

## **VIII. FUTURE GROWTH IN WAREHOUSE/DISTRIBUTION CENTERS**

Warehouses and distribution centers are often the “first place of rest” for containers entering the region, regardless of whether the containers entered the region by vessel, train or truck. Accordingly, determining future trends and locations of warehouses and distribution centers was a key component in projecting container flows for the Portway Extensions Concept Development Study.

This chapter summarizes the approach used to project warehouses and industrial space for the study. The chapter contains two sections:

- The approach and factors used to develop the warehousing projections; and
- The warehouse projections for the study.

### **VIII.1 APPROACH AND FACTORS**

The unique and changing nature of the warehousing industry, combined with the scarcity of data on the subject, led to the use of a more qualitative approach to projecting warehousing development and location for the Portway Concepts study. Under this qualitative approach, the consultant team used several factors to project warehousing activity:

- Trends in industrial space development and net asking lease rates in northern and central New Jersey;
- General trends in warehousing use and location decisions; and
- Information obtained during the outreach discussions.

Note, however, that the qualitative warehouse information was correlated and considered with both the PIDN Container Origin/Destination database provided by the Port Authority and the data assembled by Reebie Associates for this project.

### **VIII.2 TRENDS IN INDUSTRIAL SPACE DEVELOPMENT AND ASKING LEASE RATES**

The historical data show substantial increases in the inventory of industrial property in Middlesex County; the replacement of older space with modern facilities in Mercer

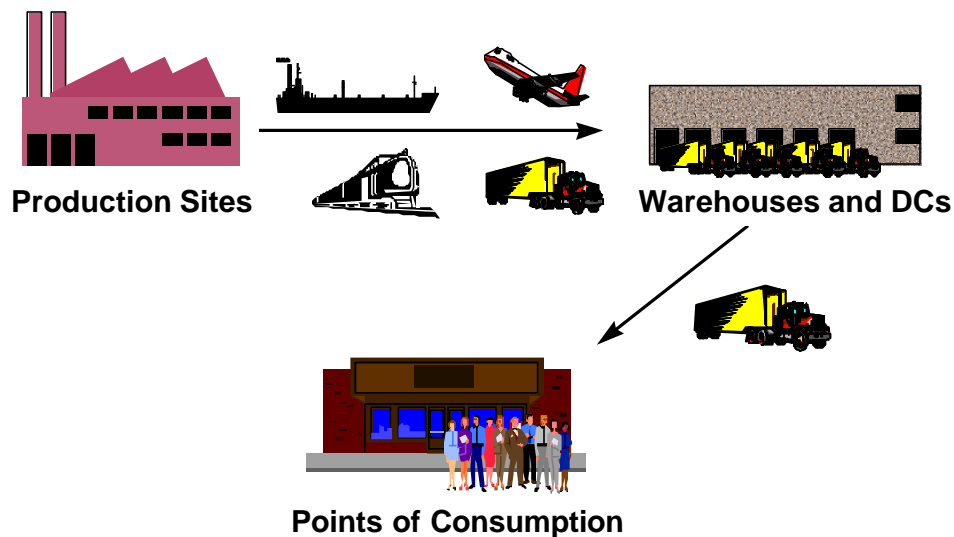
County; and the final stages in development in Bergen and Hudson Counties. Land prices in Bergen and Hudson Counties are reaching the point where the financial viability of developing new warehouse facilities will become limited as will the ability to acquire and develop parcels large enough to sustain buildings in excess of 500,000 square feet.

Middlesex County's development remains robust, with both build to suit and speculative construction still occurring. However, at some point, the County will reach build out. Mercer County's industrial development appears to be at an early stage as new properties are developed in the vicinity of New Jersey Turnpike Interchange 7A.

### VIII.3 GENERAL TRENDS IN WAREHOUSE USE AND LOCATION DECISIONS

The role of warehouses and distribution centers has become more important as supply chains have become more global. As shown in Figure VIII.1, warehouses are generally the first place of rest after the production line on the way to points of consumption.

**Figure VIII.1  
The Role of Warehouses**



Source: A. Strauss-Wieder, Inc.

In today's increasingly global marketplace, warehouses and distribution centers are often the place where goods that are produced overseas are prepared for local consumption. Products undergo final assembly and customization, as well as packaging and "shelf readiness" processes.

This value added activity differs from typical manufacturing operations in that the primary function of the facility is warehousing and distribution. In addition to warehouses and distribution centers, manufacturing operations, both big and small, also exist throughout the State that rely on the receipt or shipment of international products.

In the global supply chain, customization for the North American market increasingly occurs near the port of entry at area warehouses and distribution centers. Accordingly, the southern California region and New Jersey are increasingly attracting warehousing activity. In southern California, for example, the Inland Empire area is quickly developing as a hub of warehousing and distribution activity for the Ports of LA and Long Beach. The Colliers Seeley Industrial Market Report for the first quarter of 2003 states that "*The Inland Empire is a rapidly growing, big box market. It has a total of 197 million square feet of industrial space, the vast majority (88%) of which was built in the past 20 years. 73% of its space is in the big box segment*". Other ports, such as the Port of Savannah, have recognized the trend and are actively marketing local warehousing sites in order to attract customers and cargo flows.

Within this context, the consultant team will assume for the Portway study that the demand for warehousing and distribution center space in New Jersey will remain high. Where the State cannot fulfill warehousing needs, it is likely that sites in states adjacent to New Jersey will be used. This trend is one of the reasons for the growing amount of warehousing space located along I-78 to Harrisburg, PA.

Considerations in warehouse/distribution center location decisions include the cost of land/buildings, access to markets and transportation modes and the availability of labor. In general, regional and national distribution centers seek sites with space for future expansions. Developers are also building larger facilities that can be subdivided to house several tenants.

While larger tracts to meet these needs are more commonly found in the outer areas of the region, several brownfield initiatives are likely to result in sites becoming more available closer to the Port. These locations have been explicitly included in the analysis. Redevelopment of individual, smaller parcels has also been accounted for in developing traffic flow information.

#### VIII.4 INFORMATION FROM THE OUTREACH DISCUSSIONS

Based on the outreach discussions with the counties and municipalities, several additional assumptions were made for the projections:

- The property currently used for empty container storage in Essex County will become available for industrial use.
- The large brownfield sites in Linden and Carteret will be redeveloped for distribution facilities.
- Approximately 5 million square feet of new distribution space can be developed on properties in Raritan Center.
- Distribution facility development in Bergen County will be limited by the availability of properties and increasing land prices.
- Mercer County in the vicinity of New Jersey Interchange 7A will emerge as a new hub of warehousing and distribution center activity.
- The PSE&G site in Carteret is assumed to be developed as an auto terminal.

The consultant team defined three categories for the warehouse projections:

- *High* – Warehouse growth in the area will be higher than the regional average and will generate greater container flows in the future than the regional average.
- *Average* -- Warehouse development will continue to grow in the area in line with the anticipated average growth for the region. Container flows will also grow by the average rate established by the team.
- *Low* – Warehouse growth in the area will be lower than the regional average. Container flows in the future will be lower than the average rate.

Projections were developed for two future horizon years – 2010 and 2025. The warehouse projected growth trends are summarized in Table VIII.1. If a location is not listed in the figure, then the warehouse growth rate and projected container flows are assumed to be represented by the regional average.

**TABLE VIII.1**  
**WAREHOUSE/INDUSTRIAL SPACE PROJECTIONS**

Warehouse/Distribution Activity Cluster	New Jersey County	2010	2025
NJ Tpk Interchange 12 – Tremley Point/Carteret	Union/Middlesex	High	High
NJ Tpk Interchange 12 - Port Reading/Carteret	Middlesex	Low	Low
Allied Junction – Secaucus	Hudson	Low	Low
Resources Terminal - North Bergen	Hudson	Low	Low
NJ Tpk Interchange 10 - Raritan Center/Woodbridge	Middlesex	High	Average
NJ Tpk Interchange 8A - Cranbury	Middlesex	High	Average
NJ Tpk Interchange 7A - Turnpike South	Mercer	High	High
Interstate 80 Corridor	Morris	Average	Average
Interstate 78 Corridor	Morris/Somerset	Average	Average
City of Newark – Port District	Essex	High	Average
Other Local/Regional		Average	Average

Projections based on industrial space and lease rate trends, assessment of industry and regional conditions, and meetings with local and county officials, along with private sector stakeholders.

Source: A. Strauss-Wieder, Inc

In the 2010 Projection period, five areas are projected to grow faster than the regional average:

- New Jersey Turnpike Interchange 12 (Tremley Point and Carteret);
- New Jersey Turnpike Interchange 10 (Raritan Center);
- New Jersey Turnpike Interchange 8A;
- New Jersey Turnpike Interchange 7A; and
- City of Newark locations in the vicinity of the Port

Lower than average projections are assumed in Bergen County and for the PSE&G site currently under consideration for a maritime auto terminal.

As the projections move to 2025, more of the region's properties are assumed to be fully developed. Accordingly, growth rates are projected to slow to the regional average for NJ Turnpike Interchanges 10, 8A and the City of Newark. Growth at NJ Turnpike Interchange 12 is projected to remain high as more brownfield properties are remediated and redeveloped. Interchange 7A in Mercer County is assumed to continue to grow at a higher rate as the inner areas of the region become more fully developed.

Warehouse and distribution center development along the Interstate 80 and Interstate 78 corridors in New Jersey are projected to grow at the regional average rate. However, it is possible that rate of warehouse development in Pennsylvania along these corridors could increase, particularly as properties become less available in New Jersey. Policies supporting the development of brownfield sites, particularly those proximate to the ports and the Portway alignment, will assist in reducing the disparity in the rate of warehouse and distribution center development between locations within and external to the Portway Extensions Study Area.