

REGIONAL FREIGHT COMMODITY PROFILE

Textiles and Leather Products

COMMODITY BUNDLE OVERVIEW

As the graphs below show, textiles and leather products are classified as one group. This group consists of: textiles, which includes fabrics, carpet and floor coverings, upholstery, and yarns and threads; and leather products, including leather gloves and mittens, leather clothing and accessories, and leather handbags and luggage.

The primary data source for commodity flows reported in this profile is NJTPA's Freight Forecasting Tool, which generates commodity freight data and forecasts for a 2020 base year and 2050 forecast year. This profile describes freight flows between domestic origins and destinations.

- 4.9 million tons in 2020, increasing 15 percent to 5.7 million tons in 2050.
- Represents 1.3 percent of the goods moved in the region by weight and 6 percent by value.
- Nearly 110 million square feet of warehousing/distribution center space dedicated to this bundle.
- 92 percent moves by truck, 1 percent by rail, and less than 7 percent by other modes.

Highlights

Composition

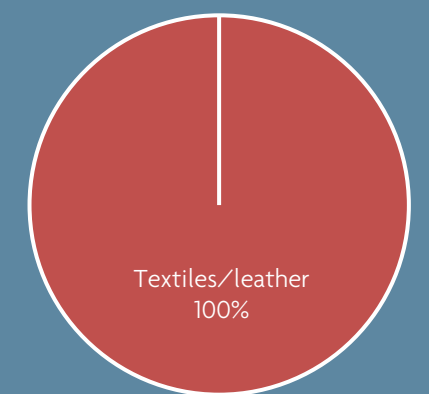
Domestic Tons in 2020



Total Tons: 4.9 million

Source: NJTPA Freight Forecasting Tool, 2020

Domestic Value in 2020



Total Value: \$41 billion

Source: NJTPA Freight Forecasting Tool, 2020

Textiles and leather products are grouped into one standard classification of transported goods (SCTG) classification code. 100 percent of the goods in this bundle are in the textiles and leather products SCTG category.

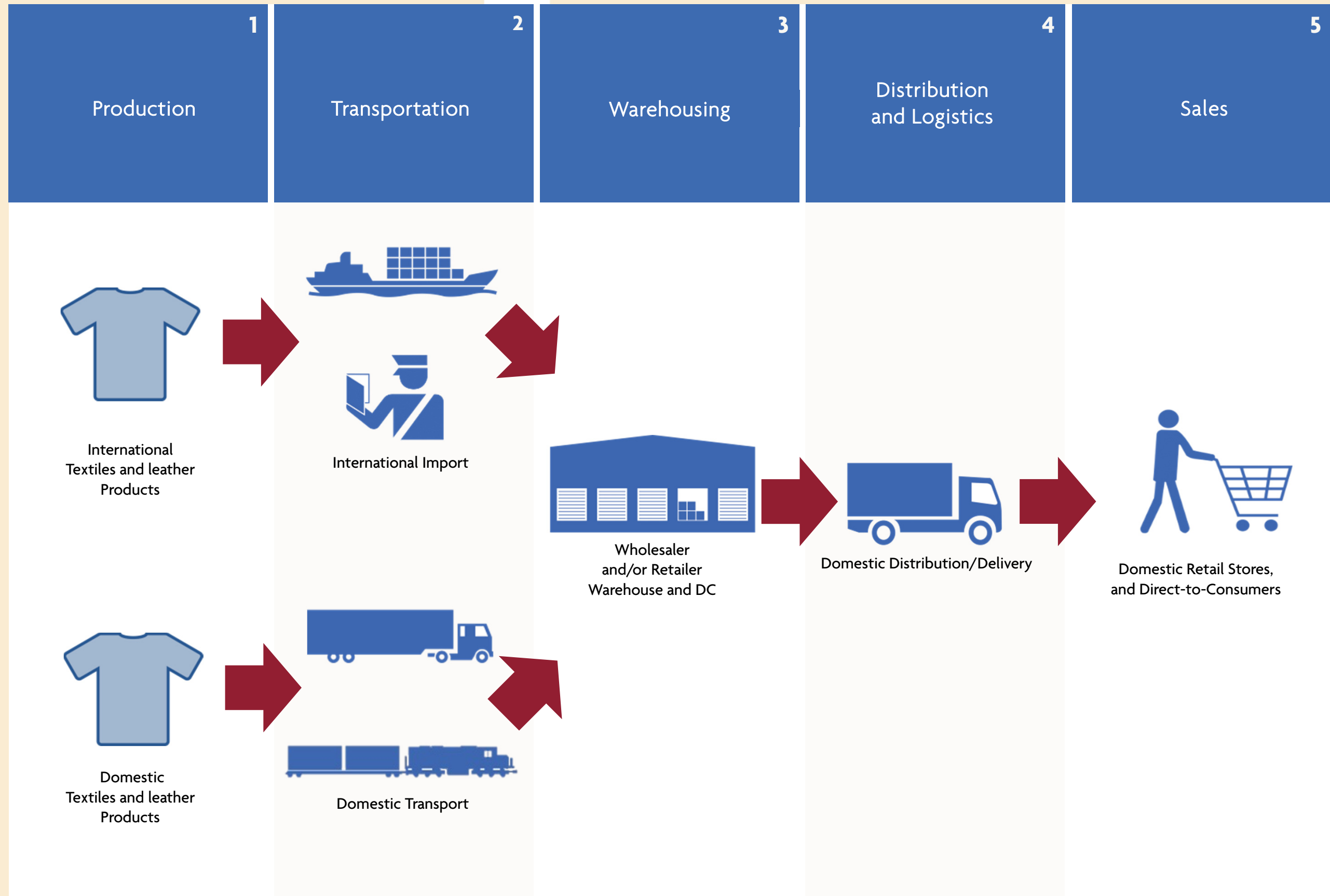
LOGISTICS SUMMARY

The graphic to the right represents the supply chain for the textiles and leather products commodity bundle from initial production of finished goods to delivery of goods to consumers.

This supply chain consists of five steps:

1. International and domestic manufacturers produce textiles and leather goods.
2. International products are transported by ocean vessel to U.S. Ports-of-Entry where they are inspected by U.S. Customs and transloaded to truck or rail intermodal modes. Domestically produced products are transported by truck and rail intermodal.
3. Products are sorted and stored at wholesaler or retailer warehouses and distribution centers.
4. Products are distributed to customers via truck, either to retail stores or direct-to-customers to fulfill orders.
5. Shipments are delivered according to customers' specifications.

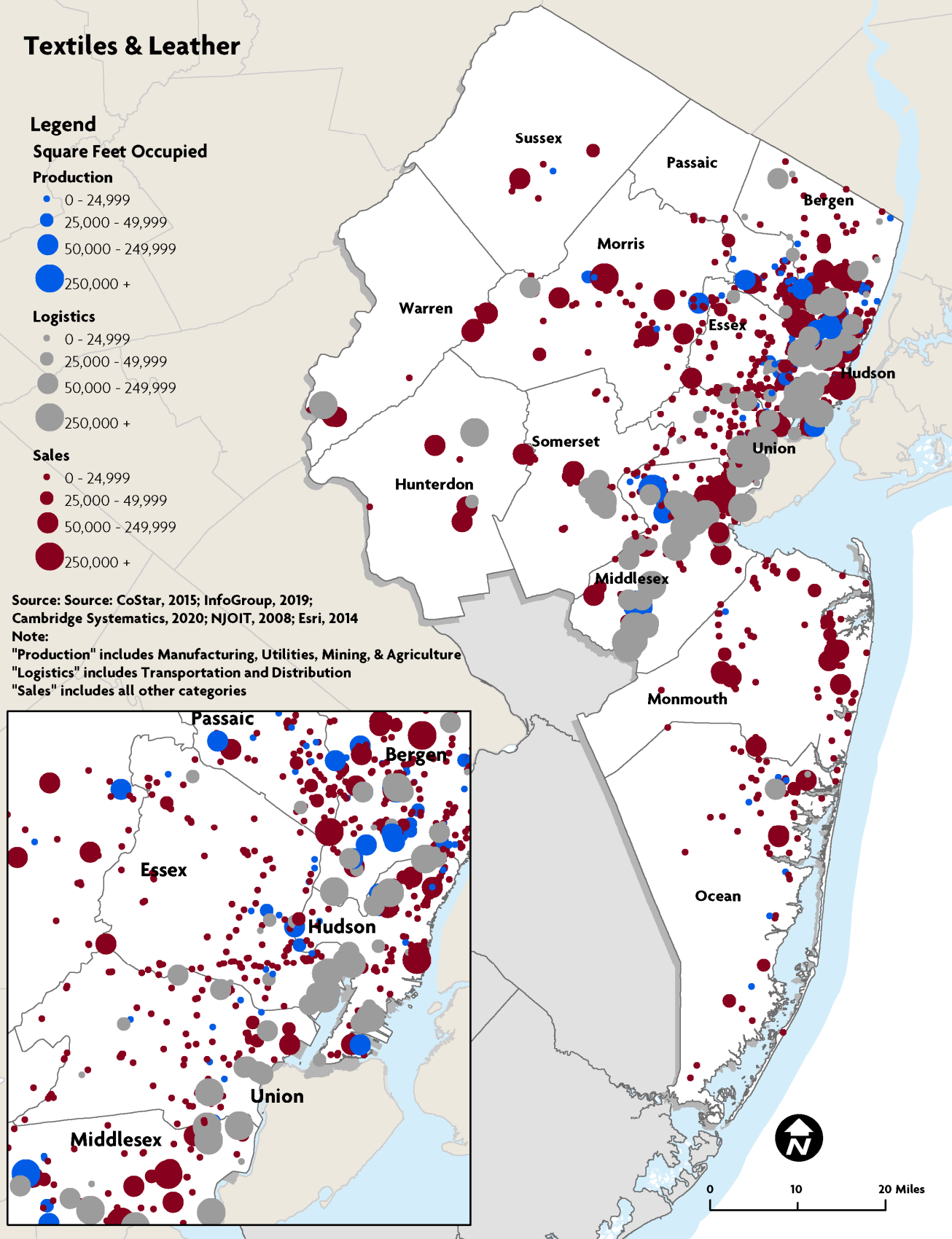
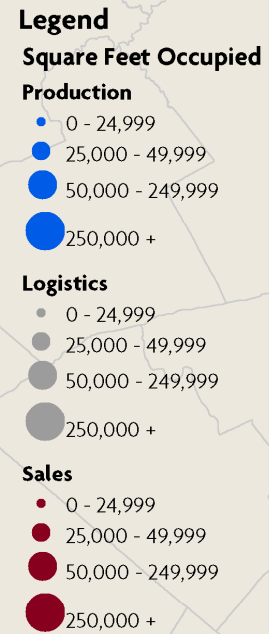
Note that some products bypass retailer or customer warehousing and distribution centers and move directly from a wholesaler's warehouse to the final user. The e-commerce deliveries are described in the e-commerce commodity bundle profile.



Business Locations by Industry Type

Business Square Footage by Industry Type

Textiles & Leather



Source: Source: CoStar, 2015; InfoGroup, 2019; Cambridge Systematics, 2020; NJOIT, 2008; Esri, 2014
 Note:
 "Production" includes Manufacturing, Utilities, Mining, & Agriculture
 "Logistics" includes Transportation and Distribution
 "Sales" includes all other categories

BUSINESS LOCATIONS SUMMARY

The map on the previous page illustrates the locations of facilities that ship, handle, or receive commodities in this bundle, including:

- Production facilities such as manufacturing businesses where goods are produced, and correspond to Step 1 in the logistics summary chart on pages 2 and 3.
- Logistics facilities, including warehousing and transportation facilities through which goods are distributed, and correspond to steps 2 through 4 on the logistics summary chart.
- Sales, represented in Step 5 on the logistics summary chart, including retail, services, and institutional establishments where goods are sold.

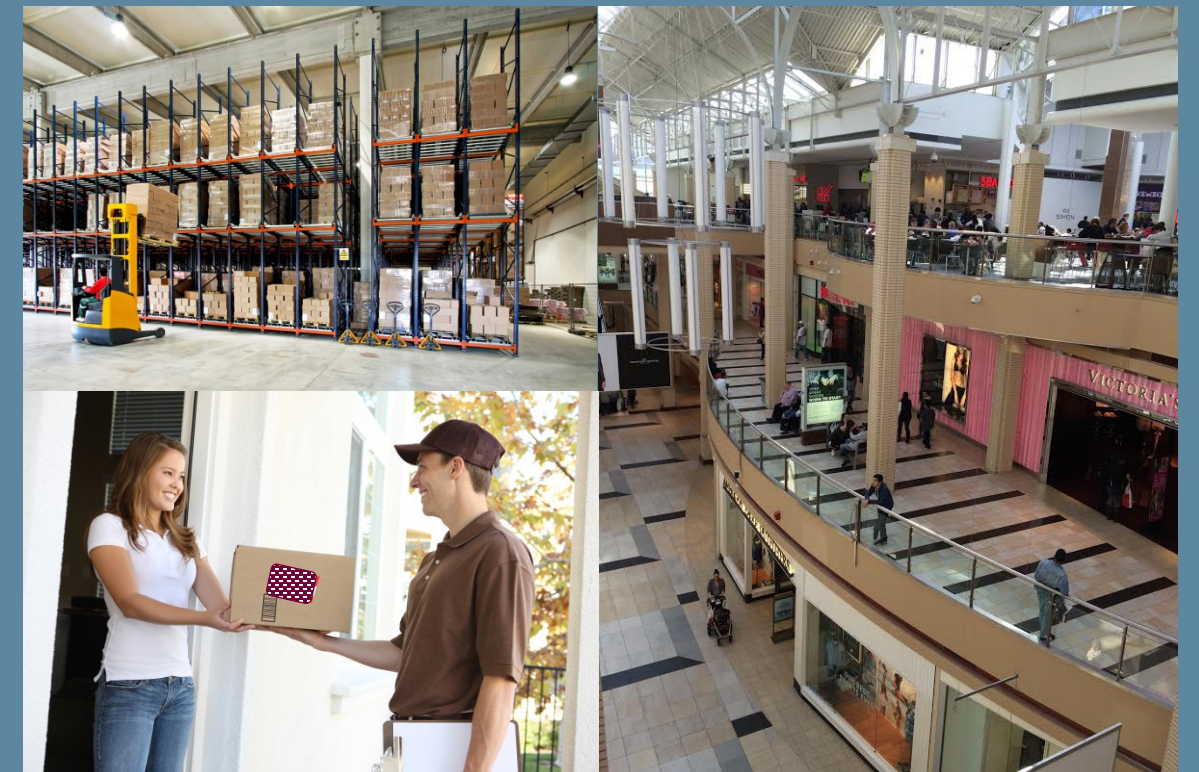
Clusters of establishments are located in the urban areas of the region, including southern Bergen, so

KEY INDUSTRY TRENDS

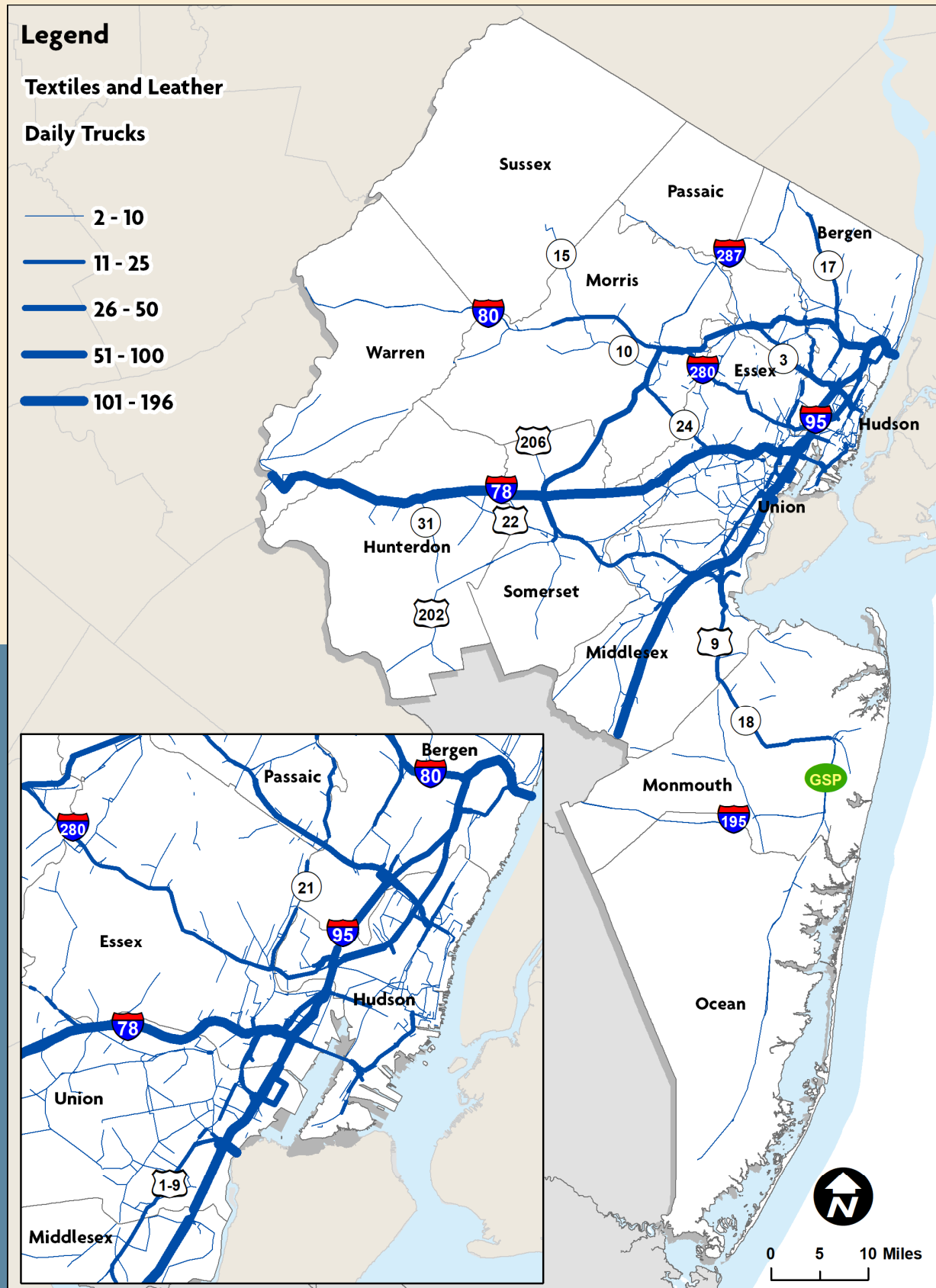
The following trends are shaping demand for textiles and leather products today, and projected demand in the future:

- Some US apparel manufacturers are reshoring or "nearshoring" to provide higher quality products to their customers faster. This trend is supported by increased automation and reduction in inventories as consumers demand quicker deliveries and greater customization.
- About one-third of items ordered via e-commerce are apparel or accessories. As online shopping and digitization increases, digital native companies and traditional brands are increasingly reducing their physical retail presence.
- Demand for business wear and accessories could be reduced if a large proportion of workers continue to work from home after COVID-19.
- Some consumers are considering production and supply chain social costs when deciding which brands and products to purchase. Demand for used clothing appears to be increasing.

Most Textiles and Leather Products Travel Through Distribution Centers (Top-Left) Before Being Delivered to Consumers (Bottom-Left) or Retailers (Right)



Highway Network Utilization, 2020



Source: NJTPA Freight Forecasting Tool, 2020; NJRTM-E, 2019; NJOIT, 2008; Esri, 2014.

HIGHWAY NETWORK FLOWS OF TEXTILES AND LEATHER

The map on the previous page shows the volume of truckloads of goods in this bundle traveling on highway segments in the NJTPA region every day.

Portions of the New Jersey Turnpike/Interstate 95 between Exit 8A in Middlesex County and Exit 16W in Bergen County, the George Washington Bridge and vicinity, and Interstate 78 between U.S. Routes 1/9 in Union County and the Pennsylvania border carry more than 100 truckloads of textiles and leather daily in each direction.

Portions of Interstate 95 between Exit 17 and Interstate 80, portions of Interstate 80 between Interstate 95 and Route 17 in Bergen County, and Route 3 in Hudson County carry 51 to 100 daily truckloads of textiles and leather products in each direction.

COMMODITY FLOW SUMMARY

More than 4.9 million tons of textiles and leather products, worth \$40 billion, moved in the NJTPA Region in 2020. By 2050, 5.7 million tons worth nearly \$47 billion are expected to move in the region. These projections represent 15 percent growth by tons and 16 percent growth by value.

Textiles and leather represented 1.3 percent of the goods moved in the region by weight and 6 percent by value in 2020 and are expected to represent the same shares of weight and value of goods moved in the region in 2050.

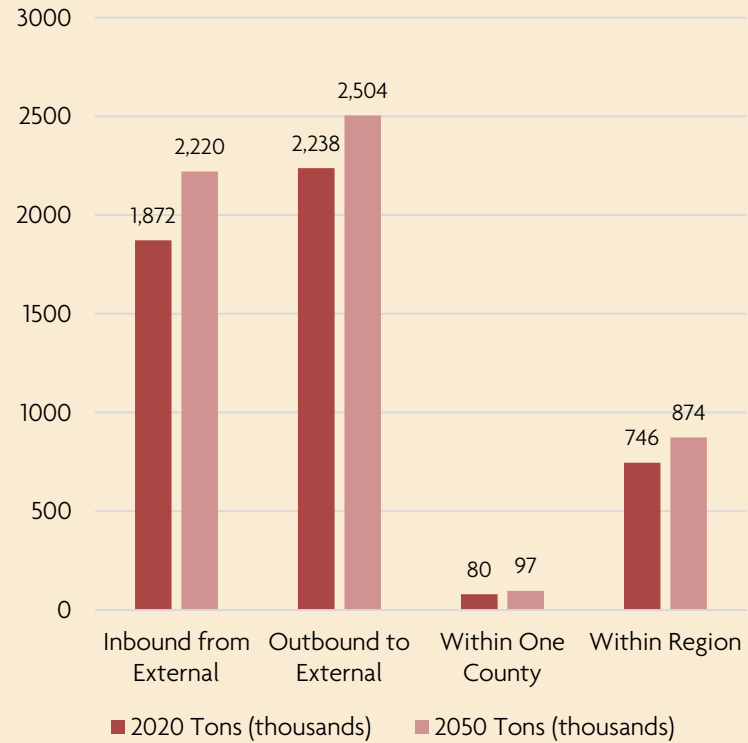
As the table below shows, textiles and leather products is the single commodity group in this bundle.

Forecasted Change in Commodity Flows in the Textiles and Leather Products Bundle by Weight and Value, 2020 and 2050

Commodity	2020 Tons (thousands)	2050 Tons (thousands)	2020 Value (millions \$)	2050 Value (millions \$)	Change in Tons, 2020-2050	Change in Value, 2020-2050
Textiles/leather	4,935	5,695	40,483	46,975	15%	16%
Grand Total	4,935	5,695	40,483	46,975	15%	16%

Source: NJTPA Freight Forecasting Tool, 2020

Domestic Tons by Direction, 2020 and 2050



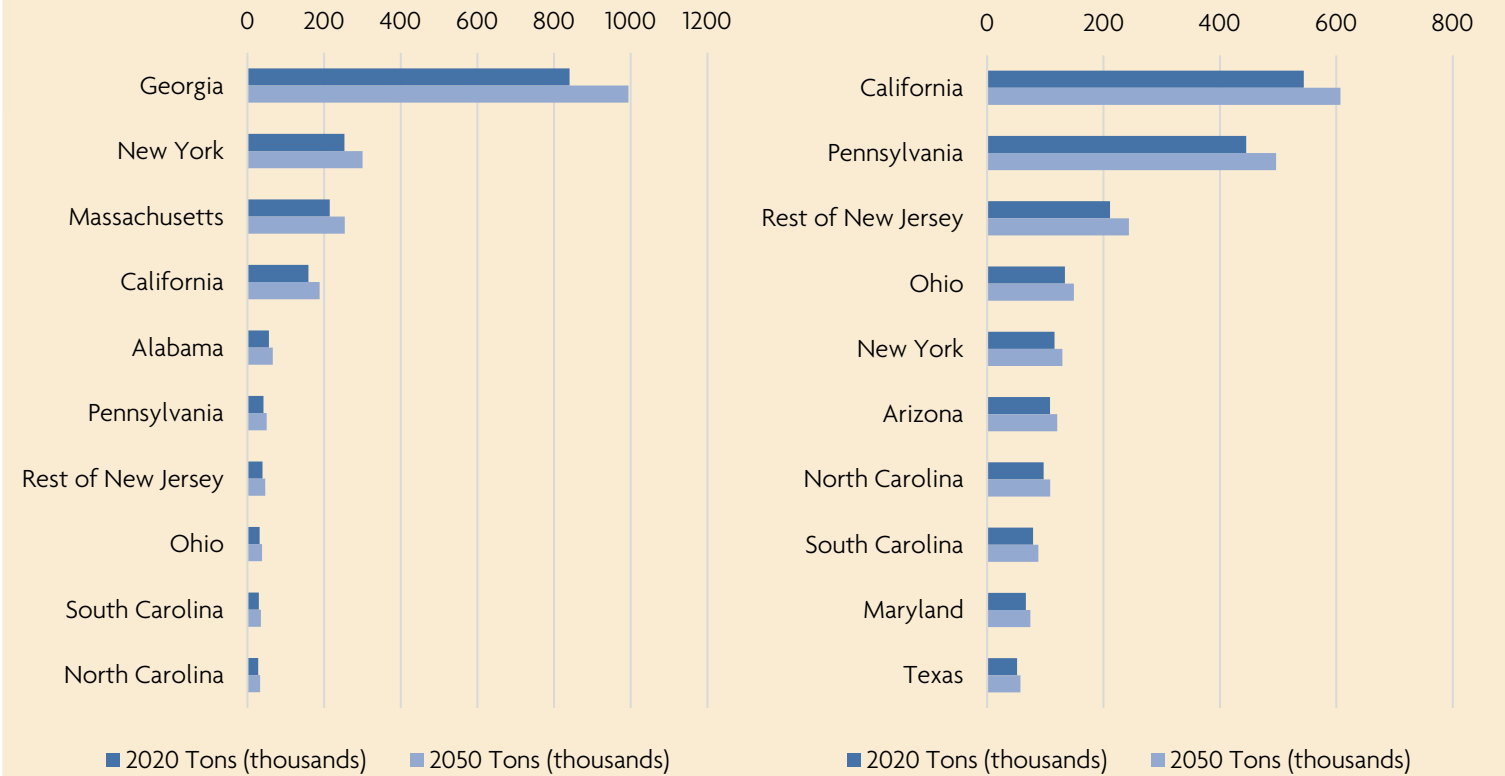
Source: NJTPA Freight Forecasting Tool, 2020

About 2.2 million tons of textiles and leather products (45 percent of all tons in this bundle) traveled outbound from the NJTPA region to locations outside the region. About 1.9 million tons (38 percent) are moving inbound. Movements within a single county are expected to grow at the fastest pace (22 percent) between 2020 and 2050.

About 90 percent of the textiles and leather products imported to the NJTPA region originate in one of the locations shown in the graph on the next page. Georgia is the top origin of inbound textiles and leather, and is expected to remain the top origin through 2050. Tons of freight from each of the top origins is expected to grow between 18 and 20 percent between 2020 and 2050.

The graph on the next page also shows the destinations of 83 percent of the goods in this commodity bundle that leave the NJTPA region. California and Pennsylvania are the top destinations. The volume of textiles and leather products sent from NJTPA to California and Pennsylvania is expected to increase by 12 percent between 2020 and 2050.

Top Origins of Inbound Domestic Commodities (Left) and Top Destinations of Outbound Domestic Commodities (Right), 2020 and 2050



Source: NJTPA Freight Forecasting Tool, 2020

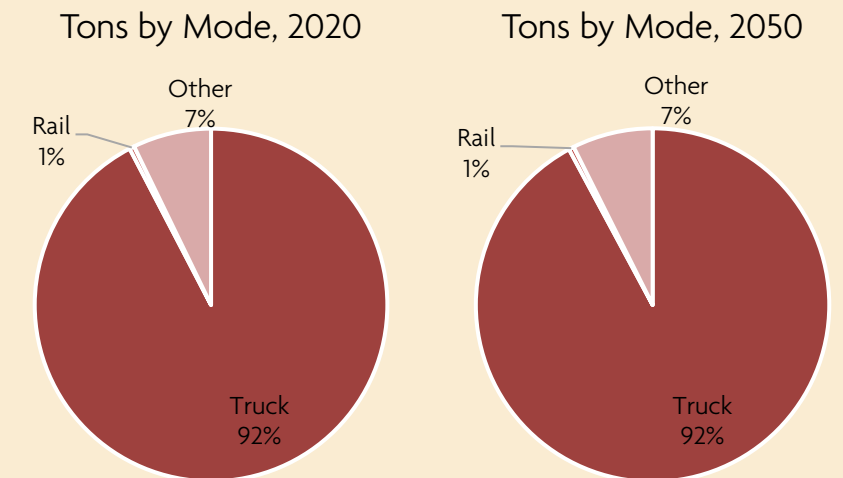
Source: NJTPA Freight Forecasting Tool, 2020

Nearly All of the Textiles and leather Goods Move by Truck (Left), with about 1 percent moving by Intermodal Rail (Right)



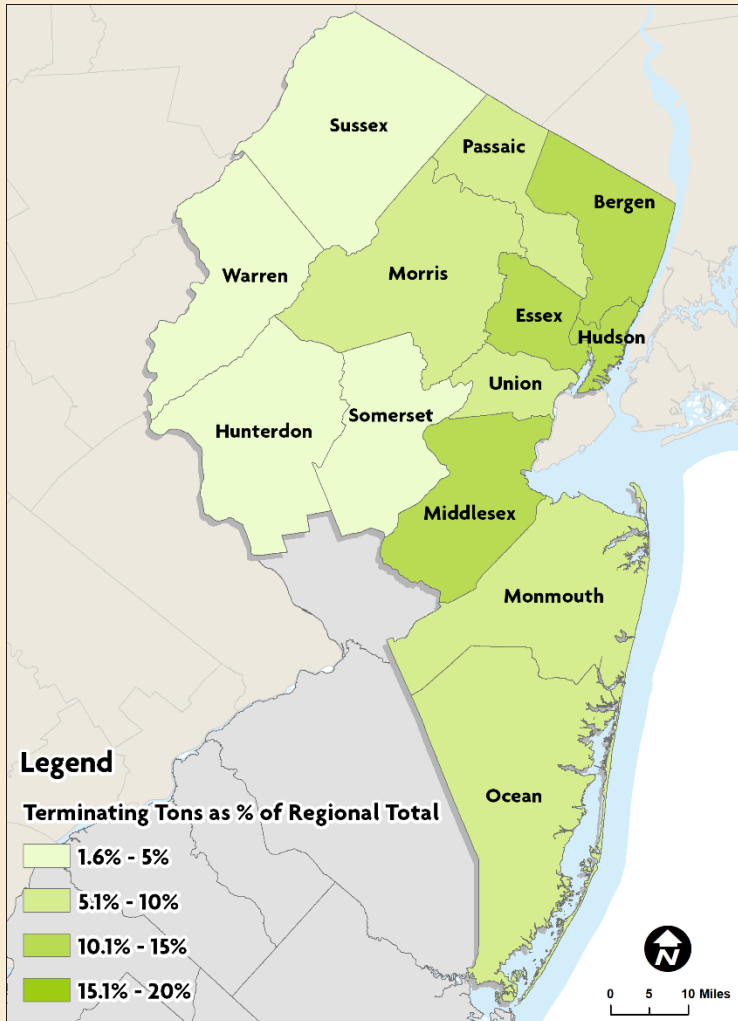
Mode Splits, 2020 and 2050

In 2020, about 92 percent of the textiles and leather products moving in the NJTPA region traveled by truck. Rail carried about 1 percent of goods in this commodity bundle, and other modes carried 7 percent. By 2050, the share of tons moving by each mode is expected to remain similar.



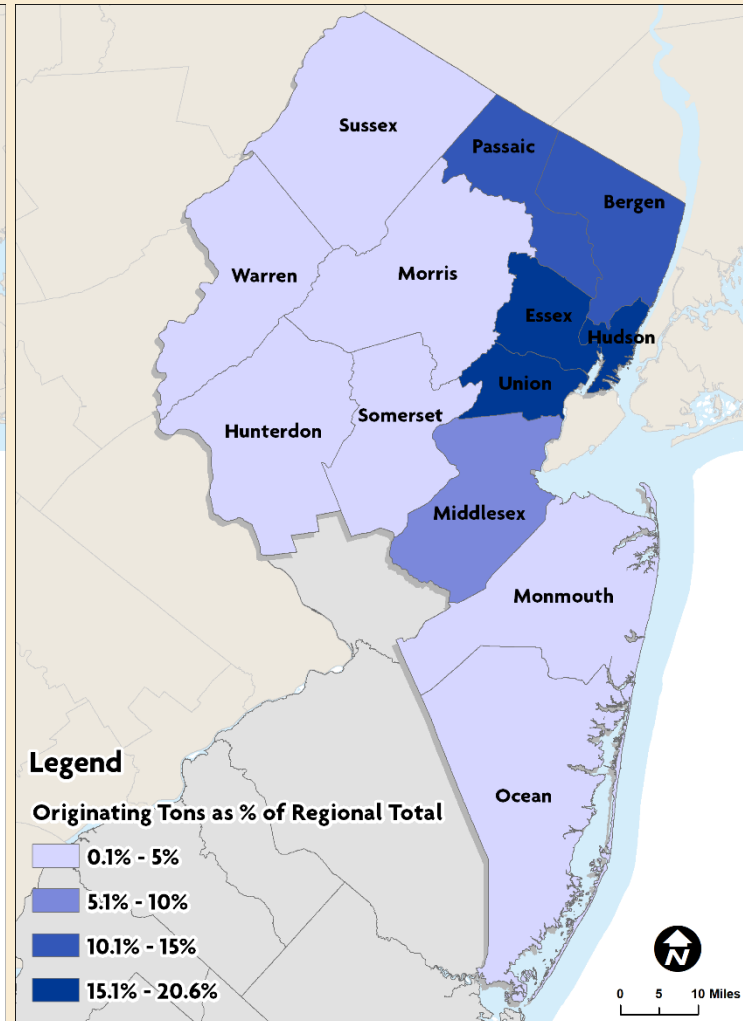
Source: NJTPA Freight Forecasting Tool, 2020

Inbound Domestic Tons by County, 2020



Source: NJTPA Freight Forecasting Tool, 2020; NJRTM-E, 2019; NJOIT, 2008; Esri, 2014.

Outbound Domestic Tons by County, 2020



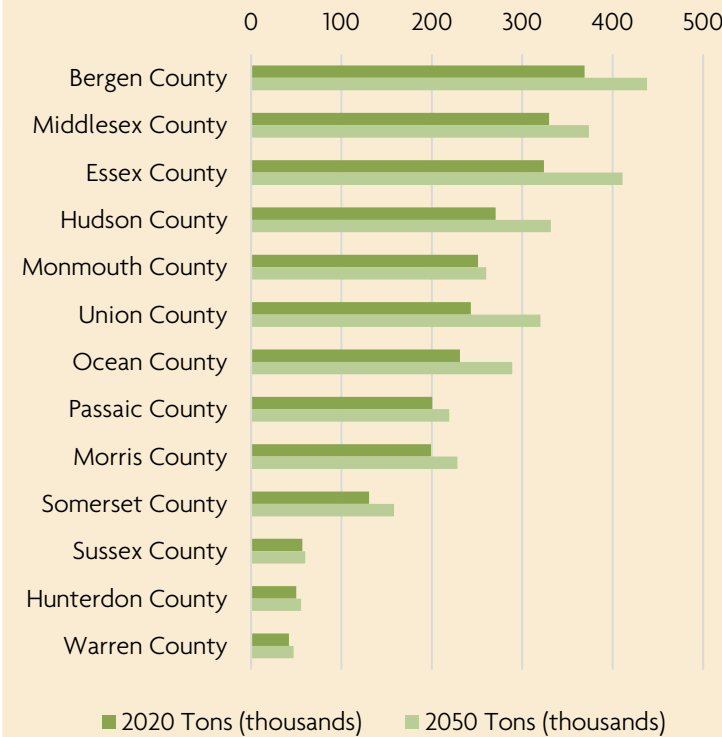
Source: NJTPA Freight Forecasting Tool, 2020; NJRTM-E, 2019; NJOIT, 2008; Esri, 2014.

The maps above and the graphs on the next page show the top counties of origin and top counties of destination for goods in this commodity bundle traveling to or from the NJTPA region.

More than 38 percent of the textiles and leather traveling into the NJTPA region terminate in Bergen, Middlesex, or Essex counties, each of which received more than 300,000 tons. Projected growth rates in inbound tonnage of textiles and leather between 2020 and 2050 range from 5 percent (Monmouth County) to 32 percent (Union County).

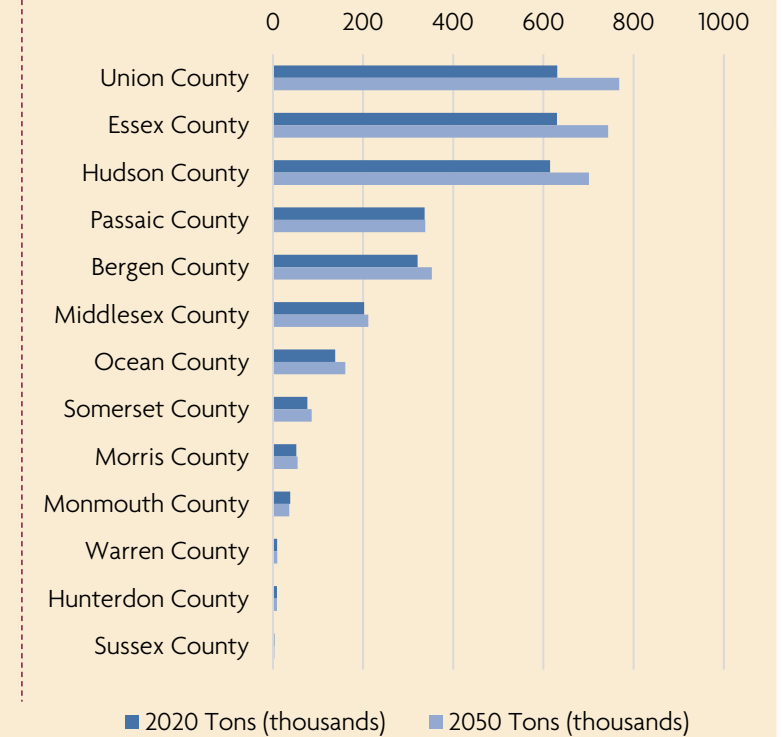
More than 60 percent of all textiles and leather shipped outbound originate in Union, Essex, or Hudson counties, each sending more than 600,000 tons of shipments of this commodity group. Projected growth rates in outbound tonnage between 2020 and 2050 range from -6 percent (Monmouth County) to 22 percent (Union County).

Inbound Domestic Tons by County, 2020 and 2050



Source: NJTPA Freight Forecasting Tool, 2020

Outbound Domestic Tons by County, 2020 and 2050



Source: NJTPA Freight Forecasting Tool, 2020

References

For more information on textiles and leather commodity flows and logistics in the North Jersey region and elsewhere, consult the following sources:

- United States Fashion Industry Association, www.usfashionindustry.com
- International Textile and Apparel Association, www.itaaonline.org
- American Apparel & Footwear Association, www.aafaglobal.org
- Bureau of Labor Statistics, U.S. Department of Labor, www.bls.gov

ABOUT THE NJTPA

The North Jersey Transportation Planning Authority (NJTPA) is the federally authorized Metropolitan Planning Organization for 6.7 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, 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 Director of NJ TRANSIT, the Chairman of the Port Authority of New York and New Jersey, a Governor's Representative and a Citizens' Representative appointed by the Governor.

ABOUT THE STUDY

Conditions in the goods movement industry have changed over the last several years. The 2050 Freight Industry Level Forecasts Study developed updated information on current and projected freight demand through 2050 for the NJTPA to use in its freight planning activities. This effort built on two previous NJTPA freight planning studies: the 2040 Freight Industry Level Forecasts Study (completed in 2012) and the Regional Freight Commodity Profiles Study (completed in 2015).

This study helps identify locations with concentrations of goods movement activity and where they will occur in the future; the types of commodities that are and will be moving through the region; and where strategic investments should be considered to support economic growth and enhance regional resiliency. The results of this work will serve as background for the NJTPA's next Long Range Transportation Plan as well as freight planning and subregional planning studies.

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

This Freight Profile is one of a series of profiles, representing 12 freight commodity bundles in the 13-county NJTPA region.

This document was prepared by the NJTPA with funding from the Federal Transit Administration and the Federal Highway Administration. The NJTPA is solely responsible for its contents.