

The New Jersey Comprehensive Statewide **FREIGHT PLAN**



Executive Summary

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New Jersey Department of Transportation

Governor Jon S. Corzine



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I. Introduction

The New Jersey Department of Transportation (NJDOT) produced a Comprehensive Statewide Freight Plan in 2007. The plan examined all modes of freight movement as a complete system; highlighting issues, trends, challenges, and opportunities. Rather than focusing solely on capital needs, the plan suggested ways to improve the integration of freight within the NJDOT planning and project development process, and to improve coordination amongst other government organizations and private industry. The plan also identified strategies and critical projects that capitalized on freight as an economic engine and leveraged it to support attainment of New Jersey's quality of life goals.

This briefing summarizes the key recommendations from the freight plan that were determined by the NJDOT to be actionable in a short time frame, fall within the available financial resources, and produce near-term and long-term benefits. Taken as a whole, advancing these selected recommendations would represent a major step forward for the NJDOT in realizing a balanced and strategic statewide freight agenda.

The recommendations are organized into the following categories:

- Capitalizing on freight to promote economic activity
- Addressing critical freight node issues
- Addressing critical freight corridor issues (highway, rail, and water)
- Conclusions and Next Steps

II. Capitalize on Freight to Promote Economic Activity

Freight is the economy in motion and a major employer. 11% of New Jersey's 4.4 million workers are involved in the movement of goods, with 80% of those jobs in warehousing and distribution sectors. Several key strategies address freight and the economy directly: overall coordination and prioritization of investments; advancing the Liberty Corridor; and, directing the location and modal accessibility of warehouse/distribution center development.

Coordinate and Prioritize Investments

Public and private sector entities have different goals, timeframes, and constituents. Each prioritizes freight problems and seeks solutions to serve their own needs. However, current systemwide freight issues require solutions transcending traditional silos. In order to maximize the potential economic benefits of freight, critical state level projects and initiatives must advance within and across organizations. To achieve this goal, New Jersey needs an overall logistics/economic development oversight entity to champion priority freight initiatives, identify and employ leveraged public/private sector funding mechanisms, and monitor implementation. The NJDOT, in coordination with New Jersey Governor Jon S. Corzine's reinvigorated Office of Economic Growth and the Governor's Economic Growth Council, should be a key partner this public/private sector effort.

Advance the Liberty Corridor

The Liberty Corridor, as envisioned by U.S. Senator Bob Menendez (D-NJ), aligns research and development, manufacturing, warehousing, and export facilities along one corridor to provide the resources and incentives needed to take products from “idea” to “market”. The corridor includes the ports of Newark and Elizabeth in North Jersey and stretches down the New Jersey Turnpike (NJTP) towards the port areas around Camden. The Liberty Corridor is a corridor of regional and national significance under SAFETEA-LU and received a \$104 million was earmark under “High Priority Projects” and “Projects of Regional and National Significance”.

Senator Menendez has formed four committees to carry out the vision and mission of the Liberty Corridor: 1.Technical (to be chaired by the Commissioner of Transportation), 2.Outreach, 3.Redevlopment and 4.Innovation. Over the next year, NJDOT will provide an active leadership role in the advancement of this vision and will be participating in the development of a Strategic Implementation Plan (SIP) for the corridor that will determine the optimal use of these earmarked funds which in turn will serve as a foundation for future investment decisions in this region.

Target Warehouse and Distribution Center Development

Warehouse and distribution centers are critical components of the supply chain and provide New Jersey an excellent opportunity to create jobs and grow the economy. To maximize the economic value, public and private sector entities must work together to determine where additional warehousing / distribution centers can best be located, what the nature of those centers should be, and how non-highway modes can be utilized for access. New Jersey must be strategic in attracting business within the state which will increase employment opportunities, and recognize that not all out-of–state development is inappropriate on its face.

Promoting the use of brownfields and underutilized properties around our ports and rail terminals for value-added warehouse development addresses some of the problem but additional warehouse and distribution centers must be identified and designated. Because of the nature of warehouse and distribution centers, every effort must be made to ensure that these developments are “good neighbors” to the host communities, and maximize non-highway modes when feasible.

Recommendations to Promote Economic Activity:

- Create a logistics and economic development oversight entity under the New Jersey Office of Economic Growth to identify and guide key state-level freight initiatives.
- Advance the Liberty Corridor: Formalize core membership for the Liberty Corridor Technical Committee and develop the Strategic Implementation Plan.
- Develop a coordinated program to identify and expedite appropriate warehouse development in New Jersey including non-highway access options to support warehouses and distribution centers.

III. Address Critical Freight Node Issues

Freight nodes are areas with concentrated freight activity such as port, trucking, rail, air, manufacturing, warehouse and distribution and support facilities. New Jersey has two major nodes: one in the north centered on the ports of NY and NJ and one in the south centered on the ports of NJ and PA. Other smaller nodes, such as Exit 8A off the New Jersey Turnpike (NJTP), have emerged along corridors throughout the state. To develop properly, a node must seamlessly integrate into the broader freight transportation network. Congestion, bottlenecks, access problems, or limited modal options can prevent nodes from operating at full efficiency.

The Northern Node

The northern node is comprised of the port facilities in Newark, Elizabeth and Jersey City (part of the broader New York – New Jersey port district), the Newark Liberty International Airport, and major rail yards (Croxtton, Oak Island, and South Kearny). It is the nexus of several major highway corridors (I-78, I-80, the New Jersey Turnpike, I-287, and Route 17) and major river crossings (GWB, Goethals, Outerbridge, and Newark Bay Bridge).

Much work has been done to assess the infrastructure needs of the state's northern node. Currently, the Port Authority of New York & New Jersey (PANY&NJ) is advancing roadway, rail and river crossing projects to improve the flow of goods.

Key PANYNJ freight projects:

- PANY&NJ intra-facility roadway improvements: Description: Several projects within PANY&NJ facilities that will improve the flow of goods from the wharf to the terminal gates: Project Lead: PANYNJ. Estimated cost: \$275 million. Status: Ongoing
- PANY&NJ intra-facility ExpressRail improvements: Description: These projects will expand the ExpressRail on-dock rail service to all major PANY&NJ container terminals. Project Lead: PANYNJ. Estimated cost: \$530 million. Status: ongoing: estimated completion in 2011.
- PANY&NJ Goethals Bridge project: Description: The project includes improvements to ramps and deck of the Goethals Bridge. Project Lead: PANYNJ. Estimated cost: Over \$1 billion. Status: Bridge Deck Rehabilitation Project is expected to be complete by mid-2007.

Portway Program Projects – Phase I:

While the PANY&NJ projects address some issues, additional projects needed to improve the flow of goods from the port to their next point of rest have been identified through the NJDOT Portway and Portway Extensions Studies.

- Rt. 1&9t (25) St Paul's viaduct replacement: Description: Replace Route 1&9T Bridge over St. Paul's Avenue with a viaduct on new alignment from the Wittpenn Bridge approach to north of Tonnelle Circle. Estimated cost: \$ 191 million. Status: NJDOT Contract award anticipated in March 2007.
- Rt. 7, Sec (2) Wittpenn Bridge: Description: Replace the existing Wittpenn Moveable Bridge with new lift bridge over the Hackensack River, and reconstruct Route 7

Interchange with Fish House Road. Estimated cost: \$ 320 million. Status: NJDOT Contract award anticipated in Fall 2007.

- NJTP Interchange 15E/Doremus Avenue/Central Avenue/Route 1&9T, & new Passaic River Crossing: Description: Construct new Passaic River Crossing and realign Route 1&9T / Doremus Avenue and Route 1&9T/Central Avenue. Also includes improvements to NJTP Interchange #15E. Estimated cost: \$ 400 million. Status: Currently in NJDOT Feasibility assessment.
- Pennsylvania Ave. and Fish House Road Improvements: Description: This project will improve roadway access to Kearny Intermodal Rail Yard. Estimated cost: \$ 12 million. Status: Currently advancing to NJDOT design phase.
- New Road from St. Paul's Avenue to Secaucus Road: Description: This project will construct a new two-lane roadway parallel to Route 1&9 in Jersey City with connections to Croxton Yards Intermodal Rail Facility at Secaucus Road. Estimated cost: \$ 40 million. Status: Currently advancing to NJDOT design phase.

Portway Extensions (Phase II) Recommendations:

- NJTP Newark Bay Bridge operational improvements: Description: Proposed interim improvement: replace existing fixed median barrier with a movable median barrier to create three travel lanes in the peak period direction through use of reversible center lane. Estimated cost: \$ 342 million. Status: NJDOT Portway recommendation, not in NJTP Capital Plan.
- The NJTP Interchange 14A Area Improvements: Description: Reconfigure NJTP Interchange 14A to accommodate increased freight capacity on the deepened Port Jersey Channel (MOTBY/Global). Estimated cost: \$ 70 million. Status: NJDOT Portway recommendation, not in NJTP Capital Plan.
- NJTP Interchange 12 Improvements & Tremley Point Access Improvements: Description: Reconstruction of NJTP Interchange 12 and enhance local connector roadways to the anticipated Tremley Point industrial complex. Estimated cost: \$ 10 million. Status: NJDOT Portway recommendation. Interchange Improvements under design by NJTP - Tremley Point Access improvements tied to advancement of development effort.

The Southern Node

New Jersey's southern node is comprised of the port facilities in Camden, Gloucester, and Salem Counties. Paulsboro (part of the broader New Jersey – Pennsylvania Delaware River port district and the Pureland Industrial Park (the second largest industrial complex in the United States) are key freight generators within this node. The southern node is the nexus of several major highway corridors (I-76, I-676, the New Jersey Turnpike and I-295 and major river crossings (Betsy Ross, Ben Franklin, Walt Whitman, Commodore Barry, and Delaware Memorial Bridges). The primary rail line providing access to the south crosses the Delair Bridge which carries New Jersey Transit, the Atlantic City Line and Conrail across the Delaware River from Philadelphia to Pennsauken, New Jersey.

Current key initiatives in the Southern Node include:

- Paulsboro Marine Terminal: Description: Construct commercial port and improve rail. Estimated cost: \$ 135 - 250 million. Status: Agreements signed Between SJPC and Paulsboro. Lead Agency: South Jersey Port Corporation.

- Broadway Terminal in Camden: Description: Make terminal improvements, expand bulkhead, and improve highway access. Estimated cost: \$ 100 million. Lead Agency: South Jersey Port Corporation.
- Crown Landing LNG Facility in Logan Township: Description: Construct liquid natural gas facility and tanks, berthing pier, and connections to area pipeline systems. Estimated cost: \$ 80 -120 million. Status: Under regulatory review. Lead Agency: British Petroleum (private)

Freight activity in the southern node has great potential for increasing its contribution to the State's economy. However, three major factors complicate efforts to realize the economic potential of the area: 1) the southern node is home to several independent port, bridge, and transit authorities which do not always share the same goals or mission; 2) New Jersey has not developed a state-level vision for goods movement in the area; and, 3) New Jersey and Pennsylvania have not agreed on complimentary agendas to maximize the Delaware River port district as a common asset.

To address these issues, it is recommended that the NJDOT allocate resources to undertake a multi-modal corridor study in the southern node. Working with public and private stakeholders, the study effort will define needs, recommend solutions, and be a foundation for establishing common goals – both within New Jersey and amongst bi-state and Pennsylvania only entities.

Recommendations to Address Critical Freight Node Issues:

- Coordinate with the PANY&NJ and the NJTP to advance critical projects in the northern region.
- Advance key Portway and Portway Extensions recommended projects. This would encompass working with locals to ensure projects compliment local land use and economic development goals.
- Develop a strategic plan for constructing projects to fit within expected funding limitations.
- Conduct a multi-modal corridor study of the southern NJ port area coordinated with existing planning activities. Work should encompass facility ingress and egress, intra-facility movements, highway/rail connections, land-use, and community issues.
- Coordinate the above activities with the logistics and economic development oversight entity, the Liberty Corridor steering committee, and the warehouse development program.

IV. Address Critical Freight Corridor Issues (Highway, Rail, and Water)

New Jersey's highway, rail, and waterway corridors are the vital conduits through which goods flow into, out-of, through, and within the State. Just like freight nodes, congestion and bottlenecks prevent corridors from operating at full efficiency. While the states freight transportation corridors function as part of a complete system, for purposes of this discussion, corridor recommendations are grouped below by mode.

Highway Corridors

New Jersey's 84,000 lane-miles of state and authority-owned roadways carry an average yearly volume of 2.6 million vehicles per lane-mile, almost double the national average of 1.5 million. The annual vehicle miles of travel over the State's highways system is over 70 trillion, with trucks accounting for almost 9% of this travel at 6.3 trillion vehicle miles. This large volume of vehicles must travel in a small geographic area. New Jersey has 11.4 lane miles of highway per square mile of land - more than any other state except Rhode Island, and far exceeding the national average of 2.4 lane miles per square mile.

Seventy-five percent of all tonnage in the state moves by road but the highest concentration of truck traffic occurs on a very limited subset of the state's roadways. Analysis of truck flow volumes identified six priority freight corridors: I-78, the New Jersey Turnpike, I-80, I-287, I-295, and Route 17. These corridors are the main highway conduit for the flow of goods into, out-of and through the state. Congestion, bottlenecks and other system deficiencies on these corridors negatively impacts all users of the transportation system. While each of the corridors have projects in various stages of the NJDOT and NJTP pipelines which will benefit passengers and freight users, the widening of the NJTP from Interchanges 6 to 8A will be the most significant project from a freight perspective.

Maintaining the corridors and associated structures is a challenge now and will become harder as passenger vehicle and commercial truck volumes continue to rise. Even within the context of growing financial constraints, the NJDOT must seek out opportunities to maintain these corridors and maximize their freight and passenger traffic capacities.

To address these issues, it is recommended that the NJDOT allocate resources to undertake a multi-modal corridor study of the primary freight corridors. The work effort will go beyond traditional highway assessments to encompass land use, ITS, modal alternatives, and shifting freight to off-peak periods.

Data is also an important consideration, The NJDOT needs to have sufficient truck volume and origin / destination statistics to properly evaluate proposed capital expenditures, operational, ITS, and/or regulatory measures effecting truck traffic along the highway network. To address these issues the NJDOT will commence a five year truck counting and monitoring program in 2007. The Program will:

- Monitor the statewide effect of the proposed new 102' large truck regulations upon truck traffic volumes and patterns over the next 5 years to quantify their effectiveness in assigning more truck traffic to the National Network.
- Collect, analyze, and report on truck volumes, Origin/Destination (O/D) patterns, and crash statistics along key truck corridors throughout the state during that time period.

- Ensure the functionality of existing WIM Stations and add new WIM Stations along key corridors.
- Provide much needed truck volume data to support the advancement of a variety of freight plans, programs and projects statewide.

Recommendations to Address Highway Freight Corridor Issues:

- Advance specific highway projects:
- Support the advancement of the NJTP Interchange 6 to 8A widening project.
- Advance Portway projects and Portway Extensions recommendations (see Northern Node section)
- Advance studies and projects designs to preserve and improve the state's priority freight corridors;
- Designate I-78, I-80, I-287, I-295, the New Jersey Turnpike, and Route 17 as priority freight corridors, and identify maintenance and capital projects within these corridors as high priority due to their implications on both freight and commuter travel.
- Develop specific infrastructure, operational, and data collection action plans for the six priority highway freight corridors identified in the Plan. This analysis should be expanded to cover alternative modal and land use considerations, and seek to integrate plans for commuter traffic needs.
- Continue implementation and funding of the five-year truck monitoring program

Rail Corridors

Rail corridors, like highway corridors, are vital conduits through which goods flow into, out of and through the state. In 2003, New Jersey's railroads handled approximately 7 percent of the State's total freight tonnage. In sharp contrast to highway corridors, which account for almost 97% of all intrastate shipments by weight, rail moves less than one percent of all intrastate freight.

The railroad network within New Jersey is essentially divided into two separate parts. The northern and southern parts of the State are connected only by the Conrail River Line (and a shared portion of the NE Corridor), which operates light rail passenger service during the day and allows freight shipments at night. The lack of viable connections between major regions of the state limits prospects for providing rail alternatives to in-state truck movements.

The northern part of the state, as discussed in the node section, is home to major Class I rail yards and has access to the national rail network to the North and West. However, the primary link from southern New Jersey to the Class I railroads is the Delair Bridge in Pennsauken. While work is currently underway to enable the Delair Bridge to carry heavier (286,000 pound) rail cars, its ability to accommodate additional growth in rail freight volume for the southern node as the sole access point will have to be examined.

The rail system in NJ has been trimmed to a vast extent over the past 30 years. The heaviest built line, the Northeast Corridor in New Jersey, is predominantly a passenger service route.

In the meantime, freight traffic growth has increased 23% over 5 years. Several projects, programs and initiatives are advancing to address rail issues within the State. These include the New Jersey Rail Freight Assistance program, the North Jersey Development Plan and related improvements targeted by CSX, the Mid-Atlantic Rail Operations Study (MAROps) and the New England Rail Operations Study (NEROps)

The New Jersey Rail Freight Assistance Program

The New Jersey Rail Freight Assistance Program provides funding for eligible capital improvement projects that result in the continuation of economically viable rail freight services. The competitive program distributes \$10 million annually across selected eligible projects and has provided assistance to thirteen short lines and two regional railroads throughout New Jersey.

The North Jersey Development Plan:

The North Jersey Development plan is a series of projects originally estimated to cost \$112 Million that was designed to expand the capacity in the North Jersey Shared Assets Area. Thanks to \$25 Million in funding from the Port Authority of New York and New Jersey, matched equally by \$25 Million each from CSX and NS, 6 projects were put under agreement. Two of these have been completed and the remaining projects are expected to be completed by the end of 2007. An additional 12 projects have been identified. Funding for the remaining projects has not been formalized to date.

A list of those projects considered most critical to the NJ rail freight system and their status are identified as follows:

- P&H Line Improvements: Description: This project will doubletrack the line allowing trains to travel both directions simultaneously, eliminating waiting delays. Status: Completed. Project Lead: Conrail. Estimated cost: \$ 15 million.
- Lehigh Main, P&H Connector: Description: This project will doubletrack the connector at Oak Island. Status: Completed. Project Lead: Conrail. Estimated cost: \$2.9 million
- Lehigh Main, East of Bound Brook: Description: This project will doubletrack the mainline east of Bound Brook. Status: Scheduled for construction in Fall 2006 Project Lead: Conrail. Estimated cost: \$ 18.7 million
- Chemical Coast Line, Portside: Description: This project will doubletrack the line in the vicinity of Port Newark Yard. Status: Completing Final Design. Project Lead: Conrail. Estimated cost: \$ 4 million.
- Port Reading Secondary, Port Reading Junction: Description: This project will create a direct connection to the Trenton Line via sidings. Status: Under review. Project Lead: Conrail. Estimated cost: \$ 2.4 Million.
- Marion Junction: Description: This project will doubletrack the line from Marion Junction to the P&H to the south. Status: Under review. Project Lead: Conrail. Estimated cost: \$24.4 million.
- Waverly Loop: Description: This project will create a connector which will allow trains to enter Oak Island Yard from the P&H without reversing. Status: Under review. Project Lead: Conrail. Estimated cost: \$ 13.6 million

- Port Reading Secondary, Siding Extension: Description: This project will extend the current siding to 1.5 mi, long enough to hold full length trains. Status: Under review. Project Lead: Estimated cost: \$ 3.7 Million.
- Chemical Coast, Bayway: Description: This project will doubletrack the line between Bayway yard and the Port Reading Secondary. Status: Under review. Project Lead: Conrail. Estimated cost: \$ 12.4 million.

Other Emerging Rail Improvement Options

In addition to the North Jersey Development Plan projects, two other alternative improvement concepts are emerging and developing to address the critical need to increase access and throughput at Port Newark/Elizabeth. These are only conceptual improvement alternatives to some of the North Jersey Development Plan projects listed above. The merit and feasibility of these concepts will need to be explored further in coordination with CSX and other stakeholders in the region before a decision can be made. The two projects are:

- Corbin St. Yard Expansion: This concept, proposed by CSX, would expand the number of tracks available to provide (4) 10,000 ft. tracks to link trains coming off of the Express Rail network, and serve as a staging area for railcars coming out of the Port. This concept would also support the development of the Raritan Express Corridor and Raritan Center as a new rail freight hub. Status: Concept development. Lead Agency: CSX. Estimated cost: Undetermined.
- Bergen/Waldo Tunnel Clearance Upgrade: This concept, proposed by CSX, would provide alternative or supplemental rail access into Oak Island Yard and Port Newark/Elizabeth by increasing the clearance in the Bergen/Waldo Tunnel in Jersey City. This is only a conceptual idea being suggested by CSX as an option to obviate some of the need/scope of the Marion Junction and Waverly Loop projects.

Rail Project Development Process Improvements:

In order for New Jersey to maximize rail as a modal alternative and an economic engine, work beyond the immediate projects is needed. A coordinated project development process must be established for identifying, prioritizing, and improving priority freight rail corridors in New Jersey.

To be most effective, the proposed rail freight capacity oriented project development process must be integrated within the NJDOT and aligned to compliment and support other freight activities such as: the logistics and economic development oversight entity, the Liberty Corridor steering committee, the warehouse development program, and freight node and highway corridor initiatives. The process should deliver the following:

- Identify overlaps and / or conflicts among previously proposed improvement programs, classify additional critical chokepoints, identify opportunities for joint funding, and identifying critical capacity constraints beyond New Jersey's borders.
- Systematically assess the rail network to establish inter-operational goals and to identify locations where there is a lack of seamless operations.
- Address safety and operational issues occurring at rail crossings along key growth corridors.
- Resolve any passenger-freight rail operating and program support conflicts on existing, expanded or new rail lines where service is being considered.

- Provide a forum for institutional coordination and cooperation and increased dialogue among Class I and short line railroads, passenger rail service operators, and the users of these services regarding all operational issues.
- Identify and prioritize rail projects.
- Provide a mechanism for rail projects to be advanced within the NJDOT beyond the State Rail Plan process.
- Support existing and future projects on smaller rail lines owned by the Department, NJ Transit, counties and smaller railroads which serve New Jersey businesses and provide opportunities for economic development within the state.

Recommendations to Address Rail Corridor Issues:

- Create a rail freight project development process within the NJDOT.
- Secure funding for the remaining Phase I North Jersey Development Plan projects. Incorporate Phase II projects into the proposed rail project development process.
- Support/Promote PANYNJ on dock rail ExpressRail improvements.
- Complete the State Rail Plan.

Waterway Corridors

New Jersey is fortunate to have two major river systems supporting port activity: The Hudson-Raritan in the north and the Delaware to the south and west. New Jersey's waterways move about 36 percent (by tonnage) of all goods into the state, and about 22 percent of all goods shipped out. Modern maritime shipping requires that engineered channels be constructed through these waterways to ensure navigable depths. These channels are similar to highway and rail corridors: they serve freight and non-freight users, have operational and environmental constraints, and require maintenance. Currently, there are over 300 miles of commercial channels in New Jersey (including the Intracoastal Waterway), not including private berths and terminals. These channels and the associated infrastructure directly support a \$50 billion commercial and recreational economy.

Maintenance of waterways through dredging is a critical activity which preserves the states waterways as transportation assets. Annual dredging needs statewide are in excess of 7 million cubic yards of sediment, conservatively. This does not include sediment dredged during the construction or improvement of channels. Unfortunately, many channels statewide are in desperate need of dredging; the direct result of inadequate funding or insufficient sediment management alternatives. Promoting innovative and beneficial uses of dredged materials will improve management of this critical transportation resource. As a large consumer of aggregate, NJDOT should explore cost-effective ways to utilize dredged material in highway construction and maintenance.

International shipping is constantly changing to meet the needs of a rapidly expanding global economy. The newest cargo ships are significantly larger and more economical than ever before, and access channels must be improved so that these ships can continue to call on

our ports. In northern New Jersey, channel improvement projects are underway to provide access for the most modern ships requiring as much as 50 feet of water. In southern New Jersey, issues surrounding the deepening the Delaware River channels to 45 feet have yet to be resolved. Several projects are designed to accommodate the ever increasing freight traffic to and from New Jersey. These include:

- NY/NJ Harbor Navigation Project (50-foot Project): The PANY/NJ is working with the US Army Corps of Engineers to deepen the main shipping channels in and out of the NY/NJ Harbor. This critical project will ensure the maintenance of New Jersey as an international shipping hub. Estimated cost: \$ 1.2 billion. Status: Underway, completion by 2014. Lead Agency: PANY&NJ.
- Port Jersey Channel: Deepening of the State-owned Port Jersey Channel serving the Global Marine Terminal in Jersey City and the former Military Ocean Terminal in Bayonne from 35 to 50 feet. Estimated cost: \$ 127 million. Status: Underway, completion by 2008. Lead Agency: NJDOT.
- Bayonne Bridge Elevation Increase: The Bayonne Bridge crosses the main shipping channel into Newark Bay at a height that is restrictive to some of the largest container ships calling on the Port. While this issue is not an immediate commercial impediment, it will become increasingly so as the container ship fleet continues to upgrade. Raising the Bayonne Bridge to accommodate larger ships would cost in excess of \$1 billion and require considerable changes to the neighborhoods in both Staten Island and Bayonne. While an immediate change is not required, the issue must be and incorporated into future planning activities.

Recommendations to Address Waterway Corridors:

- Continue to support deepening of the shipping channels in the NY/NJ Harbor.
- Seek resolution on Delaware River channel deepening issues.
- Continue to support and promote beneficial use of dredged materials.
- Ensure that sufficient funds are programmed for continual maintenance dredging.

V. Next Steps

The following recommendations, if advanced, would enable the NJDOT to strategically identify and target investments that optimize the freight transportation system and maximize the potential economic benefit of freight movement.

Elevate Freight and logistics to a state level strategic initiative:

- Create a logistics and economic development oversight entity within the New Jersey Office of Economic Growth to identify and guide key state-level freight initiatives.
- Advance the Liberty Corridor: Develop the Strategic Implementation Plan.
- Develop a coordinated program to identify and expedite appropriate warehouse development in New Jersey including non-highway access to support warehouses and distribution centers.
- Designate one unit at the NJDOT to coordinate above activities with the logistics and economic development oversight entity, the Liberty Corridor steering committee, and the warehouse development program.

Protect the State's critical freight nodes:

- Coordinate with the PANY&NJ and the NJTP to advance critical northern node projects.
- Advance key Portway and Liberty Corridor projects and recommendations and work with locals to ensure that these further land use and economic development goals.
- Conduct a multi-modal corridor study of the southern node coordinated with existing planning activities. Address facility ingress and egress, intra-facility movements, highway/rail connections, land-use, and community issues.

Protect the State's critical freight corridors:

- Continue implementation and funding of the five-year truck monitoring program
- Designate I-78, I-80, I-287, I-295, the New Jersey Turnpike, and Route 17 as key freight corridors, and identify maintenance and capital projects within these corridors as high priority due to their implications on both freight and commuter travel. Support the advancement of the NJTP widening project from Interchange 6 to 8A.
- Develop specific infrastructure, operational, and data collection action plans for the six priority highway freight corridors identified in the Plan. Analysis should cover alternative modal and land use considerations, and seek to integrate plans for commuter traffic needs.
- Create a rail freight capacity oriented project development process within the NJDOT.
- Secure funding for the remaining Phase I North Jersey Development Plan projects. Incorporate Phase II projects into the proposed rail project development process.
- Support/Promote PANYNJ on dock rail ExpressRail improvements.
- Continue to support deepening of the shipping channels in the NY/NJ Harbor.
- Seek resolution on Delaware River channel deepening issues.