

II. ASSEMBLY OF EXISTING STUDIES AND DATA SETS

A significant body of work has been developed around Portway Phase I and other concurrent initiatives. These studies were utilized as a starting point in the planning process to focus subsequent investigation and eliminate "reinventing the wheel". The Portway Extensions study was closely coordinated with State, Regional, County and Municipal planning officials to obtain copies of relevant master plans, travel demand forecasts, traffic data, etc. for incorporation into the study. In addition to assembly of previously prepared studies, a wealth of relevant data exists which will be applicable to the study. Studies, plans and initiatives from which relevant data and information were extracted for incorporation into the Portway Extensions study include:

- Portway Phase I Feasibility Assessment
- Comprehensive Port Improvement Plan (CPIP)
- Port Inland Distribution Network (PIDN)
- International Intermodal Transportation Corridor (IITC)
- Union County TDD / Kapkowski Road
- North Jersey Transportation Planning Authority (NJTPA) TIP and Long Range Plan
- NJ Turnpike Authority Interchange Improvements (Secaucus, Int-12, Int-8A)

II.1 PORTWAY PHASE I

Creation and maintenance of a multimodal network for the transport of the containers that move through the Port District is of paramount importance to the continued mobility and economic vitality of the region. In 1996, in recognition of the need to safely and efficiently move containers through the region, Portway Phase I was initially conceived as a Truck Priority roadway/intermodal connector facility that would strengthen highway and inter-facility access between the Newark/Elizabeth Seaport Complex and major intermodal rail and trucking distribution facilities throughout the region. Portway Phase I was intended to serve the many Brownfields properties along and proximate to its alignment and thereby facilitate their re-use for value added processing and other goods movement logistics purposes.

The components of Portway Phase I included numerous roadway network enhancements to increase safety and support seamless connections by separating heavy truck traffic flows from other traffic flows. A series of eleven (11) projects, each having independent utility, comprise Portway Phase I, and are in various stages of the project implementation pipeline. These Phase I projects include:

PROJECTS UNDER CONSTRUCTION

- Doremus Avenue reconstruction and bridge replacement, from south of Port Street to north of Wilson Avenue.
- Doremus Avenue reconstruction and widening, from north of Wilson Avenue to north of Raymond Boulevard.
- Construction of operational improvements to the Tonnelle Circle and elimination of the Charlotte Circle.

PROJECTS IN PRELIMINARY OR FINAL DESIGN

- The Route 1&9 St. Paul's Avenue Bridge Replacement.
- The Route 7 WittPenn Movable Span Bridge Replacement across Hackensack River between Kearny and Jersey City.

PROJECTS IN FEASIBILITY ASSESSMENT

- Enhanced access to NJ Turnpike interchange 15-E.
- Reconstruction of the Doremus Avenue Interchange with Route 1&9 Truck.
- New crossing of the Passaic River using abandoned railroad alignment and infrastructure, supplementing the existing Route 1&9 Truck crossing. The new crossing is intended to connect Doremus Avenue and Central Avenue.
- Central Avenue improvements including enhancement of its interchange with Route 1&9 Truck.
- Enhancement of Pennsylvania Avenue and Fish House Road, and improved access to Kearny Intermodal Railyard.
- A New Road connecting St. Paul's Avenue to Croxton Intermodal Railyard and Secaucus Road.

The Portway Phase I Corridor extends from the Seaport northward to the rail facilities in Hudson and Bergen Counties. The broad purpose of the Portway project is to facilitate the movement of freight from portside to intermodal rail facilities and local value-added warehouse/distribution centers; and other major regional highways and simultaneously, to reduce congestion along the roads forming the entire corridor impacted by Port related traffic. Container flow and other data, as well as the planned improvements being advanced under Portway Phase I served as a “jumping-off point” for the development of the Portway Extensions study.

II.2 PORT INLAND DISTRIBUTION NETWORK (PIDN)

For several years, the Port Authority of New York and New Jersey (PANYNJ) has been developing and refining a concept known as the Port Inland Distribution Network (PIDN). The overall goal of the PIDN is to shift container traffic from trucks to alternative modes (rail and barge). This would help delay or reduce the need for highway improvements. At a program level, the PIDN aims to establish rail and barge services between the Port of New York and New Jersey (PONYNJ) and a series of “dense trade clusters” located generally within a 75 to 400 mile radius. The dense trade clusters that form the focus of the PIDN include:

- Worcester and Framingham, MA
- Hanover, PA/MD
- Reading, PA and Camden, NJ
- Pittsburgh, PA
- Hartford, CT and Springfield, MA
- Rochester, NY
- Albany, NY
- Buffalo, NY
- Syracuse, NY

Data supporting the PIDN concept were originally developed for the PANYNJ by Moffatt and Nichol Engineers. The Portway Extensions team obtained data files from Moffatt and Nichol indicating: 1) the total number of international containers moving to and from the 17-state PONYNJ service region, by zip code; and 2) the number of these containers using the PONYNJ as their international gateway (as opposed to other U.S. ports). The Portway Extensions team used these data files to:

- Develop estimates relating to the geographic distribution of PONYNJ containers;
- Develop estimates of the share of international containers moving to/from the region by truck or rail (through other U.S. ports); and
- Develop mode-specific growth forecasts for container traffic between the PONYNJ and dense trade clusters.

The Portway Extensions team distributed these analyses to Moffatt and Nichol and the PANYNJ for review and coordination.

II.3 COMPREHENSIVE PORT IMPROVEMENT PLAN (CPIP)

The Comprehensive Port Improvement Plan (CPIP) is an ongoing process to identify marine terminal and related transportation system improvements in the New York/New Jersey region. The CPIP process consists of two related parts: the CPIP Plan, and the CPIP Environmental Impact Statement (EIS). The CPIP is being directed by the member agencies of the CPIP Consortium:

- U.S. Environmental Protection Agency
- U.S. Army Corps of Engineers
- U.S. Department of Transportation, Federal Highway Administration
- Port Authority of New York and New Jersey
- New Jersey Department of Transportation, Office of Maritime Resources
- New York State , Empire State Development Corporation
- New York City Economic Development Corporation

The CPIP Plan is being prepared by a consultant team led by the firm of Sir William Halcrow and Partners. The plan will: examine existing conditions (marine terminal capacity and operations, landside transportation, etc.); develop future forecasts (international trade volumes by commodity, utilization of available capacity, impacts on landside transportation); and identify a program of potential physical and operational improvements to marine terminals and related landside transportation systems. To date, the CPIP consultant team has produced two major interim reports: one presenting forecasts of maritime trade by type and by terminal, and one presenting estimates of the capacity of the region's marine terminals to accommodate that trade.

Both reports have provided important information for use in the Portway Extensions study. In particular, the Portway Extensions forecasts for international container traffic in the North Jersey region have been derived from these CPIP Plan documents (refer to Section VII). The Portway Extensions forecasts are consistent with the CPIP forecasts, with the exception that the Portway Extensions forecasts allocate container traffic through a proposed new marine terminal at the Military Ocean Peninsula Bayonne, whereas the CPIP forecasts do not. The Portway Extensions team met several times with the CPIP Plan managers and consultants to ensure close coordination between the two study efforts (refer to Section III).

The CPIP EIS is being prepared by a consultant team led by Parsons, Brinckerhoff, Quade and Douglas. The CPIP EIS is just getting underway, and has not yet produced any new information to incorporate into the Portway Extensions effort.

II.4 INTERNATIONAL INTERMODAL TRANSPORTATION CENTER (IITC)

The International Intermodal Transportation Center (IITC) at the New Jersey Institute of Technology (NJIT) is undertaking two research efforts relevant to the Portway Extensions analysis. These efforts include:

- ***The Regional Freight Planning Support System (FPSS).*** The FPSS is being developed in cooperation with the North Jersey Transportation Planning Authority (NJTPA). The project, anticipated to be completed during the summer of 2003, will define and measure freight transportation planning indicators, develop goods movement performance goals to be met, and evaluate/select strategies to be implemented through the NJTPA Regional Transportation Plan. As part of this project, the IITC acquired TRANSEARCH and PIERS datasets.
- ***Brownfields Planning.*** The NJTPA and NJIT recently concluded a federally funded study to identify Brownfield sites for assess their potential for reuse in the development of freight-related facilities and operations. The project included extensive market analyses, GIS mapping of Brownfield sites in northern and central New Jersey, and detailed environmental and marketing assessments of several potential sites.

As part of the Portway Extensions project outreach, the consultant team and the New Jersey Department of Transportation (NJDOT) coordinated with IITC and NJTPA staff to discuss respective study approaches, methodology and the data sets being utilized. The Portway Extensions team provided IITC with the data and preliminary forecasts developed to date by the team. NJIT indicated that their FPSS information and potential performance measures were still under development and would not likely be completed in time for incorporation into the Portway Extensions analysis. The GIS mapping of identified Brownfield sites was also still under review and could not be made available to the Portway team within the project's time frame.

Some of the base datasets being used for the FPSS and Portway Extensions studies are similar. Therefore, it is anticipated that there will be a level of consistency between the findings of the two efforts. For example, both the Portway Extensions study and the FPSS study incorporate the TRANSEARCH and PIERS datasets. Portway Extensions also involved substantial enhancements to these datasets in the form of detailed container market disaggregation to the zip code level, facility-specific forecasts, and a new program of field observations.

In the absence of the Brownfield database, the Portway Extensions study incorporated three (3) key assumptions the development of the future warehousing/distribution center forecasts:

- The large Brownfield sites in Linden and Carteret are assumed to be redeveloped as warehousing centers, along with existing Brownfield sites adjacent to existing concentrations of warehousing activities.
- The Brownfield sites currently being used for container storage in the City of Newark will be redeveloped as warehouses and distribution centers.
- The remainder of the Brownfield sites and their potential redevelopment are assumed to be captured through the general warehouse development forecasts prepared as part of this study.

II.5 UNION COUNTY TDD/KAPKOWSKI ROAD TRANSPORTATION PLANNING STUDY

The Kapkowski Road Transportation Planning Study covers the area bounded by the Elizabeth City border to the north (with includes part of Newark Liberty International Airport and all of Port Elizabeth), the waterfront to the east, Routes 1/9 to the west and East Grand/Trumbell Streets to the south. In addition to the Airport and Port, the study area includes the highest grossing IKEA store in the US, the Jersey Gardens Mall and several new hotels. The anticipated non-port development includes additional hotels, office space, restaurants and retail operations. The area includes North Avenue, which is one of the two major access routes to Port Newark/Elizabeth. The Maher and Maersk Terminals, the two largest container facilities in the port are located in the study area. The Port Newark Container Terminal is located just above the northern border of the study area.

**Figure II.1
Kapkowski Road and North Avenue**



The study is a comprehensive analysis of the anticipated growth in the area aimed at providing the critical planning guidelines and transportation infrastructure needed to accommodate the projected economic development in the area. The analysis has

identified a series of both transportation capital and systems management projects for the area and has advanced select priority projects into preliminary engineering. The study is scheduled for completion in the summer of 2003.

The set of proposed improvements most pertinent to the Portway Extension project are located in the North Avenue corridor. The Kapkowski Road study has developed a series of improvements that substantially improve the vehicular flows on the North Avenue corridor and separate port from non-port traffic. The improvements include:

- Improvements to the Dowd/Division/North Avenue intersection. The Kapkowski Road study envisions a redesigned intersection where North Avenue will be elevated and the remainder of the intersection reconfigured to alleviate congestion.
- Improvements in the vicinity of New Jersey Turnpike Interchange 13A whereby port and non-port traffic will be directed to separate roadways, improving safety and traffic flow and reducing lane weaving in the area.
- A new flyover across the New Jersey Turnpike and over North Avenue into the IKEA property that provides more direct access to the IKEA site, as well as separates non-port vehicular movements in the study area from port traffic. With this flyover, the intersection of Kapkowski and North Avenues, the site of major delays in container movement, is eliminated.

The North Avenue improvements provide a direct port-dedicated connection between the New Jersey Turnpike and the maritime terminals, a goal long sought by the port community. In addition, the North Avenue improvements proposed in the Kapkowi Road study were designed to work with the North Avenue and Airport improvements currently being completed by the Port Authority, the recon-figuration and improvements to the Routes 1/9 and North Avenue connection being undertaken by the New Jersey Department of Transportation, and the reconfiguration of the North Avenue/McClester turn anticipated to be undertaken by the Port Authority.

The preliminary engineering plans for the North Avenue corridor improvements were provided by Union County to the Portway Extensions consultant team. The County has received funding from the Port Authority of New York and New Jersey to continue the engineering work on the improvements and is working on developing a coalition of funding sources for the infrastructure development and necessary land acquisition. The proposed improvements have broad based support from a wide range of public and private sector stakeholders. The North Avenue Corridor improvements are been incorporated into the Portway Extension concepts.

II.6 NJTPA TRANSPORTATION IMPROVEMENT PROGRAM (TIP) AND LONG RANGE PLAN

Part of a cooperative and continuous regional planning effort sanctioned by FHWA and FTA, the TIP and Long Range Plan are lists of surface transportation improvements. The former is a 3-year committed program of improvements, while the latter has a longer (up to 20-year) vision of improvements needed to accommodate and manage future growth.

These two documents provided guidance on the roadway and railroad elements that connect and feed Portway Phase I and Portway Extensions initiatives. Moreover, as the Portway initiatives are integrated into the regional planning process, the Portway projects will appear as programmed for specific years and funding in the TIP.

In short, continuing dialog and on-going coordination efforts ensure that the numerous areas of mutual concern spanning the numerous related studies are identified and reconciled to the greatest extent possible. As can be seen, the data sets incorporated into the various on-going studies and initiatives are the same or similar to those incorporated into the Portway Extensions Concept Development Study. This level of consistency ensured that the study was not conducted in a vacuum, and the maximum level of consistency possible was achieved.

II.7 NJ TURNPIKE AUTHORITY INTERCHANGE IMPROVEMENTS

The NJ Turnpike Authority is currently advancing a number of initiatives that are anticipated to have a positive effect on overall traffic flows. Several of these initiatives were identified as being particularly beneficial to the movement of container trucks between the marine ports, intermodal rail yards and existing and anticipated areas of concentrated warehouse/distribution activity. Three specific initiatives were incorporated into the Portway Extensions planning process:

- New interchange along the Eastern Spur south of Interchange 16E/18E,
- Interchange 12 Reconstruction
- Interchange 8A Improvements

While not the only NJ Turnpike Interchanges serving dense industrial areas, these three interchanges are expected to be affected by the future growth in container movements and shifting development trends in the warehouse / distribution center markets.