NJTPA
NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

Jersey City Freight Profile

2040 Freight Industry Level Forecasts

ABOUT THIS PROFILE

The NJTPA has developed a set of alternative freight forecasts to support transportation, land use, and economic development decisions. The first step in the study process was to document current baseline conditions. This Freight Profile offers a snapshot of key metrics – Economy and Land Uses, Freight Flows, and Freight Transportation Networks in 2010 and in the forecast year, 2040.

ECONOMY AND LAND USES

With a 2010 population of 247,597*, Jersey City is the second most populous city in the State of New Jersey. After a period of declining population, which ended in the 1980s, Jersey City's population has grown at a slower rate than the State overall, though the gap narrowed significantly during the 2000s. The City's average household income is lower than that of the State, and comparable to Hudson County overall. Jersey City's median household income has increased between 2005 and 2009 by more than $12,000 when adjusted for inflation, while the State's median household income declined by more than $1,700.

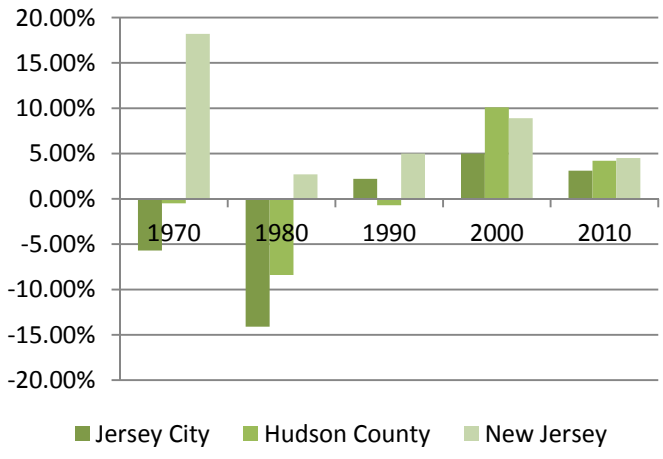
* Outcome of a challenge to the 2010 Census of Jersey City pending.

Jersey City is home to…

- 247,597* people
- 8,014 businesses that employ 86,600 people; 37% of these jobs are in businesses that are highly dependent on freight movement
- 205 warehousing/distribution buildings and 48 manufacturing buildings
- About 9.6 million tons of domestic freight shipped or received annually
- Interstate, State, and County highways used by thousands of trucks every day
- Global Marine Terminal
- The National Docks Secondary, one of the Region's major freight rail lines.

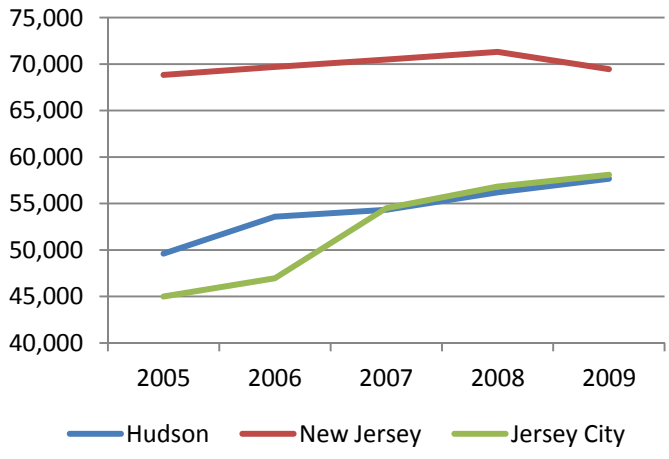
Population Growth by Decade*

Source: U.S. Census Bureau



Household Income, Constant 2010 Dollars

Source: U.S. Census Bureau



Employment

The City's economy employs 86,600 people in more than 8,000 establishments. About 37% are employed in "freight-intensive" industries, such as construction, manufacturing, mining and extraction, retail trade, wholesale trade, and logistics. About 63% are employed in industries that may generate freight, but are less dependent on freight movement.

FREIGHT FLOWS

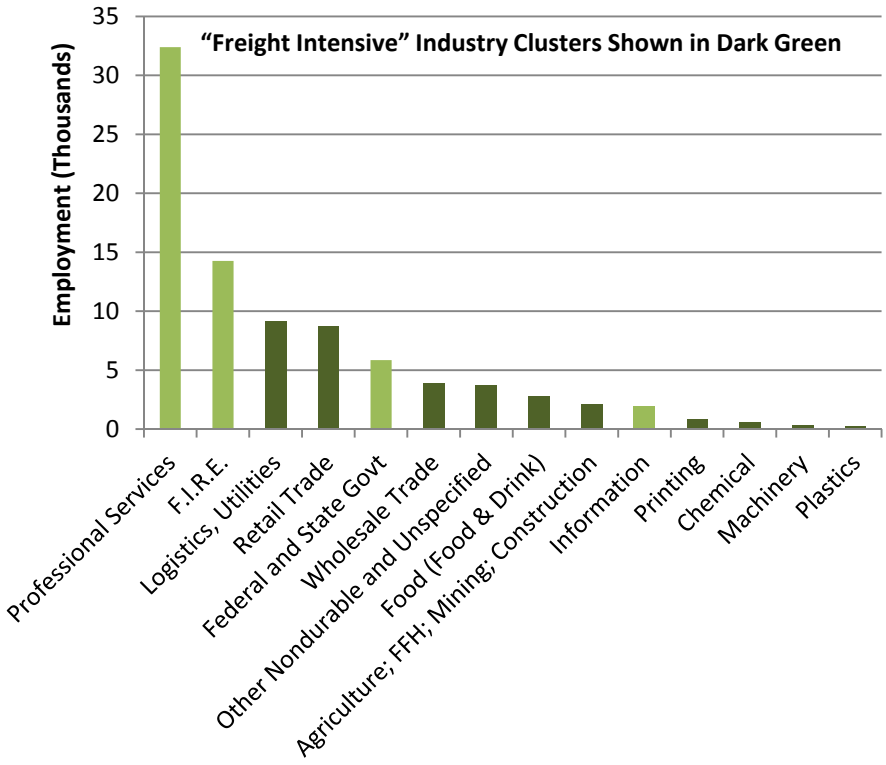
In 2007, approximately 9.6 million tons of domestic freight moved into or out of Jersey City, by all modes of transportation (truck, rail, water, and air). This figure includes commodities moving into or out of Jersey City, but excludes pass-through tonnage. (The movement of international cargo to and from seaports, airports, and border crossings is captured and counted as domestic tonnage.)

Commodities

For domestic O-D tonnage, around 40% consisted of moves of consumer goods between warehouses or distribution centers, 76% of which moved in the outbound direction. Other leading commodities include petroleum or coal products, waste or scrap metals, chemicals, freight all kinds, nonmetallic minerals, and printed matter. A larger share of tonnage was reported moving outbound (63%) versus inbound (37%), supporting a notion that Jersey City is a gateway for international freight that becomes outbound domestic freight.

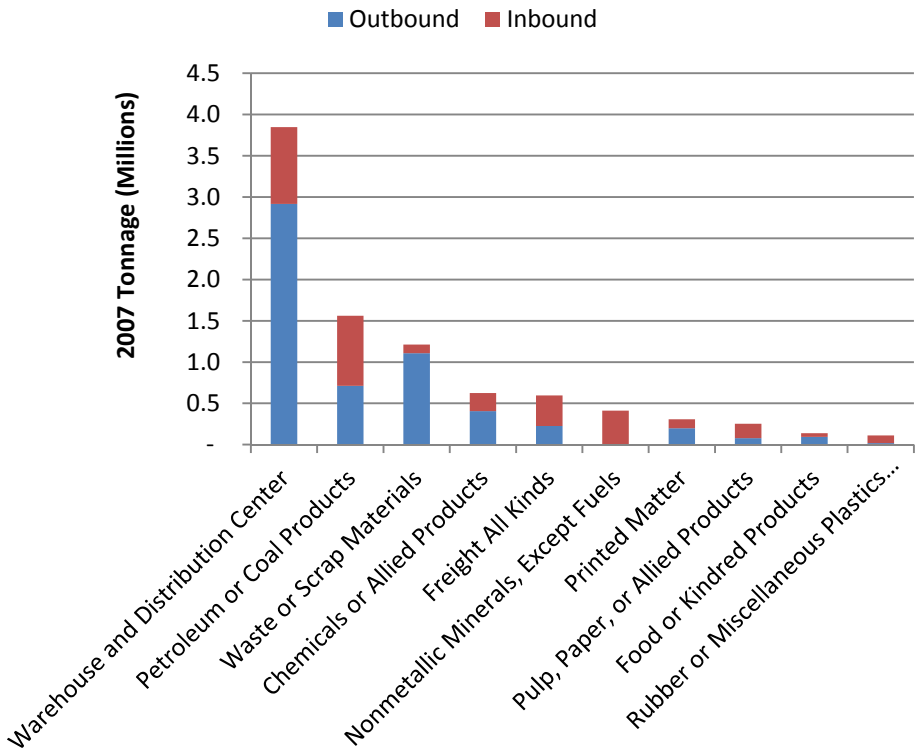
Employment by Industry, 2010

Source: R/ECON; Cambridge Systematics, Inc.



Domestic O-D Commodities by Tonnage, 2007

Source: Cambridge Systematics, with data from IHS Global Insight



Trading Partners

Jersey City's major trading partners are, not surprisingly, its neighbors. As illustrated to the right, locations in New Jersey are the greatest origins of inbound freight, followed by New York and Pennsylvania. For all of the top trading partners, except Illinois, Florida, and Delaware, outbound flows (consisting largely of warehouse and distribution center traffic) exceed inbound flows.

FREIGHT TRANSPORTATION NETWORKS

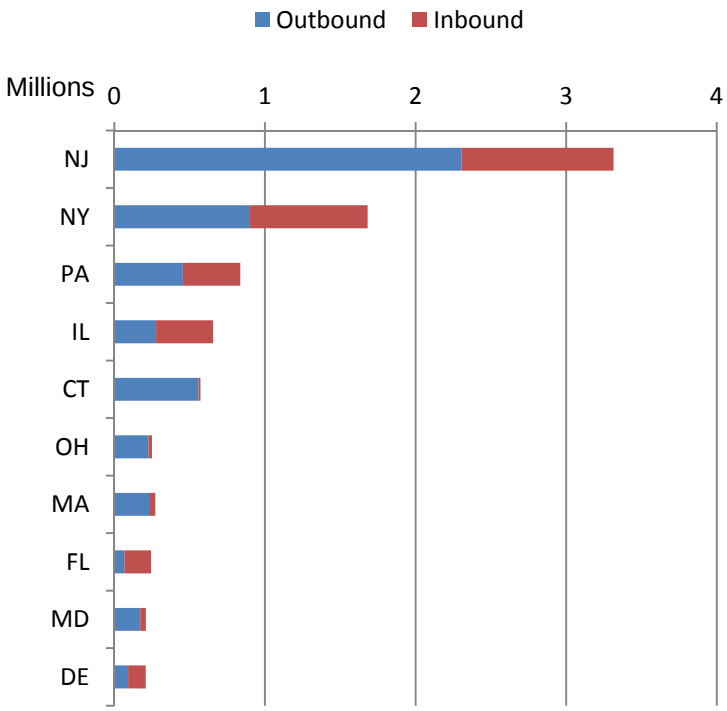
Freight can be handled by truck, rail, air or water. The choice of mode depends on a variety of factors, including: length of trip (rail and air are more competitive at longer distances), commodity type (rail and water are more competitive for heavy materials), time sensitivity (truck and air are most competitive), need for door-to-door service (trucking is needed unless the customer has a dock or a rail connection).

Mode Split

For domestic freight traveling to, from or within Jersey City, 55% travels by truck, 31% by water, and 14% by rail. The presence of rail and water terminals in Jersey City result in Hudson County having one of the most diverse mode split distributions among counties in the NJTPA region.

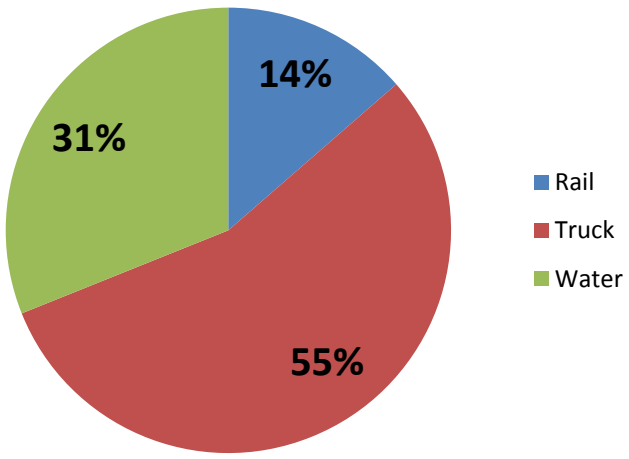
Top Origins and Destinations of Domestic O-D Freight Tonnage, 2007

Source: Cambridge Systematics, with data from IHS Global Insight



Mode Split, Domestic O-D Tonnage, 2007

Source: IHS Global Insight

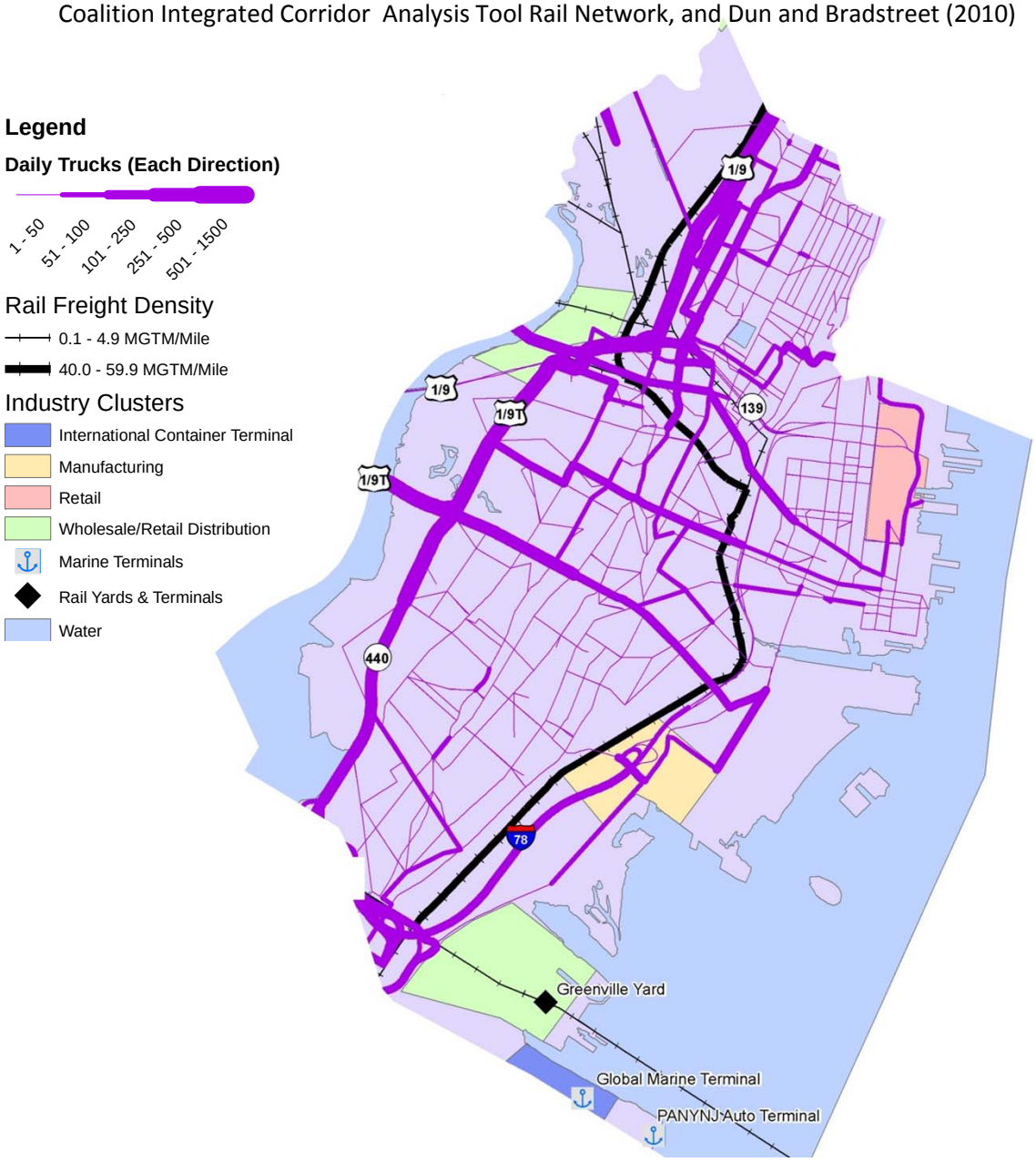


Highway and Rail Network Utilization

Jersey City's highway network serves to connect its major freight activity centers with key trading partners elsewhere in Hudson County, in the State of New Jersey, in other parts of North America, and – via international seaports and airports – the world. Segments of US Routes 1 and 9 carry as many as 5,000 trucks per day. Interstate 78, NJ Routes 7 and 440, and Communipaw Avenue carry between 1,000 and 2,000 trucks daily. Caven Point Road, Montgomery Street, Newark Avenue, County Road, and J.F. Kennedy Boulevard north of the Journal Square area, are also important roadways for trucks traveling in the City. Not all trucks on the road are carrying freight. Some are moving empty. Others are providing municipal services (waste transfer, utility services, etc.) or commercial services (contractors, lumber, landscapers, etc.).
On the rail network, the Conrail National Docks Secondary, one of the busiest freight rail lines in the State, traverses the City from north to south, connecting several major rail terminals in Northeastern New Jersey, including Greenville Yard in Jersey City.

Commodity Truck and Rail Flows in Jersey City, 2007

Sources: IHS Global Insight (2007), NJTPA Regional Transportation Model-Enhanced (NJRTM-E), I-95 Corridor Coalition Integrated Corridor Analysis Tool Rail Network, and Dun and Bradstreet (2010)

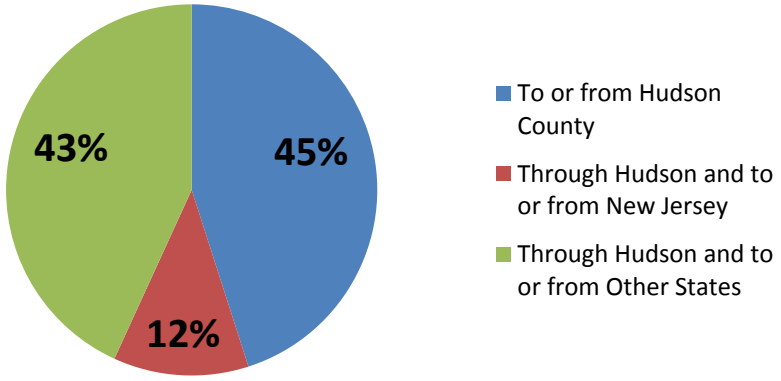


Highway Link Analysis

Different highways can be used by freight carrying trucks in different ways. Some highways have a high % of local traffic; others a high % of pass-through traffic. Many highways show significant differences at different locations.
Among major highways in Jersey City, Interstate 78 and US Routes 1/9 were analyzed at the County level. The average values of internal and through traffic are shown in the graph to the right.

Truck Trips on Hudson County Highway Links, 2007

Source: IHS Global Insight and USDOT Freight Analysis Framework-3



About 45% of the trucks traveling on Interstate 78 or Routes 1/9 in Hudson County were traveling to or from points located within the County. About 43% of trucks traveling on these highways were passing through Hudson County on their way to or from locations outside the State. Trucks traveling through Hudson County on their way to or from locations elsewhere in New Jersey composed 12% of the truck traffic on the selected highways.

Industrial Buildings Inventory

Freight-generating industries are supported by industrial buildings. The location of these buildings often depends on transportation access, and their uses may be significant generators of freight traffic. As illustrated on Pages 6 and 7, 48 manufacturing buildings are located in the City. More than 200 warehousing/distribution buildings are located within the City, one of which is more than 1 million square feet, and three of which are between 500,000 and 1 million square feet. There are several distinct clusters of industrial buildings throughout the City, including the vicinity of Turnpike Interchange 14B, the vicinity of Charlotte Circle and Tonnele Circle, Port Jersey, and the area between 12th and 18th Streets north of the Hamilton Park and Newport neighborhoods.

As summarized in the two tables to the right, many of the industrial buildings generate large volumes of freight. According to the Freight Locator database, 98 facilities in Jersey City receive more than 929,000 tons and ship 704,000 tons of freight annually. It is important to note that some facilities' inbound and outbound tonnage values do not match. This is because some types of local delivery and pickup moves are not classified as "commodity moves" in the source data.

Top 5 Facilities by Inbound/Outbound Tonnage, 2007

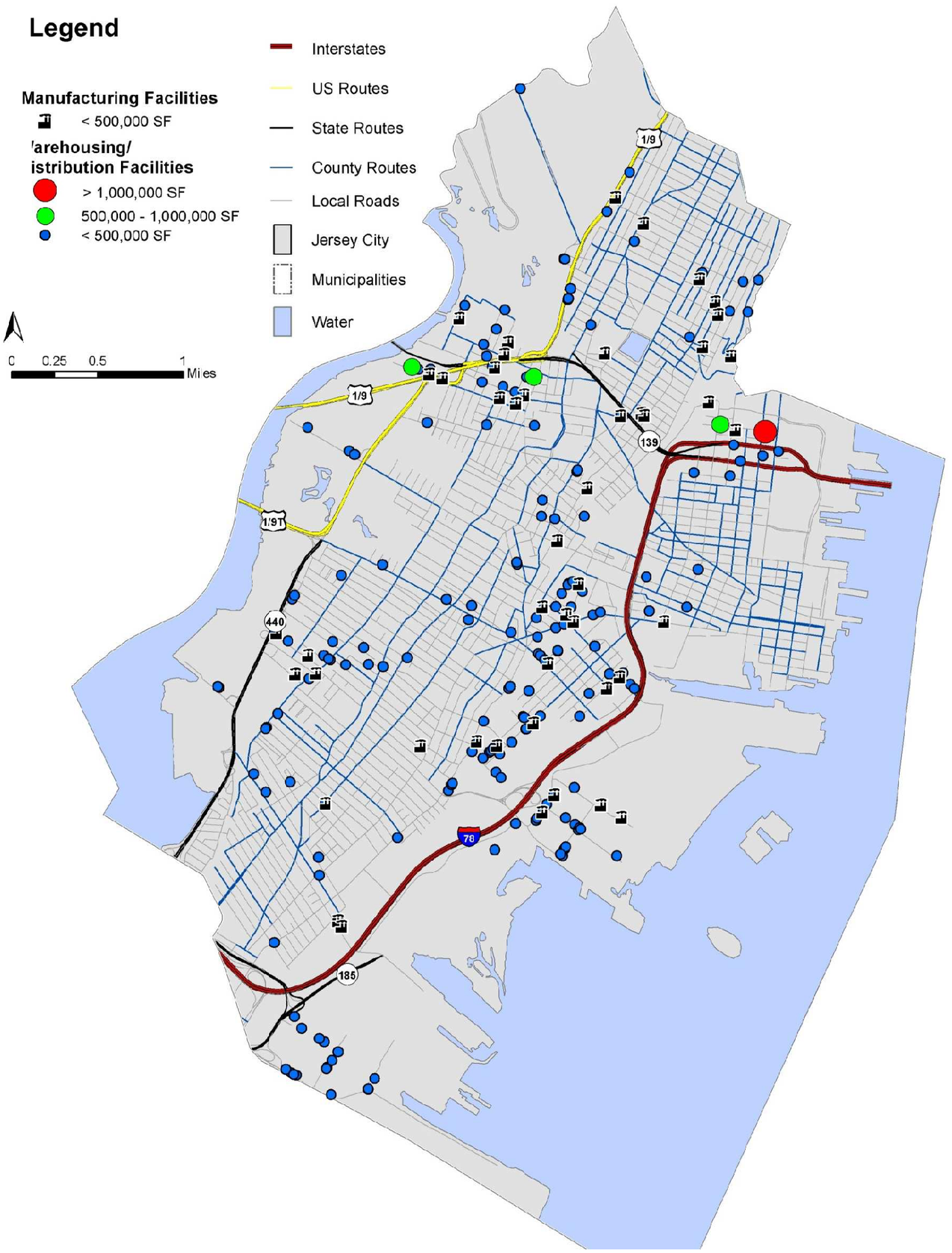
Source: IHS Global Insight Freight Locator Database

COMPANY NAME	CITY	INBOUND TONS
CERTIFIED PRODUCTS CO	JERSEY CITY	376,924
GREENVILLE COLORANTS	JERSEY CITY	78,780
ELEMENTIS SPECIALTIES	JERSEY CITY	69,210
DAILY NEWS	JERSEY CITY	46,608
ACRILEX INC	JERSEY CITY	37,964

COMPANY NAME	CITY	OUTBOUND TONS
DAILY NEWS	JERSEY CITY	129,028
CERTIFIED PRODUCTS CO	JERSEY CITY	98,915
IMPORTERS SERVICE CORP	JERSEY CITY	94,896
RELIABLE WOOD PRODUCTS	JERSEY CITY	55,615
PATELLA CONSTRUCTION CORP	JERSEY CITY	39,014

Industrial Buildings by Type and Square Footage, 2010

Source: CB Richard Ellis

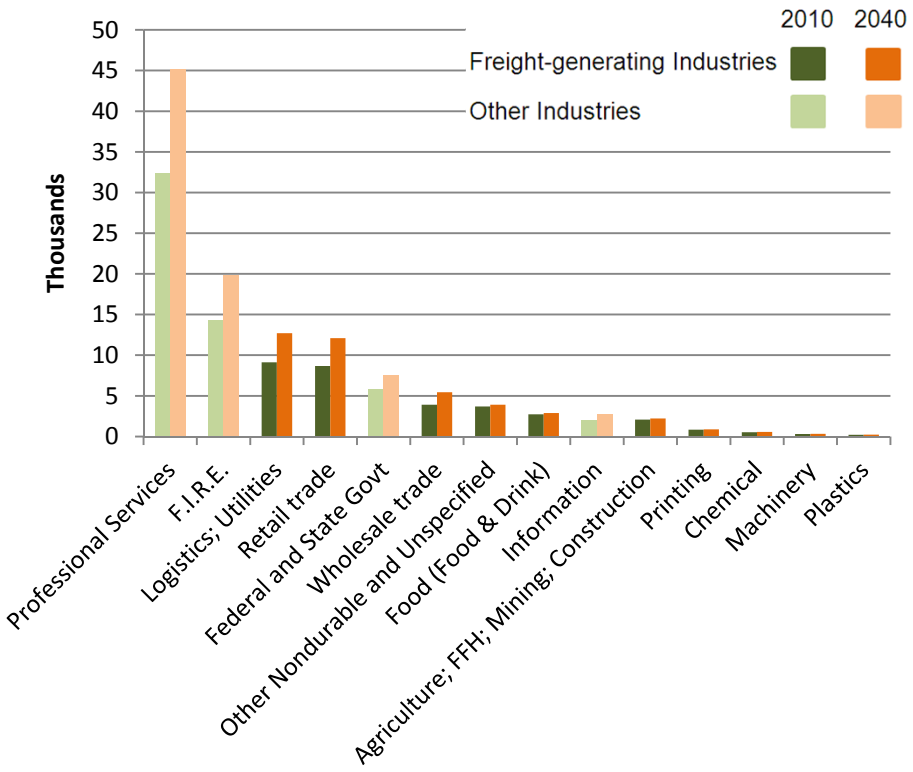


EMPLOYMENT FORECAST

Between 2010 and 2040, non-farm employment in Jersey City is expected to grow by 35%, from 86,600 to 116,600. Employment in freight-intensive industries is expected to grow by 29% during the forecast period, compared to 38% for other industries. The faster-growing services, finance, insurance, real estate, and other less freight-intensive industries, will make up 65% of the City's employment in 2040 compared to 63% in 2010. Among individual industry groups, professional services is expected to experience the greatest numeric growth in employment (12,800 jobs) during the forecast period.

Industry Employment Forecast, 2010 - 2040

Source: R/ECON; Cambridge Systematics, Inc.



2040 COMMODITY FLOWS

By 2040, overall commodity flows into, out of, and within Jersey City are expected to have increased by about 45%, from 9.6 million tons to 14.0 million tons (a difference of 4.4 million tons). Warehouse and distribution center traffic is expected to remain the number one commodity in Jersey City by tonnage. Growth rates among the top ten commodities are expected to range from 36% (chemicals) to 66% (waste or scrap metals).

Top 10 Commodities by Tonnage, 2040

Sources: Cambridge Systematics, with data from IHS Global Insight

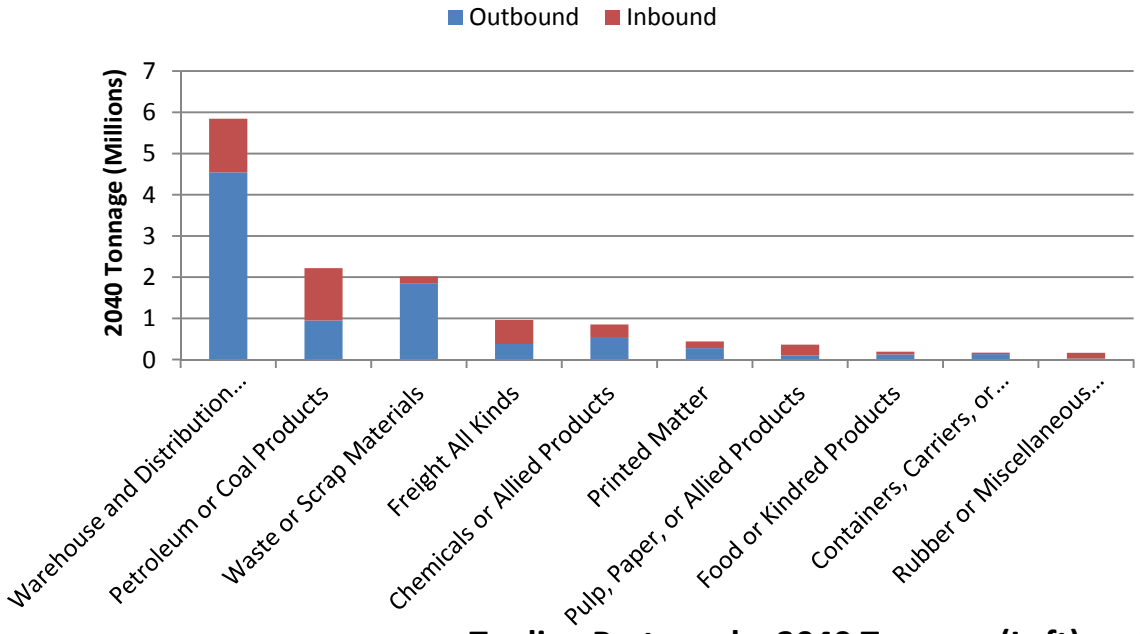
Commodity	2007 Tons	2040 Tons	Difference	Growth Rate
Warehouse and Distribution Center	3,848,015	5,843,204	1,995,189	52%
Petroleum or Coal Products	1,561,362	2,216,891	655,529	42%
Waste or Scrap Materials	1,212,596	2,015,885	803,288	66%
Freight All Kinds	596,837	958,849	362,013	61%
Chemicals or Allied Products	624,472	851,711	227,240	36%
Printed Matter	307,682	441,088	133,406	43%
Pulp, Paper, or Allied Products	252,763	363,201	110,438	44%
Food or Kindred Products	138,213	192,472	54,259	39%
Containers, Carriers, or Devices, Empty	101,490	167,505	66,014	65%
Rubber or Miscellaneous Plastics Products	111,342	163,789	52,447	47%

Commodity Volumes and Direction

Outbound freight moves are expected to grow faster than inbound moves during the forecast period. In 2007, outbound moves accounted for 63% of all freight tonnage. By 2040, inbound moves are expected to account for 66% of all tonnage. Growth in warehouse and distribution center traffic, chemicals, and printed matter is expected to fuel the faster increase in outbound traffic.

Top 10 Commodities by Tonnage by Direction, 2040

Sources: Cambridge Systematics, with data from IHS Global Insight

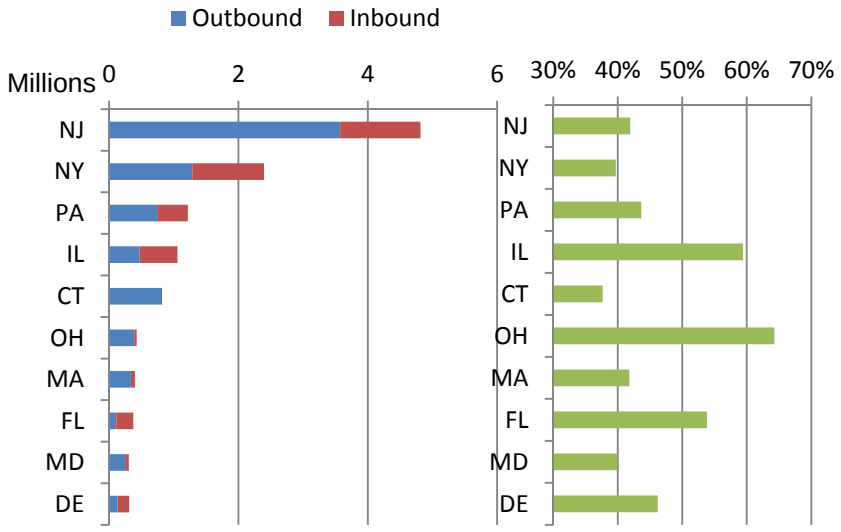


Future Trading Partners

Jersey City's largest trading partners will continue to be other New Jersey counties, followed by New York and Pennsylvania. The predominant direction of trade with the top partners (except Illinois, Florida, and Delaware) will continue to be outbound. Growth in trade with States in the Midwest, South, and West will outpace growth in trade with Northeastern States.

Trading Partners by 2040 Tonnage (Left) and 2007-2040 Growth (Right)

Source: Cambridge Systematics, with data from IHS Global Insight

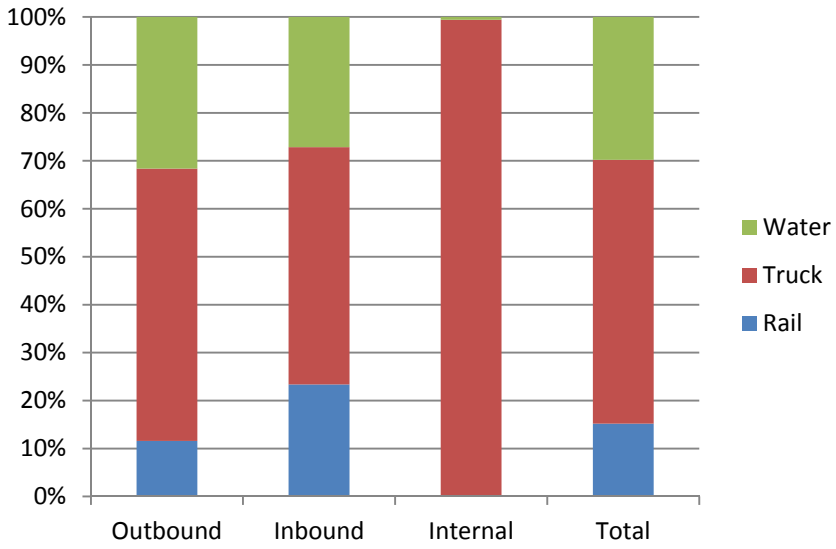


Future Mode Utilization

The forecast anticipates that rail will gain a slightly larger share of the market (15% in 2040, compared to 14% in 2007) and water will carry a slightly lower share (30% in 2040, compared to 31% in 2007) by 2040. Trucks are expected to carry 55% of all freight tons in 2040, which is the same share trucks carried in 2007. Rail is expected to have its highest share among inbound tonnage (23%), water will likely have its highest share for outbound freight (32%), and trucks will carry more than 99% of intra-city freight.

Freight Tonnage by Mode and Direction, 2040

Source: Cambridge Systematics, with data from IHS Global Insight



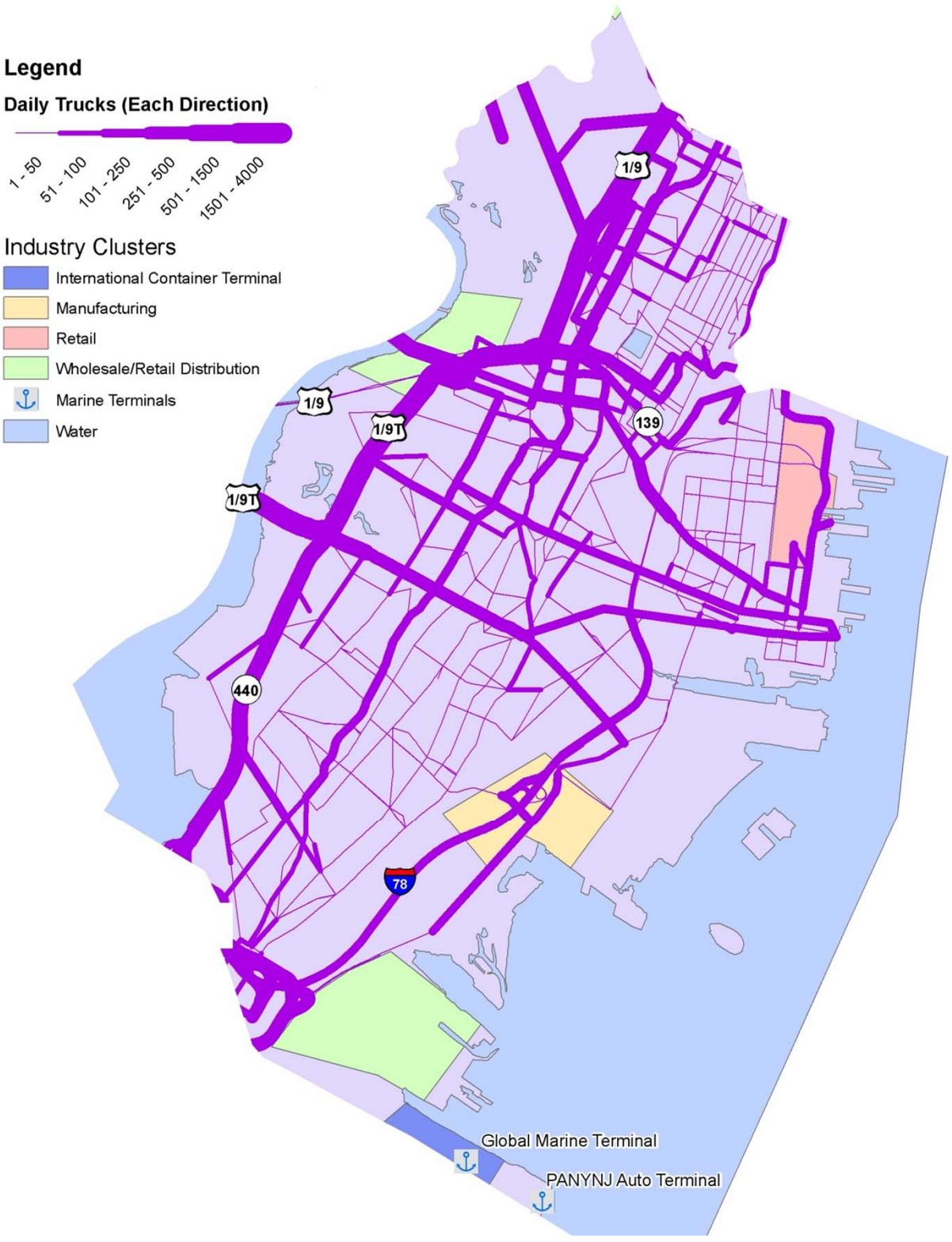
Future Highway Network Utilization

In 2040, Jersey City's highway network is expected to remain the primary conveyor of freight into, out of, within and through the City. Truck volumes are expected to grow by 30% on US Routes 1 and 9 to about 6500 daily trucks .

The map on Page 11 illustrates the projected truck volumes in 2040 on highways in Jersey City.

Commodity Truck Flows in Jersey City, 2040

Sources: IHS Global Insight, NJTPA Regional Transportation Model-Enhanced (NJRTM-E), Dun & Bradstreet (2010)



ABOUT THE NJTPA

The North Jersey Transportation Planning Authority (NJTPA) is the federally authorized Metropolitan Planning Organization for 6.6 million people in the 13-county northern New Jersey region. Each year, the NJTPA oversees the investment of more than $1 billion in federal funding for transportation projects and provides a forum for interagency cooperation and public input into funding decisions. It also sponsors and conducts studies, assists County planning agencies and monitors compliance with national air quality goals.

The NJTPA Board of Trustees includes 15 local elected officials, including one representative from each of the 13 northern New Jersey counties—Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union and Warren—as well as from the cities of Newark and Jersey City. The Board also includes the Commissioner of the New Jersey Department of Transportation (NJDOT), the Executive Directors of NJ Transit and the Port Authority of New York & New Jersey, a Governor's Representative, and a Citizens' Representative appointed by the Governor.

Jersey City's representative on the NJTPA Board of Trustees is Mayor Jerramiah T. Healy.

ABOUT THIS STUDY

The North Jersey Transportation Planning Authority (NJTPA) is pleased to announce the completion of a major new freight planning initiative – the development of Year 2040 Freight Industry Level Forecasts.

Freight issues are extremely important in the NJTPA planning region, which includes thirteen counties in Northern New Jersey. The region hosts: the Port of New York and New Jersey, one of the nation's top three ports on the basis of tonnage and containers; heavily-used local, regional, and interstate truck corridors and crossings; heavy concentrations of intermodal and non-intermodal rail activity; significant national and international air cargo facilities; and hundreds of millions of square feet of warehouse/distribution space. These networks and facilities are essential to the economic and transportation well-being of 6.6 million residents in the NJTPA region and 20 million in the NY/NJ metropolitan statistical area, along with more than 312,000 regional businesses. Understanding the effects and importance of freight is therefore critical – not only to ensure the accuracy of the regional transportation planning process, but also to effectively communicate the importance of freight to the region's freight stakeholders, businesses, communities, residents, and funding decision-makers.

The primary goal of the 2040 Freight Industry Level Forecasts project was to develop a clear, accurate and comprehensive picture of regional freight activity, both current and future. The end product is an accurate picture of where concentrations of goods movement activity can be expected to occur in the region in the future, the types of commodities that will be moving, and where strategic investments should be made.

FOR FURTHER INFORMATION

For further information, please contact Jakub Rowinski, NJTPA Project Manager, at jrowinski@njtpa.org.

This Freight Profile is one of a series of profiles, covering the 13 counties of the NJTPA region, the City of Newark, Jersey City, and the region as a whole. This document was prepared by the North Jersey Transportation Planning Authority, Inc. with funding from the Federal Transit Administration and the Federal Highway Administration. The NJTPA is solely responsible for its contents.