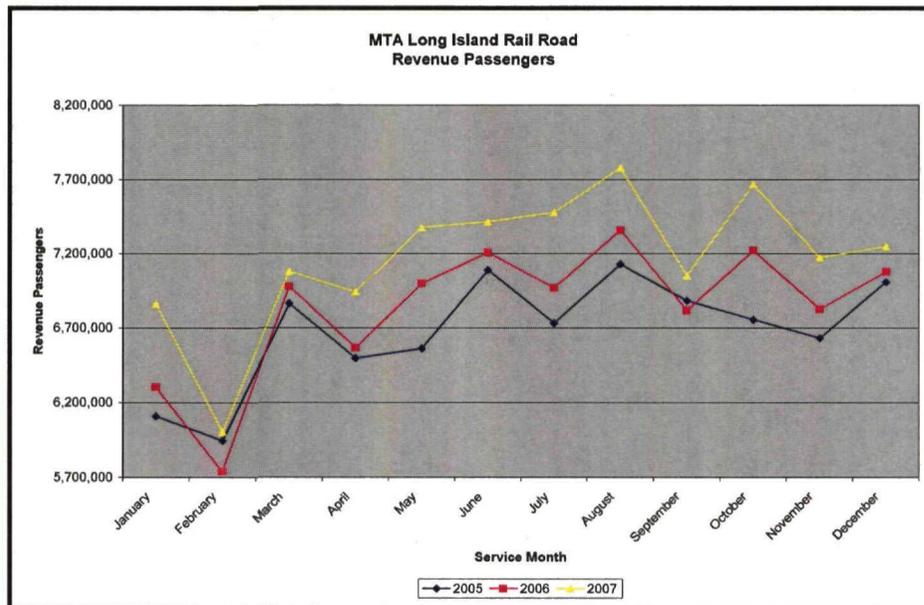


Figure 38 Long Island Rail Road Ridership

Performance Reliability:

Reliability of service, including both On-Time Performance (OTP) and the fleets mean distance between failures (MDBF), is important to the success of the commuter railroads. On-time performance for Metro-North has increased to almost 98 percent in 2007 while LIRR reached 95 percent OTP in that same year. MDBF, the distance a rail car travels between breakdowns, has improved from 13,341 miles for Metro-North in 1988 to 110,361 miles in 2007 and from 28,945 in 1988 to 107,825 in 2007 for LIRR. These improvements are due in large part to the MTA's capital programs, beginning in 1982, as well as programmed preventative maintenance programs.

6.3 Commuter Rail Intermodal Facilities and Connections

The two largest passenger intermodal facilities used by the commuter railroads are Grand Central Terminal (Metro-North) and Pennsylvania Station (LIRR) where there are connections to Amtrak's intercity passenger service, MTA New York City Transit services and other public transportation services.

There are several stations served by both Amtrak and either LIRR or Metro-North. As shown in the following map, these stations are Penn Station, Yonkers, Croton-Harmon and Poughkeepsie.

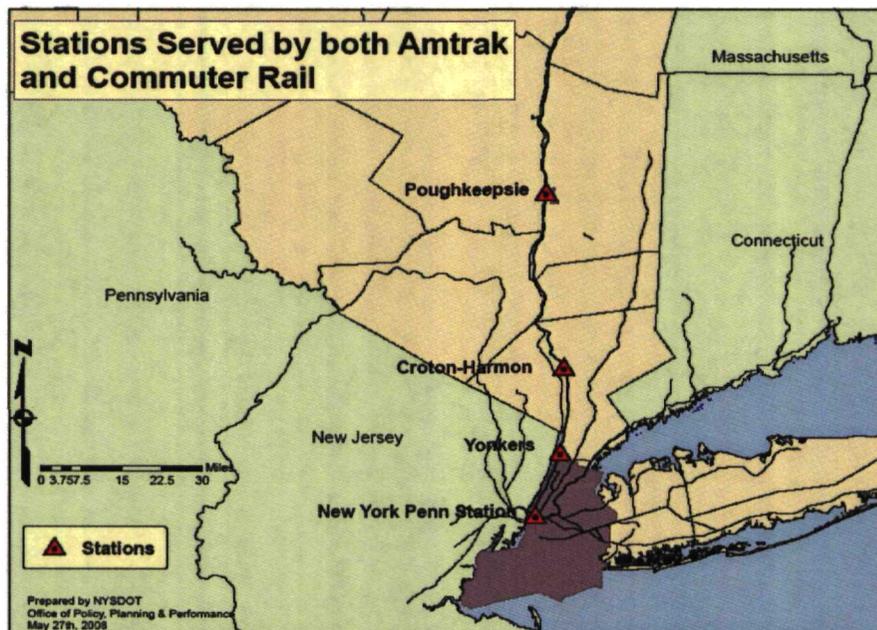


Figure 39 Stations Served by both Amtrak and Commuter Rail

The following is a brief description of each railroad's key intermodal facilities.

Metro-North Commuter Railroad

Grand Central Terminal is in the heart of midtown Manhattan, on 42nd Street and Park Avenue. GCT provides access to Metro-North and MTA New York City Transit subways and buses, as well as buses to the region's three major airports. Almost 90

percent of all Metro-North trains travel into and out of this rail terminal every weekday.

Stamford Station in Connecticut is served by 10 Connecticut Transit bus routes, intercity bus routes and Amtrak.

Fordham Station in the Bronx is an important "reverse commuting" location. The station is at a major transportation hub at Fordham Plaza with seven MTA New York City Transit bus routes passing in front of the station.

White Plains Station is in Westchester County and a key point for New York City (NYC) bound travel as well as a destination for reverse peak and intermediate (not originating nor ending in NYC) ridership. The station sits close to 22 Westchester County Bee-Line bus routes, five Transport of Rockland bus routes and eight other regional bus lines.

Harlem/125th Street Station connects the three main routes of the system to the nearby Lexington Avenue IRT subway line (4, 5, and 6 trains) and four MTA New York City Transit bus lines.

Long Island Rail Road

Pennsylvania Station is the primary western terminal for the LIRR commuter network and is in the underground levels of Pennsylvania Plaza, between 7th and 8th Avenues and between 31st and 33rd Streets in midtown Manhattan. Owned by Amtrak, Penn Station is at the center of the Northeast Corridor (NEC).

In addition to services provided by Amtrak and LIRR, commuter rail services are operated by New Jersey Transit. Penn Station is connected to six subway lines and seven bus routes operated by MTA New York City Transit.

Jamaica Station in Queens County is the LIRR's hub station and has long been the connecting point among 10 LIRR branches and the railroad's three western terminals at Penn Station, Flatbush Avenue and Hunterspoint Avenue¹⁴. Since AirTrain service to and from JFK Airport began in 2003, Jamaica Station has also become a busy transfer point.

Flatbush Avenue (Atlantic Terminal) station is in downtown Brooklyn and provides connection to 10 subway lines and five bus lines.

By their very nature, commuter rail stations are intermodal, requiring a different mode of transportation to either get to or come from the station. Typically, this involves using another form of mass transit, such as bus/subway, or as is usually the case with suburban commuter rail stations, the automobile. Station access by bicycle offers a potential alternative; their use may be facilitated since many local bus providers have installed or are installing bike racks on their buses. As examples, the City of Long Beach has bike racks on its buses and Suffolk County Transit, is equipping its entire fleet with bike racks. MTA-Long Island Bus is open to the possibility of putting bike racks on its buses but obtaining the necessary funding is an issue.

¹⁴ "MTA Capital Program – 2008-2013" Metropolitan Transportation Authority. Feb. 2008. 29 May 2008 <<http://www.mta.info/mta/budget/pdf/2008-2013%20Capital%20Plan.pdf>> (February 2008) 49.

6.4 Rail System Asset Condition for the Commuter Railroads

Infrastructure

The LIRR uses 29 yards and six major repair shops. Metro-North uses 15 yards and five major repair shops. The following table provides some asset inventory characteristics for each railroad.

| | Stations | Actual Route Miles | Main Line Track Miles | Passenger Cars | Yards | Major Repair Shops |
|-------------|----------|--------------------|-----------------------|----------------|-------|--------------------|
| LIRR | 124 | 319.1 | 594.1 | 1,140 | 29 | 6 |
| Metro-North | 115 | 346.1 | 794.7 | 1,119 | 15 | 5 |
| Total | 239 | 665.2 | 1,388.8 | 2,259 | 44 | 11 |

Figure 40 LIRR and Metro-North Asset Inventory

As a result of the 5-year Capital Programs that started in the early 1980s, both commuter railroads are, for the most part, in a state of good repair (SOGR) and both are undergoing a program of rigorous preventive maintenance and ongoing normal replacement. The following is a brief report on the rail system asset condition for each railroad and what is being proposed in the next Capital Program.

Metro-North System Asset Condition

As depicted in the following summary chart, despite capital improvements from the past 25 years of investments, significant SOGR work remains in a few categories. In addition, it is important to protect investments to date with investments in normal replacement projects. Approximately 90 percent of the investments in the core capital programs are typically earmarked for SOGR and normal replacement (NR) projects. The remaining 10 percent are dedicated to system improvement projects.

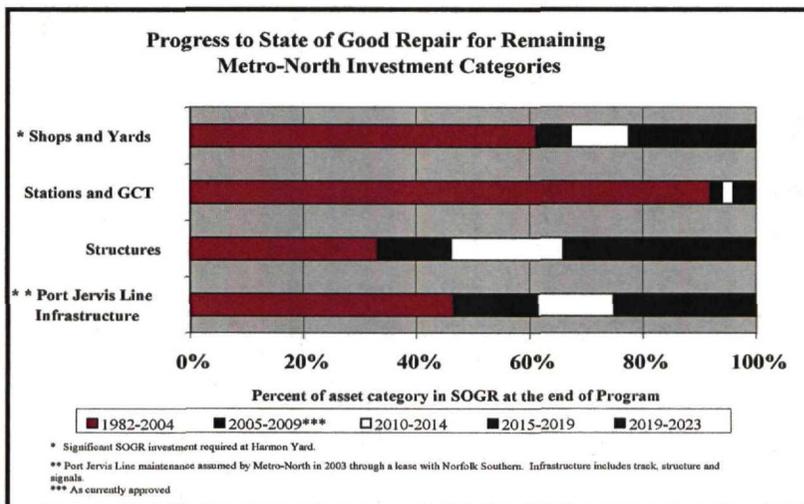


Figure 41 Progress to SOGR for Remaining Metro-North Investment Categories

Metro-North Investments

In the next Capital Program, achieving core infrastructure SOGR and protecting past core infrastructure investment will remain critical elements. Regional mobility will be improved through projects that reduce travel times and increase reliability and dependability throughout all aspects of the railroad. Planned projects include modernizing and expanding the fleet, power improvements, replacement and upgrade of the train signal control system and expansion of station facilities and parking to advance the development of key intermodal facilities.

Customer Satisfaction benefits result from improvements in trip quality, station environment, customer information and ease of fare payment. Key improvements include replacing aging and obsolete ticket selling machines, improving communications with customers in stations and infrastructure improvements on the Port Jervis Line.

Safety and Security projects focus on both customer and employee safety and security. Plans for improved safety and security include achieving a state of good repair on certain bridges and Closed Circuit Television improvements at priority locations.

Achieving core infrastructure state of good repair and protecting past core infrastructure investment remain the most critical elements of the next Capital Program.

Long Island Rail Road System Asset Condition

Investments in its capital assets since 1982 have allowed the Long Island Rail Road to improve its operations. LIRR looks to the future with "network enhancement" initiatives that will expand capacity, increase levels of service and support new LIRR service to Grand Central Terminal.

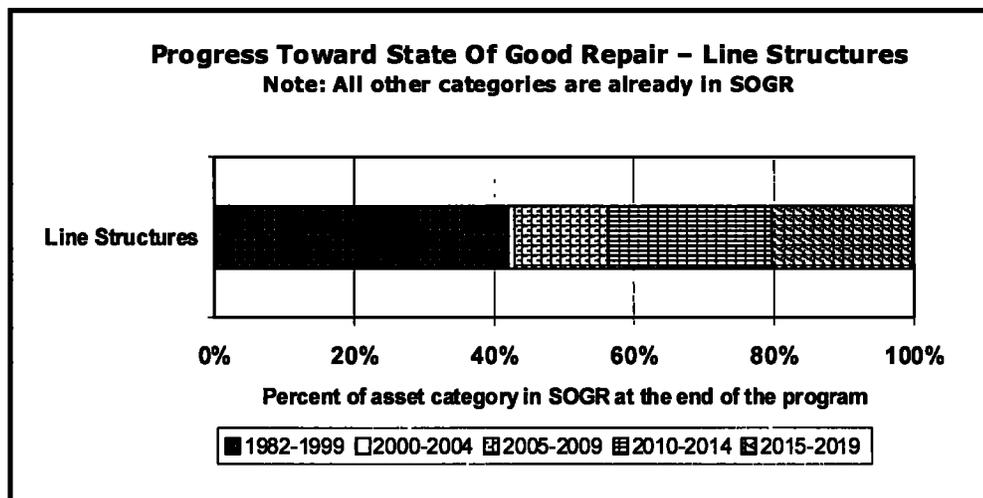


Figure 42 Progress Toward SOGR - LIRR Line Structures

LIRR's intensive infrastructure investments have achieved a state of good repair in all asset categories except Bridges and Viaducts in the Line Structures category. The Line Structure rating does not mean that the asset is unsafe; it characterizes an unacceptable level of cost and effort to maintain the asset through the regular operating budget.

The next Capital Program includes a significant capital investment in the Line Structure category complemented by extensive maintenance work. Through these concentrated efforts, this asset category as a whole is anticipated to achieve SOGR by 2020 as outlined by the following chart.

Long Island Rail Road Investments

In addition to normal replacement, a significant portion of LIRR's proposed Capital Program is focused on readiness for forecasted ridership growth and new LIRR service into Grand Central Terminal. The proposed plan demonstrates the railroad's ongoing commitment to maintaining and enhancing mobility, economic health and quality of life in the region. Proposed investments will maintain LIRR in a state of good repair through funding of its most essential components.

6.5 Commuter Rail System Issues and Needs

The New York metropolitan region's commuter railroads are working on projects and studies for system improvement, network expansion and needed capital investment that individually and collectively will dramatically improve each commuter railroad's ability to attract and to provide service to additional commuters throughout the region. The following is a brief description for each project or study.

East Side Access

East Side Access is LIRR's \$7.2 billion project that will connect the LIRR Main Line and Port Washington Branch in Queens to a new LIRR terminal beneath Grand Central Terminal.

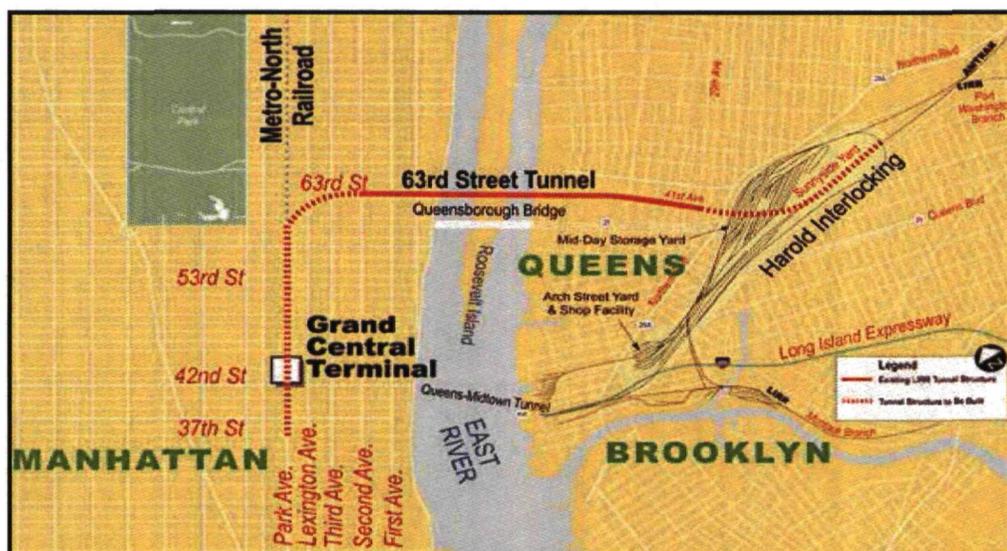


Figure 43 MTA/ Long Island Rail Road's East Side Access Project

This new rail connection will allow the LIRR to operate up to 24 trains per hour in the peak of the rush hour to Grand Central, dramatically shortening travel time for Long Island and eastern Queens commuters traveling to the east side of Manhattan. Among the many benefits of this project will be a new a commuter rail station in Sunnyside Queens providing much-needed service to this area of New York City.

Main Line Corridor Improvement Project

The Main Line Corridor Improvement Project (MLCIP) proposes to provide a much-needed third track in a critical, 10-mile stretch between Floral Park and Hicksville.

The MLCIP would improve systemwide service reliability for the LIRR by providing more capacity and flexibility to move trains. Five LIRR branches, carrying 41 percent of the railroad's total ridership, converge on this stretch.

Tappan Zee Bridge/I-287 Corridor

In September 2008, the Tappan Zee Bridge/I-287 Corridor Environmental Review project team, led by NYSDOT and including the State Thruway Authority and the Metropolitan Transportation Authority Metro-North Railroad (MNR), announced its recommendations for the Tappan Zee Bridge/I-287 Corridor. The team, working in cooperation with the Federal Highway Administration and the Federal Railroad Administration, recommended that the bridge be replaced with a transit-ready bridge and that bus rapid transit and commuter rail transit be added to the corridor.

The project team will move forward to prepare a Draft Environmental Impact Statement (DEIS) to be completed in late 2009, with a final Environmental Impact Statement due in early 2010. The subsequent Record of Decision in 2010 will identify the preferred alternative.

Preliminary estimates of the cost of the new bridge, built to handle both bus rapid transit and commuter rail service, is \$6.4 billion, plus \$2.9 billion more for bus rapid transit and highway improvements and an additional \$6.7 billion for the build-out of commuter rail service in the future. These estimates may change over the next few years as decisions are made on alignment, bridge design and other details. NYSDOT will work with a financial advisor to develop options to fund the project.

The recommended solution calls for full-corridor bus rapid transit from Suffern to Port Chester with transfer points and new stations in between. It includes a new, two-track commuter rail transit service from the Port Jervis Line at Suffern, across Rockland County with several new stations and over the new bridge, connecting to the Hudson Line south of Tarrytown and, thus, providing direct service to Grand Central Terminal in Manhattan. Anticipated growth in travel demand in this region and the ability of the proposed transit modes to accommodate it were among the most important considerations in making this recommendation. The combination of bus rapid transit and commuter rail transit also would provide the most flexibility to accommodate multiple markets, including the cross-corridor and New York City travel markets.

West of Hudson Regional Transit Access (including Rail Access to Stewart Airport)

This initiative will provide expanded service to address the growing demand in Metro-North's West of Hudson commuter market and to provide fast and reliable transit access that will support the development of Stewart Airport. The analysis will be coordinated with the Port Authority, NJ Transit and NYSDOT through a steering committee

Transit access to Stewart Airport would encourage development at the airport and position it as a reliever to New York metropolitan area's major airports. Transit access is also seen as an important ingredient for the airport to be a key player in and generator of important local and regional economic development.

Moynihan Station

The Expanded Moynihan Station Project is being developed to improve passenger circulation and platform access at the Penn Station complex in Manhattan; to expand railroad capacity and passenger throughput; to restore and to preserve an important historic resource; and to create a financially viable and dynamic mixed-use rail and transit-oriented development.

Access to the Region's Core

Access to the Region's Core is designed to increase the commuter rail capacity of NJT and Metro-North service west of the Hudson River into New York City. This regional commuter rail project extends from Frank R. Lautenberg Station in Secaucus, N.J., to Fifth Avenue and West 34th Street in Manhattan near the current Penn Station.

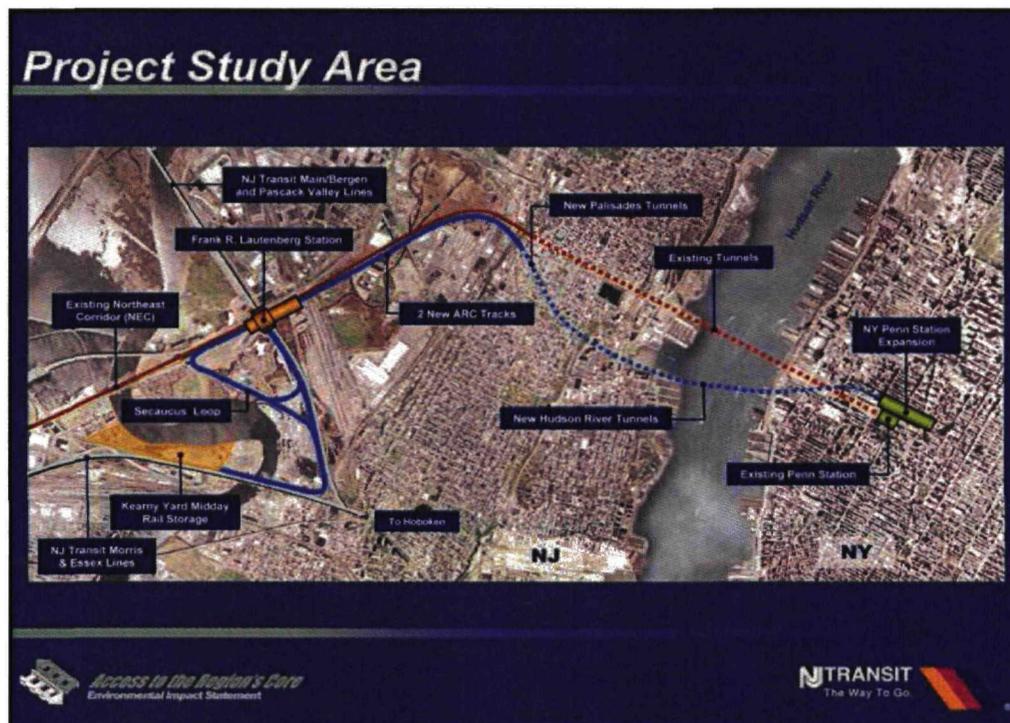


Figure 44 Access to the Region's Core West of Hudson River

Once the project is complete, the anticipated West of Hudson train capacity into New York City would increase from 23 trains per hour to 48 trains per hour. This would enable 32,350 more weekday riders into Manhattan, a 22 percent increase over the no-build alternative, and a 63 percent increase in riders who currently use trains (West of Hudson) to access Manhattan. The net effect of the new station would increase West of Hudson rail capacity into midtown Manhattan by nearly 44 percent.¹⁵

Harlem Line Capacity Study

This study will identify and evaluate potential projects to improve operational capacity on Metro-North's Harlem Line between Mott Haven Junction in the Bronx and North White Plains in Westchester County and improve pedestrian conditions at Fordham Station in the Bronx.

Metro-North Penn Station Access

Metro-North is conducting the Penn Station Environmental Assessment to examine alternatives for improving access between the Metro-North service area east of the Hudson River and Penn Station using existing infrastructure. The benefits would be to improve access to Manhattan's west side for Metro-North's current and future customers, improve regional rail connectivity, increase Metro-North ridership, improve Metro-North service flexibility, support regional economic development and improve quality of life in the region.

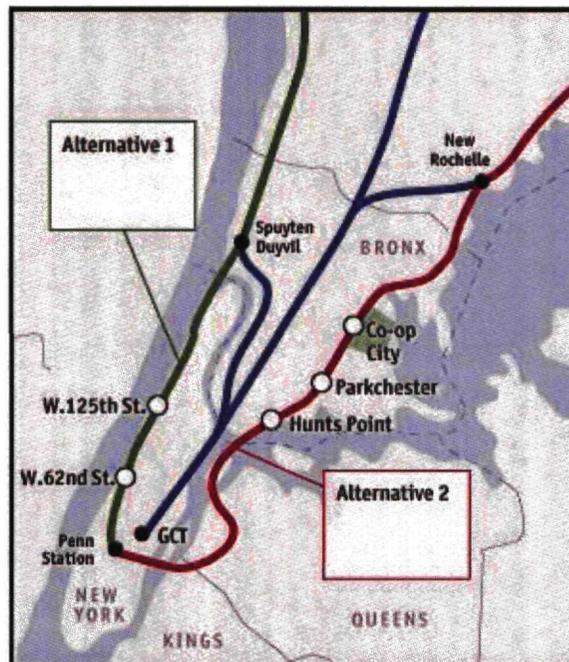


Figure 45 Metro-North Penn Station Access Study

¹⁵ www.accesstotheregionscore.com/FAQs.htm

Other Feasibility Studies

Outside of the New York metropolitan area, there are other possible opportunities for Commuter Rail in the State. The Capital District Transportation Authority, for example, will include in its Long Range Plan (CDTA New Visions 2030 Plan) an analysis on the feasibility of a commuter rail link between the City of Saratoga Springs and the City of Albany. CDTA runs express commuter bus service from the City of Saratoga Springs into the City of Albany on Interstate I-87. This service has recently expanded by 36 percent in 2008 and experienced an increase in ridership of 25.2 percent from 2007 to 2008. It appears that in the near term, those corridors being considered for possible commuter rail can be served by Commuter Bus.

Conclusion

The Long Island Rail Road and the Metro-North Railroad both provide commuter rail service in the New York City metropolitan region. LIRR and MNR are subsidiary corporations of the Metropolitan Transportation Authority and have comprehensive investment plans for the future. For this State Rail Plan, the focus is on investments from those plans that interface with the rest of the state rail and passenger system.

The LIRR is the largest commuter railroad in North America, handling 86.1 million passengers in 2007. MNR is the second largest commuter railroad in North America, handling 80.1 million passengers in 2007. Ridership continued to increase on both the LIRR and MNR during the past three years. Also, MN's market share of weekday commuter trips to Manhattan went from 70 percent in 1991 to 81 percent in 2006, while LIRR's share has been relatively constant at 78 percent.

Many of the infrastructure improvements of the LIRR and MNR are generally in a state of good repair (SOGR) as a result of the 5-Year Capital Programs begun in the early 1980s, supported by the ongoing preventive maintenance and normal maintenance programs. Largely as a result, on-time performance (OTP) for both railroads is excellent. In 2007, MNR reached a 98 percent OTP level and LIRR reached 95 percent OTP.

Several major studies and projects are under way that would dramatically improve the service provided to commuters throughout their service areas. LIRR projects include the \$7.2 billion East Side Access project that will connect the LIRR to a new terminal beneath Grand Central Terminal; the Moynihan Station Project to improve passenger circulation and passenger access at Penn Station in New York City; and the Main Line Corridor Improvement Project to add a 10-mile-long third track between Floral Park and Hicksville.

MNR elements include potential commuter rail service over a new Tappan Zee bridge; the West of Hudson Regional Transit Access initiative to address growing demand in MN's service area west of the Hudson River, including transit access to support the development of Stewart Airport; the Harlem Line Capacity Study to improve operational capacity between Mott Haven Junction and North White Plains Station; and the Penn Station Access initiative to allow MN's Hudson and New Haven Lines to access Penn Station. Also, the Access to the Region's Core initiative would allow New Jersey Transit (and its routes extending into New York State) to operate more trains into Penn Station.

CHAPTER 7 – RAIL SAFETY AND SECURITY

A primary goal of this Plan is to provide a safe and secure rail transportation system that reflects the needs of New York State to address both personal safety and infrastructure security. Safety and security are paramount to rail transportation efficiency and success. Through sustained demands for added commuter rail transportation and increased freight movements, New York State's railroad system continues to have an exemplary safety record. The Rail Safety Improvement Act of 2008 provides for stronger rail safety measures affecting grade crossings, train operations, crews hours of service and calls for improving automatic train stop technologies

7.1 Rail Safety

Federal and State Roles

Safety on the rail transportation system in New York State is addressed through a combination of federal and state laws and regulations. The primary federal role in rail safety lies with the Federal Railroad Administration (FRA). The FRA is responsible for prescribing appropriate rules, regulations and orders in all areas of rail safety as required by the Rail Safety Act of 1970. This act provides for a State Participation Program in which New York has participated since 1977. This program provides funding for NYSDOT staff to perform planned routine compliance inspections on rail freight and passenger facilities and locomotive power and equipment.

NYSDOT is the primary state agency responsible for rail safety activities in New York. Based on requirements in State Railroad Law and State Transportation Law, NYSDOT provides safety oversight for railroad freight carriers as well as intercity passenger rail (Amtrak) operations in New York State. NYSDOT also provides safety oversight and investigation activities for all rail commuter and transit operations in the New York metropolitan region as mandated by the Public Transportation Safety Board (PTSB) in State Transportation Law.

Focus Areas

NYSDOT addresses rail safety in three major focus areas: Grade Crossing Safety, Rail Safety Inspections and Public Transportation Safety Board (PTSB) Rail Safety Activities. NYSDOT's mission in these areas is to reduce the number, rate and severity of rail accidents and to help ensure the safety of users and employees of New York State's passenger and freight rail systems.

Grade Crossing Safety

At intersections of highway and rail modes of transportation, all at-grade crossings present vehicle movement conflicts that have safety issues. Although crossing accidents are fewer in number than vehicular accidents, the consequences of crossing accidents are typically more severe due to the weight and speed of rail equipment involved. Unlike vehicular intersections, trains cannot stop in a timely manner to avoid collisions. Crossing accidents put at risk vehicle occupants and may lead to train derailment, jeopardizing the passenger and train crew safety.

Pursuant to New York State Railroad Law and federal legislation, NYSDOT has responsibility and regulatory authority for grade crossing safety at all public highway-railroad grade crossings in the state and private crossings along intercity (Amtrak) and commuter railroad (Metro-North and LIRR) corridors. Recognizing the hazards associated with public grade crossings, Congress and the FHWA have long made federal funds available to states to assist in eliminating and/or mitigating those hazards, most notably through the Section 130 program of the Surface Transportation Program.

Historically, New York has been a leader in grade crossing safety. Efforts have focused on providing modern grade-crossing warning device systems at all public crossings as well as reducing the total number of crossings by closure or elimination. More than 2,000 (72 percent) of the 2,800-plus public crossings in New York State are equipped with warning devices (flashers, gates and highway traffic signals) and there are an estimated 400 projects being developed to modernize or improve existing installations. New York State has one of the lowest grade crossing accident rates in the country, ranking 13th nationwide.

Grade Crossing Closures and Grade Separations

Pursuant to USDOT guidance, a lead objective of the NYSDOT Grade Crossing Program has been to eliminate and consolidate hazardous and/or redundant grade crossings wherever possible. This is accomplished via direct closure, consolidation through installation of connector roads or, in some instances, installation of grade-separated structures. In recent years, dozens of crossings have been safely and permanently closed under NYSDOT initiative.

In situations where there are no closure options, grade separation assures guaranteed and continual safe access for vehicles and pedestrians while also permitting unimpeded operation of trains. Priority proposals for grade separation on mainline railroads in New York include:

- Ripley, Chautauqua County (State Route 76) – would eliminate up to 10 redundant crossings on high-volume CSX/Amtrak and Norfolk Southern rail corridors that connect to the industrial Midwest.
- South Rensselaer Port Access – can eliminate two hazardous crossings on the CSX/Amtrak High Speed Hudson Line and provide improved commercial access to port area.
- Lower Flints Road, Canaan – would eliminate a crossing used by slow-moving heavy trucks and tandem trailers, including gasoline tankers over CSX/Amtrak Boston Line adjacent to Thruway Berkshire Spur.
- Stewart Avenue pedestrian overpass – would improve safety at the site of numerous commuter accidents on a crossing located between station and parking lots on LIRR Main Line in the Bethpage/Oyster Bay area.
- Flatbush Avenue (State Route 32) – would insure emergency access in City of Kingston during train operations in and out of local CSX yard; would allow for closure of at least two crossings.

As bridge structures, grade-separations are necessarily capital-intensive projects that will require funding from sources beyond NYSDOT's standard Section 130 grade crossing program (currently funded by FHWA at a rate of \$6.3 million annually).

Safety Improvement on Existing Crossings

For crossings that cannot be closed or consolidated, NYSDOT's primary focus is on improving safety at existing locations. Most often, this is accomplished through installation of updated warning devices, including standard signs and pavement markings; installation of new or replacement active warning devices (flashers and gates); and circuitry improvements and interconnections with highway traffic signals where warranted.

More recently, more emphasis is on crossing site physical improvement, such as mitigation of profile-deficient crossings. Some grade crossings have steep roadway approaches; low-clearance vehicles, such as large trucks and trailers attempting to traverse the crossing, may have their undercarriages caught or stuck on the crossing surface, creating a hazardous situation in the event of an approaching train.

To reduce the hazards of such situations, NYSDOT has initiated an effort to identify profile-deficient sites and, where conditions allow, to work with involved municipalities and property owners to improve roadway approach grades. At a minimum, involved municipalities will be asked to install and maintain appropriate low-clearance advisory signage for roadway and crossing users.

Further crossing safety initiatives around the state will include an effort to have passive warning devices at lesser-used public grade crossings meet all updated MUTCD standards.

Finally, an area of future safety concern, increasingly recognized by the FHWA and FRA, is that of private grade crossings that traditionally have not been subject to public oversight or regulation nationally. New York, under recently enacted Sections 97 and 97a of the Railroad Law, has adopted some initial regulatory oversight of private crossings situated on Amtrak and MTA lines. However, to date, no routine funding source exists for improvement of this class of crossings at any location statewide.

Grade Crossing Accident Data

New York State has one of the lowest grade crossing accident rates in the country, ranking 13th nationally based on Federal Railroad Administration data. There were 360 grade crossing accidents recorded during the 10-year period (1997-2006) involving all railroads operating in New York State. These accidents resulted in 188 injuries and 61 fatalities; a high of 47 accidents occurred in year 2000. The lowest number of accidents, 26, occurred in both 2004 and 2006. The 10-year data reflects improvement in the moving three-year average through 2000 (see Figure 46 below). The moving average in 2006 was 38 percent lower than that of 1997. The incremental decrease in all three categories is a testament to the efforts by the railroads, PTSTB and NYSDOT to continually reduce grade crossing accidents in New York State; this is done primarily through a high grade crossing improvement program and public awareness programs, such as *Operation Lifesaver* (discussed further in this section).

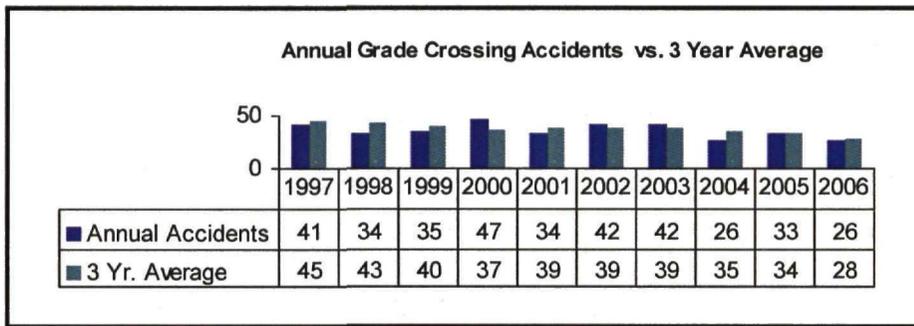


Figure 46 Annual Grade Crossing Accidents vs. 3 Year Average

The numbers of injuries and fatalities arising from grade crossing accidents have also declined over the same 10-year period (*Note that 56 of the total injuries reported in 2004 were the result of one accident and, as a result, will significantly influence the data*).

Figure 47 displays the trend for injuries over this period. Figure 48 similarly shows the trend for fatalities.

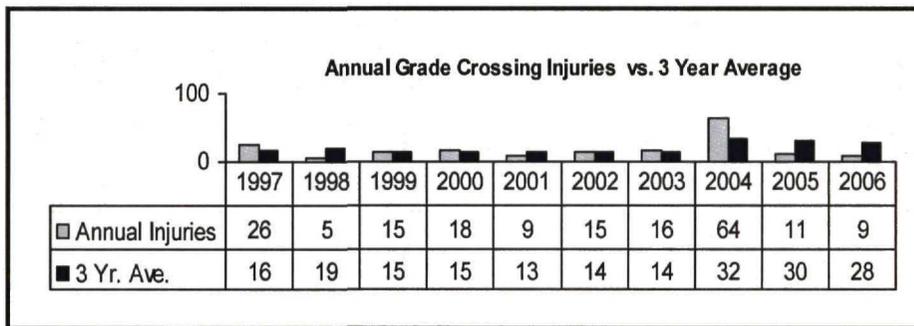


Figure 47 Annual Grade Crossing Injuries vs. 3 Year Average

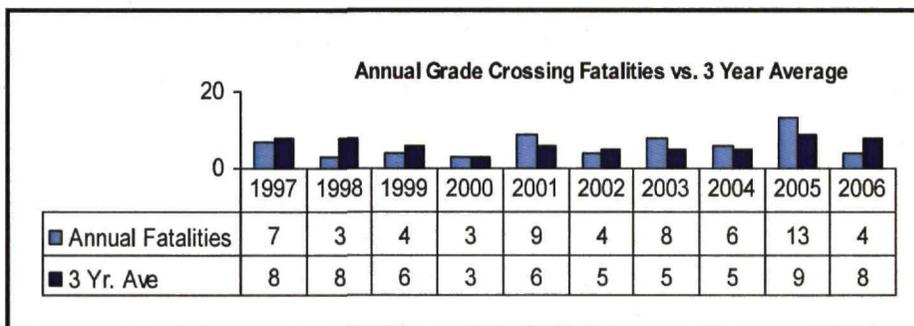


Figure 48 Annual Grade Crossing Fatalities vs. 3 Year Average

Rail Safety Inspections

The New York State Rail Safety Inspection Program provides safety oversight for railroad freight carriers and intercity passenger rail (Amtrak) operations within New York State. The area covered by this program is primarily upstate New York. The

New York City metropolitan area is covered by the PTSB activities referenced in the next section. Pursuant to this safety inspection program, NYSDOT conducts statewide rail equipment and track inspections, accident investigations and safety monitoring.

Freight, intercity and tourist railroads operating in New York State are required to provide immediate notification to NYSDOT if one of the following events occurs:

- All train and train service accidents involving a passenger train;
- All train and train service accidents that cause delays to passenger train movements of more than 30 minutes;
- All collisions, except those minor collisions that can be repaired without the need to move to a repair facility;
- All freight train derailments that occur on tracks where maximum authorized track speed exceeds 25 mph, that involve placarded hazardous materials cars or that derail at least five freight cars;
- Any release or spill of a hazardous material identified in 49 CFR Part 172;
- All bridge or other track opening failures;
- Any accident involving a steam-powered locomotive;
- All accidents at street or highway/rail grade crossings; or
- All train and train service accidents that result in death or an injury that requires immediate hospitalization.

The NYSDOT Rail Safety Bureau annually prepares a review of the reported accidents that occurred on New York State's freight, intercity passenger, commuter and transit railroads, as well as the equipment and track safety inspections and investigations performed by NYSDOT. These annual reports can be found at: <https://www.nysdot.gov/portal/page/portal/divisions/operating/oss/rail/inspection-system/annual-reports>

NYSDOT also supports and participates in *Operation Lifesaver*, a national railroad safety education program that is delivered to schools and localities throughout the state. The program educates the public about dangers associated with the railroads, especially safety concerns at grade crossings and along the railroad rights-of-way. NYSDOT staff participation includes approximately 24 workshops, information booths at fairs, train rides and presentations annually.

Public Transportation Safety Board Rail Safety Activities

New York State's Public Transportation Safety Board was created in 1984 and is statutorily responsible by State Transportation Law for the safety oversight of all public transportation systems operating in New York State that receive State Transit Operating Assistance (STOA). Safety oversight required by the PTSB does not include Amtrak operations but includes the commuter railroads.

Since 1984, the Public Transportation Safety Board has been responsible for safety oversight of the six subway, commuter railroad or light rail public transportation systems in New York State. These systems include all commuter and transit operations of the Metropolitan Transportation Authority (Long Island Rail Road, Metro-North Railroad and New York City Transit including the Staten Island Railway), New Jersey Transit (New York State Operations) and Niagara Frontier Transit Authority. The inspection activities are performed in a cooperative partnership with

the Federal Railroad Administration and per Federal Transit Administration regulations (49CFR659).

Modeled after the National Transportation Safety Board, New York's PTSB was the first State Safety Oversight organization in the nation. The board is administratively housed within the New York State Department of Transportation, with staff support provided by NYSDOT. Historically, the PTSB's oversight program has been built around a requirement that each property develop a System Safety Program Plan (SSPP) that details the property's operating procedures for conducting business in a safe and efficient manner. The PTSB guidelines provide individual properties with the direction needed to ensure that their SSPP is developed in as thorough a manner as possible. In 1996, the guidelines were expanded to include sections on employee safety and security as required in the Federal Transit Administration oversight regulations.

The PTSB mission is to reduce the number, rate and severity of public transportation accidents. The PTSB consists of seven members chaired by the Commissioner of NYSDOT. The board's commitment to working proactively with New York's public transportation systems has led to fewer serious public transportation accidents and made New York a leader in rail safety.

Each public transportation system and/or public transportation service subject to the Safety Oversight Board that operates a commuter rail, light rail, rapid transit or subway system shall give the Safety Board staff immediate notice and written notice of the following accidents:

- All collisions and derailments, except those minor incidents resulting from shifting cars and making up trains in yards;
- All accidents at highway grade crossings;
- All fatal accidents and all injury accidents that result in injuries to two or more passengers; and
- All emergency evacuations of passengers to the roadbed or bench wall and then to the adjacent environment.

When an accident meets the above criteria, staff investigates. The resulting report is reviewed, finalized and submitted to the board for approval. The report is then transmitted to the chief executive of the appropriate railroad property.

System Safety

Each public transportation operator receiving financial operating assistance from New York State is required by law to submit for the Commissioner of NYSDOT a System Safety Program Plan. The SSPP's primary purpose is to detail the provider's policies and internal operating procedures for conducting business in a safe and efficient manner. The PTSB advises the Commissioner on the feasibility and consistency of these plans.

System Safety: Monitoring and Lessons Learned

Long-term safety success requires continual performance monitoring and the thorough documentation of accidents. It is important that railroad operators maintain comprehensive statistics, including minor occurrences, to evaluate patterns

and to take corrective actions. It is also important to investigate accidents to collect and analyze data to identify an accident's probable cause and contributing factors. This will allow for corrective action. Accident investigations by safety professionals are focused on *preventability*, not fault or liability. These investigations illuminate the providers' operating practices and adherence to stated policies and procedures. They provide the knowledge needed to modify or reinforce procedures. Aggregate investigation data can identify industrywide issues and trends.

Accident Investigation Activities

Statistical data collected during 2006 reveals that the PTSB received a combined 315 reports of accidents/incidents that resulted in 60 injuries and 58 fatalities, a 12 percent and 13 percent reduction injuries and fatalities, respectively, to the previous year.

| PTSB 2006 Accidents, Injuries and Fatalities by Type | | | |
|---|-----------------|-----------------|-------------------|
| Criteria | Total Accidents | No. of Injuries | No. of Fatalities |
| Collision | 6 | 2 | 2 |
| Derailment | 3 | 4 | 0 |
| Evacuation | 3 | 25 | 1 |
| Grade Crossing | 12 | 2 | 3 |
| Multiple Injury | 1 | 2 | 1 |
| Passenger Fatality | 2 | 0 | 1 |
| Criteria Totals | 27 | 35 | 8 |
| Incident Collision | 195 | 8 | 0 |
| Incident/Accident | 93 | 17 | 50 |
| All Totals | 315 | 60 | 58 |

Figure 49 Accidents, Injuries and Fatalities by Type in 2006

Twenty-seven of the 315 accident and incident reports received during the 2006 calendar year were reportable criteria accidents. The results of those accidents show fewer injuries and fatalities, compared to 2005 data while ridership continued to increase in the same period. Since 1984, the PTSB has investigated 998 reportable rail criteria accidents and issued numerous recommendations to rail properties.

When the PTSB investigates accidents, the facts, along with all other available evidence, are analyzed to determine the most probable cause of each accident. Recommendations, with respect to mitigating future occurrences, are issued if necessary. Recommendations may require the involved railroad operator and/or property owner to implement corrective actions, to develop new procedures and/or to adhere to the existing procedures contained in its SSPP.

Trespassing

Accidents resulting from individuals trespassing on railroad property are a significant safety concern in New York State. Trespassing can be defined as actions prohibited

on railroad property, such as unauthorized entry to railroad right-of-way by walking on or around the tracks, sleeping on the tracks, driving or walking around downed gate crossings and intentionally jumping into the path of oncoming trains.

Each year, preventable railroad fatalities occur because of trespassing. NYSDOT and the railroad industry are committed to effective and intensive educational efforts directed at potential victims of trespassing incidents; aggressive enforcement of state and local laws concerning motorist responsibilities at crossings and access to railroad property; funding for physical improvements that reduce the likelihood of mishaps and productive research on technological solutions; and behavioral factors to help decrease trespassing activity. Additionally, NYSDOT should consider advocating for increased penalties for violation of rail safety laws.

7.2 Rail Security

Passenger and freight rail services are important links in the state's transportation network. There are challenges that center on securing passenger and freight operations; improving the rail system; and fortifying rail security. Some challenges are common to both passenger and freight modes while others are unique to specific rail operations. Open access and high ridership of mass transit systems make them more difficult to secure than airports. Millions of tons of hazardous materials are shipped across the state as well. Numerous actions have been implemented since the attacks of September 11, 2001, and more are planned. Risk management and better coordination and communication can help enhance rail security.

Federal and State Roles

The primary agencies responsible for security in the transportation sector and, thus, the rail transportation system are the U. S. Department of Homeland Security on the federal side and the New York State Office of Homeland Security (NYSOHS) on the state side. Security is addressed in the transportation sector mainly by identifying critical infrastructure assets and developing protection strategies for these. Other agencies, such as law enforcement and railroad operators, also play a significant role in addressing rail security needs.

New York State's Office of Homeland Security is by law, responsible for overseeing state resources applied to detection, prevention and, if necessary, response to attack. To date, the NYSOHS and the federal Transportation Safety Administration (TSA) have concentrated their security efforts on the high-volume, mass-transit rail operators in the greater New York metropolitan region. Most their resources have been used to install video surveillance cameras and motion sensors at high risk locations. In cooperation with the NYSOHS, the federal TSA is also conducting rail passenger baggage screening pilot programs in upstate New York. The intent of the pilot programs is to deter terrorist activities in and around New York's passenger rail systems.

A good example of security coordination was initiated by the Capital District Transportation Authority (CDTA) at its Albany-Rensselaer and Saratoga Springs rail-passenger stations. Joint training exercises were coordinated with first responders and the railroads to increase preparedness for a major security incident.

Other examples of completed security capital investment improvements include: radio communication systems; security cameras on board transit vehicles and in transit stations; controlling access to transit facilities and secure areas; intrusion alarms; automated vehicle locator systems; and fencing.

Amtrak

As indicated on its Web site, www.amtrak.com, Amtrak has a range of security measures aimed at improving passenger rail security, some of which are conducted on an unpredictable or random basis. The following security measures may be conducted in stations or on board trains:

- Uniformed police officers or Mobile Security Teams
- Random passenger and carry-on baggage screening
- K-9 Units
- Checked baggage screening
- Onboard security checks
- Identification checks

Additionally, funding is provided to Amtrak by the U.S. Department of Homeland Security through its Transit Security Grant Program (TSGP) for security enhancements for Amtrak intercity rail operations among key, high-risk urban areas throughout the United States.

Commuter Rail

The Metropolitan Transportation Authority has several security campaigns under way to address security on its buses, subways and railroads. MTA commuter railroads include Metro-North Railroad and the Long Island Railroad. In 2003, the MTA initiated the "*If You See Something, Say Something*" campaign. It exhorts travelers to:

- Be alert to unattended packages;
- Be wary of suspicious behavior;
- Take notice of people in bulky or inappropriate clothing;
- Report exposed wiring or other irregularities;
- Report anyone tampering with surveillance cameras or entering unauthorized areas; and
- Learn the basics of safe train evacuation.

The MTA has also contracted with Lockheed Martin for a state-of-the-art Integrated Electronic Security System/Command Communication and Control to enhance security throughout the New York transportation network. The program will provide enhanced monitoring, surveillance, access control, intrusion detection and response capabilities at key MTA locations and assets.

Freight Security

Following the events of September 11, 2001, the American Association of Railroads established a Railroad Security Task Force. That task force produced the "*Terrorism Risk Analysis and Security Management Plan*" that was designed to enhance freight rail security. The plan remains in effect today. As a result, freight railroads enacted

more than 50 permanent security-enhancing countermeasures. For example, access to key rail facilities and information has been restricted and cyber-security procedures and techniques have been strengthened.

Communication among security officials, law enforcement and the railroads is critical to ensuring secure operations on New York's rail transportation system. Toward that end, in July 2007, CSX Transportation entered into an unprecedented rail security partnership with New York and New Jersey. This partnership formalizes and enhances CSXT's ongoing commitment to both states to share information, resources and strategies to better protect the communities in which CSXT operates.

The partnership provides New York security officials with access to CSXT's Network Operations Workstation (NOW) System. This secure, online system, developed and used by CSXT, allows New York security and law enforcement officials to independently track the location of CSXT trains and the contents of rail cars being hauled by CSXT in each state in a nearly real-time environment. This enhances New York's ability to protect citizens.

Vehicle and Cargo Inspection System (VACIS)

VACIS scans shipments in a secure manner with minimal disruption and cost for rail companies, importers and shipping companies while enhancing security at border crossings. VACIS is used to inspect freight cars and rail containers. Cargo can be scanned as it passes by the machine at low speeds of approximately 7-10 km per hour. A one-mile-long train can be scanned in approximately 10 minutes. The system is designed to detect threats, contraband and items that deviate from the shipment manifest, including illegal drugs, illegal immigrants, smuggled goods, radiological materials, weapons and explosives. The Canadian Pacific Railroad (CPR) has funded this technology in New York at the Rouses Point International border crossing for use by the United States Customs and Border Protection staff.

Additionally, U.S. Customs and Border Protection staff operates a VACIS installation at the International Bridge between Fort Erie Ontario and Buffalo, the only operating freight rail crossing along the U.S./Canada border in western New York.

7.3 Rail Safety Issues

Railroad Bridges and Undergrade Structures

The rail industry's resurgence over the past 20-30 years is heavily straining a system that was originally constructed in the 1800s. In addition to the volume of rail traffic showing continued growth, the rail axle loadings have increased significantly from when structures were originally designed.

The major Class I railroads have invested in improvements to their track infrastructure. Under existing FRA regulations, railroads are required to self-inspect and self-certify the condition, adequacy and safety of their rail line structures/bridges. Additionally, pursuant to Section 236 of New York State Highway Law railroads are required to perform bridge inspections and provide certifications by a licensed professional engineer and report the inspection results to NYSDOT. If, as a result of an inspection, a bridge in the state is determined to be unsafe, the

railroad needs to notify the Commissioner of NYSDOT and take appropriate action to ensure that the structure is safe.

Under the Rail Safety Improvement Act of 2008, the Federal Railroad Administration must implement regulations requiring owners of track carried on one or more railroad bridges to adopt certain safety practices to prevent deterioration of railroad bridges and to improve bridge safety.

Inspection of Grade Crossing Warning Devices

There has been significant progress over the past 30 years in upgrading the level of warning devices at the state's public grade crossings, but these systems need to be maintained. Maintenance and repair of highway-railroad grade crossing warning device equipment are the responsibility of the railroad owner. The Federal Railroad Administration has established minimum inspection requirements for railroad maintenance of the warning systems and is responsible for inspecting them. This will require additional resources to ensure that all active grade crossing warning devices are inspected on a three-year cycle.

The Rail Safety Improvement Act of 2008 requires the implementation of emergency notification of grade crossing problems. The act further directs the USDOT secretary to establish regulations clearing grade crossing obstructions; requires the USDOT secretary to develop model legislation for the states to use in enforcing criminal violation of grade crossing signals; and imposes civil penalties for the non-reporting of grade crossing accidents.

Crash Avoidance Technology

A promising area for improving rail safety is crash avoidance at highway-rail crossings. Crash avoidance technologies include communication-based train control systems and technologies intended to improve grade crossing safety, such as motor vehicle intrusion detection systems, moveable highway barriers, median barriers and quad gates. The Rail Safety Improvement Act of 2008 calls for a new policy initiative to develop new technologies that can prevent loss of life and injuries at highway-rail grade crossings. NYSDOT is committed to working with municipalities and the railroad industry to install crash-avoidance technology where feasible.

Positive Train Control (PTC) and Existing Train Safety Technologies

On several of New York's rail lines, both PTC and other forms of automatic train stop are already in operation. On Amtrak's high-speed corridor between Poughkeepsie and Hoffmans, west of Schenectady, which is owned by CSXT Transportation, locomotives have cab signals. In general, a cab signal notifies an engineer if a red signal is passed but it does not stop the train. Amtrak has implemented the Advanced Civil Speed Enforcement System (ACSES) on the Northeast Corridor (NEC) between Boston and Washington, D.C. ACSES supplements the existing cab signal/automatic train control system on the NEC, providing full PTC functionality in support of operations up to 150 mph. Originally designed as a transponder-based system, the system now has enhancements under development to replace the transponders with a Global Positioning Satellite (GPS) radio-based system. The cab system also displays the most recent signal on the locomotive's control panel to the engineer, in case the trackside light was missed. The Long Island Rail Road has automatic train stop on its system; this automatically stops a train if it passes a red

signal. Metro-North Commuter Railroad has cab signals similar to the system installed on the Empire Corridor, noted above.

With the enactment of the Rail Safety Improvement Act of 2008, all Class I railroads must submit to the USDOT Secretary for approval by end of 2015 plans to deploy a Positive Train Control system on their respective systems.

7.4 Rail Security Issues

The railroad system in New York State is vulnerable to trespassers and difficult to secure. The Railroad Security Task Force developed a plan in response to terrorist threats. New York State and the railroads should build upon the efforts of the Railroad Security Task Force and identify key railroad yards, interchange points and major structures that may need to be secured from open public access. Security strategies that could be examined to protect key assets include video monitoring for all major structures; upgrading fencing and installing fencing around the perimeter of major rail yards; securing vehicular access to rail right-of-ways at grade crossings; and securing assets, such as rail equipment and train control signals systems.

Improved communications among railroads and all security-cleared officials at the state, emergency responders and police agency level to track the location and contents of trains with any high-risk contents hauled throughout the state in real time would also enhance security for New York State's railroad system. Freight rail offers a safe and low-cost means to transport these materials. Railroads are experienced shippers and follow both the Federal Railroad Administration and the Environmental protection Agency (EPA) regulations in the handling, transporting and incident management during a security-related event.

Conclusion

Improving rail transportation safety requires ongoing dialogue and cooperation among transportation operators, the traveling public and state and federal agencies, with the goal of establishing a comprehensive safety program that reduces accidents on the state's rail system. NYSDOT is committed to this goal and will work with its railroad partners by adopting stronger rail safety measures as required under the Rail Safety Improvement Act of 2008, such as Positive Train Control systems, and new technologies that prevent loss of life and injuries at highway-rail grade crossings. The state's long-term safety needs will also require continual performance monitoring of our rail system to identify industrywide trends and issues; this, in turn, will assist NYSDOT in identifying system improvements and a further reduction of accidents.

Along with our safety efforts, rail security is a major issue that has faced this nation since the events of September 11, 2001. Improving communication among security officials, law enforcement and the railroads is critical to ensuring secure operations on New York's rail transportation system. Continued improvements in technology, such as VACIS, will also help to ensure the security of the state's rail freight infrastructure and incoming shipments. Comparable security initiatives at the commuter railroads and Amtrak will continue to be introduced, thus enhancing New York's ability to protect its citizens.

CHAPTER 8 – ENERGY AND ENVIRONMENT

New York State has the most energy efficient transportation sector in the United States. The state's extensive support for public transportation and the unrivaled levels of transit ridership (including rail transit), coupled with the large walking population in New York City, contribute to the lowest per-capita energy consumption in the nation. Energy consumption for transportation purposes in New York is roughly two-thirds that of the national average. Despite this impressive record, New York State remains committed to substantial improvements in transportation's energy efficiency.

Currently, transportation produces about one-third of greenhouse gas emissions in New York. The transportation sector consumes more petroleum than any other sector and will need to play a significant role in attaining the state's aggressive energy and air quality goals. On this point, freight railroads already play a significant role through their fuel efficiency.

Railroads, on average, are three or more times more fuel efficient than trucks (in terms of ton-miles per gallon), and because greenhouse gas emissions are directly related to fuel consumption, every ton-mile of freight moved by rail instead of truck reduces greenhouse gas emissions by two-thirds or more.¹⁶

Energy efficiency and conservation and emission reduction are the most important environmental issues facing transportation operators. Nonetheless, the state faces additional challenges. The environment plays a fundamental role in determining quality of life and economic well-being for New Yorkers. Thus, the actions of governmental agencies must have a positive impact upon the environment. Federal and state laws require the transportation sector to mitigate adverse environmental impacts resulting from its projects. One such program under the national Clean Air Act is the Environmental Protection Agency (EPA) national program to reduce emissions from diesel engines, including railroad locomotives.

Intercity passenger rail service uses 21 percent less energy per passenger miles traveled than automobiles and 17 percent less than airline travel.¹⁷ Also, intercity passenger rail carbon emissions per passenger mile traveled are 40 percent less than automobile and 56 percent less than by air travel.¹⁸

Further, the Environmental Justice Executive Order 12898 requires that states ensure fair treatment and meaningful involvement of all people with respect to implementation of transportation programs. Specifically, transportation planners and

¹⁶ Association of American Railroads, "Freight Railroads & Greenhouse Gas Emissions", July 2007.

¹⁷ United States Department of Energy, "Transportation Energy Data Book", Edition 26, May 2007

¹⁸ Emissions factors based on calculations from the World Resource Institute and Carbonfund.org.

operators must focus on underserved communities and seek to address adverse impacts that fall disproportionately on minority and low-income populations. This could potentially involve the location of new or expanded rail passenger/freight transportation facilities, as project decision-makers must consider the community impact that these facilities may have on specific population groups.

8.1 Energy

All forms of passenger rail transportation are more energy efficient than driving in a car or taking a plane. The latest available statistics show that domestic airlines on average consumed more than 20 percent more energy per passenger-mile than Amtrak; cars consumed more than 27 percent more energy than traveling by Amtrak. In other words, Amtrak consumes 17.0 percent and 21.4 percent less energy per passenger-mile than airlines and cars, respectively.¹⁹ [Note: One passenger-mile is one passenger traveling one mile.]

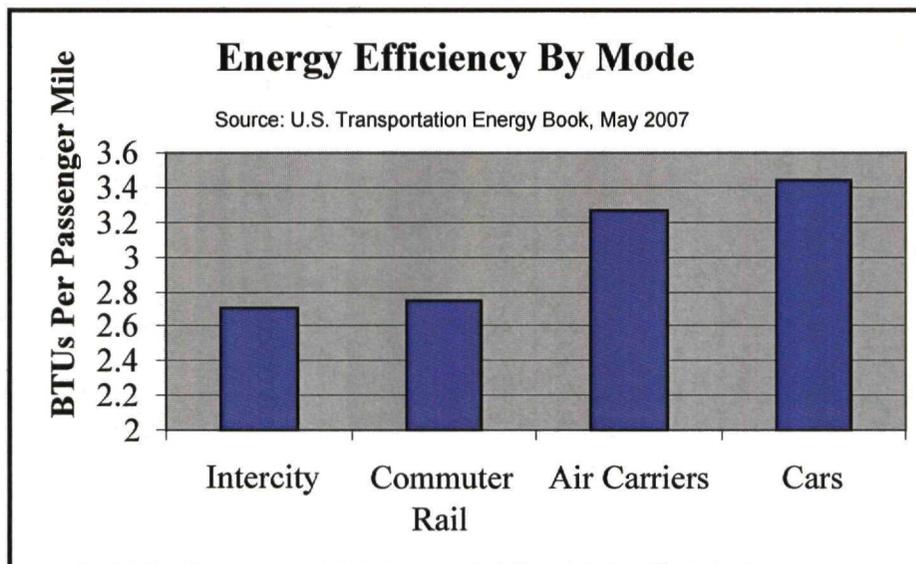


Figure 50 Energy Efficiency by Mode

Freight railroads are the most energy efficient choice for moving goods. Nationally, in 2007 one gallon of fuel moved one ton of freight by rail 436 miles – *roughly the distance from Buffalo to the South Bronx*. Moving more freight by rail is a straightforward way to meaningfully reduce both energy use and greenhouse gas emissions without harming our economy. Based on data from the American Association of State Highway and Transportation Officials (AASHTO), if, for each 1 percent of long-haul freight that currently moves by truck were moved by rail instead, fuel savings would be approximately 111 million gallons per year; annual greenhouse gas emissions would fall by 1.2 million tons.

Moving more freight by rail would also help cut highway congestion by taking trucks off the road, especially along key corridors. A single intermodal train can take up to 280 trucks off the highways. Depending on length and cargo, other trains can take up to 500 trucks off our highways. According to the latest American Association of

¹⁹ United States Department of Energy, “Transportation Energy Data Book”, Edition 26, May 2007

Railroad (AAR) statistics, in 2005, there were more than 73.58 million tons of freight carried by railroads in New York; this translates to approximately 2.725 million truck loads (5.45 million truck trips) diverted from New York's highways. Railroads thus enhance mobility and reduce the costs of maintaining existing roads and the pressure to build costly new roads.

Railroads are curbing fuel consumption through the use of technology, training of personnel and changes in operating practices.²⁰ A summary of these initiatives is described below:

- **Locomotives:** Railroads, nationally, have spent billions of dollars on thousands of new environmentally friendly locomotives and have overhauled thousands of older locomotives to improve their environmental friendliness. For example, some new switching locomotives that are used to assemble and disassemble trains in rail yards are "GenSet" (generator set) switchers that sharply reduce fuel consumption and emissions. GenSets have two or three independent engines that cycle on and off, depending on need. Other new switching locomotives are hybrids with a small, fossil-fueled engine in addition to a large bank of rechargeable batteries. Hybrid switchers can save up to half the fuel of conventional switchers while releasing a fraction of smog-inducing emissions.
- **Locomotive Monitoring Systems:** Railroads use sophisticated onboard monitoring systems to gather and evaluate information on location, topography, track curvature, train length and weight; they provide engineers with real-time "coaching" on the optimum speed for that train from a fuel-savings and operational standpoint.
- **Training:** In many cases, railroad fuel efficiency is directly related to how well an engineer handles a train. In effect, railroads use the skills of their engineers to save fuel. For example, railroads commonly offer training programs through which engineers and simulators provide fuel-saving tips. On one railroad, the fuel consumption performance of participating engineers in the same territory is compared with awards given to the top "fuel masters."
- **Information technology:** Railroads use advanced computer software to improve their operational efficiency and, therefore, their fuel efficiency. For example, railroads use sophisticated modeling software to identify the best ways to sequence cars in a large classification yard. The result is more efficient yard operation.
- **Innovative "trip planning" systems:** Railroads also use trip planning systems that automatically analyze a mix of ever-changing variables (e.g., crew and locomotive availability, congestion in rail yards, the priority of different freight cars, track conditions, etc.) to optimize how and when freight cars are assembled to form trains and when those trains depart. The result is smoother traffic flow, better asset utilization and reduced fuel use.
- **Reduced idling:** Locomotives often have to idle when not in use for various reasons, such as preventing freezing of the coolant (most lack antifreeze),

²⁰ Association of American Railroads, "Freight Railroads & Greenhouse Gas Emissions", July 2007

charging batteries and air reservoirs and providing for crew comfort. However, some railroads are implementing "stop-start" idling-reduction technology that allows main engines to shut down when ambient conditions are favorable. One advantage of "GenSet" locomotives is that their smaller engines use antifreeze, thus allowing them to shut down in cold weather. Some railroads also use "auxiliary power units" that warm engines so that locomotives can be shut down in cold weather.

- **Components and Design:** Railroads use innovative freight car and locomotive components and designs to save fuel. For example, advanced top-of-rail lubrication techniques save fuel by reducing friction and wear. Improving the aerodynamic profile of trains saves fuel by reducing drag.

Many of these innovations and practices are being explored and/or practiced nationally and locally by railroads operating in New York State.

8.2 Air Quality

Nationally, freight railroads account for a small share of U.S. greenhouse gas (GHG) emissions. According to 2006 Environmental Protection Agency (EPA) data, as outlined in the following table, total U.S. greenhouse gas emissions were 7,054 teragrams of carbon dioxide equivalents, with transportation accounting for 28 percent. Most transportation-related greenhouse gas emissions are due to fossil fuel consumption. Of the transportation sector's GHG emissions, trucking accounted for 20.8 percent of GHG emissions, while freight railroads produced only 2.6 percent.

| U.S. Greenhouse Gas Emissions By Economic Sector: 2006 | | | U.S. Greenhouse Gas Emissions from Transportation: 2006 | | |
|---|----------------|---------------|--|----------------|---------------|
| Economic Sector | Tg CO2 Eq. | % of Total | Economic Sector | Tg CO2 Eq. | % of Total |
| Electr. generation | 2,377.8 | 33.7% | Trucking | 404.6 | 20.8% |
| Residential | 344.8 | 4.9% | Freight Railroads | 51.5 | 2.6% |
| Industry | 1,371.5 | 19.4% | Waterborne Freight | 30.2 | 1.5% |
| Agriculture | 533.6 | 7.6% | Pipelines | 32.4 | 1.7% |
| Transportation | 1,969.5 | 27.9% | Aircraft | 157.4 | 8.1% |
| Commercial | 394.6 | 5.6% | Recreational Boats | 17.4 | 0.9% |
| U.S. Territories | 62.4 | 0.9% | Passenger Railroads | 6.4 | 0.3% |
| Total | 7,054.2 | 100.0% | Pass. Cars & Light Duty Trucks | 1,236.9 | 63.5% |
| | | | Buses | 12.5 | 0.6% |
| | | | Total | 1,949.3 | 100.0% |

Data are in teragrams of CO2 equivalents.

Source: EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006, Tables ES-7, A-100, and A-101.*
Totals for "transportation" in the two tables do not match exactly because of estimation issues.

Figure 51 U.S. Greenhouse Gas Emissions by Economic Sector

Although freight rail volume rose by 64 percent from 1990 to 2005, freight rail GHG emissions rose by only 29 percent.²¹

²¹ AAR Policy and Economic Department, excerpts from *Freight Railroads and Greenhouse Gas Emissions*: Dated July 2007.

Intercity passenger rail contributes less carbon dioxide [CO₂] to the atmosphere per passenger mile traveled than by automobile or commercial airline.

| Carbon Emissions (per Passenger Mile Traveled) | |
|--|---------|
| Passenger Rail | 0.21 kg |
| Automobile | 0.35 kg |
| Airline | 0.48 kg |
| Emissions factors based on calculations from the World Resource Institute and Carbonfund.org | |

Figure 52 Carbon Emissions

More recently, freight railroads are reducing GHG emissions through the use of "Green Rail Yard" technology. A green rail yard is defined as any facility at a rail system node which has applied leading-edge technology to minimize environmental effects. Examples of this technology include the use of low- or no-emission mobile equipment, such as container lift cranes; on-site renewable energy generation equipment (solar, wind, etc.) to provide all or part of the yard's power consumption; and the use of Gen-Set or hybrid locomotives.

In addition, Amtrak has committed to a 6 percent reduction in CO₂ emissions from diesel locomotives from 2003 to 2010 (from baseline years 1997 -2001) with its participation in the *Chicago Climate Exchange*.

While New York State has made significant strides in reducing air pollution, it still faces a major challenge to comply with emissions requirements in non-attainment areas defined under requirements of the Federal Clean Air Act Amendments of 1990. This challenge is especially great in the downstate region where pollution levels are highest. New York has shown some improvement but exceeding the maximum levels of pollutants continues to occur in New York City and Long Island, as well as Westchester, Rockland and Orange counties. More work remains to be done.

Because freight transportation demand is expected to rise sharply, future fuel savings and GHG reductions are expected to increase. For example, AASHTO projects that ton-miles for truck movements more than 500 miles long will increase from 1.40 trillion in 2000 to 2.13 trillion in 2020. If 10 percent of truck traffic went by rail — perhaps via efficient intermodal movements involving both railroads and trucks — cumulative estimated GHG reductions from 2007 to 2020 would be 210 million tons.

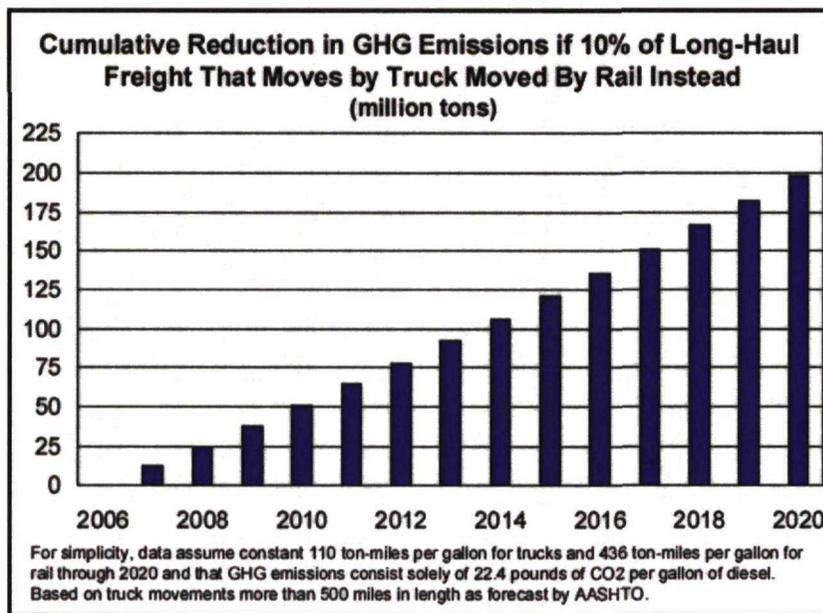


Figure 53 Cumulative Reduction in GHG Emissions

The New York State Energy Plan approved by the Governor in 2002 established ambitious reduction goals for greenhouse gas emissions and energy consumption during the first quarter of the 21st century. The state's response is comprehensive and aggressive, requiring contributions from all transportation operators. New York State's transportation operators also play an important role in the nation's efforts for clean air and energy efficiency. Greater use of alternative-fueled and low-emission vehicles, carpooling, walking, biking, transit, commuter rail options and long-distance railroad freight transportation likely would help reduce pollution. As this State Rail Plan is being finalized, the New York State Energy Plan is being updated with a June 2009 anticipated completion date. The New York State Energy Planning Board is overseeing the update; regarding transportation, it is charged with assessing the costs and benefits of traditional and alternative transportation measures and multimodal methods, including rail and transit, required to meet the future demands of the system and the state.

A recent Transportation Research Board study on Bicycles and Transit indicates that over the past decade there has been significant growth in bicycle and transit integration, including rail passenger service. Benefits of this trend likely are decreased automobile congestion, reduced air pollution (by reducing motor vehicle trips) and an improved public image of transit.²²

In New York State, commuter rail has accommodated bicyclists by allowing bikes on the trains during weekends and off-peak periods. NYSDOT has supported this mode of transportation by installing bicycle lockers at 17 LIRR stations, part of a demonstration project started in 1999. Initially, this effort produced locker occupancy rates of only 35 percent; more recently, the usage has increased to 60 percent due to improved marketing and higher gas prices.

²² TCRP Synthesis 62, Integration of Bicycles and Transit, A synthesis of Transit Practice, Transportation Research Board, Washington D.C., 2005

Amtrak has also taken steps to accommodate bicyclists. Unlike commuter railroad operations in larger urban areas, Amtrak provides a longer-haul intercity service. Previously, New York State, in conjunction with Amtrak, provided additional accommodations for bicycles but with minimal utilization. Amtrak has several options for transporting bicycles aboard Amtrak trains, one of which requires storing the bicycles as checked baggage in a box or other secure container. Another option allows customers to bring folding bicycles on board as carry-on baggage, although onboard bike space is limited and not available on all trains. As with other mobility initiatives, more services to accommodate bicycles on intercity rail service should be studied by Amtrak and the state with input from bicycle advocacy groups to ascertain true market potential and, if demonstrated to be worthy of capital investment, pursued at that point as equipment becomes available.

Locomotive Emissions

The Environmental Protection Agency has adopted a comprehensive national program to reduce emissions from future non-road diesel engines, known as the Clean Air Non-Road Diesel Rule. This program includes railroad locomotives for local switching and road (long- distance) service by integrating engine and fuel controls as a system to gain the greatest emission reductions. To meet these emission standards, engine manufacturers are to produce new engines with advanced emission-control technologies similar to those already expected for highway trucks and buses.

The U.S. emission standards for railroad locomotives apply to newly manufactured and remanufactured railroad locomotives and locomotive engines. The standards have been adopted by the EPA in two regulatory actions:

a. Tier 0-2 standards

The first emission regulation for railroad locomotives was adopted on December 17, 1997. The rulemaking, which became effective in 2000, applies to locomotives originally manufactured from 1973, any time they are manufactured or remanufactured.

b. Tier 3-4 standards

A regulation signed on March 14, 2008, introduced more stringent emission requirements. Tier 3 standards, to be met by engine design methods, become effective from 2011/12. Tier 4 standards, which are expected to require exhaust gas after treatment technologies, become effective from 2015. The 2008 regulation also includes more stringent emission standards for remanufactured Tier 0-2 locomotives.

The EPA also finalized new idle reduction requirements for newly built and remanufactured locomotives and adopted provisions to encourage a new generation of clean switcher locomotives based on clean, non-road diesel engine standards. The rule is designed to cut emissions from all types of diesel locomotives including line-haul, switcher and passenger rail as well as from a range of marine sources.

Phasing in tighter long-term standards for PM and NOx will begin in 2014 for marine diesel engines and in 2015 for locomotive engines. Advanced after-treatment

technology will apply to both types of engines. The EPA estimates a 90 percent PM reductions and 80 percent NOx reductions from Tier 4 engines compared to engines meeting the current Tier 2 standards.



Figure 54 Railpower's RP Series GenSet low-emission locomotive at Selkirk, NY

By 2030, this program is designed to reduce annual emissions of NOx nationally by about 800,000 tons and PM emissions by 27,000 tons; those emission reductions are expected to continue to increase beyond 2030 as fleet turnover largely is completed.

8.3 Land Use and Community Impacts

In New York State, land use planning authority fundamentally resides with local governments, while the state is charged with providing a transportation system that effectively serves all communities' transportation needs. The coordination of both land use planning and transportation will better link the two. Encouraging this coordination is paramount to the principles of "Smart Growth" that NYSDOT endorses by the Department through its planning and programming efforts.

New York State's focus upon sound planning is illustrated by:

- Technical assistance being provided to localities that are updating the transportation elements of their comprehensive plans. The Routes 202 and 303 sustainable development studies in the Hudson Valley are prime examples of applying new techniques to promote consensus community plans for the future.
- NYSDOT's "Smart Growth" initiative provides municipalities with direct support in their local planning efforts. As part of this initiative, the Department created a "Smart Planning" Web site that provides municipalities access to land use and transportation planning tools and programs supported by NYSDOT: <https://www.nysdot.gov/programs/smart-planning>.

- The Department is working closely with the Metropolitan Planning Organizations and other key partners on Transit Oriented Development (TODs) studies. These studies focus on mixed-use residential or commercial area development that is designed to maximize access to public transit and often incorporates features to encourage transit ridership. A TOD neighborhood usually has a center with a train station, metro station or bus stop surrounded by high-density development with progressively lower-density development spreading outward.
- Workshops and training seminars in context sensitive solutions principles have been conducted for NYSDOT staff and others. Context sensitive solution is a philosophy wherein safe transportation solutions, including rail transit, are designed in harmony with the community. Similarly, the Department provides training to its staff and to municipalities on integrated land use and transportation planning and related planning topics.

Land use is a critical factor in rail freight planning. In the downstate area, particularly within the New York metropolitan area, available land is scarce for any freight rail expansion. This poses a serious constraint to increasing rail freight downstate. Many existing yards and facilities are small, obsolete or located in remote or inaccessible locations. In addition, many formerly industrial-commercial neighborhoods in New York City (areas that once utilized rail service) have been rezoned to allow for residential development; Williamsburg and Green Point in Brooklyn are two of the most prominent neighborhoods. As a result, efforts to expand and even to maintain freight rail service in New York City and downstate New York will be difficult.

Upstate New York is also experiencing capacity issues, which in turn has led to numerous rail yard expansions. In the Buffalo area, Norfolk Southern rebuilt Bison Intermodal Yard and, similarly, CSX rebuilt Seneca Yard as a new intermodal terminal to allow for expansion. In the Capital District Region, Canadian Pacific is considering building a new intermodal yard as Kenwood Yard has reached capacity. The distinction in the upstate region, however, is that there is more available land for expansion and the railroads and industrial sites are not competing with residential development.

Finally, NYSDOT can affect land use patterns by encouraging communities to locate their business parks in areas where rail access is possible. This will encourage non-rail users to gain access to rail freight service, an option that is not available in many existing industrial parks. NYSDOT can accomplish this by working more closely with other state agencies, such as the Empire State Development Corporation, local IDAs and municipalities and Metropolitan Planning Organizations.

8.4 Congestion Mitigation

Transportation facilities of all types require the dedication of substantial acreage. The expansion of facilities to relieve congestion or accommodate increased volumes of freight can be extremely expensive, particularly for urban areas where property along major roads or rail tracks is fully utilized. In contrast, passenger rail service can often expand within existing rights-of-way or with minimal land acquisition. Rail is also less land-intensive than highways, airports and related facilities requiring less space to carry more passengers.

In many intercity corridors, highway demand is near capacity or beyond, and it is not financially or environmentally feasible to add capacity. Intercity rail passenger service currently provides congestion relief in corridors where capacity has already been exceeded, such as along the Northeast Corridor between Boston and Washington D.C. and the Empire Corridor between Albany and New York City. Intercity rail, thus, provides an alternative to building new highway capacity. Current investment in rail facilities and infrastructure will ensure rail capacity is protected to be available in the future to provide critical relief to highway and airway systems.

On the air transportation network, it is also environmentally and financially difficult to build additional airport capacity, especially in the New York metropolitan area. Intercity rail provides an alternative to short-haul air travel, such as in Amtrak's Northeast Corridor, relieving congestion at airports by eliminating the need for some short-distance flights.

Conclusion

The railroads serving the State of New York provide an additional transportation option for moving people and goods and contribute to improved air quality through a decrease in highway vehicle miles traveled and vehicle emissions (both carbon and greenhouse gas). Rail service cuts fuel consumption, leading to less dependence on foreign petroleum. Greater reliance on passenger and freight rail reduces the need for highway construction; such construction often causes the loss of economically, environmentally and historically valuable land, which, in turn, can contribute to inefficient land use patterns. With an enhanced focus on "Smart Growth," the Department is committed to transportation choices that support efficient land use patterns. In addition, with the limited opportunity to expand the transportation system, the abandoned right-of-way represents an extremely valuable resource for future mobility and potential economic development initiatives in an energy-constrained environment.

As stewards of our environment, it is critical that we continue to promote energy efficient transportation choices, especially rail transportation. In fact, railroads are three or more times more fuel efficient than trucks, in ton-miles per gallon, thus lowering cost to the shippers and customers.

CHAPTER 9 – ECONOMIC DEVELOPMENT

Overview

Railroads play a vital role in economic development initiatives that support, sustain and expand the state and national economies. They provide an additional transportation option and are a crucial factor in attracting new economic activities or retaining and expanding existing ones. New York's railroads serve as key cross border links, acting as international conduits for travel and commerce between New York and Canada, the state's most important trading partner. Cross-border travel and trade support the state's major economic activities that broaden and strengthen the state's overall economic base. More than 87.6 million tons of rail freight crossed the U.S.-Canada border in 2001 and forecasts indicate an increase to 153.5 million tons in 2020.²³

New York railroads are a vital transportation option because they can relieve congestion on highways, reduce energy consumption, concentrate development patterns and contribute to New York's overall mobility and economic climate. Clearly, New York's railroads are important to the state's economy. The New York State Rail Plan is being developed in recognition of this role and in close conjunction with the Governor's statewide economic development capital plan.

9.1 Economic Development and Transportation

In general terms, "economic development" comes from a process where the level of economic activity in an area is enhanced on a continuing, rather than a temporary, basis. Transportation investment as a tool in economic development may work in one of two ways. Transportation can make an area more attractive to new business or it can improve the conditions for existing business.

Well-focused transportation improvements and initiatives, coordinated with other efforts, can form a catalyst for economic growth. For example, the introduction of a rail line or highway may induce businesses to expand or to relocate in a region that otherwise may not have been considered.

While transportation access is not the only factor in siting decisions, the condition of the transportation system can greatly affect business costs, markets and overall competitiveness for attracting business investments. A successful business in an area with a good transportation system may attract its suppliers to locate in close proximity.

Optimal transportation conditions can reduce business operating costs and/or increase business productivity. When transportation system investments that reduce business operating costs or expand market size are made, affected businesses can become more competitive and capture a greater share of the market. Good intermodal transportation investments can lead to increased reliability of deliveries and, thus, reduce business operating costs by lowering the likelihood of production interruptions.

²³ Eastern Border Coalition Study - 2004

Investments in transportation can expand the available labor markets by allowing more people to easily access the facility. A larger labor pool allows a firm to grow, gaining access to employees with specialized skills. In addition, those same investments can increase business access to needed supplies, services and materials.

The quantity and quality of transportation infrastructure may attract new businesses and induce existing businesses in an area to stay or to expand. Transportation is a cost of doing business; locations that can effectively lower this cost may develop an advantage over regions unable to do the same.

In addition to the “big picture” impacts, transportation investments can save vehicle operation costs and travelers’ and carriers’ time, directly translating into business productivity and, consequently, into increased economic output. By decreasing congestion, increasing volume-to-capacity ratios and removing conditions that disrupt free flow of traffic, investment in transportation reduces transit time and increases reliability.

Transportation investment may help solidify an existing advantage or compensate for a disadvantage related to some other locational criteria, such as taxes or labor costs.²⁴

It is important to note that for shippers and small railroads to participate in and remain competitive in the rail freight industry today, costly infrastructure investments, such as rail yard expansions and rail switch and siding improvements, are often necessary. These costs can present an entry barrier to shippers, railroads and other potential customers and, thus, are often a deterrent to the continued use and expansion of rail freight transportation in New York State.

9.2 Programs that Support Economic Development

State Industrial Access Program (IAP)

The State Industrial Access Program has provided funding for necessary transportation improvements, including rail as of 1998, that facilitate economic development and job creation or retention. Project awards are made on a 60 percent grant, 40 percent interest-free loan basis, generally up to a maximum of \$1 million. The loan portion must be paid back to the state within five years after the acceptance of the project. This program has not been funded in the last two fiscal years.

A representative IAP project example is the \$2.7 million in State IAP funds used to construct tracks, install switches and purchase rail equipment to support rail freight operations at the Railex terminal. The terminal is presently served by two, 55-refrigerator car trains a week originating from the West Coast.

²⁴ NYS Economic Development Handbook, 2001

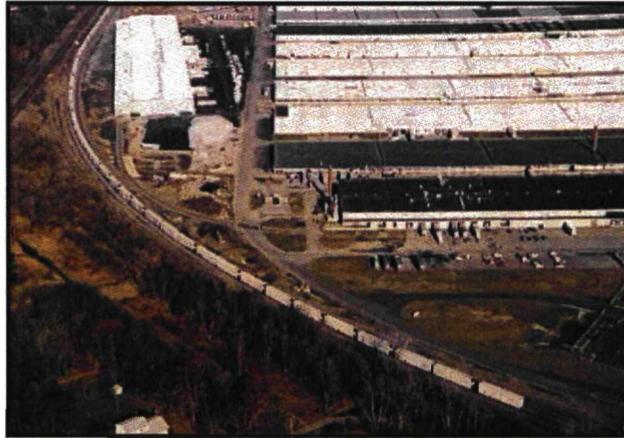


Figure 55 Railex Produce Dist. Center (upper left), Rotterdam Industrial Park

Last Mile Issues

This is an opportune time to consider redirecting the focus of the former IAP program or to develop a new initiative with an emphasis on the "Last Mile" issue. This issue was recognized as early as 1991 at the federal level under the Intermodal Surface Transportation Efficiency Act of 1991; this stated that connections among modes need to be seamless if each mode is to maximize the efficiencies of the global supply chains.

As a result of ISTEA, critical National Highway System Intermodal Connectors were identified along with their associated issues. Three major issues were identified: 1) the need for direct rail service to the dock of major national ports, which to some degree has been addressed, but many containers are still trucked on local streets to rail yards miles away from the ports, multiplying the number of truck trips; 2) "last mile" highway connections to ports and rail yards are typically on a local congested city street with traffic signals, poor turning radii, inadequate overhead clearances and narrow bridges that restrict efficient movements; and 3) Interstate interchanges were developed away from ports and rail intermodal terminals, thus the local road network became the link among international ports, rail intermodal facilities and the Interstate system.

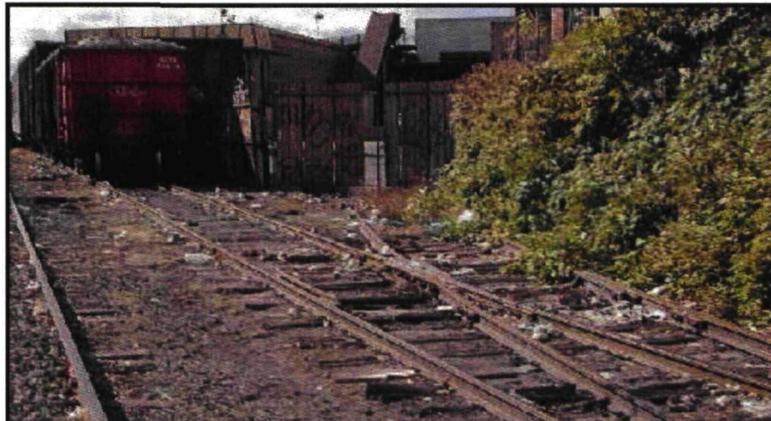


Figure 56 "Last Mile": Typical Industrial Siding, Bushwick Branch, Brooklyn

In addition to the intermodal connector aspect of the "last mile" issue, there is also the problem of substandard access for local firms and industrial parks, resulting in poor rail and trucking service to those facilities. Rail and truck carriers encounter their highest cost in the delivery and pickup of goods. In New York, substandard industrial access decreases the efficiency of truck and rail carriers, reducing the quality of service to shippers. An outmoded and obsolete rail infrastructure frequently discourages many shippers from using direct rail service to their facilities. A new initiative could potentially be used to begin addressing these "last mile" industrial access issues within the state, especially in an energy-constrained environment.

Multi-Modal Program

The State Multi-Modal Transportation Program provides reimbursements for authorized rail, port, airport, local highway and bridge projects. Eligible projects must have a public or freight transportation purpose and a minimum 10-year bondable service life.

The Multi-Modal program has funded transportation projects that facilitate economic development, such as the \$2.69 million rail improvement project at the Fort Drum U. S. Army base near Watertown completed in July 2006. The rail project helped to provide the Army with a more efficient way of deploying equipment. Under that project, 8,700 feet of track sidings were constructed. This allows approximately 100 additional rail cars to load, thus reducing loading time and increasing the deployment capability of the military base from three trains per week to five.

9.3 Rail Line Preservation, Revitalization and Strategic Enhancement

In 1975, there were seven Class I railroads serving New York State. By 2000, that number had decreased to just two. In 1975, there were 5,215 route miles of track operated by Class I railroads; that decreased to 2,290 route miles by 1996. Over a span of 20 years, slightly more than half of New York's Class I route mileage had been either abandoned or spun off to short lines. When a rail line is abandoned, it is critical that the integrity of the right-of-way be maintained. If an abandoned line ends up parceled off piece by piece, it would be extremely difficult, if not impossible, to reconstruct for a future transportation use. Given the limited opportunity to expand the highway system, an abandoned railroad right-of-way represents an extremely valuable resource for future mobility.

As a result of the decrease in route miles, many of the state's communities no longer have access to rail service. To counter the trend, since the 1970s, New York has implemented rail line preservation initiatives for retaining rail service, supporting economic development initiatives.

New York State has many successes in retaining rail freight service on lines that were faced with the cessation of service. In the mid-1980s, the Utica and Syracuse branches, originating out of Binghamton, were faced with abandonment by Conrail. The successful "negotiated solution" involved the state, counties and the railroad. The Utica and Syracuse branch lines were turned over to the counties and the local rail freight service was leased to a short line operator -- the New York, Susquehanna

& Western Railway. This lease arrangement also includes a Payment In Lieu of Taxes (PILOT) to the respective counties.

Another example is the Geneva "Cluster," a group of rail lines owned by Conrail that radiated out of the City of Geneva and that serve numerous large and small rail shippers. Similar to the Utica and Syracuse branch "negotiated solution," the Geneva "cluster" of rail lines was turned over to the Industrial Development Agencies of the respective counties. The local rail freight service was leased to a short line, the Finger Lakes Railway Corp., by a consortium of county IDAs.

The Southern Tier Extension

A notable success in rail line preservation and revitalization is the Southern Tier Extension, a 175-mile-long segment of the former Erie Railroad's main line that was acquired in 1999 by Norfolk Southern Railway Company after the Conrail breakup. Under Conrail, 95 miles of the 175 miles had been out of service since the 1980s and the rest had deferred maintenance for the prior 25 years. Conrail considered the line redundant and was prepared to abandon and salvage the Southern Tier Extension rail line by 1998.



Figure 57 Regional Rail System: Southern Tier Extension (in Red)

In the summer of 2000, New York State created a public authority to affect the sale/lease back and tax abatement of Norfolk Southern Railway Company's Southern Tier Extension Railroad. The counties of Chautauqua, Cattaraugus, Allegany and Steuben, along with the Seneca Nation, formed the Southern Tier Extension Railroad Authority (STERA). The sale/lease back arrangement saved Norfolk Southern \$ 1.2 million in taxes annually.

In February 2001, the Norfolk Southern Railroad transferred the Southern Tier Extension to STERA, which leased it back to Norfolk Southern. Norfolk Southern retained through train rights mostly for unit coal trains bypassing the congested Buffalo terminal and subleased the local freight operations to the Western New York and Pennsylvania Railroad. Gradually, the entire 175 miles of the Southern Tier Extension was reopened to rail traffic. Some sections of line reopened for service for the first time in more than 10 years with several local companies returning to shipping. In 2001, there were fewer than 75 carloads per year on only 50 miles of

rail. By 2006, rail freight traffic had increased to 54,000 carloads annually on 175 miles of rail.

In essence, the Southern Tier Extension had evolved from a rail line targeted to be abandoned by Conrail, to a highly functioning line serving numerous customers with significant economic development potential for the Southern Tier region.

The federal government, two states, six counties, local economic development agencies and the railroads invested in excess of \$38 million in public and private funds to upgrade and rehabilitate the Southern Tier Extension Railroad in six phases, which is scheduled to be completed by the end of 2009. The project included replacement of 15 miles of welded rail, 15,000 ties and ballast replacements, grade crossing repair, signal repairs, bridge repair and track surfacing. In addition, there was flood damage repair and mitigation work.

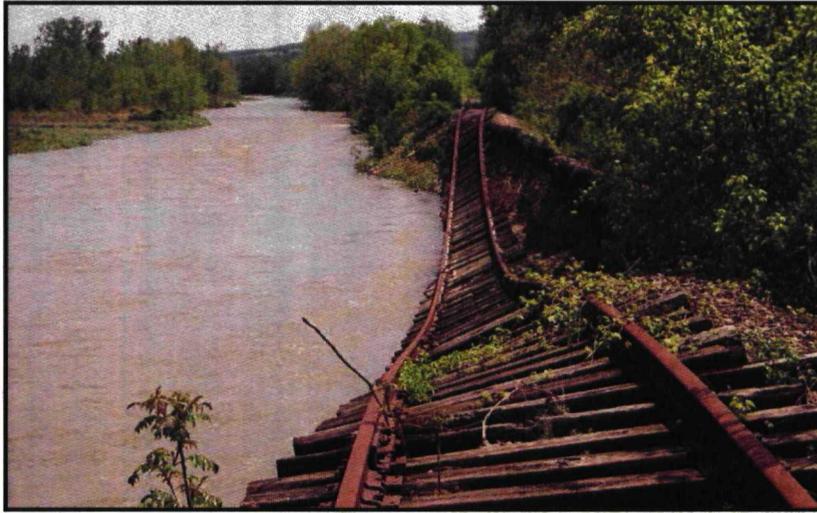


Figure 58 Southern Tier Extension Washout 2002

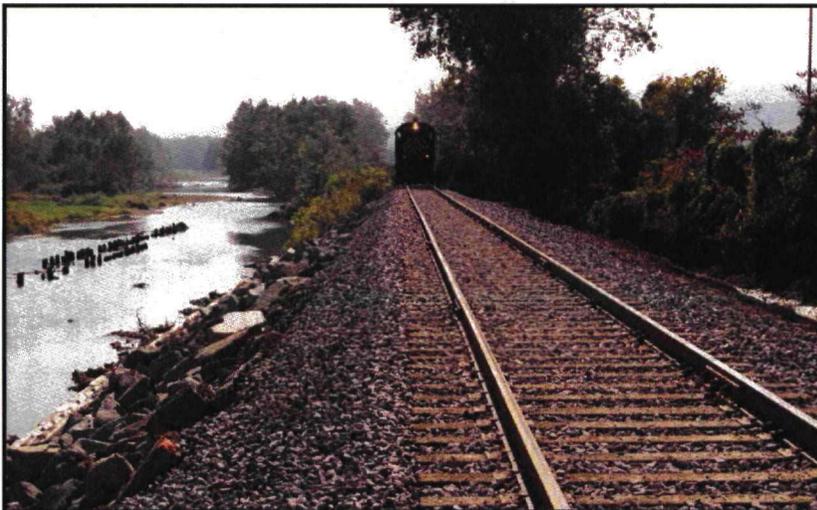


Figure 59 Southern Tier Extension - Restored 2002

The Southern Tier Extension Railroad is essential to the economy of southwestern New York in assisting in retaining and attracting manufacturing by providing an additional transportation option to this rural region. The Western New York & Pennsylvania, the rail freight operator of the Southern Tier Extension, has approximately 12 major on-line shippers.

The Southern Tier Extension Railroad is an important example for making the case for preserving abandoned railroad right-of-way for possible future rail service. Preserved or banked rail lines have the potential for supporting future economic initiatives while providing New York State communities with another potential transportation option other than highway.

In addition to the current abandoned and out-of-service rail lines, New York also has a number of both major and minor rail lines that are at risk of being abandoned or sold and segmented at some future point. It is estimated that 61 percent of the existing track route miles within the state are at risk currently. The Class I railroads are under pressure by their investors to improve their financial performance, which places more pressure on the railroads to abandon or spin off their under-performing assets. In addition, the burden of the railroad local property taxes is also hastening the casting-off of under-performing rail lines by the railroads as taxes often exceed revenues and maintenance cost for many low-volume rail lines.

Given the limited opportunity to expand the highway system, an abandoned railroad right-of-way represents an extremely valuable resource for future mobility. Thus, rail options are increasingly being considered for their ability to relieve congestion, concentrate development patterns and contribute to the overall mobility and healthy economic climate in this state.

Scenic and Tourist Railroads

There are about a dozen tourist and scenic railroads operating in New York State, mostly on a seasonal basis. Most of these small railroads operate over former abandoned rail lines that have been rehabilitated in the upstate region of the state. For many communities, these small railroads are important tourist attractions that provide local economic benefits in terms of jobs and other economic development objectives.

The Adirondack Scenic Railroad is the most notable example of New York's scenic and tourist railroads in terms of its length (141 miles) and because of the significant state funding commitment. Beginning in 2000, the state initiated a \$7 million program that substantially improved rail service on the entire Remsen to Lake Placid Travel Corridor. This included a \$2.5 million project to rehabilitate 11 miles of the corridor between Lake Placid Station and Saranac Lake Station. This segment was upgraded to Federal Railroad Administration Class II standards to allow for safe and comfortable operations for new excursion services. Also, \$4.5 million was provided for structure improvements along 108 miles of the Remsen/Lake Placid Travel Corridor, including track stabilization and upgrades, bridge improvements and restoration of four major washout areas between Remsen and Saranac Lake Station. These improvements allow for the movement of locomotives and passenger cars between the existing southern service area (Remsen to Carter Station) and the northern service area (Saranac Lake Station to Lake Placid). The southern portion of

the Adirondack Scenic had been operating since 1992 by a nonprofit organization. The Adirondack Scenic Railroad attracts more than 50,000 tourists annually, greatly adding to the region's economic vitality.

For more information on New York State's tourist and scenic railroads go to NYS DOT's Web site at the following address: <https://www.nysdot.gov/divisions/operating/opdm/passenger-rail/passenger-rail-service/historic-tourist-railroads>

9.4 Cross Border Trade

Over the past two decades, changes in international trade policy, and domestic and international changes in rail ownership structures, including restructuring of the rail system in the United States following deregulation, have generated changes in the nature of international rail transportation and shaped the issues confronting the Federal Rail Administration. Recent issues include implementation of the North American Free Trade Agreement (NAFTA), economic development and border rail transportation facilitation and safety issues along the United States/Mexico and United States/Canada borders. These changes and issues affect cross-border rail freight movements in New York State and underscore the importance for ongoing study and analysis of their impact on the state's economy.

Eastern Border Transportation Coalition Study

Cross-border rail freight movements were analyzed in the *Eastern Border Transportation Coalition (EBTC) Study in 2004*. The study found that cross-border rail freight movements in the EBTC region are significant. More than 87.6 million tons of rail freight crossed the U.S.-Canada border in 2001, approximately 62.5 percent of which originated, terminated or crossed the border within the EBTC region.



Figure 60 Eastern States Rail Border Crossing Points (EBTC Study 2004)

Forecasts indicate that more than 153.5 million tons of rail freight is projected to cross the entire U.S.-Canada border in 2020, approximately 65.1 percent of which is anticipated to originate, terminate or cross the border within the EBTC region. This increase is being driven by growth in the electronics, vehicles and precision goods industries, which are important sectors of the EBTC region's economy.

While cross-border freight movements are currently dominated by trucks that handle approximately 75 percent of U.S.-Canada trade, cross-border movements by rail are, and will continue to be, an important component of the transportation system and economic vitality of the United States and Canada.

Conclusions

A reliable, well-maintained rail transportation system is essential to having a competitive and sustainable economy for New York State, the region and nation. Rail transportation is increasingly being considered a preferred alternative due to its ability to relieve congestion, concentrate development patterns and, thus, offer a competitive advantage to its customers. However, in New York State, the substandard access to many freight facilities decreases the efficiency of truck and rail carriers, which reduces the quality of service to shippers. Initiatives to address the "last mile" access issue are essential to achieve the full benefits of rail service.

Preserving our railroad right-of-way, through efforts such as the now-thriving Southern Tier Extension, must continue to be a priority for New York State. Preservation of existing rail lines is important for future economic development initiatives, as well as providing our business communities with transportation options. Railroads are also important to our economy by supporting tourism, as well as essential rail freight service to rail dependent shippers. Clearly, our rail transportation system is an important factor in retaining economic competitiveness in this state.

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CHAPTER 10 – PLAN DEVELOPMENT AND OUTREACH PROCESS

10.1 The 2009 New York State Rail Plan

The 2009 New York State Rail Plan is a policy document that establishes the state's vision, goals and objectives for improving freight and intercity passenger rail service. The 2009 Plan also includes a long range capital investment program which will guide our investment decisions over the next 20 years, thus ensuring an improved and expanded rail transportation system within New York State. The 2009 Plan replaces the previous plan that was adopted in 1986.

The Passenger Rail Investment and Improvement Act of 2008 requires a state rail plan that includes an "identification of rail infrastructure issues within the state that reflects consultation with all relevant stakeholders." In anticipation of this legislation, NYSDOT coordinated this consultative process with a diverse group of stakeholders. Involvement of these groups provides invaluable input and an important influence on decision-making in the planning process.

10.2 Alignment with Other Plans

To help describe the issues affecting rail transportation across the state and develop consistent goals and strategies in the plan, NYSDOT considered the findings from other key planning documents. For example, the State Rail Plan is consistent with the principles and overall vision of *Strategies for a New Age: New York State's Transportation Master Plan for 2030* that was released in November 2006. This plan provides a long-term, intermodal vision of the state's future transportation system and provides policy level guidance to achieve that vision.

A second influential document is the *Intermodal Transportation Program Submission (2009– 2014)*. This document outlines resources needed to support our transportation infrastructure in New York State. The program identifies accomplishment-focused goals, including enhancing service frequency and improving on-time performance on key passenger rail corridors, and extending the service life of essential rail facilities. These goals are also reflected in the State Rail Plan.

10.3 Developing the State Rail Plan: Outreach and Collaboration

Many resources were consulted during the development of the State Rail Plan, including members of the railroad industry, metropolitan planning organizations, rail advocacy groups, elected officials, county and state government officials and other stakeholders. The purpose of this outreach effort was to ensure that NYSDOT had an informed and involved public; this was accomplished by providing many opportunities for input. Such input early in the process leads to a more enhanced planning document and, eventually, to better decision-making and more effective use of limited resources.

The stakeholders attended outreach sessions that were held before and during development of the State Rail Plan. A summary of the outreach sessions is highlighted below:

- December 11, 2007 - "Kickoff Meeting" - The initial introduction of the rail plan concept was discussed at this meeting with attendees from the railroad industry and NYSDOT. The purpose was to initiate development of a comprehensive state rail plan through discussion and early identification of long term needs, rail goals, strategies to meet those goals and a proposed vision statement. The NYU Wagner Rudin Center for Transportation Policy and Management assisted NYSDOT with the kickoff meeting and helped in preparing an outline of the results, including issues to address, concerns, trends, public benefits, roles of the state and goals and strategies. The contributions from this session were used in developing the initial draft Rail Plan.
- April 28, 2008 - Rail Industry Partners Workshop - The participants from the December Kickoff meeting were invited to a follow-up workshop to further refine the needs and critical goal setting for the future rail system in New York State. NYSDOT sent excerpts of the working rail plan draft to participants prior to the meeting.
- April 29, 2008 - Transportation Planning Partners Workshop - A complementary workshop to the April 28 session was held by NYSDOT with participants from the 13 Metropolitan Planning Organizations, nine Regional Planning Council/Boards in the state, the 11 NYSDOT Regional Planning & Program Managers and representatives from other planning and economic development groups. Similarly, the purpose of this workshop was to refine the needs and critical goal setting for the future rail system in New York State.
- The June 13, 2008, release of the draft State Rail Plan was followed by four public informational workshops in Buffalo (two meetings), Binghamton and New York City. The workshops were conducted using an interactive format with the NYU Wagner Rudin Center assisting NYSDOT in running the sessions. A mailing of 1200 invitations went to elected officials, railroad industry representatives, the Transportation Planning Partners, Metropolitan Planning Organizations, and other interested persons. Also, there were several media advisories announcing the workshops and advertisements through industry and transportation media outlets. More than 160 people attended the four workshops; each attendee was given an opportunity to contribute during the breakout sessions.

The purpose of the four public workshops was to present NYSDOT's New State Rail Plan and to obtain public input and reaction to the vision, goals and objectives, as well as to the strategies proposed in the plan. This was accomplished by formatting the sessions into small group discussions after a presentation by NYSDOT staff. The presentations provided the necessary foundation and grounds for the interactive workshop.



Figure 61 New York City Workshop participants discuss the Rail Plan

Each breakout group was accompanied by a facilitator and recorder to guide the discussion and to record the group discussion. During the small group discussions, participants responded to specific goals, objectives and strategies and were also given an opportunity to ask questions. The recorders at each table documented the “group memory” and this information was then used to create summaries of each discussion for subsequent report-outs to all workshop attendees. These summaries included comments that elicited strong agreement, areas of disagreement, identification of missing items, new ideas and areas of great concern.

The format of the sessions was highly constructive; as one participant noted, “My colleagues had a collective energy where ideas fostered more ideas. The process helped us keep the good ideas, and shelve the marginal ones.” (New York City workshop participant)

Highlights of the four sessions are outlined below:

Rail Plan Workshops: Buffalo, June 18 and July 8, 2008

There were 54 attendees at these sessions representing various organizations, including the railroad industry, rail passenger association, bicycle/pedestrian advocacy groups, transit groups, local economic development agencies, consulting firms, members of the press, elected officials, local and state government officials and private citizens. NYSDOT employees served as recorders, facilitators, expert resources and presenters during this half-day session. Overall, the attendees reacted positively to the Rail Plan. There was strong agreement with the Rail Plan’s contention that rail is an important part of the state’s transportation infrastructure and should be supported by the public and private sectors.



Figure 62 Buffalo Workshop participants listen to a Rail Plan presentation



Figure 63 NYSDOT Commissioner Glynn addresses the Buffalo Rail Plan Workshop

A second workshop was held in Buffalo on July 8th, to accommodate those organizations and individuals unable to attend the first workshop. At that workshop, NYSDOT Commissioner Astrid C. Glynn spoke about the importance of a healthy and vibrant passenger and freight rail system to serve the state and the regional economy of western New York.

One major concern emerging from these sessions was the issue of funding, more specifically, the lack of resources to fund the implementation of this Rail Plan due to the state's current fiscal situation. On this point, there was strong support for long-term tax policies that create incentives or at least remove disincentives to capital investment of rail infrastructure.

Many new ideas were presented, including a suggestion to form an advisory-type board comprised of government and private industry representatives who would guide implementation of the plan in a collaborative and accountable way. It was

argued that the various components of the Rail Plan were complex and diverse and would benefit from an advisory committee approach.

Finally, the attendees were asked to identify missing items from the Rail Plan. Several points were made, including a suggestion that the Rail Plan lacked initiatives that would excite the public. For example, the Rail Plan should focus not only on current technology, but also on next-generation technology that is employed in other countries, such as Maglev and electronic train systems. Also identified as missing was adequate emphasis on the need for connectivity among intercity rail passenger service and local transit services, particularly in Buffalo and Rochester.

Rail Plan Workshop: Binghamton, June 24, 2008

There were 52 attendees at this workshop, with representatives from the railroad industry, government agencies, local officials, advocacy groups and many other organizations as well as private citizens. The workshop format was consistent with the Buffalo meeting, with presentations and small group discussions. The Binghamton attendees were enthusiastic about the Rail Plan and the sharing of ideas to improve it.

Improvement to rail passenger service was a common theme, especially to the unserved Southern Tier region and other areas west of Albany. It was pointed out that passenger rail must be price competitive with the alternative modes in order to succeed. Participants also stressed the need for proper, cost-effective security of rail facilities and increased grade crossing safety awareness.

During the small group discussions, there was some disagreement over public subsidies of the railroad industry. One view held that other countries subsidize the railroads and that their survival was dependent on government funding. A contrasting view argued that railroads could be more profitable if they had robust marketing programs and were more customer-friendly. A second area of discussion involved railroad taxation. The participants stressed the need for reform of railroad taxation policies but cautioned that tax reform should avoid reducing revenue to government.



Figure 64 NYSDOT officials discuss workshop participants' comments and recommendations

Areas that were perceived as missing from the Rail Plan included rail tourism and the need to integrate transit oriented development with tourism and other markets. Also suggested was an audit of public rail investments every 10 years to determine the level of return on taxpayers' investments.

Rail Plan Workshop: New York City, July 10, 2008

There were 62 attendees at the workshop, with representation from many groups, including those who attended previous workshops. There was general agreement that the Rail Plan was needed and that the timing was right. Many of the same issues were raised at the Manhattan workshop, including the need to more aggressively market rail service, both freight and passenger. Also, it was noted that NYSDOT needed to be effective in dealing with the public's "not in my back yard" position on rail projects.



Figure 65 New York City Workshop participants consider Rail Plan information



Figure 66 New York City Workshop participants confer on the Rail Plan

The attendees asserted that the Rail Plan should more clearly state the importance of railroads making a profit. This is paramount to the railroads. Further, for the railroads to survive and to keep up with demand, additional main lines were deemed essential. Again, the attendees raised the question of financing this expansion, and the related question of how NYSDOT could advance this effort with a public that is not entirely supportive of rail.

During the workshop, many other issues were raised, such as the need for green rail yards, the ongoing concerns about the sharing of tracks between passenger and freight service and the problems associated with property tax policies. Although the workshop did not necessarily address solutions to these concerns, it did provide a forum for discussion and the exchange of ideas.

10.4 Public Comment Period

An important part of the planning process for developing the State Rail Plan is the public comment period for the draft. The purpose is to include the public in the planning process by making the draft available and encouraging input. This was accomplished by posting the draft on the Department's Web site with an e-comment form; by direct mail outreach; by having a toll-free line for comments; and by the workshops held by NYSDOT. A 30-day public comment period was offered, although comments were accepted after that period.

There were many comments received, including suggestions to broaden and to modify the goals and vision; identification of funding sources to reach certain goals; more specifics on how the vision could be achieved; and many requests to include specific transportation projects in the Rail Plan. Each comment was considered and incorporated as appropriate given the intent of the Rail Plan. Comments that pertained to rail transportation matters outside of the Rail Plan's intent may be considered in other planning venues.

The Rail Plan is intended to be a living document. As is the case with all comprehensive planning documents, more refinements and updates will occur periodically to reflect a changing environment. This continuous process will involve all interested stakeholders to ensure that many issues and problems are identified as well as possible solutions. The State Rail Plan is no exception and it is anticipated that an update will occur as needed, but at a minimum of every five years.

10.5 What's Next?

This 2009 State Rail Plan is not just for the New York State Department of Transportation, but is to serve as a blueprint to guide planning and investment for the entire state rail system for the next 20 years. It will help NYSDOT make more informed decisions involving capital investments in the state's rail infrastructure. It will serve as a springboard for system planning by the state and railroads for improved and/or expanded freight and passenger rail services. The 2009 State Rail Plan will also help our efforts in developing energy policy and advocating for intercity passenger rail service and rail freight at the state, regional and national levels. Clearly, the Rail Plan is an important document that will guide current and future efforts involving the capital program, rail infrastructure planning, rail transportation advocacy efforts and will informing the state's economic development decisions.

The State Rail Plan will provide guidance in developing rail capital projects and activities related to the State's Transportation Improvement Program (STIP). Those projects selected for inclusion in the STIP must address issues and concerns that the Rail Plan indicates are important. In addition, the Rail Plan will fulfill federal requirements stemming from the Passenger Rail Investment and Improvement Act; it requires states to have a comprehensive state rail plan that includes a long range investment program for current and future freight and passenger infrastructure in the states.

Other areas that will be guided by the Rail Plan include rail project selection for the ongoing NYS Rail Service Preservation Program and the Rebuild and Renew New York Transportation Bond Act of 2005. Together, these two state-funded capital investment programs provide up to \$47 million per year for needed rail and port infrastructure improvements. The selection criteria of these two programs will need to be consistent with the approved 2009 State Rail Plan.

NYS DOT will continue to be involved in rail-focused studies that help address many of the issues raised in the Rail Plan and identify potential solutions. Some of the ongoing studies are the Mohawk-Erie Multimodal Transportation Corridor Study, a market study of intercity passenger service by all modes; the Empire Corridor West Railroad Transportation Plan Study, a computer simulation modeling of the rail network that will identify deficiencies and recommended infrastructure and rail operational changes; and the Binghamton Intercity Passenger Rail Study, a feasibility review by Amtrak for connecting the Binghamton area to the New York City market. These are just a few examples of studies that will examine issues and concerns that have been raised in the Rail Plan.

NYS DOT will continue to pursue increased use of Public-Private Partnerships for rail projects in New York State. An example is the privatization of the Long Island Rail Road freight operations by New York & Atlantic Railway in May 1997. The railway serves a diverse customer base and shares track with the densest passenger system in the United States.

Public-Private Partnerships are not viewed as subsidies to railroads, but rather a mechanism that allows private entities to pay for private benefits and public entities to pay for the public benefits of a project.
(Association of American Railroads, June 2008)

To produce change at the national level, NYSDOT will continue to advocate for an increased federal government role in national rail policy and funding of intercity passenger and freight rail transportation improvements. At the state level, NYSDOT will support and participate in regional and state rail advocacy groups, such as the Empire Corridor Joint Users Working Group and the Railroads of New York, Inc. (RONY). All these efforts are critical to the continuation and revitalization of the rail system in New York State.

Conclusion

The many transportation changes affecting the rail system that have occurred since the last State Rail Plan was adopted in 1987 point to the need for a new State Rail Plan. This new Plan establishes the state's vision, goals and objectives for improving freight and intercity passenger rail service, and in doing so, establishes the policy

framework to shape the state's rail system and to help NYSDOT make more informed investment decisions.

To support and to inform the development of this new Rail Plan, NYSDOT implemented a multifaceted public involvement, consultation and outreach process that identified rail issues and captured many ideas and concepts from a wide range of participants and stakeholders. During a process over several months, participants and stakeholders could confer with NYSDOT on rail vision, goals, issues and strategies, providing valuable contribution to the development of this Rail Plan. This input was carefully reviewed and incorporated as appropriate, resulting in a responsive, comprehensive plan that reflects the needs and views of the citizens of New York State.

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CHAPTER 11 – RAIL FUNDING AND FINANCE OPTIONS

Investing in rail system improvements and expansion supports the critical role rail plays in the economy of the state and the nation. Unlike some other transportation modes, rail has not historically had a dedicated funding source at the federal level. At the state level, rail funding has been accomplished through small, ongoing programs and periodic public bond referendums. The constrained funding climate that exists at both the federal and state levels provides a significant challenge to finding adequate, stable and predictable investment sources for rail passenger and freight investments.

In addition, unique to intercity passenger and freight rail services is the mix of public-private operation that characterizes the mode: mostly private ownership of infrastructure and facilities with public use and benefits. The need to reauthorize surface transportation funding programs, on the heels of the recent Amtrak reauthorization, presents an opportunity to develop a national transportation policy for rail and to address the appropriate role of the federal government. It also provides an opportunity to address the related issues of how rail improvements should be funded, including innovative financing strategies and what roles the respective private and public sector entities, both federal and state, should play in financing rail system improvements.

11.1 New York State's Rail Capital Improvement Programs

New York State has a long history of investing in both freight and passenger rail transportation starting with the Transportation Capital Facilities Bond Act of 1967 through the Rebuild and Renew New York Transportation bond Act of 2005. State investments in the early 1970s funded rail improvements that allowed high-speed rail passenger service from New York City to Albany, the first high-speed service outside the Northeast Corridor. The state also invested in key rail freight improvements both upstate and downstate where there was a public benefit. More recently, the investment strategy has targeted improvements in key trade and travel corridors to increase the use of rail services, enhance intermodal transportation options and improve the overall efficiency of the transportation system.

Section 14-d of the New York State Transportation Law authorizes the Commissioner of transportation to enter into contracts with private corporations, other state agencies, public authorities, political subdivisions of the state and other states, among others entities listed, for the purpose of maintaining and improving rail transportation services. The State of New York generally provides state funds for rail capital improvements through the following four programs:

Rail Service Preservation Program

The Rail Service Preservation Program is a multiyear freight and passenger rail funding program enacted by the State Legislature with funds appropriated annually. The current program is a \$100 million program over five years. Beginning in State FY 2005-06, \$20 million is available annually for rail passenger and freight capital projects. Funding from this program is also used for the annual subsidy that NYSDOT pays Amtrak for operation of Adirondack service between Albany and Montreal. There is no local match requirement for this program.

Rebuild and Renew New York Transportation Bond Act of 2005

The \$2.9 billion Rebuild and Renew New York Transportation Bond Act of 2005 was passed by the voters of New York State in the November 2005 election. The Governor and the Legislature signed a Memorandum of Understanding that established the criteria for the use of these funds. The bond act allocates \$27 million each year for rail and port projects. The projects funded in the initial two years of the program were included in the MOU. For years three through five of the program, the MOU requires that NYSDOT develop formal procedures to solicit applications from eligible recipients, specifies application evaluation criteria and requires notification to the Governor and the Legislature of those projects which the Department proposes to fund. A 10 percent local match is required for projects funded by the bond program.

Industrial Access Program

The Industrial Access Program was established by Chapter 54 of the Laws of 1985 for the purpose of providing state funding for necessary road and bridge improvements which facilitate economic development and result in the creation and/or retention of jobs. Under the Laws of 1998, projects that provide rail access were made eligible. The Industrial Access Program is a combination 60 percent grant and 40 percent loan program with a specified repayment period based on the project cost. No new funding has been appropriated since SFY 2006-07.

Multi-Modal Program

The Multi-Modal Program is authorized by Section 14-k of NYS Transportation Law. This program provides funds for capital improvements to rail freight and passenger facilities, port facilities, aviation facilities, local roads and bridges and fixed ferry facilities. Projects funded from this program must be nominated by the Governor or members of the Legislature. NYSDOT evaluates nominated projects for compliance with the eligibility criteria but has no role in project selection. There is no requirement for a local match in this program.

11.2 Federal Funding Programs Available for Rail

Passenger Rail Investment and Improvement Act of 2008

The recently enacted Passenger Rail Investment and Improvement Act of 2008 authorizes a total of slightly more than \$13 billion over the next five years to Amtrak and it encourages the development of new and improved intercity rail passenger services. The act established a first-ever intercity passenger rail capital grant program for states. States are required to identify intercity passenger rail corridor improvement projects in their State Rail Plan to be eligible for the federal capital grant funding authorized by this act. The act authorizes \$1.9 billion for capital grants to states over five years, starting in 2009, for facilities and equipment necessary to provide new or improved intercity passenger rail. The act reserves \$2 million annually for states for small capital projects. Also under this act, \$325 million is authorized in "congestion grants" to be made available to Amtrak and states over the next five years, beginning in 2009, for high-priority rail corridors to increase capacity along certain lines to reduce congestion and facilitate ridership. The act establishes a

high speed rail corridor development program, with authorized funding of \$1.5 billion beginning in FY 2009. States and Amtrak can apply for grants for capital projects in high speed rail corridors.

The 2008 Act substantially increases the federal government's commitment to enhancing the nation's intercity rail passenger network. It is important to note that Congress must annually appropriate funding for these newly authorized programs.

The current federal surface transportation authorization, SAFETEA-LU, authorizes the federal surface transportation programs for highways, highway safety and transit through 2009. The following is a brief review of several programs available for rail investments contained in SAFETEA-LU as well as a description of the recently enacted tax credit for regional and short line railroads.

SAFETEA-LU Funding Programs

SAFETEA-LU is the latest transportation authorization act that continues many of the policies and programs originating in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), and the Transportation Equity Act for the 21st Century (TEA-21).

SAFETEA-LU continues to include the trademark of flexibility that has characterized the three authorization acts discussed above. This flexibility allows states and Metropolitan Planning Organizations to utilize federal funding from various sources for rail projects. Typically, federal funding for rail projects has come from Congestion Mitigation and Air Quality Improvement (CMAQ), Transportation Enhancements, Rail-Highway Crossing Program (the so-called Section 130 program), High Speed Rail Development and other programs. The following sections provide additional detail regarding these federal programs:

a. Congestion Mitigation and Air Quality Improvement

The Congestion Mitigation and Air Quality Improvement program funds projects that reduce traffic congestion and help meet federal Clean Air Act requirements. CMAQ funding may be used for freight and passenger rail projects that accomplish CMAQ goals. Funding is available for projects in areas that do not meet the National Ambient Air Quality Standards (e.g. non-attainment areas), in former non-attainment areas now in compliance (e.g. maintenance areas), and for projects outside air quality non-attainment areas where the air-quality benefits of the project accrue to the non-attainment area or maintenance area. The FFY 2008 dollar amount apportioned to New York State for this program is \$171 million.

b. Transportation Enhancements Program (TEP)

TEP funds support non-traditional, environmentally related transportation-related improvements, including rehabilitation and operation of historic transportation buildings, structures or facilities and preservation of abandoned railway corridors.

c. Section 130 Highway-Rail Grade Crossing Program

The Highway Safety Act of 1973 established the Rail-Highway Crossing Program, 23 USC 130. The goal of the Section 130 program is to provide federal support in efforts to reduce the incidence of accidents, injuries and

fatalities at public rail-highway crossings. States may utilize the Section 130 program, administered by the Federal Highway Administration, to improve railroad crossings using a variety of methods, including installation of warning devices, elimination of at-grade crossings by grade separation or by consolidation and closing of crossings.

A portion of the safety program funding is also eligible for elimination of crossing hazards should a state choose to use the funds for this purpose. Funds from other apportionment categories may also be used to improve crossing safety. For example, any repair, construction or reconstruction of roads and bridges affected by a project would be eligible under normal funding categories. A corridor approach to improving railroad crossing safety promotes greater efficiency in solving the problem and has been encouraged by FHWA.

SAFETEA-LU provided \$220 million nationwide per year FY 2005-2009 for Section 130 from the Highway Trust Fund. New York's apportionment for FFY 2008 is \$6.3 million.

d. *High Speed Rail Crossing Improvement Program*

FRA administers the High-Speed Rail Crossing Improvement Program, funded at \$50 million over the five-year period from FY 2005 to FY 2009. The program is intended to reduce or eliminate hazards at highway-rail grade crossings in designated high speed corridors. These funds are generally earmarked by Congress in the annual Transportation Appropriations bill.

e. *High Speed Rail Corridor Development*

SAFETEA-LU reauthorized the Swift Act and expanded eligible expenses from "planning" to "development" of high-speed rail corridors. The bill authorizes \$70 million annually for corridor development and \$30 million for high-speed rail technology improvements. These funds are generally earmarked by Congress in the annual Transportation Appropriations bill.

(Note: The Passenger Rail Investment and Improvement Act of 2008 changed the Swift Act back to "planning" and reduced the funding to \$30 million. It then recreated the High Speed Rail Corridor Development Program in a new section as an 80/20 state grant program funded at \$1.5 billion across the five years.)

f. *Capital Grants for Rail Line Relocation Projects*

SAFETEA-LU established this new grant program to provide financial assistance for rail line relocation or grade separation of track that is interfering with a community's motor vehicle traffic flow, its quality of life or its economic development. The program authorizes \$350 million for each of fiscal years 2006 through 2009. The rules established for this program were scheduled to be completed in October 2006, however, the rulemaking process has been delayed with no projected date of completion. Furthermore, Congress has yet to appropriate funds for this program.

g. *Credit Assistance Programs*

SAFETEA-LU authorizes two credit assistance (direct loans, loan guarantee) programs available for rail investments.

The Rail Rehabilitation and Improvement Financing (RRIF) program provides direct loans and loan guarantees to state and local governments, government sponsored authorities and corporations, railroads and joint ventures that include at least one railroad. Eligible projects include (1) acquisition, improvements or rehabilitation of intermodal or rail equipment or facilities (including tracks, components of tracks, bridges, yards, buildings and shops); (2) refinancing outstanding debt incurred for these purposes; or (3) development or establishment of new intermodal or railroad facilities. At the time of this writing, the future of the RRIF program is uncertain. Congress has failed to appropriate funds for this program.

The Transportation Infrastructure Finance and Innovation Act (TIFIA) provides credit assistance on flexible terms directly to public-private sponsors of major surface transportation projects to assist them in gaining access to capital markets. TIFIA can provide direct loans, loan guarantees and lines of credit to support up to 33 percent of a project's cost. The eligibility of projects for TIFIA has been expanded in SAFETEA-LU to include not only highway and capital transit projects, intercity bus and rail projects, and publicly owned intermodal freight transfer facilities, but also private freight rail facilities that provide public benefit to highway users, intermodal freight transfer facilities and access to these facilities. TIFIA is restricted to projects costing at least \$50 million (\$15 million for ITS projects).

SAFETEA-LU also established a new financial assistance program that provides up to \$15 billion in Private Activity Bonds for transportation infrastructure projects. This program enables loans for specific projects at a lower interest rate since the bond purchaser is not required to pay federal taxes on the incomes they receive. The eligible projects include privately owned-or-operated highway projects and rail-truck transfer facilities. However, New York would require state legislation to be able to utilize the SAFETEA-LU private activity bond provision.

h. *New Starts Program*

Federal Transit Administration funding for major commuter rail projects may be available under FTA's New Starts program. SAFETEA-LU authorized more than \$8 billion for New Starts, in order to support transit "guideway" capital investments, including commuter rail. FTA evaluates projects based upon "New Starts criteria," assigning ratings based upon cost-effectiveness, local financial commitment and transit supported land use.

i. *Surface Transportation Program*

Surface Transportation Program (STP) funds are also available for railroad relocations and consolidations, intermodal terminals and the acquisition of abandoned railroad rights-of-way.

Economic Development Administration Programs

The Economic Development Administration (EDA) of the Department of Commerce administers two project grants programs: Grants to Public Works and Economic Development Facilities and Economic Adjustment Assistance. They are intended, respectively, to promote long-term economic development in areas experiencing

substantial economic distress and to assist states and local interests with strategies to bring about a change in the economy focusing on areas under serious economic damage.

October 2004 Tax Credit

In October 2004, President Bush signed into law the American Jobs Creation Act of 2004, which includes provisions to provide a tax credit to help regional and short line railroads fund their infrastructure projects. *"The tax credit will provide small roads 50 cents for every dollar of qualifying track maintenance expenditures, such as cost to improve track, bridges and signals."* The tax credit is for a three-year period starting in 2005 and is capped by the number of miles owned or leased (by a Class II or Class III railroad) multiplied by \$350,000 for each of the three years.

11.3 Rail Funding Programs in Other States

Selected State Freight Programs

a. California

In November 2006, California voters approved Proposition 1B that authorized \$19.925 billion of state general obligation bonds for 16 separate transportation programs. Of these, the Trade Corridor Improvement Fund (TCIF) provides \$2.0 billion for infrastructure improvements along federally designated "Trade Corridors of National Significance" or along other corridors with a high volume of freight movement.

In April 2008, the California Transportation Commission adopted a TCIF program of \$3.088 billion for 79 projects; this included \$643 million for 21 rail-related projects. These TCIF funds are expected to leverage another \$925 million in non-state funds to produce a total rail-related investment of about \$1.6 billion. The TCIF projects include main line rail track and clearance improvements, rail port and yard improvements and a rail over rail flyover.

b. Ohio

The Ohio Rail Development Commission (ORDC) was created in 1994 as an independent commission within the Ohio Department of Transportation. ORDC's mission is "to plan, promote and implement the improved movement of goods and people faster and safer on the rail transportation network connecting Ohio to the nation and the world". The mission is to be accomplished through a "coordinated freight and passenger rail system which is an integral part of a seamless, intermodal transportation network contributing to Ohio's quality of life and economic development."

ORDC uses SAFETEA-LU funds allocated by the Ohio Department of Transportation to fund various programs that support economic development related to both rail passenger and freight transportation.²⁵

c. Pennsylvania

Pennsylvania Department of Transportation provides financial assistance for investment in rail freight infrastructure through the Rail Freight Assistance

²⁵ Ohio Rail Development Commission, www.dot.state.oh.us/Ohiorail/OVerview1.htm, March 2008

Program. The intent of the program is to (1) preserve essential rail freight service where economically feasible and (2) preserve or stimulate economic development through the generation of new or expanded rail services.²⁶ In March 2008, Pennsylvania allocated \$10.2 million for investment in freight infrastructure for the purpose of creating and maintaining jobs at expanding businesses.

d. *Wisconsin*

The Wisconsin Department of Transportation has two freight rail assistance programs. The Freight Rail Infrastructure Improvement Program (FRIIP) provides up to 100 percent loans for rail projects that connect and industry to the national rail system; makes improvements that enhance safety and intermodal freight movements; and develops the economy. The Freight Rail Preservation Program (FRPP) provides grants up to 80 percent of the cost to purchase abandoned rail lines in an effort to continue freight service, or for preservation for the opportunity for future service; and to rehabilitate facilities, such as tracks or bridges, on publicly owned rail lines.²⁷

e. *Michigan*

The Michigan Department of Transportation provides support to the freight industry through the Michigan Rail Loan Assistance Program (MiRLAP) and the Freight Economic Development Program. The MiRLAP is a loan program limited to \$1 million up to 90 percent of costs. The annual amount of loans is approximately \$3 million. The Economic Development Program offers financial assistance to transportation companies, private companies or local units of government in the development or expansion of facilities. The assistance is in the form of loans and/or grants up to 50 percent of the rail freight portion of the project.²⁸

Selected State Passenger Rail Programs

a. *California*

The California Department of Transportation supports three intercity Amtrak rail corridors: the *Pacific Surfliner* between San Diego, Los Angeles, Santa Barbara and San Luis Obispo; the *San Joaquin* between the Bay/Area/Sacramento, Fresno and Bakersfield; and the *Capitol Corridor* between San Jose, Oakland, Sacramento and Auburn. The state also supports a large network of state-supported connecting buses that are used to reach markets not directly served by these three rail corridors. In Amtrak during Fiscal Year 2007, these corridors handled 4,962,000 passengers, with state operating support totaling \$86.139 million.

Proposition 1B (noted above in Selected State Freight Programs) included the "Intercity Rail Improvement" program that provided \$400 million for intercity passenger rail improvement projects, of which \$125 million is reserved for acquisition of new rail cars. In February 2008, the California Transportation Commission adopted a \$400-million program of projects such as rail cars, and other high-priority track, signal, station and maintenance facility projects.

²⁶ Pennsylvania Department of Transportation, www.dot.state.pas.us/internet/Burueas/pdBRE, March 2008

²⁷ Wisconsin Department of Transportation, www.dot.sate.wi.us, March 2008

²⁸ Michigan Department of Transportation, www.michigan.gov, April 2008

b. *Pennsylvania*

The Pennsylvania Department of Transportation contracts with Amtrak for rail passenger service in the Philadelphia to Harrisburg corridor to complement services provided within the Commonwealth by Amtrak as part of its national rail passenger service network. Capital improvements and operating costs are supported under the Transit Assistance Programs offered by PennDOT.

c. *Wisconsin*

The Wisconsin Department of Transportation provides funding to Amtrak to operate the Hiawatha services currently offering seven round trips per day and is studying increasing the service to 10 round trips per day. WisDOT pays Amtrak \$8.5 million annually for these services.

11.4 Other Finance Options for Rail System Improvements

The use of tax credit bonds for intercity passenger rail may be considered as a future funding mechanism. In addition, the use of Public-Private Partnerships may provide another source of funding for rail improvements.

Public-Private Partnerships

“Public-Private Partnerships” (PPP) are contractual agreements formed between a public agency and private-sector entity that allow for greater private-sector participation in the delivery of transportation projects. Expanding the private-sector role allows the public agencies to tap private-sector technical, management and financial resources in new ways to achieve certain public agency objectives, such as greater cost and schedule certainty, supplementing in-house staff, innovative technology applications, specialized expertise or access to private capital.

To address future capacity issues from the growth in freight, the freight railroads have indicated an interest in participating in PPPs that provide tangible benefits for both the public and private sectors. As an example, CSXT has partnered on projects with Maryland and Virginia as well as New York State to the mutual benefit of all the parties. Some other examples of successful freight rail-related PPPs are:²⁹

- Alameda Corridor – a \$2 billion, 20-mile rail expressway connecting the Ports of Los Angeles and Long Beach with rail yards near downtown Los Angeles.
- Chicago Region Environmental and Transportation Efficiency Program (CREATE) – a \$1.5 billion project to improve rail freight connections involving the State of Illinois, City of Chicago and major freight and passenger rail serving the region.
- Heartland Corridor – a \$200 million multistate partnership with Norfolk Southern to increase the flow of goods between the East Coast and Chicago.
- Reno Trench – a multimillion-dollar project that separates trains running through downtown Reno, Nev., from motor vehicle traffic.

Other successful rail passenger PPP projects completed by states since 2000 include:

- South Florida Commuter Rail Upgrades, Florida.

²⁹ Association of American Railroads, “Public-Private Partnerships for Freight Rail Infrastructure Projects”, February 2008

- Portland MAX Airport Extension, Oregon.
- BART Oakland Airport Connector, California.

Conclusion

There are existing funding programs at the federal and state level that provide some opportunity for funding intercity passenger and freight rail projects. However, these programs are relatively small or narrowly focused while there is a rapidly growing need to increase investment in rail transportation. The enactment of the Passenger Rail Investment and Improvement Act of 2008 provides the multiyear authority for Amtrak and creates new federal funding programs for intercity passenger rail service. The act authorizes a rail passenger funding program for states to use to improve and expand passenger rail service, similar to federally funded programs for other transportation modes. Annual appropriations from Congress are needed to fund these programs.

Additional investment from both public and private sources will be needed in the future to address existing rail infrastructure needs and allow for growth in rail passenger and freight systems to serve the economy.

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CHAPTER 12 – STATEWIDE RAIL NEEDS AND INVESTMENT PROGRAM

12.1 Introduction

This chapter presents the results of the Department's comprehensive survey of the rail industry's capital needs for all railroads operating in New York State. It summarizes and describes the intercity passenger rail and freight rail capital needs over the next 20 years. This chapter also describes the proposed rail investment policy that will be used to address these intercity passenger and freight rail infrastructure needs in the future.

The earlier chapters of this report have outlined the importance of New York's rail passenger and freight system to the state's economy, mobility, energy savings and environmental quality. The state's rail network is also essential in supporting the regional and national transportation system and economy. New York is a bridge state, connecting New England to the rest of the nation, and provides connections for international trade and travel to/from Canada and the region's major seaport and airports.

Included in this chapter is the Long Range Service and Investment Program (LRSIP) required under the recently enacted Federal Passenger Rail Investment and Improvement Act of 2008. The LRSIP is a prerequisite for applying for new federal rail capital grant funding for improving passenger rail service that is authorized by the act.

Finally, a companion long range investment program for freight rail service in New York State is presented to guide the prioritization for the state's funding decisions for freight rail investments.

The combination of these recommended infrastructure investment programs address many of the goals, objectives and strategies for improving rail passenger and freight service in New York State that were presented in Chapter 1.

12.2 Summary of Rail Industry Needs

Introduction

To quantify the capital needs of the freight and intercity passenger rail industry in New York State, NYSDOT conducted a comprehensive Rail Needs Survey in 2008. The survey covered all railroads in the state, including freight and intercity passenger rail service. Rail Survey respondents were notified that inclusion of their capital needs that they identified as part of the survey did not constitute an endorsement or concurrence on the part of the New York State. Likewise, submission of rail needs would not in any manner obligate the respective railroad or rail service provider to undertake any specific project or improvement.

NYSDOT's survey effort did not include the capital plans of New York's two commuter railroads of the Metropolitan Transportation Authority. The Long Island Rail Road and Metro-North Commuter Railroad have exclusive capital programming responsibility for their respective rail system. The Department's Rail Needs Survey

identified those capital improvements deemed necessary to improve freight and intercity passenger rail services that may overlap with New York's commuter rail networks. Thus, certain commuter railroad projects that directly benefitted freight or intercity passenger rail services were included in the survey.

NYS DOT's rail needs survey asked the rail industry to categorize their capital projects into four basic programming categories:

- **Maintain Existing Conditions (Status Quo):** Capital investments required to maintain the existing condition level of a rail line into the future.
- **Develop State of Good Repair (SOGR):** Capital investments in this category are in addition to that estimated to maintain the Status Quo of the rail network. For the purposes of this rail needs assessment, a State of Good Repair means that rail system components and assets are:
 - In good condition for current and near-term anticipated rail traffic conditions;
 - Maintained to provide dependable and reliable operation; and
 - Replaced within the useable service life of that component.
- **System Enhancement:** Rail needs in this category include work to add, develop, increase or otherwise improve rail services and/or schedule reliability on the existing rail network without significantly altering the configuration of the rail network.
- **System Expansion:** Rail needs identified for this category would reconfigure the rail network to significantly improve capacity, service levels and/or access to customers.

The submissions to the 2008 NYS DOT Rail Needs Survey resulted in a wide range of planned and prospective capital investments for railroad infrastructure, facilities and expanded services across the state. A complete listing of individual rail needs submitted to the statewide survey is contained in Appendix A (separately bound). The following table summarizes these needs.

Summary of 20-year Rail Needs (2009 – 2028)

The results of the Rail Needs Survey identified a total of nearly \$10.7 billion for rail network, facility and equipment improvements and/or replacements over the next 20 years or an annual average annual expenditure of approximately \$535 million.

It should be noted that the rail needs survey includes a placeholder project to improve the movement of freight across New York Harbor, with a cost yet to be determined. The PANYNJ's Cross Harbor Freight Goods Movement Study will complete a Final Environmental Impact Study that will recommend a preferred alternative for improving freight movement across New York Harbor.

| 2008 NYSDOT Rail Needs Survey | | |
|--|---|--|
| Rail Need Category | 20-year Needs 2009-2028 \$ million | 5-year Needs 2009-2013 \$ million |
| Maintain Existing Conditions (Status Quo) | | |
| Short Line, Regional, and Terminal Railroads | 265 | 85 |
| Class I – Major Freight Railroads | 590 | 142 |
| Joint Freight – Intercity Passenger | 112 | 31 |
| Intercity Passenger (Commuter-Intercity) | 0 | 0 |
| Status Quo – Subtotal | 967 | 258 |
| Develop State Of Good Repair (SOGR) | | |
| Short Line, Regional, and Terminal Railroads | 409 | 258 |
| Class I – Major Freight Railroads | 730 | 301 |
| Joint Freight – Intercity Passenger | 193 | 76 |
| Intercity Passenger (Commuter-Intercity) | 50 | 20 |
| SOGR – Subtotal | 1,382 | 656 |
| Status Quo & SOGR Total | 2,349 | 914 |
| System Enhancement | | |
| Short Line, Regional, and Terminal Railroads | 612 | 282 |
| Class I – Major Freight Railroads | 917 | 163 |
| Joint Freight – Intercity Passenger | 258 | 201 |
| Intercity Passenger (Commuter-Intercity) | 569 | 383 |
| System Enhancement – Subtotal | 2,356 | 1,029 |
| System Expansion & Economic Development | | |
| Short Line, Regional, and Terminal Railroads | 426 | 227 |
| Class I – Major Freight Railroads | 414 | 221 |
| Joint Freight – Intercity Passenger | 1,034 | 264 |
| Intercity Passenger (Commuter-Intercity) | 4,120 | 2,180 |
| Expansion & Economic Develop – Subtotal | 5,994 | 2,892 |
| Enhancement & Expansion Total | 8,350 | 3,921 |
| Total by Railroad Class | | |
| Short Line, Regional, and Terminal Railroads | 1,712 | 853 |
| Class I – Major Freight Railroads | 2,651 | 828 |
| Joint Freight – Intercity Passenger | 1,597 | 572 |
| Intercity Passenger (Commuter-Intercity) | 4,739 | 2,583 |
| Total | 10,699 | 4,835 |
| <i>Note: Totals & Subtotals Rounded to nearest \$ million.</i> | | |

Figure 67 2008 NYSDOT Rail Needs Survey

20-Year Rail Needs By Improvement Category

Approximately 9 percent (\$967 million) of the total 20-year rail needs were projects that would maintain existing conditions (Status Quo) of the railroad system in New York State. This work consists mostly of track and railroad bridge rehabilitation and intensive capital maintenance activities. The following chart displays the share of needs by improvement category.

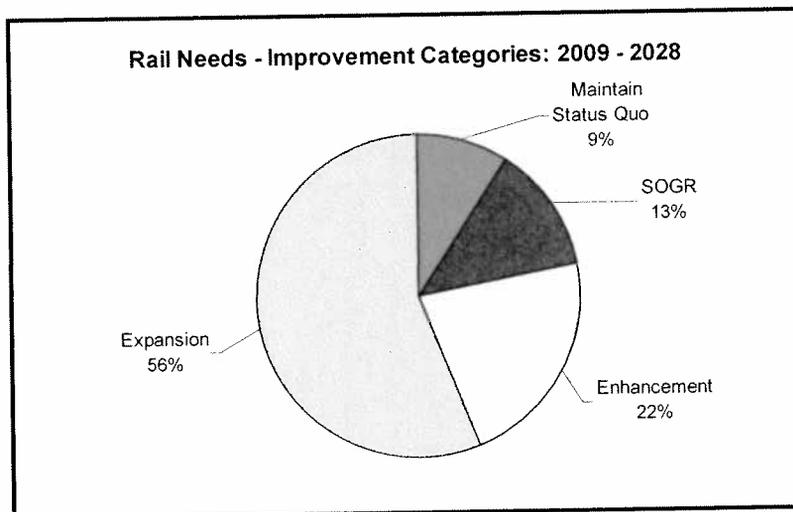


Figure 68 Rail Needs - Improvement Categories: 2009 - 2028

Over the next two decades, an additional \$1.382 billion, or 13 percent of total rail needs, was estimated to bring the railroad system to a State Of Good Repair for dependable and reliable freight and passenger rail services across the state. This work typically consists of extensive rail line rehabilitation, railroad bridge reconstruction or repair and infrastructure replacement to support high axle load rail cars weighing up to 286,000 pounds.

Together, the need to maintain existing conditions and reach a State Of Good Repair represents 22 percent of the total rail needs over the next 20 years. Completion of this work would create a rail network that was fully integrated with the national rail network and allow the unrestricted movement of the majority of the North American rail car fleet through the New York State.

The vast majority (78 percent) of the 20-year rail needs were for rail system enhancements and expansions that would provide the state with new and/or expanded rail services for freight goods movement or intercity passenger travel. There were nearly \$8.4 billion in rail capital improvements identified to provide railroad system improvements necessary to support new and/or more efficient rail transportation services.

Rail system enhancement improvements would include removal of clearance obstructions to enable the safe movement of high and/or wide standards freight cars, such as auto racks for the national transport of newly manufactured motor vehicles and for double stack container cars for both domestic and international freight goods movement. System expansion and economic development capital

needs would include the construction of additional main line track, the removal of rail network bottlenecks, signal system traffic capacity improvements, and additional rolling stock equipment to address the significant increases in both freight and intercity passenger train volumes expected over the next 20-years.

20-Year Rail Needs By Railroad Type

Approximately 41 percent of the \$10.7 billion total rail needs over the next 20 years was identified for the exclusive benefit of freight goods movement along the regional, short line, and major Class I railroads operating in New York State. The following chart displays the share of needs by railroad type.

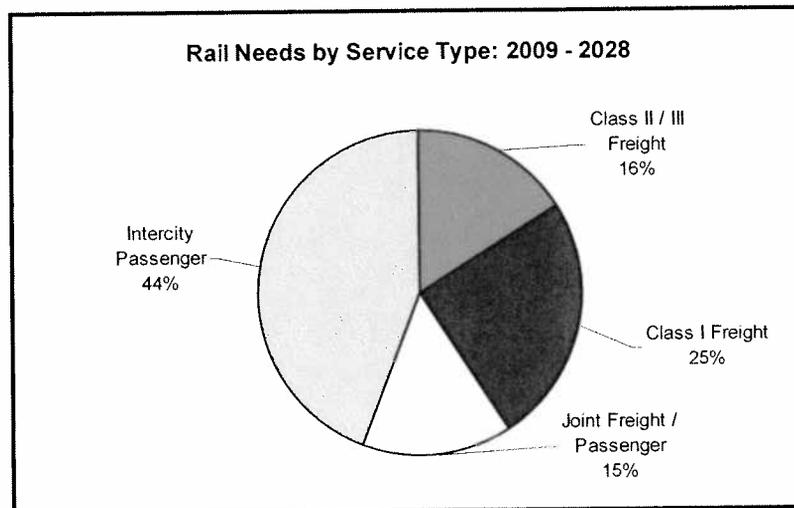


Figure 69 Rail Needs by Service Type: 2009 - 2028

In addition to freight rail improvements, the 20-year needs survey identified an additional \$1.6 billion in capital investments for the joint benefit of freight and intercity passenger rail services. This amount represents approximately 15 percent of the total future rail needs. These joint benefit projects would typically consist of rail infrastructure improvements that would benefit both freight and intercity passenger rail services operating over these lines.

The largest single category estimated at \$4.7 billion (44 percent of the 20-year rail needs) would be for the primary benefit of improving intercity passenger rail service in New York State. These projects include additional passenger train fleet equipment purchases, passenger station reconstructions, passenger information systems at stations, and rail infrastructure improvements, such as additional main line track and higher-speed passing sidings.

The rail needs survey also identified the need for passenger rail capital improvements to the Penn Station complex in New York City, which are expected to be part of the overall Moynihan Station project. The overall scale, scope, and specific improvements for the Moynihan Station project are currently in development, including those for the reuse of the Farley Post Office Building (Moynihan West). For the purposes of the 2008 Rail Needs Survey, cost estimates for near-term strategic passenger access improvements for the Moynihan Station

West project were included. The Needs Survey does not include the potential cost of the Moynihan Station East (existing Penn Station) project which is under development.

Near Term Rail Needs (2009–2013):

The 2008 NYSDOT Rail Needs Survey was developed to segment the results into various five-year increments. Of particular interest is the initial five-year period (2009–2013); this includes a total of approximately \$4.8 billion of combined rail freight and intercity passenger needs, or about \$967 million annually. The 2009–2013 period represents 45 percent of the total rail needs identified over the next 20 years.

Five-Year Rail Needs By Improvement Category

Approximately 5 percent (\$258 million) of the total 2009–2013 rail needs were projects that would maintain existing conditions (Status Quo) of the railroad system in New York State. This work consists mostly of track and railroad bridge rehabilitation and intensive capital maintenance activities.

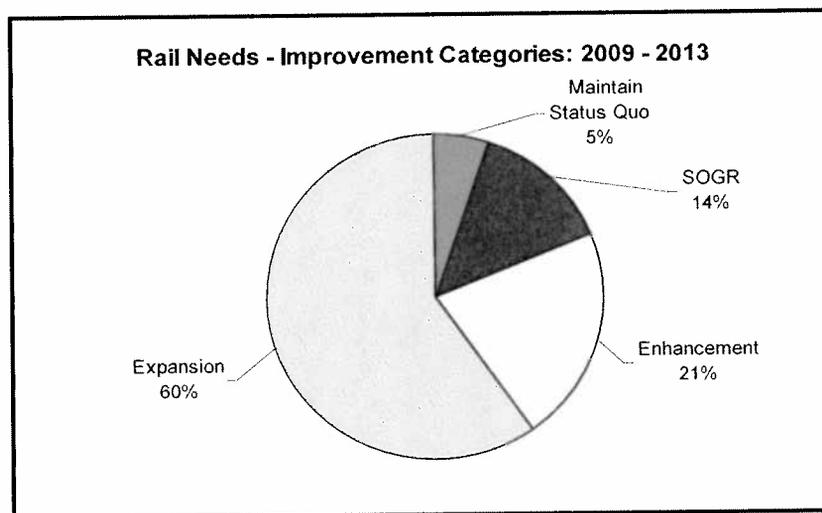


Figure 70 Rail Needs - Improvement Categories: 2009 - 2013

An additional \$656 million, or 14 percent of the total five-year rail needs, was estimated to address the most critical deficiencies of railroad system to begin to produce a State Of Good Repair for dependable and reliable freight and passenger rail services across the state. This work typically consists of extensive rail line rehabilitation, railroad bridge reconstruction or repair and infrastructure replacement to support high axle load rail cars weighing up to 286,000 pounds.

Together, rail needs to maintain the Status Quo and develop a State Of Good Repair represents 22 percent of the rail needs estimated for the 2009–2013 period. Completion of this work (\$914 million) in the next five years would begin to create a rail network in New York State that was fully integrated with the national rail network and allow the unrestricted movement of the majority of the North American rail car fleet through New York State.

The vast majority (78 percent) of the five-year rail needs were for rail system enhancements and expansions to provide new and/or expanded rail services for freight goods movement or intercity passenger travel. There were \$3.9 billion in rail capital improvements identified to provide railroad system improvements necessary to support new and/or more efficient rail transportation services.

Rail system enhancement improvements would include removal of clearance obstructions to enable the safe movement of high and/or wide standards freight cars, such as auto racks and for double stack container cars for both domestic and international freight goods movement. System expansion and economic development capital rail needs would include the construction of additional main line track, the removal of rail network bottlenecks, signal system traffic capacity improvements and additional rolling stock equipment to address the significant increases in both freight and intercity passenger train volumes expected over the next five years.

Five-Year Rail Needs By Railroad Type

For the near term period of 2009–2013, approximately 35 percent (\$1.7 billion) of the rail needs were for the exclusive benefit of freight goods movement along the regional, short line, and major railroads operating in New York State. An additional 12 percent (\$572 million) in capital improvements were identified for the joint benefit of freight and intercity passenger rail services. When combined, 47 percent (\$2.252 billion) of the five-year rail needs would benefit freight railroads either exclusively or with joint benefits shared by intercity passenger rail services.

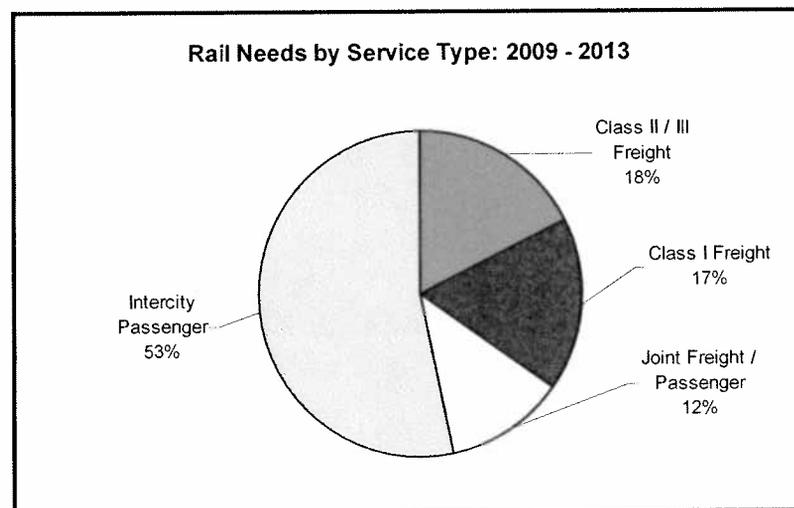


Figure 71 Rail Needs by Service Type: 2009 - 2013

By comparison, a nearly equal share of capital rail needs over the next five years period (\$2.583 billion, 53 percent), were identified for projects that primarily benefit the improvement of intercity passenger rail service in New York State. This work primarily includes efforts to replace the more than 30-year-old passenger train fleet equipment and provide strategic main line capacity improvements, such as additional passing sidings, modification of yard approach tracks, additional track crossovers,

and signal modifications. These near-term intercity passenger rail capital improvements are targeted to contribute to reduced train trip duration and improved on-time performance schedule reliability. Additional rail needs identified for intercity passenger rail services in the period 2009–2013 included station facility improvements at a number of locations in upstate New York.

12.3 Investment Policy for Funding Future Rail Needs

Recap of NYS Funding for Rail

New York State has a long history of providing public funding for rail infrastructure. Starting with the Rail Preservation Bond Act of 1974, the state has invested in maintaining its vital passenger and freight rail services. Through additional bond acts and state appropriations, New York provided essential funding to maintain, improve and expand rail services throughout the state. Significant state funding is also provided to support the capital and operating needs of the commuter rail services operated by the Metropolitan Transportation Authority.

Beginning in 2000, the state has annually provided funding for rail investments from the State Dedicated Fund, and also provided additional resources from the Rebuild and Renew New York Transportation Bond Act of 2005. But the additional rail funding from the 2005 Bond Act will end in 2010. State investment has resulted in rail improvements well above the level funded from just state aid. The ability of the state to strategically invest in rail passenger and freight infrastructure has often leveraged additional private investment and resulted in increased public benefits.

In addition to traditional transportation funding resources, new revenues generated from climate change policies provide an opportunity to implement rail projects that reduce energy use and green house gas emission and should be made available to improve rail passenger and freight services that have energy and emissions benefits.

Investment Policy

For the state rail system to serve the many previously described state and national roles, it must be maintained in a state of good repair and expanded where necessary. As the past has shown, leaving this funding responsibility to the private railroads alone may not result in the high-quality passenger and freight system, intermodal connectivity and public benefits that are needed for the state and nation to grow and compete in the 21st century global economy. The responsibility for funding the necessary investments for the rail system to serve both state and interstate commerce should be shared where appropriate among the private railroads that own much of the rail infrastructure and the various levels of government.

There needs to be a stable, predictable funding partnership consisting of the railroads, the federal government (including Amtrak) and state government to invest in rail transportation, just as there are similar partnerships for shared infrastructure investments in other modes of transportation such as highways, transit and aviation. New York State's investment policy supports a sharing of project funding among the partners in relation to benefits received. The share of funding for specific investments attributable to each of these partners will differ based on the specific type of investment and the weighting of project benefits between the public and the

railroad. The following section describing the Long Range Rail Service and Investment Program presents the recommended cost-sharing responsibilities for future passenger rail investments.

The enactment of the Federal Passenger Rail Investment and Improvement Act of 2008 is the beginning of an expanded federal role in this partnership, providing authorizations for a major infusion of federal funding for rail investments that benefit and improve passenger rail services. Consideration should be given to expanding federal investment in the future to freight rail improvements that benefit interstate commerce, the environment and the public. Funding infrastructure projects, such as the removal of network bottlenecks that impede interstate commerce, last mile access to ports of entry and constructing rail-truck intermodal transfer facilities, have these interstate commerce and public benefits.

Funding from government should be dedicated and predictable so that rail investments can be adequately included in transportation plans and programs. New federal funding programs contained in the Federal Passenger Rail Investment and Improvement Act is dependent upon annual appropriations from Congress. The expiration of the 2005 Rebuild and Renew New York Bond Act will leave state resources for rail also totally dependent only upon annual state appropriations. A dedicated, predictable funding source for future rail investments is needed at both the federal and state level. Continuing and supplementing state dedicated funding for rail will provide an advantage to New York in leveraging future federal aid as well as leveraging longer-term commitments from the private railroads.

Funding Future Investment Programs

The next sections in this chapter present the state's proposed long range investment programs separately for passenger rail service and freight rail transportation. The passenger rail investment program is intended to meet the requirements of the Federal Passenger Rail Investment and Improvement Act of 2008 and contains the information required for this investment program as specified in the act in Appendix B to this report. The Department has also developed a companion investment program for freight rail that is intended to describe, at a broad level, the state's investment priorities to maintain and to improve the state's freight rail system.

The current dependency on annual appropriations from government makes funding for longer-term rail investments difficult to predict. In addition, similar to capital program development for other modes, rail projects start as proposals and require planning and engineering during the early project development process in order to result in a specific project with detailed cost and schedule. Because of these factors, the following long range investment program for rail passenger service has greater funding specificity for the nearer-term projects than for those projects that are later in the funding period. Projects that are expected to be ready for construction in the near term and whose details are better known have greater funding specificity than projects that are less well defined in later years of the investment program.

The long range passenger and freight investment programs will be regularly updated as the state's investment priorities are refined, as project costs and schedules are better known and as funding commitments become more certain. State rail passenger and freight investment projects will continue to be selected through existing annual rail program processes.

In addition, the near-term projects in the investment program will be discussed with the appropriate Metropolitan Planning Organizations, the agencies responsible for planning and programming federal transportation funding in urbanized areas, as well as local officials outside metropolitan areas, and merged into the MPOs' federally required Transportation Improvement Program and State Transportation Improvement Program as appropriate.

Funding for Rail Passenger Operations

Funding for the operations of rail passenger service in New York and nationally has traditionally been the responsibility of Amtrak (which has been the sole provider of intercity passenger services in the state) through federal appropriations. This has included the Northeast Corridor, New York's Empire Service and long-distance trains traveling through New York State that have been part of Amtrak's basic core system. The one new service begun by the state, Adirondack service to Montreal, is the exception, with the state responsible for operating losses for this service. Vermont also subsidizes the Ethan Allen service, a portion of which serves New York.

This rail plan assumes that the tradition of Amtrak funding responsibility for operating costs continues for all existing services. The policy for new passenger rail service beyond existing may require a sharing of operating cost responsibility in the future. New York State's transportation entities will work with the federal government and Amtrak to further develop and implement any new cost sharing policy.

In light of increased federal funding for Amtrak and states in the Federal Passenger Rail Investment and Improvement Act, this rail plan anticipates that this new federal funding will result in the addition of quality passenger service to New York State's rail corridors. Should the outcome of Amtrak's consultative process require New York to fund, for the first time, some or all of the current operating shortfall for the Empire Corridor, the state would begin the development of any new services with a \$30 million to \$60 million deficit. This plan assumes some restructuring of current financial arrangements with Amtrak that meet the intent of the Act to improve the national and state rail network.

Beyond services operated by Amtrak, there are several tourist railroads operating in New York State. Funding the cost of operations of these rail services is the sole responsibility of the rail operating authority.

12.4 Long Range Service and Investment Program for Passenger Rail

This section describes the Long Range Service and Investment Program (LRSIP) required by the Federal Passenger Rail Investment and Improvement Act of 2008. These are the projects that the state expects to undertake or support, in whole or in part, to improve intercity passenger rail service in the future. The ultimate decisions on costs and funding of these projects is subject to future discussions with the involved rail partners. This investment program was developed from the comprehensive inventory of rail system needs described earlier in this report, specifically those projects that improve intercity rail passenger service.

The list of projects contained in the LRSIP is contained in Appendix B (separately bound). They include projects that primarily benefit intercity passenger rail service, as well as projects that benefit and/or improve rail infrastructure of the owning railroads, which can be either commuter railroads or freight railroads. The LRSIP projects will improve rail infrastructure including track, train control signals, and passenger stations to improve intercity passenger rail service across the state. These passenger rail investments address critical capacity and bottleneck constraints that will promote operational improvements that will increase the fluidity of the multipurpose rail network in New York State. The combination of these varied LRSIP projects will reduce delays and improve reliability, both expected to produce increased market demand for passenger rail service.

The detailed information required by federal law is presented for each near-term project, including:

- Project location, description and estimated cost;
- A description of public and private benefits; and
- A proposed project funding plan.

Anticipated future LRSIP projects are also shown, but without the project and funding detail. These details will be added to projects as they move closer to implementation.

The projects presented in the LRSIP often have many benefits, not only to the users and the public, but also to the owning railroad. Following are the initial cost-sharing assumptions used for the projects contained in the passenger rail investment program:

Projects that exclusively benefit intercity passenger rail service:

- Federal: 80 percent
- State/Amtrak or alternative intercity service provider: 20 percent

Projects that improve intercity passenger rail service and also benefit the host railroad:

- Host railroad: 50 percent
- Federal: 40 percent, (80 percent of government share)
- State: 10 percent, (20 percent of government share)

Projects that improve intercity passenger rail and also benefit higher-volume commuter rail service, with the cost-sharing based on share of facility usage:

- Commuter railroad: up to 75 percent
- Federal: 20 percent, (80 percent of non-commuter railroad share)
- State: 5 percent, (20 percent of non-commuter railroad share)

Passenger train rolling stock:

- Equipment replacement: Amtrak 100 percent
- Equipment expansion: Amtrak or alternative intercity service provider: 50 percent; Federal: 40 percent; State: 10 percent

The LRSIP should be considered a program of projects, in which the timing and allocation of state resources for individual projects may be revised from time to time in order to use available private and public funding efficiently and to implement critical projects as quickly as possible. Adjustments to the plan may be made in the

future based on the results of on-going planning studies including the Empire Corridor West Railroad Transportation Planning Study and the Binghamton Rail Passenger Service Study. In addition to these and other planning studies, decisions on future project needs and implementation should result from a cooperative information and data-sharing process between the state and its railroad partners.

The LRSIP is contained in Appendix B (separately bound) to the State Rail Plan in order to facilitate revision. The LRSIP is also slightly over-programmed in terms of state and federal funding, similar to long range investment programs for other modes. This is done given traditional capital program uncertainties and in order to have sufficient projects identified to utilize available funding in case certain projects are delayed.

The LRSIP in Appendix B presents project descriptions, benefits, and recommended funding allocations. Appendix B also includes a project location map depicting each proposed rail investment contained in the initial plan. A cost summary table of the LRSIP initiatives is included on the project location map.

12.5 Long Range Investment Program for Freight Rail

This plan contains the results of the survey of the rail industry's 20-year needs for freight-related infrastructure improvements and presents NYSDOT's rail investment strategy for freight rail infrastructure improvements. This investment strategy is intended as a guide for NYSDOT in selecting future freight projects.

Freight rail investments identified in the rail needs survey total more than \$4.3 billion over the next 20 years, not including many of the joint investments on freight lines that benefit both freight and passenger service. A significant portion of these freight needs, nearly \$2.0 billion, are for projects to achieve a state of good repair of the existing rail infrastructure, both for Short Line railroads and for the large Class I railroads. In addition to SOGR needs, many freight investments are presented, totaling approximately \$2.4 billion that would enhance or expand the existing rail infrastructure or construct new intermodal facilities. It should be noted that the cost for the Cross Harbor Freight Improvement project is not yet included in this freight investment program, pending completion of the Environmental Impact Statement by the Port Authority of New York and New Jersey and selection of a preferred alternative.

Traditionally, the state has assisted the freight railroads in improving their infrastructure where there was a clear public benefit. Projects that improve the railroads ability to divert truck traffic from overburdened highways, including removing vertical clearance restrictions, increasing the weight carrying ability of the railroads to increase efficiency, constructing rail/truck intermodal facilities, other projects that reduce vehicle emissions from highway traffic and increasing safety at rail-highway crossings all have public benefits. Further, many rail investments, such as sidings to serve a business or a port facility, have significant benefits to economic development. While many projects have public benefits, a portion of the freight investments will continue to primarily benefit the railroad and their stockholders and thus should be funded by the railroads alone.

This rail plan recommends that the state continue to support freight rail infrastructure improvements that have significant public benefits. Future federal

funding programs to increase investment in freight service should also be implemented.

Following are the general categories of freight rail infrastructure investments that have been identified and should be considered for funding through a partnership of the railroads and government over the next five years. These levels of investment, totaling \$520 million, should be considered as an initial guide for NYSDOT to use in the future, which would be adjusted based on a continuing review of specific rail system needs. NYSDOT supports increased state funding to help address these needs. This level of proposed investment, if achieved, would be double the level of state funding provided in the 2005-2010 multimodal capital program. These investments will help address many of the rail plan goals, objectives and strategies described in Chapter 1 of this report.

Short Line Railroad SOGR and Capacity Improvements – \$200 million. Track and bridge upgrades to accommodate 286,000-pound or heavier rail cars; clearance improvements for larger rail cars; track, tie and other infrastructure improvements to reach a state of good repair on these rail lines, improve last mile connections.

Class I Railroad SOGR and Capacity Improvements -- \$200 million. Removal of clearance and weight restrictions to accommodate larger and/or heavier rail cars; upgrade signal systems; passing sidings and other improvements to increase system efficiency; and address critical bottlenecks.

Construct Rail/Truck Intermodal Facilities – \$50 million. Construct at least three new intermodal facilities in the state.

Improve Rail-Highway Crossings – \$20 million. Upgrade safety equipment at rail-highway crossings across the state.

Conversion to Green Locomotive Fleet -- \$10 million. Assist in the purchase environmentally friendly locomotives for the state's Short Line railroads.

Economic Development/Market Expansion -- \$40 million. Construct new rail sidings and improve existing sidings to serve business and expand opportunities for rail freight use; improve last mile access to facilities and shippers.

Criteria to review potential freight rail investments:

- Improves efficiency, reliability and reduced energy use
- Increases capacity that increases freight usage and modal share
- Reduces highway congestion
- Increases intermodal options
- Increases competition
- Meets identified market demand
- Improves environmental conditions
- Increases safety

State rail freight investment projects will continue to be selected through existing annual rail programming processes. State investment in freight rail infrastructure improvements must have identified public benefits and should leverage additional investment by private railroads. Meeting these freight rail needs will require new or

expanded rail investment programs at the state and federal levels, as well as increased investment by the railroads.

APPENDIX

(separately bound)

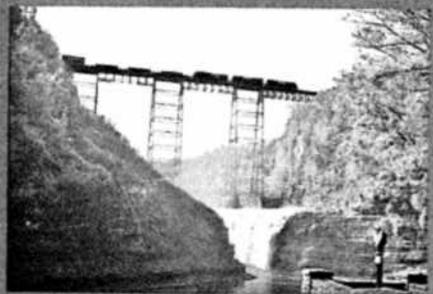
APPENDIX A: 2008 Rail Needs Survey

APPENDIX B: Long Range Service and Investment Program for Passenger Rail

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NEW YORK STATE RAIL PLAN



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APPENDIX A



New York State Department of Transportation | David A. Paterson, Governor | Astrid C. Glynn, Commissioner

APPENDIX A

APPENDIX A

2008 RAIL NEEDS SURVEY

Introduction

In an effort to quantify the capital needs of the freight and intercity passenger rail industry in New York State, NYSDOT conducted a comprehensive Rail Needs Survey in 2008. The survey covered all railroads in the state, including freight and intercity passenger rail service. Rail Survey respondents were notified that inclusion of their capital needs which they identified as part of the survey did not constitute an endorsement or concurrence on the part of the New York State. Likewise, submission of rail needs would not in any manner obligate the respective railroad or rail service provider to undertake any specific project or improvement.

NYSDOT's survey effort did not include the capital plans of New York's two commuter railroads of the Metropolitan Transportation Authority. The Long Island Rail Road and Metro-North Commuter Railroad have exclusive capital programming responsibility for their respective rail system. The Department's Rail Needs Survey identified those capital improvements deemed necessary to improve freight and intercity passenger rail services that may overlap with New York's commuter rail networks. Thus, certain commuter railroad projects that directly benefitted freight or intercity passenger rail services were included in the survey.

The submissions to the 2008 NYSDOT Rail Needs Survey resulted in a wide range of planned and prospective capital investments for railroad infrastructure, facilities, and expanded services across the state. Following is a complete listing of individual rail needs submitted to the statewide survey.

New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-------------------------------|--------------------|----------------------------------|----------------|-------------------------------------|--|---|------------------|---------|---------|---------|---------|
| Shops | ADRC | 2007 Bond Application | | Utica | Construct Equipment Repair Facility | This project will greatly reduce the cost of equipment maintenance to the Adirondack Scenic Railroad by transferring shop operations from the WW II facility on the former Griffiss AFB to Utica Yard. This project will improve efficiency by eliminating the movement of cars and equipment between Utica and Rome for repair, and having the repair personnel and the equipment at the ADRC's base of operations in Utica. | 1,247 | 1,247 | | | |
| Track Reconstruction | ADRC | NYS DOT | | Various | Return Out of Service segments of Remsen-Lake Placid Corridor to active service | | 15,000 | 5,000 | 5,000 | 5,000 | |
| Safety | ADRC | NYS DOT | | Franklin County | Highway-Railroad Grade Crossing Warning Devices | Improve safety of the motoring public. | 1,007 | 1,007 | | | |
| Tracks and Bridge | ADRC | NYS DOT | | Franklin County | Rail Service Expansion, all EXCEPT Signal | Expansion of ADRC service will increase ridership. | 9,150 | 9,150 | | | |
| Safety | ADRC | NYS DOT | | Hamilton and St. Lawrence Counties | Highway-Railroad Grade Crossing Warning Devices | Improve safety of the motoring public. | 0,355 | 0,355 | | | |
| Track and Bridge | ADRC | NYS DOT | | Hamilton and St. Lawrence Counties | Rail Service Expansion, all EXCEPT Signal | Expansion of ADRC service will increase ridership. | 8,143 | 8,143 | | | |
| Safety | ADRC | NYS DOT | | Snow Jct. to Lake Placid | Basic maintenance of grade crossing warning devices. | Improve safety of the motoring public. | 2,000 | 0,500 | 0,500 | 0,500 | 0,500 |
| Track and Bridge | ADRC | NYS DOT | | Snow Jct. to Lake Placid | Basic Track, B&B Maintenance, Ditching & Vegetation Control | Preserves the State's investment. | 8,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Equipment | ADRC | NYS DOT | | Snow Jct. to Lake Placid | Purchase Two Budd Dome rail cars for Excursion Service | Acquisition of this equipment will encourage more tourist ridership as viewing of the scenery, particularly in the fall, will be enhanced. | 0,800 | 0,800 | | | |
| | ADRC | | | | | | 45,702 | 28,202 | 7,500 | 7,500 | 2,500 |
| Station | Amtrak | New York State | | Penn Station, NYC | Mezzanine Station: Redevelopment of Farley Building. | Rail Passenger Access Infrastructure required for expansion into Farley Post Office Building includes: 1) Reactivation of Diagonal Loading Platform, 2) Extend West End Passenger Concourse south to 31st Street, 3) Connection of West End Passenger Concourse to Platforms 1 and 2, 4) Passenger Concourse connector from 31st Street to Penn Station. | 280,000 | 280,000 | TBD | | |
| Equipment - Fleet Replacement | Amtrak | Amtrak | | Empire Service | Empire Service Train Fleet Life-Cycle Replacement. | Life cycle replacement of 30+ year old rolling stock with approximately 18 Locomotives, 53 Coaches, and 16 Business Class / Food Service cars. Maintains Empire Service fleet up to current operating condition. [\$7.0 average per trainset] | 125,000 | 125,000 | | | |
| Station | Amtrak | Amtrak | | Empire Corridor West | Rehabilitate / Replace Passenger Stations at Buffalo-Denew, Rochester, Amsterdam, and Schenectady. | | 10,000 | 10,000 | | | |
| Station | Amtrak | Amtrak | | Dewey, Erie Co. | Rehabilitate / Replace Buffalo-Dewey Station | | 10,000 | 10,000 | | | |
| Station | Amtrak | Amtrak | | Rochester, Monroe Co. | Rehabilitate / Replace Rochester Station | | 10,000 | 10,000 | | | |
| Station | Amtrak | Amtrak | | Amsterdam, Montgomery Co. | Rehabilitate / Replace Amsterdam Station | | 10,000 | 10,000 | | | |
| Station | Amtrak | Amtrak | | Schenectady, Schenectady Co. | Rehabilitate / Replace Schenectady Station | | 10,000 | 10,000 | | | |
| Equipment - Fleet Expansion | Amtrak | NYS Senate Tf on HSR Action Plan | | Empire Service | Empire Service Train Fleet Expansion - Phase I. | Acquisition of three trainsets totaling 3 Locomotives, 9 Coaches, and 3 Business Class / Food Service cars to accommodate Amtrak service expansion between Niagara Falls, Albany-Rensselaer, and New York City. [\$70 million per trainset] | 21,000 | 21,000 | | | |
| Equipment - Rail Cars | Amtrak | NYS Senate Tf on HSR Action Plan | | Empire Corridor South (Hudson Line) | Acquire 10 Cab-Control Cars for Push-Pull Service: Albany-Rensselaer to NYC | Ten passenger coach cars with Cab Control would permit Empire Service trains to operate in a push-pull mode, thus allowing the trains to turn in Penn Station and not be required to turn to Somerville Yard and back. This will improve the reliability of train service and may permit added frequencies on the Empire Corridor. This will also reduce congestion in the East River Tunnels. | 33,037 | 33,037 | | | |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-----------------------------|--------------------|----------------------------------|----------------|---|--|---|------------------|---------|-----------|---------|---------|
| Equipment & Operations | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South Hudson (Line) | New Operations Plan and acquire 6 new tilting trainsets. Albany-Rensselaer to NYC | With the implementation of further incremental rail improvements, a new rail operations plan will be developed for the south corridor covering intercity, commuter, and freight service. Most importantly, six new tilting trainsets will be acquired. These New York cars will permit higher speed operations with additional amenities. Service reliability and frequency will increase while travel times will be reduced. | 481.022 | 481.022 | | | |
| Equipment - Rail Cars | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South Hudson (Line) | Acquire 20 Tilted Trainsets for 110 MPH Operation. Albany-Rensselaer to NYC | This project acquires 20 new 110 MPH high speed tilting trains dedicated to the Empire Corridor, powered by fossil fuel locomotives and equipped for electric operation in and out of New York, with active tilting, radial steering, and high performance acceleration and braking. These characteristics will allow the trains to take maximum advantage of the infrastructure improvements described herein. | 1,069.552 | | 1,069.552 | | |
| Equipment & Infrastructure | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South Hudson (Line) | Added Excess Service & 110 mph Rail Infrastructure. Albany-Rensselaer to NYC | The addition of two non-stop round trips will between New York City and Albany, with incremental infrastructure improvements to upgrade the track between New York City and Albany to exceed ERA Class 3, will increase the maximum speed to 110 mph, improve line performance and reduce travel time. | 565.598 | 565.598 | | | |
| Equipment - Rail Cars | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South Hudson (Line) | New rail cars. Albany-Rensselaer to NYC | Empire Corridor West. Amtrak service expansion Niagara Falls to Albany-Rensselaer. | 266.941 | 266.941 | | | |
| Equipment - Rail Cars | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor West | New rail cars. Albany-Rensselaer to Niagara Falls | Empire Corridor West. Amtrak service expansion Niagara Falls to Albany-Rensselaer. | 229.520 | 229.520 | | | |
| Equipment - Rail Cars | Amtrak | Amtrak | | Empire Service | Purchase train equipment to replace and increase operating fleet to operate Empire Service in order to support increased ridership demand. | Greater operating flexibility, increase reliability of service and increased customer satisfaction. | 200.000 | | | 200.000 | |
| Equipment - Train Servicing | Amtrak | Amtrak | | Somerset Yard, Rensselaer, Buffalo, Niagara Falls | Train Watering Cabinets: Identify and replace existing watering cabinets at Amtrak train servicing facilities. | Rehabilitates train servicing facilities to improve fleet reliability and reduction in train maintenance. | 5,000 | 5,000 | | | |
| Station | Amtrak | Amtrak | | Various Owners and Locations | Passenger Station: State Of Good Repair and ADA compliance improvements or replacement of the current eleven (11) Amtrak non-owned or non-operated facilities. | Non-Owned / Non-Operated Stations: Includes, but is not limited to parking, access, platform upgrades and repairs, lighting and building infrastructure. | 45,000 | 15,000 | 15,000 | 15,000 | |
| Information System | Amtrak | Amtrak | | All Stations served by Amtrak | Purchase and installation of real-time train operating status display and audio information system at all locations served by Amtrak trains. | Enhance communication to public and passengers on train operating status. | 4,000 | 4,000 | | | |
| Maintenance Facilities | Amtrak | Amtrak | | Niagara Falls Maintenance Facility | Design and build an indoor train shed for servicing trains in Niagara Falls, NY | Enhances train servicing capabilities and eliminates current outdoor operation. Increases fleet maintenance and reliability. | 8,000 | 8,000 | | | |
| Maintenance Facilities | Amtrak | Amtrak | | Rensselaer Maintenance Facility | Design and build a separate Painting facility for train equipment. | Enhances train servicing capabilities. | 5,000 | 5,000 | | | |
| Maintenance Facilities | Amtrak | Amtrak | | Rensselaer Maintenance Facility | Purchase crane to move train equipment at the Rensselaer maintenance facility. | Eliminates current contracting to perform this function, enhances train servicing capabilities. | 1,500 | 1,500 | | | |
| Maintenance Facilities | Amtrak | Amtrak | | Rensselaer Maintenance Facility | Train Maintenance Facility Expansion | Extend existing building in order to close doors and maintain / repair equipment during the winter. Project includes track reconfiguration and wash rack overhaul in order to complete project. | 10,000 | 10,000 | | | |
| Maintenance Facilities | Amtrak | NYS Senate TF on HSR Action Plan | | Rensselaer Maintenance Facility | Upgrades and Improvements | This recommendation includes upgrades and improvements to the existing Rensselaer Maintenance Facility building and yard to support maintenance of the new 110 MPH high speed train fleet discussed elsewhere. | 33,588 | | 33,588 | | |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|----------------------------|--------------------|----------------------------------|-----------------|-------------------------------------|--|---|------------------|---------|---------|---------|---------|
| Station | Amtrak | NYS Senate TF on HSR Action Plan | City of Buffalo | Buffalo, Erie Co. | Buffalo-Exchange Street Station: Construct New Station with High Level Platforms, Elevator and Pedestrian Bridge | Construct new downtown Buffalo Station with high-level platform on a site to be determined in coordination with the City of Buffalo, Niagara Frontier Transportation Authority, New York State, CTA, and Amtrak. The high-level platform will cut station dwell time by approximately half. | 22,392 | 22,392 | | | |
| Station | Amtrak | NYS Senate TF on HSR Action Plan | | Depew, Erie Co. | Buffalo-Depew Station: Construct High-Level Platforms, Elevator and Pedestrian Bridge | This first phase of this project installs a new westbound low-level platform with overhead passenger concourse and elevator. The second phase installs either new high-level side platforms at the current location or realign the tracks and construct a new center island high-level platform with overhead passenger concourse and elevator. | 7,837 | 7,837 | | | |
| Station - Parking | Amtrak | NYS Senate TF on HSR Action Plan | | Rhinecliff, Dutchess Co. | Rhinecliff Station: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 6,607 | 6,607 | | | |
| Station - Parking | Amtrak | Amtrak | | Rhinecliff, Dutchess Co. | Study, design and build a parking garage over current parking lot. | Public - alleviate current parking congestion and allow for future ridership increase. | 5,000 | 5,000 | | | |
| Station - Parking | Amtrak | NYS Senate TF on HSR Action Plan | CENTRO | Syracuse, Onondaga Co. | Syracuse Station: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 5,598 | 5,598 | | | |
| Station - Parking | Amtrak | NYS Senate TF on HSR Action Plan | MNCR | Westchester County | Croton & Yonkers: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 13,200 | 13,200 | | | |
| Station - Parking | Amtrak | NYS Senate TF on HSR Action Plan | CDTA | Albany-Rensselaer | Rensselaer Rail Station: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 11,196 | 11,196 | | | |
| Station: Info Systems | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South (Hudson Line) | Upgrade Passenger Information Systems: Albany-Rensselaer to NYC | Modernize the passenger reservation and information systems to expedite determination of correct fare, purchase of tickets, and determination of train status. | 5,286 | 5,286 | | | |
| Station: Info Systems | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor West | Upgrade Passenger Information Systems: Albany-Rensselaer to Niagara Falls | Modernize the passenger reservation and information systems to expedite determination of correct fare, purchase of tickets, and determination of train status. | 10,076 | 10,076 | | | |
| Station: Intermodal Access | Amtrak | NYS Senate TF on HSR Action Plan | CDTA | Albany-Rensselaer | Rensselaer: Station Facility Access & Connections | This project provides improved access and intermodal connection to station facilities for airport, transit, intercity bus, taxi, bicycles and pedestrian as well as signage and roadway improvements to improve connectivity. | 5,598 | 5,598 | | | |
| Station: Intermodal Access | Amtrak | NYS Senate TF on HSR Action Plan | | Depew, Erie Co. | Buffalo-Depew: Station Facility Access & Connections | This project provides improved access and intermodal connection to station facilities for airport, transit, intercity bus, taxi, bicycles and pedestrian as well as signage and roadway improvements to improve connectivity. | 3,359 | 3,359 | | | |
| Station: Intermodal Access | Amtrak | NYS Senate TF on HSR Action Plan | City of Buffalo | Depew, Erie Co. | Buffalo-Exchange Street: Station Facility Access & Connections | This project provides improved access and intermodal connection to station facilities for airport, transit, intercity bus, taxi, bicycles and pedestrian as well as signage and roadway improvements to improve connectivity. | 5,598 | 5,598 | | | |
| Station: Intermodal Access | Amtrak | NYS Senate TF on HSR Action Plan | CENTRO | Syracuse, Onondaga Co. | Syracuse: Station Facility Access/Connections | This project provides improved access and intermodal connection to station facilities for airport, transit, intercity bus, taxi, bicycles and pedestrian as well as signage and roadway improvements to improve connectivity. | 5,598 | 5,598 | | | |
| Station: Intermodal Access | Amtrak | NYS Senate TF on HSR Action Plan | MNCR | Westchester County | Croton & Yonkers: Station Facility Access/Connections | This project provides improved access and intermodal connection to station facilities for airport, transit, intercity bus, taxi, bicycles and pedestrian as well as signage and roadway improvements to improve connectivity. | 6,600 | 6,600 | | | |
| Station: Parking | Amtrak | NYS Senate TF on HSR Action Plan | | Depew, Erie Co. | Buffalo-Depew: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 5,598 | 5,598 | | | |

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**New York State Department of Transportation
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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2034-38 |
|--------------------------------------|--------------------|----------------------------------|----------------|-------------------------------------|---|--|------------------|---------|---------|---------|---------|
| Station: Parking | Amtrak | NYS Senate TF on HSR Action Plan | | Hudson, Columbia Co. | Hudson Station: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 4,000 | | 4,000 | | |
| Station: Parking & Intermodal Access | Amtrak | NYS Senate TF on HSR Action Plan | | Rochester, Monroe Co. | Rochester: Station Facility Access/Connections | This project provides improved access and intermodal connection to station facilities for airport transit, intercity bus, taxi, bicycles and pedestrian as well as signage and roadway improvements to improve connectivity. | 5,598 | | 5,598 | | |
| Station: Platforms | Amtrak | NYS Senate TF on HSR Action Plan | | Amsterdam, Montgomery Co. | Amsterdam Station: Construct Hi-Level Center Platform, Elevator and Pedestrian Bridge | The first phase of this project installs a new eastbound low-level platform with overhead passenger access and elevator. The second phase installs a new center island high-level platform with overhead passenger concourse and elevator, and configures the platform to allow a freight bypass track. | 7,837 | | 7,837 | | |
| Station: Platforms | Amtrak | NYSDOT | | Rhinecliff, Dutchess Co. | Rhinecliff Station: Construct High Level Platforms | Replace existing low-level passenger platforms with high-level. Work includes new canopies, stairs, ADA compliant access to overhead station. | 6,000 | | 6,000 | | |
| Station: Platforms | Amtrak | NYS Senate TF on HSR Action Plan | Oneida County | Rome, Oneida Co. | Rome Station: Construct Hi-Level Center Platform with freight bypass | Construct new center island high-level platform at the current location with an elevator using the existing (subsurface) pedestrian concourse. In addition, re-route the freight trains to the north on the existing right of way on a new alignment. The addition of the high-level platform will cut the station dwell time by approximately half. | 5,598 | | 5,598 | | |
| Station: Platforms | Amtrak | NYS Senate TF on HSR Action Plan | CENTRO | Syracuse, Oneida Co. | Syracuse Station: Construct Hi-Level Platform Tk #1, Elevator and Pedestrian Bridge | This first phase of this project installs a new westbound low-level platform with overhead passenger concourse and elevators. The second phase installs a new high-level platform with overhead passenger concourse and elevator, and configures the platform to allow a freight bypass track. | 12,316 | | 12,316 | | |
| Station: Platforms | Amtrak | NYS Senate TF on HSR Action Plan | Oneida County | Utica, Oneida Co. | Utica Station: Construct Hi-Level Platforms Tk #1 and Tk #2 with freight bypass | Construct new high-level side platforms at the current location or realign the tracks and construct a new center island high-level platform. Either of these improvements includes use of the present overhead passenger concourse and elevators. In addition, re-route the freight trains onto the old Utica Station bypass track north of the existing alignment. Adding high-level platforms will cut station dwell time by approximately half. | 8,957 | | 8,957 | | |
| Station: Ticketing | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South (Hudson Line) | Upgrade Passenger Ticket Vending Machines: Albany-Rensselaer to NYC | Update the passenger ticket kiosks at each station to interface with and access the features of the upgraded passenger information system. | 2,643 | | 2,643 | | |
| Station: Ticketing | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor West | Upgrade Passenger Ticket Vending Machines: Albany-Rensselaer to Niagara Falls | Update the passenger ticket kiosks at each station to interface with and access the features of the upgraded passenger information system. | 5,038 | | 5,038 | | |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|------------------------|--------------------|--|----------------|--|--|---|------------------|---------|---------|---------|---------|
| Station - Track | Amtrak | NYS Senate TF on HSR Action Plan | | Penn Station, NYC | Penn Station, Track, Turnout & Signal Upgrade Diagonal Platform Use | These improvements will allow Empire Service trains to layover at Penn Station, but not occupy a current passenger platform. Instead, the "Diagonal Platforms" formerly used for mail handling will be converted for Empire Corridor passenger use. This eliminates the need for trains to make a non-revenue move to Sunnyside Yard and back. These enhancements will improve reliability of the Empire Service. | 39.645 | 39.645 | | | |
| Equipment | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor South (Hudson Line) | Expanded Upstate Service: Albany-Rensselaer to NYC | Hudson Line (Empire Corridor South): Amtrak service expansion. | 229.939 | 229.939 | | | |
| Operating Service | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor West | Added Express Service: Albany-Rensselaer to Niagara Falls | Empire Corridor West: Amtrak service expansion Niagara Falls to Albany-Rensselaer. | 98.526 | 98.526 | | | |
| Operating Service | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor West | Expanded Upstate Service: Albany-Rensselaer to Niagara Falls | Empire Corridor West: Amtrak service expansion Niagara Falls to Albany-Rensselaer. | 302.295 | 302.295 | | | |
| Operating Service | Amtrak | NYS Senate TF on HSR Action Plan | | Empire Corridor West | New Operations Flag: Albany-Rensselaer to Niagara Falls | Empire Corridor West: Amtrak service expansion Niagara Falls to Albany-Rensselaer. | 53.741 | 53.741 | | | |
| Station | Amtrak | State of Vermont | | Mechanicville, Saratoga Co. | Construct new Mechanicville Station to serve rerouted Ethan Allen Vermont subsidized Amtrak service in Pam Am Southern Railways territory. | | 8.000 | | | 8.000 | |
| Station | Amtrak | Amtrak | | Various | Passenger Station, State Of Good Repair and ADA compliance improvements or replacement of the current eleven (11) Amtrak owned or operated facilities. | Owned / Operated Stations: Work includes but is not limited to parking, access, platform upgrades and repairs, lighting and building infrastructure. | 80.000 | 40.000 | 40.000 | | |
| Track | Amtrak | Hudson Line Railroad Transportation Plan | MNCR | Bronx - Manhattan | Double track Spuyten Duyvil crossing of Harlem River: MNCR Hudson Line - Amtrak Empire Connection. | Increase capacity and schedule reliability of Amtrak service to/from Penn Station. | 62.538 | | 62.538 | | |
| Track - Yard | Amtrak | NYSDOT | | Rensselaer Yard | Amtrak Rensselaer Yard: Expanded Yard Capacity | Provides additional yard capacity for the additional trainsets, to reduce congestion in the Albany-Rensselaer Station territory. | 30.000 | 30.000 | | | |
| Station - Parking | Amtrak | NYS Senate TF on HSR Action Plan | | Rochester, Monroe Co. | Rochester Station: Increase Station Parking | This project provides increased parking facilities for those who use passenger vehicles to access the station facilities. | 5.598 | | 5.598 | | |
| Bridges - 286K | Amtrak | PANYNJ | | Hell Gate Line: Bronx | Upgrade Amtrak Pelham Bay Bridge (approx. AMTRAK MP 15.5) for 286,000 lb gross weight freight rail cars. | This project will support achievement of 286K lb rail car capability on the route from Connecticut on MB, New Haven Line and AMTRAK Hell Gate Line for CSX and PW traffic to Bronx and Long Island. | 2.990 | 2.990 | | | |
| Track & Signal | Amtrak | PANYNJ and PW | | Hell Gate Line: Bronx | Construct Hell Gate Line bypass around Oak Point Yard | A new Amtrak Controlled Sliding between the Bronx River Draw Bridge (approx. CSX MP 21.5) and Oak Tower (approx. CSX MP 19.0) would allow PW to bypass Oak Point Yard at track speed to reach Freight Track #5 on the Hell Gate Bridge to Queens and Long Island. This would also benefit CSX and CPR by reducing interference with yard operations. | 2.800 | 2.800 | | | |
| Track & Structures | Amtrak | NYSDOT | | Hell Gate Line: Bronx and Westchester Counties | Upgrade 4 Miles Track and Undergrade Bridges for 286K lb rail cars, New Rochelle to Pelham. | Enables Providence & Worcester (PW) Railroad and CSX to utilize 286K lb High Axle Loads north of Oak Point Yard. | 4.000 | 2.000 | 2.000 | | |
| Locomotive | APRR | 2007 PFRAP Application | | Albany Co. | Acquire new wheels for APRR Locomotive #12 | APRR, the switching railroad in the Port of Albany, originates and terminates over 9,000 carloads annually. APRR Unit #12 is an SW9 switcher, built in 1953, whose wheels have reached the end of their useful life and must be replaced. | 0.045 | 0.045 | | | |
| Track - Yard | APRR | 2007 PFRAP Application | | Albany Co. | The & Surface Yard & 1A Lead | The rehabilitation of 1A Lead allows GE, Alstom Power, and Westinghouse to move generators, import and export. With a new production plan being built in CBRO for Biodiesel/Ethanol production, inbound cars of 286K lbs. will have to be handled. | 0.338 | 0.338 | | | |
| Track Rehab Locomotive | APRR | NYSDOT | | Albany Co. | Track Rehabilitation & Maintenance | Reduce emissions in Albany County | 4.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Locomotive | APRR | NYSDOT | | Albany Co. | Acquire 2 Low-Emission Locomotives | | 3.000 | 3.000 | | | |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---|--------------------|------------------------|----------------|---|--|---|------------------|---------|---------|---------|---------|
| Track - Yard | APRR | NYS DOT | | Albany Co. | Extend double track to South | Expands viability of Port of Albany by allowing direct transfer of cargo from ship to rail | 5.000 | 5.000 | | | |
| Track - Yard | APRR | NYS DOT | | Albany Co. | Rehabilitate remaining Highway-Railroad Grade Crossings in Port | This project is needed to complete the last four crossings in the Port of Albany which are subject to very heavy truck traffic. APRR operates over these crossings daily. This project will also improve safety of the motoring public. | 0.515 | 0.515 | | | |
| Track | APRR | | | | Upgrade rail from 70 lb. to 100 lb., ballast and surface | This project will provide for sustainable operation of 286K lb. rail cars and meet FRA Class standards for passenger train operations. It will improve efficiency by lowering transportation costs, increasing rail market accessibility, and improve tourism potential. | 12.898 | 9.898 | 1.000 | 1.000 | 1.000 |
| Track | ARA | 2007 PFRAP Application | | ARA Main Line, MP 04 to MP 15, Wyoming County | Rehabilitate Rail, Construct Rail Siding to Provide Switch Car, Install Three Turnouts | | 1.200 | 1.200 | | | |
| Equipment | ARA | 2007 PFRAP Application | | Wayne County | Acquire 2 Low-Emission Locomotives | Reduce emissions | 3.000 | 3.000 | | | |
| Track Rehab | ARA | NYS DOT | | Wyoming Co. | Preserve 14.5 miles of track and 6 structures | Safety, reliability, retain shippers, preserve assets | 2.000 | 0.500 | 0.500 | 0.500 | 0.500 |
| Track Rehab | ARA | | | Wyoming Co. | Upgrade 14.5 miles of track and 6 structures to Class 1 SOGR | Safety, Efficiency, reliability, expand service, speed, remove trucks, economic competitiveness, reduce energy use, reduce operating costs, enhance productivity | 5.000 | 2.000 | 1.000 | 1.000 | 1.000 |
| Grade Crossing | ARA | | | Wyoming Co. | Upgrade 28 grade crossings | Safety, preserve assets, reliability | 2.000 | 1.000 | 1.000 | | |
| Sidings & Wye | ARA | | | Wyoming Co. | Construct two new 1000 ft sidings in Java and Genesee and rehab the wye track and construct new loading platforms for bio-fuels | Expand service, remove trucks, capacity, improve operations, intermodal connectivity, enhance market share, reduce energy use, enhance productivity | 5.600 | 3.000 | 2.600 | | |
| Track Upgrade Maintenance, Facility and Interchange | ARA | | | | Install used 100-lb-rail | Retain shippers, accommodate modern rail cars | 2.500 | 0.000 | 2.500 | | |
| Signal system | ARA | | | | Reconfigure NS interchange and relocate maintenance facility to accommodate freight shippers | Reliability, efficiency, preserve assets, improve operations | 4.300 | 4.300 | | | |
| | ARA | | | | Upgrade signal system | Safety, preserve assets, capacity, reliability | 2.200 | 1.200 | 1.000 | | |
| 286 | ARA | | | | Upgrade to carry 286K lb. rail cars | Expand service, retain shippers, improve operations, intermodal connectivity, reduce congestion, remove trucks, economic competitiveness, enhance productivity | 7.500 | 2.500 | 2.500 | 2.500 | |
| Track storage and switching | ARA | | | | Expand track storage at railroads northern terminus and upgrade switching track | Capacity, expand service, improve operations, reduce operating costs | 1.400 | 1.400 | | | |
| Locomotive | BHRC | NYS DOT | | | Acquire 2 Low-Emission Locomotives | Reduce emissions | 41.605 | 25.005 | 11.100 | 4.000 | 1.500 |
| Track Rehab | BHRC | | | Steuben Co. | Preserve 47 miles of track and 20 structures | Safety, preserve assets, reliability, retain shippers, intermodal connectivity, reduce operating costs | 3.000 | 3.000 | | | |
| Track Rehab | BHRC | | | Steuben Co. | Upgrade 47 miles of track and 20 structures to SOGR | Safety, reliability, efficiency, retain shippers and expand service, on-time performance, preserve assets, improve operations, enhance market share, remove trucks, economic competitiveness, reduce energy use, enhance productivity, competitive pricing | 14.240 | 3.560 | 3.560 | 3.560 | 3.560 |
| Grade Crossing | BHRC | | | Steuben Co. | Upgrade 20 public grade crossings | Safety, reliability, preserve assets, improve operations, reduce operating costs | 3.000 | 1.500 | 1.500 | | |
| | BHRC | | | | | | 33.840 | 10.560 | 12.160 | 5.560 | 5.560 |
| Track | BKRR | 2007 PFRAP Application | | BKRR Central Main, Rensselaer and Washington Counties | Tie and ballast program to complete and connect SOGR Improvement from CPR interchange at Eagle Bridge with current primary customer service area | This project, Phase 2 of 2 phases, is necessary to realize the safety, efficiency, and serviceability objectives that will result from bringing the most utilized BKRR track into SOGR. The work is needed to maintain service to existing customers and to extend service to additional potential customers. | 4.000 | 4.000 | | | |
| Track | BKRR | 2007 PFRAP Application | | BKRR MP 141.6 to MP 132, Washington County | Upgrade: Replace 11.4 miles 80 lb rail | Completion of this project will reliably accommodate sustainable handling of 286,000 lb. gross weight rail cars to BKRR's primary bulk customers. | 3.500 | 3.500 | | | |
| Freight facility | BKRR | 2007 PFRAP Application | | Greenwich, Washington County | Construct Truck-Rail Transfer Site, Runaround, & Roadway Improvements | Capacity, expand service, improve operations, reduce operating costs, intermodal connectivity | 0.350 | 0.350 | | | |
| Track work | BKRR | | | Rensselaer Co. | Expand interchange tracks at Eagle Bridge to accommodate existing and future traffic | | 1.000 | 1.000 | | | |

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2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|----------------------|--------------------|------------------------|----------------|---|---|--|------------------|---------|---------|---------|---------|
| Track Rehab | BKRR | | | Washington Co. | Preserve 18 miles of track and structures at Class I and 9 miles at accepted level | Safety, reliability, retain shippers, preserve assets | 10,000 | 3,000 | 3,000 | 2,000 | 2,000 |
| Track Rehab | BKRR | | | Washington Co. | Upgrade 26 miles of track and 25 structures to State of Good Repair | Safety, efficiency, reliability, expand service, speed, remove trucks, economic competitiveness, reduce energy use, reduce operating costs, enhance productivity | 14,000 | 3,000 | 3,000 | 4,000 | 4,000 |
| Maintenance Facility | BKRR | | | Washington Co. | Develop new maintenance facility and associated tracks located closer to prime shipping operations | Improve operations, reduce operating costs, intermodal connectivity | 1,500 | 1,500 | | | |
| Grade Crossing | BKRR | | | Washington Co. | Upgrade 26 grade crossings | Safety, preserve assets, reliability | 0,530 | 0,530 | | | |
| Equipment | BKRR | | | | Acquire fuel efficient, low emission locomotives | Reliability, efficiency, improve operations, reduce air emissions, reduce energy use | 2,400 | 1,200 | 1,200 | | 0,000 |
| 286 | BKRR | | | | Upgrade 22 miles to carry 286K lb. rail cars; then 315K cars | Accommodate modern rail cars, expand service, improve operations, intermodal connectivity, reduce congestion, remove trucks, economic competitiveness, enhance productivity | 16,000 | 5,000 | 5,000 | 3,000 | 3,000 |
| Signal system | BKRR | | | | Upgrade signal system | Safety, preserve assets, capacity, reliability | 1,600 | 0,600 | 1,000 | | 0,000 |
| | | | | | | | 54,880 | 23,680 | 12,000 | 10,200 | 9,000 |
| Track | BPRR | 2007 PFRAP Application | | BPRR Main Line, MP 0 to MP 5, Erie County | Construct a new 2000 foot rail connection between the BPRR Main Line and former NS Buffalo line south of Buffalo Creek Yard | This project will allow BPRR trains direct access between Buffalo Creek Yard and the former NS Buffalo Line, thereby eliminating the need to cross over the congested C-DRAW bridge and improve transit times for BPRR customers. | 2,400 | 2,400 | | | |
| Track - Yard | BPRR | 2007 PFRAP Application | | Buffalo Creek Yard, Erie County | Rehabilitate Buffalo Creek Yard, to include ties, rail, surfacing and turnouts. | This project will improve transit times of customer's cargo, thereby helping them grow business and jobs. | 1,800 | 1,800 | | | |
| Track | BPRR | 2007 PFRAP Application | | Buffalo Line MP 0 to MP 50, Erie and Cattaraugus Counties | Install Ties and Surface / renew some highway-rail grade crossing surfaces. | This project will reverse the deteriorating condition of the line and increase its operating speeds from 10 MPH to 25 MPH. | 3,500 | 3,500 | | | |
| Equipment | BPRR | NYSDOT | | | Acquire 4 Low-Emission Locomotives | Reduce emissions. | 6,000 | 6,000 | | | |
| Track Rehab | BPRR | | | Erie & Cattaraugus Cos. | Preserve 75 miles of track and 100 structures | This project directly supports the many rail customers in New York served by the BPRR Railroad. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 6,000 | 2,000 | 1,000 | 1,000 | 1,000 |
| 286 | BPRR | | | Erie & Cattaraugus Cos. | Upgrade 2 miles of track and structures to carry 286K lb. rail cars | Through improving grade crossings on the BPRR Railroad, public road safety and ride quality will be directly improved. This project directly supports the many customers served by the railroad in New York State. These customers depend on freight services provided by this railroad. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 1,000 | 1,000 | | | |
| Grade Crossing | BPRR | | | Erie & Cattaraugus Cos. | Upgrade 50 grade crossings | Through improving grade crossings on the BPRR Railroad, public road safety and ride quality will be directly improved. This project directly supports the many customers served by the railroad in New York State. These customers depend on freight services provided by this railroad. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 3,000 | 1,000 | 1,000 | 1,000 | 0,000 |
| Safety | BPRR | | | Erie & Cattaraugus Cos. | Upgrade signal & Dispatch systems | Improving train control on the BPRR Railroad will greatly improve train dispatching efficiency and reliability. This project directly supports the many customers served by the railroad in New York State. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 4,000 | 2,000 | 2,000 | | |

**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|----------------------------|--------------------|------------------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Bridge Rehab | BPRR | | | Erie Co. | Highway Bridges over Railroad | Maintain Status Quo: This project directly supports the 12 customers served by the BPRR Railroad. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Bridge Rehab | BPRR | | | Erie Co. | Highway Bridges over Railroad | State Of Good Repair: This project directly supports the 12 customers served by the BPRR Railroad. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 6,000 | 2,000 | 2,000 | 1,000 | 1,000 |
| Bridge Rehab | BPRR | | | Erie Co. | Highway Bridges over Railroad | Enhancement: This project directly supports the many customers served in New York State by the BPRR Railroad. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 6,000 | 2,000 | 2,000 | 1,000 | 1,000 |
| Track Rehab | BPRR | | | Erie & Cattaraugus Cos. | Upgrade 75 miles of track and 100 structures to SOGR | This project directly supports the many customers served in New York State by the BPRR Railroad. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 8,000 | 3,500 | 1,500 | 2,000 | 1,000 |
| Track Rehab | BPRR | | | | | | 51,700 | 28,200 | 11,500 | 7,000 | 5,000 |
| Track | BSOR | 2007 PFRAP Application | | BSOR Main Line, MP 7 to MP 14, Erie County | Install ties, drop ballast, and surface between Blandell and Hamburg. | This project will eliminate slow orders and improve the rail infrastructure for the handling of 286K lb. rail cars, and preserve the integrity of the rail line for the future. | 0.900 | 0.900 | | | |
| Equipment | BSOR | | | | Acquire 3 Low-Emission Locomotives | Reduce emissions | 4,500 | 4,500 | | | |
| Track Rehab | BSOR | | | Erie Co. | Preserve 33 miles of track and 35 structures | Safety, reliability, retain shippers, preserve assets | 3,000 | 0.750 | 0.750 | 0.750 | 0.750 |
| Track Rehab | BSOR | | | Erie Co. | Upgrade 33 miles of track and 35 structures to SOGR | Safety, efficiency, reliability, expand service, speed, remove trucks, economic competitiveness, reduce energy use, reduce operating costs, enhance productivity | 1,500 | 1,500 | | | |
| Safety | BSOR | | | Erie Co. | Upgrade 43 grade crossings | Safety, preserve assets, reliability | 2,000 | 0.500 | 0.500 | 0.500 | 0.500 |
| Siding/Safety | BSOR | | | Erie Co. | Build 1200 ft siding in North Collins and add 2 switches to better serve existing shipper | Retain shippers, reliability, efficiency, improve operations, enhance market share, remove trucks, enhance productivity | 0,550 | 0,550 | | | |
| Signal System | BSOR | | | Erie Co. | Upgrade signal system | Safety, preserve assets, capacity, reliability | 1,500 | 0,750 | 0,750 | | |
| 286 | BSOR | | | Erie Co. | Upgrade track and structures to carry 286K lb. rail cars | Accommodate modern rail cars, expand service, improve operations, intermodal connectivity, reduce congestion, remove trucks, economic competitiveness, enhance productivity | 0,500 | 0,500 | | | |
| Siding/Safety | BSOR | | | Erie Co. | Upgrade two sidings in Hamburg and Eden to better service existing customers | Retain shippers, reliability, efficiency, improve operations, enhance market share, remove trucks, enhance productivity | 0,300 | 0,300 | | | |
| Bridges | Class II and III | | | Various | Adaptive re-use of NYSDOT owned structures carrying abandoned rail lines over state highways (i.e. BN 7013890, ex D&H over Rt. 20) | Allows for re-use of NYSDOT-owned rail bridges which no longer serve a rail purpose | 14,750 | 10,250 | 2,000 | 1,250 | 1,250 |
| Rail Freight Block Funding | Class II and III | | | | RONY Block Funding - Enhancement: Safety upgrades including grade crossings, system upgrades including signal systems, upgrades to accommodate 313K car compatibility, new sidings, new freight facilities, etc. | Safety, security, reliability, efficiency, retain shippers and expand service, on-time performance, enhance market share, accommodate modern rail cars, reduce congestion, remove trucks, reduce air emissions, reduce energy needs, enhance productivity, land use management, economic competitiveness, intermodal connectivity | 100,000 | | | 50,000 | 50,000 |
| Rail Freight Block Funding | Class II and III | | | | RONY Block Funding - Expansion: Projects to expand the rail freight system in NYS, including capacity enhancements such as double tracking, passing sidings, signal system upgrades or replacements, new facilities to serve new products not currently envisioned or businesses that do not currently have rail access. | Reliability, efficiency, retain shippers and expand service, on-time performance, enhance market share, intermodal connectivity, reduce congestion, remove trucks, reduce air emissions, reduce energy needs, enhance productivity, land use management, economic competitiveness | 100,000 | | 20,000 | 40,000 | 40,000 |
| | Class II and III | | | | | | 203,000 | 3,000 | 20,000 | 90,000 | 90,000 |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---------------------------------|--------------------|------------------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Track | CLP | 2007 PFAAP Application | | Whitehall Yard | Install 6300 feet of new track within Whitehall Yard | CLP leases their Whitehall Yard from CPR and interchanges trains there. Due to the substantial increase in traffic, there is a growing demand for more capacity in the rail yard and to maintain efficiency on the CPR Canadian Subdivision main line and controlled siding. This 6300 foot siding is needed to accommodate the increase in train volumes. | 0.897 | 0.897 | | | |
| Equipment | CLP | NYS DOT | | | Acquire 3 Low-Emission Locomotives | Reduce emissions, fuel savings. | 4.500 | 4.500 | | | |
| Culverts | CLP | NYS DOT | | CLP Main Line, Washington County | Culvert Replacement | The culverts on this line need to be inspected and replaced as necessary to avoid failure on this route travelled by AMTRAK Ethan Allen service. | 0.200 | 0.200 | | | |
| Grade Crossing | CLP | NYS DOT | | CLP Main Line, Washington County | Rehabilitate Rail and Surface 2 Grade Crossings | Improve safety of the motoring public. | 0.100 | 0.100 | | | |
| Track | CLP | NYS DOT | | Whitehall | Restore Connection Track to CPR Canadian Subdivision northbound | Restoration of this previously existing connection in the northeast quadrant will allow CPR-originated multilevel traffic from Canada to make a progressive move east on the CLP into Vermont. The Bellow Falls Tunnel in VT, which has recently been improved for multilevel clearances, and recent additional clearances improvements in Massachusetts and Rhode Island allow access to the Port of Davisville, RI for import and export of finished vehicles. | 3.000 | 0.000 | 3.000 | | |
| Track - Yard | CLP | NYS DOT | | Whitehall Yard | Replace 4 Turnouts | Increase freight volumes in Whitehall Yard require the replacement of these turnouts, whose components have reached the end of their service life. | 0.200 | 0.200 | | | |
| Track Rehab | CLP | | | Washington Co. | Preserve 7 miles of track and 5 structures | Safety, reliability, efficiency, retain shippers, preserve assets, reduce operating costs, intermodal connections, on-time performance, reduce congestion | 3.500 | 2.000 | 1.000 | 0.500 | 0.200 |
| Track Rehab | CLP | | | Washington Co. | Upgrade 7 miles of track and 5 structures | Safety, reliability, efficiency, retain shippers and expand service, speed, improve operations, enhance market share, economic competitiveness, remove trucks, reduce energy use, reduce operating costs, enhance productivity, on-time performance, intermodal connectivity | 3.000 | 1.000 | 1.000 | 0.500 | 0.500 |
| Safety | CLP | | | Washington Co. | Upgrade 3 public grade crossings | Safety, reliability, efficiency, preserve assets, intermodal connectivity | 0.200 | 0.200 | | | 0.000 |
| Siding | CLP | | | Washington Co. | Add main line switch and siding to new shipper | Capacity, expand service, intermodal connectivity, enhance market share, remove trucks, economic competitiveness, enhance productivity | 0.500 | 0.500 | | | |
| Track | CLP | | | Ulster Co. | Track Rehabilitation & Maintenance | | 16,097 | 9,597 | 5,000 | 0,800 | 0,700 |
| Track | CMRR | NYS DOT | | Ulster Co. | Track Rehabilitation & Maintenance | | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Track | CMRR | NYS DOT | | Ulster Co. | Reopen OUT OF SERVICE segments | | 10,000 | 5,000 | 5,000 | | |
| Track | CMRR | | | | | | 14,000 | 1,000 | 6,000 | 1,000 | 6,000 |
| Bridge | CN | City of Niagara Falls | | Niagara SD, QDN 28.2 | Niagara Falls International Railway Station / Intermodal Transportation Center: Rehabilitation of CN undergrade bridge (BIN 7090230) over Whirlpool Street. | Phase 2 Railway Improvements: Work includes rehabilitation of existing CN undergrade bridge necessary to serve new station siding track and realignment of existing Mainline Track #1. | 2.100 | 2.100 | | | |
| Service Road & Support Facility | CPR | Amtrak | | Rouses Point, Clinton Co. | CPR Main Line Congestion Relief: Rouses Point | Construction of gravel road and small inspection support facility to relocate U.S. Customs inspection activities approximately 500 feet north of present location. Project would move customs border inspection of Amtrak's Adirondack train from the single track CPR Canadian Main Line to the nearby CN Connection track. | 0.500 | 0.500 | | | |
| Track - New Rail Line | CN | NFDARTS | | CN North Connection (Niagara Branch), Buffalo, Erie County | CN Northern Connection (Niagara Branch) The proposed connection will provide competitive access to South Buffalo-Lackawanna area and reduced truck congestion on international bridge crossings | Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Intermodal Connectivity, Enhance Market Share, Economic Competitiveness, Competitive Pricing, Enhance Productivity | 3,000 | 3,000 | | | |

New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-----------------------|--------------------|-----------------------|----------------|---|---|---|------------------|---------|---------|---------|---------|
| Track - New Rail Line | CN | NFAUFTS | CSX | CN Southern Connection (Avenue Running Track), Buffalo, Erie County | CN Southern Connection (Avenue Running Track) The proposed connection will provide competitive access to South Buffalo-Lackawanna area and reduced truck congestion on International bridge crossings | Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Intermodal Connectivity, Enhance Market Share, Economic Competitiveness, Competitive Pricing, Enhance Productivity | 5,000 | 5,000 | | | |
| Bridge | CN | NFAUFTS | CSX | Whirlpool Bridge, Niagara Falls, Niagara County | Whirlpool Bridge Upgrade Truck Access to Lehigh Valley Yard | Remove Trucks, Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Intermodal Connectivity, Enhance Market Share, Economic Competitiveness, Competitive Pricing, Enhance Productivity, Competitive Pricing, Reduce Air Emissions, Reduce Energy Usage, Land Use Management | 5,000 | | 5,000 | | |
| Track | CN | NYS DOT | CSX | Buffalo - Black Rock, International Bridge | Restore South Wye Connection CN to CSX Niagara SD | Restoration of this previously existing connection in the southwest quadrant will allow a progressive move from the CN International Bridge to the CSX Niagara Subdivision. This will shorten the distance for interchange trains between Canada and the Buffalo rail yards of CSX, CP, NS, BPR, and BQR by avoiding the longer CSX Belt Line Subdivision. To fully achieve this benefit, the vertical clearances on the Niagara SD will need to be improved beyond the existing 16-10 inches, which do not allow Plate "F" rail cars to clear. | 3,000 | | 3,000 | | |
| Track | CN | NYS DOT | Amtrak | Rouses Point, Clinton County | CN Rouses Point Subdivision track rehabilitation | Proposed work is full track rehabilitation to improve track conditions on rail line segment utilized by Amtrak Adirondack Service to-to-from Montreal's Central Station. Project is approximately 1.1 miles in length from CPR Canadian Main Junction at A-191 through CN Rouses Point Yard to Canadian Border. | 2,000 | 2,000 | | | |
| Track | CN | | | | | | 20,600 | 12,600 | 8,000 | 0,000 | 0,000 |
| Track | CNY | 2007 Bond Application | | Southern Tier Line, Port Jervis to Binghamton | Track rehabilitation MP 89-91, MP 118-187, MP 202-213 | The replacement of ties, placement of ballast, and surfacing will improve safety, provide greater stability for the current movement of 286,000 lb. gross weight rail cars and work towards adding capacity to the line. | 3,195 | 3,195 | | | |
| Safety | CNY | 2007 RRAP Application | | Sullivan County | Improvement to Private Grade Crossing Southern Tier MP 124.7 | Improve safety of the motoring public. | 0,625 | 0,625 | | | |
| Track Rehab | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Install ties/ballast/surfacing, ditching | Improve reliability, enhance safety, provide greater stability for the 286,000 lb. car loads now using the line, add to the capacity of the line | 26,220 | 11,010 | 1,900 | 2,900 | 10,410 |
| Rehabilitation | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Install switch timber | Improve reliability, enhance safety | 0,350 | 0,150 | | | 0,200 |
| Bridge Maintenance | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Renew Bridge Timber, Structural steel repairs to various bridges | Improve reliability, enhance safety | 2,700 | 1,000 | 0,600 | 0,200 | 0,900 |
| Signal System | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Renew Hot Box Detector, Relocate signal stanchion at seven crossings | Enhance safety | 0,300 | 0,300 | | | |
| Power Switches | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Install Power Switches at CP-Narrows, CP-Nobody, CP-Eddy, CP-Leaville, and CP-Deposit. Realign switches at CP-Narrows, CP-Deposit, and CP-SR | Efficient operation of line, Enhance safety | 2,710 | 2,710 | | | |
| Rehabilitation | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Rehab grade crossings | Improve reliability, enhance safety, provide greater stability for the 286,000 lb. car loads now using the line, add to the capacity of the line | 0,900 | 0,300 | 0,100 | 0,100 | 0,400 |
| Signal System | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Remove 18 miles of pole line for AC power | Improve reliability, enhance safety | 0,400 | 0,400 | | | |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-------------------------|--------------------|-------------|----------------|---|---|--|------------------|---------|---------|---------|---------|
| Welded Rail | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Weld in place jointed rail 20 miles | Improve reliability, enhance safety, provide greater stability for the line 285,000 lb. car loads now using the line, add to the capacity of the line | 3,400 | | | 3,400 | |
| Welded Rail | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Weld in place jointed rail 30 miles | Improve reliability, enhance safety, provide greater stability for the line 285,000 lb. car loads now using the line, add to the capacity of the line | 5,400 | | | | 5,400 |
| Welded Rail | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Weld in place various curves 8 miles | Improve reliability, enhance safety, provide greater stability for the line 285,000 lb. car loads now using the line, add to the capacity of the line | 2,400 | 1,200 | 1,200 | | |
| Rehabilitation | CNY | | | Broome, Delaware, Sullivan Counties, 1st Main 80.8 miles, 2nd Main 12.9 miles | Install ties at various sidings | Maintaining rail service to local customers | 0.240 | 0.240 | | | |
| | CNY | | | | | | 48,840 | 21,130 | 3,800 | 6,600 | 17,310 |
| Track | CPR | NYSDDOT | | Canadian Main Line | Amtrak - CPR Canadian Main Line Corridor Reliability Initiative. | This work consists of three distinct projects that would significantly improve the operational reliability and functional capacity of this shared used railroad corridor. Work elements include main line inspections, the additional of a second main line track on the busy south approach to the Saratoga Springs yard and passenger station, and completion of a multi-year corridor track rehabilitation intended to increase allowable train operating speeds and schedule reliability. | 6,000 | | | | |
| Track | CPR | | | Canadian Main Line: Ballston Spa - Saratoga Springs, Saratoga Co. | CPR Main Line Capacity Improvement: Ballston Spa | Double Track CPR Canadian Main Line CPC-33 to CPC-35. The project would extend the existing Ballston Spa Controlled Siding north to the existing Saratoga Running Track in CPR's Saratoga Springs Yard. When completed, this work would provide a fully functional two track mainline approach to the railroads classification yard and the Saratoga Springs passenger rail station. This added corridor track capacity would significantly reduce daily conflicts between Amtrak's through trains and freight car classification activities. This reduction of freight train interference is a prerequisite to additional passenger trains utilizing the passenger station. | 6,000 | | | | |
| Track | CPR | NYSDDOT | | Canadian Main Line | CPR Main Line Track Rehabilitation. | This work would complete the comprehensive track program proposed by CPR in 2004 intended to cut 30 minutes from Amtrak's Adirondack passenger train schedule. This work would increase allowable passenger train operating speeds to 79 mph for the majority of the Canadian Main Line in New York and would raise freight train allowable speeds. Improved corridor operating speeds and slow order removals are anticipated to reduce scheduled trip durations and significantly improve passenger train On Time Performance between Schenectady and Rouse Point. | 3,000 | | | | |
| Rail Line Rehab | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo total is \$111.102 million | | | | | | |
| Ballast & Surfacing | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo | | 2,088 | 0,566 | 0,537 | 0,498 | 0,467 |
| Bridge, Culvert, Tunnel | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo | | 13,011 | 3,654 | 3,543 | 3,102 | 2,911 |
| Crossings | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo | | 3,846 | 1,080 | 0,988 | 0,917 | 0,860 |
| Rail | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo | | 69,118 | 19,412 | 17,762 | 16,478 | 15,466 |
| Switches & Turnouts | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo | | 8,109 | 2,277 | 2,084 | 1,933 | 1,814 |
| Ties & Gauging | CPR | | | Canadian Main Line | Maintain existing conditions. Status Quo | | 14,931 | 4,193 | 3,837 | 3,560 | 3,341 |

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New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Existing Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|------------------------------|-------------------|-------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Rail Line Rehab | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | | | | | |
| Ballast & Surfacing | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | 3,213 | 0,717 | 0,778 | 0,834 | 0,885 |
| Bridge, Culvert, Tunnel | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | 20,022 | 4,465 | 4,896 | 5,196 | 5,515 |
| Crossings | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | 5,918 | 1,320 | 1,432 | 1,536 | 1,630 |
| Rail | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | 89,624 | 22,589 | 22,453 | 22,340 | 22,244 |
| Switches & Turnouts | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | 12,478 | 2,783 | 3,020 | 3,238 | 3,437 |
| Ties & Gauging | CPR | | | Canadian Main Line | Develop State Of Good Repair: SOGR | | 22,977 | 5,125 | 5,561 | 5,963 | 6,329 |
| Signal | CPR | | | Canadian Main Line | Upgrade signal system | Provides increased system fluidity and reliability | 23,205 | 5,000 | 5,500 | 6,050 | 6,655 |
| Ties & Gauging | CPR | | | Canadian Main Line | Deploy new Plastic or Concrete Cross Tie technology | Positive impact to the environment and tie life | 50,204 | 12,000 | 12,350 | 12,711 | 13,113 |
| Runaround Track | CPR | | | Canadian Main Line | Construct runaround track to bypass Customs VACIS Machine | Allows for more fluid movements of Northbound freight trains by allowing them to pass southbound VACIS activity. It will allow increased Passenger and Freight activity | 5,000 | 5,000 | | | |
| Track | CPR | NYSOT | | Canadian Main Line: (Border), Rouses Point | Upgrade CPR mainline track from Rouses Point to Canadian Border; RRP 131.0 to MP 192.08. | Supports the alternate routing of the Amtrak Adirondack Service from Montreal Windsor Station rather than existing service to Central Station. Proposed work and re-routing of Adirondack Service will experience reduced in running time between Rouses Point and Montreal. | 0,738 | 0,738 | | | |
| Freight Facility | CPR | | | Capital District | Construct new Intermodal Freight / Automotive Terminal | Reduces truck moves increases economic activity and enhances competitiveness of local industries | 25,000 | 25,000 | | | |
| Rail Line Rehab | CPR | | | Colonie Main | Maintain existing conditions. Status Quo | | 0,856 | 0,240 | 0,220 | 0,204 | 0,192 |
| Ballast & Surfacing | CPR | | | Colonie Main | Maintain existing conditions. Status Quo | | 1,843 | 0,518 | 0,474 | 0,439 | 0,412 |
| Grade Crossings | CPR | | | Colonie Main | Maintain existing conditions. Status Quo | | 20,183 | 5,668 | 5,186 | 4,812 | 4,516 |
| Rail | CPR | | | Colonie Main | Maintain existing conditions. Status Quo | | 47,026 | 17,776 | 10,445 | 9,700 | 9,104 |
| Switches, Turnouts & Signals | CPR | | | Colonie Main | Maintain existing conditions. Status Quo | | 2,729 | 0,766 | 0,701 | 0,651 | 0,611 |
| Ties & Gauging | CPR | | | Colonie Main | Maintain existing conditions. Status Quo | | 12,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Rail Line Rehab | CPR | | | Colonie Main | Develop State Of Good Repair: SOGR total is \$47,072 million. | | | | | | |
| Ballast & Surfacing | CPR | | | Colonie Main | Develop State Of Good Repair: SOGR | | 1,318 | 0,294 | 0,319 | 0,342 | 0,363 |
| Grade Crossings | CPR | | | Colonie Main | Develop State Of Good Repair: SOGR | | 2,836 | 0,633 | 0,686 | 0,736 | 0,781 |
| Rail | CPR | | | Colonie Main | Develop State Of Good Repair: SOGR | | 31,059 | 6,928 | 7,517 | 8,090 | 8,555 |
| Switches, Turnouts & Signals | CPR | | | Colonie Main | Develop State Of Good Repair: SOGR | | 4,200 | 0,937 | 1,016 | 1,090 | 1,157 |
| Ties & Gauging | CPR | | | Colonie Main | Develop State Of Good Repair: SOGR | | 7,659 | 1,708 | 1,854 | 1,988 | 2,110 |
| Signal | CPR | | | Colonie Main | Upgrade signal system | Provides increased system fluidity and reliability | 23,205 | 5,000 | 5,500 | 6,050 | 6,655 |
| Ties & Gauging | CPR | | | Colonie Main | Deploy new Plastic or Concrete Cross Tie technology | Positive impact to the environment and tie life | 9,936 | 2,375 | 2,446 | 2,520 | 2,595 |
| Track & Signal | CPR | NYSOT | | Colonie Main & Freight Main | Track & Signal Improvements for Stratoges to Albany Commuter Rail Service | Provides the minimum signal and track infrastructure to allow the development of commuter rail service. | 25,000 | 5,000 | 10,000 | 10,000 | |
| Rail Line Rehab | CPR | | | Freight Main | Maintain existing conditions. Status Quo total is \$103,435 million. | | | | | | |

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New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Existing Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|------------------------------|-------------------|-------------|----------------|---------------------|--|---|------------------|---------|---------|---------|---------|
| Ballast & Surfacing | CPR | | | Freight Main | Maintain existing conditions. Status Quo | | 3,713 | 1,043 | 0,954 | 0,885 | 0,831 |
| Bridge, Culvert, Tunnel | CPR | | | Freight Main | Maintain existing conditions. Status Quo | | 8,354 | 4,013 | 1,544 | 1,433 | 1,345 |
| Grade Crossings | CPR | | | Freight Main | Maintain existing conditions. Status Quo | | 0,801 | 0,225 | 0,206 | 0,191 | 0,179 |
| Switches, Turnouts & Signals | CPR | | | Freight Main | Maintain existing conditions. Status Quo | | 26,842 | 7,539 | 6,898 | 6,399 | 6,006 |
| Ties & Gauging | CPR | | | Freight Main | Maintain existing conditions. Status Quo | | 63,744 | 17,902 | 16,381 | 15,197 | 14,264 |
| Rail Line Rehab | CPR | | | Freight Main | Develop State Of Good Repair. SOGR total is \$257,439 million. | | | | | | |
| Ballast & Surfacing | CPR | | | Freight Main | Develop State Of Good Repair: SOGR | | 5,714 | 1,275 | 1,383 | 1,483 | 1,574 |
| Bridge, Culvert, Tunnel | CPR | | | Freight Main | Develop State Of Good Repair: SOGR | | 20,791 | 4,638 | 5,032 | 5,395 | 5,727 |
| Grade Crossings | CPR | | | Freight Main | Develop State Of Good Repair: SOGR | | 5,918 | 1,320 | 1,432 | 1,536 | 1,630 |
| Rail | CPR | | | Freight Main | Develop State Of Good Repair: SOGR | | 85,612 | 26,030 | 18,559 | 19,900 | 21,123 |
| Switches, Turnouts & Signals | CPR | | | Freight Main | Develop State Of Good Repair: SOGR | | 41,308 | 9,214 | 9,997 | 10,719 | 11,378 |
| Ties & Gauging | CPR | | | Freight Main | Develop State Of Good Repair: SOGR | | 98,097 | 21,881 | 23,741 | 25,456 | 27,019 |
| Signal | CPR | | | Freight Main | Upgrade signal system | Provides increased system fluidity and reliability | 7,735 | 1,667 | 1,833 | 2,017 | 2,218 |
| Signal | CPR | | | Freight Main | Signalize Binghamton to New Milford | Increase fluidity of Binghamton yard | 2,500 | 2,500 | 0,000 | 0,000 | 0,000 |
| Ties & Gauging | CPR | | | Freight Main | Deploy new Plastic or Concrete Cross Tie Technology | Positive impact to the environment and tie life | 36,607 | 8,750 | 9,013 | 9,283 | 9,561 |
| Track/Switch | CPR | | | Freight Main | Power the switch connecting the O&H Buffalo Runner and NS Track 1, in the vicinity of the Chenango Street overpass, and the main line crossover just west of this switch, in the vicinity of MP 98214.05 | Long train sets block routes to/from the NSW on the north side of Binghamton setting into motion a series of cascading delays from one train to others, as well as to motorists waiting at blocked road crossings. Powering these switches will allow the dispatcher to line them for the train and then line them back for the main line route after the train has passed, avoiding this delay. Public benefit is reduced motorist delays and increased customer service for shippers. Private benefits include increase fluidity for railroads. | 1,441 | 1,441 | | | |
| New Siding | CPR | | | Freight Main | New sidings between Binghamton and Mohawk and Mechanicville | Allows for increased freight activity with a particular eye on attracting North / South domestic intermodal and import / export activity. | 19,000 | 4,000 | 4,500 | 5,000 | 5,500 |
| New Siding | CPR | | | Freight Main | New siding between Mohawk and Mechanicville | Allows for less Freight/Pass interference and is a building block to additional Passenger starts out of Saratoga | 4,000 | 4,000 | | | |
| New Siding | CPR | | | Freight Main | New siding between Mohawk and Rouses Point | Allows for less Freight/Pass interference and is a building block to additional Passenger starts out of Saratoga | 13,500 | | 4,000 | 4,500 | 5,000 |
| Runaround Track | CPR | | | Freight Main | Construct runaround track to bypass Binghamton Yard | Allows for more fluid movements of freight trains around Binghamton Yard | 5,000 | 5,000 | | | |
| Track, Signal & Structures | CPR | NYSDOT | | Freight Main | Restore Sand Bank Track (8000 feet) and Wye Track as Controlled Points; Construct 2 Overhead bridges. | This connection provides an alternate for CPR's Hudson River grade trains from Fort Edward to interchange with and move west on CSX. It bypasses Mechanicville, Kenwood, and Selkirk Yards. | 14,800 | 4,800 | 5,000 | 5,000 | |
| Track, Signal & Structures | CPR | NYSDOT | | Freight Main | Restore South Schenectady Connection (8500 ft) and Wye Track as Controlled Points; West Campbell Rd (CR 87) Bridge; North Thompson Rd (CR 87) Bridge | This connection provides an alternate for CPR's Hudson River grade trains from Fort Edward to interchange with and move west on CSX. It bypasses Mechanicville, Kenwood and Selkirk Yards. | 14,800 | 4,800 | 5,000 | 5,000 | |
| Economic Development | CPR | | | General | New Facility and Customer Sidings | Increase general economic activity. | 29,285 | 7,000 | 7,210 | 7,426 | 7,649 |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|------------------|--------------------|----------------------------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Freight Facility | CPR | | | Kenwood Yard, Albany | Reconfigure yard from intermodal terminal to Bulk Transfer Facility | Reduces truck moves increases economic activity in the Port of Albany Area and enhances competitiveness of local industries | 8,000 | 8,000 | | | |
| | CPR | | | | | This project will help ensure uninterrupted rail service to the CSAO users, including the New York Container Terminal, Yantio and the Fresh Kills Transfer Facility. | 1,085.872 | 322.818 | 256.547 | 260.785 | 245.722 |
| Bridge | CSAO | 2007 PRRAP Application | | Arthur Kill Lift Bridge, former SRR Northern Branch, Staten Island (Richmond) County | Rebuild the protective cofferdam and tender systems for the piers of the Arthur Kill Lift Bridge, owned by NYC Economic Development Corporation. | | 4,900 | 4,900 | 0,000 | 0,000 | 0,000 |
| Tunnel | CSAC | PANYNJ | | | Construct Cross Harbor Freight Tunnel | The Preliminary Engineering, Design, and Construction of a freight railroad tunnel under New York Harbor and the lower Hudson River between Brooklyn and the national freight railroad network in New Jersey. PANYNJ initiated Preliminary Engineering and the final Environmental Impact Statement study during November, 2008. | | | TBD | | |
| | CSAO | | | | | | 4,900 | 4,900 | 0,000 | 0,000 | 0,000 |
| | CSX | CSX & Amtrak | | Hudson SD: Capital District | Empire Corridor Congestion Relief: Capital District | This project is a set of track and signal improvements along the Empire Service Corridor in the Capital District of New York. Work includes the reconfiguration of the CP-169 junction of CSX, Sellkirk Hudson subdivisions at Hoffmans, Schenectady County. Work also includes the construction of a 10,000 foot long controlled siding along the 110 mph section of the Hudson Subdivision in Colonie, Albany County. | | | | | |
| Track and Signal | CSX | NYS Senate TF on HSR Action Plan | | Hudson SD: Hoffmans, Schenectady, Co. | CP-169 (Hoffmans) Reconfiguration | Reconfigure for simultaneous parallel train movements at CP-169 between CSX Hudson Subdivision and CSX Sellkirk Subdivision. CP-169 is a bottleneck for Amtrak trains on the Hudson Subdivision of the Empire Corridor and for freight trains entering and leaving the Empire Corridor from the Sellkirk Subdivision. This will reduce the conflict area and increase capacity and reliability. | 8,957 | 8,957 | | | |
| Track & Signal | CSX | NYSDOT | | Hudson SD: Colonie, Albany Co. | Albany - Schenectady Controlled Siding | The project would construct a 10,000-foot controlled passing / Overtake siding between Albany and Schenectady. Approximate location QC 147.5 - QC 149.5 of CSX Hudson Subdivision in Colonie. | 9,000 | 8,000 | | | |
| Signal | CSX | Amtrak | | Hudson SD: CP-75 to CP-169 | Train Control System Communications Modernization: Hudson Subdivision. | CSX Hudson Subdivision train control system communications line modernization. Work includes the removal of existing CSX pole line cable communications between Poughkeepsie CP-75 and Hoffmans CP-162, spanning approximately 87 miles of Amtrak's Empire Service corridor. Signal control system communications replacement medium would consist of either buried cable or secured wireless radio technologies, depending on engineering and cost evaluations. Work would also include the installation of new signal control cabinets, as appropriate | 10,000 | 10,000 | | | |
| | CSX | | | | Empire Corridor Congestion Relief: Hudson - Tivoli | This project consists of two work elements that improve the functional capacity and operational reliability of the CSX Hudson Line between Renesselee and Poughkeepsie. Improvements include station platform reconfiguration and signal system modifications at Amtrak's Hudson, NY passenger station and the construction of a two-way crossover south of the Hudson area near Tivoli. | | | | | |

New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Existing Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---------------------|-------------------|---|----------------|---------------------------------|--|---|------------------|---------|---------|---------|---------|
| Station - Platforms | CSX | NYS Senate TF on HSR Action Plan and Hudson Line Railroad Transportation Plan | | Hudson, Columbia Co. | Hudson Station: Operational Bottleneck Removal | Construct high level platforms and eliminate track access by Amtrak passengers. Project would separate passengers from two main line tracks and an active yard. Work would also modify the train control signal system by removing "home" signals in vicinity of passenger station. Once completed, these improvements would allow for unrestricted train movements by Amtrak and the freight railroads through station area while an Amtrak train is positioned at a station platform. | 8,000 | 8,000 | | | |
| Track and Signal | CSX | Hudson Line Railroad Corridor Transportation Plan | | Hudson SD, Tiwell, Dutchess Co. | Construct New CP-99; vicinity of Tiwell. | One of three high-speed interlocking installations on the upper Hudson line to support enhanced train frequency and schedules. CP 82, CP-99 and CP-136 can be installed independently of each other, based on operational requirements. | 12,027 | 12,027 | | | |
| Bridge | CSX | NYS Senate TF on HSR Action Plan | | Hudson SD, Albany-Rensselaer | Livingston Avenue Bridge: Rehabilitation; Modernize and achieve State Of Good Repair. NOTE: Amtrak estimates cost of LAB Rehabilitation at \$46 million. | The proposed repair requires a minimum of substructure work and concentrates on the superstructure. Some bridge steel repair will be accomplished, however, the main focus of the rehabilitation will be on the electrical and mechanical operating systems of the bridge. | 28,935 | 28,935 | | | |
| | CSX | | | Mohawk SD, Syracuse | Empire Corridor Congestion Relief: Syracuse | This project is a set of track and signal improvements along the CSX Mohawk Subdivision in the Syracuse area. Work includes: improvements at De Witt Yard to remove train classification and other yard movements from the main line tracks utilized by Amtrak and through freight trains. Work also includes upgrades to track serving Syracuse passenger station platform. | | | | | |
| Track and Signal | CSX | | | Mohawk SD, Syracuse | CP-286-290; Upgrade 4 miles of Track # 7 Runner (to 50 MPH from current 30 MPH) & eliminate 251, West operation | Upgrade 4 miles of track from current 30 MPH to 50 MPH and eliminate 251 West operation (Tracks signaled in one direction and movement against flow of traffic - restrictive speeds). | 2,600 | 2,600 | | | |
| Track and Signal | CSX | CSX and Pass & Freight Capacity Assessment (for AASHTO) | | Mohawk SD, Syracuse | De Witt Yard Midway Crossover: Extend controlled siding from CP-288 to MP 282.7 | Upgrade from hand thrown crossover switch would clear main track of freight train operations into De Witt Yard and reduce train delays for all through trains for Amtrak Empire Service and freight. | 1,790 | 1,790 | | | |
| Track and Signal | CSX | CSX and Pass & Freight Capacity Assessment (for AASHTO) | | Mohawk SD, Syracuse | De Witt Yard East End: Restore Main Track #4 between MP 290.5 and MP 282.7 | Construction (restoration of fully controlled main line track #4 on the east approach to the De Witt classification yard. | 1,960 | 1,960 | | | |
| | CSX | | | Mohawk SD: Utica - Amsterdam | Empire Corridor Congestion Relief: Mohawk Valley | | | | | | |
| Track and Signal | CSX | | | Mohawk SD, Utica | CP-239: Add Crossover to existing XO to provide a Universal Crossover, Chicago line | Improve freight-passenger train performance, Chicago-New York. Adds dispatcher flexibility, which reduces freight train and maintenance related delays. | 2,800 | 2,800 | | | |
| Signal | CSX | | | Mohawk SD, Utica | CP-239: Add new automatic signal near MP 233 to reduce block length, Chicago Line | Improve freight-passenger train performance, Chicago-New York | 0,500 | 0,500 | | | |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Owning Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-----------------------------------|-----------------|----------------------------------|----------------|---|--|--|------------------|---------|---------|---------|---------|
| Signal | CSX | | | Mohawk SD, Utica | Add new automatic signal near MP 237.7 to reduce block length, Chicago Line Make CP 235 & CP 239 display "Restricting" signal behind following move to improve velocity, Chicago Line | Improve freight-passenger train performance, Chicago-New York | 0.700 | 0.700 | | | |
| Signal | CSX | | | Mohawk SD, Utica | | Improve freight-passenger train performance, Chicago-New York | 0.200 | 0.200 | | | |
| Signal | CSX | NYS Senate TF on HSR Action Plan | | Mohawk SD; Amsterdam, Utica, and Rome | Install New Approach Signals at Three Station Locations. | Install westbound signals just west of station platforms at Amsterdam and Utica and install eastbound signals at the east end of Rome station. The addition of these signals will increase capacity by allowing the Amtrak trains, after stops, to accelerate to a maximum authorized speed instead of the current rule, which does not allow a train to exceed 40 mph until the engineer can see the next signal. In some cases this can be as much as one and one-half miles. This would cut the signal block length from four miles to two miles. | 1.679 | 1.679 | | | |
| Track and Signal | CSX | NYS Senate TF on HSR Action Plan | | Mohawk SD; Amsterdam and S. Johnsville | CP-175 Amsterdam and CP-207 St. Johnsville - Construct Universal Interlockings. | The installation of new right hand #20 crossovers at CP-175 and CP-207 will create universal interlockings and allow trains to cross to/from either main track in either direction, which is not possible with the existing configuration. | 6.718 | 6.718 | | | |
| | CSX & CN | City of Niagara Falls | | Niagara SD; QDN 28.2 to QDN 22.0 | Niagara Falls International Rail Station / Intermodal Transportation Center Development | A set of all infrastructure (i.e. undergrade bridges, retaining walls, track, switches, and signals) required to relocate existing Amtrak passenger station operations to a redeveloped 1863 Customs House. Work includes track realignment and automatic switch installation. | | | | | |
| Station Platform & Retaining Wall | CSX | City of Niagara Falls | | Niagara SD; QDN 27.5 - QDN 28.1 | Niagara Falls International Railway Station / Intermodal Transportation Center: Retaining wall construction at 1863 Customs House site. | Phase 2 Railway Improvements: Work includes construction of retaining wall to support new passenger platform and siding track. | 2.805 | 2.805 | | | |
| Track & Signals | CSX | City of Niagara Falls | | Niagara SD; QDN 27.5 - QDN 28.1 | Niagara Falls International Railway Station / Intermodal Transportation Center: Passenger train siding to serve new passenger rail station at former 1863 Customs House. | Phase 2 Railway Improvements: Work includes construction of passenger siding and control switches. | 2.550 | 2.550 | | | |
| Track & Signals | CSX | City of Niagara Falls | | Niagara SD; QDN 27.5 - QDN 28.1 | Niagara Falls International Railway Station / Intermodal Transportation Center: Mainline Track #1 realignment at 1863 Customs House. | Phase 2 Railway Improvements: Mainline Track #1 realignment to accommodate adjacent, new passenger siding. Work includes track and switches. | 1.785 | 1.785 | | | |
| Bridge | CSX | City of Niagara Falls | | Niagara SD; QDN 28.1 | Niagara Falls International Railway Station / Intermodal Transportation Center: Reconstruction of CSX undergrade bridge (BN 7036282) over Main Street NY Route 104. (\$2.850 M) to be funded by highway improvement program. | Phase 2 Railway Improvements: Work includes replacement of existing, deteriorated, CSX undergrade bridge to serve new station siding track and realignment of existing Mainline Track #1. [Work does not include separate project to lower profile of Main Street for additional truck vehicle clearance.] | 2.850 | 2.850 | | | |
| Track | CSX | | | Niagara SD, Tonawanda, CP 9 & CP 8 to CP 17 | Niagara Branch Signal System Capacity Improvements. | Implementation of Train Signal Control System improvements to accommodate two-way (TCS 263) operational routing of main line tracks. Work includes installation of Remote Control switch heaters for operational reliability. | 3.800 | 3.800 | | | |
| Grade Crossing | CSX | NYS Senate TF on HSR Action Plan | | Hudson SD, Mohawk SD, Rochester SD, Buffalo Terminal SD, Niagara SD | Highway-Rail Grade Crossings: HSR Safety Enhancements | Upgrade existing grade crossing warning devices at selected crossings along the higher speed (90 - 110 mph) segments of Empire Service Corridor. Work to consider reconfiguration to enhance safety, including standard entrance gates with a center island median, closure or grade separation. This effort would be coordinated with NYS DOT and CSX. | 11.196 | 11.196 | | | |
| Bridge | CSX | Amtrak | | Hudson SD - Albany-Rensselaer | Washington Avenue Bridge - Replacement | Reconstruction to replace existing Hudson River railroad bridge, including the swing bridge portion. | 126.000 | | | | |
| Bridge | CSX | | | Rochester SD, QC 313.98 | Replace the Sagoyah Bridge structure over the Seneca River; Eliminate 40 MPH speed restriction. | Built in 1924, US bridge is 1791 feet in length. Maximum Allowable Speed restrictions for all train types due to pilings are in soft ground. Improve schedule reliability and trip durations for all trains. | 25.000 | 25.000 | | | |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Existing Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-------------------------|-------------------|---|----------------|--|---|---|------------------|---------|---------|---------|---------|
| Signal | CSX | Amtrak | | Hudson SD: CP 75 to CP 169 | Double-track to bidframes; Overhaul and replace existing signal system from CP 75 to CP 169 | Project would eliminate pole lines, replace and bury cable, and install new signal boxes. Underground cables estimated at \$47 million over the next five years, periods: \$17, 10, 10, 10 to replace with underground cables. | 0.000 | | | | |
| Track and Signal | CSX | Hudson Line Railroad Corridor Transportation Plan | | Hudson SD | Construct New CP-136: vicinity of East Greenbush. | These high speed interlocking installations will support enhanced train frequency and schedules. CP-82, CP-99 and CP-136 can be installed independently of each other, based on operational requirements. | 11.600 | 11.600 | | | |
| Track and Signal | CSX | Hudson Line Railroad Corridor Transportation Plan | | Hudson SD | Construct New CP-82: vicinity of Hyde Park. | These high speed interlocking installations will support enhanced train frequency and schedules. CP-82, CP-99 and CP-136 can be installed independently of each other, based on operational requirements. | 11.600 | 11.600 | | | |
| Track and Signal | CSX | Hudson Line Railroad Corridor Transportation Plan | | Hudson SD: CP-123 to CP-125; Stayseant | Construct Third Track and Interlocking Improvements: Schoadest SD junction with Hudson SD at Stayseant. | Extension of the existing freight track from CP 125 to a new CP 123 effectively creates a third main track in this segment. | 46.200 | 46.200 | | | |
| Track and Signal | CSX | NYS Senate TF on HSR Action Plan | | Mohawk SD, Rochester SD, Buffalo Terminal SD, CP-169 to CP-437 | Construct Three New 10,000 foot Controlled Slidings along CSX main line: Hoffmans - Buffalo. | The installation of three 10,000-foot passing/overtake slidings between Hoffmans and Buffalo. The specific locations are to be determined as part of full dispatch modeling effort. The locations may be combined and integrated with the station track or interlocking improvements. | 100.765 | 100.765 | | | |
| Track and Signal | CSX | NYS Senate TF on HSR Action Plan | Amtrak | Niagara SD, Niagara Falls, ODN 26.2 | Niagara Falls Passenger Rail Station Track Turnouts: Upgrade two station track turnouts to power operation along Bridge Branch in former Lehigh Valley Yard. | This project converts the hand thrown switches at the existing station (former Lehigh Railroad Freight House) to powered switches and signalizes the station lead track. | 2.239 | 2.239 | | | |
| Additional I/C Capacity | CSX | | | Fremont IT | North of Swamp switch on CSX: Construct a track parallel to CSX's main north of existing Swamp Switch thus permitting CSX to I/C to NYAR without entering Fremont yard. CSX light power could then P/U NYAR I/C at the Swamp Switch and return to the Bronx with minimal NYAR interference. | Efficiency, reliability, on-time performance, improve operations, economic competitiveness, reduce operating costs, enhance productivity, intermodal connectivity | 1.800 | 1.800 | | | |
| Clearance Improvement | CSX | NYS DOT | | Niagara SD | Improve Vertical Clearances from 16'-10" to 20'-8" Approx 12 OH Bridges | Shortens Route for CH to interchange with CSX at Buffalo Frontier Yard | 36.000 | 36.000 | | | |
| Freight Facility | CSX | PANYNJ | | Bronx, Market IT | Provide unloading platform at Hunts Point Market | Increase efficiency of terminal operation for CSX and CPR traffic destined there. | 0.240 | 0.240 | | | |
| Freight Facility | CSX | PANYNJ | | Bronx, Oak Point Yard | Provide unloading platform at Oak Point Yard | Increase efficiency of terminal operation for CSX and CPR traffic destined there, by providing a location where customers, who do not have sidetracks, can receive cargo. | 0.710 | 0.710 | | | |
| Maintenance | CSX | | | Mohawk, Rochester, Buffalo, Hudson SDs | Status Quo: Routine Maintenance: 879 miles | Includes passenger rail routes. | 0.994 | 0.181 | 0.220 | 0.268 | 0.326 |
| Maintenance | CSX | | | Mohawk, Rochester, Buffalo, Hudson SDs | SOGR: Capital maintenance: 879 miles | | 1.223 | 0.219 | 0.271 | 0.329 | 0.401 |
| Maintenance | CSX | | | River SD & Selkirk SD | Status Quo: Routine Maintenance: 159 miles of River SD & Selkirk SD | Includes passenger rail routes. | 179.900 | 32.700 | 39.700 | 48.300 | 58.800 |

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New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|--------------------------------------|--------------------|--------------------------------|----------------|--|---|--|------------------|---------|---------|---------|---------|
| Maintenance | CSX | | | River SD & Selkirk SD | SOGR: Capital maintenance: 159 miles of River SD & Selkirk SD | Creation of Rail - Truck Intermodal and/or Rail Freight Transfer facility. | 221,000 | 40,200 | 48,900 | 59,500 | 72,400 |
| New Construction | CSX | NYSDOT | | Nagara SD | Lehigh Valley Yard Intermodal Expansion | Replacement of the existing pedestrian crossing on the Oak Point Link trestle connecting the ferry landing barge with the shore will avoid conflict with Stadium users and improve safety. | 10,000 | | | 10,000 | |
| Safety - Pedestrian | CSX | PANYNJ | | Bronx, Oak Point Link, RT MP 3.12 | Provide a pedestrian overpass over the NYSDOT Oak Point Link at the Yankee Stadium Ferry Landing | | 3,000 | 3,000 | | | |
| System Expansion, Capital Investment | CSX | | | Albany, NY | New Intermodal Facility in Capital District. | Improve freight service available to Albany shippers. | 40,000 | | 40,000 | | |
| System Expansion, Capital Investment | CSX | | | Athens, QR.47 | Build 20,000' siding with #20 mid-Universal Crossover on River SD | Improve freight train performance, Chicago-New York | 18,000 | | 18,000 | | |
| System Expansion, Capital Investment | CSX | | | Catskill, QR 110 | Build 20,000' siding with #20 mid-Universal Crossover on River SD | Improve freight train performance, Chicago-New York | 18,000 | 18,000 | | | |
| System Expansion, Capital Investment | CSX | | | Haverstraw, QR 34 | Create 20,000' siding with #20 mid-Universal Crossover on River SD by extending existing Haverstraw siding using former coal plant track | Improve freight train performance, Chicago-New York | 14,000 | | 14,000 | | |
| System Expansion, Capital Investment | CSX | | | Kingston, QR 88 | Upgrade Kingston siding @ 30 MPH on River SD (request funding for 2008-2009) | Improve freight train performance, Chicago-New York | 1,700 | 1,700 | | | |
| System Expansion, Capital Investment | CSX | | | Mt. Marion, QR 96 | Build 10,000' clear siding on River SD | Improve freight train performance, Chicago-New York | 14,000 | 14,000 | | | |
| System Expansion, Capital Investment | CSX | | | Selkirk, QG 11.5-16.9 | Selkirk Yard Bypass: Build 5.4 mile Main Track Bypass for 30 MPH on Selkirk SD (request 2008-2009 funding) | Improve freight train performance, Chicago-New York | 13,500 | 13,500 | | | |
| Track | CSX | 2007 PFRAP Application | | Port of Oswego, Oswego County | Upgrade Track within Port of Oswego | This project will upgrade the railroad infrastructure in the port to maintain present service and to improve the intermodal capability of the port. | 2,200 | 2,200 | | | |
| Track | CSX | 2007 PFRAP & Bond Applications | | Potdam Paper Spur, MP 0 to MP 2, St. Lawrence County | At the Head-Herbasco Cedar Mill, install 750 ties, renew two grade crossing surfaces, replace 250 rail, repair turnouts and bridge, replace trolley. | These repairs are necessary to maintain the existing level of service as well as provide a means to increase receipt of other raw materials by rail. | 0.485 | 0.485 | | | |
| Track | CSX | 2007 PFRAP Application | | River SD, Kingston, QR 88 | Upgrade Kingston siding @ 30 MPH on River SD (request funding for 2008-2009). Currently programmed at \$1.7 million | Improve freight train performance, Chicago-New York | 0.000 | | | | |
| Track - 286K | CSX | 2007 PFRAP & Bond Applications | | St. Lawrence SD MP QM 106.2: Natural Dam IT | Natural Dam Industrial Tract, MP 0 to MP 1.42: Upgrade existing 70 lb. rail to 100 lb. or greater for the 7500 track, reel, and install ties at joints. | This project will upgrade the track for 286K lb. rail cars and insure continued service to Cellu Tissue Corporation. | 0.550 | 0.550 | | | |
| Track - New Rail Line | CSX | NYSDOT | | Port SD, Bethlehem | Track, Signal, and Structures: Construct New Connection (5000 ft) from Port SD to CSX Castleton SD Track #1 eastbound | This connection provides an alternate for CPR's freight service between Saratoga and NYC to cross the Hudson River on the Castleton Bridge vs. the LAB Bridge. This reduces interference with passenger trains as it avoids the Hudson Subdivision between Schenectady and Stuyvesant, and bypasses the Albany-Rensselaer Station complex. | 5,000 | | | | 5,000 |
| Track & Signal | CSX | PANYNJ | | Bronx, Oak Point Yard | Construct Runaround Track along Bronx River / Oak Point Yard | This will relieve congestion at Oak Point Yard for CSX, PW, CPA and AMTRAK operations | 2,310 | | 2,310 | | |
| Track - Yard | CSX | 2007 PFRAP Application | | Mohawk SD-Syracuse | Town of Manlius: Construct a new Central New York Distribution Hub, adjacent to the CSX De Witt Yard, with an annual capacity of 225,000 containers per year, to be part of the PANYNJ Port Inland Distribution Network | This project will reduce congestion at the Northern New Jersey ports of the PANYNJ by diverting import containers destined for Central New York from truck to short haul rail for the PFDN. | 104,000 | 104,000 | | | |
| | CSX | | | QB 171.30, Berkshire SD | Improve clearances under OH Bridge, Albany Turnpike (SR 295), East Chatham, NY | Reduce number of tractor trailers using NY State highways by enabling 30'-2" Double Stack intermodal train movements, from Selkirk, NY east to Worcester, MA. | 0.700 | 0.700 | | | |
| | CSX | | | QB 181.49, Berkshire SD | Improve clearances under OH Bridge, White Mills Road, Chatham, NY | Reduce number of tractor trailers using NY State highways by enabling 30'-2" Double Stack intermodal train movements, from Selkirk, NY east to Worcester, MA. | 0.500 | 0.500 | | | |

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New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involvement | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|----------------------------------|--------------------|----------------------------------|-------------------|--|--|--|------------------|---------|---------|---------|---------|
| | CSX | | | QB 182.72, Berkshire SD | Improve clearances under OH Bridge, Gould Road, Chatham, NY | Reduce number of tractor trailers using NY State highways by enabling 20'-2" Double Stack intermodal train movements, from Selkirk, NY east to Worcester, MA. | 0.700 | 0.700 | | | |
| | CSX | | | River SD | Fill in 2nd Main Track segments until entire Subdivision has two main tracks. Will require a total of about 72 miles of 2nd Main Track beyond these segments listed in System Expansion. | Improved freight service between Chicago and New York metro areas to enhance freight market share by improved operating performance for shippers. | 720.000 | 110.000 | 200.000 | 200.000 | 200.000 |
| | CSX | | | | Rensselaer Phase II: 4th Station Track. | Project would complete the 4th station loading track at the Albany-Rensselaer Rail Station, including required modifications to train control signal system. This work will complete the build out of the station tracks. | 1,883.368 | 672.645 | 395.401 | 318.397 | 462.926 |
| Station - Track | CSX - Amtrak | NYS DOT | | Hudson SD: Rensselaer Station | | | 12.000 | 12.000 | | | |
| Station - Track | CSX - Amtrak | NYS DOT | | Hudson SD: Rensselaer Station | Rensselaer Phase III: CP-142, Track Realignment | Project would realign main line tracks at CP 142 to allow Amtrak trains using the Hudson Line to approach the Rensselaer Rail Station on a clear train control signal indication. | 15.210 | 15.210 | | | |
| Signal - Yard | CSX - Amtrak | NYS DOT | | Hudson SD: Rensselaer Station | Rensselaer Phase IV: Station North End Interlocking Improvements | Expand throughput capacity, improve travel time. | 10.000 | 10.000 | | | |
| Bridge | CSX - Amtrak | Amtrak - NYSDOT | | Syracuse | Syracuse Station Track: Completion of Park Street Bridge and modify interlockings for connection to Chicago Main Line. Involves CSX, NYSM, and Amtrak. | Allows Amtrak trains to access 2 station tracks utilizing both sides of station platform, increases dispatching flexibility for movement of trains leading to reduction of train delays. | 0.000 | TBD | | | |
| ROW Acquisition & Infrastructure | CSX - Amtrak | NYS Senate TF on HSR Action Plan | | Hudson SD and Amtrak Post Road Branch | Acquire ROW and Infrastructure from CSX and AMTRAK and complete Initial State of Good Repair: CP-75 Poughkeepsie to CP-169 Hoffmans; Post Road Branch CP-187 to Rensselaer Station CP-142; Rensselaer Station Property; Rensselaer Maintenance Facility. | This project includes costs to bring the current track, signals, grade crossings, and structures into a state of good repair. | 198.200 | 198.200 | | | |
| Track and Signal | CSX - Amtrak | NYS Senate TF on HSR Action Plan | | Hudson SD: LAB to Hoffmans | CP-144 to CP-169: Install Second main line track for 110 MPH passenger train track speed. | This project includes signal system rehabilitation and bridge rehabilitation for three (3) upgrade bridges between these points, not including LAB. | 86.806 | 86.806 | | | |
| Track and Signal | CSX - Amtrak | NYS DOT | | Empire Corridor: Third Track Initiative | CP-169 to CP-431: Install Third main line track for 110 mph passenger train track speed. | This initiative includes the construction of an express track where practical within existing railroad rights-of-way for intercity passenger rail service capable of reaching operating speeds up to 110 mph. Infrastructure includes track, signals, and structures necessary for operating speeds higher than existing 79 mph passenger service. | TBD | | | | |
| Safety | CSX - Amtrak | NYS Senate TF on HSR Action Plan | | Hudson SD: Poughkeepsie to Albany-Rensselaer | Upgrade Six (6) Highway/Rail Grade Crossings for 110 mph High Speed Rail. | Six crossings have been identified which should be upgraded to the appropriate configuration to enhance safety, including standard entrance gates with a center stand median, closure, or grade separation. | 17.800 | 17.800 | | | |
| Track and Signal | CSX - Amtrak | NYS Senate TF on HSR Action Plan | | Hudson SD: Hudson to Stuyvesant | CP-114 to CP-125: Track Improvements for 110 MPH Phase 2: Additional concrete ties will be added. Rehabilitation of bridges and structures will be completed. Curve re-alignments that require major track shifts will take place in this phase. Major structure repairs or replacement will be performed. Hudson Station tracks will be shifted to "lengthen" the curve through the station to provide for the highest possible passenger speed. Further signal upgrades, including signal block length reductions along with continued upgrades of grade crossing warning devices, will occur. A major program for grade separations, closures, or combining crossing access points will take place in this phase. | This additional work will further increase reliability, increase train capacity, reduce travel time, and improve corridor safety. | 222.800 | | 222.800 | | |

New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2006-13 | 2014-18 | 2019-23 | 2024-28 |
|------------------------|--------------------|----------------------------------|----------------|--|--|---|------------------|---------|---------|---------|---------|
| Track and Signal | CSX - Amtrak | NYS Senate TF on HSR Action Plan | | Hudson SD; Poughkeepsie to Hudson | CP-75 to CP-114: Track improvements for 110 MPH Phase 1: increasing super-elevation on curves and realignment of curves between Poughkeepsie and Stuyvesant to achieve the maximum passenger train speed possible, tie replacement with wood or concrete, replacement or repositioning of rail, surface and re-gauge track to 110 MPH standards, signal upgrades to reduce block length, and upgrade of crossing warning devices will achieve 110 MPH operation in the corridor. | This additional work will further increase reliability, increase train capacity, reduce travel time, and improve corridor safety. | 222.800 | 222.800 | | | |
| Track | CSX - Amtrak | 2007 PRRAP Application | | Batavia, Genesee County | Peanut Track Rehab and Rail Replacement | | 785.616 | 141.816 | 421.000 | 222.800 | 0.000 |
| Track | DLWR | | | Batavia | Construct 25,000 Sq. Ft. Expansion to Truck/Rail Transload Facility | | 2.618 | 2.618 | | | |
| Freight Facility | DLWR | NYS DOT | | Batavia | Construct track and truck/rail transload facility | | 1.800 | 1.800 | | | |
| Freight Facility | DLWR | NYS DOT | | Cheektowaga | Rehabilitate 13 Highway/Rail Grade Crossing Surfaces | | 2.740 | 2.740 | | | |
| Track | DLWR | NYS DOT | | Various | Upgrade 23 Existing Turnouts with new 119 LB Turnouts | | 1.300 | 1.300 | | | |
| Track | DLWR | NYS DOT | | Various | Acquire 2 Low Emission GenSet Locomotives | | 0.805 | 0.805 | | | |
| Track | DLWR | NYS DOT | | Various | Ties, rail, bridge decking. Upgrade track in support 315K hi-wide moves from Graham & Transload Center | | 2.000 | 2.000 | | | |
| Track Rehab | DLWR | | | Batavia | Expand yard & team track capacity | Grahams is a growing user of rail for only heavy wide shipments increases car handling cap. as reload takes more trucks of highways | 1.510 | 0.460 | 0.380 | 0.420 | 0.250 |
| Rail Yard | DLWR | | | Batavia | Extend & improve engine house, fence & pave transload site | Allows reduced emissions, dust and saves fuel | 1.150 | 0.500 | 0.160 | 0.190 | 0.300 |
| Engine house | DLWR | | | Batavia | Upgrade 5 crossings with lights gates & bells | Provides safe separation of vehicles and increasing train traffic | 0.400 | 0.200 | 0.120 | 0.080 | |
| Grade Crossing | DLWR | | | Batavia & Lancaster | Preserve 9 miles of track and 6 bridge structures. Replace ties, spot surface work, cut brush & spray | Insures rail transportation options to 8 companies in Erie Co. & 11 in Genesee Co. preserves assets, safety, reliability, economic competitiveness | 0.750 | 0.250 | 0.250 | 0.250 | |
| Track Rehab | DLWR | | | Erie & Genesee Co | Upgrade 4 grade crossings surfaces | | 1.700 | 0.330 | 0.450 | 0.450 | 0.470 |
| Grade Crossing | DLWR | | | Erie & Genesee | Ties & Surface work. Replace worn rail & ties | | 0.500 | 0.250 | 0.250 | | |
| Track Rehab | DLWR | | | Erie Co. | Add 18x sq feet to existing train to truck transload center | Safe operation and facilitates 286K lb. & 315K loadings | 1.650 | 0.430 | 0.620 | 0.300 | 0.300 |
| Transload Facility | DLWR | | | Genesee Co. | Purchase grapple truck & 2 locomotives to serve new Agri Business park | Allows additional train/truck transload savings for shippers | 1.000 | 1.000 | | | |
| Engine & Grapple truck | DLWR | | | Genesee Co. | Extend track & build 3 switches in expanded park | IDA is developing AgriPark to reduce farmers transportation costs | 0.340 | 0.210 | 0.130 | | |
| Industrial Park | DLWR | | | Lancaster | Track Rehabilitation & Maintenance | Facilitates the enlargement of Town Ind. Pl. Allowing park access to rail | 0.790 | 0.330 | 0.460 | | |
| Track | DLWR | NYS DOT | | Delaware Co. | Capacity improvements in Solway Yard | | 21.053 | 6.578 | 11.465 | 1.990 | 1.290 |
| Track | DLWR | NYS DOT | | Auburn Road, Onondaga County | Track Rehabilitation and construct Clifton Springs Runaround track | By upgrading track from 80 lb. to 105 lb. rail, this will support 286K railcar movement to ONCT and Clifton Springs. The new Runaround will improve service to Hanson Aggregates and allow service to Dolomite Aggregates. | 4.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Track | FGLK | 2007 Bond Application | | Cannadagua Line, MP 60 to MP 76, Ontario County | Track rehabilitation, construct two Runaround tracks, Bridge Repairs | This project will improve track and bridge conditions to permit sustainable operation of 286K lb. rail cars and passenger excursions on this track. | 0.913 | 0.913 | | | |
| Track | FGLK | 2007 Bond Application | | Watkins Glen IT, MP 16.4 to MP 40.5, Yates & Schuyler Counties | Construct two new sidings, totaling approximately 5,200 feet, in Sennett (Auburn) | Auburn rail business is growing. Additional yard track capacity is required to support growing local switching requirements and to facilitate the exchange of rail cars between intercity road trains and the Auburn-based local train. | 0.372 | 0.372 | | | |
| Track | FGLK | 2007 PRRAP & Bond Applications | | Auburn Road MP 23.4 to MP 23.6, Cayuga County | Realign track through Seneca Falls and construct on mile of new track. Install highway/rail grade crossing warning devices at eight crossings. | Upgrade track to 286K capability; realign track away from homes constructed too close to the track; provide automatic grade crossing protection through a densely populated part of the village. | 2.400 | 2.400 | | | |
| Track and Safety | FGLK | 2007 PRRAP & Bond Applications | | Auburn Road MP 41 to MP 42, Seneca County | New Track Surface Existing Yard | | 0.554 | 0.554 | | | |
| Track | FGLK | 2007 PRRAP Application | | Auburn Road MP 3 to MP 6, Onondaga County | | | | | | | |

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New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---------------------------------------|--------------------|------------------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Track | FGLK | 2007 PFRAP Application | | Geneva Yard, MP 50.5 to Mp 51.3, Ontario and Seneca Counties | Reinstall Wye Track; extend one track; install ties & surface track | Improves interchange with CSX; increases yard capacity and improves switching efficiency. | 0.384 | 0.384 | | | |
| Equipment | FGLK | NYS DOT | | 10 Villages | Acquire 7 Low-Emission Locomotives | Reduce emissions | 11,000 | 11,000 | | | |
| Whistle Stop Boarding Locations | FGLK | | | Auburn, NY | Signal approach to Washington St. & Columbus St. | Tourist Excursion Rail Service | 0.100 | 0.100 | | | |
| Signal Approach | FGLK | | | Auburn, NY | Construct 1 mile rail siding lead and major grade crossing supporting trackage and land acquisition to better serve NUCOR Steel. | Public: Eliminate stop and proceed crossing | 0.250 | 0.250 | | | |
| Rail siding | FGLK | | | Auburn, NY | Platforms and cross loading docks with building coverage. | Private: This siding would lower raw material costs and result in reduction in truck traffic. | 7,600 | 4,000 | 3,000 | | |
| Transload Facility | FGLK | | | Aurelius, NY | | Improvement of off-rail customers ability to have better rail access. | 0.450 | 0.450 | | | |
| Runarounds | FGLK | | | Cayuga, NY | 1200' of Track | Lower switching costs for freight; Improve Industrial Development Prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.250 | 0.250 | | | |
| Runarounds | FGLK | | | Canton Springs, NY | 1200' of Track | Lower switching costs for freight; Improve Industrial Development Prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.250 | 0.000 | 0.250 | | |
| Runarounds | FGLK | | | Elbridge, NY | 1200' of Track | Lower switching costs for freight; Improve Industrial Development Prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.250 | 0.000 | 0.250 | | |
| Weight Scale Track | FGLK | | | Geneva, NY | Scale Track near headquarters | Public & Private: Monitor accurate weight variance. | 1,500 | 0,000 | 1,500 | | |
| Construct Passenger Station | FGLK | | | Geneva, NY | | Tourist Excursion Rail Service | 0.500 | 0.500 | | | |
| Bulk Transfer Facilities | FGLK | | | Himrod, Auburn, & Geneva, NY | Construct two bulk transfer facilities, including trackage, land acquisition, lighting, paving and terminal equipment. | Increase ability for truck traffic to originate and terminate within reasonable location to customer. | 2,400 | 1,400 | 1,000 | | |
| Yard Enhancements | FGLK | | | Himrod, NY | Himrod Yard. Add one 50-car yard tracks and two pair of Crossovers. | PRIVATE & PUBLIC: Lower operating costs and improve service to customers. | 1,000 | 0.500 | 0.500 | | |
| Transload Facility | FGLK | | | Himrod, NY | Platforms and cross loading docks with building coverage. | Improvement of off-rail customer ability to have better rail access. | 0.450 | 0.450 | | | |
| Car Repair Facility | FGLK | | | Ontario County | Combination Freight / Passenger Car repair facility plus track equipment storage track. Flash Welding facility space included. | Private: | 1,000 | 1,000 | | | |
| Runarounds | FGLK | | | Penn Yan, NY | 1200' of Track | Lower switching costs for freight; Improve Industrial Development Prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.250 | 0.000 | 0.250 | | |
| Runarounds | FGLK | | | Phelps, NY | 1200' of Track | Lower switching costs for freight; Improve Industrial Development Prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.250 | 0.250 | | | |
| Industrial Development - Seneca Depot | FGLK | | | Romulus, NY | Upgrade Kendall track and yards, add flashers at critical grade crossings and add two runarounds | Public Benefit: Allow any industrial development to include rail options | 5,500 | 1,500 | 4,000 | | |
| Track and Bridge Rehab | FGLK | | | Schuyler County, Yates County, Onondaga County, Ontario County, Seneca County, Cayuga County | Preserve 118 miles of track and 50 structures | PUBLIC & PRIVATE: 40+ FGLK customers have made economic decisions which resulted in an increase in carloads of 13,000 over 10 years enabled by the quality of trackage and ability to move cars and efficiently. | 12,000 | 3,000 | 3,000 | 3,000 | |
| Signals and remote manual switches | FGLK | | | Schuyler County, Yates County, Onondaga County, Ontario County, Seneca County, Cayuga County | Install remote automated switches and associated signaling | Public & Private: Increase Train Movement Safety and speed up train movement which results in increased productivity. | 3,000 | 1,500 | 0,500 | 0,500 | |
| Grade Crossing | FGLK | | | Schuyler County, Yates County, Onondaga County, Ontario County, Seneca County, Cayuga County | Upgrade 40 public grade crossings - road portion for smoother driving | Public: Safety and Community safety enhancement. | 4,000 | 1,500 | 1,500 | 0,500 | 0,500 |
| 315K lb rail | FGLK | | | Schuyler County, Yates County, Onondaga County, Ontario County, Seneca County, Cayuga County | Upgrade tracks and structures to carry 315K lb cars | PUBLIC & PRIVATE: 315K will become the next industry standard. | 15,000 | 3,750 | 3,750 | 3,750 | 3,750 |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost \$M | 2009-11 | 2014-18 | 2019-23 | 2024-28 |
|----------------------------------|--------------------|-----------------------|----------------|--|--|---|----------------|---------|---------|---------|---------|
| Grade Crossing Structures | FGLK | | | Schuyler County, Yates County, Oneida County, Ontario County, Seneca County, Cayuga County | In cooperation with OACT: Continual fixing and maintenance | PUBLIC & PRIVATE: Crossings are a weak point in track. Upgrades benefit not only FGLK but communities served. | 2,000 | 0.500 | 0.500 | 0.500 | 0.500 |
| Runarounds | FGLK | | | Shortsville, NY | 1200' of Track | Lower switching costs for freight; improve industrial development prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.250 | 0.250 | | | |
| Yard Improvements in Solway Yard | FGLK | | | Solvay, NY | Replace Bridge with Culvert & Fill; Lengthen 1 track 500'; Rebuild Yard Switching Lead; Improve Track Centers to 14'; Retie yard; Add Lighting | FGLK - CSX interchange will improve local FGLK service to Customers and improve the flow of business to and from the rest of the FGLK system. | 1,000 | 1,000 | | | |
| Lights & Gates | FGLK | | | Watkins Glen, NY | New Lights and gates at Rt. 414 with high traffic volume. Only cross bucks at this time | Greatly improve the safety of a very dangerous crossing. | 0.220 | 0.220 | | | |
| Runarounds | FGLK | | | Watkins Glen, NY | Runaround at US Sal. | Lower switching costs and improve service to US Sal. | 0.250 | 0.250 | | | |
| Runarounds | FGLK | | | Watkins Glen, NY | Cargill End of Track | Lower switching costs for freight; improve industrial development prospects; Lower Passenger Services Costs; Increase Passenger Service options | 0.500 | 0.250 | 0.250 | | |
| Runarounds | FGLK | | | Watkins Glen, NY | | | 76,326 | 39,576 | 20,250 | 8,250 | 8,250 |
| Bridge | FRR | NFLUAFIS | | GVF Bridge over Erie Canal, Lockport, Niagara County | Repair GVF Bridge over Erie Canal | Safety, Capacity, Reliability, Efficiency, Retain Shippers, Speed, Improve Operations, Enhance Productivity | 0.000 | | | | |
| Real Estate | FRR | NYSDOT | | Brookport to Rochester | Acquire 17 Miles Abandoned ROW | | 5,000 | 5,000 | | | |
| Track, Structures & Safety | FRR | NYSDOT | | Brookport to Rochester | Restore 17 Miles Track on Acquired ROW between Brookport and Rochester | | 17,000 | 17,000 | | | |
| Track | FRR | NYSDOT | | Lockport | Renovate Lockport Yard Tracks | | 0.750 | 0.750 | | | |
| Track | FRR | NYSDOT | | Lockport | Upgrade 25 Existing Turnouts with new 132 LB Turnouts | | 1,125 | 1,125 | | | |
| Equipment | FRR | NYSDOT | | Various | Acquire MOW Work Equipment | | 0.680 | 0.340 | | | 0.340 |
| Equipment | FRR | NYSDOT | | Various | Acquire 3 Low-Emission GenSet Locomotives | | 3,000 | 3,000 | | | |
| Equipment | FRR | NYSDOT | | Various | Acquire 7 Maintenance of Way rail cars (1 flat and 6 ballast cars) | | 0.175 | 0.175 | | | |
| Rail yard | FRR | | | Lockport | Expand yard to handle ethanol and corn by-products | Fulfills needs for car handling taking trucks off of the highway, while providing convenient run around for passenger trains | 1,700 | 0.725 | 0.425 | 0.550 | |
| Track Rehab | FRR | | | Medina | Rail & Tie change out. Ties & Rail change out through villages & main ethanol route | Provides for safe transp. of ethanol & unit corn trains through villages, and for the operation of canal tourist trains for Medina RR Museum. | 5,600 | 1,200 | 1,400 | 1,200 | 1,800 |
| Rail spur | FRR | | | Monroe Co. | Construct rail spur to Co. Industrial Park in Brookport | Facilitates the enlargement of Towns Ind. Park. Allowing park access to rail | 0.750 | | 0.750 | | |
| Grade Crossing | FRR | | | Monroe, Orleans, | Upgrade 18 grade crossings surfaces | Provides for safe transp. through villages of ethanol & unit corn trains, and for canal tourist trains for Medina RR Museum | 3,000 | 1,000 | 0.800 | 0.800 | 0,400 |
| Grade Crossing | FRR | | | Niagara & Orleans | Upgrade 18 signal system gates, lights & bells | Provides for safe transp. through villages of ethanol, corn and passing trains. | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Extend Engine houses | FRR | | | Niagara Co. | Addition to engine house for 3rd locomotive ethanol plant | Allow reduced emissions, dust and saves fuel, & provides power for pass. trains | 0.140 | 0.140 | | | |
| Transfer Facility | FRR | | | Niagara Co. | Const. Rail to truck transfer - short haul instead of long haul trucking | Allows additional train/truck transfer savings for shippers | 1,900 | | 1,600 | 0,300 | |
| Rail spur | FRR | | | Niagara Co. | Construct rail spur to Co. Industrial Park | Facilitates the enlargement of Towns Ind. Park. Allowing park access to rail | 0.460 | | 0.460 | | |
| Track Rehab | FRR | | | Niagara, Orleans & Monroe Counties | Preserve 41 miles of track and 26 bridge structures. Replace ties, spot surface work, cut brush & spray | Insures rail transportation options to 14 companies in the service area, while providing trackage for Medina RR Museum year around passenger operations | 2,600 | 0,550 | 0,650 | 0,650 | 0,750 |
| Freight Facility | FRR | NYSDOT | | Hopewell Junction, Dutchess County | Construct Bulk Transfer Facility near Hopewell Junction, M.R. Beacon Line | | 47,880 | 29,005 | 10,085 | 4,500 | 4,290 |
| Track & Structures | HRRC | NYSDOT | | M.R. Beacon Line, NY/CT Border to Beacon | Upgrade 41 Miles Track and Undergrade Bridge for 286K lb. rail cars | | 4,000 | 0,000 | 4,000 | | |
| Track | HRRC | 2007 Bond Application | | LAL Main Line MP 377.02 to MP 379.80, MP 360 to MP 361.59, Monroe County | Rail replacement, ties & surface | | 10,500 | 0,000 | 10,500 | | |
| Track | LAL | 2007 Bond Application | | Various | Acquire 3 Low-Emission GenSet Locomotives | | 14,500 | 0,000 | 14,500 | | 0,000 |
| Equipment | LAL | NYSDOT | | Various | | | 1,030 | 1,030 | | | |
| Equipment | LAL | NYSDOT | | Various | | | 3,000 | | 3,000 | | |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Outgoing Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|--|-------------------|------------------------|-------------------------|--|--|---|------------------|-------------|-------------|-------------|-------------|
| Track Rehab | LAL | | Livingston & Monroe Co. | Livingston & Monroe Co. | Preserve 29 miles of track and 20 structures | Safety, preserve assets, reliability, retain shippers, intermodal connectivity, reduce operating costs | 8,560 | 2,140 | 2,140 | 2,140 | 2,140 |
| Grade Crossing | LAL | | Livingston & Monroe Co. | Livingston & Monroe Co. | Upgrade 10 public grade crossings | Safety, reliability, preserve assets, improve operations, reduce operating costs | 1,500 | 0.750 | 0.750 | | |
| Track Rehab | LAL | | Livingston & Monroe Co. | Livingston & Monroe Co. | Upgrade 29 miles of track and 20 structures to SOGR | Safety, reliability, efficiency, retain shippers and expand service, on-time performance, preserve assets, improve operations, enhance market share, remove trucks, economic competitiveness, reduce energy use, enhance productivity, competitive pricing | 6,000 | 2,500 | 2,500 | 0,500 | 0,500 |
| Track | LAL | NYSDOT | | Lewis | Track Rehabilitation & Maintenance | | 20,090 | 6,470 | 8,390 | 2,640 | 2,640 |
| Track | LBR | NYSDOT | | | | | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Track | CBR | NYSDOT | | | | | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Bridge | LIRR | 2007 PFRAP Application | | Bay Ridge Branch MP 5.5 to MP 12, Brooklyn (Kings County) | Rehabilitate or replace bridges at Seneca Ave, Cooper Ave, Rockaway Ave, Remsen Ave and Kings Highway | Achieve 286K capability on Bay Ridge Branch between Fresh Pond Yard and 65th St. Yard for NYAR traffic interchanged from/to NYNJ and NS. | 20,400 | 20,400 | 0,000 | 0,000 | 0,000 |
| Bridge | LIRR | 2007 PFRAP Application | | Bushwick Branch MP 5.8, Brooklyn (Kings County) | Replace moveable bridge over English Kills Creek | Achieve 286K capability on Bushwick Branch from Fresh Pond Yard east to Bushwick for NYAR traffic interchanged from/to CSX, CPR and PW. | 12,900 | 12,900 | | | |
| Bridge | LIRR | 2007 PFRAP Application | | Montauk Branch MP 0 to MP 1.3, Queens | Upgrade bridges at Borden Ave, 51st Ave, 50th Ave, Skillman Ave, Cabin "M" moveable bridge and Montauk Cut-Off Viaduct | Achieve 286K capability on Montauk Branch from Fresh Pond Yard east to Long Island City for NYAR traffic interchanged from/to CSX, CPR and PW. | 53,200 | 53,200 | | | |
| Bridge | LIRR | 2007 PFRAP Application | | Montauk Branch MP 7.3 to MP 9, Queens | Rehabilitate or Replace Bridges at 89th Street and Points East Montauk Branch | Achieve 286K capability on Montauk Branch from Fresh Pond Yard east to Jamaica for NYAR traffic interchanged from/to CSX, CPR and PW. | 5,700 | 5,700 | | | |
| Classification and Storage Area | LIRR | NYAR | | Adjacent to LIRR mainline (MP 57 to MP 58) | Construct new classification, storage and siding tracks west of YA siding and overpass west of Yaphank station (up to 3 tracks wide) | Retain shippers, reliability, efficiency, improve operations, safety, economic competitiveness, reduce operating costs, enhance productivity, enhance market share | 2,500 | 2,500 | | | |
| Increased Clearance East New York Tunnel | LIRR | NYAR | | Bay Ridge Line (MP 9.0) | Lower right of way track in abandoned existing tunnel bore | Reliability, efficiency, enhance market share, on-time performance, improve operations, economic competitiveness, enhance productivity | 2,500 | 2,500 | | | |
| Additional Storage Capacity | LIRR | NYAR | | Bushwick Branch | Extend track #4 to tie into track #2 just south west of Woodward Ave. crossing | Reliability, efficiency, retain shippers, improve operations, intermodal connectivity, enhance productivity, remove trucks, reduce air emissions, reduce energy use, land use management | 0,200 | 0,200 | | | |
| Track Extension | LIRR | NYAR | | Fremont Yard Bay Ridge line (MP 10-MP 11.5) | Reconstruct from #3 to east of CBS turnout from current cross over location at north-east end of Irons | Reliability, efficiency, retain shippers, improve operations, intermodal connectivity, reduce operating costs, enhance productivity | 1,400 | 1,400 | | | |
| Track and Drainage | LIRR | NYAR | | Hicksville yard adjacent to LIRR mainline (MP 23.1) | Replace ties and correct drainage, upgrade rail and ties, LINE & SERVICE as required | Safety, reliability, efficiency, retain shippers, preserve assets, economic competitiveness, enhance productivity | 0,200 | 0,200 | | | |
| Track Signal and Structures | LIRR | NYAR | | NYC LI | Upgrade LIRR tracks, signals and structures used by NYAR to a SOGR | Safety, reliability, efficiency, retain and expand shippers, preserve assets, improve operations, enhance market share, reduce congestion, remove trucks, economic competitiveness, reduce air emissions, reduce energy use, reduce operating costs, enhance productivity | 0,000 | TBD by LIRR | TBD by LIRR | TBD by LIRR | TBD by LIRR |
| Track Extension | LIRR | NYAR | | Pilgrim DEP adjacent to LIRR mainline (MP 38.5 to MP 40.0) | Extend Pilgrim DEP from east of Executive Drive Crossing at Deer Park to west of 5th Ave. crossing Brentwood | Reliability, efficiency, retain shippers, improve operations, intermodal connectivity, reduce operating costs, enhance productivity, remove trucks, reduce energy use, reduce air emissions | 3,000 | | | 3,000 | |

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New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | Owning Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---|-----------------|-------------|----------------|--|---|---|-----------------|---------|---------|---------|---------|
| Track Realignment and Extension | LIRR | NYAR | | Pilgrim IT | Add extra class / storage tracks parallel to Pilgrim DEF track between Back Track turnout and Sagittos Parkway overpass (up to 3 tracks in width) | Reliability, efficiency, retain shippers, improve operations, intermodal connectivity, reduce operating costs, enhance productivity, remove trucks, reduce energy use, reduce air emissions | 1,200 | 1,200 | | | |
| Track Realignment and Extension | LIRR | NYAR | | Pine Aire back track adjacent to LIRR mainline (MP 31.4) Farm 2 | Realign curve to not exceed 18 degrees and construct a second back track within 25 feet easement at critical locations, upgrade tie condition and damage | Enhance market share, improve operations, intermodal connectivity, remove trucks, reduce air emissions, reduce energy use, efficiency, | 0,400 | 0,400 | | | |
| Track and Drainage | LIRR | NYAR | | PW long siding adjacent to LIRR mainline (MP 31.4) Farm 2 | Replace crossing and correct drainage upgrade rail and tie, Line & Surface as required | Safety, reliability, efficiency, retain shippers, preserve assets, economic competitiveness, enhance productivity | 0,600 | 0,600 | | | |
| Track Extension and Additional Track Classification | LIRR | NYAR | | PW Long Siding adjacent to LIRR mainline (MP 32.0) | Extend PW Long Siding to clear crossing (Wellwood) at Pine Lawn station. Construct second freight track from east of east leg of "v" to cut into existing PW track at location of east end existing detail. | Retain shippers, reliability, efficiency, improve operations, safety, economic competitiveness, enhance productivity, enhance market share | 1,600 | 1,600 | | | |
| Track Upgrade and Extension | LIRR | NYAR | | Southern Container et al, lead adjacent to LIRR mainline (MP 38.2) | Upgrade tie and drainage conditions, add run around track | Safety, reliability, efficiency, retain shippers, intermodal connectivity, enhance market share, remove trucks, reduce air emissions, reduce energy use, enhance productivity | 0,400 | 0,400 | | | |
| Track and Drainage | LIRR | NYAR | | Wellwood Def adjacent to LIRR central branch MP 32.5 | Replace ties and correct drainage upgrade rail and ties, Line & Service as required | Safety, reliability, efficiency, retain shippers, preserve assets, economic competitiveness, enhance productivity | 0,200 | 0,200 | | | |
| Clearance Improvement | LIRR | NYSDOT | | Lower Montauk Branch | Undercut Lower Montauk Branch for Plate F clearances | | 5,000 | 5,000 | | | |
| Signal Improvement | LIRR | NYSDOT | | Lower Montauk Branch | Convert Lower Montauk Branch to Rule 261 signal territory | Allows for bidirectional operation on existing double track, thereby expanding capacity and improving operation | 10,800 | | | 10,800 | |
| Clearance Improvement | LIRR | NYSDOT | | Metropolitan Avenue & Fresh Pond Road - Relocation of 60" combined sewer and increase bridge foundation depth. | | Prerequisite to any improvement beyond 16" on Lower Montauk Branch. | 30,000 | 30,000 | | | |
| Equipment | MHWA | NYSDOT | | Various | Acquire 2 Low-Emission Diesel Locomotives | | 152,200 | 129,300 | 9,100 | 13,800 | 0,000 |
| Track, Structures & Safety | MHWA | NYSDOT | | Lyons Falls Line | Upgrade 17 Existing Turnouts with new 119 LB Turnouts and washout repairs. | | 2,000 | | | | |
| Track, Structures & Safety | MHWA | NYSDOT | | Newton Falls Line | Restore Newton Falls Line to service; track, bridge, culvert, crossing | | 0,950 | | | | |
| Track | MHWA | NYSDOT | | Rome | Upgrade 12 Existing Turnouts with new 119 LB Turnouts | | 8,400 | 8,400 | | | |
| Track | MHWA | NYSDOT | | Utica Yard | Upgrade 14 Existing Turnouts with new 119 LB Turnouts | | 0,420 | 0,420 | | | |
| Structures | MHWA | NYSDOT | | Various | Complete Railing and Repair Bridges and Culverts for 286K Rate & Initiate Repair Bridges and Culverts for 286K | | 0,490 | 0,490 | | | |
| Structures | MHWA | NYSDOT | | Various | Acquire rail cars for NYSDOT High Friction Aggregate | | 5,000 | 5,000 | | | |
| Equipment | MHWA | NYSDOT | | Various | Acquire rail cars for NYSDOT High Friction Aggregate | | 1,800 | 1,800 | | | |
| Transload Facility | MHWA | | | Baconville | Improve track & build new forest products facility | Takes forest products/logs off the highways - mills reducing trucks on hwy | 1,700 | 0,950 | 0,750 | | |
| Track Rehab | MHWA | | | Lewis, Jefferson & Onondaga Counties | Preserve 62 miles of track and 32 bridge structures. Replace ties, spot surface work, cut brush & spray | Insures rail transportation options for 18 companies in economically stressed area, while providing Adirondack Scenic passenger operations over 26 mi of track to reach State owned trackage Remsen to Lake Placid | 2,800 | 0,450 | 0,650 | 0,850 | 0,850 |
| Track Rehab | MHWA | | | Lyons Falls & Rome Line | Rail & Tie change out. Replace worn rail & ties, surface work & repair of 150 yr old culverts | Insures safe rail transportation options for 18 companies in economically stressed area, while providing Adirondack Scenic passenger operations over 26 mi of track to reach State owned trackage Remsen to Lake Placid | 3,850 | 1,200 | 1,000 | 1,000 | 0,650 |
| MOW Equipment | MHWA | | | Onondaga Co. | Vehicles for maintenance & construction. Grapple & dump truck. | Fulfills needs for equipment for the safe operation of trains | 0,155 | 0,090 | 0,065 | | |
| Industrial Park | MHWA | | | Onondaga Co. | Develop industrial park on RR owned property | Facilitates the enlargement of Towns industrial, PK. Allowing part access to rail | 1,700 | 0,700 | 1,000 | | |
| Engine House | MHWA | | | Utica | Expand Engine house and upgrade yard | Allows reduced emissions, dust and saves fuel, provides spare loco for Adirondack Scenic passenger trains | 1,000 | 1,000 | | | |
| Transload Facility | MHWA | | | Utica | Build siding and purchase aggregate unloading equipment | Takes aggregate off the highways & into Metro NY City coast zones | 2,850 | 1,350 | 1,500 | | |
| Transload Facility | MHWA | | | Utica | Const. Train to truck transload - short haul instead of long haul trucking | Allows additional train/truck transload savings for shippers | 0,000 | | | | |
| Signal System | MHWA | | | Various | Upgrade 22 grade crossing surfaces | Provides for safe transp. Of ethanol & unit corn trains through villages, and for the operation of canal tourist trains for Medina RR Museum | 2,850 | 1,000 | 0,850 | 0,600 | 0,400 |
| Grade Crossing | MHWA | | | Various | Upgrade 22 grade crossings gates lights & bells | Provides for safe transp. Of ethanol & unit corn trains through villages, and for the operation of canal tourist trains for Medina RR Museum | 3,300 | 0,800 | 0,800 | 0,900 | 0,800 |
| | | | | | | | 43,910 | 33,650 | 14,210 | 3,350 | 2,700 |

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New York State Department of Transportation
2008 Rail Needs Survey

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|-----------------------|--------------------|---|----------------|---|--|---|------------------|---------|---------|---------|---------|
| Track & Signal | MINCR | Hudson Line Railroad Corridor Transportation Plan | | Hudson Line, CP-72 to CP-75, Poughkeepsie | Empire Corridor Capacity Improvement: Third Main Line Track - Poughkeepsie | The upgrade and extension of the existing Controlled Sliding to create a Third Main Line Track along south approach to Poughkeepsie Station. Work includes High-Capacity Signal Upgrade to Existing Tracks and high speed turnouts. This project will also enable direct interlocked access to the new and consolidated Metro-North Railroad yard immediately north of the station. | 13,950 | 13,950 | | | |
| Track & Signal | MINCR | Hudson Line Railroad Corridor Transportation Plan | | Hudson Line, Poughkeepsie | Empire Corridor Congestion Relief: Poughkeepsie Yard | This work includes the consolidation of MINCR yard operations onto a contiguous site to the east of the two track Hudson Line. Work includes relocation of both main line tracks to the west and the conversion of all yard switches to remote control operation. Main line track realignment and new yard configuration will provide Metro-North with a single yard having interlocked access and capable of storing approximately 15 trainsets. | 30,366 | 30,366 | | | |
| Signal | MINCR | Hudson Line Railroad Corridor Transportation Plan | | Hudson Line | New High-Capacity Signal System from Croton-Harmon to Poughkeepsie | | 117,474 | 117,474 | | | |
| Track & Signal | MINCR | PANYU | | Hudson Line, Bronx | CP-10 to CP-11: Construct third main line track between Marble Hill and Spuyten Duyvil stations. | This work eliminates the two-track bottleneck known as the "Marble Hill Rock Cut" along the MINCR Hudson Line. | 26,920 | | | 26,920 | |
| Track & Signal | MINCR | Hudson Line Railroad Corridor Transportation Plan | | Hudson Line, CP-24, Tarrytown | Tarrytown Station Pocket Track and New CP-24 | | 63,177 | 63,177 | | | |
| Track & Signal | MINCR | Hudson Line Railroad Corridor Transportation Plan | | Hudson Line, CP-53 to CP-63 | Construct Third Main Line Track - Cold Spring Bay to Chelsea | Work includes High-Capacity Signal Upgrade to Existing Tracks. This improvement extends an existing controlled sliding southward from CP-53 to CP-63 and northward to a new CP-63, and installs several new high speed crossovers and turnouts at these Control Points. This track will become a third main track. | 111,900 | 111,900 | | | |
| Clearance Improvement | MINCR | NYSOT | | Hudson Line | Establish Program to Increase Vertical Clearance to 23' for Existing Active, Private Bridges and Pedestrian Bridges | | 20,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Clearance Improvement | MINCR | NYSOT | | Hudson Line | Establish Program to Retire and Remove Abandoned Signal and Pedestrian Bridges | | 4,000 | 2,000 | 2,000 | | |
| Clearance Improvement | MINCR | NYSOT | | Hudson Line and Oak Point Link, Bronx | Modify 10th Harlem River Bridge over Oak Point Link to improve Vertical Clearance to 20'-3" | | 5,000 | 5,000 | | | |
| New Construction | MINCR | NYSOT | | Tappan Zee Commuter Rail Line (Incremental Cost) | | Future Class I Freight Rail Crossing of Hudson River | 0,000 | | | TBD | |
| Track & Structures | MINCR | NYSOT | | New Haven Line, Westchester County | Upgrade 14 Miles Track and Undergrade Bridges for 286K lb. rail cars, NYCT Border to CP-212 - Mt. Vernon | Enables Providence & Worcester (PW) Railroad and CSX to utilize 286K lb. High Axle Loads north of Oak Point Yard. | 28,000 | 14,000 | 14,000 | | |
| | | | | | | | 420,787 | 362,867 | 21,000 | 31,920 | 5,000 |
| Track | MNI | 2007 Bond Application | | NS Crawford Branch, MP 0 to MP 1.8, Orange County | Upgrade 90 lb. and 90 lb. rail to 100 lb. rail; tie replacement; ballast and surface; replace one turnout; renew 6 grade crossing surfaces; construct new 1500 foot interchange track with two turnouts. | This project will create new jobs, upgrade and improve the safe operation of the railroad and advance the economic development of Orange County as well as provide sustainable operation of 286K lb. rail cars. | 3,461 | 3,461 | | | |
| Equipment | MNI | NYSOT | | Acquire 1 Low-Emission, GenSet Locomotive | | Preserve assets, safety, reliability, efficiency, retain shippers, reduce operating costs. | 1,000 | | 1,000 | | |
| Track Rehab | MNI | | | Orange Co. | Preserve 7 miles of track and 3 structures | | 3,250 | 1,750 | 0,500 | 0,500 | 0,500 |
| Track Rehab | MNI | | | Orange Co. | Upgrade 5 miles of track and 3 structures to Class I SOGR in order to serve anticipated privately funded intermodal and transload facilities in planning | Preserve assets, retain shippers and expand service, reliability, efficiency, improve operations, intermodal connectivity, enhance market share, economic competitiveness, enhance productivity | 3,500 | 2,000 | 0,500 | 0,500 | 0,500 |
| Safety | MNI | | | Orange co. | Upgrade 4 public grade crossings | Safety, preserve assets, reliability, efficiency, improve operations, land use management | 1,000 | 0,500 | 0,500 | | |

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|------------------------|--------------------|-------------|----------------|--|---|--|------------------|---------|---------|---------|---------|
| Transload facility | MNJ | | | Orange Co. | Develop a transload facility for salt, lumber, stone and coal, including salt shed and paving (planned to be privately funded if tracks brought up to SOGR) | Accommodate modern rail cars, retain shippers and expand service, intermodal connectivity, enhance market share, reduce congestion, remove trucks | 0.000 | 1.500 | 0.500 | | |
| 286 | MNJ | | | | Upgrade to carry 286K lb. rail cars | | 2.000 | | | | |
| Intermodal facility | MNJ | | | | Develop an intermodal ramp for freight containers (planned to be privately funded if tracks brought up to SOGR) | | 0.000 | | | | |
| Equipment | MNJ | | | | Acquire 1 Low-Emission GenSet Locomotive | | 14.211 | 9.211 | 3.000 | 1.000 | 1.000 |
| Track Rehab | MSTR | NYSDOT | | St. Lawrence Co. | Preserve 3 miles of track and 7 structures | | 1.000 | 0.250 | 0.250 | 0.250 | 0.250 |
| Track | MSTR | | | St. Lawrence Co. | Upgrade 3 miles of track (rail to ribbon rail) and 7 structures to SOGR | | 4.000 | 2.500 | 0.500 | 0.500 | 0.500 |
| Tunnel | MSTR | | | St. Lawrence Co. | Siding. Construct a spur to unload local goods. | | 6.250 | 0.250 | 1.750 | 0.750 | 0.750 |
| Tunnel | NJT | NYSDOT | | | Access to the Region's Core (ARC) Trans-Hudson Express Tunnel (THE Tunnel) and 34th Street Station Annex to Penn Station). | NJ Transit service expansion to Penn Station would be able to provide congestion relief to the two Hudson River tunnels used by Amtrak. | 0.000 | 0.000 | TBD | 0.000 | 0.000 |
| New Construction | NJT | | | | | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| New Construction | NS | NFUAFIS | | Near C P Draw Bridge, Buffalo, Erie County | 2nd C P Draw Bridge Construction. In cooperation with CSX. Proposed bridge will relieve current CP Draw congestion. CSX owned tracks need to be flipped to the other side to allow NS access to interchange yard. | Reduce Congestion, Capacity, Reliability, Efficiency, Retain Shippers, On-time Performance, Speed, Improve Operations, Enhance Productivity | 35.000 | 0.000 | 35.000 | 0.000 | 0.000 |
| Track/crossover | NS | | | Binghamton, mp SR 2132 | Install a hand-thrown crossover, eastward from CP's track D14 to track D13, just west of the signals for NS's BD interlocking (MP SR2132). | NS has limited access to its track D14 because the track is restricted at BD interlocking to 4 to 4, or CP One Runner, move only. CP uses D14 to receive the intermodal interchange and to build an additional 2 to 3 trains daily, leaving the track blocked for approximately 85% of the day. NS is therefore restricted from accessing the east end of track D14, and cannot efficiently utilize this track. Adding the crossover would increase NS' effective utilization of this track for movements including block swaps and power moves as well as for staging coal trains for Johnson City. | 0.170 | 0.170 | | | |
| Bridge | NS | | | mp IS 276.63 | Located on the Ithaca Secondary; bring to 286K lbs. | These are all of the structures remaining in New York that restrict our lines to less than 286K traffic and are preliminary estimates. Detailed engineering estimates to be developed when the projects will be undertaken may result in different actual costs. | 0.125 | 0.125 | | | |
| Bridge | NS | | | mp IS 303.91 | Located on the Ithaca Secondary; bring to 286K lbs. | Freight car weights on these structures are restricted to less than the heavier, efficient 286,000 lbs. cars standard in the industry today. The weight restriction severely penalizes customers using these bridges as it denies them the benefit of fully loading their cars | 0.275 | 0.275 | | | |
| Track / Ties / Ballast | NS | | | Horseheads IT mp QM 0.0-QM 3.6 | Horseheads IT Track Rehabilitation for Economic Development | NS's branch line that provides rail service to the Center at Horseheads is nearing the point that it will require reinvestment in the 3.6 mile track structure (ballast, ties, rail, and grade crossing work.) This branch line is very light density and precipitously close to a marsh which poses a number of environmental and operational concerns. The ETC (local MPO) approved \$1.28M in 2003 to design the road, which will cost approx \$8M. The Center's location, availability of all needed infrastructure, and proximity to recently designated I-86 make it one of the most valuable properties for development in the Southern Tier. | 0.500 | 0.500 | | | |

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|--------------------|--------------------|-------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Track | NS | | | Southern Tier Line MP SR 217.8 - SR 250.8 | Southern Tier Line Track Rehabilitation | Single track the current 33-mile double track segment between Binghamton and Waverly, NY, add traffic control and passing sidings at Johnson City and Owego; Tie & Surface the segment to bring to 40-50 mph. NYSDOT awarded NS a grant from the 2007 Transportation Bond Act to partially fund this 2008 - 2009 project. | 8,100 | 8,100 | | | |
| Bridge | NS | | | Southern Tier Line MP SR 361.66 | Rebuild Portage Bridge. Renovation will benefit NS, CN and CP operations by providing better access to PANYNL and interchange yards in Buffalo. | Located at the Genesee River Gorge in Letchworth State Park The Portage Bridge is a 105 years old structure that currently carries a 273,000-lb. weight restriction and 10 MPH speed restriction. It is also nearing its useful life. Major restoration or replacement is required to make this bridge functional and remove weight restrictions. Portage Bridge is located on the NS Southern Tier Route, a major east-west rail corridor that is vital to the economic activity of New York State. The Southern Tier is the direct NS route connecting Buffalo and points west with Binghamton and the Southern Tier, Albany, New England, and the New York Metropolitan region. Besides NS, the bridge and the Southern Tier is used by the Canadian Pacific Railway. | 30,000 | 30,000 | | | |
| Bridge | NS | | | mp T2.73.28 | Located on the Gangs Mill Industrial Track, bring to 286K lbs. | | 0.150 | 0.150 | | | |
| Bridge | NS | | | mp WI 30.66 | Located on the Waldron Secondary, bring to 286K lbs. | | 0.125 | 0.125 | | | |
| Bridges | NS | | | Various | There are 375 bridges of various types on the NS system within the State of New York. While each bridge is inspected regularly, it would be cost prohibitive to develop a maintenance schedule and/or a replacement cost for each. The values entered here assume a bridge failure has occurred due to outside forces (flood, vehicular traffic damage, etc.) at the rate of 1 failure every 10 years. | | 6,300 | 1,550 | 1,600 | 1,650 | 1,650 |
| Grade Crossings | NS | | | Various | Maintain/Rehabilitate grade crossings. Currently there are 903 public and 621 private grade crossings on NS lines. | | 27,200 | 6,500 | 6,700 | 6,900 | 7,100 |
| Signal Systems | NS | | | Various | | | 65,500 | 33,900 | 15,000 | 17,400 | 20,200 |
| Track/Ties/Ballast | NS | | | Various | NS maintains 487 route miles within NY state | Public Benefit: Primary public benefit of a well-maintained freight railroad is the safe movement of freight to the desired locations throughout the state at a fraction of the cost of freight moves made by truck and with less total impact to the environment. Private Benefit: Continued growth and opportunity for this company to compete. | 123,400 | 29,500 | 30,400 | 31,300 | 32,200 |
| Bridges - 286K | NYAR | | | Bay Ridge Branch, MP 10.8, Brooklyn (Kings County) | Bridge Rehabilitation - Seneca Ave, BIN 7705170 | Achieve 286K capability | 296,845 | 89,845 | 98,650 | 57,200 | 61,150 |
| Track & Signal | NYAR | | | LRR Main Line MP 37.5 to MP 41.5, Suffolk | Upgrade interlocking for Pine Aire Siding | Powering up the existing hand-thrown, electrically locked crossover will allow a Dispatcher-controlled progressive move for freight trains into the proposed LTRM facility and eliminate delays on the Main Line due to operate of hand-thrown turnouts. | 6,738 | 6,738 | | | |
| Bridge | NYAR | | | LRR Montauk Branch MP 6.5, Queens | Bridge Rehabilitation - Jackie Robinson Parkway BIN 7704590 | Achieve 386K capability | 1,516 | 1,516 | | | |
| Track | NYAR | | | LRR Main Line, MP 69.1, Suffolk County | Rehabilitate Calverton Yard Lead & Additional Tracks | This project provides several rail lines for new customers and will increase employment in the area. It will also allow greater operating flexibility for existing customers, by increasing storage capacity. | 3,000 | 3,000 | | | |
| Track | NYAR | | | Bay Bridge Branch MP 6, Queens | Restore previously existing track #2 by constructing 2000 feet of track and install two number 10 turnouts. | This project will improve the overall efficiency of the NYAR in handling its increased traffic volumes by the addition of one yard track. The existing number and configuration of tracks require double and even triple handling of rail cars. | 2,000 | 2,000 | | | |
| Track | NYAR | | | | | | 0,600 | 0,600 | | | |

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|----------------------------|--------------------|------------------------|----------------|--|---|--|----------------|---------|---------|---------|---------|
| Track | NYAR | 2007 PFRAP Application | | Bay Ridge Branch MP 11.1, Queens | Restore Track 3 Fremont Yard by constructing approximately 5,000 feet of track and install two number 10 turnouts | The restoration of this track would provide another long receiving track and would allow yard crews to handle inbound cars directly to outbound trains, thus reducing handling, noise and emissions. | 1,400 | 1,400 | | | |
| Track | NYAR | 2007 PFRAP Application | | Bay Ridge Branch MP 11.1, Queens | Restore Track 5 Fremont Yard by constructing 1,500 feet of track and install two number 10 turnouts | The construction of additional track capacity in Fremont Yard will result in fewer switching moves. This will yield less noise and lower emissions. | 0,500 | 0,500 | | | |
| Track | NYAR | 2007 PFRAP Application | | Bay Ridge Branch MP 8, Queens | Rehabilitate existing Track #4 and extend by 4,200 feet. Install one number 10 turnout. | By providing additional track capacity, this project will reduce the number of times each freight car is handled. In addition, the expansion will produce savings for freight customers in that they will be able to order larger quantities of rail cars, availing them of volume discounts and seasonal price opportunities. | 1,000 | 1,000 | | | |
| Track | NYAR | 2007 PFRAP Application | | LIRR Main Line, MP 41.1, Suffolk County | Extend existing Pineaire Siding by 1,000 feet | Present space constraints prevent efficient and satisfactory service to patrons at this location. Extension of the siding will provide greater flexibility in switching cars on the "back track" and the Industrial sidings which emanate from it. | 1,200 | 1,200 | | | |
| Equipment | NYAR | NYSDOT | | | Acquire 13 Low-Emission GenSet Locomotives | | 13,000 | | 13,000 | | |
| New Construction | NYAR | NYSDOT | | | Long Island Track Rail Intermodal @ Pilgrim (LITRIM) | | 40,000 | 40,000 | | | |
| Bridge | NYAR | PANYNJ | | Queens, Nassau and Suffolk | Remove targeted Plate F Restrictions and 286K restrictions | This project will clear routes to Phelps Dodge site in Queens and Pilgrim (LITRIM) in Suffolk County for AAR Plate F rail cars and 286K lb. rail cars | 0,000 | | | | |
| Equipment | NYAR | PANYNJ | | Various | Upgrade 8 NYAR locomotives with speed control | The LIRR has a rail industry-unique system. Installation of this LIRR speed control will allow NYAR to operate at an increased freight speed as compared to current restrictions. | 0,480 | 0,480 | | | |
| Signal | NYAR | PANYNJ | | Various | Install High-Car, Thermal Wheel, 3rd Rail Detectors & AEI Tag Readers | Reduce potential for NYAR and PW freight operations to foul the LIRR commuter operations. | 0,200 | 0,200 | | | |
| Track & Signal | NYAR | PANYNJ | | Various | Install ten turnouts in LIRR electrified main line track | Turnouts would be provided for direct access at individual freight customer locations. The installation would be correlated with installation of turnouts at nodal locations. | 2,500 | | 2,500 | | |
| Track & Signal | NYAR | PANYNJ | | Various | Install two turnouts in LIRR electrified main line track | Turnouts would be provided for direct access at nodal locations, i.e., commodity clusters. | 0,750 | 0,750 | | | |
| Track Rehab | NYAR | | | | Block funding: Unspecified rail infrastructure improvements. | | 3,000 | | 1,000 | 1,000 | 1,000 |
| Maintenance Facilities | NYCT | 2007 PFRAP Application | | New York Container Terminal, Staten Island (Richmond County) | Construct locomotive lubrication and inspection pit | This project will provide a safe, clean and environmentally sound area to perform locomotive fueling and maintenance. The pit will include a spill containment system as well as an oil separation unit. | 1,200 | 1,200 | | | |
| Track | NYCT | 2007 PFRAP Application | | | | | 0,000 | 0,000 | | | |
| Track | NYCT | | | | | | 1,200 | 1,200 | 0,000 | 0,000 | 0,000 |
| Track | NYLE | 2007 Bond Application | | Cattaraugus Branch, Cattaraugus County | Track Rehabilitation: MP 427.5 to MP 437.5. | | 0,881 | 0,881 | | | |
| Equipment | NYLE | NYSDOT | | | Acquire 2 Low-Emission GenSet Locomotives | | 2,000 | | 2,000 | | |
| Track Rehab | NYLE | | | Cattaraugus & Cattaraugus Co. | Preserve 35 miles of track and 29 structures | Preserve assets, safety, reliability, efficiency, retain shippers, improve operations, reduce operating costs | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Track Upgrade | NYLE | | | Cattaraugus & Cattaraugus Co. | Upgrade 35 miles of track and 29 structures to Class 1 SOGR | Preserve assets, safety, reliability, efficiency, retain shippers and expand service, improve operations, safety, reduce operating costs | 4,100 | 2,100 | 2,000 | | |
| Safety | NYLE | | | Cattaraugus & Cattaraugus Co. | Upgrade 19 grade crossings | Safety, reliability, preserve assets, improve operations | 2,500 | 1,000 | 0,500 | 0,500 | 0,500 |
| Rail siding | NYLE | | | South Dayton | Build 6000 ft siding to gravel company | Capacity, expand service, improve operations, reliability, remove trucks, reduce energy use, intermodal connectivity | 0,700 | 0,700 | | | |
| Establish WAMP Interchange | NYLE | | | Waterboro, NY | Re-activate 6.3 miles of out-of-service track between Congewango Valley and Waterboro | Intermodal connectivity, expand service, improve operations, reduce operating costs, on-time performance, system redundancy, remove trucks, economic competitiveness, enhance productivity | 1,400 | 1,400 | | | |

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| Type of Project | Owning Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost \$M | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|------------------|-----------------|-------------|----------------|---------------------|--|---|----------------|---------|---------|---------|---------|
| 256 | NYLE | | | | Upgrade to carry 286K lb. rail cars. | Capacity, reliability, efficiency, accommodate modern rail cars, retain shippers and expand service, improve operations, intermodal connectivity | 3.000 | 2.000 | 1.000 | | |
| Structures | NYLE | | | | | | 18.581 | 9.081 | 6.500 | 1.500 | 1.500 |
| Freight Facility | NYNJ | NYSDOT | | Bay Ridge, Brooklyn | Engineering Analysis of all Rail Structures | | 0.200 | 0.200 | | | |
| | NYNJ | NYSDOT | | Bay Ridge, Brooklyn | Construct Intermodal Pad Loading Area | | 0.320 | 0.320 | | | |
| Yard Track Rehab | NYNJ | | | Kings Co. | Bush Terminal Yard Tie Replacement & Switch Upgrades | Safety, reliability, retain shippers, on-time performance, preserve assets | 1.600 | 0.850 | | 0.750 | |
| Float Bridge | NYNJ | | | Kings Co. | Preserve 3 rail car float barges and track access | Preserve assets, safety, reliability, retain shippers, on-time performance, improve operations, reduce congestion, remove trucks, economic competitiveness, reduce air emissions, reduce energy use, reduce operating costs, enhance productivity | 4.600 | 2.000 | 0.300 | 0.300 | 2.000 |
| Safety | NYNJ | | | Kings Co. | Realign the track curvature to lessen the degree | Safety, reliability, retain shippers, on-time performance, preserve assets | 0.425 | 0.425 | | | |
| Bridge Rehab | NYNJ | | | Kings Co. | Repair Rail Bridge 51st Street, frame, deck, supports | Safety, reliability, retain shippers, on-time performance, preserve assets | 2.500 | 1.500 | 0.000 | 1.000 | 0.000 |
| Switch Rehab | NYNJ | | | Kings Co. | 31st Avenue Switch Upgrades | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 0.900 | 0.450 | | 0.450 | |
| Track Rehab | NYNJ | | | Kings Co. | 1st Ave Track Rehabilitation from 51st Street to 65th Yard 286 | Safety, reliability, efficiency, accommodate modern rail cars, remove trucks, economic competitiveness, reduce operating costs | 9.000 | 5.000 | | 4.000 | |
| Rail Barge Rehab | NYNJ | | | Kings Co. | 30 Car Rail Barge Rehab | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks. | 3.000 | | 1.000 | | 2.000 |
| Yard Track Rehab | NYNJ | | | Kings Co. | Bush Terminal Yard Tie Replacement & Switch Upgrades | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 1.600 | 0.850 | | 0.750 | |
| Pontoon Rehab | NYNJ | | | Kings Co. | Pontoon Rehab | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 0.240 | | 0.120 | | 0.120 |
| Curve Correction | NYNJ | | | Kings Co. | Realign the track curve to lessen the degree for safety | Safety, reliability, efficiency, accommodate modern rail cars, remove trucks, economic competitiveness, reduce operating costs | 0.425 | 0.425 | | | |
| Bridge Rehab | NYNJ | | | Kings Co. | Repair Rail Bridge 51st Street, frame, deck, supports | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 2.500 | 1.500 | | 1.000 | |
| Track Rehab | NYNJ | | | Kings Co. | Upgrade 3 car float barges to SOGR/286K lb. rail cars | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 2.600 | 2.600 | | | |
| Rehab Yard Track | NYNJ | | | Kings Co. | Upgrade Bush Terminal Yard track to SOGR/286K lb. rail cars | Preserve assets, reliability, efficiency, capacity, retain shippers and expand service, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 2.500 | 2.500 | | | |
| New Lead Track | NYNJ | | | Kings Co. | 2nd lead track-switch at 51st Bridge | Safety, improve operations, system redundancy | 0.950 | 0.950 | | | |
| Scanner | NYNJ | | | Kings Co. | AE Scanner READER (2) | Reliability, expand service, on-time performance, intermodal connectivity, enhance market share, accommodate modern rail cars, remove trucks. | 0.160 | 0.160 | | | |
| Air System | NYNJ | | | Kings Co. | Air system plant | Reliability, expand service, enhance market share, reduce operating costs | 0.400 | 0.400 | | | |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$K) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|--------------------|--------------------|-------------|----------------|---|---|--|------------------|---------|---------|---------|---------|
| Container/Loader | NYNJ | | | Kings Co. | Container Loader | Reliability, expand service, on-time performance, intermodal connectivity, enhance market share, accommodate modern rail cars, remove trucks, | 0.450 | 0.450 | | | |
| Loading Ramp | NYNJ | | | Kings Co. | Cover construction loading ramp (53') | Reliability, expand service, enhance market share, accommodate modern rail cars | 0.450 | 0.450 | | | |
| Locomotive | NYNJ | | | Kings Co. | Green Locomotive - Low emission (2) | Reduce air emissions, reliability, expand service, reduce operating costs | 2.050 | 0.850 | | 1.200 | |
| Truck Scale | NYNJ | | | Kings Co. | Intermodal Truck Scale | Efficiency, reliability, expand service, intermodal connectivity, economic competitiveness, reduce operating costs, enhance productivity | 1.400 | 1.400 | | | |
| New Structure | NYNJ | | | Kings Co. | Replacement of 51st Rail Bridge | Reliability, expand service, on-time performance, intermodal connectivity, enhance market share, accommodate modern rail cars, remove trucks, | 3.300 | 0.000 | 3.300 | | |
| Expand Service | NYNJ | | | Kings Co. | Additional 30 Rail car Barge | Expand service, reliability, efficiency, improve operations, intermodal connectivity, reduce congestion, remove trucks, economic competitiveness, reduce air emissions, reduce energy use | 5.850 | 5.850 | | | |
| Equipment | NYNJ | | | | Acquire 1 Low-Emission Genesis Locomotive | | 47.420 | 29.130 | 4.720 | 9.450 | 4.120 |
| Track Rehab | NYOG | | | St. Lawrence Co. | Preserve 30 miles of track and 6 structures | Safety, reliability, efficiency, retain shippers, preserve assets, reduce operating costs | 6.000 | 3.000 | 1.000 | 1.000 | 1.000 |
| Track Rehab | NYOG | | | St. Lawrence Co. | Upgrade 30 miles of track and 6 structures | Safety, reliability, efficiency, retain shippers and expand service, speed, improve operations, enhance market share, economic competitiveness, remove trucks, reduce energy use, reduce operating costs, enhance productivity. | 4.500 | 2.000 | 1.500 | | 0.500 |
| Engine House | NYOG | | | St. Lawrence Co. | Construct an engine house | Reliability, efficiency, on-time performance, preserve assets, improve operations, economic competitiveness, reduce energy use, reduce operating costs, enhance productivity | 1.000 | 1.000 | | | |
| Safety | NYOG | | | St. Lawrence Co. | Upgrade 20 public grade crossings | Safety, reliability, efficiency, preserve assets | 0.800 | 0.600 | 0.200 | | |
| Signal System | NYOG | | | St. Lawrence Co. | Upgrade signal system | Safety, reliability, efficiency, preserve assets | 1.200 | 0.600 | 0.600 | | |
| 286 lb. rail car | NYOG | | | St. Lawrence Co. | Upgrade track and structures to carry 286K lb. rail cars | Accommodate modern rail cars, capacity, efficiency, reliability, retain shippers and expand service, improve operations, intermodal connectivity, enhance market share, reduce congestion, remove trucks, reduce air emissions, reduce energy use, enhance productivity | 8.000 | 2.000 | 2.000 | 2.000 | 2.000 |
| Siding | NYOG | | | St. Lawrence Co. | Add main line switch and siding to new shipper | Capacity, expand service, intermodal connectivity, enhance market share, remove trucks, economic competitiveness, enhance productivity | 0.500 | 0.500 | | | |
| Freight Facility | NYSDOT | NFUAFTS | | Lehigh Valley Yard, Niagara Falls, Niagara County | Lehigh Valley Yard Intermodal Expansion The project will expand intermodal and warehousing/distribution capabilities | Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Intermodal Connectivity, Enhance Market Share, Remove Trucks, Reduce Energy Usage, Environmental Enhancement, Land Use Management, Economic Competitiveness, Competitive Pricing, Enhance Productivity, and Competitive Pricing. | 10,000 | | 10,000 | | |
| Equipment | NYSDOT | NFUAFTS | | | Acquire 4 Low-Emission Genesis Locomotive | | 4,000 | 4,000 | | | |
| Track | NYSW | NYSDOT | | Utica Main 34.5 OUT OF SERVICE Miles, Chenango County | Repair Washouts and Restore to Service | | 0.618 | 0.618 | | | |
| Track | NYSW | NYSDOT | | Utica Main 34.5 OUT OF SERVICE Miles, Chenango County | Ties, ballast, surfacing, ditching, renew crossing surfaces, and bridge timbers | | 0.775 | 0.298 | 0.298 | 0.298 | 0.179 |
| Track Rehab | NYSW | NYSDOT | | 10.15 miles, Otsego County, SBNY Branch | Install ties/ballast/surface, ditching | Improve reliability, enhance safety, provide greater stability for the 286,000 lb. car loads now using the line, add to the capacity of the line | 2.030 | 0.680 | 0.260 | 0.280 | 0.810 |
| Rehabilitation | NYSW | NYSDOT | | 10.15 miles, Otsego County, SBNY Branch | Install switch timber | Improve reliability, enhance safety | 0.180 | 0.090 | | | 0.090 |
| Bridge Maintenance | NYSW | NYSDOT | | 10.15 miles, Otsego County, SBNY Branch | Renew Bridge Timber | Improve reliability, enhance safety | 0.100 | 0.050 | | | 0.050 |

Disclaimer: The listing of capital projects in these survey results does not constitute an endorsement or concurrence in whole or in part by the State of New York.

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-11 | 2014-18 | 2019-23 | 2024-28 |
|--------------------|--------------------|-------------|----------------|--|--|--|------------------|---------|---------|---------|---------|
| Welded Rail | NYSW | | | 10.15 miles, Onondaga County, SBWY Branch | Change out jointed rail with welded rail 5.0 miles | Improve reliability, enhance safety, provide greater stability for the line | 1.750 | 1.750 | | | |
| Rehabilitation | NYSW | | | 10.15 miles, Onondaga County, SBWY Branch | Install ties/yard/Industrial | Improve reliability, enhance safety, provide greater stability for the line, add to the capacity of the line | 0.960 | 0.160 | | | 0.200 |
| Welded Rail | NYSW | | | 10.15 miles, Onondaga County, SBWY Branch | Weld in place jointed rail 5.15 miles | Improve reliability, enhance safety, provide greater stability for the line | 0.770 | 0.770 | | | |
| Rehabilitation | NYSW | | | Southern Division Main - MP 81.2 to MP 84.5 | Rehab grade crossings | Enhance safety of crossing | 0.200 | 0.100 | | | 0.100 |
| Welded Rail | NYSW | | | Southern Division Main - MP 81.2 to MP 84.5 | Weld in place 131# RE jointed rail 3.30 miles | Improve reliability, enhance safety, provide greater stability for the line, increase track speeds | 0.530 | 0.530 | | | |
| Bridge Maintenance | NYSW | | | Southern Division Main - MP 81.2 to MP 84.5, 3.30 miles | Renew Bridge #82.70 | Improve reliability, enhance safety | 0.260 | 0.200 | | | 0.060 |
| Track Rehab | NYSW | | | Southern Division Main - MP 81.2 to MP 84.5, 3.30 Miles, Orange County | Install ties/balast/surface, ditching | Improve reliability, enhance safety, provide greater stability for the line | 0.550 | 0.265 | 0.050 | 0.000 | 0.234 |
| Track Rehab | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Install ties/balast/surface, ditching | Improve reliability, enhance safety, provide greater stability for the line | 14.390 | 5.100 | 0.640 | 2.360 | 6.270 |
| Bridge Maintenance | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Bridge Repairs | Improve reliability, enhance safety | 0.600 | 0.200 | 0.100 | 0.100 | 0.200 |
| Rehabilitation | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Install switch timber | Improve reliability, enhance safety | 0.250 | 0.120 | | | 0.130 |
| Bridge Maintenance | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Renew Bridge Timber | Improve reliability, enhance safety | 0.650 | 0.300 | 0.100 | 0.050 | 0.200 |
| Rehabilitation | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Repair Culverts | Improve reliability, enhance safety | 0.550 | 0.200 | 0.100 | 0.050 | 0.200 |
| Rehabilitation | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Install ties/yard/Industrial | Improve reliability, enhance safety, provide greater stability for the line | 1.440 | 0.640 | | | 0.800 |
| Rehabilitation | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Rehab grade crossings | Improve reliability, enhance safety, provide greater stability for the line | 1.100 | 0.500 | 0.200 | 0.100 | 0.300 |
| Welded Rail | NYSW | | | Syracuse Main, Onondaga, Cortland, Broome Counties, 61.68 Miles | Weld in place 30 miles of jointed rail | Improve reliability, enhance safety, provide greater stability for the line | 9.250 | 4.500 | 4.750 | | |
| Track Rehab | NYSW | | | Utica Main, MP 194.30 to MP 209.0, MP 243.50 to MP 286.60, Total 57.80 Miles | Install ties/balast/surface, ditching | Improve reliability, enhance safety, provide greater stability for the line | 10.990 | 4.780 | 0.250 | 0.080 | 5.880 |
| Bridge Maintenance | NYSW | | | Utica Main, MP 194.30 to MP 209.0, MP 243.50 to MP 286.60, Total 57.80 Miles | Bridge Repairs | Improve reliability, enhance safety | 0.950 | 0.600 | 0.200 | 0.050 | 0.100 |
| Rehabilitation | NYSW | | | Utica Main, MP 194.30 to MP 209.0, MP 243.50 to MP 286.60, Total 57.80 Miles | Install switch timber | Improve reliability, enhance safety | 0.190 | 0.090 | | | 0.100 |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost \$M | 2009-11 | 2014-18 | 2019-23 | 2024-28 |
|-------------------------|--------------------|------------------------|----------------|--|---|--|----------------|---------|---------|---------|---------|
| Rehabilitation | NYSW | | | Utica Main, MP 194.30 to MP 209.0, MP 243.50 to MP 286.60, Total 57.80 Miles | Install ties Yard/Industrial | Improve reliability, enhance safety, provide greater stability for the 286,000 lb. car loads now using the line, add to the capacity of the line | 1,080 | 0.480 | | | 0.600 |
| Rehabilitation | NYSW | | | Utica Main, MP 194.30 to MP 209.0, MP 243.50 to MP 286.60, Total 57.80 Miles | Rehab grade crossings | Improve reliability, enhance safety, provide greater stability for the 286,000 lb. car loads now using the line, add to the capacity of the line | 0.300 | 0.100 | 0.050 | 0.050 | 0.100 |
| | NYSW | | | | | This project is needed in order to maintain the reliability of rail service to the customers on the line. With a good transportation system, the customers will remain competitive and they will be able to grow and/or maintain a stable workforce that contributes to the economic engine of this region. This project will achieve 286K capability on the line. | 53,563 | 22,924 | 10,998 | 3,438 | 16,603 |
| Track | OHRV | 2007 PFRAP Application | | OHRV Main Line, MP 289 to MP 314.7, Tioga and Cortland Counties | Tie replacement, ballast and surfacing, retimbering bridges, drainage improvements, renew grade crossing surfaces, and construct new siding | | 4,400 | 4,400 | | | |
| Economic Dev. Equipment | OHRV | 2008 Grant Application | | Cortland & Tioga Co. | Upgrade / SWS / TEPCO 286K Corridor Infrastructure Improvements | Provide rail service to three new shippers | 1,340 | 1,340 | | | |
| Shop Expansion | OHRV | NYSDDT | | Cortland & Tioga | Acquire 1 Low-Emission Genset Locomotive | Reliability, efficiency, retain shippers, on-time performance, preserve assets, enhance market share, economic competitiveness, reduce operating costs | 1,000 | | 1,000 | | |
| Track-Rail Upgrade | OHRV | | | Cortland & Tioga | Expand locomotive and maintenance shops; add crane | | 6,000 | 3,000 | 3,000 | | |
| Safety | OHRV | | | Cortland & Tioga | Upgrade 26 miles of track rail for 286K lb. operation | Reliability, accommodate modern rail cars, efficiency, retain shippers and expand service, preserve assets, intermodal connectivity, enhance market share, reduce congestion, remove trucks, reduce air emissions, reduce energy use, enhance productivity | 35,000 | 15,000 | 10,000 | 10,000 | |
| Terminal | OHRV | | | Cortland & Tioga | Upgrade 36 public grade crossings | Safety, reliability, preserve assets, improve operations, reduce operating costs | 6,000 | 3,000 | 1,000 | 1,000 | 1,000 |
| Track Rehab | OHRV | | | Cortland & Tioga Co. | Upgrade 26 miles of track and 39 structures at Class I level | Retain shippers and expand service, capacity, efficiency, improve operations, intermodal connectivity, remove trucks, economic competitiveness, reduce energy use, enhance productivity | 3,000 | 1,000 | 2,000 | | |
| Track Rehab | OHRV | | | Cortland & Tioga Co. | Upgrade 26 miles of track and 39 structures to SOGR | Preserve assets, safety, reliability, efficiency, retain shippers and expand service, improve operations, remove trucks, reduce energy use, enhance productivity | 5,000 | 2,000 | 3,000 | | |
| Signal System | OHRV | | | Cortland & Tioga Co. | Upgrade signal system | Preserve assets, safety, reliability, efficiency, retain shippers, improve operations, enhance productivity | 1,000 | 1,000 | | | |
| Track | OMID | 2007 PFRAP Application | | OMID Main Line MP 50.5 to MP 55.0 and MP 66.0 to MP 76.4, Wayne County | Install approximately 19,000 ties, drop 10,360 tons of ballast, surface, bolt replacement, and drainage improvements. | This project will upgrade ties and ballast under 80 lb. rail, and upgrade 4-8 miles of existing track, to a solid track structure capable of safely moving harnet and 286K lb. rail cars. | 71,740 | 32,740 | 22,000 | 14,000 | 3,000 |
| Track Rehab | OMID | | | Monroe & Wayne | Preserve 47 miles of track and 35 structures at Class I level | Safety, reliability, retain shippers, preserve assets | 12,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Track Rehab | OMID | | | Monroe & Wayne | Upgrade 47 miles of track and 36 structures to Class II | Safety, Efficiency, reliability, expand service, speed, remove trucks, economic competitiveness, reduce energy use, reduce operating costs, enhance productivity | 20,900 | 10,900 | 10,000 | | |
| Equipment | OMID | | | Monroe & Wayne | Purchase locomotive - green switcher and related equip | Reliability, improve operations, enhance market share, economic competitiveness, reduce air emissions, reduce energy use, remove trucks | 6,300 | 2,800 | 3,500 | | |
| Track-Rail Upgrade | OMID | | | Monroe & Wayne | Upgrade 47 miles of track rail for 286K lb. operation | Accommodate modern rail cars, expand service, improve operations, intermodal connectivity, reduce congestion, remove trucks, economic competitiveness, enhance productivity | 39,000 | 17,000 | 22,000 | | |
| Safety | OMID | | | Monroe & Wayne | Upgrade and consolidate 66 crossings | Safety, preserve assets, reliability | 15,000 | 5,000 | 5,000 | 5,000 | |
| Terminal | OMID | | | Ontario, NY | Upgrade 12 mile of track to serve new bio-diesel plant | Expand service, capacity, improve operations, intermodal connectivity, enhance market share, reduce air emissions, remove trucks, reduce energy use, enhance productivity | 4,000 | 4,000 | | | |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost \$M | 2009-11 | 2014-18 | 2019-23 | 2034-38 |
|------------------------|--------------------|-------------|----------------|------------------|--|--|----------------|---------|---------|---------|---------|
| Facility | OMID | | | Webster, NY | Develop Intermodal Service with Xerox | Expand service, capacity, improve operations, intermodal connectivity, enhance market share, remove trucks, reduce energy use, enhance productivity | 5,000 | 3,000 | 2,000 | | |
| Track Rehab | OMID | | | | Upgrade signal system | Safety, efficiency, reliability, speed, economic competitiveness, reduce operating costs, enhance productivity | 1,000 | 1,000 | | | |
| Track and Bridge Rehab | OMID | | | | Preserve 14 miles of track and 5 structures | Track investments enhance customer ability to compete in their markets and stay in NEW YORK. | 105,197 | 48,697 | 45,500 | 8,000 | 3,000 |
| | ONCT | | | Ontario | | | 1,000 | 0.250 | 0.250 | 0.250 | 0.250 |
| Grade Crossing | ONCT | | | Ontario Co. | Upgrade 5 public grade crossings - road portion for smoother driving | Public: Safer, Smoother Driving a community enhancement | 0.500 | 0.250 | 0.250 | | |
| | ONCT | | | | | | 1,500 | 0.500 | 0.500 | 0.250 | 0.250 |
| Siding | PAR | | | Glennville | Mile Post 7.6 to Mile Post 9.2 | Public Benefit: Increase/improve rail capacity in the Capitol District. Improved safety and efficiency of train operations; improved train speed and train meets which reduce locomotive 'idling' resulting in less diesel emissions. Improved rail service provides more shipping alternatives. Private Benefits: Supports improved train handling by maintaining steady speeds; decreases bottlenecks; enhances rail traffic growth. | 2,500 | | 2,500 | | |
| Siding Extension | PAR | | | Halfmoon | Direct Connect Rotterdam Branch into #2 Track at CPF 477 | Public Benefit: Increase/improve rail capacity in the Capitol District. Improved safety and efficiency of train operations; improved train speed and train meets which reduce locomotive 'idling' resulting in less diesel emissions. Improved rail service provides more shipping alternatives. Private Benefits: Supports improved train handling by maintaining steady speeds; decreases bottlenecks; enhances rail traffic growth. | 1,600 | 1,600 | | | |
| Siding | PAR | | | Johnsonville | Install passing siding | Public Benefit: Increase/improve rail capacity in the Capitol District. Improved safety and efficiency of train operations; improved train speed and train meets which reduce locomotive 'idling' resulting in less diesel emissions. Improved rail service provides more shipping alternatives. Private Benefits: Supports improved train handling by maintaining steady speeds; decreases bottlenecks; enhances rail traffic growth. | 2,500 | | 2,500 | | |
| Siding | PAR | | | Mechanicville | CPF 466 to CPF 467 | Public Benefit: Increase/improve rail capacity in the Capitol District. Improved safety and efficiency of train operations; improved train speed and train meets which reduce locomotive 'idling' resulting in less diesel emissions. Improved rail service provides more shipping alternatives. Private Benefits: Supports improved train handling by maintaining steady speeds; decreases bottlenecks; enhances rail traffic growth. | 1,100 | 1,100 | | | |
| Siding Extension | PAR | | | Schaghticoke | Extend Passing Siding Mile Post 461.1 to CPF 464 | Public Benefit: Increase/improve rail capacity in the Capitol District. Improved safety and efficiency of train operations; improved train speed and train meets which reduce locomotive 'idling' resulting in less diesel emissions. Improved rail service provides more shipping alternatives. Private Benefits: Supports improved train handling by maintaining steady speeds; decreases bottlenecks; enhances rail traffic growth. | 5,000 | 5,000 | | | |

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| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---------------------|--------------------|------------------------|----------------|---|--|--|------------------|---------|---------|---------|---------|
| Track Rehab | PAR | | | Various | Preserve 45 miles of track, and 10 miles ROW, including 46 structures | Public Benefit: Primary public benefit of a well-maintained freight railroad is the safe movement of freight to the desired locations throughout the state at a fraction of the cost of freight moves made by truck, and with less total impact to the environment. Private Benefit: Continued growth with safe operations. | 7,200 | 5,400 | 1,800 | | |
| Track rehab | PAR | | | Various | Preserve 46 miles of track, and 10 miles of ROW, including 46 structures | Public Benefit: Primary public benefit of a well-maintained freight railroad is the safe movement of freight to the desired locations throughout the state at a fraction of the cost of freight moves made by truck, and with less total impact to the environment. Private Benefit: Continued growth with safe operations. | 11,200 | 2,800 | 2,800 | 2,900 | 2,800 |
| Grade Crossing | PAR | | | Various | Upgrade 32 public grade crossings | Public Benefit: Increase/improve rail capacity in the Capital District. Improved safety and efficiency of train operations; improved train speed and train meets which reduce locomotive "idling" resulting in less diesel emissions. Improved rail service provides more shipping alternatives. Private Benefits: Supports improved train handling by maintaining steady speeds; decreases bottlenecks; enhances rail traffic growth. | 5,000 | 1,500 | 3,500 | | |
| Track | PAR | | | Various | Upgrade tracks and structures to carry 296K lb. rail cars | Allows customers/shippers to load the heavier, efficient 286,000 lbs. cars standard in the industry today. | 8,000 | 4,000 | 4,000 | | |
| | PAR | | | | | | 44,100 | 21,400 | 17,100 | 2,800 | 2,800 |
| Terminal/Facilities | PAS | NS | | Halfmoon / Stillwater / Mechanicville | Mechanicville Intermodal Terminal and Automotive Unloading Facility | The automotive distribution and intermodal facility being proposed for the Capital District and located in Mechanicville, Halfmoon and Stillwater will help environmental stewardship by presenting options that will assist in the reduction of highway congestion. Especially the facility will act as a catalyst in promoting growth and expansion in all aspects of the Capital District's economic, industrial, commercial, retail and agricultural sectors by extending markets and providing a comprehensive and lower-cost shipping alternative. | 43,000 | 43,000 | | | |
| | PAS | NS | | | | | 0,000 | 0,000 | | | |
| | PAS | | | | | | 43,000 | 43,000 | 0,000 | 0,000 | 0,000 |
| Environmental | PW | | | Various | Retrofit 20 existing locomotives to reduce overall air emissions | Reduce air emissions, reliability, preserve assets, remove trucks, economic competitiveness, enhance productivity | 2,000 | 1,000 | 1,000 | 0,000 | 0,000 |
| | PW | | | | | | 2,000 | 1,000 | 1,000 | 0,000 | 0,000 |
| Track | RSR | 2007 FFRAP Application | | GNWR Main Line, MP 0 to MP 11, Livingston County | Replacement of 10.2 miles of jointed rail with CWR. | This project will upgrade the track from FRA Class 1 & 3 to FRA Class 3, by improving rail service to American Rock Salt and reducing truck traffic. | 3,000 | 3,000 | | | |
| Track | RSR | 2007 FFRAP Application | | RSR Main Line MP 0 to MP 19, Monroe and Livingston Counties | Install rail, ties, ballast, and surface 7 miles of Main, Yard and Branch Line to Kodak; rehabilitate bridge structures. | This project will ensure that Eastman Kodak, Commodity Resources Corporation, Morton Salt and American Rock Salt will continue to have rail service. | 1,500 | 1,500 | | | |
| New Construction | RSR | NFUATS | | GNWR Connection from NS Buffalo line to BPRR line, Buffalo, Erie County | GNWR Connection from NS Buffalo line to BPRR line. The proposed route will relieve congestion by avoiding CP Draw for GNWR. Operating agreements required with NS. | Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Enhance Productivity | 2,000 | 2,000 | | | |
| New Construction | RSR | NFUATS | | GNWR Connection from NS Buffalo line to BPRR line, Buffalo, Erie County | In cooperation with NS: GNWR Connection from NS Buffalo line to BPRR line. The proposed route will relieve congestion by avoiding CP Draw for GNWR. Operating agreements required with NS. | Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Enhance Productivity | 2,000 | 2,000 | | | |

**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-----------------|--------------------|-------------|----------------|------------------|--|---|------------------|---------|---------|---------|---------|
| Track Rehab | RSR | | | Livingston Co. | Preserve 34 miles of track and 43 structures | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 86,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 4,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Track Rehab | RSR | | | Livingston Co. | Upgrade 34 miles of track and 43 structures to SOGR | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 4,000 | 1,000 | 3,000 | | |
| Grade Crossing | RSR | | | Livingston Co. | Upgrade 25 grade crossings | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 3,000 | 3,000 | 0,000 | | |
| SES | RSR | | | Livingston Co. | Upgrade 34 miles of track and structures to carry 286K lb. rail cars | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Improving the capacity of these railroads to better handle 286,000 lbs. rail shipments will help improve the competitive abilities of the customers. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 4,000 | 2,000 | 2,000 | | |
| Signal System | RSR | | | Livingston Co. | Upgrade signal system | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 1,500 | 1,500 | 0,000 | | |
| Track Rehab | RSR | | | Various | Preserve 56 miles of track and 70 structures | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 86,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 5,000 | 1,250 | 1,250 | 1,250 | 1,250 |
| Track Rehab | RSR | | | Various | Upgrade 56 miles of track and 70 structures to SOGR | This project directly supports the 35 customers served by the RSR Railroad and GSNWR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 8,000 | 3,000 | 2,500 | 1,500 | 1,000 |

**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|--|--------------------|------------------------|----------------|--|---|--|------------------|---------|---------|---------|---------|
| Grade Crossing | RSR | | | Various | Upgrade 30 grade crossings | Through improving grade crossings on the RSR Railroad, public road safety and ride quality will be directly improved. This project directly supports the 35 customers served by the RSR Railroad and GNRW Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 3,000 | 2,100 | 0,900 | | |
| 286 | RSR | | | Various | Upgrade 56 miles of track and structures to carry 286k lb. rail cars | This project directly supports the 35 customers served by the RSR Railroad and RSR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. Improving the capacity of these railroads to better handle 286,000 lbs. rail shipments will help improve the competitive abilities of the customers. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 9,000 | 2,000 | 3,000 | 2,000 | 2,000 |
| Safety | RSR | | | Various | Upgrade signal systems | Improving train control on the RSR Railroad will greatly improve train dispatching efficiency and reliability. This project directly supports the 35 customers served by the RSR Railroad and RSR Railroad companies. Efficient and competitive freight services provided by these railroads keep almost 88,000 truck shipments every year off of state and local roads and highways. This has a direct impact improving highway safety and air quality, and reducing highway congestion and highway deterioration. | 1,500 | 1,500 | | | |
| Freight Facility | RSR SB | 2007 Bond Application | | Port of Buffalo, Erie County | Loading Conveyor, Cold Storage Building, Lifting Equipment | | 51,500 | 26,850 | 13,650 | 5,750 | 5,250 |
| Track | SB | 2007 PFRAP Application | | South Buffalo Railway Co Yard, Erie County | Rehabilitate the rail yard and main tracks to include rail, ties, turnouts, bridges and surfacing of track. | This project will insure that new and existing customers would continue to receive a price- & service-competitive product as well as provide access to rail-served open property for future development. | 2,800 | 2,800 | | | |
| New Construction/ Intermodal Terminal | SB | NFUAFS | | ISG Site (Formerly Bethlehem Steel Site), Buffalo, Erie County | Intermodal Freight Village. The Freight Village will provide easy access to rail, highway and port facilities. The project will provide competitive access to NS and short line railroads, expand intermodal capabilities, and increase warehousing/distribution facilities. GW, SB, NS, and BRRR | Capacity, Reliability, Efficiency, Expand Service, Speed, Improve Operations, Intermodal Connectivity, Enhance Market Share, Remove Trucks, Reduce Energy Usage, Environmental Enhancement, Land Use Management, Economic Competitiveness, Competitive Pricing, Enhance Productivity, Competitive Pricing | 25,000 | 25,000 | | | |
| Equipment | SB | NYSOOT | | | Acquire 4 Low-Emission GerSet Locomotive | | 4,000 | | 4,000 | | |
| Track Rehab | SB | | | Erie Co. | Preserve 53 miles of track | This project directly supports the South Buffalo Railway serve 14 customers in Lackawanna, including the largest industrial employers in Erie County. Freight services provided by the SB kept over 144,000 truck shipments off of New York State roads and highways, greatly improving highway safety and air emissions, while reducing highway congestion and deterioration. By providing efficient, competitive and reliable access to the national rail freight network through direct connections with all major eastern railroads, SB helps to redevelop industrial properties in Lackawanna and attract new industrial sector jobs to the region. | 5,000 | 2,000 | 1,000 | 1,000 | 1,000 |

Disclaimer: Inclusion of capital projects in these survey results does not constitute an endorsement or concurrence in whole or in part by the State of New York.

New York State Department of Transportation
2008 Rail Needs Survey

| Type of Project | During Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-----------------|-----------------|------------------------|----------------|---------------------|---|---|------------------|---------|---------|---------|---------|
| Track Rehab | SB | | | Erie Co. | Upgrade 53 miles of track to SOGR | This project directly supports the South Buffalo Railway serve 14 customers in Lackawanna, including the largest industrial employers in Erie County. Freight services provided by the SB kept over 144,000 truck shipments off of New York State roads and highways, greatly improving highway safety and air emissions, while reducing highway congestion and deterioration. By providing efficient, competitive and reliable access to the national rail freight network through direct connections with all major eastern railroads, SB helps to redevelop industrial properties in Lackawanna and attract new industrial sector jobs to the region. | 9,000 | 3,000 | 2,000 | 2,000 | 2,000 |
| 286 | SB | | | Erie Co. | Upgrade 25 miles of track and structures to carry 286K lb. rail cars | This project directly supports the South Buffalo Railway serve 14 customers in Lackawanna, including the largest industrial employers in Erie County. Freight services provided by the SB kept over 144,000 truck shipments off of New York State roads and highways, greatly improving highway safety and air emissions, while reducing highway congestion and deterioration. By providing efficient, competitive and reliable access to the national rail freight network through direct connections with all major eastern railroads, SB helps to redevelop industrial properties in Lackawanna and attract new industrial sector jobs to the region. | 10,000 | 4,000 | 3,500 | 1,500 | 1,000 |
| Grade Crossing | SB | | | Erie Co. | Upgrade 30 private crossings | Through improving grade crossings on the SB Railroad, public road safety and ride quality will be directly improved. This project directly supports the South Buffalo Railway serve 14 customers in Lackawanna, including the largest industrial employers in Erie County. Freight services provided by the SB kept over 144,000 truck shipments off of New York State roads and highways, greatly improving highway safety and air emissions, while reducing highway congestion and deterioration. By providing efficient, competitive and reliable access to the national rail freight network through direct connections with all major eastern railroads, SB helps to redevelop industrial properties in Lackawanna and attract new industrial sector jobs to the region. | 0,600 | 0,300 | 0,300 | | |
| Safety | SB | | | Erie Co. | Upgrade signal system | This project directly supports the South Buffalo Railway serve 14 customers in Lackawanna, including the largest industrial employers in Erie County. Freight services provided by the SB kept over 144,000 truck shipments off of New York State roads and highways, greatly improving highway safety and air emissions, while reducing highway congestion and deterioration. By providing efficient, competitive and reliable access to the national rail freight network through direct connections with all major eastern railroads, SB helps to redevelop industrial properties in Lackawanna and attract new industrial sector jobs to the region. | 0,200 | 0,100 | 0,100 | | |
| Track | SB | NYSBOT | | Bay Ridge, Brooklyn | Track Rehabilitation, including connection to NYNJ Rail | | 62,125 | 42,725 | 10,900 | 4,500 | 4,000 |
| | SBK | NYSBOT | | | | | 1,000 | 1,000 | | | |
| | SBK | NYSBOT | | | | | 0,000 | 0,000 | | | |
| | SBK | | | | | | 1,000 | 1,000 | 0,000 | 0,000 | 0,000 |
| Track | SMS | 2008 Grant Application | | Albany Co. | Rail Infrastructure Upgrade @ Northeast Industrial Park and Delanson Branch | Project maintains effective and safe connection with Canadian Pacific Railway, providing competitive access for shippers to 2nd Class 1 railroad. | 4,577 | 4,577 | | | |
| Equipment | SMS | NYSBOT | | Albany Co. | Acquire 1 Low-Emission, GenSet Locomotive | | 1,000 | 2,000 | 1,000 | 2,000 | 3,000 |
| Track Rehab | SMS | | | Albany Co. | Preserve 30 miles of track and 35 structures at Class I level | Safety, reliability, retain shippers, preserve assets | 10,000 | 2,000 | 2,000 | 3,000 | 3,000 |

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New York State Department of Transportation
2008 Rail Needs Survey

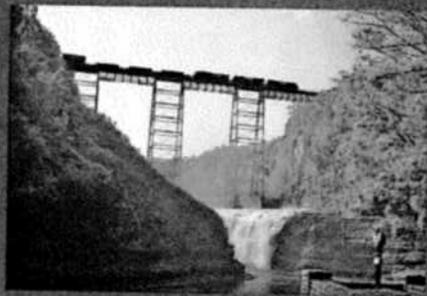
| Type of Project | Operating Railroad | Proposed By | Other Involved | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|-------------------------------|--------------------|-----------------------|----------------|--|---|---|------------------|---------|---------|---------|---------|
| Track Rehab | SMS | | | Albany Co. | Upgrade 30 miles of track and 35 structures to SOGR | Safety, Efficiency, reliability, expand service, speed, remove trucks, economic competitiveness, reduce energy use, reduce operating costs, enhance productivity | 6,000 | 3,000 | 3,000 | | |
| Equipment | SMS | | | Albany Co. | Acquire track repair equipment and 2 locomotive | Safety, reliability, retain shippers, preserve assets, improve operations, economic competitiveness, reduce operating costs, enhance productivity | 3,500 | 3,500 | | | |
| Safety | SMS | | | Albany Co. | Upgrade 27 grade crossings | Safety, preserve assets, reliability, | 0,550 | 0,250 | 0,110 | 0,110 | 0,110 |
| Safety | SMS | | | Albany Co. | Upgrade signal system | Safety, preserve assets, capacity, reliability, | 0,800 | 0,800 | | | |
| Terminal | SMS | | | Albany Co. | Develop intermodal terminal and expand yard & storage | Preserve assets, reliability, capacity, efficiency, retain shippers, improve operations, intermodal connectivity, remove trucks, reduce energy use, enhance productivity | 8,000 | 3,500 | 4,500 | | |
| Terminal | SMS | | | Albany Co. | Rebuild auto terminal | Preserve assets, reliability, capacity, efficiency, retain shippers, improve operations, intermodal connectivity, remove trucks, reduce energy use, enhance productivity | 3,500 | 3,500 | | | |
| Safety | SOM | | | Chautauque & Cattaraugus Co. | Upgrade 5 public grade crossings | Safety, reliability, preserve assets, improve operations, reduce operating costs | 37,427 | 20,597 | 10,610 | 3,110 | 3,110 |
| Track Rehab | SOM | | | Niagara Co. | Preserve 16 miles of track and 6 structures | Safety, reliability, efficiency, retain shippers, preserve assets, reduce operating costs | 1,500 | 1,000 | 0,500 | | |
| Track Rehab | SOM | | | Niagara Co. | Upgrade 16 miles of track and 6 structures to SOGR | Preserve assets, safety, reliability, efficiency, retain shippers and expand service, improve operations, remove trucks, reduce energy use, enhance productivity | 1,900 | 1,900 | | | |
| Signal System | SOM | | | Niagara Co. | Upgrade signal system to SOGR | Preserve assets, safety, reliability, efficiency, retain shippers, improve operations, enhance productivity | 1,450 | 1,450 | | | |
| Track, Structure, and Station | UHR | NYSOT | | Co-18 to Corinth, Warren & Saratoga counties | Town of Corinth Adirondack Branch - Bridge, Track and Station Rehab (and renew crossing surfaces) | | 7,350 | 5,350 | 1,000 | 0,500 | 0,500 |
| | UHR | NYSOT | | | | | 8,635 | 2,545 | 2,545 | 2,545 | 1,000 |
| | UHR | | | | | | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 |
| | UHR | | | | | | 8,635 | 2,545 | 2,545 | 2,545 | 1,000 |
| Track | VTR | NYSOT | | Washington County | Track Rehabilitation, VT/NY Border to connection with PAS / PAI at Hoosick Junction. | Track upgrade will facilitate future rerouting of AMTRAK Ethan Allen service to operate via Manchester, VT vs. Whitehall, NY | 1,000 | 1,000 | | | |
| | VTR | NYSOT | | | | | 0,000 | 0,000 | 0,000 | 0,000 | 0,000 |
| | VTR | | | | | | 1,000 | 1,000 | 0,000 | 0,000 | 0,000 |
| | WCOR | NYSOT | | | Acquire 1 Low-Emission GenSet Locomotive | | 1,000 | 1,000 | 1,000 | | |
| Track Rehab | WCOR | | | Steuben | Preserve 11 miles of track and 11 structures | Preserve assets, reliability, safety, retain shippers, improve operations, economic competitiveness, reduce operating costs | 2,000 | 0,500 | 0,500 | 0,500 | 0,500 |
| Track Rehab | WCOR | | | Steuben Co. | Upgrade 11 miles of track and 11 structures to SOGR in order to carry both freight and passengers | Safety, reliability, improve operations, efficiency, enhance productivity, retain shippers and expand service, on-time performance, speed, intermodal connectivity, enhance market share, reduce congestion, economic competitiveness | 3,000 | 1,500 | 0,500 | 0,500 | 0,500 |
| Track | WCOR | | | Steuben Co., NY | Install new siding for both freight and passenger service | Expand service, reliability, efficiency, improve operations, system redundancy, intermodal connectivity, enhance market share, reduce congestion, remove trucks, economic competitiveness, enhance productivity | 0,500 | 0,500 | | | |
| 286 | WCOR | | | | Upgrade to carry 286K lb. rail cars | Accommodate modern rail cars, preserve assets, reliability, flexibility, improve operations, retain shippers and enhance service, intermodal connectivity, enhance market share, remove trucks, reduce energy use, reduce air emissions | 0,500 | 0,500 | | | |
| | WCOR | | | | | | 7,000 | 3,000 | 2,000 | 1,000 | 1,000 |
| Track | WNYP | 2007 Bond Application | | WNYP Main Line MP JC 332 to MP SR 35.74, Allegheny, Cattaraugus, & Chautauque Counties | Rail replacement, crop & weld, tie & surface | This project will improve the safety, efficiency and capacity of the WNYP Main Line, eliminate rail joints, upgrade the track from FRA Class 2 to FRA Class 3, and support the sustainable movement of 286K lb. rail cars. | 5,387 | 5,387 | | | |

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**New York State Department of Transportation
2008 Rail Needs Survey**

| Type of Project | Operating Railroad | Proposed By | Other Involvement | Project Location | Capital Project | Project Description | Total Cost (\$M) | 2009-13 | 2014-18 | 2019-23 | 2024-28 |
|---------------------------------|--------------------|-----------------------|-------------------|--|---|--|-------------------|------------------|------------------|------------------|------------------|
| Track | WNYP | 2007 FRAP Application | | WNYP Main Line MP JC 339.81 to MP SA 23.10, Allegany, Cattaraugus, Chautauque Counties | Rail replacement. | | 4,000 | 4,000 | | | |
| Locomotive | WNYP | NYS DOT | | | Acquire 4 Low-Emission GenSet Locomotive. | | 4,000 | | 4,000 | | |
| Sidings - Interlock and signals | WNYP | | | Falconer, Cuba & Wellsville | Extend sidings and equip with interlocking switches and signals | Safety, capacity, reliability, efficiency, improve operations | 5,000 | 5,000 | | | |
| Interlock & signals | WNYP | | | Salamanca & Olean | Equip with interlocking switches and signals | Safety, preserve assets, reliability, retain shippers, intermodal connectivity, reduce operating costs | 1,500 | 1,500 | | | |
| Track Rehab | WNYP | | | Various | Preserve 129 miles of track and 30 structures | Safety, reliability, efficiency, retain shippers, intermodal connectivity, reduce operating costs | 37,560 | 9,390 | 9,390 | 9,390 | 9,390 |
| Track Rehab | WNYP | | | Various | Upgrade 129 miles of track and 30 structures to SOGR | Safety, reliability, efficiency, retain shippers and expand service, on-time performance, preserve assets, improve operations, enhance market share, remove trucks, economic competitiveness, reduce energy use, enhance productivity, competitive pricing | 30,000 | 15,000 | 5,000 | 5,000 | 5,000 |
| Grade Crossing | WNYP | | | Various | Upgrade 30 public grade crossings | Safety, reliability, preserve assets, improve operations, reduce operating costs | 4,500 | 1,500 | 1,500 | 1,500 | |
| | WNYP | | | | | | 91,567 | 41,777 | 19,890 | 15,890 | 14,390 |
| TOTAL | | | | | | | 10,696,551 | 4,856,012 | 2,427,171 | 2,433,777 | 1,002,591 |

NEW YORK STATE RAIL PLAN



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APPENDIX B



New York State Department of Transportation | David A. Paterson, Governor | Astrid C. Glynn, Commissioner

APPENDIX B

APPENDIX B

LONG RANGE SERVICE AND INVESTMENT PROGRAM FOR PASSENGER RAIL (2009 – 2013)

Introduction

This Appendix describes the Long Range Service and Investment Program (LRSIP) required by the Federal Passenger Rail Investment and Improvement Act of 2008. These are the projects that the state expects to undertake or support, in whole or in part, to improve intercity passenger rail service in the future. The ultimate decisions on costs and funding of these projects are subject to future discussions with the involved rail partners. This investment program was developed from the comprehensive inventory of rail system needs described earlier in this report, specifically those projects that improve intercity rail passenger service.

This Appendix presents the list of projects contained in the LRSIP. These include projects that solely benefit passenger rail service, as well as projects that benefit passenger rail service and improve infrastructure of the owning railroads, which can be either commuter railroads or freight railroads. Improvements are presented on each New York's passenger rail corridors, including the Empire Corridor from Albany south to New York City, (Hudson line), Empire Corridor west from Albany to Niagara Falls (Empire Corridor West) and on the Adirondack line from Albany north to the Canadian border. The combination of projects on each segment of the corridor provide significant benefits to the passenger rail traveling public.

These projects will improve rail infrastructure including track, control signals and passenger stations across the state and will result in significant improvements to intercity passenger rail service. These investments address critical capacity and bottleneck constraints as well as operational improvements that will improve the fluidity of the multi-purpose rail network. The combination of these projects will reduce delays, improve reliability and will result in increased market demand for passenger rail service.

Project groupings on the Hudson and Empire Corridor West segments include capacity, signal improvement, and station enhancements. The addition of capacity and improved interlockings provides improved fluidity of the system for both passenger and freight trains. When operating freight trains with faster passenger trains, train capacity is at a premium due to the diverse operating speeds. Improved interlockings and universal crossovers (from one track to another) provide the dispatchers greater flexibility to move trains around one another, which benefits both freight and passenger trains. Enhanced or improved signaling reduces areas with restrictive speeds or, as in the case of replacing the existing pole lines on the Hudson Line, reduces significant delays due to signal failures, thus improving on-time-performance and reliability.

Station projects that add additional track capacity to serve more trains or provide for new or improved amenities are a distinct benefit for passengers, making rail travel

more enjoyable for the customer and inducing additional travel. High level platforms are also a key enhancement for station projects.

Projects along the Adirondack Route are primarily focused on track rehabilitation and additional capacity along this single track main line that will enhance operational reliability for both passenger and freight. These projects, along with congestion relief at the Border inspection facility, will provide Amtrak passengers with improved reliability and enhanced running times.

The Department views these combined projects as a systematic approach to improving passenger rail service. Improvements west of Albany enhance overall service reliability for trains travelling south of Albany. Trains making their scheduled on-time stops at Albany or Schenectady from the west will not delay other trains operating from New York City to Albany. System investments realize systemwide improvements, resulting in benefits to all intercity rail customers.

Investment Assumptions

The LRSIP presents the detailed information required by Federal law for each near-term project, including:

- project location, description and estimated cost;
- a description of public and private benefits; and,
- a proposed project funding plan.

Anticipated future LRSIP projects are also shown, but without the project and funding detail. These details will be added to projects as they move closer to implementation.

The projects presented in the LRSIP often have many benefits, not only to the users and the public, but also to the owning railroad. Following are the cost-sharing assumptions used for the projects contained in the passenger rail investment program:

Projects that exclusively benefit intercity passenger rail service:

- Federal: 80%
- State/Amtrak or alternative intercity service provider: 20%

Projects that improve intercity passenger rail service and also benefit the host railroad:

- Host railroad: 50%
- Federal: 40%, (80% of government share)
- State: 10%, (20% of government share)

Projects that improve intercity passenger rail and also benefit higher volume commuter rail service, with the cost-sharing based on the share of facility usage:

- Commuter railroad: up to 75%
- Federal: 20%, (80 % of non-commuter railroad share)
- State: 5%, (20% of non-commuter railroad share)

Passenger train rolling stock:

- Equipment replacement: Amtrak 100%
- Equipment expansion: Amtrak or alternative intercity service provider: 50%; Federal: 40%; State: 10%

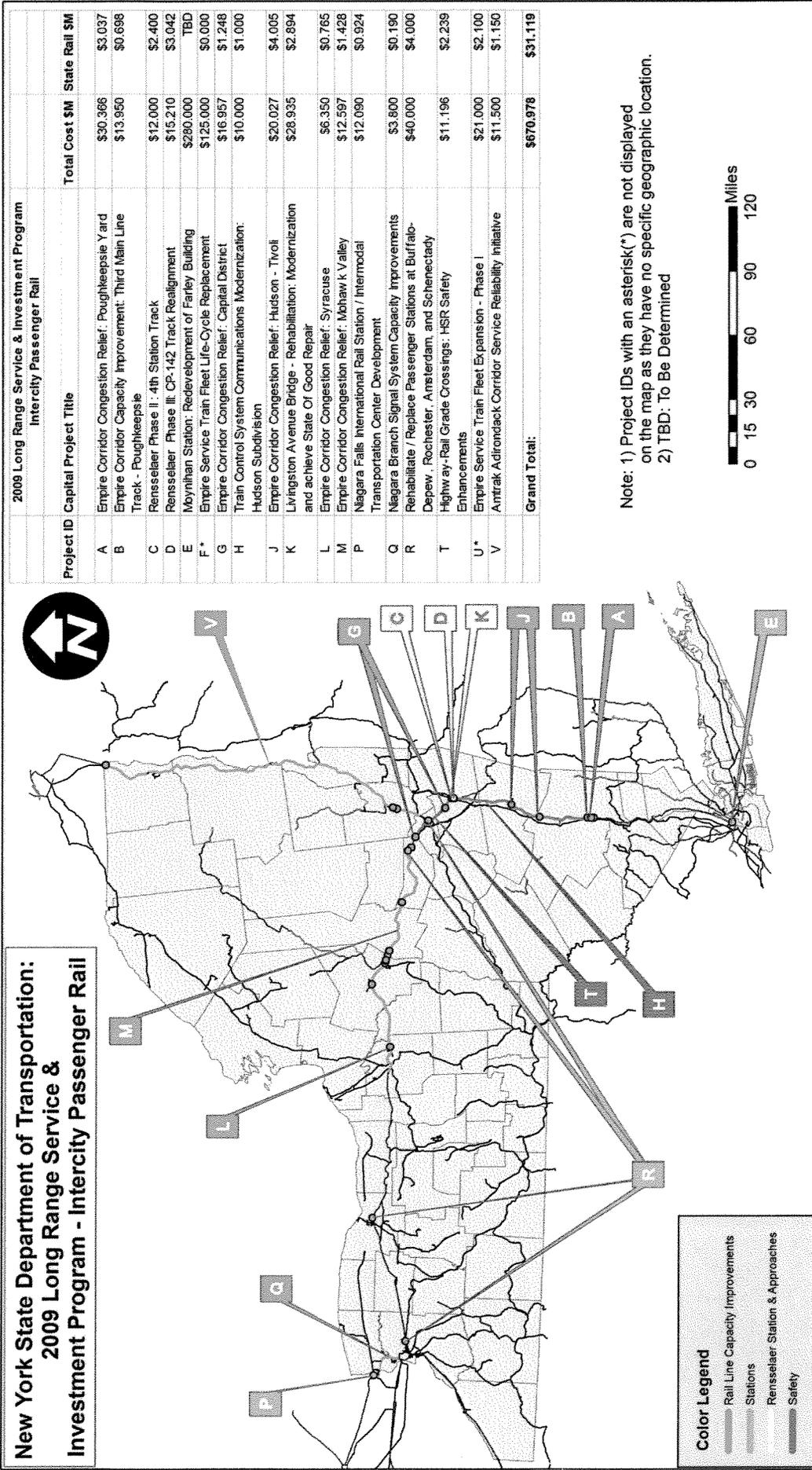
The LRSIP should be considered a program of projects, in which the timing and allocation of state resources for individual projects may be revised from time to time in order to use available public and private funding efficiently and to implement critical projects as quickly as possible. Adjustments to this plan may be made in the future based on the results of on-going planning studies including the Empire Corridor West Railroad Transportation Planning Study and the Binghamton Rail Passenger Service Study. In addition to these and other planning studies, decisions on future project needs and implementation should result from a cooperative information and data sharing process between the state and its railroad partners. The LRSIP is contained as an appendix to the State Rail Plan in order to facilitate revision.

The LRSIP is also slightly over-programmed in terms of state and federal funding, similar to long range investment programs for other modes. This is done given traditional capital program uncertainties and in order to have sufficient projects identified to utilize available funding in case certain projects are delayed.

The LRSIP includes a near-term (2009 – 2013) project cost estimate for rail transportation infrastructure and related passenger access improvements as part of the Moynihan Station West project. As the overall project scale and scope become more fully developed, discussions among the various involved parties will determine the sharing of the non-federal costs.

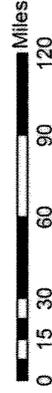
The following map depicts the initial rail passenger investment program. The map shows the location of each proposed rail investment contained in the initial plan. A project description and total cost is also provided. A listing of each project including a complete project description, benefits and funding allocation is also provided.

**New York State Department of Transportation:
2009 Long Range Service &
Investment Program - Intercity Passenger Rail**



| 2009 Long Range Service & Investment Program Intercity Passenger Rail | | Total Cost \$M | State Rail \$M |
|--|---|------------------|-----------------|
| Project ID | Capital Project Title | | |
| A | Empire Corridor Congestion Relief: Poughkeepsie Yard | \$30,366 | \$3,037 |
| B | Empire Corridor Capacity Improvement: Third Main Line Track - Poughkeepsie | \$13,950 | \$0,698 |
| C | Rensselaer Phase II: 4th Station Track | \$12,000 | \$2,400 |
| D | Rensselaer Phase III: CP-142 Track Realignment | \$15,210 | \$3,042 |
| E | Moynihan Station: Redevelopment of Farley Building | \$280,000 | TBD |
| F* | Empire Service Train Fleet Life-Cycle Replacement | \$125,000 | \$0,000 |
| G | Empire Corridor Congestion Relief: Capital District | \$16,957 | \$1,248 |
| H | Train Control System Communications Modernization: Hudson Subdivision | \$10,000 | \$1,000 |
| J | Empire Corridor Congestion Relief: Hudson - Tivoli | \$20,027 | \$4,005 |
| K | Livingston Avenue Bridge - Rehabilitation: Modernization and achieve State Of Good Repair | \$28,935 | \$2,894 |
| L | Empire Corridor Congestion Relief: Syracuse | \$6,350 | \$0,765 |
| M | Empire Corridor Congestion Relief: Mohawk Valley | \$12,597 | \$1,428 |
| P | Niagara Falls International Rail Station / Intermodal Transportation Center Development | \$12,090 | \$0,924 |
| Q | Niagara Branch Signal System Capacity Improvements | \$3,600 | \$0,190 |
| R | Rehabilitate / Replace Passenger Stations at Buffalo-Depew, Rochester, Amsterdam, and Schenectady | \$40,000 | \$4,000 |
| T | Highway-Rail Grade Crossings: HSR Safety Enhancements | \$11,196 | \$2,239 |
| U* | Empire Service Train Fleet Expansion - Phase I | \$21,000 | \$2,100 |
| V | Amtrak Adirondack Corridor Service Reliability Initiative | \$11,500 | \$1,150 |
| Grand Total: | | \$670,978 | \$31,119 |

Note: 1) Project IDs with an asterisk(*) are not displayed on the map as they have no specific geographic location.
2) TBD: To Be Determined



Long Range Service & Investment Program

| PROJECT ID | WEEK NUMBER | PROJECT LOCATION | CAPITAL PROJECT | Project Description | Public | Private | APPROXIMATE PUBLIC FUNDING - \$ MILION | | | | | COMBINATION OF AMOUNT OF PUBLIC FUNDING TO PUBLIC BENEFITS | CONSIDERATIONS |
|------------|-------------|--------------------------------------|--|--|--------|---------|--|---------|-------------|-------|-------|--|----------------|
| | | | | | | | Total/Year | Federal | State/Local | Other | Other | | |
| U-1 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes 20 new 110 MPH high speed rail cars designed for high speed rail service. The cars will be used for high speed rail service on the South Hampton Line. The project also includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 1,000.00 | ✓ | ✓ | ✓ | | | |
| U-2 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 500.00 | ✓ | ✓ | ✓ | | | |
| U-3 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 200.00 | ✓ | ✓ | ✓ | | | |
| U-4 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 220.00 | ✓ | ✓ | ✓ | | | |
| U-5 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 200.00 | ✓ | ✓ | ✓ | | | |
| U-6 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 5,000.00 | ✓ | ✓ | ✓ | | | |
| U-7 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 40,000.00 | ✓ | ✓ | ✓ | ✓ | | |
| U-8 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 4,000.00 | ✓ | ✓ | ✓ | | | |
| U-9 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 8,000.00 | ✓ | ✓ | ✓ | | | |
| U-10 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 1,000.00 | ✓ | ✓ | ✓ | | | |
| U-11 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 10,000.00 | ✓ | ✓ | ✓ | | | |
| U-12 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 25,000.00 | ✓ | ✓ | ✓ | | | |
| U-13 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 23,393.00 | ✓ | ✓ | ✓ | ✓ | | |
| U-14 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 1,000.00 | ✓ | ✓ | ✓ | | | |
| U-15 | Amtrak | Project Location: South Hampton Line | AMTRAK TRACK IMPROVEMENTS (SOUTH HAMPTON LINE) | The project includes track improvements and signal upgrades to allow the trains to travel at maximum speed of the line. | | | 1,000.00 | ✓ | ✓ | ✓ | | | |

Long Range Service & Investment Program

| PROJECT ID | WBS NUMBER | PROJECT LOCATION | CAPITAL PROJECT | Project Description | Public | Private | APPROXIMATE PROJECT FINANCING SOURCES | | | | | COMBINATION OF AMOUNT OF PUBLIC FUNDING TO PROJECT BENEFITS | CONSIDERATIONS |
|------------|------------|---------------------------------------|--|--|--------|---------|---------------------------------------|-------|-------|---------|-------|---|---|
| | | | | | | | Federal | State | Local | Private | Other | | |
| ✓ | CSF - AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | The project includes the construction of an express track within the existing structure to provide additional capacity for service to downtown, including the existing structure for operations, including track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | The addition of capacity through the express track will provide additional capacity for service to downtown, including the existing structure for operations, including track, signal, and structure necessary for operations, including the existing structure for operations. The capacity of the existing structure will be increased. |
| ✓ | CSF - AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | To improve the existing structure which would be subject to the economic configuration to enhance safety, including track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | As an express track, the project is expected to have the capacity of the existing structure. |
| ✓ | CSF - AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. |
| ✓ | CSF - AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. |
| ✓ | AMNH | Figure Center Third Track Inside Loop | New High-Speed Rail System from Columbia to Washington | The project includes the construction of a new high-speed rail system from Columbia to Washington, including track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | These improvements will increase the reliability and contribute to the overall safety of the system. The capacity of the line to carry the additional work will be increased. |
| ✓ | AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | The project includes the construction of a new high-speed rail system from Columbia to Washington, including track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. |
| ✓ | AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | The project includes the construction of a new high-speed rail system from Columbia to Washington, including track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. |
| ✓ | AMNH | Figure Center Third Track Inside Loop | CSF 2012-01-01 - 2014-01-01 | The project includes the construction of a new high-speed rail system from Columbia to Washington, including track, signal, and structure necessary for operations, including the existing structure for operations. | Public | Private | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | The additional work will include the increase in capacity, increase in safety, increase in track, signal, and structure necessary for operations, including the existing structure for operations. |

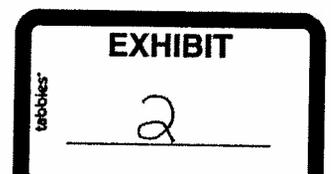


Rail Freight Yard Requirements Land Assessment for the East of Hudson Area

March 2003



NEW YORK METROPOLITAN TRANSPORTATION COUNCIL



This New York Metropolitan Transportation Council (NYMTC) report was compiled, written and photographed by **Howard J. Mann**, Associate Transportation Analyst. Preparation was funded by the Federal Highway and Federal Transit Administrations of the United States Department of Transportation, and the New York State Department of Transportation. The contents of this report reflect the views of the author who is responsible for the fact and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway and Transit administrations or the State of New York. This report does not constitute a standard, specification, or regulation.

NYMTC appreciates the cooperation of all the agencies that have provided information for the Rail Freight Yard Requirements/Land Assessment for the East Of Hudson Area Report. Through their submissions, this report continues to be a useful source of transportation statistical information on the NYMTC region and environs.

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March 2003

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I OVERVIEW

The objective of this study was to determine the need for freight facilities and to survey land area in the NYMTC region to determine potential locations where yards could be situated or existing yards expanded.

1. Studies Point to Rail Freight Solutions

Over the past several years many discussions have been held and analyses performed on the issue of freight transportation in and around the NYMTC region. Moving freight by rail, as an alternative to the intensely used highway mode, has been promoted in several recent studies and plans to that effect are in the process of being developed.

The following five studies, completed for sites in the region, support the effort to promote movement of freight via rail:

Cross Harbor Freight Movement Major Investment Study
New York City Economic Development Corporation (NYCEDC)

Strategic Plan for the Redevelopment of the Port of New York
New York City Economic Development Corporation (NYCEDC)

Port Development and Investment Planning Study
The Port Authority of New York and New Jersey (PANYNJ)

Intermodal Freight Movement Opportunities for Long Island—Making the Case for the Pilgrim State Hospital Site
New York Metropolitan Transportation Council (NYMTC)

Pilgrim Intermodal Feasibility Study
New York State Department of Transportation (NYSDOT)—Region 10

2. Deterioration of the Rail System

The rail facilities in the region are a holdover from a past in which rail played a much greater role in freight movement than it does today. The movement of freight was affected by the implementation of the interstate highway system, expanding and maturing suburban development, and e-commerce; the region has outgrown the existing rail freight system. In fact, today's rail facilities serve less than one percent of the total volume of freight in the NYMTC region.

I OVERVIEW

3. Regional Transportation Plan Calls for Increased Yards

Expanding the share of freight moved by rail is a focus of NYMTC's Regional Transportation Plan (RTP), *Mobility for the Millennium*. The plan recognizes that such an expansion would require a commensurate increase in the size and/or number of rail freight facilities, such as yards. Whether the objective is to handle an increase in the goods arriving at a port's dockside by rail or to handle trailers on rail cars, the requisite rail facilities would be necessary.

The RTP highlights the need to explore the region's physical ability to accommodate an expansion in the number of yards and terminals and/or expansion of specific existing yards. The availability of land is the single most important criterion necessary to allow for the increase in rail yards and terminals. Some yards in the United States consist of hundreds of acres. The dense development that characterizes the NYMTC region will likely make it difficult to locate sufficient land to meet the size requirements of a modern rail facility.

4. Objectives

The objectives of this report are to:

1. Investigate the need for additional facilities,
2. Assess the land area necessary for either expanded or additional facilities, and
3. Catalogue the parcels that are available for potential future use as part of the regional rail freight system.

The focus area of this study is east of the Hudson River.

II DISCUSSION OF CONTRIBUTING STUDIES

1. Pilgrim Intermodal Feasibility Study

New York State Department of Transportation (NYSDOT)—Region 10

Originating from a white paper report prepared by NYMTC staff in January 1999, this feasibility study follows the recommendation that the Pilgrim State Hospital site, the current location of a state mental health facility, is the best location for a large rail yard on Long Island. The study examined market data and analyzed the site itself to determine whether it was appropriate for conducting intermodal and carload rail freight operations. It concluded that the site was sufficient and that the market could be increased if this facility were to be developed. Volume forecasts used in this study were derived from rail freight that does not currently enter Long Island such as Trailer on Flat Car (TOFC) and Container on Flat Car (COFC). The volumes vary, depending on the operating scenario, including:

1. Enhanced car float operation (2005 horizon)
2. TOFC/COFC with no operational restrictions on LIRR and Hudson Line and enhanced car float (2010 horizon)
3. TOFC/COFC with no operational restrictions on LIRR and Hudson Line and enhanced car float (2015 horizon)
4. TOFC/COFC with no operational restrictions on LIRR and Hudson Line and enhanced car float (2020 horizon)
5. Double stack access plus no operational restrictions on LIRR and Hudson Line and enhanced car float
6. Double stack access plus no restrictions on LIRR and Hudson Line and cross-harbor tunnel

As a result of the conclusions of this study, NYSDOT developed concept plans for handling intermodal and bulk freight at this location.

2. Cross Harbor Freight Movement Major Investment Study

New York City Economic Development Corporation (NYCEDC)

Conducted by NYCEDC, the Cross Harbor study includes an in-depth analysis of freight volumes and commodities moved in four types of markets:

1. Interregional
2. Intraregional
3. International
4. Through movements

II DISCUSSION OF CONTRIBUTING STUDIES

The Cross Harbor study found that existing freight volume was 475 million tons per year. This total was broken down into the following volumes for each type of freight flow:

- Interregional 276 million tons
- Intraregional 108 million tons
- International 56 million tons
- Through flows 35 million tons

The study also concluded that the regional rail freight market includes a few primary commodities and reinforces the fact that the bulk of the region's freight is moved by truck (rail handles less than 1 percent).

The major finding of the study was that with improvements to rail facilities, a portion of the freight market could be diverted to rail. Each of three rail alternatives was found to be capable of diverting varying amounts of tonnage from other modes. The diversions range from 0.7% from long haul truck for a no build alternative (for an additional 731,000 tons over 2020 base case rail tonnage of 4.5 million tons) up to 5.33% from long haul truck for a rail tunnel alternative (for an additional 5.8 million tons over 2020 base case rail tonnage of 4.5 million tons).

3. Strategic Plan for the Re-Development of the Port of New York New York City Economic Development Corporation (NYCEDC)

The focus of this study was on the potential development of the port in New York City. It explored improvements to the transportation network that would be required to develop the port as well as other infrastructure improvements to port facilities. The study examined the markets for breakbulk, autos and containers, and arrayed the improvements that would be necessary to accommodate the loads these commodities would present over various time frames. It concluded that an inland rail terminal would be feasible as a means of rapidly moving goods off the port and to their ultimate destination.

4. Port Development and Investment Planning Study Port Authority of New York and New Jersey (PANYNJ)

This study, conducted for the Port Authority of New York and New Jersey, examined base levels and forecasts of cargo traffic to the port of New York and New Jersey. In addition, the study sought to analyze the expansion of the port—focusing on sites, location and the potential environmental impact of such development. It indicated that the port must be able to handle the volumes carried by that 6000 teu ships (ships with greater than 40 foot drafts). The study pointed out that 48 percent of trucks serving the port are destined for locations east of the Hudson River. It also concluded that imports will increase by 3.8% per year and containers by 3.5% per year.

5. Contributing Projects

Others involved with freight planning include: NYMTC Regional Freight Plan Project; Port Inland Distribution System and the NYMTC Freight Transportation Working Group.

III REGIONAL FREIGHT MARKET ASSESSMENT

This report made use of the Reebie database, which organizes freight volumes by mode, commodity and county of origin/destination, to study the rail freight market. The Reebie version used for this analysis contained 1998 base year and 2025 forecast year time parameters. Resulting data was compared for carload traffic. The Reebie database forecast is an unconstrained scenario; the projection is based on economic forces only and does not take into account changes to the transportation network.

1. Potential Change in Carload Traffic

Table 1 summarizes the base year and forecast year levels of tonnages for carload traffic. These data reveal that even without major new facilities, there will be a large increase in rail carload traffic. Intermodal rail, not currently implemented in the region, would increase the share of the total regional freight moved by rail. Further, even the most minor improvements and a favorable rail business environment would probably increase the rail freight share of the transportation market.

The New York and Atlantic Railway's efforts have stabilized and slightly increased its market. The amount of reefer (refrigerated) traffic into Hunts Point Market has seen similar growth with increased marketing and with only modest physical improvements to the rail system. The acquisition of Conrail by CSX Transportation and Norfolk Southern Corporation also played a role.

The overall economy also plays a part in the volume of freight and rail traffic. In general, economic activity is a primary driver of freight volume. Over the last two years, consumer consumption has decreased in parallel with overall economic activity and the onset of an official recession.

III REGIONAL FREIGHT MARKET ASSESSMENT

| County | Sum Of Carload_1998 (Tons) | Sum Of Carload_2025 (Tons) | Percent Change |
|---------------|-------------------------------|-------------------------------|----------------|
| Kings | 280,646 | 533,331 | 90% |
| Bronx | 650,237 | 1,111,946 | 71% |
| New York | 0 | 0 | 0% |
| Queens | 182,743 | 336,244 | 84% |
| Richmond | 0 | 0 | 0% |
| Nassau | 115,152 | 187,341 | 63% |
| Suffolk | 186,831 | 370,745 | 98% |
| Putnam | 0 | 0 | 0% |
| Westchester | 374,862 | 559,782 | 49% |
| Totals | 1,790,471 | 3,099,389 | 73% |

Table 1: Potential Change in Carload Traffic 1998 to 2025 (Source: Transearch Reebie Data 1998)

III REGIONAL FREIGHT MARKET ASSESSMENT

2. Rail Freight Facilities

Acreage and Activity in Metropolitan New York Area

Table 2 analyzes the car handling efficiency of yards in the New York metropolitan area, comparing rail yards east and west of the Hudson River. Most of the rail traffic destined for destinations east of the Hudson is handled in New Jersey, where yards tend to be larger and more modern than those in New York. Using the average utilization rate of New Jersey yards (364 annual carloads/acre) as a basis for comparison, it can be inferred that efficiencies (ability to move rail cars) vary from county to county in the NYMTC region. However, one observation that appears to hold for all counties, with the exception of Queens, is that greater numbers of carloads could be handled. Staten Island's future facilities, Arlington Yard, Howland Hook and possibly a facility at Proctor and Gamble could increase greatly the City's overall car handling efficiency. Specific facilities, such as Fresh Pond, appear to be operating at capacity.

The Regional Freight Plan Project's Technical Memorandum Task 4, Definition and Assessments of Needs, concludes, "In nearly all the cases of yards and terminals in the downstate study area, some investment in trackage, connections and control systems would be required to increase utilization rates of the underutilized yards to the levels of activity found in northern New Jersey."

Each of the studies described previously concludes that there are additional volumes that could be handled by rail. Rail freight in the NYMTC region today comprises less than one percent of all tonnage in the region. This can be compared to about fifteen percent in New Jersey and about thirty percent in the Midwest. Most rail freight experts concur that an upgrading and expansion of yards, main line track and associated facilities would allow rail freight providers to serve additional customers.

III REGIONAL FREIGHT MARKET ASSESSMENT

| Location | Facility | Acreage | Annual Carloads | Annual Intermodal Containers | Carloads per Acre | Intermodal Containers and Trailers per Acre |
|---------------|----------------------------------|-------------|-----------------|------------------------------|-------------------|---|
| Bronx | Hunts Point Terminal Market | 329 | 6,000 | | 18 | |
| Bronx | Oak Point Yard | 50 | 18,000 | | 360 | |
| Bronx | Bronx Terminal Market | 32 | 0 | | 0 | |
| Bronx | Harlem River Yard | 28 | 6,250 | | 223 | |
| Totals | | 439 | 30,250 | 0 | 69 | NA |
| Kings | 65th Street Yard | 33 | 4,000 | | 121 | |
| Kings | Brooklyn Terminal Market | 25 | 500 | | 20 | |
| Kings | Atlantic Terminal | 14 | 5,400 | | 386 | |
| Kings | Bushwick Terminal | 2 | 2,055 | | 1,028 | |
| Kings | Bush Terminal | 11 | 4,800 | | 436 | |
| Kings | Second Avenue Yard | 1 | 120 | | 240 | |
| Totals | | 86 | 16,875 | 0 | 197 | NA |
| Qns | Long Island City Yard A | 17 | 0 | | 0 | |
| Qns | Long Island City Team Yard | 12 | 540 | | 45 | |
| Qns | Fresh Pond Yard | 10 | 15,000 | | 1,500 | |
| Qns | Maspeth yard | 3 | 3,000 | | 909 | |
| Qns | Blissville Yard | 2 | 223 | | 93 | |
| Totals | | 45 | 18,763 | 0 | 420 | NA |
| L. I. | Garden City Yard | 4 | 0 | | 0 | |
| L. I. | Deer Park Yard | 23 | 1,027 | | 45 | |
| L. I. | Farmingdale Yard | 2 | 82 | | 41 | |
| Totals | | 29 | 1,109 | 0 | 343 | NA |
| Staten Is | Port Ivory Industrial Center | 125 | | | | |
| Staten Is | Arlington Yard | 50 | | | | |
| Staten Is | St. George Yard | 30 | | | | |
| Totals | | 205 | 0 | 0 | NA | NA |
| N.J. | Oak Island Terminal | 500 | 180,675 | | 361 | |
| N.J. | Doremus Avenue Auto Terminal | 87 | 42,000 | | 483 | |
| N.J. | Ridgefield Heights Auto Terminal | 25 | 16,000 | | 640 | |
| N.J. | Greenville Float Rail Yard | 33 | 4,800 | | 145 | |
| N.J. | Elizabeth Transflow Yard | 13 | 2,500 | | 192 | |
| N.J. | Croxtan Yard | 135 | | 155,000 | | 1,148 |
| N.J. | South Kearny Terminal | 120 | | 340,000 | | 2,833 |
| N.J. | APL South Kearny Terminal | 100 | | 120,000 | | 1,200 |
| N.J. | Little Ferry Terminal | 73 | | 132,000 | | 1,808 |
| N.J. | E-Rail Terminal | 55 | | 80,000 | | 1,455 |
| N.J. | North Bergen Terminal | 50 | | 118,000 | | 2,360 |
| N.J. | ExpressRail | 33 | | 175,000 | | 5,303 |
| N.J. | Portside Terminal | 25 | | 31,250 | | 1,250 |
| Totals | | 1249 | 245,975 | 1,151,250 | 364 | 2,170 |

Table 2: Rail Freight Facilities Acreage and Activity in Metropolitan New York Area

III REGIONAL FREIGHT MARKET ASSESSMENT

3. Market Assessment Conclusions

The potential market for freight traffic in the NYMTC region is large, due to the region's high per capita income and its consumption of goods. The region's rail freight share of about one percent is accommodated through a small number of facilities that are in fair to poor condition.

Discussions with regional railroads revealed that carload volumes could possibly double (from 35,000 to 70,000 carloads) before there is a need for additional or expanded facilities (see Appendix 1). It was not possible to perform an operations planning study to determine the actual number of facilities needed to handle volumes above the higher level that the railroads stated they could attain. It appears that existing facilities could be made more efficient, increasing their utilization. Field trip observations of an out of state regional railroad point to the possibility that higher carload handling can be accommodated at smaller size yards.

As the studies previously described in Section II—Discussion of Contributing Studies, additional facilities and expanded existing facilities will be needed to handle a major increase in volumes generated by the removal of barriers, such as line clearances and weight restrictions. New facilities will also be necessary for trans-Hudson crossing and the expansion of the port.

The Cross Harbor Freight Movement Major Investment Study cites the future need for a major intermodal facility somewhere along the Montauk Division. This report begins with the understanding that additional facilities will be needed. It recommends investigating several locations which could play a role in handling additional freight business for intermodal, bulk transfer or carload operations.

IV PRELIMINARY SITE SEARCH

The NYMTC region is generally a densely settled area comprised of a variety of land uses. The proportion of industrial zoned land is small compared to all other land uses. Few facilities are currently used for rail freight and the sites themselves are relatively small in terms of land area. Finding new sites in the NYMTC region that could be used for rail freight is difficult.

NYMTC developed a methodology for reviewing potential sites in order to determine sites that could be useful to freight railroads as yard facilities. Search criteria were developed and a method for culling sites from a large database of land parcels was determined. The methodology was customized for each NYMTC subregion. The sections below describe the methodology and include a brief background on the reconnaissance of sites. Maps for each site are available in the Appendix section of the report.

1. Long Island

A. SEARCH METHODOLOGY

Field reconnaissance and previous study search efforts were used to review and identify sites. Previous efforts include: NYMTC's Pilgrim White Paper and LIRR Freight Department reports. County planning staff from Nassau and Suffolk counties provided input.

B. DISCUSSION

As mentioned previously, Long Island has an opportunity to develop a part of the Pilgrim Hospital grounds into a functional intermodal and carload yard and recent planning efforts have identified the site as the primary Long Island rail freight facility.

Although large sites other than Pilgrim have not been identified, other rail development opportunities could exist on smaller parcels. Freight operations on the Long Island Rail Road in the past have included traditional boxcar and flatcar loading and unloading operations at facilities called team tracks. In some cases this type of operation is still carried on successfully by the New York and Atlantic Railway.

Reports prepared by the Freight Department of the LIRR, which is no longer in operation, concluded that transload operations for bulk products were feasible at many of the locations they examined, with modest improvements to lighting, paving, and security. While many of these locations are currently being utilized for LIRR maintenance-of-way (MOW) operations, some freight operations may be possible. The discussion of specific sites in the following section highlights some of these locations.

IV PRELIMINARY SITE SEARCH

2. Lower Hudson Valley

A. SEARCH METHODOLOGY

Field reconnaissance was conducted. County planning staff from Westchester County provided input.

B. DISCUSSION

No large sites were found in the Mid-Hudson South area for a large yard. The former General Motors plant in Tarrytown, a former rail customer, is being redeveloped into a mixed-use residential and commercial complex. Croton West Yard is currently being used as a rail yard serving the Hudson Valley and the Bronx. There are rail customers along the Hudson Line, however, these customer locations use private sidings.

There are locations along the Harlem Line where freight operations are conducted in close proximity to maintenance-of-way operations, including Mount Vernon. However, Metro North stores a large number of MOW vehicles and supplies at that location. In addition, this location is inappropriate due to poor access to the highway system.

3. New York City

A. SEARCH METHODOLOGY

For the purpose of searching for sites in New York City, a more complex methodology was used because of New York City's density, complex geography and greater number of potential candidate sites. Since there is a multitude of parcels it was necessary to eliminate those sites that did not meet minimal criteria. The criteria used were:

1. Access to highway (≤ 1 mile)
2. Land zoned commercial or industrial
3. Parcels of two acres or more
4. Land adjacent to rail line

The Transportation Division staff of NYC Department of City Planning conducted a preliminary site search of the New York City real estate database, using their geographic information system software. The staff arrayed the sites against the criteria above producing a smaller list of potential sites (see Appendix III—Site Maps)

B. DISCUSSION

The resulting short list of 62 sites was further reviewed for current ownership and activity. Not all of the remaining parcels were adequate based on ownership and current usage. The remaining sites, i.e. those in this report, were held aside for a field visit. A

IV PRELIMINARY SITE SEARCH

separate effort was made to determine where multiple parcels could be grouped together to form a larger site. Field visits were then made to sites in Bronx, Brooklyn and Queens. Staten Island was not included since it was scanned previously under NYC Economic Development Corporation's work. The Proctor and Gamble site, adjacent to Howland Hook, was one such location. In addition, Arlington Yard has been rehabilitated and is ready for use once the rail connection to New Jersey is made.

V FIELD RECONNAISSANCE

Maps for each site are available in Appendix III—Site Maps of this report.

1. Long Island

Site visits were made to several small sites where small numbers of rail cars could be loaded or unloaded, depending on the type of commodity carried. It may be possible to use these sites for bulk transfer type operations. Road access to these sites was mixed with some having good access on major arterials and others having less than optimal access. The sites listed below are possible sites. The sites that are checked were visited.

A. PORT JEFFERSON BRANCH

St. James

Acreage Unknown

Ownership could be MTA LIRR since it is along the railroad right of way.

(No Picture Available)

There is currently no freight facility at this site. It does not appear as if there would be adequate property at this site to conduct either intermodal or bulk transfer operations.

Setauket

Acreage Unknown

Mixed, Private Ownership

(No Photo Available)

This is an existing industrial site including an aggregate plant as well as a number of other buildings. The site does not have significant open space for intermodal or bulk reload use. There is evidence of a former rail siding that apparently served the aggregate business. Access to the site is via Comsewogue Road.

V FIELD RECONNAISSANCE

B. MAIN LINE

Farmingdale

Acreage Unknown

Private Ownership

(No Photo Available)

This site is currently occupied by several commercial or industrial companies. Previous occupants used rail service with individual siding. A bumping block currently obstructs the site's primary track, preventing service. The site does not include necessary space for intermodal or bulk transfer operations. Carload service maybe possible if a customer can be identified.

Yaphank

3 acres



Figure 1: Yaphank site—possible expansion. Currently used for transload.

There is rail freight in the area at Georgia Pacific's wood products location. There may be some opportunity to the left of the passing siding.

V FIELD RECONNAISSANCE

Calverton

10 acres

(No Photo Available)

There is a siding leading into and through the former Navy facility. It is anticipated that carload operations will be conducted along the siding in the site, however, the proposed Pilgrim facility is close by and may preclude the need for a major yard.

V FIELD RECONNAISSANCE

C. MONTAUK DIVISION

- Freeport
- Rockeville Centre
- Bay Shore
- Islip

2 acres
(No Photo Available)

The team track currently has a freight customer. It has about an eight car capacity.

- Sayville

3 acres



Figure 2: Sayville site—Joint MOW/freight use. Not large enough for yard.

LIRR maintenance-of-way forces utilize at least part of the site. The site is currently jointly used by both maintenance of way and freight.

V FIELD RECONNAISSANCE

Patchogue

0.5 acres



Figure 3: Patchogue site—Currently used for freight. Not large enough for yard.

The team track has about a nine car capacity.

V FIELD RECONNAISSANCE

Eastport

5 acres



**Figure 4: Eastport site—Currently used for freight. Not large enough for yard
LIRR maintenance-of-way forces utilize the site periodically.**

V FIELD RECONNAISSANCE

Speonk

2 acres



Figure 5: Speonk site—Small site. Currently used for carload freight.

The siding at Speonk appears to be short and not able to hold more than the number of cars that appear in the photo.

- South Hampton
- Hampton Bays

V FIELD RECONNAISSANCE

2. Mid Hudson South

Locations are limited to the Hudson Line since that is the line that freight trains use to enter the east of Hudson area. Site visits were made to various areas.

Yonkers Industrial Area

CSX may be the owner of this parcel. Highway access may be problematical. Current users include a rail car manufacturer.

Croton West Yard

There may be an expansion possibility at this site. It should be analyzed further for the type of commodities that could be handled and whether it would be operationally possible.

V FIELD RECONNAISSANCE

3. New York City

A. BROOKLYN

A field visit was made to the Brooklyn Terminal Market area and Bushwick.

Brooklyn Terminal Market

30 acres

(Photo Not Available)

Several parcels, mixed ownership

Firms that receive and distribute produce and related products dominate the Brooklyn Terminal Market area. Although there are parcels of large size present it was found that the activity was too great to allow for additional use. However, it is possible additional carload rail activity can take place in the area now occupied by the rail siding. However, the site is not appropriate for a major freight yard.

V FIELD RECONNAISSANCE

Bushwick

> 22 acres in total

Several parcels, private ownership,



Figure 6: Bushwick site—Hemmed-in by industrial buildings. Not useful for yard.

A field visit was made to Bushwick because it currently has rail served businesses and various parcels were of a large size. The area does not appear to be conducive as a rail yard due to the physical restrictions set by surrounding active industrial uses. The surrounding land uses restrict the expansion of the site.

V FIELD RECONNAISSANCE

B BRONX

Several areas were visited.

Cross Bronx and Sheridan expressways.

Acreage Not Available

2 parcels, bordered by the Cross Bronx and Sheridan expressways, are publicly owned.

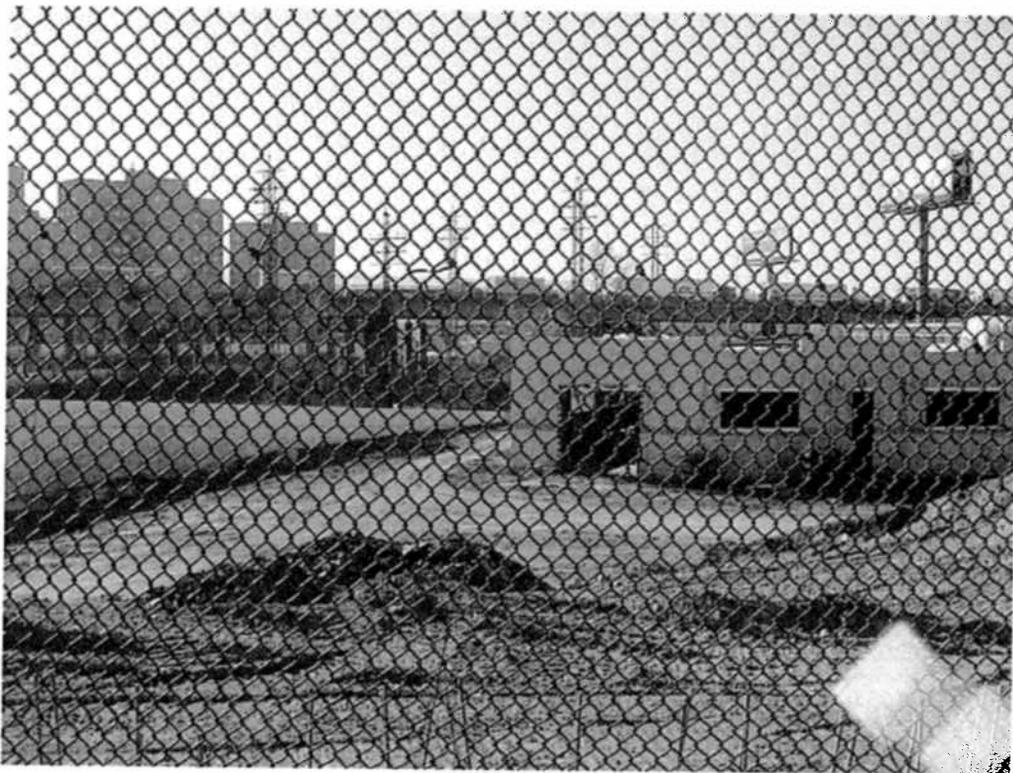


Figure 7: Cross Bronx/Sheridan site—Not appropriate for yard. Currently used for transit purposes.

This site was found to include new construction, a NYCTA bus depot and training center. There did not appear to be significant remaining unused acreage. The rail line, Amtrak's Northeast Corridor, bisects the parcels. This site is within a 2 mile radius of the Oak Point Yard. This site did not appear to be useful for freight operations due to the future operation of the bus maintenance facility which occupies most of the site and the close proximity of the Oak Point Yard which itself may have the potential for expansion.

V FIELD RECONNAISSANCE

Van Nest

>5.25 acres

3 parcels, mixed ownership

Located along Northeast Corridor adjacent to East Tremont Avenue

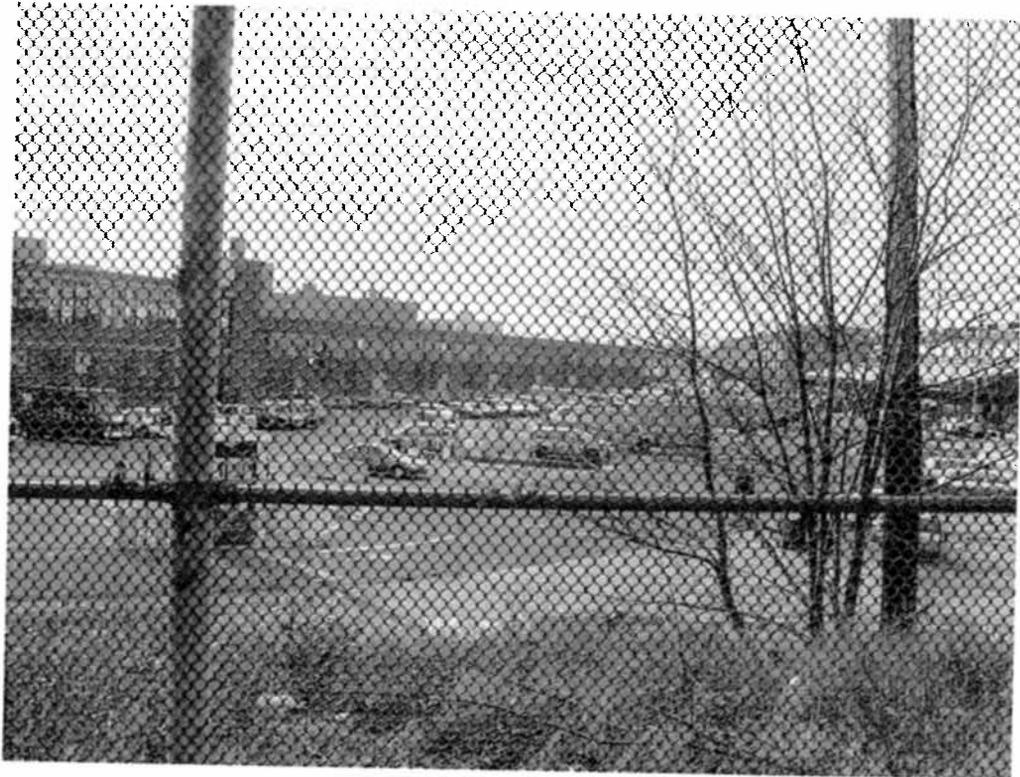


Figure 8: Van Nest site—Occupied by Con Ed. Do not consider further.

This area is highly active with Con Edison as a primary occupant. The site also contains a catering hall. The site is fully utilized and thus not available for freight use.

V FIELD RECONNAISSANCE

University Heights Bridge

Acreage Not Available

Unknown ownership

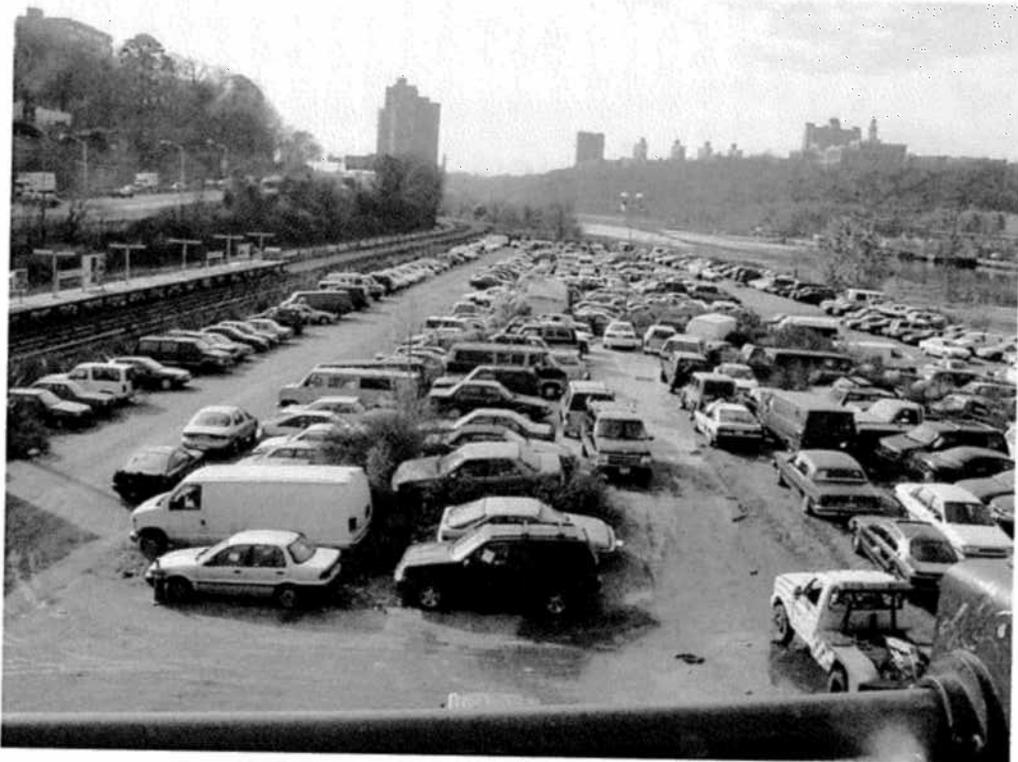


Figure 9: University Heights Bridge site—Occupied. Possible transload.

Located just south of the University Heights Bridge (Fordham Road) along the west side of the right of way, this site is occupied by what appears to be an auto repossession business. A search of the real estate files did not reveal the existence or owner of this parcel. This site could be useful as a transload facility.

V FIELD RECONNAISSANCE

Highbridge

Acreage Not Available



Figure 10: Highbridge site—Occupied. Possible transload.

The second parcel, north of Highbridge, also along the west side of the right of way is occupied by what appears to be a metal fabrication business. The site could be useful as a transload facility. A search of the real estate files did not reveal the existence or owner of this parcel.

V FIELD RECONNAISSANCE

Mott Haven

10 acres

2 parcels, mixed ownership

Former site of New York Central coach yards



Figure 11: Mott Haven site—Possible conflicts with commuter rail highway access.

This site is former railroad property. It appears to be an adequate size for a yard, however its configuration should be subjected to the scrutiny of a yard designer and its impact on MTA-Metro North Railroad passenger operations determined.

V FIELD RECONNAISSANCE

Oak Point Yard Vicinity

44 acres in total

1 parcel, private ownership

Property adjacent to Oak Point Yard



Figure 12: Oak Point Yard Site (east view)—possible expansion.

Portions of this site comprise the Oak Point Yard, the location of rail activities of CSX Transportation. There appear to be undeveloped and currently unused pieces. Identifying the current owner of the unused portions has been difficult. The unused portion appears to be excellent for an addition to the existing yard or a separate yard. At one time this former railroad property was sold to the private sector (Britestar,) although this could not be confirmed using the New York City real estate database. This site has the potential to serve additional freight needs due to its apparent ability to expand and its location adjacent to existing rail freight use.

V FIELD RECONNAISSANCE



Figure 13: Oak Point Yard Site (west view)—possible expansion

V FIELD RECONNAISSANCE

C. QUEENS

Several sites were visited.

Phelps Dodge

27+ acres in total

1 parcel, private ownership

Former property of Phelps Dodge



Figure 14: Phelps Dodge site—Appropriate for large yard. Environmental mitigation needed.

This site appears to be excellent as a potential rail freight facility. The site has been cleared. There are extensive ground contamination issues from past manufacturing processes. Of all the sites examined this one is superior as it exceeds the selection criteria. In its favor is nearby highway access, a location in an industrial area, and juxtaposition to a lightly used passenger and freight line. The current status, as of 9/18/02, is that the Galasso Trucking Company has purchased an option to buy the land.

V FIELD RECONNAISSANCE

Former Heinz Plant

>7 acres in total

3 parcels, mixed ownership



Figure 15: Former Heinz Plant site—size appropriate to yard. No current use for most of site.

This site is located in Glendale at the junction of the Montauk Division and the former Rockaway Beach Branch. The area is located in the northeast quadrant of the junction. The property is interesting due to its proximity to two rail lines and what appears to be a property shaped to conform to those rail lines. This would indicate it is also shaped properly for a rail yard. The site is largely cleared of all obstructions. The sole evidence of previous use is the internal roads still in existence. At one time there was a rail connection from the east along the Montauk Division to the north along the Rockaway Beach Branch. There is evidence of this track in place. It is unclear how large the total property is. The NYCDOP database only includes the acreage for one parcel. One parcel is currently occupied by NYCDOT. Union Turnpike, Woodhaven Boulevard and Metropolitan Avenue are nearby for truck access.

This site warrants further investigation for its ability to accommodate a modern freight operation and the area roadways to handle trucks.

V FIELD RECONNAISSANCE

Flushing

~30 acres in total

5 parcels, private ownership

(Photo Not Available)

This site is located in Flushing just east of the Van Wyck Expressway and is bisected by the Long Island Rail Road. Home Depot and other commercial establishments currently occupy the southern piece. The northern section comprises about 16 acres and is occupied by a number of warehouses. College Point Boulevard is on the eastern border of this section. Although highway access is adequate, siting a major yard at this location would be problematic because of the high level of commercial and travel activity in area. In addition, limited main line tracks and intense passenger rail service are issues. The site should not be evaluated further.

Springfield Gardens

23 total acres

2 parcels, private ownership

(Photo Not Available)

Bordered by Merrick Road, Springfield Boulevard, and Belknap Street, this site is bisected by the LIRR's Atlantic Branch. A supermarket, home improvement retailer and active warehouses occupy the site. The site should not be evaluated further because of limiting land uses.

V FIELD RECONNAISSANCE

Long Island City

Acreage Not Available

Several parcels, mixed ownership

(Photo Not Available)

There are several components to this area. Amtrak's northeast corridor and the LIRR main line traverse the area. Component One comprises, in part, the former Railway Express property. Although no longer used for that purpose, there seems to be some activity at the site. Component Two is occupied by Home Depot, among other active users. This site would not appear to be desirable for a freight facility due to intense active Amtrak and New Jersey Transit passenger train movements, both in service and yard moves.

Maspeth

~ 3 acres

Several parcels, public ownership



Figure 16: Maspeth site (east view)—low rail freight use. Possible expansion for rail freight.

V FIELD RECONNAISSANCE

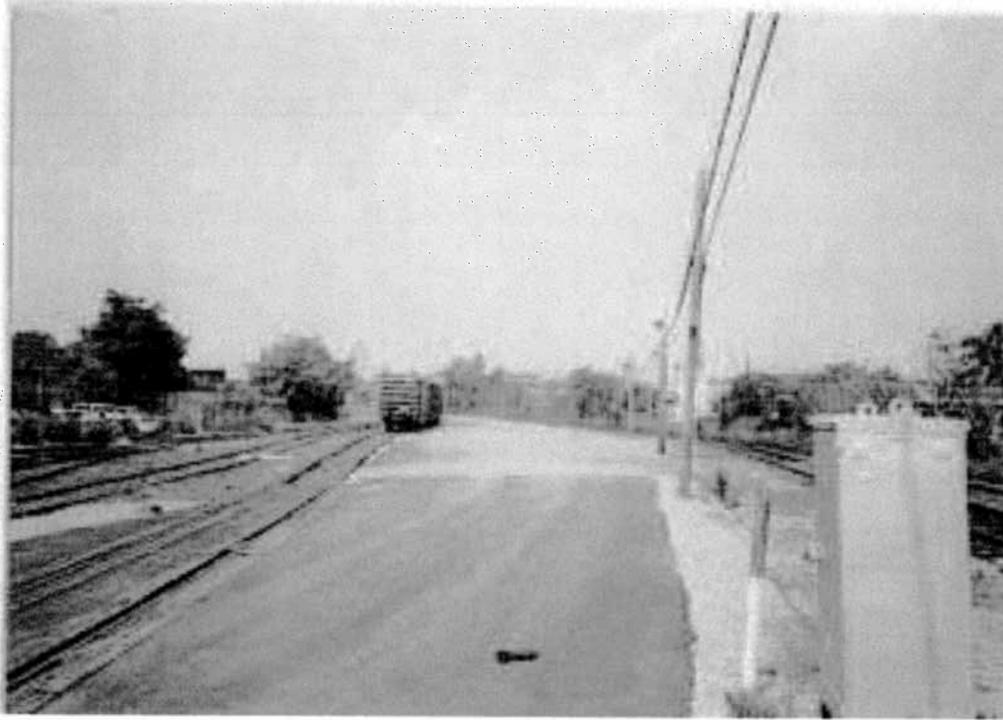


Figure 17: Maspeth site (west view)—low rail freight use. Possible expansion for rail freight.

This yard is currently used at what appear to be low levels. It is the site of a yard that had been used by the LIRR for freight. The site has excellent access to the Montauk Branch of the LIRR and good highway access. This site could prove to be useful for additional reload or cross dock operations.

Blissville

~ 2 acres

One parcel, public ownership

(Photo Not Available)

The site, a former rail freight yard, is located in Long Island City along the Montauk Division. This site has, in previous LIRR Freight Department reports, been identified as a potential bulk transfer facility. Blissville has the potential to become an additional reload, cross dock or team track facility.

VI RECOMMENDATIONS

The demand for rail freight services will increase over the coming years along with economic growth. This increased demand will require a greater number of facilities to absorb and process larger numbers of rail traffic.

A limited number of sites are available and some should be subjected to further investigation for their applicability for freight use. This study recommends that the region should protect prime locations, such as the former Phelps Dodge site, which is currently in private hands and is an essential component to other rail freight plans. Sites such as the Heinz site in Queens should also be investigated. In the case of those locations where important data are missing, that information should be obtained and the sites reevaluated.

Due to the paucity of land for rail purposes, planners and decision makers will need to be creative in fashioning an expanded rail freight network. For example, opportunities may arise in small size parcels such as former team track locations. These locations should be preserved as needed for freight purposes. In addition, Long Island sites currently used for LIRR maintenance of way operations should be explored for joint freight/MOW operations. The need for a rail banking program at the state or regional level should also be explored.

Other issues, such as adding main line track, adding new switches or restoring old ones, weight restrictions, height limitations and operating windows all require further discussion and eventual resolution. The aforementioned improvements should be evaluated in conjunction with the capacity of the rail freight system's yards.

APPENDIX I—CARRIER INTERVIEWS

1. Background

The Rail Freight Yard Requirements/Land Assessment for East of the Hudson Area of Downstate New York conducted by NYMTC was undertaken in response to concerns about the scarcity of suitable land for railroad use, and its constraint on the potential growth of rail freight volume east of the Hudson River. These concerns were expressed at meetings of the Council, the East of Hudson Rail Freight Task Force and other public forums.

This assessment is a pioneering effort that begins to define the needs and requirements, by:

- Focusing on the near, 3-5 year term;
- Identifying plots of land with active and non-active physical connections that could be put into use quickly at a low cost;
- Identifying large plots of land very near or adjacent to rail lines that warrant further investigation and possible land banking; and
- Incorporating the response of the carriers operating freight services east of Hudson.

Follow-up activities, described below, were conducted in response to the request of several Task Force members. The objective of these activities was to vet the results of the report with participating railroads so as to obtain an “operating” point of view.

2. Interview Summaries

Upon completion of the Basic Land Inventory, NYMTC staff, with the assistance of the East of Hudson Rail Freight Operations Task Force staff, interviewed three of the five railroads providing freight services in the east of Hudson area. One of the five carriers was selected for a site tour.

The three carriers interviewed were the Canadian Pacific Railway, CSX Transportation, and the New York and Atlantic Railway. The site tour was on the Providence and Worcester Railroad.

Senior managers at the three carriers were asked to review the "draft inventory" and comment on the practicality of the properties identified from a near term and long term perspective. Near term was roughly defined as a doubling of volume along current car

APPENDIX I—CARRIER INTERVIEWS

type/commodity patterns in three to five years. Long term was defined as a volume increase in the range forecasted by the "Cross Harbor Major Investment Study."

A. CANADIAN PACIFIC (CP)

The CP is one of the seven mega-railroads serving North America. It is the newest rail operator east of the Hudson and enters the area from the north via trackage rights on the Hudson Line and its extensions to the CSX Oak Point Yard and interchange with the NYA at Fresh Pond, on geographic Long Island.

Though Canadian Pacific is a large full service company, it enters the area through its Delaware and Hudson subsidiary and has a service pattern and flexibility more commonly found on regional railroads.

The CP manager interviewed believed the "Inventory" fairly represented land available for rail freight use and that the company did not feel its near term market goals would be constrained due to a lack of land. The company had overcome what appeared to be a land constraint with the lease of the 65th street yard in Brooklyn.

During the interview, the CP representative expressed concern that volume growth in the Bronx could be constrained by a lack of land for a reload facility and/or capacity overloads at Oak Point Yard caused by a lack of land for expansion. Another concern was for traffic forwarded to the NYA. He hoped that a way would be found to put the Pilgrim State Rail Freight Facility into service soon.

B. CSX TRANSPORTATION (CSX)

CSX is the third largest private railroad system in North America with lines serving nearly all of the major markets in the United States East of the Mississippi River. It acquired Conrail's rail freight franchise in the Downstate Area of New York/East of the Hudson in 1999, and has since doubled the volume of rail freight.

CSX hauls most of the rail freight moved in and out of the region and is currently the primary link connecting rail freight users on geographic Long Island with the North American rail network.

Operationally, CSX routes East of Hudson cars thru Selkirk Yard in Upstate New York then via its Hudson Line to Oak Point Yard. Rail freight users in the Bronx, Westchester, Southwestern Connecticut and the New York and Atlantic Railway are serviced from Oak Point Yard.

Train and service characteristics on the CSX East of the Hudson are closer to the US standard of longer trains and fewer but chunkier pick-up and delivery points such as the

APPENDIX I—CARRIER INTERVIEWS

Hunts Point Produce Terminal and the Fresh Pond Interchange. As the primary trunk line carrier CSX does more car classification than the other carriers in the area.

The CSX official interviewed had reviewed the “Assessment” and thought it was a good portrayal of the current situation. He said CSX could double its volume without running into a land constraint.

He further noted that Oak Point Yard frequently reached capacity levels and when that happened CSX used Croton West Yard thirty miles away as a backup facility to relieve the pressure and open up the system, if volume continued to grow Oak Point Yard would have to be expanded and the cost of acquiring land could become a stumbling block and possibly a restraint on growth.

Space for marketing activities appears to be sufficient at present, but if the lease for the "Big Apple" Flour Reload Facility at Hunts Point is not renewed at a reasonable rate the operator may have to find a new, currently undetermined, location. The Bronx Terminal Market, the nearest suitable site, doesn't want a "reload facility".

C. NEW YORK AND ATLANTIC (NYA)

The New York and Atlantic Railway (NYA) took over marketing and management of rail freight services on the Long Island Rail Road in May 1997 under a 20-year franchise. In the four years since, the NYA management team has substantially increased volume and reversed a 25-year decline in freight volume.

Except for very short linkages to the North American rail system provided by the NY Cross Harbor Railroad, CP and CSX, NYA is the sole provider of rail freight services on geographic Long Island. They operate a rail car distribution network 125 miles long from one end of Long Island to the other end in four counties that produce a significant Gross Domestic Product.

The NYA operates on a platform shared with several hundred fast moving commuter trains. Freight trains must sprint and hopscotch between and around commuter trains reliably and safely to deliver and pick-up freight.

In this intense, no elbow room operating arena, land and its location, size and nature of access is critical. It sets the limit on traffic growth.

NYA senior management felt that the assessment was complete but offered few new sites to consider. They said that the many smaller three to four acre sites were useful and customers for those sites are vigorously pursued, but that the smaller sites offered only limited opportunity. Increasing the use of smaller sites also increases the interaction with

APPENDIX I—CARRIER INTERVIEWS

LIRR passenger trains and requires that more space be set aside for car storage, sorting and other operating support work nearby.

Additionally, they have found that the smaller sites are mainly attractive to small volume users with low storage requirements and quick mobile non-mechanized loading/unloading techniques. Commodities such as lumber require storage space not possible at four- and five-acre sites.

The NYA managers interviewed believe that the establishment of several larger reload sites along its network would greatly improve the chances for traffic growth and truck diversions. They thought in particular, that the Blissville Yard, Phelps Dodge, Pilgrim State, Grumman/Bethpage and Sayville Yard have in single, but dispersed, locations the acreage needed to increase rail freight volume and operate within an active commuter railroad.

The NYA management team is hoping the public programs now underway to establish rail freight facilities at Phelps Dodge and Pilgrim State will be accelerated. The team believes early use of Pilgrim State would release substantial terminal capacity for rail use.

APPENDIX II—SITE TOUR

1. Providence and Worcester (P&W)

The Providence and Worcester Railroad is one of North America's first regional railroads and pioneered the modern idea of a small regionally-oriented low-cost railroad.

Centered primarily in central and southeastern New England, the P&W has in recent years extended its service into southwestern Connecticut and downstate New York/East of the Hudson. In southwestern Connecticut, the railroad services freight users on two former Conrail lines, South Norwalk-Danbury and Devon-Derby Jct. The downstate New York connection is provided by two unit trains per week of aggregates. They operate from Tifton, Connecticut, to Fresh Pond Jct. in Queens. At Fresh Pond, the trains are handed over to the New York and Atlantic Railway for delivery to a customer on Long Island. The trains move between New Haven and Fresh Pond Jct. via CSX trackage rights.

Regular carload traffic is interlined to the New York and Atlantic by way of a haulage arrangement with the CSX.

The P&W moves more tonnage along the I-95 Corridor between New York City and Providence, Rhode Island than any other railroad and has successfully developed operating techniques that have enabled it to attract customers along Amtrak's high speed Northeast Corridor Line between New Haven and Providence. Each freight siding on that line is active.

A field visit was made to survey the facilities that are served by the Providence and Worcester Railroad Company in Worcester. These facilities are relatively small in comparison with Class One railroad operations. However, the volume of traffic handled is surprisingly high. The scarcity and expense of land in the NYMTC area made the constraint of space here compelling.

The project team visited the following four facilities, all in the Worcester, Massachusetts area.

A. SOUTHBRIDGE YARD-PORT OF WORCESTER

The Southbridge Yard is particularly interesting because of the number and variety of operations conducted there. Located (see photo) in the heart of the city, Southbridge is home to three distinct types of operations conducted on about 15 acres. First, there is the bulk transfer operation (150 cars/year). Second, the yard handles a container on flatcar

APPENDIX II—SITE TOUR

(COFC) operation. This business contributes 10,000 containers each year. Third, the yard also has a hazardous material operation. This operation entails the transloading of PCB contaminated soil. The material is trucked into a specially designed building which is equipped with a chute, which funnels the material directly into gondolas (1500 cars/year).

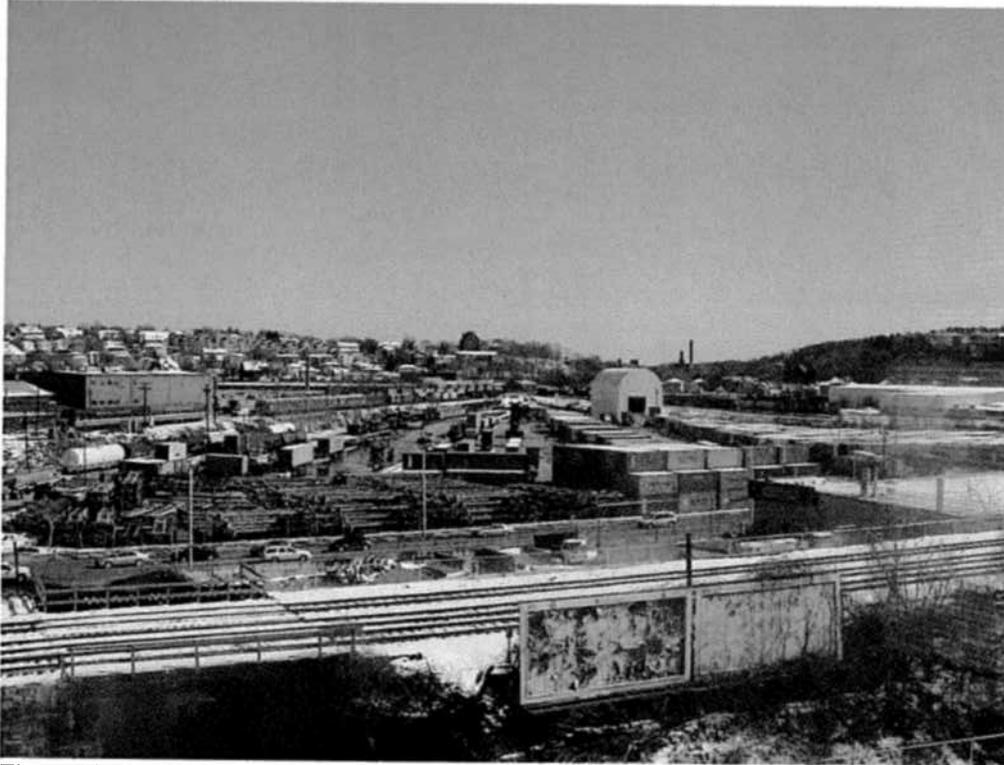


Figure 18: Southbridge Yard (P&W RR)—Worcester, Massachusetts

B. WISER AVENUE YARD

Wiser Avenue Yard is an intermodal facility operating on about 25 to 30 acres. It handles approximately 70,000 containers annually. The yard is operated by Intransit.

C. GREENWOOD YARD

Greenwood serves the bulk transfer business. The facility is about two miles long and 250 feet wide and accommodates about 400 cars (see photo). There is apron space between each pair of tracks, enabling trucks to navigate to the car from which they take product. The facility fits into the profile of a four track main line right of way.

APPENDIX II—SITE TOUR



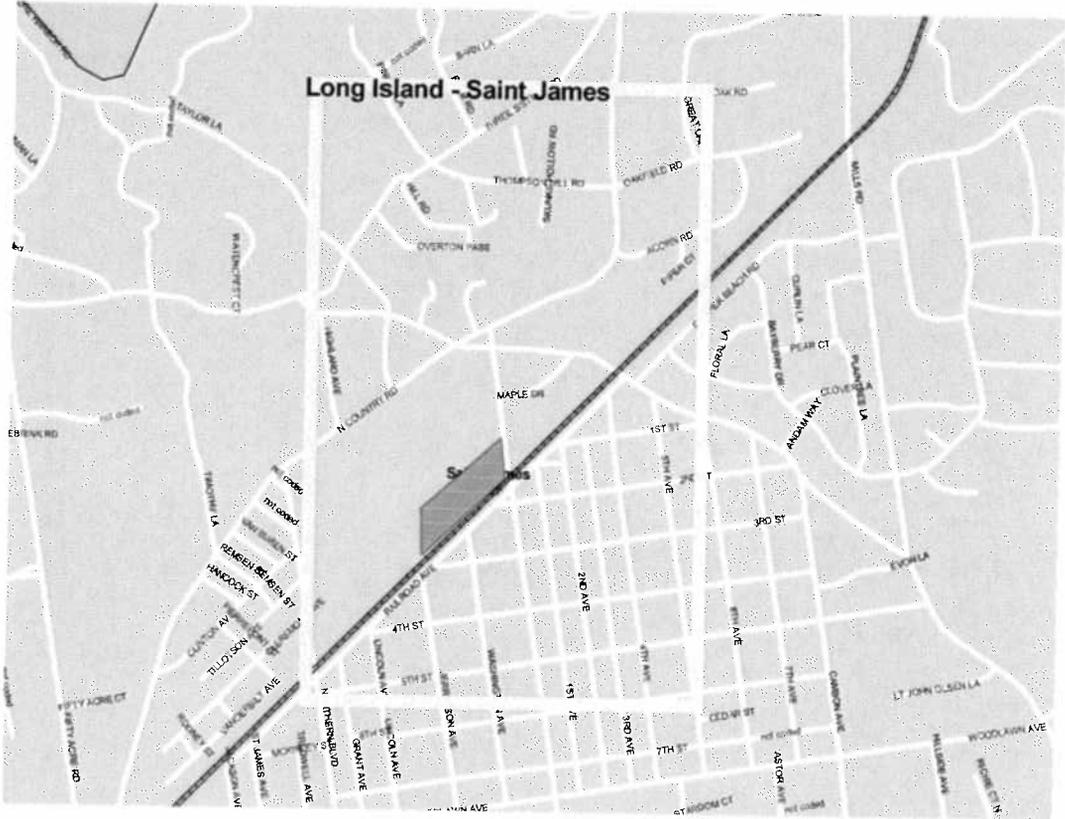
Figure 19: Greenwood Yard (P&W RR)—Worcester, Massachusetts.

D. KANSAS STREET YARD

This is the smallest of each of the facilities, approximately 2 to 3 acres, currently handles 250 carloads per year. Commodities are primarily petroleum products and plastics.

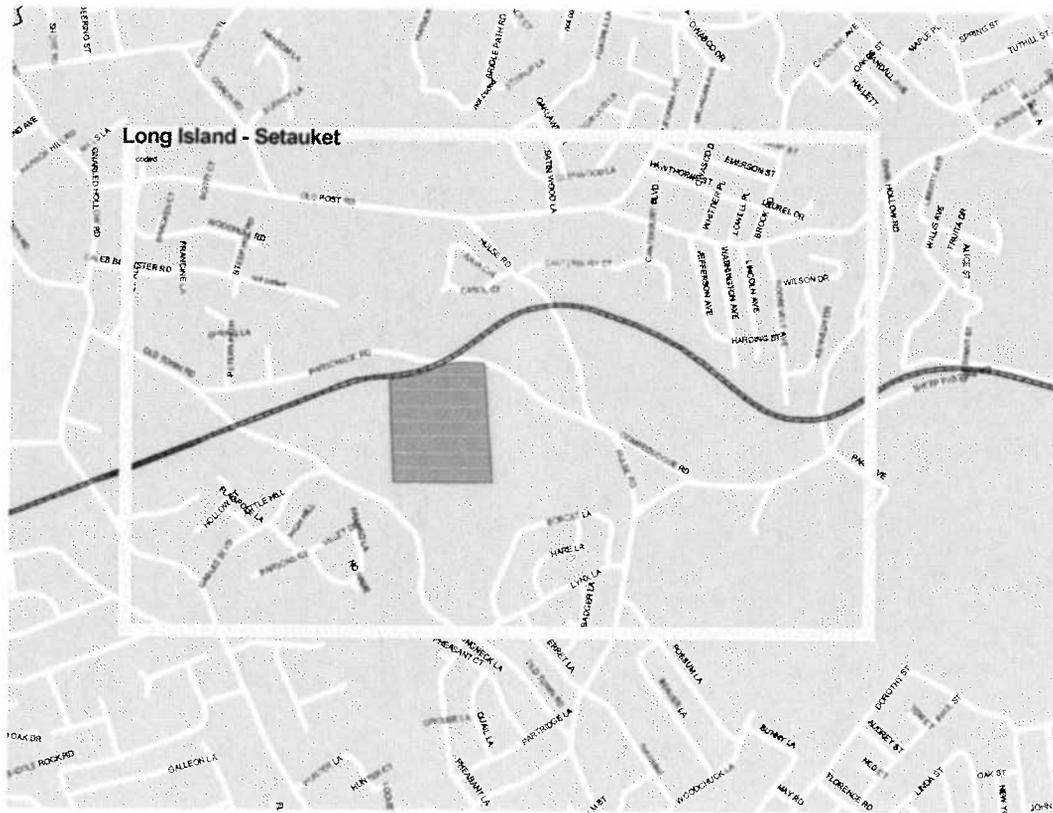
APPENDIX III—SITE MAPS

1. Long Island



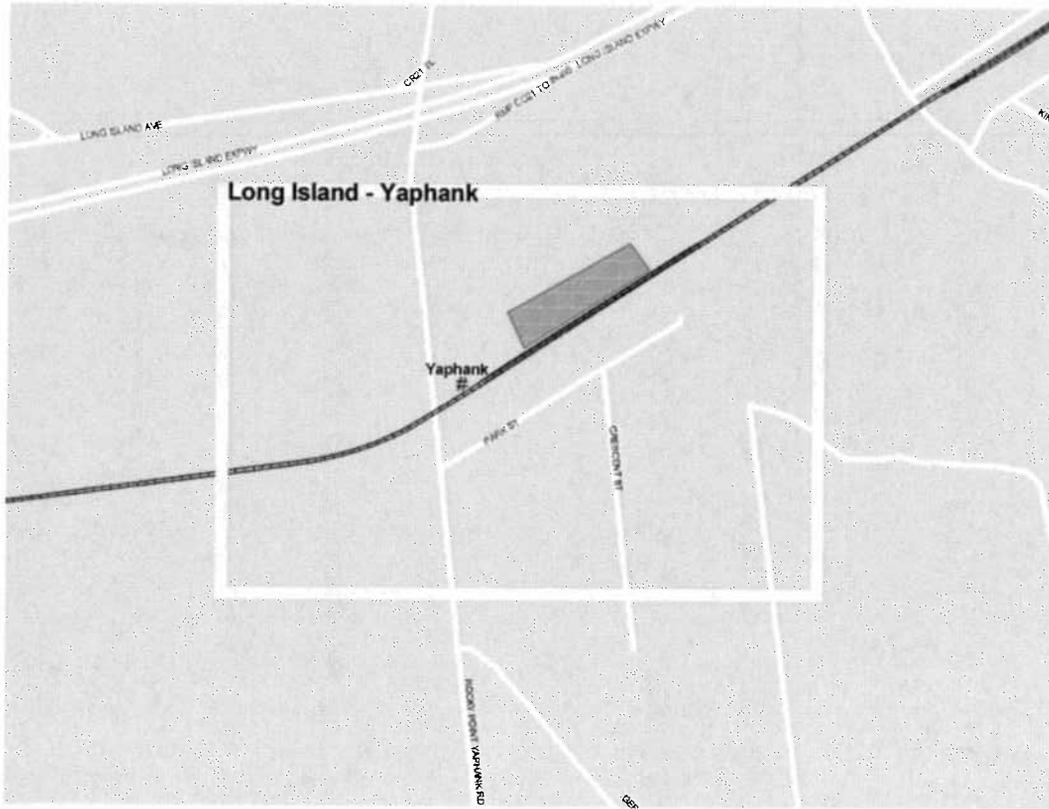
Map 1: St. James

APPENDIX III—SITE MAPS



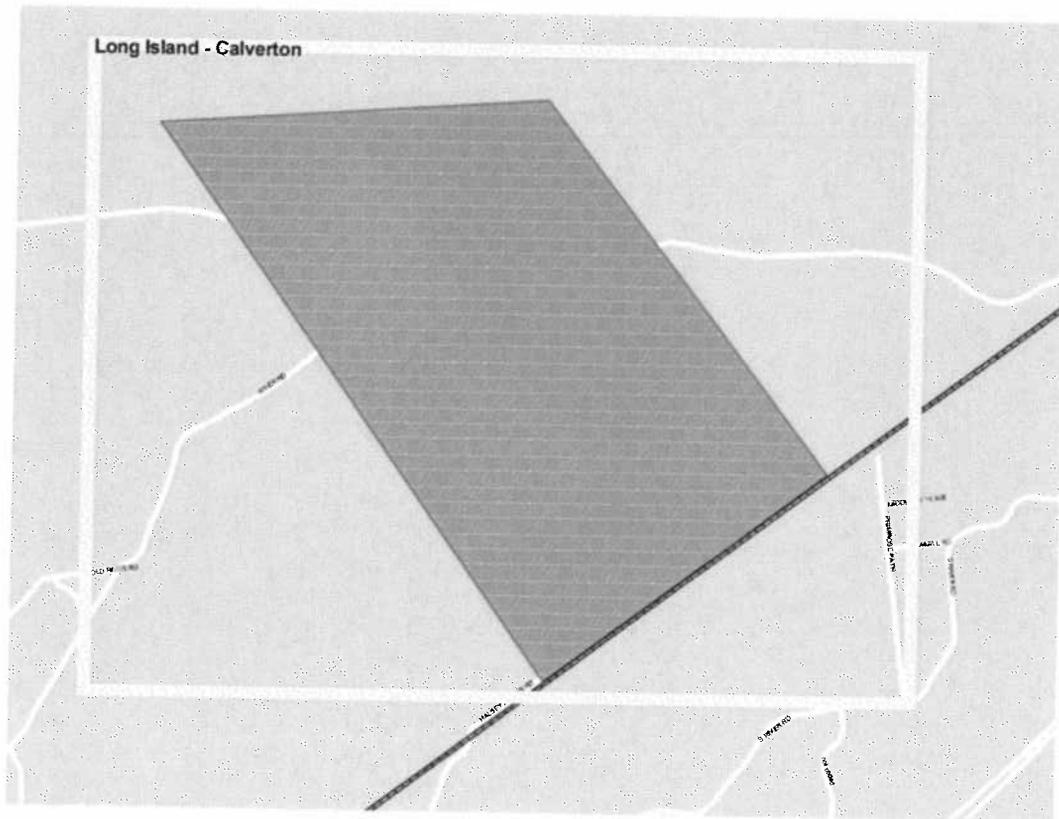
Map 2: Setauket

APPENDIX III—SITE MAPS



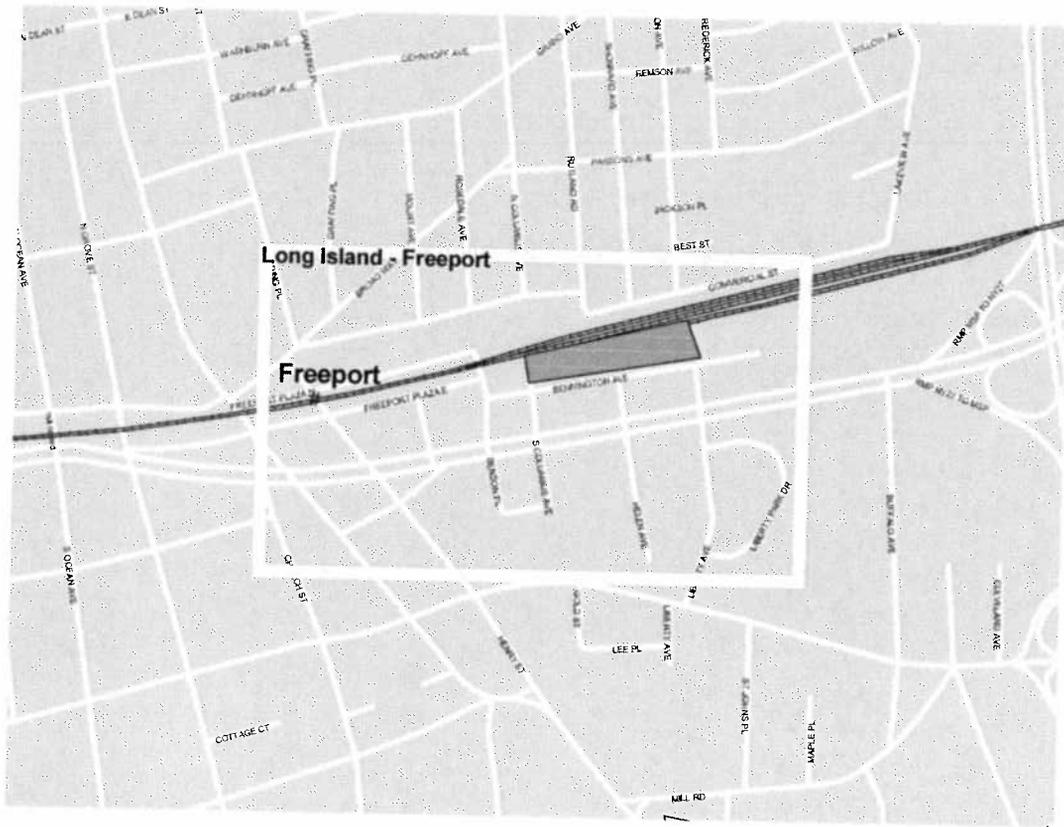
Map 4: Yaphank

APPENDIX III—SITE MAPS



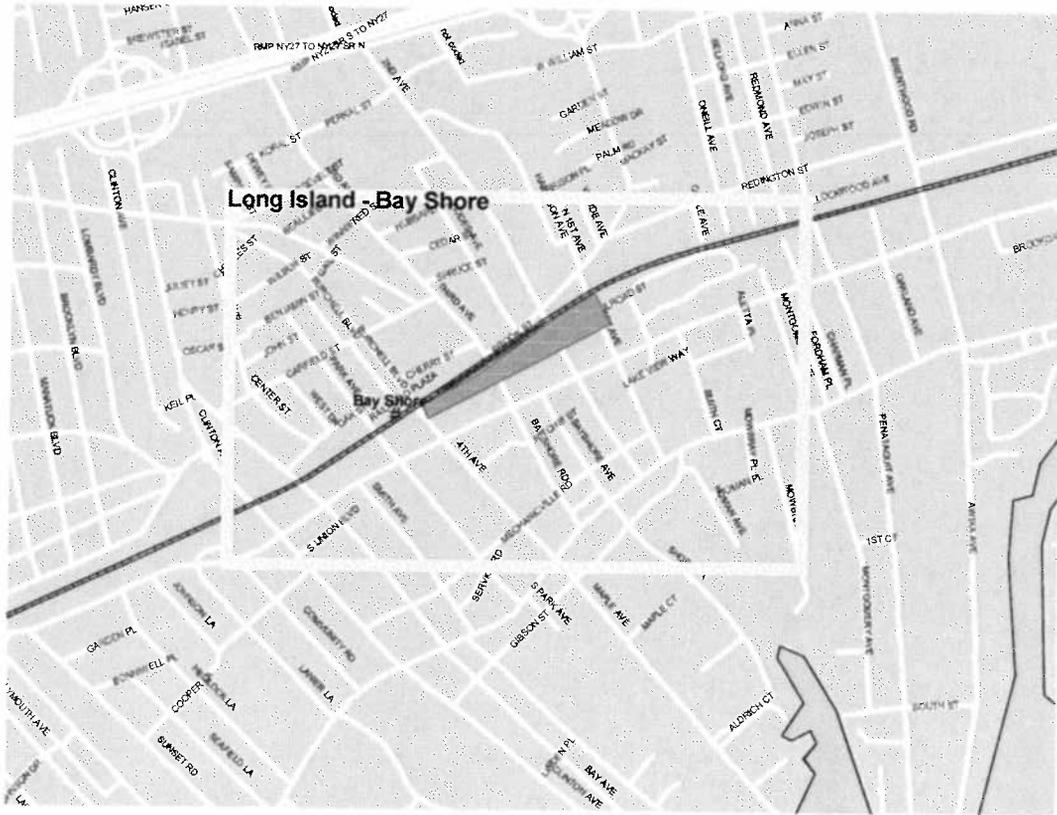
Map 5: Calverton

APPENDIX III—SITE MAPS



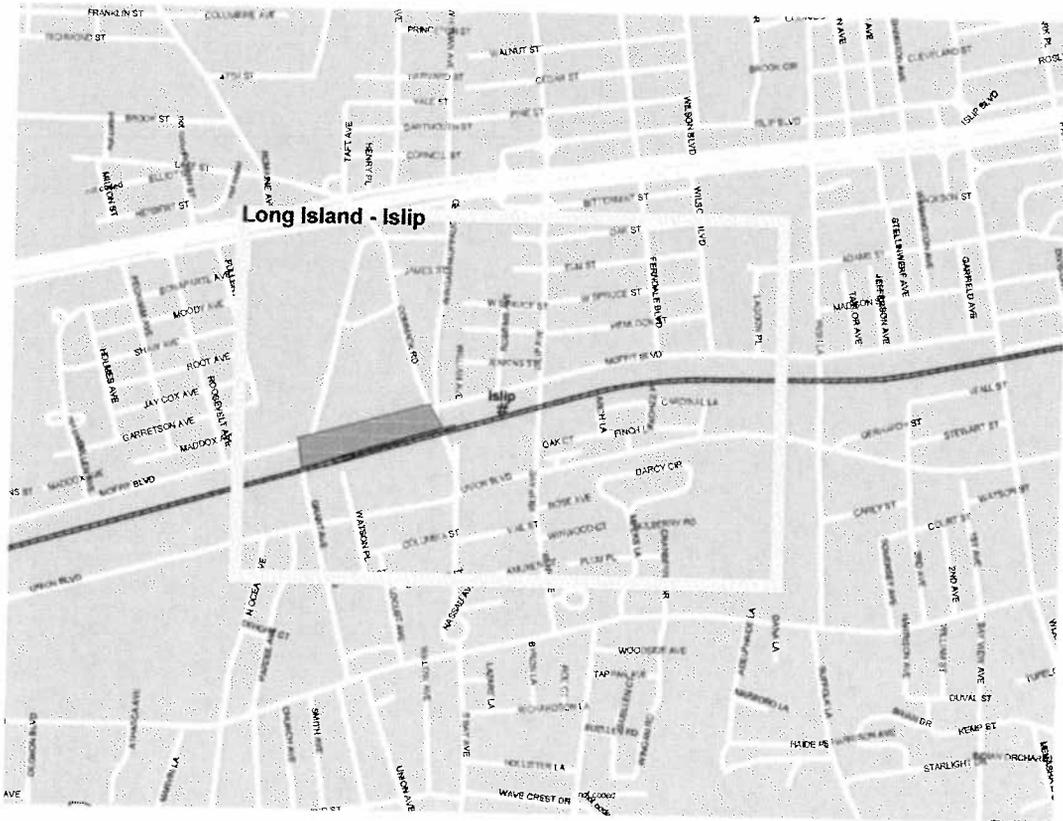
Map 6: Freeport

APPENDIX III—SITE MAPS



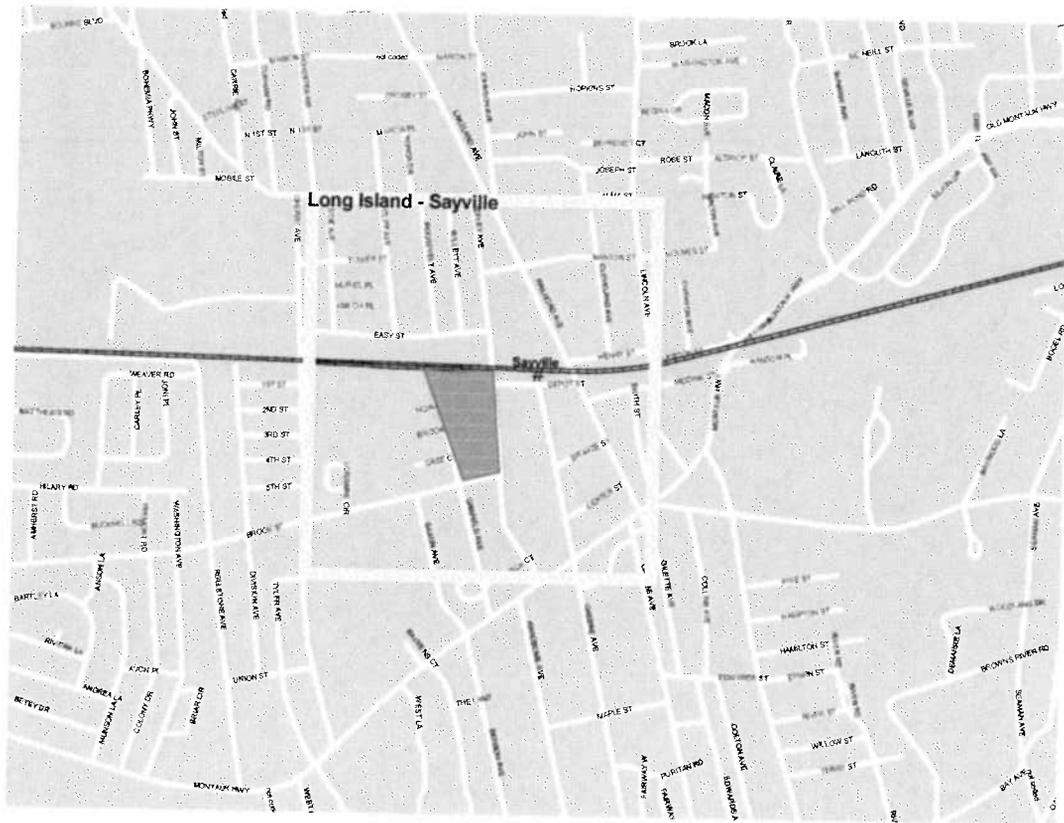
Map 8: Bay Shore

APPENDIX III—SITE MAPS



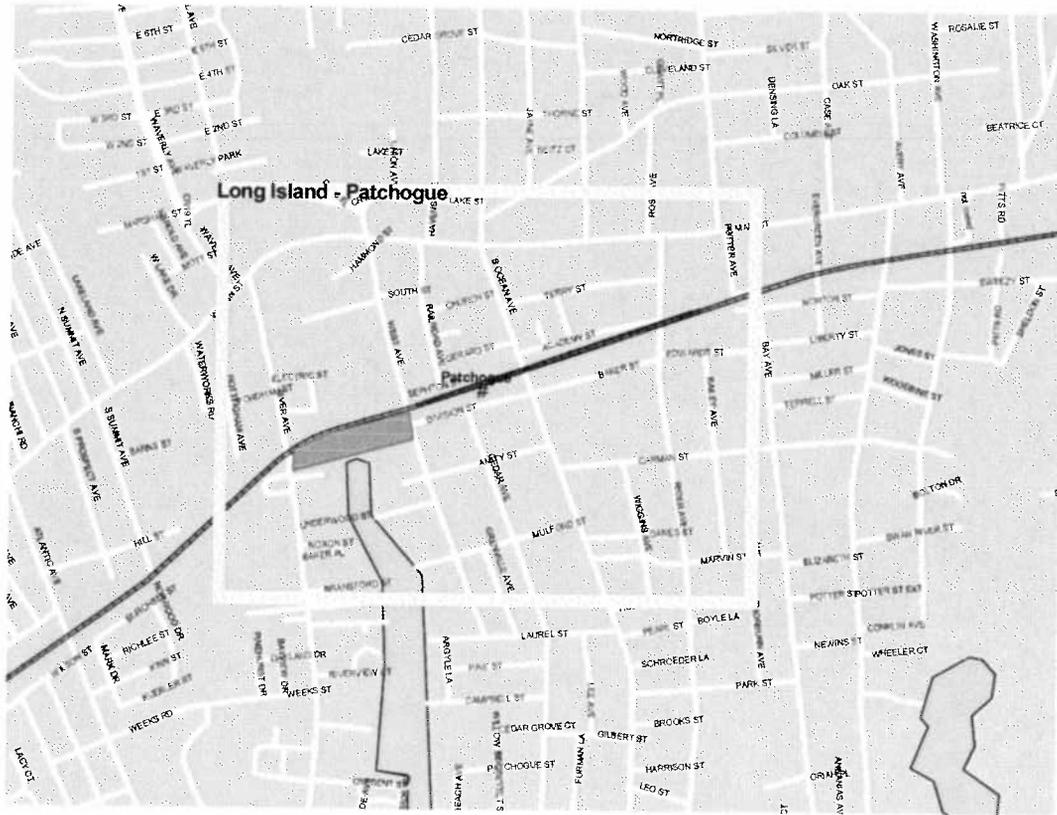
Map 9: Islip

APPENDIX III—SITE MAPS



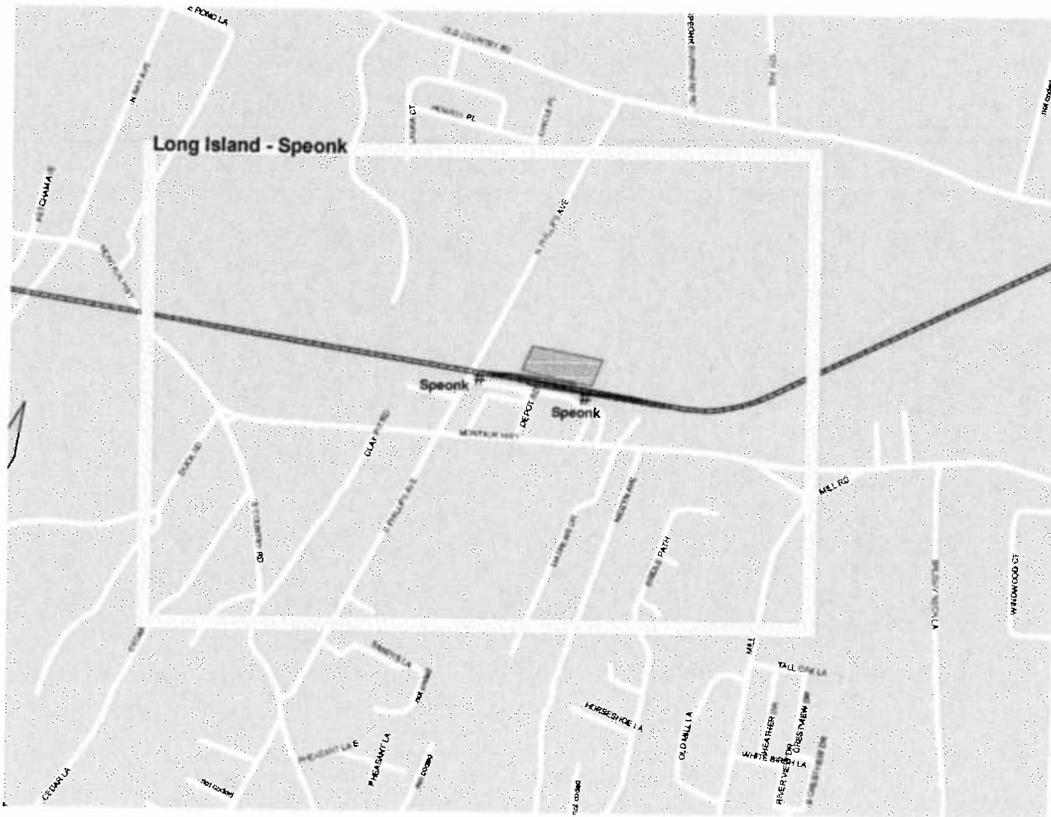
Map 10: Sayville

APPENDIX III—SITE MAPS



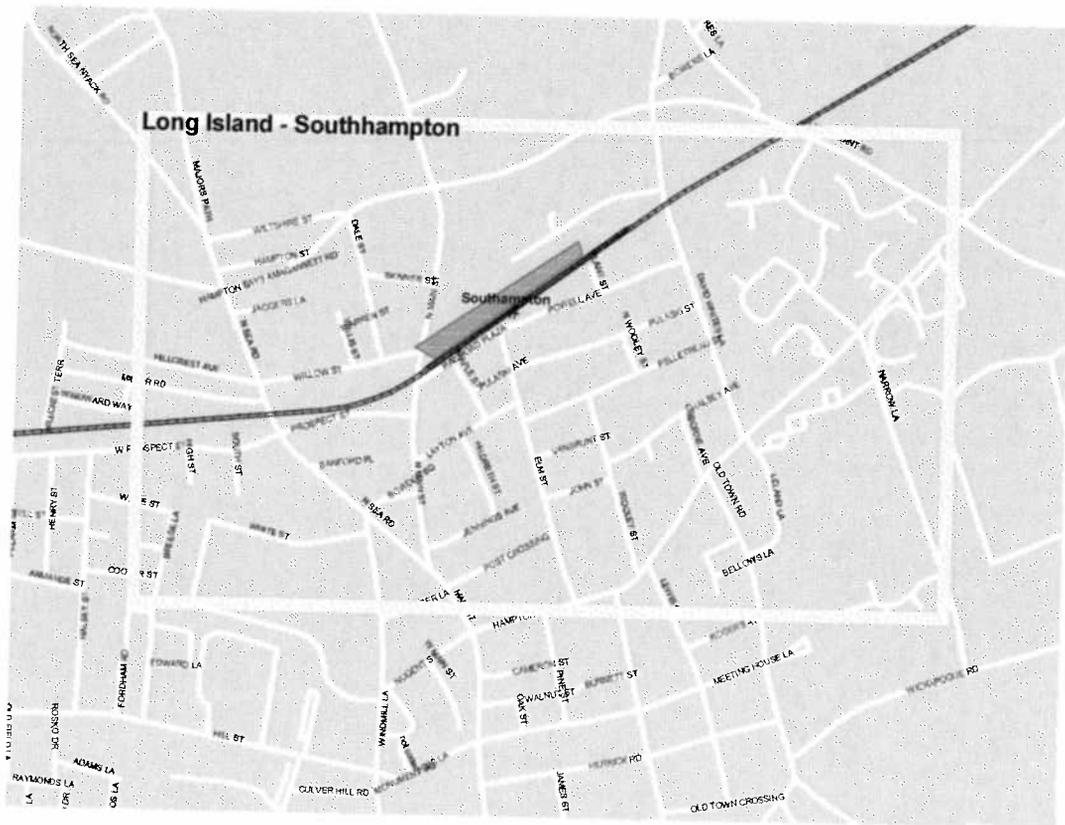
Map 11: Patchogue

APPENDIX III—SITE MAPS



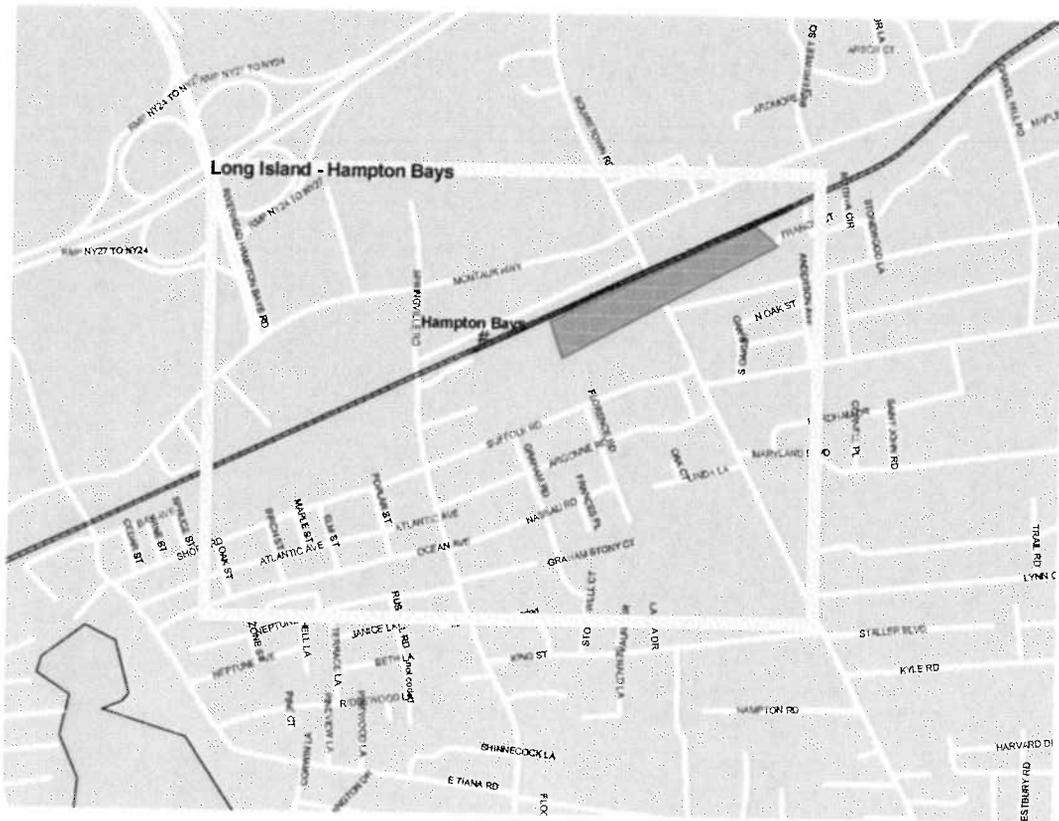
Map 13: Speonk

APPENDIX III—SITE MAPS



Map 14: Southampton

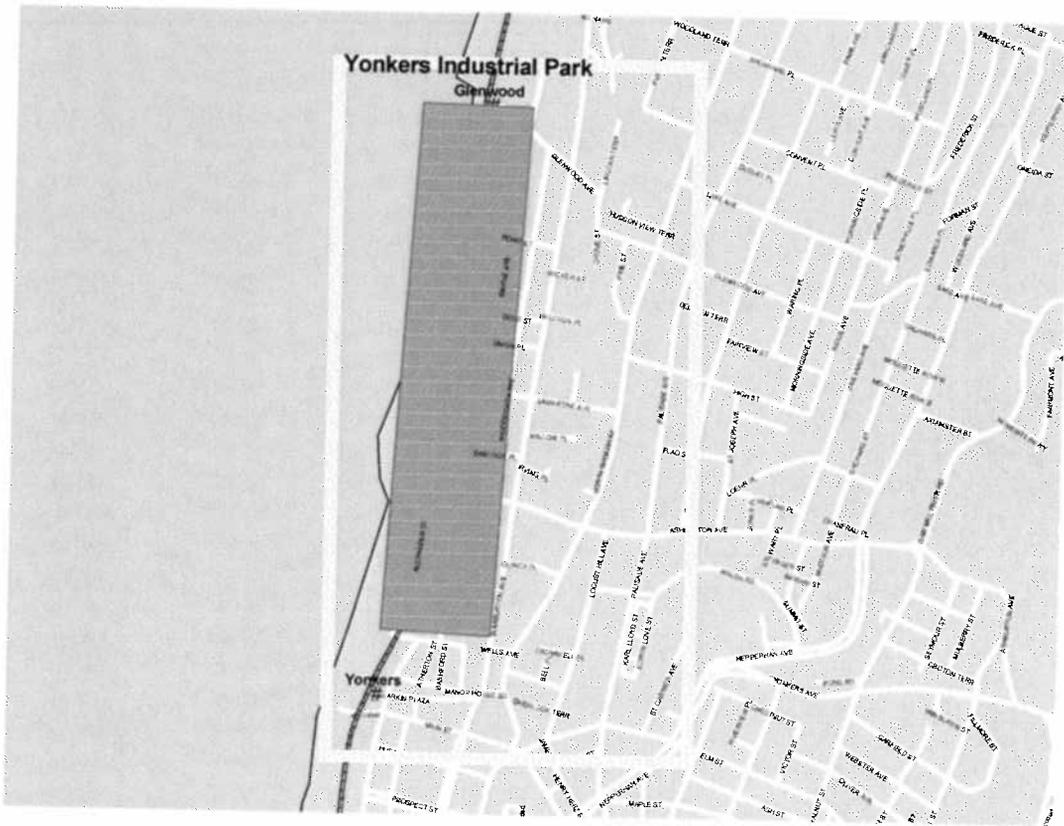
APPENDIX III—SITE MAPS



Map 15: Hampton Bays

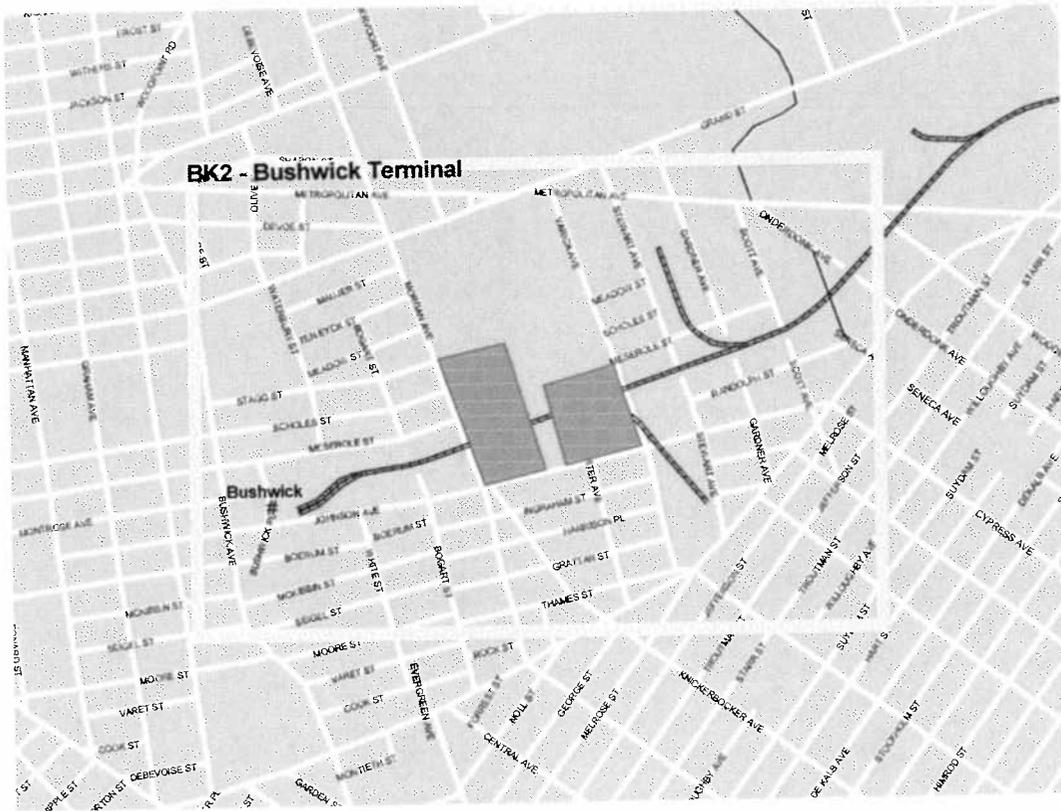
APPENDIX III—SITE MAPS

2. Mid Hudson South (Westchester County)



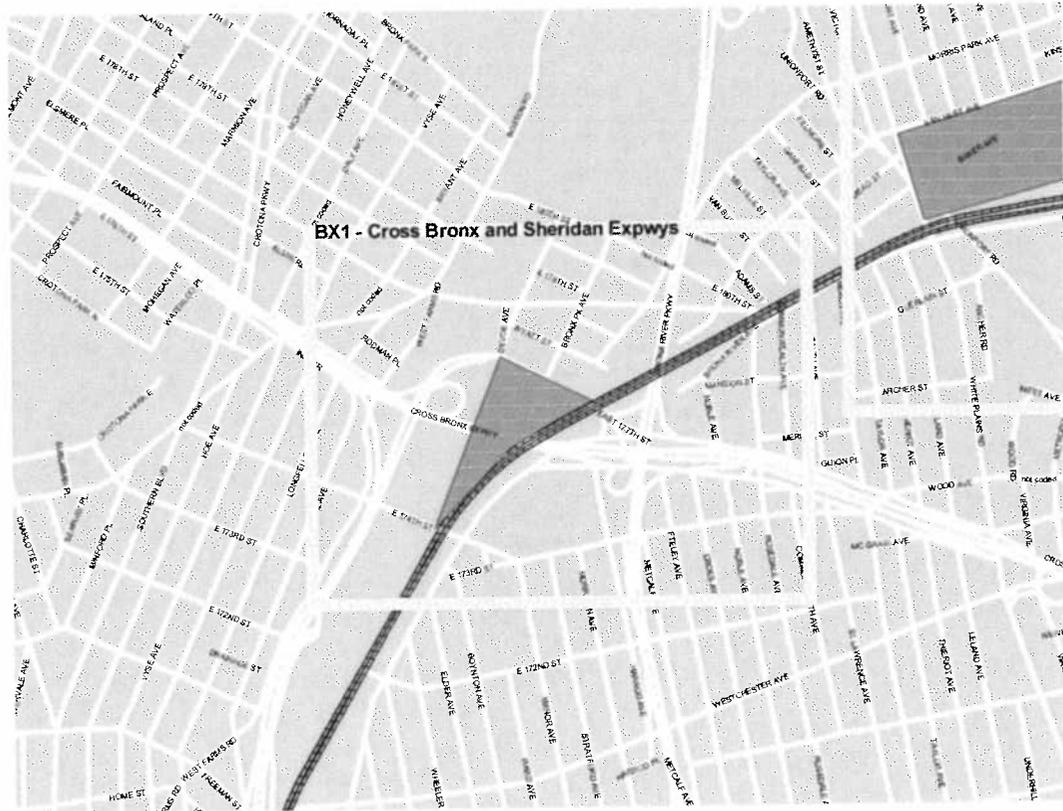
Map 16: Yonkers Industrial Area

APPENDIX III—SITE MAPS



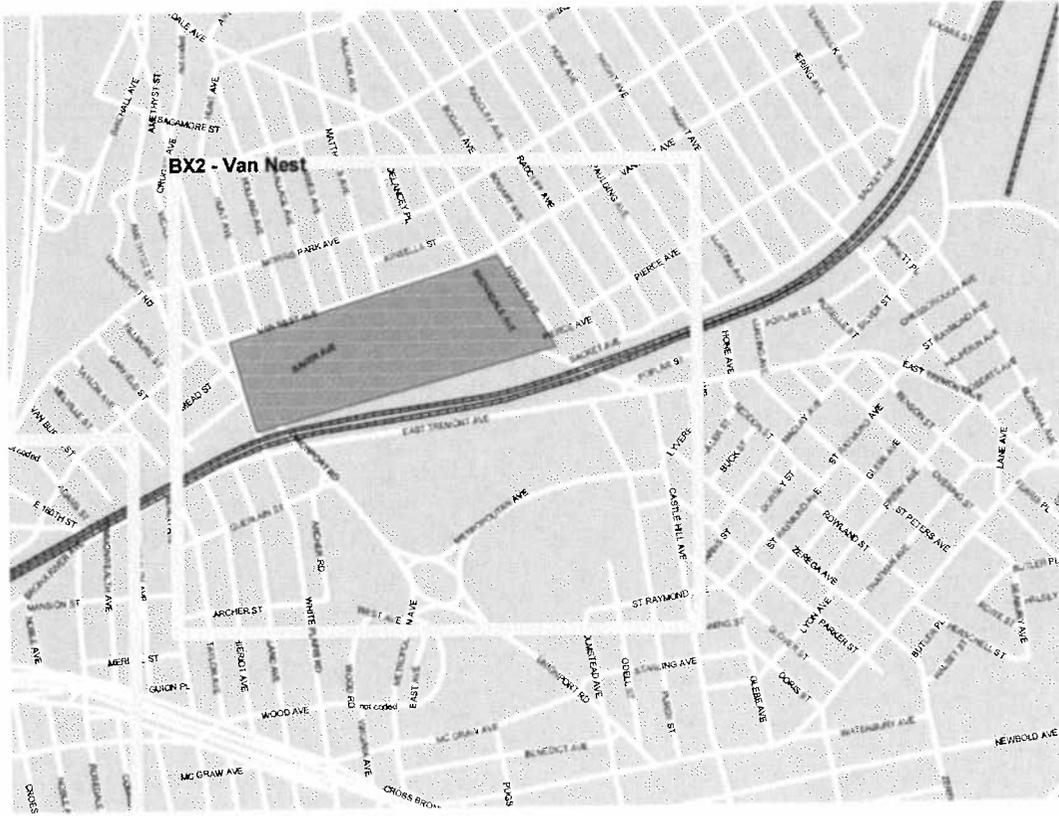
Map 19: Bushwick

APPENDIX III—SITE MAPS



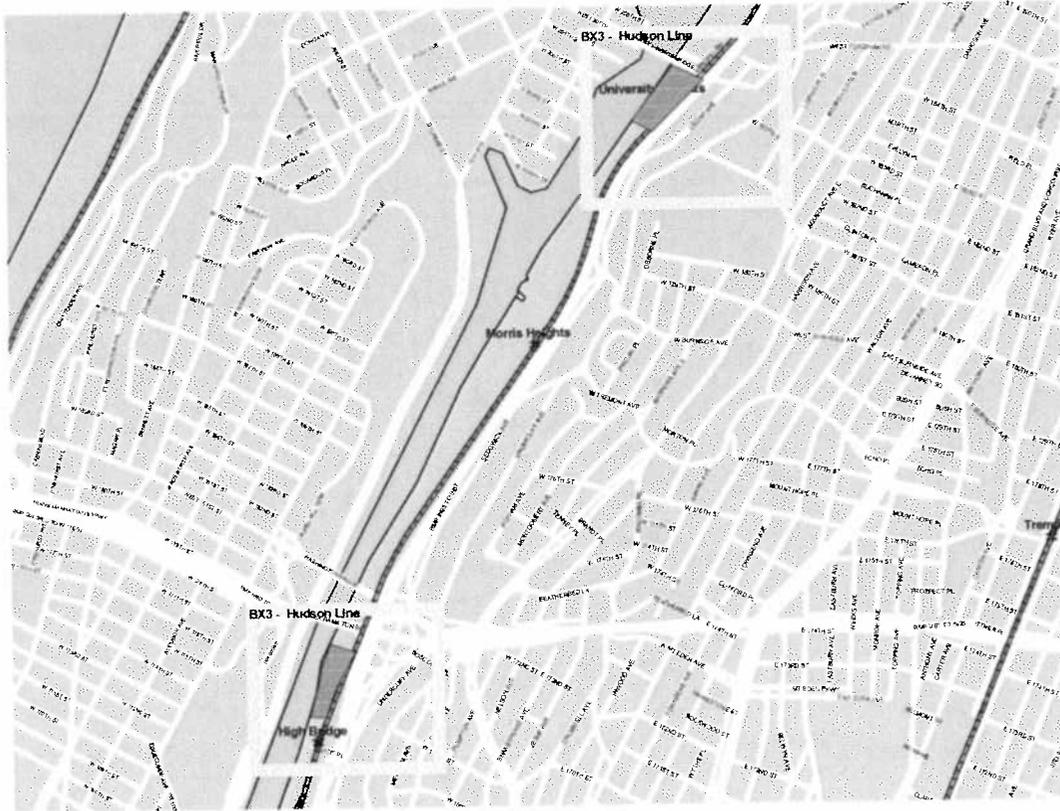
Map 20: Cross Bronx and Sheridan Expressways

APPENDIX III—SITE MAPS



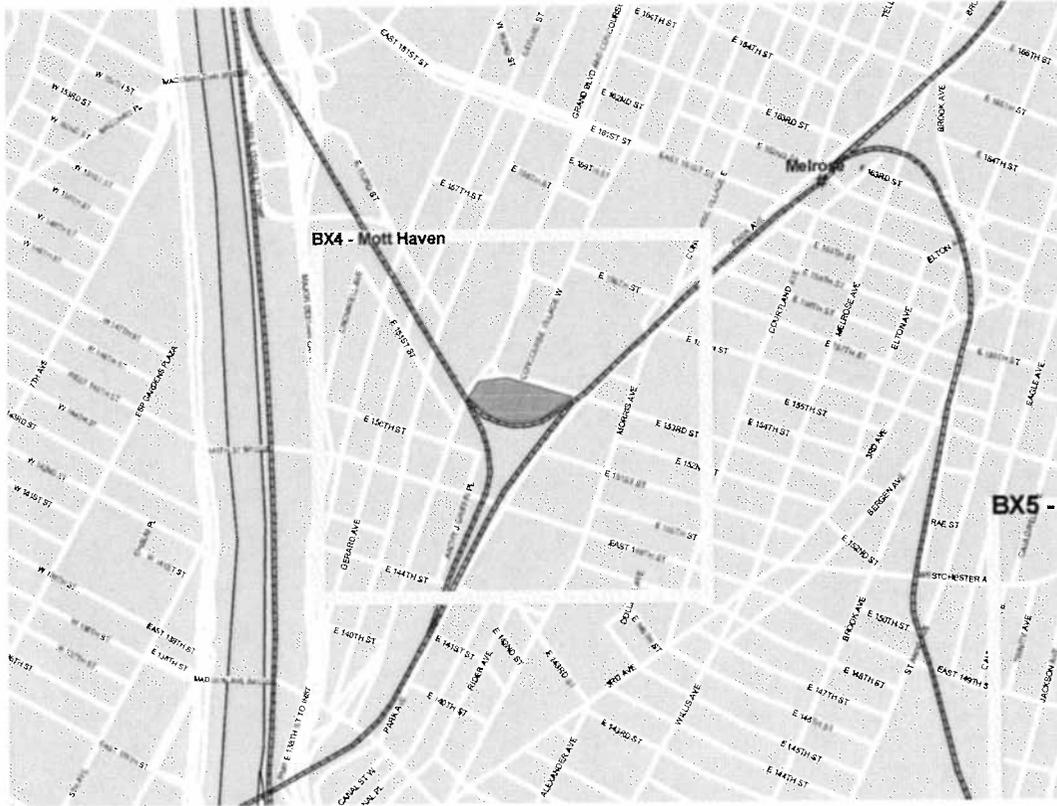
Map 21: Van Nest

APPENDIX III—SITE MAPS



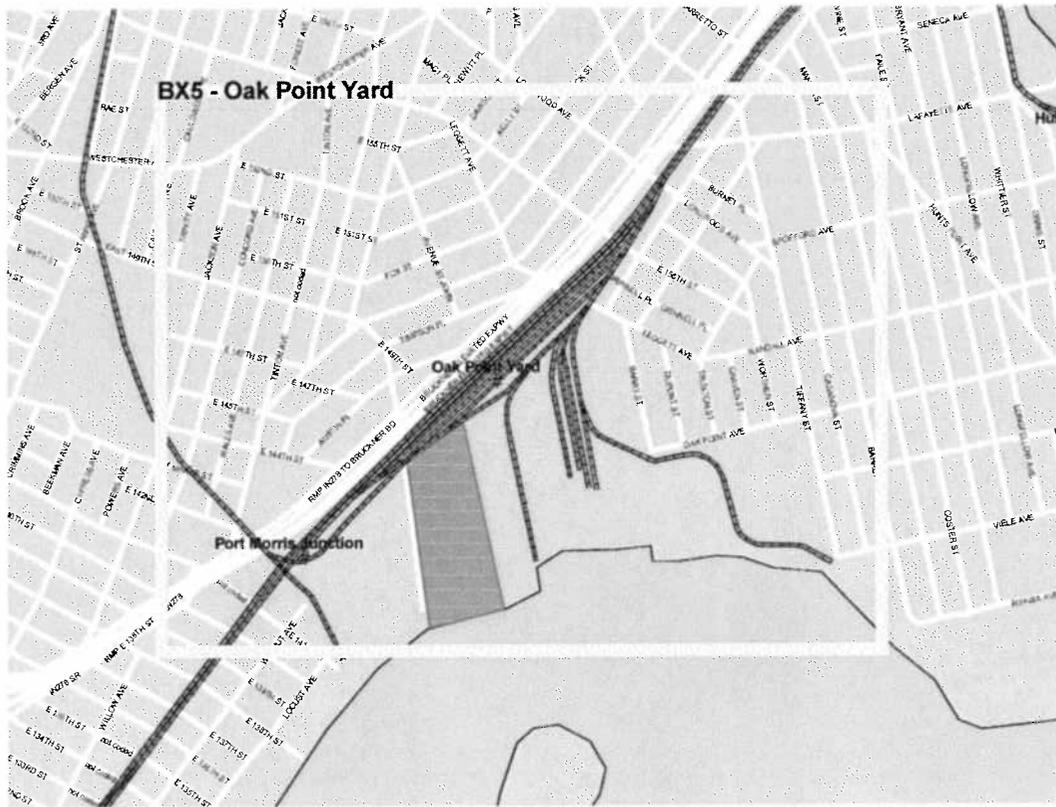
Map 22: University Heights Bridge and Highbridge

APPENDIX III—SITE MAPS



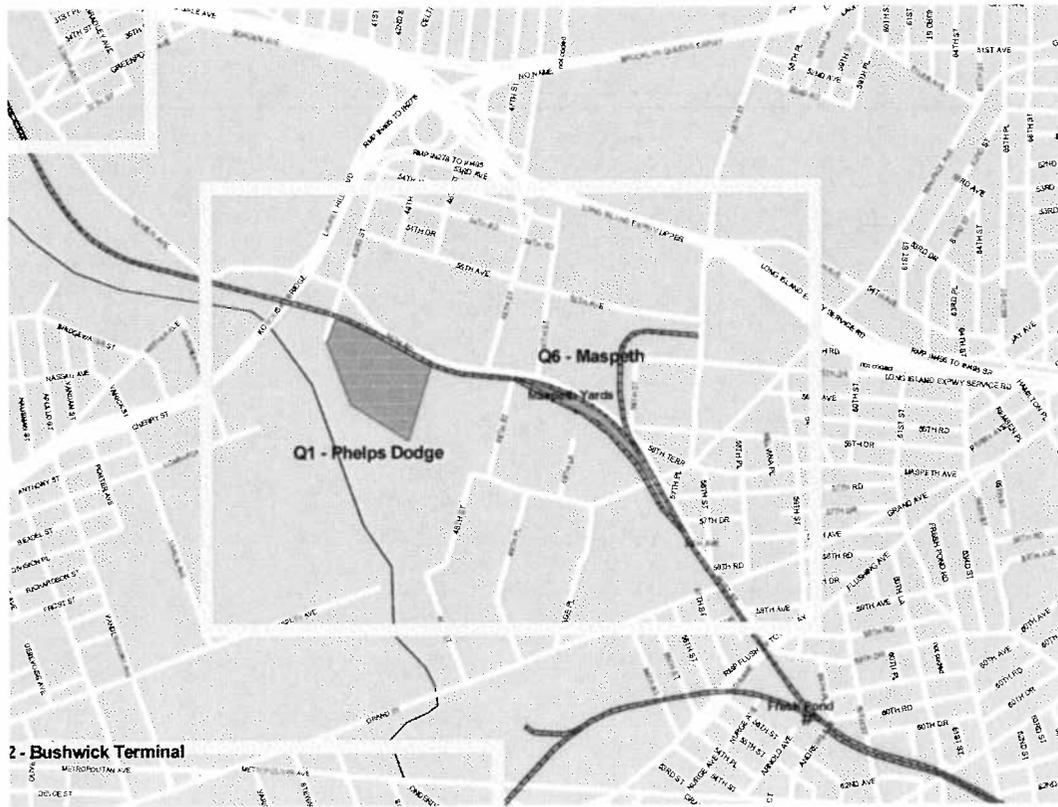
Map 23: Mott Haven

APPENDIX III—SITE MAPS



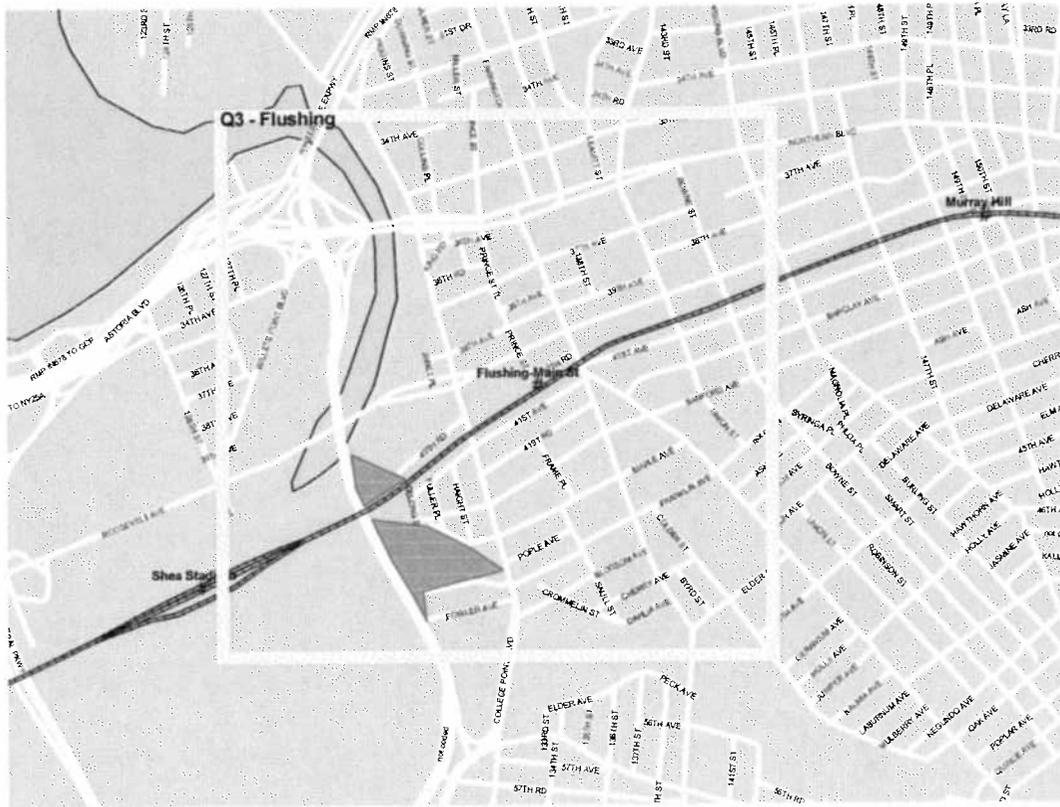
Map 24: Oak Point Yard

APPENDIX III—SITE MAPS



Map 25: Phelps Dodge and Maspeth

APPENDIX III—SITE MAPS



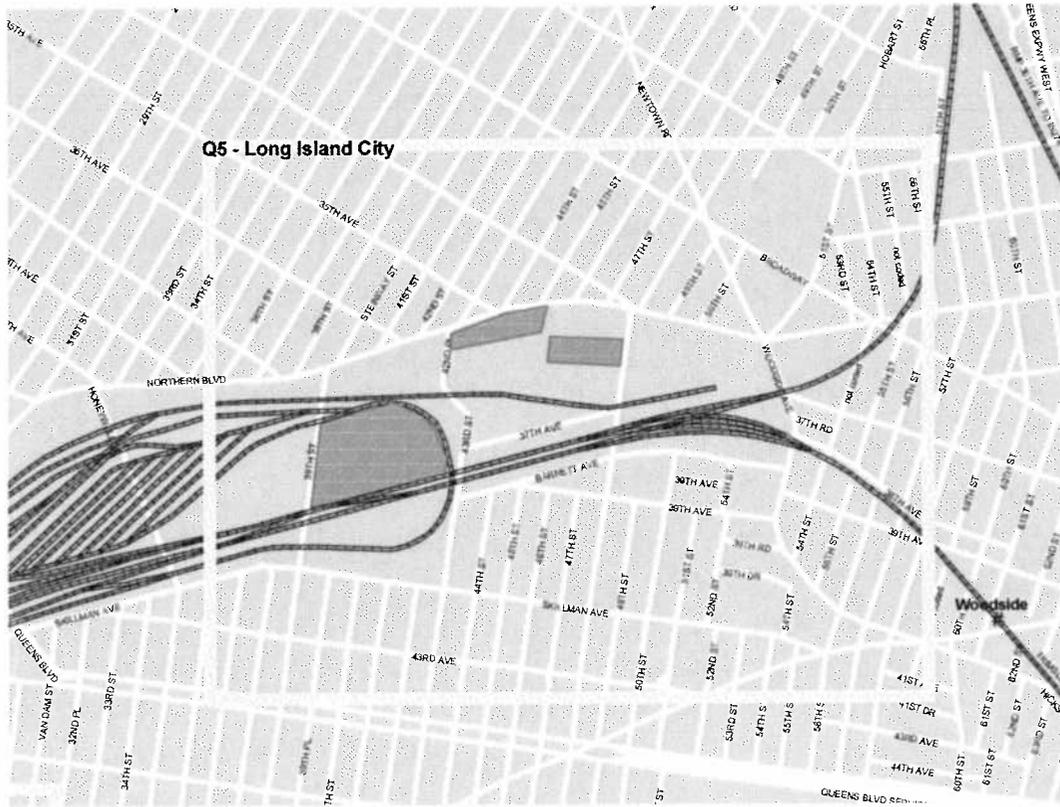
Map 27: Flushing

APPENDIX III—SITE MAPS



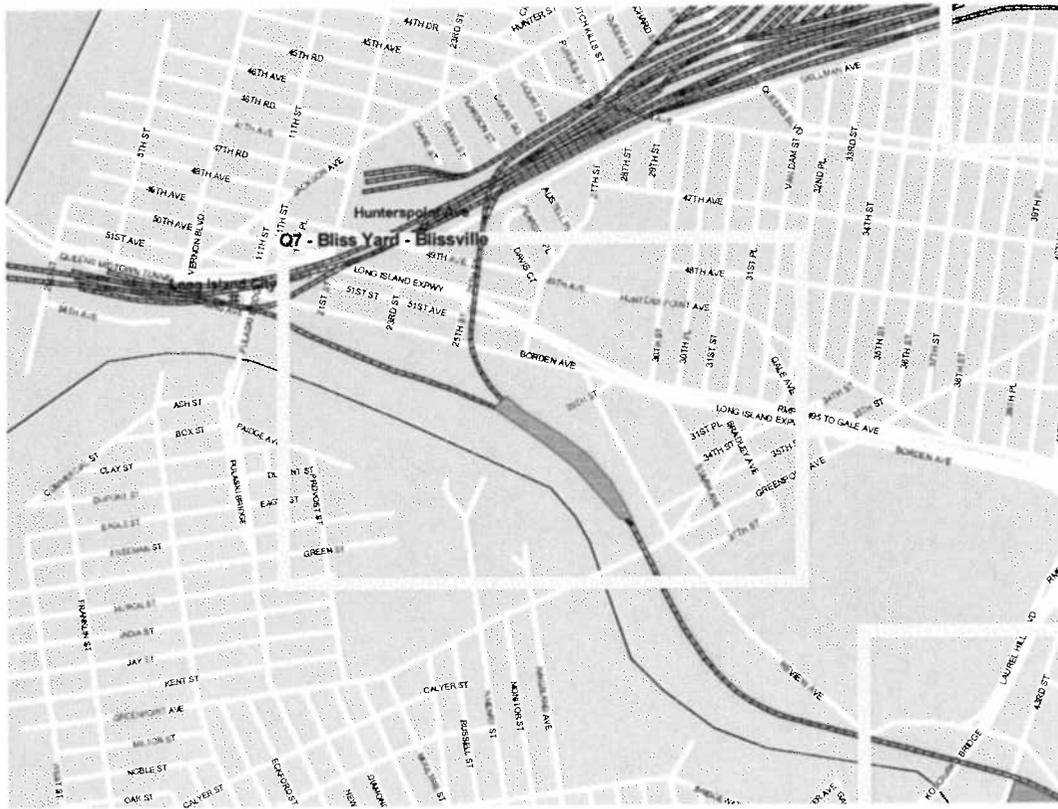
Map 28: Springfield Gardens

APPENDIX III—SITE MAPS



Map 29: Long Island City

APPENDIX III—SITE MAPS



Map 30: Blissville

APPENDIX IV—SUMMARY OF SITE CHARACTERISTICS

| ID | Location | Highway Access | Rail Access | Zoning | Parcel Size (acres) | Conclusions |
|----|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------|---|
| 1 | St. James | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 2 | Small site—possible carload or transload use |
| 2 | Setauket | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | n/a | Small site—possible carload use |
| 3 | Farmingdale | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | n/a | Small site—possible carload or transload use |
| 4 | Yaphank | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3 | Currently used for transload. Expansion possible. |
| 5 | Calverton | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 10 | Useful for carload and transload. Undergoing industrial redevelopment (rail use). |
| 6 | Freeport | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1.4 | Small site—possible carload or reload use |
| 7 | Rockville Centre | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | n/a | Small site—possible carload use |
| 8 | Bay Shore | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 2 | Small site—possible carload use |
| 9 | Islip | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 2 | Active freight use—not large enough for yard |
| 10 | Sayville | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 3 | Joint MOW/freight use. Not large enough for yard |
| 11 | Patchogue | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0.5 | Currently used for freight. Not large enough for yard. |
| 12 | Eastport | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 5 | Currently used for freight. Not large enough for yard. |
| 13 | Speonk | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 2 | Small site—currently used for carload freight |
| 14 | Yonkers Industrial Area | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | n/a | Not large enough for yard. Highway access possible issue. |
| 15 | Croton West Yard | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0 | Active current rail freight use. Explore for expansion. |
| 16 | Brooklyn Terminal Market | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 30 | Not appropriate for major yard. Possible expanded carload activity. |
| 17 | Bushwick | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 22 | Hemmed-in by industrial buildings. Not useful for yard. |
| 18 | Cross Bronx/Sheridan | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 0 | Not appropriate for yard. Currently used for transit purposes. |
| 19 | Van Nest | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5.3 | Site is occupied by Con Ed. Do not consider further. |
| 20 | Hightbridge | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | n/a | Site occupied—possible transload |

APPENDIX IV—SUMMARY OF SITE CHARACTERISTICS

| ID | Location | Highway Access | Rail Access | Zoning | Parcel Size (acres) | Conclusions |
|-----------|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------------------|---|
| 21 | University Heights Bridge | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | n/a | Site occupied—possible transload |
| 22 | Mott Haven | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 10 | Explore conflicts with commuter rail highway access issues |
| 23 | Oak Point Yard Vicinity | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 44 | Expansion possibly for existing yard. |
| 24 | Phelps Dodge | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 35 | Appropriate for large yard. Environmental mitigation needed—private ownership |
| 25 | Former Heinz Plant | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 7 | Size appropriate to yard. No current use for most of site. |
| 26 | Flushing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 30 | Existing active use of site. Intensively used adjacent commuter rail |
| 27 | Springfield Gardens | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 23 | Current active commercial and industrial use. No space for rail. |
| 28 | Long Island City | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | n/a | Intensively used for commercial purposes. Very active intercity and comm. rail. |
| 29 | Maspeth | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 3 | Low rail freight use—possible expansion for rail freight |
| 30 | Blissville | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 2.4 | Possible transload, cross dock or team track use |

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Region 2

UNIVERSITY TRANSPORTATION RESEARCH CENTER

NYSDOT Consideration of Potential Intermodal Sites for Long Island

Submitted by

Robert E. Paaswell, Ph.D., Principal Investigator

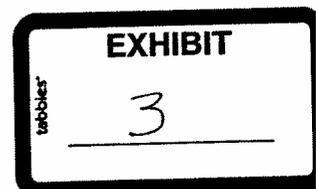
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June 9, 2011



Disclaimer

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| | | 14. Sponsoring Agency Code | |
| 15. Supplementary Notes | | | |
| 16. Abstract This Study was prepared in response to the Governor's directive to conduct an extensive analysis of the feasibility of a truck/rail facility on Long Island. It was designed to answer three questions: | | | |
| <ul style="list-style-type: none"> • Is an intermodal truck/rail transfer facility needed to respond to the current and anticipated volume of goods movement in Nassau and Suffolk County? • Where should such a facility be located? • What are the economic, social, and environmental effects of such a facility and can any adverse effects be mitigated? <p>The research showed that there is a demand for increased freight delivery on Long Island as a result of population and employment gains and such increased delivery could reduce the number of trucks currently required to deliver freight to area businesses and industrial parks. Increased rail-freight deliveries would, in all likelihood, reduce the costs of these local freight deliveries. Industry experts consulted for this study agree that there is a likely market for delivery of freight by rail to Nassau and Suffolk Counties, but that the demand for bulk freight yards may be more immediate than is the demand for container yards and that the demand for containerized rail freight would be significantly increased if a cross-harbor tunnel were built. Experts generally agree that a significant demand for containerized freight will also depend upon the availability of conveniently accessible warehouse facilities.</p> <p>The study team identified potential sites for the facility and assessed the "pros" and "cons" of each and reviewed the previous work on the LITRIM project. Some recommendations for future action included:</p> <p>The Pilgrim FEIS site evaluation should rigorously address a number of significant environmental, legal, public-health, and environmental justice issues that were identified in the Study Team's interviews with project stakeholders such as mitigating the potential adverse impacts of light and noise on the patients of Pilgrim State Hospital, some of whom live as close as 350 feet from the proposed site; the impact of the transfer facility site on the adjacent Edgewood State Preserve; and the site's location within the Oak Brush Plains Special Groundwater Protection Area.</p> <p>The Study Team distinguished between the two major types of truck-rail transfer facilities, bulk and containerized, and found that: while there might be some short-term advantages to combining bulk and container operations, as rail-freight markets develop in the near-term, there is neither any compelling long-term need to combine these operations nor any significant near-term demand for container operations. There is a need for multiple yards on Long Island both for bulk traffic and (with the development of a double-stack cross-harbor rail-freight tunnel) for containers and that there is an immediate demand for at least one major bulk transfer yard on Long Island. In addition, if a double-stack rail-freight tunnel is built across New York harbor, at least two major containers (or bulk-and-container) yards will be required.</p> | | | |
| 17. Key Words Intermodal truck/rail, Freight, Bulk, Mitigation, Containerized | | 18. Distribution Statement | |
| 19. Security Classif. (of this report) Unclassified | 20. Security Classif. (of this page) Unclassified | 21. No of Pages 59 | 22. Price |

NYSDOT

Consideration of Potential Intermodal Sites for Long Island

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June 9, 2011



Acknowledgements

It takes an extensive team effort to complete a project as complex as the Potential Long Island Intermodal Sites Study. Robert Paaswell, Principal Investigator, and Penny Eickemeyer, Project Coordinator for UTRC, would like to recognize the hard work of the entire Study Team, including Allison L. C. de Cerreño and three research assistants, Radhameris Gómez, Martha Kenton, and Lin Zeng. Their contributions were invaluable to the project.

Allison's skill in interviewing and reporting the concerns of representatives of many of the stakeholder groups, along with the work of Allen Zerkin, contributed significantly to our understanding of the issues discussed in this report. Their efforts were further enhanced by Martha Kenton, a student at NYU, who scheduled over 20 meetings in approximately one month's time.

Lin Zeng of Hunter College ably served the Team through her assistance to Harry Schwartz in analyzing the 13 potential sites that were identified for truck/rail yard use. Her work included reviewing and producing quality air photos and land use maps and assisting Ben Miller and Herb Levinson with geographic specific data.

Radhameris Gómez a Civil Engineering student at RPI enthusiastically helped with many varied tasks that were crucial to the Study's completion including assisting with research and presentations and organizing voluminous email discussions.

Consideration of Potential Intermodal Sites for Long Island

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Consideration of Potential Intermodal Sites for Long Island Study

Chapter 1: Introduction

In 2008 the NYS legislature passed a bill transferring property from Pilgrim State Hospital (currently publicly owned) to the Oak Brush Plain State Reserve. In his message vetoing the bill Governor Paterson said that “Neither I nor DOT has made any determinations as to whether a LITRIM [Long Island Truck Rail Intermodal] facility of any size is appropriate on surplus property at Pilgrim. The best way for this determination to be made is to continue with the environmental impact analysis of LITRIM, with public participation in the process.”

Concurrent with this veto, the Governor ordered several agencies, with the New York State Department of Transportation in the lead, to undertake the development of a comprehensive regional traffic plan and to include as part of this plan, “an exhaustive analysis of the pros and cons for developing an intermodal at Pilgrim, as well as at potential sites elsewhere in Suffolk County.” Subsequently, NYSDOT invited members of the University Transportation Research Center to submit proposals to analyze the pros and cons of building a Long Island Truck/Rail Intermodal (LITRIM) facility at Pilgrim and other sites in Long Island. In response to this request, this study has been prepared by the CUNY Institute for Urban Systems (CIUS). The work included a review of documents previously prepared concerning the LITRIM, additional technical documents, extensive meetings with stakeholder groups and public agencies and an evaluation of alternative sites for the transfer facility. (See Figure 1.1, Potential Sites)

The study addresses three major questions:

1. Is an intermodal truck/rail facility needed to respond to the current and anticipated volume of goods movement in Nassau and Suffolk County?
2. Where should such a transfer facility be located?

3. What are the economic, social, and environmental effects of such a facility and can any adverse effects be mitigated?

The following chapters demonstrate that:

- While the NYC region moves an extraordinary amount of goods each year, those goods are moved predominately by truck. Lack of good and adequate rail freight service to the NYC metropolitan region and all regions east of the Hudson River has created economic and environmental penalties. At this time (2009), there is a resurgence of rail planning in the US; this must also take place in NY State and its most populous regions, including Long Island. Overcoming the historical impediments to rail freight east of the Hudson River is essential to the economic growth and quality of life of Long Island.
- There is a current and growing need for rail-truck transfer facilities, based both on a growing demand for commodities on Long Island and the need to reduce the number of motor vehicles, particularly trucks, on the roads because of air quality and congestion concerns.
- Given the shortage of available rail-truck transfer facilities on the Island, which prevents existing latent demand for rail-freight service from being met--and hence prevents additional diversion from trucking--no action should be taken that would foreclose the development of any potentially feasible truck-rail yards. The Pilgrim State site is one such potentially feasible facility; it is particularly well-suited to bulk freight service for shippers who are concentrated in nearby centers (e.g., the Heartland and Hauppauge Industrial Parks). However, Pilgrim is not ideal: potential environmental adverse impacts, possible environmental justice issues, potential effects on the resident and out-patient populations at the Hospital, and limitations on space for future intermodal-related development all warrant further study. Other sites may also be appropriate for truck/rail transfer operations.

- The traffic and other potential adverse environmental impacts the Pilgrim site would pose need to be weighed against the significant environmental benefits it would produce. It should also be noted that the negative impacts it might produce—especially regarding traffic—would be far outweighed by the negative impacts that would be associated with the Heartland Town Center that is proposed to be built a short distance from the rail yard.
- In addition to the Pilgrim site, there are other sites that might be well-suited to truck-rail use. One of these is a considerably larger private site that private investors are interested in developing; another is the Calverton site which the Town of Riverhead is considering for truck-rail use. Either of these sites might offer advantages over the Pilgrim site for container service, since containerized freight requires the intermediate handling and storage services of nearby warehousing/distribution centers, and sites such as these offer greater availability of nearby parcels on which such ancillary facilities could be developed.
- While there is an immediate demand for bulk service, it is not likely that there will be significant demand for container service in the absence of significantly improved cross-harbor rail-freight connections. Since such improvements--e.g., a tunnel under the Hudson River which would connect New York City with New Jersey and the rest of the country--will require some years to be developed, a rational development sequence might involve the Pilgrim site or other suitable sites for immediate bulk purposes while also taking steps to develop an additional site that would be available for container service when it is needed. Since the development of a cross-harbor tunnel would also require at least one truck-rail container yard within the general orbit of the Bay-Ridge/Fremont line in Brooklyn and Queens (to handle distribution within New York City), a container-yard location in Central/Eastern Suffolk County might best minimize overall dray distances on geographic Long Island.
- Increased truck traffic would be associated with any site selected for a truck-rail facility. Long Island is highly developed; existing traffic levels as well as other environmental concerns are issues not only at Pilgrim but at other potential sites as well.

- If a separate container yard were not available by the time it is needed, the Pilgrim yard could be turned to container use.

This year, 2009, is a unique year for examining a traditional transfer facility. National and local economic activity, including the demand for goods, is depressed. Nevertheless, this study assumes that the upward economic trend of the past several decades will continue supporting the activities of the 2.9 million people who live and work on Long Island. Continued sustained levels of growth on Long Island have created motor vehicle congestion and associated economic, social and environmental costs. The rapidly accelerating movement of goods by truck – whether local deliveries or long-distance shipments to commercial establishments--have exacerbated the effect of trucks on congestion and the environment.

One solution to the problem is to move goods by rail. Outside the Northeast, east of the Hudson River, the significant proportion of goods moved by rail dwarfs the volume carried in New York State. Using modern, green logistics, moving goods by rail where it is appropriate saves money, is more environmentally friendly, lessens pollution and stimulates economic growth.

An intermodal facility on Long Island will be an early-21st Century necessity. When the cross-harbor rail tunnel is completed, at least one intermodal facility will be needed in Nassau/Suffolk to accommodate containerized freight. This study recognizes the real and growing need to address the movement of freight, not only on Long Island but in New York State and its neighbors. Any type of development on Long Island is complicated since it is so densely settled and its transportation infrastructure, particularly its highways and local roads, is so crowded. Space for new development is at a premium and determining the best and highest use of limited underdeveloped land is often a contentious process. Yet developing adequate capacity for the transfer of goods between truck and rail is critical to the continuing economic growth of Long Island.

The report that follows is divided into brief chapters, each of which responds to the three questions previously cited regarding the demand for and appropriate location of a truck-

rail facility. An additional chapter is devoted to the concerns and ideas of the many stakeholders groups whom team members interviewed between January and April 2009. (See Table 1.1) While stakeholders are frequently concerned about complex facilities in their regions, the study team found that those involved with the proposed LITRM facility at the Pilgrim State Hospital site contributed many positive ideas regarding location, access, and mitigation of environmental effects.

NYSDOT Potential Long Island Intermodal Sites Study Potential Sites

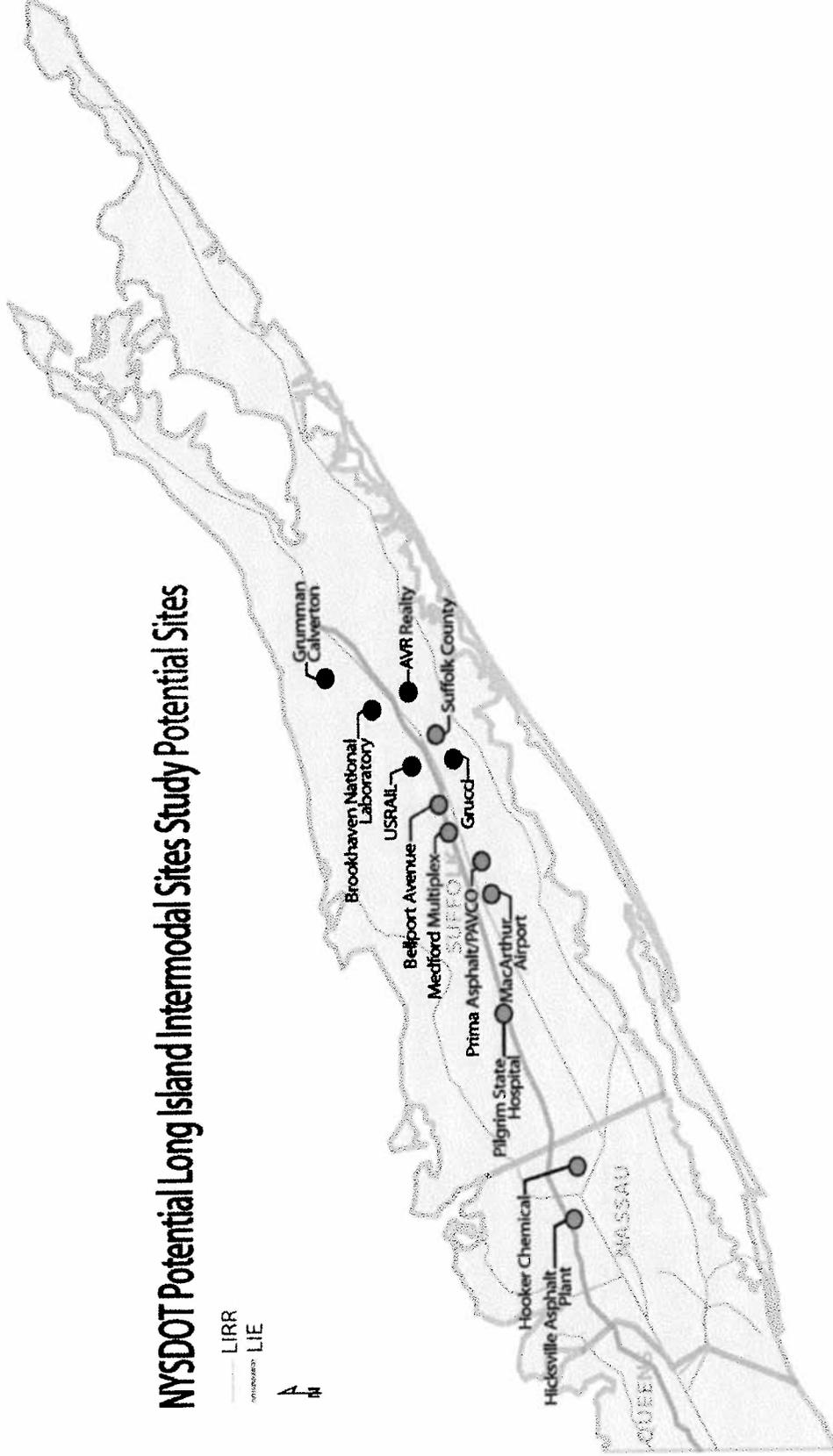


Figure 1.1 Long Island showing Several Candidate Intermodal Sites

Table 1.1 Stakeholder Groups

Community Institutions and Long Island Environmental Organizations

| | |
|---------|--|
| 2/03/09 | Friends of Edgewood Preserve (they also provided a tour on 2/17/09) |
| 2/10/09 | Four Towns Civic Association ¹ |
| 2/13/09 | Long Island Greenbelt Trail Conference Long Island Pine Barrens Society Sierra Club, Long Island Chapter |
| 2/24/09 | Citizens Campaign for the Environment |
| 2/26/09 | Affiliated Brookhaven Civic Organizations Brentwood Civic Association Medford Taxpayers & Civic Association PRONTO George and Roberta Pettingill, residents of Dix Hills** Nicholas Zuba, legislative aide to Babylon Town Supervisor** Matthew Ferdon, aide to Assemblyman Andrew Raia, 9 th District** Angela Meyer, legislative aide to Senator John Flanagan, 2 nd District** |
| 2/27/09 | Brentwood Summit Council |
| 3/02/09 | Islip Town Branch NAACP |
| 3/19/09 | Enrico Nardone, Executive Director, Seatuck Environmental Association, Islip |

¹ James Ptucha from Four Towns was ill the day we initially met with Laura Mansi. A phone conversation was held with him separately on 2/27/09.

** Added to list at their own request

Long Island Business and Planning Organizations

2/13/09 Vision Long Island
2/13/09 Heartland Business Center Long Island Association
2/24/09 Long Island Association
Long Island Regional Planning Council

Government Entities

2/12/09 Pilgrim Psychiatric Center, NYS Office of Mental Health
2/17/09 Suffolk County Planning Department
2/18/09 US EPA-Region 2
2/25/09 PANYNJ²
2/27/09 Nassau County Planning Department

Railroads and Other Interested Parties

2/18/09 Kelvin MacKavanagh, (NJ Short Line Railroad Association, speaking as consultant)
2/18/09 William Galligan (E. of Hudson Rail Freight Task Force, speaking as subject expert)
2/19/09 Anacostia & Pacific
2/19/09 Peter Cohen (Amtrak, but spoke as a former Conrail person)
2/23/09 CSX
2/26/09 NY & Atlantic Railway
3/9/09 John McHugh (E. of Hudson Rail Freight Task Force, speaking as subject expert)

² The first meeting with the PANYNJ did not involve all who needed/desired to attend so a follow up meeting was held. The notes incorporate both discussions.

3/18/09 Norfolk Southern
3/20/09 LIRR
3/30/09 Ron Klempner, railroad consultant

Carriers, Shippers, Warehousing

2/10/09 NY Freight Users Association
2/18/09 NYS Motor Truck Association
2/19/09 NYPort Terminal Company

Chapter 2: The Need for One or More Truck/Rail Transfer Facilities on Geographic Long Island

- There is an immediate need for one or more additional truck-rail facilities on geographic Long Island.
- The current need is for bulk transfer facilities, the lack of which prevents potential customers from being able to receive shipments by rail; ideally there would be multiple yards located as close as possible to existing and potential shippers/receivers.
- Although there is not a current demand for a containerized truck-rail facility (an "intermodal" facility in the conventional sense), one or more such yards would be needed if a rail-freight tunnel were built across the Hudson; to be viable, such a yard or yards would require space in the immediate vicinity for the development of the ancillary warehousing/wholesaling facilities needed for the storage, processing, and distribution of containerized goods.

Chapter 2: The Need for Truck/Rail Transfer Facilities on Geographic Long Island

Over the past several decades, the volume of freight hauled in the US has nearly doubled and, despite the current recession, freight levels are expected to increase significantly in the coming decades. Truck traffic on the nation's highways increased by 62 percent between 1987 and 2002;³ congestion attributed to trucks is expected to continue to rise in the years ahead. In Nassau and Suffolk Counties, the problems caused by truck-related congestion--the costs of delay, roadway maintenance, air pollution, energy usage, and accidents-- are more severe than they are in the rest of the nation due to the East-of-Hudson region's unusually low level of rail freight traffic.

The population of Nassau and Suffolk is 2.9 million; by 2035 it is projected to reach 3.3 million. While the level of industry on the Island is relatively low, it does support a potential demand for freight movement. (And, given global economic and technological developments affecting the form and location of manufacturing/assembly activities, this base may increase in the years ahead.) According to the most recent NYMTC figures, the two counties received 56 million tons of inbound freight in 2004, a level that is expected to rise to 98 million tons in 2030.⁴

Since the primary land use in Long Island is residential, the greatest demand for freight is for the goods that sustain human life: food, clothing and shelter. Long Island residents consume on the order of 16,000 tons of food and beverages a day.⁵ An even greater number of tons of "removables" are sent out every day: construction and demolition debris, municipal solid waste, recyclable scrap commodities, and sewage sludge.⁶ Both inbound and outbound flows typically travel many hundreds (or thousands) of miles to the hinterlands from which they originate or terminate and are therefore well suited to rail movement. In addition, the more than 20,000 tons of construction materials that enter the Island each day to be converted into shelter and the rest of the built environment are also suited for rail transport.

³ FHWA, Freight Facts and Figures 2008, Table 3-3, http://ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats/docs/08factsfigures/table3_3.htm, accessed 3-31-09.

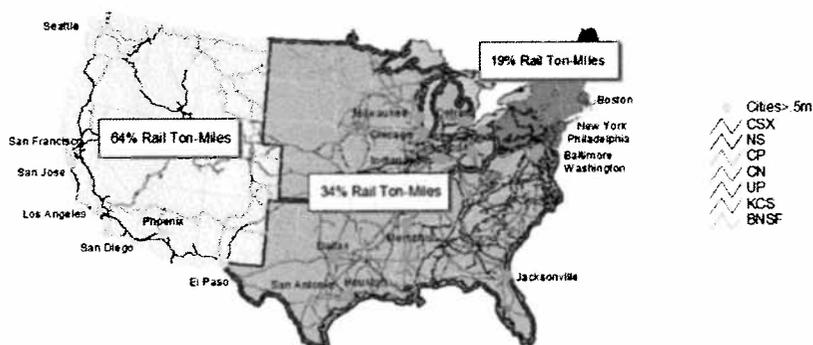
⁴ NYMTC, "Feasibility of Freight Villages in the NYMTC Region," Preliminary Draft, 1-20-2009, p. 38.

⁵ Derived from *ibid.*, p. 230.

⁶ Aggregate figures of removables exported from Nassau and Suffolk are not available, but extrapolating on a per-capita basis from known figures for New York City (which is believed to be similar from a waste-generation perspective), the daily rate would be expected to be nearly 19,000 tons.

Although Long Island was once a world-scale rail-freight market, this volume—on the order of a million carloads a year—dwindled to a negligible level when cross-harbor traffic by barge float came to a virtual end with the formation of Conrail. Since then, the Island’s rail-freight picture has been much different than that for the rest of North America. In the West, 64 percent of all freight ton-miles are on railroad tracks. Everywhere else in the country, except in the nine Northeastern states, 34 percent of all ton-miles move by rail. Only in the Northeast—largely because of the historical barrier posed by the Hudson River—only 19 percent of ton-miles by rail. But Long Island has only about a twentieth of even this rate: fewer than one percent of all the ton-miles of freight on the island are moved along Long Island Railroad tracks.

US Rail Demand by Census Region



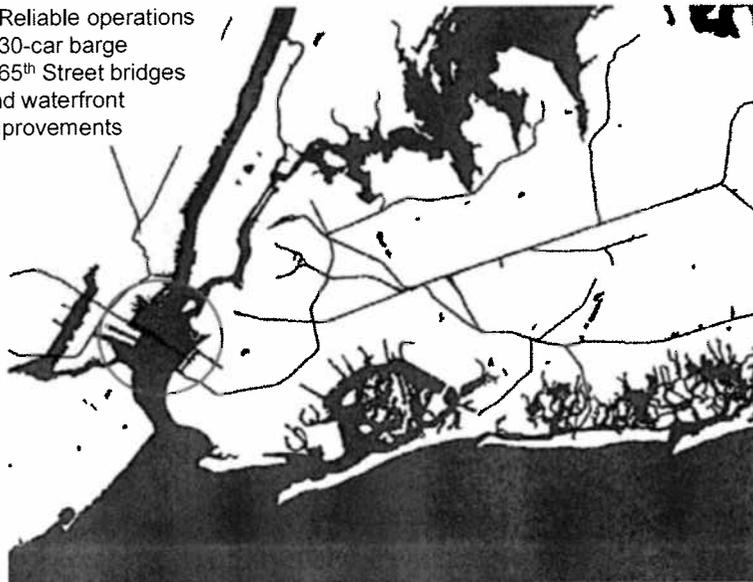
Source: Environmental Policy Services, LLC; percentages calculated from US Department of Commerce, Commodity Flow Survey, 2002

Instead of coming directly to Long Island on rails, the trains that carry the goods consumed on Long Island are unloaded on the Hudson’s western shore and then trucked across the George Washington or Verrazano-Narrows Bridges to the Long Island Expressway (LIE). But recent developments suggest that this situation may change. Among these is the recent purchase by the Port Authority of New York and New Jersey (PA) of the one remaining cross-harbor float system. Another is the

progress, also under the PA, in advancing final environmental studies for a cross-harbor rail freight tunnel that would provide a solid connection for rail freight between Long Island and the rest of the continent to the West. Another is that, after more-than-\$375 million in infrastructural investments by New York State, New York City, and the Port Authority, it is finally possible to get some of the newer types of railroad equipment used in the rest of the country down the Hudson Line between Albany and the Bronx and on out to Long Island.⁷ The issues noted above--the limited capacity of the region's roadway system and the economic and environmental problems posed by ever-increasing volumes of truck traffic--will supply the context in which these developments are likely to be leveraged in the years ahead to achieve a larger market share for rail freight on Long Island.

PA Float

- Reliable operations
- 30-car barge
- 65th Street bridges and waterfront improvements



The proposed Cross-Harbor Tunnel would follow a similar alignment between Bayonne, NJ, and 65th Street, Brooklyn.

⁷ The bridge across the Hudson is at Castleton (Selkirk).

Given the discrepancies between the national picture and that in the Northeast (where Long Island and the rest of the East-of-Hudson region stand out as the most extreme case), the following commodities appear to offer the greatest market opportunities for rail freight on Long Island:

- Prepared foodstuffs, fats, oils (18-41% ton-miles by rail elsewhere in the US, 0.1% in the Northeast)
- Alcoholic beverages (12-47% elsewhere, minimal volumes in the Northeast)
- Plastics and rubber (22 and 44% in South and Midwest, 2.1% in the Northeast)
- Wood products (18-61% elsewhere, 1% in the Northeast)
- Pulp, newsprint, paper, and paperboard (31-56% elsewhere, 22% in the Northeast)
- Vehicles and parts (21 to 35% in South and Midwest, 10% in the Northeast—and 0% on LI)

Other significant market opportunities on Long Island include (inbound) fresh produce, rice, flour, canned and frozen goods; bricks, lumber, dry wall, cement and aggregates; and (outbound) all categories of “removables.”

The major railroads serving Long Island, as well as the rail-industry experts interviewed for this study, were unanimous in their view that the most critical factor in moving more of these commodities by rail was the availability of railheads—i.e., truck-rail transfer yards—that would enable the railroads to get their goods to potential customers.

The current and future aggregate capacity that these truck-rail transfer yards would have to supply can be estimated by assuming that, if they could be accessed by the types of conventional equipment that are now used on the rest of the continent without substantially increasing shipment times or costs or decreasing the reliability of deliveries, the specific types of commodities already carried to the western edge of the Hudson River barrier would be carried at the same level into Nassau and Suffolk counties. As the table in Appendix 6.4.1 shows, in 2004 the two counties received over 40 million tons of the types of bulk commodities that, in the rest of the nation, depending on the specific commodity, have a rail market share of between 3 and 25 percent.

Using the conservative assumption that the rail-market shares by commodity would be the same as they are in the adjoining Northeastern states (which includes rail-starved portions of New England as well as New Jersey and Pennsylvania, where rail shares

range only between .02 and 10 percent for these commodities), this would translate into 1.7 million tons of freight a year—or the equivalent, at the average carload loading rates currently found on Long Island, of about 75 carloads of bulk commodities a day. These 75 railcars would keep at least 250 trucks per day off the highways between New Jersey and Long Island. By 2030, the inbound tonnages of the major commodities will increase to 54 million tons, which, at typical Northeastern rail-share rates would still translate into 75 carloads a day. (The increased tonnage is not reflected in increased carloads because the average weight of each car load car is expected to be closer to national averages and because electronics—a product that would require containers, and which is currently not hauled by rail to any appreciable level in the Northeast—would displace metal products in the mix of inbound commodities.)

Before rail traffic declined with the 2008 economic downturn, 9,500 carloads of inbound bulk commodities were hauled by rail on Long Island each year. Although figures that could be used to apportion this inbound traffic between Brooklyn-Queens and Nassau-Suffolk are not publicly available, since the ratio of Nassau-Suffolk's population to that of Brooklyn-Queens is roughly three-to-five, it is likely that some 3,500 carloads were delivered to Nassau-Suffolk, either to private sidings or to team tracks—or assuming 300 delivery days a year, about 12 cars a day. According to the railroads serving Long Island, the lack of additional truck-rail yards constrains their ability to deliver appreciably more than this volume. The current (and projected) incremental demand for Nassau-Suffolk yard capacity, then, is on the order of 65 carloads per day inbound.

This figure does not include the demand for outbound traffic—most of which will continue to be, albeit at higher volumes, the types of “removables” noted earlier. The 2007 outbound removables traffic was about 9,500 carloads from all of Long Island. Again assuming a Brooklyn-Queens/Nassau-Suffolk ratio of 5/3, this translates into about 3,500 carloads from Nassau-Suffolk. Since there is no overlap between the current rail shippers of removables from Nassau-Suffolk and those who send waste to distant landfills in OH, PA, and VA (See Appendix 6.5), there is a current demand for another 760,000 tons a year of municipal solid waste alone, (not including additional construction and demolition debris, scrap commodities, or dewatered sewage sludge). This would translate into some 8,000 additional carloads per year⁸ (or about 25 per

⁸ Containerized MSW leaving the Harlem River Yard in 2005 averaged 92 tons/carload. Benjamin Miller, *An Evaluation of New York's Full Freight Access Program and Harlem River Intermodal Rail Yard Project*, CUNY Institute for Urban Systems, 11-2005, p. 14, <http://www.cunyurbansystems.org/media/Miller-FFAP.pdf>.

day—a volume that could be accommodated on a few acres). This figure does not include expected increases in waste volume, related to projected increases in Nassau-Suffolk's population (see Appendix 6.5.1)

In addition to new truck-rail transfer facilities—since very few Long Island businesses will be willing or able to accept full-carload shipments—an ancillary logistical system (i.e., warehouses) will need to be developed to take full advantage of the potential growth in rail-market share. To shift Long Island from its current truck-based freight system, in which a significant share of what Long Islanders consume is transferred from trains to warehouses in Pennsylvania and New Jersey before being trucked to retail outlets on Long Island, a network of warehousing/wholesaling distribution facilities will need to be developed on Long Island. Rail freight market share on Long Island will only grow if the entire logistical system on which it depends also grows up around it. This will require land and new facilities as well as, perhaps, public-private partnerships between railroads, businesses and the State to provide capital and operating funds, at least during start-up phases. To capture really significant market shares, national retailers such as Wal-Mart, Home Depot, or Tropicana will need to be involved. On the rest of the continent, major new rail yards are generally accompanied by surrounding distribution facilities for major national firms.

With a strategic focus on nurturing the overall distribution/ logistical system, new rail yards would satisfy a latent demand for moving bulk commodities. Is there a similar existing and potential demand for containerized rail freight service? This situation is more complicated.

Over the past three decades, public agencies have focused on issues related to vertical clearances and the bearing-weight of rails so that the publicly-owned rail infrastructure east of the Hudson River could accommodate the types of rail equipment commonly used elsewhere in the US. However, while these efforts are still underway, the bar is continually being raised. As a result, trailers-on-flatcars (TOFC) and high-cube boxcars⁹ (Plate F/17'6") can now reach many parts of Long Island. However, since the NYS "Full Freight Access Program" to achieve a 19'6" clearance between Castleton (Albany) and the Bronx was completed, railroads in the rest of the country have begun double-stacking their container trains—thus achieving a 40 percent increase in efficiency¹⁰ but

⁹ See glossary, Appendix 8

¹⁰ US container line-haul costs in 2005 were 70-80 cents/mile for single-stack and 40-50 cents for double-stack, Global Insight, Economic Development Research Group, *Guidebook for Assessing Rail Freight Solutions to Roadway Congestion*.

requiring a 20'6" clearance. Trains that formerly had a maximum gross-weight-on-rails of 263,000 pounds per car now, in the rest of the country, typically weigh 286,000 pounds—a weight that has not yet been determined to be safe for most of Long Island's trackage. (Although 286,000-pound-cars can cross the Hell Gate Bridge from the Bronx into Queens to reach the Fresh Pond Yard, they are not currently allowed farther east.)"



Trailer-on-Flatcar (TOFC)

Source: http://www.greenlightintermodal.info/images/tofc_cofc_cars_23_santa_fe.jpg, accessed 3-10-09

But while public agencies have focused their attention on weight and vertical clearance issues, the major long-term impediments to containerized traffic in Nassau and Suffolk counties (in the electrified portions of the LIRR beyond Jamaica Center, Queens) are the horizontal, ground-level clearance problems associated with the third rail in conjunction with the outward-flaring well-cars in which double-stacked containers (or single-stacked containers after filleting) are almost always carried. Achieving horizontal

10-2006, pp. 102-3.

¹¹ 315,000 gross-weight-on-rails is starting to be used in some places in the US, but this is not likely to be a major constraint on the future growth of Long Island's rail-freight share since the Island is not likely either to be shipping or receiving the heaviest products of mines, fields, or forests that such cars typically carry.

clearance for this equipment in Nassau and Suffolk would be extremely costly and difficult. A more practicable solution would be the use of specialized equipment to serve the Long Island market. It is possible to conceive of such equipment in operation (e.g., special Long Island-bound trains bound from West Coast ports), but it is difficult to foresee such operations in the absence of a tunnel across New York Harbor that would permit direct, non-delayed delivery to the final destination.¹²



Double-stack containers in well cars

The wide well cars that cannot clear the LIRR's third rail. Source: http://www.freefoto.com/images/25/62/25_62_50---Double-Stack-Container-Train_web.jpg, accessed 3-10-05

For this reason as well as for others (e.g. the fact that the kinds of consumer goods typically carried in containers -- unlike bulk commodities such as cement and aggregates, plastic pellets, lumber and other construction materials, or flour -- *must* go to warehouses for breakdown, repackaging, or other operations, and the fact that relatively expensive containerized equipment is more costly to ship to Long Island because it takes longer to get back into service from a "stub-end" location), it seems

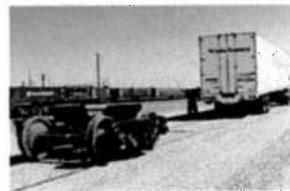
¹² Bulk freight in conventional 263,000-pound-gross-weight-on-rail cars can now reach all of Long Island and high-cube box cars can reach most of Long Island; all of the access issues (weight and horizontal clearance) pertain only to well cars for *containers* and *heavy-weight* (286,000-pound-gross-weight-on-rail) equipment.

unlikely that there would be any appreciable demand for containerized traffic on Long Island in the absence of a tunnel. The fact that the Harlem River Yard, which was designed and built to accommodate container traffic, and which opened in 1998, has never had a container lifted there supports this assertion, as do the statements of the great majority of railroad-industry personnel consulted for this study.

The only standard containerized equipment other than Trailer-on-Flatcar currently capable of serving central Long Island is a technology such as the RoadRailer or the Iron Highway, which are narrow, have low clearances and low weights. One company has proposed to the Port Authority that it carry marine containers from Port Newark/Elizabeth to central Long Island on RoadRailers. Unless such a venture is successfully implemented, it seems unlikely that there would be appreciable demand for a containerized truck-rail facility on Long Island in the absence of a double-stack tunnel.



RoadRailer



Source: <http://www.triplecrownsvc.com/Bimodal.html>, accessed 3-10-09

With a double-stack tunnel and appropriate equipment however, it would be reasonable to expect that many of the double-stacked containers whose contents are destined for the East-of-Hudson region, but which are currently lifted onto trucks on the New Jersey side of the Hudson, would instead enter geographic Long Island by train, and that this volume would increase due to time- and cost-savings from avoiding the congested roadway harbor crossings and metropolitan traffic-jams.

Our review of freight traffic data and projections and our discussions with industry experts suggest that there is a need for one or more new truck-rail transfer facilities on geographic Long Island. There is current demand for increased rail freight, which is not being met because of the insufficient supply of rail-truck transfer facilities accessible to potential shippers/receivers who do not have their own rail sidings. This demand, which is projected to increase in the future, is largely for commodities that would be carried by bulk equipment. Although it would be possible to reach central Long Island with single-stack containers, TOFC, or RoadRailer-type equipment via the Hudson line, the Amtrak tunnels, or the New York/New Jersey float (provided that longer barges were available for RoadRailer equipment or that RoadRailers were routed through the Amtrak Hudson/East River tunnels), no current demand for a containerized truck-rail facility has yet been demonstrated. With a cross-harbor rail freight tunnel, however, it is likely that there would be a demand for such a facility.

There is a current demand for multiple *bulk* truck-rail transload facilities, in addition to the current network of small-scale public team tracks and private sidings. And with a cross-harbor tunnel, it is expected that there would be a demand for at least two truck-rail *container* facilities: one or more within the general vicinity of the Bay Ridge-Hell Gate Line, to manage flows north to New England and distribution within New York City, and at least one farther east, to serve as a distribution center for the nearly three million inhabitants of Nassau and Suffolk counties. Given the expectation that in the event of a cross-harbor tunnel there would be at least one container yard in Brooklyn/Queens, and given that open land available for new warehouse development is relatively more available toward Eastern Long Island, overall dray distances on geographic Long Island would be likely to be minimized if the more-eastern yard were located somewhere in Central/Eastern Suffolk rather than in western Suffolk.

A Central/Eastern Suffolk container yard would be well-positioned to serve Suffolk's population, which at 1.5 million is already bigger than Nassau's and is projected to grow more quickly by 2035 (See Appendix 6.5.1) as well as to serve Suffolk's concentration of rail-freight-relevant industries (warehousing and wholesaling); as shown in Appendix 6.6 the numbers of establishments and employees in these industries are already greater in Suffolk than in Nassau.¹³

¹³ There are 3,993 wholesale establishments in Suffolk v. 3,162 in Nassau, with 47,450 employees v. Nassau's 36,308. There are 1,586 warehousing and storage employees in Suffolk v. 872 in Nassau.

Chapter 3: Community Consultation

- Approximately 30 stakeholder groups and organizations were interviewed.
- The rail stakeholders and experts generally agree that there is a market that could be expanded, but they differ in how they would grow it. It was the predominant view that it is important to distinguish between bulk and TOFC (Trailer on Flat Car)/COFC (Container on Flat Car) when thinking about growing rail freight on Long Island.
- A number of technical issues were identified with respect to the capacity of the existing rail system to move TOFC/COFC rail freight on Long Island.
- About the Pilgrim Location:
 - Several freight rail experts consider Pilgrim to be a good site, especially if there were to be only one site, since it is near the LIE, has reasonably good secondary access roads around it, and is central to both Nassau and Suffolk end points.
 - Community stakeholder groups have many concerns, including possible negative impacts from light and noise on residents of the high-rise Pilgrim Psychiatric Center, located as close as 350' from the site, and on animal life in and around the Edgewood Preserve, which is contiguous to the site; from site development and use on Long Island's sole-source aquifers; from site-related mobile source emissions on air quality and the health of surrounding and already impacted communities; and from additional truck traffic worsening traffic conditions on local roads.

Chapter 3: Community Consultation

This chapter outlines the key points distilled from extensive outreach to a wide variety of stakeholders regarding the need and market for truck/rail transfer facilities on Long Island, the operation of a viable truck/rail transfer system, and the pros and cons of the proposed Pilgrim site. A list included in this report identifies each outreach meeting.

It is important to note that the reporting below reflects the beliefs and concerns raised during the interview sessions; technical analysis of significant issues are discussed in the other chapters of this report. Study Team recommendations that respond to these community groups concerns are presented in Chapter 6, Conclusions and Next Steps. The FEIS should address all of these recommended actions.

The Desirability of Rail Freight on Long Island

It is important to note that there was consensus among the stakeholders, including community groups, that truck traffic is a growing problem on Long Island and that a rail freight system that will remove trucks from the roads is a desirable objective.

The Viability of Rail Freight on Long Island

A number of different views were expressed regarding the market for rail freight on Long Island. Rail stakeholders and experts generally agree that there is a market and that it could be expanded but they differ on how the market should be developed. The predominant view is that it is important to separate bulk and TOFC (Trailer on Flat Car)/COFC¹⁴ (Container on Flat Car) in considering expanded rail freight on Long Island. The consensus was that inbound bulk commodities would consist of construction aggregates, building materials, lumber, sand and road salt, while TOFC/COFC would include appliances and high-end products such as electronics, certain retail items, and perhaps automobiles. Outbound commodities would be “removables,” including recycling and scrap metal, construction and demolition debris, ash, and municipal solid waste.

¹⁴ See glossary, Appendix 8

We note that there are disagreements pertaining to the vitality of “intermodal” traffic. One industry stakeholder stated that with or without a cross-harbor tunnel, there will never be double-stack container traffic on Long Island, even though this is the norm elsewhere, others averred that without such a tunnel, there will not be a market even for TOFC and COFC. Yet, some believe that there is a potential market for COFC/TOFC given the large and relatively wealthy population on Long Island. The key is developing the demand for rail/freight; many saw value in first broadening bulk freight rail and then introducing TOFC/COFC in steps. They advocate first focusing on products that do not require substantial logistics, and then creating a market for premium service over time.

Financial aspects of rail freight

The viability of rail-truck transfer facilities for bulk and for COFC/TOFC depends on different factors, regardless of what type of freight rail is pursued. Several industry experts stressed the necessity for making a business case for growing bulk freight or encouraging COFC/TOFC, noting that it is difficult for rail freight operators to initiate a project since the profit margins are so slim. Bulk generally receives a sufficient volume to be cost-effective. While volume is also important for COFC/TOFC operations, speed and reliability are equally important, if not more so.

Given the speed at which TOFC/COFC needs to move, and the importance of reliability, it was noted that the Port Authority float will be too slow to compete with the Kearny, NJ, yards for this premium service CSX and Norfolk Southern Railroad “unit trains¹⁵” typically arrive during the night; whereas a truck can pick up a trailer in New Jersey and deliver it by 8:00am. However, if a 30-car train is assembled for the float and then transported when there is a window in the LIRR schedule, it probably would not be available for pick up on Long Island until the following morning. Thus, in the absence of a cross-harbor tunnel, containers on Long Island may prove problematical in the short-run, though several experts believe that there is a potential market over the longer-term.

Several experts proposed another study that would analyze the actual cost (not the charged price) of reassembling a train destined for Long Island at, say, Kearny, having the reassembled train go to a Long Island transfer facility, and then having a container drayed to an end point such as Hauppauge; versus the actual cost (not the charged

¹⁵ See glossary, Appendix 8

price) to the trucker of picking up a container at Kearny and bringing it to the same end point.

However, one freight industry representative suggested that competing with Kearny is not the issue and that the market on Long Island is sufficiently different to develop its own market with its own products.

Several rail industry experts suggested that it would make sense to begin by nurturing the bulk service on Long Island. Then, over time, as the use of rail freight expands, simple TOFC/COFC or other higher-end products with simple logistics (e.g., automobiles) could be introduced. If it is reliable and efficient, demand for this service will grow and the market will expand into products requiring more challenging logistics.

Market factors supporting rail shipments

Several operating factors, may lead to more opportunities for rail freight, such as the costs of enhanced enforcement of highway weight limits and New York City's length restrictions as well as frequent delays and the costs of multiple local truck safety inspections.

The vast majority of truckers are in the short haul business, and they are not opposed to truck/rail transfer facilities.

One industry representative also noted that, notwithstanding the current economy, rail is experiencing a renaissance. Given the concerns over energy, the environment, and compact development, the public's understanding of the positive role the movement of goods by rail can and should play is now even stronger.

System capacity issues

A number of issues were raised regarding the capacity of the rail freight system and the ability (or lack of it) to develop.

- Infrastructure, e.g. the lack of track and siding capacity to support growth, the insufficient number of yards, and the very high LIRR charges for installing new switches.
- Technical constraints, such as remaining vertical clearance limits for TOFC/COFC as well as weight limitations that must still be remedied to allow fully-loaded 286 thousand -pound cars along the entire LIRR mainline; and the incompatibility of double-stack well cars with tracks having a third-rail.
- Operational constraints, such as the need for a dedicated slot(s) in the LIRR schedule for TOFC/COFC service to ensure a reliable premium service, and the tendency of freight cars to cause misaligned tracks over time, undermining the quality of passenger train service and imposing additional costs on the LIRR.

Siting rail-truck transfer facilities

Many rail experts suggest that all potential sites should be reserved before they are lost. However, when considering space needs, the discussion is more complex. Transfer facilities located as close as possible to clusters of users should maximize the demand for rail freight competition between rail and trucks. Size of the facility needs to be considered *together* with the type of freight service product and site configuration, a point that was overlooked in previous discussions. A facility for bulk could be relatively small. While typical small bulk facilities are less than 15 acres, several experts suggested they could be even smaller, *with the qualification* that, depending upon configuration and what the products being carried, there must be to be sufficient room for equipment (e.g., lumber needs different equipment than ethanol), truck turning radii, and appropriate buffers from neighboring communities.

TOFC/COFC facilities require significantly more space given the kinds of equipment and storage space needed, as well as the necessity for moving unit trains in and out to speed up transfers. One Class 1 railroad noted that their smallest modern intermodal facilities are roughly 150-200 acres. However, several experts suggested that intermodal yards could be significantly smaller, and that 30 acres was sufficient for a container yard (which is why a 50-acre minimum was initially set in the DEIS for an intermodal yard at the Pilgrim State Hospital site, so that it could handle both bulk and containers). Although automobiles need space for parking while awaiting transfer to dealers, it can be provided off-site since the cars can be driven there. Bulk and TOFC/COFC, may entail different levels on site personnel, which, in turn, will determine the types of shelter service facilities that will be needed on site.

Long and rectangular properties are preferred since they allow trains to be brought in and serviced in units and the rail tracks to be cleaned quickly. Parcels with other shapes may require different layouts and may need to be larger or smaller. Buffers for the surrounding community must also be considered when in conjunction with needs for operational space.

It is desirable to have as much space as possible—hundreds of acres ideally—*around* the actual container transfer operations, so that warehousing, wholesaling, and industry can grow. Nearby industrialized warehouse concentrations can complement transfer facilities.

Significantly, no expert said that it was necessary to combine bulk and TOFC/COFC in the same yard. However, in the short-term, it may make sense to combine them to provide sufficient volumes for a cost-efficient system. In the long-term, if volumes grew sufficiently, bulk and TOFC/COFC would be located in separate yards.

Pilgrim as the Site for the Truck/Rail Transfer Facility

The reader is reminded again that recommended actions to be addressed by NYSDOT in the FEIS to further evaluate these issues are available in Chapter 6 of this report. A variety of opinions were expressed regarding the use of the Pilgrim for a truck-rail transfer facility. Stakeholders/experts and county governments indicated the following:

- It might be feasible to develop linear facilities within the existing LIRR right-of-way (ROW) to handle small-scale bulk transload facilities for specific customers.
- Pilgrim is considered a good site by several industry experts, especially if there were to be only one site, since it is near the LIE and has reasonably good secondary access roads around it, and is central to both Nassau and eastern Suffolk transportation end points.

A number of problems with the Pilgrim site were also identified, primarily by community and environmental stakeholder groups, but also by several government entities:

Air quality impacts on nearby residents, particularly vulnerable populations of special concern

- **Significant residential populations nearby.** The DEIS, using 2000 Census data, found that the area has less than a 10 percent poverty rate, the threshold for triggering environmental justice issues. More recent, but unofficial, data from 2007 indicates that the share is now over 11 percent. The population of Brentwood is over 50 percent minority. Within one mile of the site, there are 30,000 residents, 11 schools, the Suffolk County Community College and Brentwood North Middle School and their respective athletic fields. Community groups are concerned about the potential impact of exhausts from operating or idling diesel trucks and locomotives (A railroad expert noted that the emissions from a truck/rail facility are not significant.) According to the Friends of the Edgewood Preserve, particulate matter from diesel fumes is a contributor to asthma and cancer, among other serious health effects, and stays in the air for hours and days. Children are especially vulnerable, so schools, playgrounds and ball fields are of special concern. Two neighborhoods are within one-quarter mile of the site – one off the northwest corner of the site, and Brentwood, on the eastern side of the Sagtikos Parkway. Community groups said that Brentwood already has the highest rate of asthma on Long Island and any additional impact may raise environmental justice issues. Contrary to the DEIS' assertion that the Pilgrim site is in a "wholly non-residential area" and that there would be *no* impact, the Pilgrim Psychiatric Center houses 800+ residents in buildings within a few hundred feet of the site. Hospital officials noted that the buildings are closed, with little air circulation from the outside, so that any fumes entering the air intake systems would circulate through the facility, where patients would be exposed to them.

Light and noise impacts

- **Residents of the Pilgrim Psychiatric Center.** Hospital staff and others expressed concern that light and noise could have a negative impact on the mentally unstable residents of the high-rise Pilgrim Psychiatric Center.
- **Proximity to the Edgewood-Oak Brush Plains State Preserve.** The Edgewood Preserve is almost the size of Manhattan's Central Park. It is a rare oak brush habitat that provides a home and migratory refuge for many species of birds and animals, including many on the state's Species of Special Concern list. The Friends

of the Preserve believe that the integrity of the preserve could be compromised by light and noise generated by a transfer facility. Although the extent of the impacts has not been studied, the Friends of Edgewood Preserve do not believe that these impacts can be mitigated. (By contrast, a railroad expert noted that noise isn't a significant factor and that "there are lots of strategies to address these issues. A bulk transfer terminal is really just a parking lot for the trains and the equipment, so the issues are fairly minimal." He also noted that lighting can be focused into the facility to reduce external light pollution. Also, while an intermodal (container) facility contains trucks and heavy lifting equipment, noise can be reduced by using certain types of equipment.)

Environmental impact on the sole- source aquifers that supply water to Long Island

As previously mentioned, all points in this chapter, including those identified below, represent specific concerns raised by community groups (see chapter 1 for the list of interviewees) expressed during interviews taken by the Study Team.

- Community groups provided information to the Study Team which called attention to the LITRIM site's location within the Oak Brush Plains Special Groundwater Protection Area (SGPA), one of only two small SGPAs in Western Suffolk County.
- One of the criteria for designating SGPAs is the location of hydrologic zones in which water is able to percolate through semi-impermeable soil that lies above a water source. Community groups pointed out that this occurs at Pilgrim as water percolates into the Raritan clay layer that lies above the deepest and purest of the Long Island aquifers, the Lloyd, and thereby recharges it. Friends of Edgewood Preserve and others therefore expressed concern about the impact of a truck/rail facility at Pilgrim because the Lloyd is viewed as the reserve of last resort on Long Island and is believed to be increasing in importance as other aquifers such as the Magothy, which lies closer to the surface, may be deteriorating..
- Community groups expressed awareness and concern that the SGPA designation is advisory only and therefore the towns and villages that control zoning and land use are not obligated legally to address this consideration, yet the groups feel strongly due to the concern cited above that consideration is necessary. The community groups indicated that the remaining open lands are of particular significance since much of the SGPA is already developed. Some contend that any use of the Pilgrim site may compromise the quality of groundwater percolating down to the aquifers, to some degree, and perhaps diminish its quantity.

- The Friends of Edgewood Preserve called attention to an EPA letter of July 25, 2007 to the FHWA commenting on the DEIS, stating that it “[did] not anticipate that this project will result in significant adverse impacts to ground water quality” and therefore “satisfies the requirements of ... the Safe Drinking Water Act.” Further explanation was provided to the Team by an EPA representative who explained that the EPA did not take any cognizance of the SPGA designation since it is advisory only, but rather conducted its review in accordance with provisions of the Safe Drinking Water Act, which addresses water sources currently in use. The community groups are concerned that the EPA’s assessment may not have taken the special issue of the Lloyd Aquifer into account because the Lloyd Aquifer is not currently in use.

Environmental impact from constructing a truck/rail transfer facility at the Pilgrim site

- Portions of the LITRIM site that border the Preserve’s edge include a stand of tall Eastern white pines that the study team was told is unique to Long Island and is home to hawks and owls. Friends of Edgewood Preserve expressed concern that leveling or damaging these areas would eradicate or diminish this significant habitat.

Traffic congestion on local roads

- Commack Road (a designated federal access highway), Crooked Hill Road, and their intersections with the LIE and Northern State Parkway already experience Level-of-Service conditions of D, E, and F (Level of service A is the best and F is the worst.) These conditions are expected to worsen when the Tanger Mall is fully occupied. The DEIS road improvements called for in the Pilgrim DEIS would alleviate some of these problems.
- Four Towns Civic Association is now opposed to a transfer facility at Pilgrim even if there are road mitigation efforts because of other issues, such as groundwater impacts.

Legal issues

- **1987 law establishing the Oak Brush Plain State Preserve.** Local groups assert that the law requires that lands “not necessary for use by Pilgrim State Hospital and where native foliage may reasonably be reestablished” shall be transferred to the Preserve. The OMH also asserts that it has not declared this LITRIM site “surplus,” and says that it uses a catch basin on it at this time.

As previously mentioned, the Team recommends that all of the above concerns be thoroughly reviewed as part of the FEIS process.

Chapter 4: Defining Site Needs for a Truck/Rail Facility

- The 13 sites considered in this Study include five sites from the DEIS, plus eight other sites suggested by the Friends of the Edgewood-Oak Brush Plains State Preserve, the Suffolk County Planning Department and other sources.
- The 13 sites were subject to a two-step review process. In the first step they were screened using five essential criteria that are very similar to those used in the DEIS. Sites that satisfied these criteria were then analyzed in terms of four additional elements. The first five screening criteria are sufficient land available, access to the Long Island Railroad, access to truck routes, suitability of the site, and proximity to users of the truck/rail transfer facility.
- The four elements of the second level analysis are current use of the site, immediate surroundings of the site, potential for expanding truck/rail transfer operations and supportive warehousing, and regulatory requirements.

Chapter 4: Defining the Site Needs for a Truck/Rail Facility

Chapter 4 assesses the appropriate sites for a truck/rail transfer facility on Long Island. The May 2007 DEIS for the Long Island Truck- Rail Intermodal Facility identified 19 sites, including Pilgrim State Hospital, which the DEIS eventually determined was the most suitable site. The 13 sites considered in this Study include five sites from the DEIS, plus eight other sites suggested by the Friends of the Edgewood-Oak Brush Plains State Preserve, the Suffolk County Planning Department and other sources.

The 13 sites and their acreages are listed in Table 4-1 and their locations in relation to the Long Island Expressway and LIRR lines are shown on the accompanying map. The sites retained from the DEIS are the first five listed in the Table. Eight sites were eliminated from further consideration for essentially the same reasons cited in the DEIS: insufficient land, unsuitability for a transfer facility and lack of access to major east-west truck routes and rail lines.

Screening of Sites by Essential Criteria

CIUS developed a two step review process to assess suitability of each potential site as a truck/rail facility. Each of the 13 sites was subject to this process. In the first step they were screened using five essential criteria pertaining to the locational and physical aspects of the sites. Sites that satisfied these criteria were then analyzed in terms of four additional elements. The five essential criteria are in effect the same as those used in the DEIS. The main changes are that in addition to east-west truck routes, north-south routes are considered and “central location” is redefined as “proximity to users of the facility”. The aerial photographs and land use maps in Appendix 4 support the narrative report. The five essential criteria are:

Sufficient Land Available: Interviews with rail/freight experts revealed that although truck/rail transfer facilities for handling bulk freight can be as small as a few acres, a yard capable of handling a significant share of geographic Long Island’s truck-rail transfer bulk needs should be at least 15 to 20 acres. An “intermodal” facility for transferring containerized freight between railcars and trucks would ideally be somewhat larger, on the order of 30 acres or more. They noted that for containers,

larger yards and/or sites with developable space on-site or in the immediate vicinity are preferable, as they permit expanded transfer operations, warehouses and buffering from nearby sensitive land uses.

Access to the Long Island Railroad (LIRR): This criterion refers to access to LIRR lines that carry freight. Ideally a freight-carrying rail line, a spur line or a siding should be directly adjacent to the site and there should be a minimum number of grade crossings of significantly traveled roads between the Railroad and the site.

Access to Truck Routes: The primary requirement is proximity to an east—west bound interchange of the Long Island Expressway (LIE), the main east-west route on the Island, or to the Sunrise Highway, or to separate east and west bound interchanges. Access by trucks to through north-south roads is also important. Access to the LIE or Sunrise should be on through streets to minimize disruptions to residential neighborhoods.

Suitability of the Site: Suitability refers to the functional appropriateness of a site for operating the truck/rail transfer facility, notwithstanding the impact that it might have on its environment. A rectangular site with a long side along the rail line is preferable for truck/rail transfer operations and to enable trains to quickly clear the LIRR tracks. It should not present major physical obstacles to developing the transfer facility, such as highly uneven topography.

Proximity to Users of the Facility: Even though a facility in central Suffolk County will be favorably located in regard to markets, research conducted for this Study concluded that one further to the east would also serve a significant customer base. For example, 60% of the industrial space in the two counties is in Suffolk as is two-thirds of the commercial space proposed for development.

Table 4-1 summarizes the application of the five essential criteria to the 13 sites, and Appendix 5 discusses the application of the criteria to individual sites. The 13 sites present a wide variety of conditions. Four are publicly owned and nine are in private hands. The two small ones in Nassau County—7 and 18 acres—are suitable for bulk freight; the 11 in Nassau County, ranging from 47 to 660 acres, are appropriate for bulk

and container operations. All of the sites are located directly on the LIRR or close enough to be served by spur lines. All are less than 3.5 miles from the LIE for east-west travel (the DEIS uses a maximum of four miles), along routes that do not disrupt residential neighborhoods and are reasonably convenient to north-south County roads. Some will require improved rail access, usually spur lines, and most need improved road access.

In addition to being convenient to many users of a truck/rail transfer facility, sites in central and near eastern Suffolk County, between LIE exits 64 and 71 of the LIE, have much to commend them. They are large, usually with room for expanded operations, on-site warehousing or buffering and tend to be held by a few owners. They are usually adjacent to the LIRR and for the most part are proximate to the LIE. Local roads connecting the sites to the LIE are not heavily traveled and do not disrupt residential areas. The sites are more likely to be at a distance from neighbors, thereby lessening their adverse environmental effects on residents or public facilities. (Chapter 5 provides information on the characteristics of people living within one-half mile of each site.)

It should be noted that other apparently suitable sites near the 60s exits of the LIE were identified. However, these sites require rail spurs through private property and across roadways, in one case the LIE, to gain access to the LIRR. Generally, it is much easier to improve roadway than rail connections to potential sites.

Given the wide range of present conditions and opportunities for truck/rail transfer facilities, all 13 sites are considered appropriate for such a facility at this time and are included in the second level of analysis.

Since issues pertaining to the site at Pilgrim State Hospital are the motivating forces for this Study, its "pros" and "cons" are discussed in some detail in light of the essential locational and physical criteria

From the perspective of the screening criteria the advantages of the Pilgrim State Hospital site are that it is sufficiently large, 105 acres; suitable for bulk and container freight operations; and does not have any physical impediments. Furthermore, it is served by an unused LIRR rail spur that would have to be rebuilt and extended into the

site, enabling trains to be rapidly cleared from the main tracks. The site itself is well — shaped for transfer operations. It is 1.8 miles from the east-west exit 53 of the LIE, from which this Study believes two-thirds to three quarters of the truck traffic would come. The remaining truck traffic is estimated to come from northern and southern locations— such as the Heartlands warehouse and Sunrise Highway areas to the south and the Hauppauge vicinity to the north. All truck traffic would enter and leave the Pilgrim site via G Road. The planned ramp improvements along the LIE will divert trucks using the expressway to Crooked Hill Road and there would be no additional trucks along heavily-traveled Commack Road in the Pilgrim site environs. There are few residences just south of the LIE interchange, especially adjacent to Crooked Hill Road. Therefore, trucks going to and from the Pilgrim site would have minimum impact on these areas.

Commack road is heavily traveled, and truck traffic to and from the site would not add to this though more traffic may result from future population growth and economic development. Accordingly, consideration should be given to additional north—south access improvements.

Evaluation of Sites by Elements of Analysis

Given the wide range of present conditions and opportunities for truck/rail transfer facilities, all 13 sites are considered appropriate for a truck/rail transfer facility at this point and were included in the second level of analysis. The four elements of the second level analysis are:

Current Use of the Site: Extent to which the present use of the site may affect intermodal operations and any required displacement of current uses.

Immediate Surroundings of the Site: The land uses immediately surrounding the site that may be most affected by the operation of the facility. (The maps in Appendix 4 show the land uses for about one-half mile around each site.)

Potential for Expanding Truck/Rail Transfer Operations and Supportive Warehousing: The extent to which the transfer facility can be expanded on the site. Since warehousing is a vital adjunct of such operations, the availability of existing warehousing or opportunities to develop it on the site or at other convenient locations is an important factor.

Regulatory Requirements: The extent to which non-local government regulations may affect development of the freight transfer facility. Chief among these are development restrictions in the Pine Barrens, Special Groundwater Protection Areas (SPGA) and possible limitations on using land at airports or federal installations.

The results of the second level of evaluation are summarized on Table 4-2 and described in detail in Appendix 5. Of the 13 sites, nine are undeveloped and four will require relocation of current activities. Except for the two small sites in Nassau County, they can accommodate expanded transfer operations and some warehousing. In several cases warehouses are being or can be developed in the vicinity of the site. The immediate surroundings are such that the effects of freight transfer operations will not be severe or they can be buffered or mitigated. Five of the sites will be subject to some type of regulatory control.

As with the essential criteria, application of the four second-level criteria to the Pilgrim State Hospital site is discussed in some detail. The rail spur serving the Pilgrim site would enable trains to be easily cleared from the LIRR tracks and the site's long southern edge is suitable for truck/rail transfer operations. The site is large enough for expanded operations and some on-site warehousing. It is adjacent to the warehouses in the Heartland Business Center, which could be directly connected to the facility by rail sidings. The nearby Hauppauge Industrial Park, with 14 million square feet of space, could also be an important adjunct.

Pilgrim has potential legislative and regulatory drawbacks, exemplified by the issues raised by local community organizations, notably the Friends of the Edgewood – Oak Brush Plains State Preserve. The Friends question the legality of using Pilgrim for the facility, stating that the 1987 legislation establishing the Preserve provided that land not required by the Hospital become part of the Preserve if native foliage can be regenerated on the site. The Friends also contend that the traffic, lighting and noise from the facility will harm the natural life of the Preserve and that it will compromise air quality in a wide area around the site. Another potential regulatory issue is that the site lies in the Oak Brush Plains Special Groundwater Protection Area (SGPA).

As can be seen from the above analysis, Pilgrim would work from a transportation standpoint, but there are stakeholder concerns that require further assessment. In addition, some of the remaining sites show promise as well, either individually or in combination. These sites also deserve further review.

Table 4-1

**Essential Selection Criteria Applied to Potential Sites for
Long Island Truck/Rail Transfer Facility**

| Site | Acres | Sufficient Land Available | Access to LIRR | Access to Truck Routes | Suitability of Site | Proximity to Users of Facility |
|-----------------------------|-------|---------------------------|--------------------------------------|------------------------------|---------------------|--------------------------------|
| Hooker Chemical | 17 | Bulk | On-site spur | LIE Exit 45 3.5 mi | Yes | Yes |
| Hicksville Asphalt | 18 | Bulk | Adjacent | LIE Exit 41 2.5 mi | Yes | Yes |
| Prima Asphalt/ PAVCO | 47 | Bulk/cont | Adjacent | LIE Exit 62 1.2 mi | Yes | Yes |
| Grumman Calverton | 51 | Bulk/cont | On-site spur | LIE Exit 71 3.3 mi | Yes | Yes |
| Grucci | 89 | Bulk/cont | .5 mi Need spur | LIE Exit 66 2.5 mi | Yes | Yes |
| Medford Multiplex | 92 | Bulk/cont | Adjacent Grade X-ing | LIE Exit 64 2.0 mi | Yes | Yes |
| MacArthur Airport | 94 | Bulk/cont | Need spur Grade X-ing | LIE Exit 59 1.5 mi | Yes | Yes |
| Pilgrim State Hospital | 105 | Bulk/cont | Need spur .2 mi Grade X-ing | LIE Exit 53 1.8 mi | Yes | Yes |
| Bellport Avenue | 109 | Bulk/cont | Adjacent | LIE Exit 66 1.5 mi | Yes | Yes |
| Brookhaven Nat'l Laboratory | 137 | Bulk/cont | On-site spur | LIE Exit 69 3.5 mi | Yes | Yes |
| Suffolk County | 158 | Bulk/cont | On-site | LIE Exit 66 1.0 mi | Yes | Yes |
| USRail Expanded | 240 | Bulk/cont | On-site | LIE Exit 66 .5 mi | Yes | Yes |
| AVR | 660 | Bulk/cont | Adjacent Need spur Grade X-ing | New LIE Exit 68A .5 mi | Yes | Yes |

Note: Sites listed in size order, bulk facilities first, followed by bulk/container facilities

Table 4-2

**Elements of Analysis Applied to Potential Sites for
Long Island Truck/Rail Transfer Facility**

| Site | Current Use of Site | Immediate Surroundings | Potential for Expansion | Regulatory Requirements |
|------------------------------------|---------------------------------------|---|-------------------------|--------------------------|
| Hooker Chemical | Undeveloped | Industry, commercial | None | Brownfield's designation |
| Hicksville Asphalt | Asphalt mfg | Housing, industry | None | None known |
| Prima Asphalt/PAVCO | Mfg bldg prods | Utility (gas storage), housing | None | None known |
| Grumman Calverton | Undeveloped | Vacant land, open space | On-site Off-site | None |
| Grucci | Undeveloped, sand mining | Undeveloped | On-site Off-site | None |
| Medford Multiplex | Comm. recreation, bldg materials dist | Industry, undeveloped commercial, housing | On-site Off-site | None |
| MacArthur Airport | Undeveloped, Compost facility | Housing, airport, LIRR parking | On-site | Airport land |
| Pilgrim State Hospital | Undeveloped | Open space, inst., housing, industry | On-site | SGPA |
| Bellport Avenue | Undeveloped | Open space, industry, housing | On-site Off-site | None |
| Brookhaven Nat'l Laboratory | Undeveloped (Brookhaven Lab) | Vacant land, inst. | On-Site Off-site | Federal DOE Regulations |
| Suffolk County | Undeveloped | Undeveloped | On-site Off-site | Owned by Suffolk Co. |
| USRail Expanded | Undeveloped | Undeveloped, industry | On-site Off-site | None |
| AVR | Undeveloped | Undeveloped, housing | On-site Off-site | Pine Barrens SGPA |

Chapter 5: Environmental and Traffic Issues

- A value of 600 truck trips per day (total both in and out) has been cited in the DEIS for the proposed facility and 60 trips (30 in and 30 out) were estimated to occur during each peak hour. For reference, this compares to the total vehicle trips for a 12,000 square foot supermarket.
- The determination of the threshold for environmental justice issues centers on an accurate reading of census and other population statistics. Due to community concerns over the level of poverty in Brentwood, the FEIS should re-examine this issue. Environmental analyses, if undertaken for any of the other potential sites should thoroughly examine this issue as well.

Chapter 5: Environmental and Traffic Impacts

Environmental Issues

Chapter 3 outlines stakeholder concerns about environmental impacts that could result from the development of a truck/rail facility at Pilgrim. The reader should refer to Chapter 6, "Conclusions and Next Steps," for recommendations as to how these concerns should be addressed in subsequent environmental analyses. One concern, the assessment of whether the area meets the federal threshold for consideration of environmental justice issues is of particular note. The determination of whether an area meets the threshold of 10% of population below the poverty level centers on an accurate reading of census and other population statistics. The data source for the Pilgrim DEIS evaluation was the 2000 U.S. Census. The geographic boundaries included neighborhoods within one-half mile from the site location, which is the commonly used basis for measuring social and economic effects in environmental impact statements in New York State. The results showed that the percent of population living in poverty (in year 2000) was under 10%, the legal limit for giving consideration to environmental justice issues. The issue in this case is that the community groups are concerned with the negative impacts on the Brentwood location, which has a heavily minority and low income population. These groups utilized a different data source, the 2007 American Community Survey, and concluded that the poverty level was over 10%. It should be noted that only a portion of Brentwood is within a half mile of the Pilgrim site. Therefore, the Team's recommendation in Chapter 6 is to re-assess appropriate data sources to evaluate the poverty level issue for this area and accordingly, the impacts (negative and positive, i.e. increased employment opportunities) of a truck/rail facility. Data on socio-economic characteristics of Pilgrim and the 12 other potential sites are included in the appendices.

Traffic and Transportation

The Long Island Railroad Main Line and the Long Island Expressway, (LIE) form the east-west transportation axis of Nassau and Suffolk Counties. They are complemented by a series of north-south expressways, parkways and arterial roads. The study team reviewed issues of impact and access at the Pilgrim Site by assessing information in the DEIS and site visits. Through maps and site visits, the Team also addressed transportation issues at the 12 alternate sites discussed in Chapter 4. Some key general characteristics of the LIE are listed below. Characteristics of the Long Island Rail Road are noted in Appendix 5.1

- From west to east, the LIE extends from the Queens Midtown Tunnel to Riverhead in Suffolk County
- There are three travel lanes each way. Peak- period high occupancy vehicle lanes extend from the New York City line to Yaphank in Suffolk County.
- Daily traffic volumes approximate 180,000 vehicles in Nassau County. Volumes are about 160 thousand vehicles at Commack Road and 123,000 at the Sagtikos Parkway, in the vicinity of the Pilgrim site. Further east, near several of the alternate sites, traffic volumes on the LIE are at about 60 thousand to 75 thousand per day. The lower volumes along the eastern sections of the Expressway result in better levels of service during peak travel periods.
- There is recurrent peak period congestion on sections of the LIE in western Suffolk and in Nassau Counties.
- Daily traffic volumes on north-south roadways crossing the LIE range upward of 10 thousand vehicles per day on Yaphank Avenue to 54 thousand and 80 thousand on Route 110 and the Sagtikos Parkway, respectively.

Traffic of a Truck/Rail Transfer Facility

- A truck-rail transfer facility on Long Island will reduce truck volumes on most sections of major east-west highways by shifting freight from road to rail. At the same time, it will increase truck volumes in the immediate environs of the center. These dual effects are illustrated with hypothetical values in Figure 1, *Conceptual Example of Traffic Impacts*.
- The DEIS for the Pilgrim site used a value of 600 truck trips per day (total both in and out) for the proposed transfer facility. The DEIS also assumed a value of 60 peak hour trips (30 in and 30 out).
- Expressed in passenger- car equivalents, each truck is equal to two passenger cars. Thus, a truck-rail facility would generate 1200 passenger car equivalents per day. For reference, this compares to the total vehicle trips for a 12,000 square foot supermarket.
- The Pilgrim DEIS estimate assumed that every truck traveling to and from the facility would be fully loaded. Making allowance for empty or partially loaded trucks could increase daily and peak hour volumes by an estimated 25%. Even then, a truck-rail transfer facility would not be a major traffic generator.

Traffic Impacts at the Pilgrim Site

- The DEIS assumed that the Pilgrim site would be used for an intermodal (combined container/bulk) facility.
- Based on the above assumption, the traffic analysis for the DEIS involved an assessment of traffic conditions and level of service analyses for a number of scenarios. To develop these, the 30 inbound and outbound peak hour truck trips were superimposed on the anticipated 2010 background traffic volumes. The various roadway capacities were assessed to determine if they were adequate for the projected level of traffic. The assessment showed that the proposed improved road system would work.
- If *all* the projected 600 additional truck trips to and from the proposed facility used the portion of Crooked Hill Road between the LIE and the facility entrance at G Road, it would represent a 5.2% increase of total traffic on that section of the road, based on data prepared by Parsons a few years ago
- Though this study agrees with the above, it is important to note, however, that the analysis assumed that all intermodal truck trips would be distributed equally to the Long Island Expressway to the east and west of the Pilgrim site. It did not allocate any trips to north-south roadways such as Commack and Wicks Roads. It is likely that some truck trips would go to or from the Hauppauge and Heartland Industrial Parks, as well as communities on the north and south shores of Long Island.
- The access treatments set forth in the DEIS are generally well thought out, would alleviate existing and future access problems along the LIE interchanges, improve general traffic flow, and remove truck traffic from the local streets. These proposals included three ramp improvements along the LIE, Sagtikos State Parkway and Crooked Hill Road. They also included improvements to G Road.
- However, the study concluded that some additional improvements are needed for safety and traffic flow needs, including connecting Suffolk and Long Island Avenues on the south end and improving ramps and roadways at the LIE Commack Road interchange. The Commack

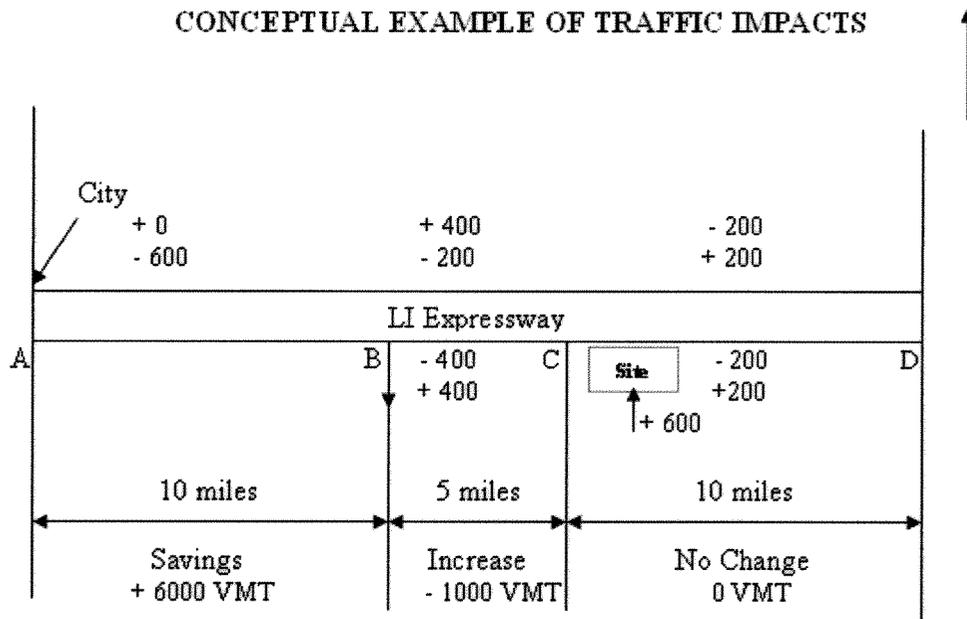
Road improvement would further improve truck access, but would also improve the current traffic flow patterns that appear to be somewhat hazardous.

Site Access Considerations

- Rail and road access improvements will be necessary wherever a truck-rail facility is built on Long Island. They will depend on where the facility is located in relation to the LIRR and the LIE, as noted in Chapter 4.
- Traffic volumes along the LIE are generally lower east of the Sagtikos State Parkway as compared with western sections of the Expressway. This translates into more reserve capacity in the environs of eastern candidate sites. As shown in Table 1, *Long Island Expressway Volumes, 2004*, in Appendix 7.0, daily volume on the LIE at the Nassau County Line is 180,000 and East of William Floyd Parkway in East Yaphank is approximately 62,000.
- The preferred access plan is one where the site is located between the LIRR on one side and the LIE on the other. The axis of the site should be parallel to both tracks and highway. (See Figure 2, *Site Location Concept*.)
- Rail spurs should be as short as possible on approaches to the site and grade crossings should be minimized.
- Road access should use existing or new LIE service roads for right turn entry and exit
- Left turn access can be made via new bridges or interchanges (See Figure 3 a, b, *Service Roads Close to Expressway and Service Roads Removed From Expressway*)
- Ideally, truck access routes to and from the LIE should be located away from built up and environmentally sensitive areas. This is possible for several eastern-central Suffolk County sites.

In summary, while the Team's review of traffic impacts due to a truck/rail facility at Pilgrim agreed with many of the recommendations presented in the Pilgrim DEIS, other needs are identified including additional ramp improvements and a re-allocation of intermodal truck trips by direction of travel. The Team recommends that the new issues identified within be included as part of the FEIS traffic evaluation.

SKETCHES SHOWING TRAFFIC ACCESS DETAIL



NET SAVING 5000 VMT/DAY

Figure 1

SITE LOCATION CONCEPT

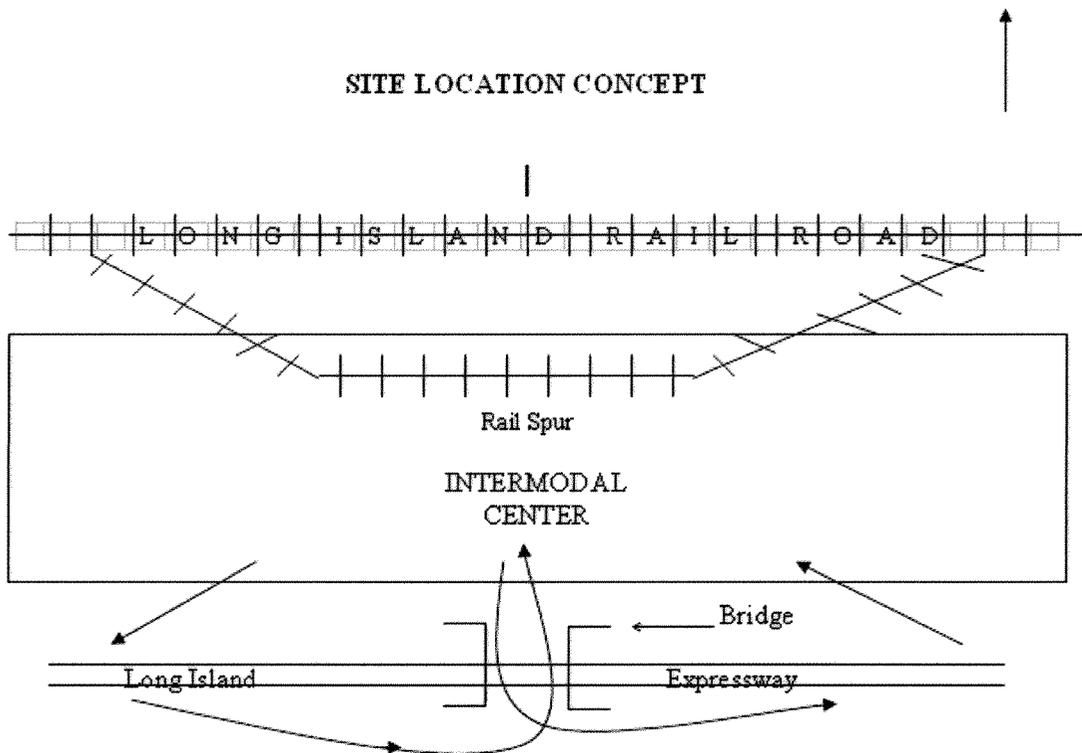


Figure 2

ACCESS CONCEPT - Service Roads Close to Expressway

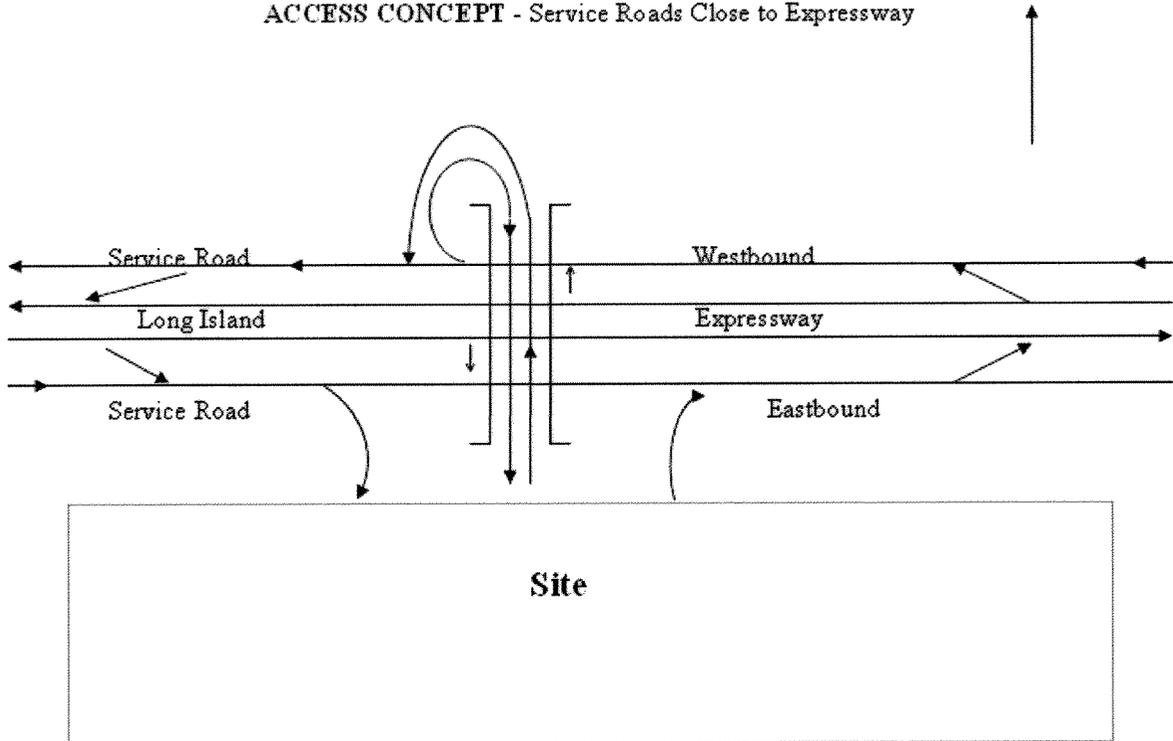


Figure 3A

ACCESS CONCEPT - Service Roads Removed from Expressway

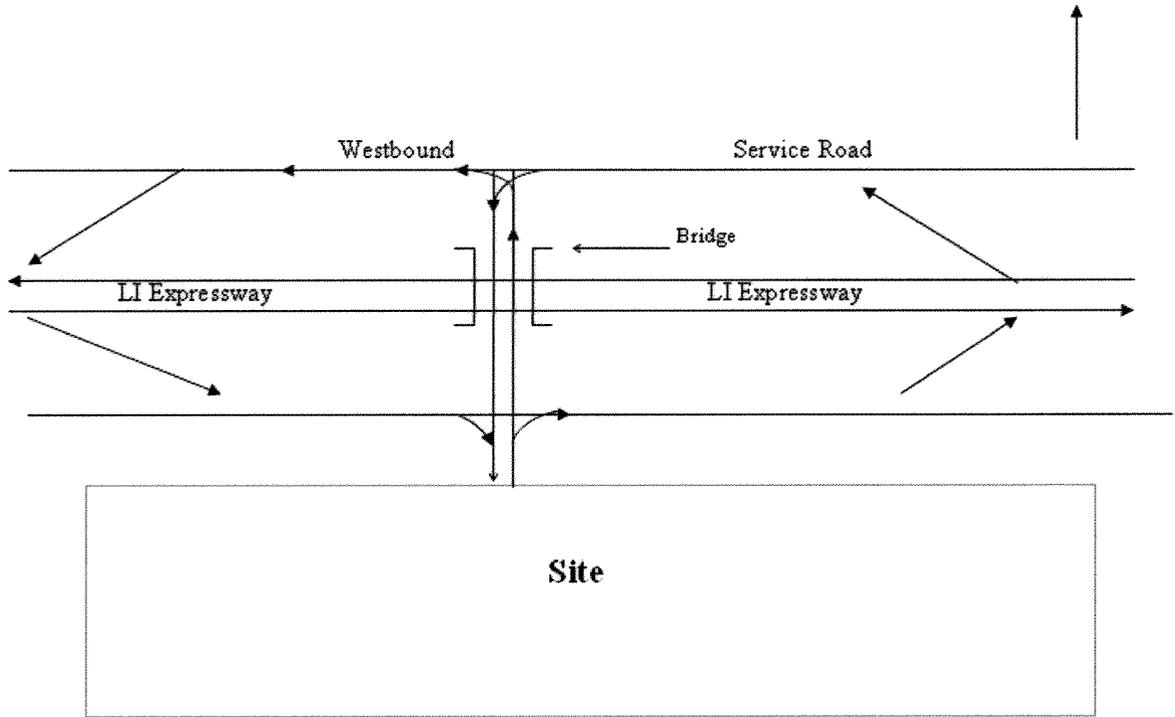


Figure 3B

Chapter 6: Conclusions and Next Steps

- Growth on Long Island is generating a need for increased freight deliveries by rail.
- There is an immediate need for delivery of bulk freight by rail; there may be further increases in demand in the future due to better cross harbor access. This would create demand for freight delivery by container cars.
- The Pilgrim site works from a transportation standpoint, but there are significant stakeholder concerns.
- The team explored 13 alternative sites, some of which show promise, either individually or collectively. Many are in eastern Suffolk County where land is more readily available and traffic volumes are less.

Chapter 6: Conclusions and Next Steps

This Study was prepared in response to the Governor's directive to conduct an extensive analysis of the feasibility of a truck/rail facility on Long Island. It was designed to answer three questions:

- Is an intermodal truck/rail transfer facility needed to respond to the current and anticipated volume of goods movement in Nassau and Suffolk County?
- Where should such a facility be located?
- What are the economic, social, and environmental effects of such a facility and can any adverse effects be mitigated?

Research for the study showed that there is a demand for increased freight delivery on Long Island as a result of population and employment gains. Moreover, the demands of the global economy and 21st Century technological and environmental imperatives are likely to require truck/rail freight delivery if the Long Island region is to remain economically competitive.

If the option of rail freight delivery were more readily available, it could reduce the number of trucks currently required to deliver freight to area businesses and industrial parks such as the Tanger Mall and the Heartland and Hauppauge industrial parks. Increased rail-freight deliveries would, in all likelihood, reduce the costs of these local freight deliveries. Other cost-savings might be achieved if the delivery of raw materials to Nassau and Suffolk manufacturers enabled more of the goods consumed in this area to be produced locally.

As previously discussed in the transportation chapter, truck traffic related to a new truck-rail yard is expected to be minimal (60 truck trips per peak hour, 600 truck trips per day). And since trucks are already delivering freight to area businesses, a significant portion of these truck trips would not be new trips, but simply shorter truck trips between the local rail yard and local businesses, rather than between the businesses and rail yards in New Jersey or Pennsylvania or between the businesses and more-distant locations. Truck miles might be even further reduced if businesses in the adjacent Heartland Industrial Park could be served with their own direct rail sidings. The feasibility of this option should be assessed by business owners, rail service providers, and the relevant governmental agencies.

Until now, for reasons mentioned in this report, the boom in rail delivery nation-wide has, for the most part, missed Long Island, depriving its residents of the related opportunities for environmental and public-health benefits, cost savings, and economic development. Nevertheless, industry experts consulted for this study agree that there is a likely market for delivery of freight by rail to Nassau and Suffolk Counties. The demand for bulk freight yards may be more immediate than is the demand for container yards. The demand for containerized rail freight, however, would be significantly increased if a cross-harbor tunnel were built to enable faster and more-reliable service to the Island.

Experts generally agree that a significant demand for containerized freight will also depend upon the availability of conveniently accessible warehouse facilities. Such facilities provide well-paying jobs. Their development should be encouraged.

After concluding that there is demand for at least one or possibly more truck/rail transfer facilities in Nassau/Suffolk, the study team identified potential sites for the facility and assessed the “pros” and “cons” of each. The Team also reviewed the previous work on the LITRIM project (e.g., the Pilgrim DEIS and related studies) and conducted a literature review (see the Appendix for a list of documents consulted). The methodology and criteria for selecting sites was presented in Chapter 4 and is detailed in Appendix 5.

The DEIS recommended the Pilgrim site on the basis of five primary criteria: it is large enough (105 acres) to allow a joint bulk/container transfer facility; it is physically and operationally suitable for such a facility; it is centrally located in regard to existing market demand; and it is conveniently accessible to both the LIE and the LIRR.

- The Pilgrim FEIS site evaluation should rigorously address a number of significant environmental, legal, public-health, and environmental justice issues that were identified in the Study Team’s interviews with project stakeholders. Among these are: mitigating the potential adverse impacts of light and noise on the 800 resident patients and over 1,300 out-patients of Pilgrim State Hospital, some of whom live as close as 350 feet from the proposed site; the impact of the transfer facility site on the adjacent Edgewood State Preserve; and the site’s location within the Oak Brush Plains Special Groundwater Protection Area, an area designated to safeguard the

Magothy and Lloyd Aquifers that provide drinking water to Long Island. The Study Team recommends that these issues be thoroughly assessed in the Final Environmental Impact Statement.

Significant Nearby Populations:

- The issue of environmental justice is of concern to the community groups who were interviewed. A specific question is whether the minority and low-income population of Brentwood meets the federally defined threshold for consideration of environmental justice issues. The Study Team therefore recommends a review of the population data to resolve the data discrepancy previously discussed. The analysis of environmental justice issues should also account for any positive benefits, such as the potential for increased employment that might affect minority and low-income residents of local neighborhoods. Such an assessment should also be undertaken for all potential sites recommended by this Study.
- Concerns about asthma and cancer resulting from negative air quality due to the operation of diesel equipment were expressed by stakeholders. Since research has shown that emission of particulate matter from diesel fumes can have an impact on asthma, and because it has been noted that many facilities in the area cater to children, a population group vulnerable to asthmatic conditions, this issue must be further assessed to determine the extent to which asthma rates might be affected by the projected level of emissions from the facility. Also, claims of abnormally high asthma rates in the vicinity should be reviewed to determine whether they can be substantiated.

Light and Noise Impacts

The potential effects of light and noise, both on Hospital patients and staff and on the Edgewood Preserve, must be rigorously assessed to determine (a) their substantive impact and (b) what practicable alternatives may be available for mitigating any significant impacts.

- Any potential negative impacts on the residents and staff of the near-by Pilgrim Psychiatric Center, who were not specifically mentioned in the Pilgrim EIS, must be considered.

- The potential exposure of building residents and staff to air emissions from the facility must also be addressed. If the likelihood of any such exposure is found, the full range of practicable measures to effectively mitigate such exposures must be identified and evaluated.
- The potential impacts of light and noise on the birds and animals in the Edgewood-Oak Brush Plains State Preserve, some of which are listed in New York State's Species of Special Concern list, must also be considered. If any such significant impacts are identified, the full range of potentially practicable mitigation measures must be addressed.

Other Impacts on the Preserve Inhabitants

- The Team recommends an updated review of any other issues that could have a negative impact on life in the Preserve, such as any potential impacts on plant life, particularly on any species, such as the Eastern white pines at the edge of the Preserve, that may be unique to Long Island. This review should also consider any potential impacts on animals, such as hawks and owls, which inhabit the Preserve and may be negatively affected by the removal of plants. Again, the full range of potentially practicable mitigation measures should be considered to address any significant impacts that may be identified.

Environmental Impact on the sole-source aquifers that supply water to Long Island

- Several community groups referred to the possibility of adverse impacts on the quality and quantity of the water supply that might be due to a truck-rail facility at Pilgrim, since the site sits entirely within the Special Groundwater Protection Area. Since by nature of its "stub-end" geographic position Long Island will be a final destination for inbound goods rather than an intermediate link in a longer transportation network, it may be practicable, if it is deemed necessary to adequately protect this sensitive groundwater area, to prohibit the delivery of certain materials to the facility. The Study

Team recommends that New York State assess the types of materials and products that could pose a substantial threat to water quality in order to make appropriate decisions about the kinds of goods that should be allowed to move in and out of the Pilgrim site.

In developing its recommended siting criteria, the Study Team distinguished between the two major types of truck-rail transfer facilities: bulk and containerized. The Team's independent analysis of the market demand for truck-transfer facilities and of their operational requirements found that:

- While there might be some short-term advantages to combining bulk and container operations, as rail-freight markets develop in the near-term, there is neither any compelling long-term need to combine these operations nor any significant near-term demand for container operations, particularly for the kind of lift-on lift-off operations that require significant operating or storage space.
- There is a need for multiple yards on Long Island both for bulk traffic and (with the development of a double-stack cross-harbor rail-freight tunnel) for containers.

In order for a major yard (whether for bulk or containers) to support the growth of rail-freight demand, it will need to be complemented by adequate distribution facilities at the transfer facility or easily accessible by truck. It is also desirable to have adequate buffer space to shield residential populations and other sensitive land uses from traffic and other adverse environmental impacts.

There is an immediate demand for at least one major bulk transfer yard on Long Island. In addition, if a double-stack rail-freight tunnel is built across New York harbor, at least two major container (or bulk-and-container) yards will be required. One or more of these yards should accommodate the freight needs of the western-to-central end of geographic Long Island, and be located within the five boroughs of New York City. One or more should satisfy the freight distribution needs of the eastern-to-central end of Long Island, and be located within Suffolk County.

In addition to these multiple large-scale yards, a number of smaller-scale bulk transfer facilities would also be desirable. Given their relatively smaller size, which would allow them to be sited near local shippers, each of them would generate relatively fewer truck trips and, cumulatively, they would reduce overall truck miles on Long Island.

While a major advantage of the Pilgrim site is its close proximity to the Heartland Industrial Park and the Hauppauge Industrial Park, disadvantages are the large traffic volumes generated by new shopping malls and the anticipated traffic volumes from a huge proposed high-density residential and commercial complex adjacent to the site, the Heartland Town Center.

Conversely, the relative advantages of potentially available larger sites farther east are lower existing and projected traffic volumes and the availability of land for ancillary warehouse and distribution activities and for buffering from nearby residents. These factors suggest that a multi-site solution might be most appropriate: a western site developed in the immediate future for bulk freight (and perhaps for containerized traffic as well) and, in the mid-term,¹⁶ a site farther east for containers (or for a combined bulk/container facility).

¹⁶ Note that while demand for a container rail yard is expected in the mid-term rather than immediately, the development of major transfer facilities can take a significant amount of lead-time. In order to have such a facility available by the time it is needed, it would be prudent to begin now to take the steps necessary to secure its development.



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
ALBANY, N.Y. 12232
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ASTRID C. GLYNN
COMMISSIONER

DAVID A. PATERSON
GOVERNOR

September 18, 2008

The Honorable Anne K. Quinlan
Acting Secretary
Surface Transportation Board
395 L Street, SW
Washington, DC 20024

Dear Secretary Quinlan:

RE: Finance Docket 35141
US Rail Corporation - Construction and Operation
Exemption - Brookhaven Rail Terminal

The New York State Department of Transportation (NYSDOT) hereby submits comments concerning the above-listed Petition. I am filing this request on behalf of NYSDOT as an attorney who is licensed to practice law in the State of New York.

In the past nineteen months, Sills Road Realty LLC (Sills), Suffolk & Southern Rail Road LLC (Suffolk) and/or US Rail Corporation (US Rail) have proposed to construct the Brookhaven Rail Terminal (BRT) to handle construction aggregates. The BRT will be located within the Town of Brookhaven (Brookhaven) in Suffolk County, New York. Suffolk County is located on the eastern half of Long Island and there are no local sources of construction aggregates. Most of this material is currently delivered to the region from quarries in upstate New York and Connecticut by truck. In the above-listed Petition, US Rail states:

Sills desires to replace truck with rail transportation because increased fuel costs, higher tolls, lower gross vehicle weights over bridge crossings and increasing highway congestion on and off Long Island make motor carrier transportation non-economical and impractical. (Petition, p. 4-5)

As a result, the proposed BRT is consistent with a number of the goals and strategies set forth by

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NYSDOT in its June 2008 Draft of the New York State Rail Plan which can be found at <https://www.nysdot.gov/portal/page-portal/divisions/policy-and-strategy/planning-bureau/state-rail-plan>. Specifically, these goals include the removal of trucks from the New York City Metropolitan area's congested highway network, increasing the rail market share in the Metropolitan area and providing additional freight yard capacity in the region. I would also note that State and local governments are among the largest consumers of construction aggregates for use in highway construction and maintenance operations in the region. The BRT may reduce shipping costs for this material which may result in direct benefits to the taxpayers of the State by lowering the costs of highway construction and maintenance activities. However, despite these benefits, the above-listed Petition does not have NYSDOT's unqualified support. Before discussing our concerns, we believe that it would be appropriate to briefly outline the history of the BRT.

On February 1, 2007, NYSDOT received an application for public funding from Suffolk for construction of the BRT. After reviewing the application, NYSDOT informed Suffolk that in order to qualify for public funding, Suffolk needed to be either an existing rail carrier or have a public sponsor, such as Brookhaven, Suffolk County or a local Industrial Development Agency.

On April 3, 2007, Suffolk filed a Notice of Exemption to become a rail carrier under Docket FD 35014, Suffolk & Southern Rail Road LLC - Sublease and Operation Exemption - Brookhaven Rail Terminal. In their application, Suffolk stated:

The parties to this transaction have decided to seek operating authority under the ICC Termination Act in order to obtain railroad rehabilitation funding from the New York State Department of Transportation. (Notice, p. 4).

On April 25, 2007, Suffolk requested that this proceeding be held in abeyance, citing inaccurate information contained in their April 3rd filing. The Board granted the request in a Notice published May 2, 2007 and there have been no further filings, notices or decisions in Docket FD 35014 to date.

On May 18, 2007, Suffolk filed a second Notice of Exemption to become a rail carrier under Docket FD 35036 Suffolk & Southern Rail Road LLC - Lease and Operation Exemption - Sills Road Realty LLC. The Board is well aware of the extensive pleadings under this Docket by NYSDOT, Sills, Suffolk, US Rail, Brookhaven and The New York & Atlantic Railway (NYAR). NYSDOT will not recount the details of this docket, but requests that the filings by all parties and all decisions and notices of the Board in FD 35036 be incorporated by reference in the above-listed proceeding.

On August 7, 2008, US Rail filed the above-listed Petition for the same facility which was the subject of the two prior proceedings which are still pending and requests expedited handling.

In the above-listed Petition, US Rail claims that their initial service will consist of approximately 40 to 50 cars of inbound crushed aggregate stone twice weekly and offers the unsubstantiated statement that this volume should have no adverse impact on either the Long Island Rail Road's (LIRR) or NYAR's service. Given the density of commuter operations on the LIRR and the limited operating windows for freight operations by NYAR, LIRR and NYAR should be requested to provide the Board with an assessment of the impact of this new traffic on their operations before taking action in the above-listed proceeding.

US Rail further claims that the project will be environmentally beneficial, but provides no information to support this claim. Such a determination can only be made after the completion of an environmental assessment by the Board. This assessment must consider both the beneficial environmental impacts of moving freight by rail and the potential negative environmental impact caused by the construction of the BRT on what had been 28 acres of undeveloped land prior to the unauthorized clearing and earthmoving operations conducted by Sills and US Rail until ordered to cease construction by order of the Board on October 12, 2007 under Docket FD 35036. Under Section 10901(c), the Board may issue a certificate authorizing construction unless it finds that such construction would be inconsistent with the public convenience and necessity. However, the Board has the discretion to deny US Rail's Petition on environmental grounds (See Decision No. 13 at 9 (Commissioner Buttrey concurring, by separate expression) Cf. Alaska Railroad Corp. - Const. and Oper Exempt - Rail Line between Eielson AFB and Fort Greeley, AK, STB Finance Docket No. 34658 (STB served October 4, 2007) at 2).

Opponents of this project could argue that Sills, Suffolk and US Rail have misused the Board's procedures in an attempt to avoid environmental and/or local government review of their project through two prior filings (FD 35014 and FD 35036) with the Board regarding the same facility. US Rail now comes before the Board in this third filing (FD 35141) relating to the same facility and requests expedited handling. Such a request for expedited handling is inappropriate and should be denied. If Sills, Suffolk, or US Rail had filed the above-listed Petition at the time of their initial filing in FD 35014 sixteen months ago, it is likely that the Board would have issued a decision on the merits of their Petition by now. As noted already, this is the third Petition that has been filed with the Board relating to the construction and/or operation of the BRT. Opponents of this project may very well feel that they have been playing an administrative game of "Whack-a-Mole," in that whenever objections to or concerns have been raised with the construction of the BRT, a new Docket "pops up" to frame the issues in a slightly different manner.

As a part of the above-listed Petition and a request for expedited handling, a verified statement of Gerard Drum, the Chief Financial Officer and General Counsel of Sills, noted that the BRT is essential for Sills to meet its contractual commitments to customers for the supply of construction aggregates. However, the reliance of Sills on the availability of a terminal which does not exist in making contractual commitments should not be a basis for the Board to expedite this proceeding, especially in light of the prior filings of Sills, Suffolk and US Rail with respect to the BRT. NYSDOT is unmoved by Sills Group's claims regarding contractual commitments to customers. Sills was well aware of, or should have been aware of, the Board's actions in issuing a cease and desist order in Docket FD 35036 and that there was the potential that the BRT would not be opened on the scheduled proposed by Sills, Suffolk and/or US Rail.

In addition to the arguments raised above opposing the request for expedited handling, the schedule proposed by US Rail for development, publication and comment upon a NEPA EA/DEIS is simply unrealistic. As proposed by the applicant, the schedule provides a mere 37 calendar days from the initial determination for the need for public scoping meeting and only 20 calendar days from the classification of the action by the Board's Section of Environmental Analysis for the publication of a Draft EA/EIS. The public is provided only twenty calendar days (including the Thanksgiving holiday weekend) to review and comment on the document and the SEA is offered only eight calendar days (including Christmas Eve) to review the comments received, resolve those comments, and publish a Final EA/EIS. If all of the above were to be accomplished, the Board is then asked to make a decision based on the merits of the Petition seven calendar days (including Christmas Day and New Year's Eve) later. Such a schedule does not serve the public interest.

NYSDOT believes that the proposed BRT has the potential for considerable transportation, economic and environmental benefits. The facility will remove trucks from the bridges and highways in the New York City Metropolitan area, will lower transportation costs and improve the availability of construction aggregates (of which all levels of New York State government are large consumers) and reduce fuel consumption and diesel emissions in an Air Quality non-attainment zone. As such, NYSDOT supports the construction of the BRT. However, this support is qualified by the need to perform the appropriate environmental reviews prior to authorizing construction of the BRT. Such review should consider the characteristics of the site prior to any construction activities undertaken by Sills, Suffolk, US Rail, or any contractors or affiliates.

In issuing its decision, NYSDOT respectfully requests that the Board institute a proceeding under 49 U.S.C. 10502(b) and impose the following conditions:

1. That Suffolk should be required to request the Board to terminate the proceedings currently pending under FD 35014 and FD 35036, provided that the filings and petitions of any party and the notices and decisions of the Board issued in FD 35036 are incorporated by reference and made a part of the above-listed Petition, including the cease and desist order.
2. That the request for expedited handling be denied.
3. That a reasonable schedule for completion of the required environmental reviews, publication of NEPA documents, public review and comment, and issuance of a Final EA/EIS should be established.
4. That the LIRR and NYAR should be requested to provide the Board with an assessment of the impact of this new traffic on their operations

I am, by copy of this letter, serving this letter on all parties of record.

Sincerely yours,



ROBERT A. RYBAK
Division of Legal Affairs

Cc: Mark A. Cuthbertson, Served Via e-mail.
Jessica P. Driscoll, Served Via e-mail.
John D. Heffner, PLLC, Served Via e-mail.
James H. M. Savage, Served Via e-mail.



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
ALBANY, N.Y. 12232
<http://www.dot.state.ny.us>

JOSEPH H. BOARDMAN
COMMISSIONER

GEORGE E. PATAKI
GOVERNOR

May 29, 2002

Mr. Joseph Rutigliano
Coastal Distribution, LLC
30A Glen Street
Glen Cove, NY 11542

Dear Mr. Rutigliano:

Thank you for your letter of April 26, 2002 regarding Coastal Distribution's efforts to establish a construction materials transload facility on Long Island. As you know, New York State is investing in rail infrastructure improvements that facilitate freight movement as a strategy for reducing truck traffic in the New York City (NYC) / Long Island area. Thus, the Department of Transportation (DOT) supports Coastal's efforts as an important step toward that objective.

I discussed your letter with President Bauer and Long Island Railroad's (LIRR) executive staff on May 24, 2002. LIRR is aware of Coastal's interest in establishing a transload facility in the vicinity of the East Farmingdale Yard and is willing to cooperate with you and the New York & Atlantic Railroad (NY&A) to accomplish that objective.

However, LIRR's position, is, essentially, that the area which Coastal proposes to occupy is not part of NY&A's leasehold and is currently utilized by it. Nevertheless, LIRR will vacate such property and permit Coastal's use if it is reimbursed for relocation costs. Toward that end, LIRR indicated a willingness to discuss options for reimbursement, such as reduced prices for purchases from Coastal.

Best wishes for success with your transload facility. Please keep me informed of your progress.

Sincerely,

John F. Guinan, Assistant Commissioner
Office of Passenger & Freight Transportation

- cc K. Bauer, President Long Island Rail Road
- D. George, Long Island Rail Road
- F. Krebs, NY & Atlantic, Rwy.
- R. Zerrillo, NYS Office of the Governor
- N. Schneider, Freight & Economic Development Division

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RETRIEVE BILL

VETO MESSAGE:

VETO MESSAGE - No. 357

TO THE ASSEMBLY:

I am returning herewith, without my approval, the following bill:

Assembly Bill Number 11933-A, entitled:

"AN ACT to amend the environmental conservation law and the public authorities law, in relation to special powers of the metropolitan transportation authority"

NOT APPROVED

This bill would amend the Environmental Conservation Law to provide local governments with jurisdiction over any entity, other than the Metropolitan Transportation Authority ("MTA"), that operates a facility to process, transfer, transload or convey contaminated or uncontaminated solid waste, hazardous waste or radioactive waste on the property of the MTA or any of its subsidiaries. The bill would also amend the Public Authorities Law to prohibit the MTA from knowingly allowing any entity to operate such a facility unless it is permitted by the Department of Environmental Conservation ("DEC") and in compliance with any applicable local law, rule or regulation. The bill would take effect immediately; provided, however, that existing facilities would have 180 days to comply with the provisions of the bill or cease operations.

According to the sponsors, this bill is necessary to prevent third-party waste haulers from entering into agreements with railroad companies to preempt state and local regulation. I am advised that this bill is intended to authorize the Town of Babylon ("Town") in Suffolk County to regulate a solid waste facility operated by Coastal Distribution ("Coastal") on MTA property located in the Town. A federal district court recently determined that the Coastal facility is under federal jurisdiction and is, therefore, not subject to local regulation. I am advised that this determination has been appealed to the United States Court of Appeal for the Second Circuit.

The City of New York ("City"), Department of State, DEC and others oppose the bill for a number of reasons. First, the opponents of the bill are concerned that authorizing local governments to restrict railway-related solid waste facilities, including the Coastal facility, would result in a significant increase in the transport of solid waste by truck, which would adversely affect the environment. Moreover, such opponents also believe that the bill would invite local government regulation in areas clearly preempted by federal law, which would result in costly and unnecessary litigation. In particular, the City is concerned that the broad language of the bill would impede its ability to implement its proposed Solid Waste Management Plan. Finally, opponents of the bill note that litigation involving local regulation of the Coastal facility presently is on appeal, and it would be premature to approve this bill during the pendency of the federal lawsuit.

While I commend the sponsors for their efforts to ensure the regulation of solid waste facilities and share their concerns regarding federal preemption, I am compelled to disapprove the bill based on the

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RETRIEVE BILL

objections raised by the City.

The bill is disapproved.

(signed) GEORGE E. PATAKI

RETRIEVE BILL

VETO MESSAGE:

VETO MESSAGE - No. 159

TO THE SENATE:

I am returning herewith, without my approval, the following bill:

Senate Bill Number 4967-A, entitled:

"AN ACT to amend the environmental conservation law and the public authorities law, in relation to special powers of the metropolitan transportation authority"

NOT APPROVED

This bill seeks to grant local governments outside New York City with jurisdiction over any entity - other than the Metropolitan Transportation Authority ("MTA") or its subsidiaries - operating a facility that processes, transfers, transloads or conveys solid waste on property of the MTA or its subsidiaries (including leased property). This bill also seeks to prohibit the MTA from knowingly allowing any entity to operate such a facility on its property unless such operation is permitted in a lawful manner by the Environmental Conservation Law or any municipal law relating to such a facility. This bill - like a similar bill that was vetoed last year by Governor Pataki - was proposed in response to a dispute relating to a construction and demolition waste facility operating in the Town of Babylon in Suffolk County.

Although I certainly recognize the desire of local governments to regulate rail facilities operating within their boundaries, as a general rule such local laws and ordinances are preempted by the federal Interstate Commerce Commission Termination Act ("ICCTA"). Indeed, the Babylon rail facility at issue here has been the subject of several years of federal litigation, and the courts have enjoined the local efforts to regulate the facility, holding that they are preempted by the ICCTA. In addition, this bill would place the MTA in the untenable position of pursuing its tenants for violations of state or local laws that are otherwise inapplicable pursuant to federal preemption.

Even if no federal preemption were involved, the provisions of this bill raise other significant concerns. For example, the New York State Department of Transportation ("DOT") indicates that closure of the rail facility in Babylon would result in an additional 39,500 loaded 20-ton trailer dump trucks - and an equal number of empty returning trucks - traveling on downstate roads and bridges each year, which would have an adverse impact on traffic congestion, bridge wear and air quality. In addition, the bill would permit localities to impose divergent requirements on rail operators, which could result in a patchwork of laws that conflict with or undercut statewide oversight by the Department of Environmental Conservation ("DEC").

The MTA, DOT, DEC and the Department of State all recommend that this bill be vetoed for the reasons noted above. I understand the desire of the proponents of this bill to provide greater local control over rail facilities, but because such restrictions generally are preempted by federal law, this legislation will not achieve its desired goals and could have other adverse consequences, and so I am compelled to veto



RETRIEVE BILL

this bill.

The bill is disapproved.

(signed) ELIOT SPITZER

RETRIEVE BILL

VETO MESSAGE:

VETO MESSAGE - No. 13

TO THE SENATE:

I am returning herewith, without my approval, the following bill:

Senate Bill Number 6737-A, entitled:

"AN ACT to amend the environmental conservation law and the public authorities law, in relation to special powers of the metropolitan transportation authority"

NOT APPROVED

This bill seeks to grant local governments other than New York City jurisdiction over any entity - other than the Metropolitan Transportation Authority ("MTA") or its subsidiaries - operating a "solid waste management facility." This bill would also place municipal jurisdiction over such facilities on par with that of the Department of Environmental Conservation. Finally, this bill would allow municipalities to regulate solid waste management facilities on MTA property, notwithstanding an MTA exemption from local laws regarding transportation-related activities.

This bill - like similar bills vetoed last year by Governor Spitzer and in 2006 by Governor Pataki - was proposed in response to a dispute relating to a construction and demolition rail waste transfer facility operating in the Town of Babylon in Suffolk County. Presently the case is in litigation awaiting final decisions from the Surface Transportation Board and an appellate court.

Although I certainly recognize the desire of local governments to regulate rail facilities operating within their boundaries, as a general rule such local laws and ordinances are preempted by the federal Interstate Commerce Commission Termination Act ("ICCTA"). Encouraging municipalities to regulate in this area could invite costly and unnecessary litigation involving federally preempted areas. But even if no federal preemption were involved, the provisions of this bill raise other significant concerns. For example, the New York State Department of Transportation ("DOT") indicates that closure of the rail facility in Babylon would result in an additional 32,825 loaded 20-ton trailer dump trucks - and an equal number of empty returning trucks - traveling on downstate roads and bridges each year, which would have an adverse impact on traffic congestion, bridge wear and air quality. In addition, the bill would permit localities to impose divergent requirements on solid waste management facility operators, which could result in a patchwork of laws that conflict with or undercut statewide oversight by the Department of Environmental Conservation ("DEC"). Also, MTA's transportation-related activities must remain free from local regulation to allow MTA to provide a uniform mass transit network. The MTA, DOT, DEC, the Department of State and the City of New York all recommend that this bill be vetoed for some or all of these reasons.

I understand the desire of the proponents of this bill to provide greater local control over rail facilities. However, because such restrictions generally are preempted by federal law, this legislation

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RETRIEVE BILL

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will not achieve its desired goals and could have other adverse consequences. Further, rail transport must be preserved as a viable alternative to truck traffic on local community roads.

The bill is disapproved.

(signed) DAVID A. PATERSON