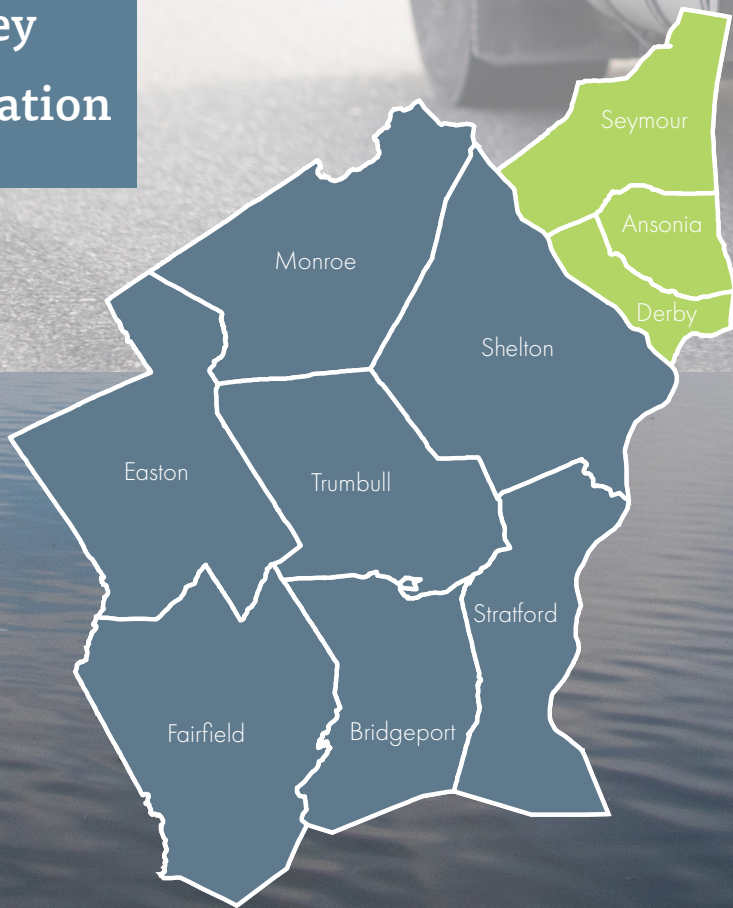




freight profile

Greater Bridgeport and Valley
Metropolitan Planning Organization



Introduction.....3

Table 1: Population, Employment & Income.....3

Greater Bridgeport & Valley5

Table 2: Roadway Mileage by Functional Classification.....6

Table 3: National Highway System (NHS) Mileage6

Figure 1: GBVMPO Transportation Facilities7

Figure 2: GBVMPO, Employment by Industry.....9

Table 4: Population, Employment & Income by Municipality.....9

Table 5: Businesses & Employees by Industry | 2025..... 10

Figure 3: GBVMPO, Freight Intensive Businesses..... 11

Fairfield County.....13

Figure 4: Fairfield County Commodities by Tonnage | 2023 13

Figure 5: Top Origins and Destinations of Freight Tonnage, Fairfield County | 2023 14

Table 6: Freight Volume Summary Fairfield County | 2023 14

Figure 6: Mode Split, Tonnage, Fairfield County | 2023 ... 15

Figure 7: Highway Link Analysis, Fairfield County | 2023... 15

Table 7: Top 10 Outbound Commodities, Tons | 2050..... 16

Table 8: Top 10 Inbound Commodities, Tons | 2050 16

Figure 8: Fairfield County Commodities by Tonnage | 2050..... 17

Figure 9: Top Origins and Destinations of Freight Tonnage, Fairfield County | 2050..... 18

Figure 10: 2023-2050 Growth (percentages)..... 18

Figure 11: Freight Tonnage by Mode & Direction | 2050 .. 19

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Cover photos: Adobe Stock

New Haven County 20

Figure 12: New Haven County Commodities by Tonnage | 2023 20

Figure 13: Top Origins and Destinations of Freight Tonnage, New Haven County | 2023.....21

Table 9: Freight Volume Summary, New Haven County | 2023 22

Figure 14: Mode Split, Tonnage, New Haven County | 2023 22

Figure 15: Highway Link Analysis, Fairfield County | 2023 23

Table 10: Top 10 Outbound Commodities, Tons | 2050 ... 24

Table 11: Top 10 Inbound Commodities, Tons | 2050..... 24

Figure 16: New Haven County Commodities by Tonnage | 2050..... 25

Figure 17: Top Origins and Destinations of Freight Tonnage, New Haven County | 2050 26

Figure 18: 2023-2050 Growth (percentages)..... 26

Figure 19: Freight Tonnage by Mode & Direction | 2050..... 27

Acknowledgments 28

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INTRODUCTION

Purpose

The purpose of this Freight Profile is to provide an overview of freight activity and movements in the Greater Bridgeport and Valley Metropolitan Planning Region, which is made up of the Cities of Ansonia, Bridgeport, Derby and Shelton and the Towns of Easton, Fairfield, Monroe, Seymour, Stratford, and Trumbull in the State of Connecticut.

Data & Methodology

This Freight Profile offers a snapshot of key metrics – Economy and Land Uses, Freight Flows, and Freight Transportation Networks in 2023 and forecasted for 2050. ,

Data sources include:

- S&P Global’s Transearch Connecticut 2023 and 2050 forecasts. **Data is presented at the county level.**
- ESRI’s Business Analyst. **Data is presented at the MPO level.**
- US Census’s American Community Survey. **Data is presented at multiple geographic scale.**

In addition to county level data, this profile presents state level data for context where appropriate.

OVERVIEW OF THE GREATER BRIDGEPORT & VALLEY REGION

As of 2024, the Region:

- Had 419,557 people
- Had 341,609 people over age 16
- Had 211,371 people who are employed
- An average median household income of \$106,042

FAIRFIELD & NEW HAVEN COUNTIES

In 2023 combined, the 2 counties had nearly 62 million tons of freight shipped or received

- Fairfield County: 30.2 million tons, valued at \$58.3 billion.
- New Haven County: 31.5 million tons, valued at \$51.9 billion.

Table 1: Population, Employment & Income

	UNITED STATES	CONNECTICUT	GBVMPO REGION	FAIRFIELD COUNTY	NEW HAVEN COUNTY
Population	334,922,499	3,624,508	419,557	968,227	867,469
Population over 16	270,181,636	2,985,163	341,609	783,330	716,214
Employed Population	161,297,155	1,849,864	211,371	497,692	434,156
Median Household Income	\$80,734	\$95,781	\$106,042	\$132,391	\$91,985

American Community Survey 2020-2024

This profile utilizes the State of Connecticut’s 2022-2026 State Freight Plan Update framework to identify “freight intensive” industries in the region: goods industries and transportation and warehousing. Goods industries are defined as those that “predominately produce, and thus move, physical goods, including agriculture, mining, utilities, construction, manufacturing, and wholesale and retail trade.” Services industries are defined as those industries that “also produce physical goods, but to a smaller relative extent, and include information, finance, management, education, health care, etc. Generally, services industries are relatively less freight intensive.”

This document is meant to be consistent with and complementary to the Connecticut Department of Transportation’s Statewide Freight Plan 2022-2026

"FREIGHT INTENSIVE" INDUSTRIES

Freight intensive industries include goods industries and transport and warehousing. Goods industries are defined as those that “predominately produce, and thus move, physical goods...”

(an update is occurring for 2026). The goals and objectives are listed below.

CT FREIGHT PLAN: GOALS & OBJECTIVES

[Click for Plan](#)

1: Safety & Security

Enhance the safety and security of the freight transportation system in all modes.

2: Economic Competitiveness & Efficiency

Support economic competitiveness, efficiency, and development through investment in the freight transportation system. Enhance goods movement efficiency into, out of, and throughout the state. Work with the private sector to identify needs and deficiencies.

3: Optimized Operations, Performance, & Resiliency

Attain and maintain adequate capacity and operational efficiency in the CT freight system. Support the use of ITS and technologies. Improve freight system resiliency and redundancy to extreme weather and natural disaster events or changes in travel demand. Improve intermodal connections.

4: State of Good Repair

Proactively maintain freight system infrastructure to preserve CTDOT’s capital investments.

5: Equity, Environmental Protection, & Livability

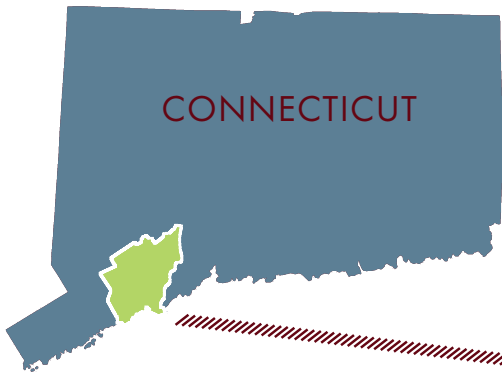
Mitigate freight movement impacts on communities located near freight facilities or freight corridors. Reduce freight-transportation-related GHG emissions. Increase electric vehicle charging and alternative fuel infrastructure. Reduce impacts of freight movement on flooding and stormwater runoff. Reduce impacts of freight movement on wildlife habitat loss.

6: Program and Service Delivery

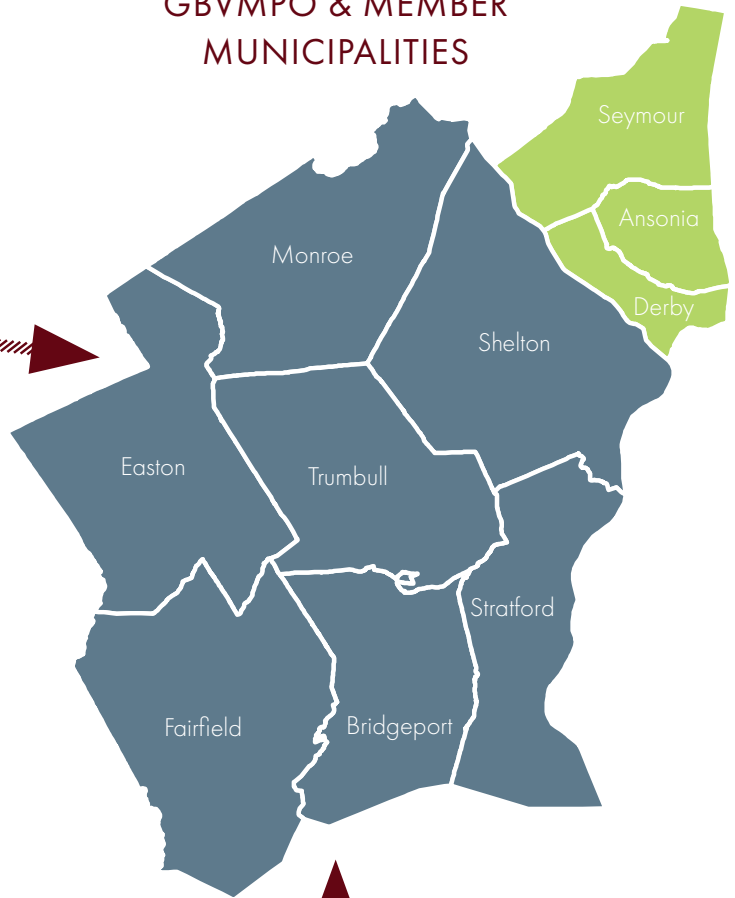
Deliver projects and services faster, cost-effectively and with greater customer satisfaction. Create strong partnerships with state agencies, local governments, neighboring states, and the private sector to foster collaboration, improve program delivery and facilitate public-private partnerships.

GREATER BRIDGEPORT & VALLEY

REGIONAL CONTEXT & OVERVIEW



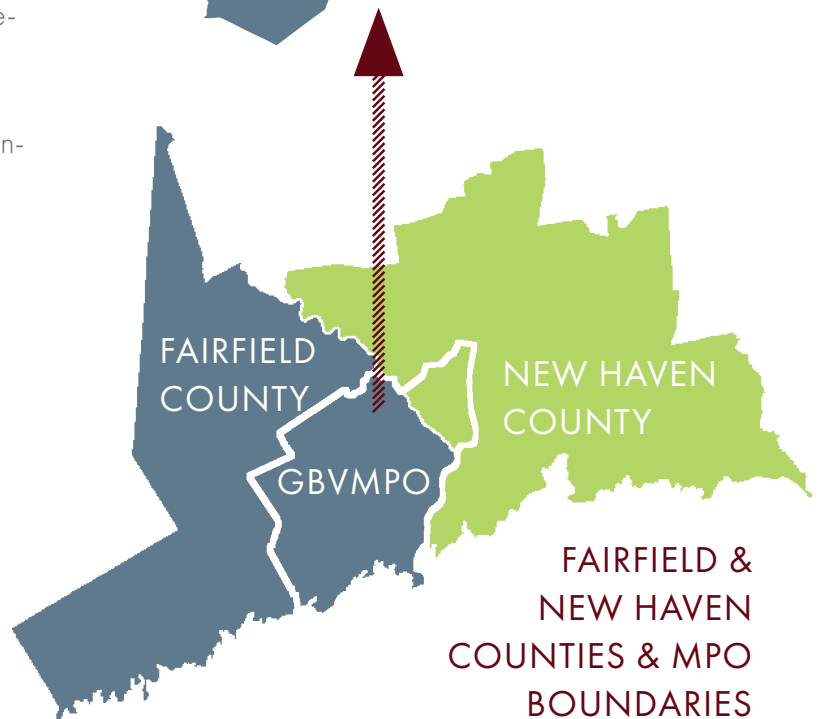
GBVMPO & MEMBER MUNICIPALITIES



At 196.6 square miles, the Greater Bridgeport and Valley region is not a large region in the third smallest state in the nation: Connecticut is 5,543 square miles; the land area of the MPO makes up less than 4% of the state. However, the region is one of the more densely populated areas of Connecticut and makes up over 10% of the state’s population.

The MPO is partially located in two counties:

- 7 municipalities in Fairfield County (Bridgeport, Easton, Fairfield, Monroe Derby, Shelton, Stratford, and Trumbull)
- 3 municipalities in New Haven County (Ansonia, Derby, and Seymour)



Freight Facilities

SURFACE ROADS

The Interstate System and trucks are the primary facilitators of freight movement in the state and region. In Connecticut, the National Highway System (NHS) makes up 7% of state-maintained roads but are some of the most heavily traveled. In the GBVMPO region, there are 1,969.5 total roadway miles, including 48.7 interstate miles, which makes up 2.4% of all roadway miles (Table 2). The 198.8 miles of NHS roadway makes up 10% of all roadway miles (Table 3).

The Primary Highway Freight System (PHFS) is a network of highways identified as the most critical highway portions of the U.S. freight transportation system. I-95 is the only PHFS facility that runs through the region: I-95 from the New York/Connecticut border to New Haven and I-91 between New Haven and Hartford carry the heaviest overall truck volumes in the region. Other PFHS facilities in the state include I-91, I-684, I-84 and CT-32.

NHS facilities not on the PFHS include CT-8, CT-25, US-1 and several other arterials. Although they are less critical to national freight movement than I-95, they are also utilized by commercial carriers. Locally-maintained, non-NHS roads provide access from interstates and arterials to factories, stores, warehouses, distribution centers and intermod-

FREIGHT FACILITIES IN THE GREATER BRIDGEPORT & VALLEY REGION

Surface Roads: Interstate 95, CT-8, CT-25, US-1 and several other arterials are utilized by commercial carriers. The Fairfield Service Plazas on I-95 provides truck parking and some rest facilities.

Water: The Port of Bridgeport is a commercial harbor with infrastructure and facilities for access to Long Island Sound and Marine Highway M-295.

Rail: The Maybrook rail line is operated by the Housatonic Railroad and has an interchange in Derby. Metro North's New Haven Main Line and Waterbury Branch Line and Amtrak's Northeast Corridor are primarily utilized for passenger service.

Air: Sikorsky Memorial Airport is a regional general aviation airport that supports a variety of private air carrier services.

Table 2: Roadway Mileage by Functional Classification

FUNCTIONAL CLASSIFICATION	TOTAL MILES
Interstate	48.7
Local	1280.8
Major Collector	207.9
Minor Arterial	235.6
Minor Collector	11.4
Other Freeway and Expressway	124.5
Other Principal Arterial	60.6
Total	1969.5

CTDOT Roadway Classification and Characteristic Data, 2026

Table 3: National Highway System (NHS) Mileage

NHS ROAD TYPE	TOTAL MILES
Major Ferry Terminal	0.9
Non Connector NHS	159.5
Ramp	37.9
Ramp Serving as Mainline	0.4
Total	198.8

CTDOT National Highway System, 2024

al transfer points (first and last-mile connections). Trucks are prohibited from using CT-15 (Merritt Parkway).

TRUCK PARKING

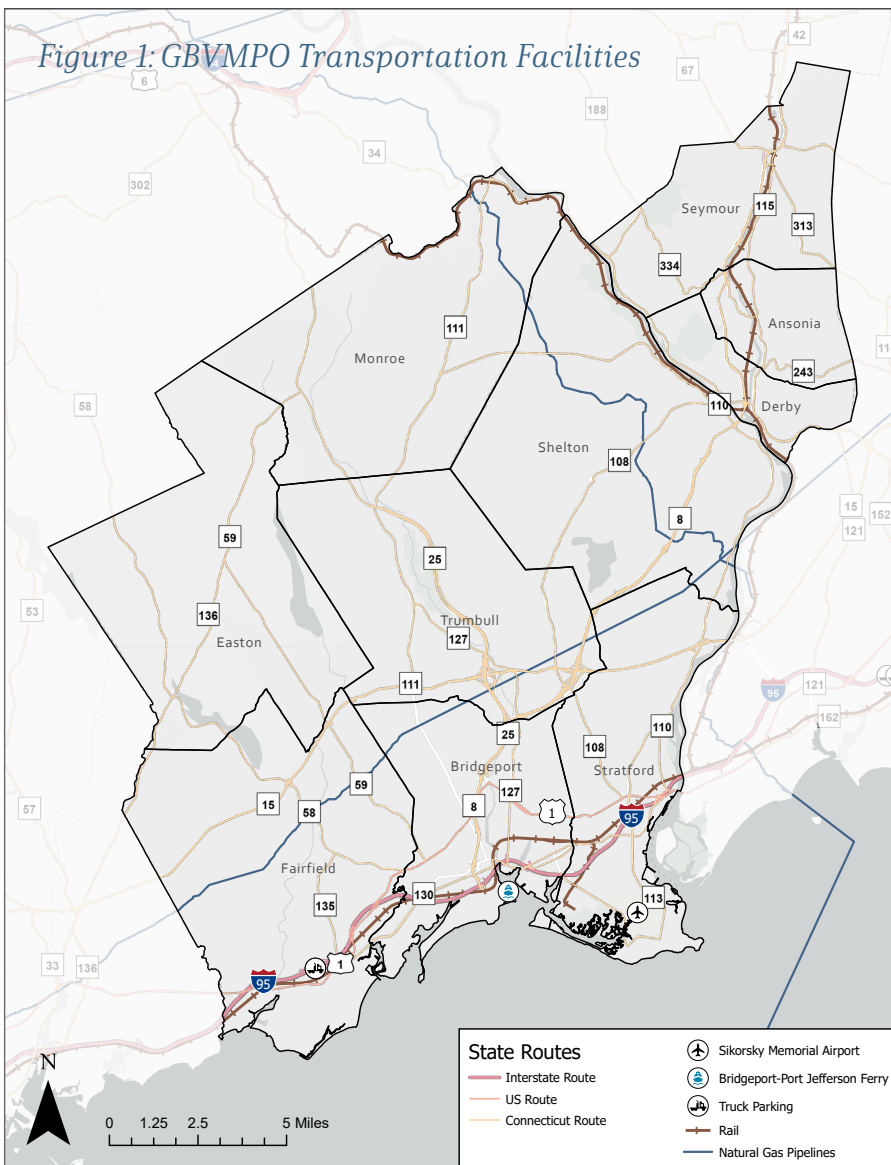
Reliable access to designated parking and services such as restrooms, food and fuel are critical to ensure that truck drivers are able to safely and efficiently operate their vehicles. To comply with Federal Motor Carrier Safety Administration (FMCSA) hours-of-service regulations, truck drivers need uniform availability of designated truck parking that meets demand and real-time informa-

tion about availability. Well lit, secure parking in designated areas with necessary facilities ensures safety for all road users.

Parking locations are uniformly distributed along the I-95 corridor, but uniformity varies on other corridors in the state. In the immediate region, the I-95 SB and NB Fairfield Service plazas each provide restrooms, food, fuel, and 20 overnight spaces. A survey and data collection conducted through the Statewide Freight Plan found that peak rate utilization is under 25%, which indicates that the supply typically meets peak-hour demand.

Demand was found to be higher closer to the New York state border - truck drivers may feel that Fairfield is not close enough, especially with the unknown delays that I-95 congestion may cause. The Darien service plazas have a utilization rate that exceeds 75% during the peak hour, and parking in undesignated locations proximate to the NB plaza has been identified as an issue. These plazas have a similar amount of parking and services as the Fairfield plazas but may be more reliable for on-time deliveries during peak congestion periods. East of the region in Milford, the privately-owned Pilot Travel Center provides 150 spaces, all standard services and showers, laundry, and truck washes.

Future demand for truck parking is likely to increase and additional services should be considered, such as showers, laundry, and truck wash stations at public locations - essential for long-haul truck drivers. As fleets convert to elec-



tric or alternative fuels, charging equipment and sufficient infrastructure to provide power should be considered as additional truck parking is planned.

The MAP Forum's Freight Working Group has been active in planning for truck parking; a truck parking inventory is available at <https://map-forum-njt-pa.hub.arcgis.com/pages/freight>.

FREIGHT RAILROADS

Rail is the next highest facilitator of freight movement in the state. Rail freight in Connecticut is operated by the private sector. Freight rail right-of-way is owned by freight rail companies, CTDOT, Amtrak and a municipality (2 miles in Bristol). As owner of the New Haven Line, CTDOT leases rights to CSX for freight operations. Similar to I-95 from the New York line to New Haven, the New Haven Line via CSX transports the most freight tonnage in the state. However, due to extensive passenger rail service, opportunities to use the track for freight is limited.

For freight-specific rail in the region, the Maybrook line begins in Danbury and connects to the Waterbury and Pan Am Southern freight lines immediately south of the Derby/Shelton passenger rail station. The Housatonic Railroad Company owns this line, and it maintains it at FRA Class 1 track standards, which allows for maximum speeds of up to 10 miles per hour for freight. The carload weight limit is 286,000 pounds (the standard maximum allowed by the FRA).

BRIDGEPORT HARBOR

The Port of Bridgeport is one of three deep water ports in Connecticut and includes two natural harbors, Black Rock Harbor and Bridgeport Harbor. Black Rock Harbor is primarily recreational, while Bridgeport Harbor includes a ferry terminus, pri-

mate marinas, ship repair and maintenance facilities, tank farm, and construction firms. Bridgeport Harbor is a designated Primary Highway Freight System Intermodal Connector on the NHS. Petroleum products are currently transported to a fuel terminal and tank farm via the port. While some water-borne freight activity occurs at Bridgeport and New Haven Harbors, the Port Authority of New York and New Jersey (PANYNJ) is the most significant handler of water-borne freight in the tri-state region.

AIR CARGO SERVICES

In Connecticut, air cargo mostly passes through Bradley International Airport (BDL) in Windsor Locks, which is over 70 miles from Sikorsky Memorial Airport in Stratford. BDL is the only airport in the state that has regularly scheduled commercial freight service. The Sikorsky Memorial Airport (owned by the City of Bridgeport) is a general and commercial aviation airport serving general and corporate activity. Air cargo services are relatively limited and the proximity of the region to the New York airports and Bradley Airport north of Hartford acts as another limiting factor.

Population, Employment & “Freight Intensive” Industries

The US Census American Community Survey provides data on population, employment, income and the types of employment people have (Table 4). The location of this employment is not confined to within the region; the data presented in Figure 2 shows the role the freight economy plays in employing the region’s population (the graph does not indicate the number or percentage of jobs in the region). Of the 211,371 people employed in the region, 35% are employed in

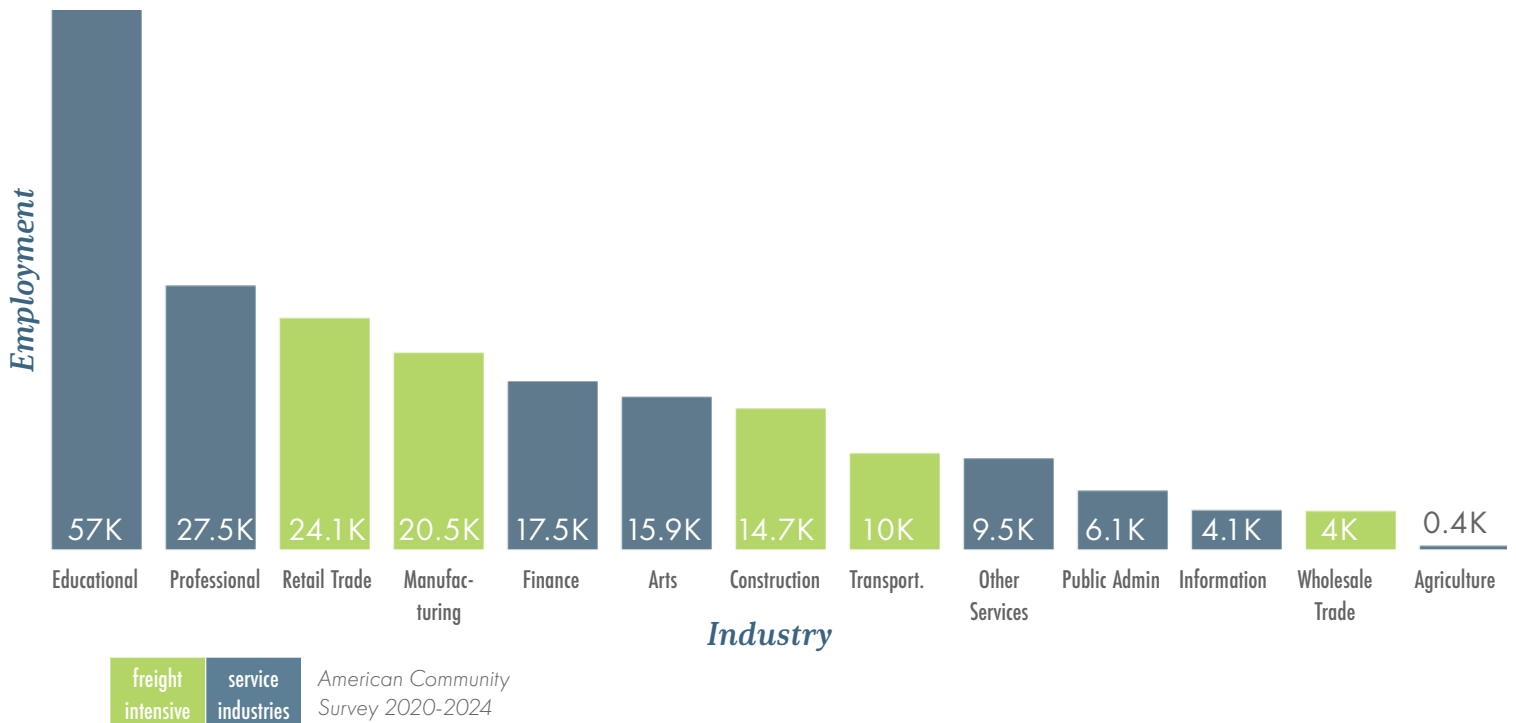
Table 4: Population, Employment & Income by Municipality

MUNICIPALITY	POPULATION	POPULATION OVER 16	EMPLOYED	MEDIAN HOUSEHOLD INCOME
Ansonia	19,033	15,907	10,024	\$85,877
Bridgeport	149,153	121,980	74,697	\$58,685
Derby	12,487	10,930	6,730	\$79,500
Easton	7,670	5,966	3,947	\$222,604
Fairfield	63,416	50,167	30,134	\$172,432
Monroe	18,949	14,530	9,979	\$157,250
Seymour	16,889	14,144	9,262	\$107,708
Shelton	41,889	34,793	21,523	\$108,185
Stratford	52,790	44,473	27,337	\$95,815
Trumbull	37,281	28,719	17,738	\$163,073
Total	419,557	341,609	211,371	\$106,042

American Community Survey 2020-2024

“freight intensive” industries, such as retail trade, manufacturing, construction, transportation and warehousing, and wholesale trade. About 65% are employed in service industries.

Figure 2: GBVMPO, Employment by Industry



ESRI's Business Analyst is a proprietary service that includes data on the types of businesses and number of employees in a geographic area. Table 5 summarizes the number and percentage of businesses and employees by industry for the GBVMPO region. It is important to note:

- Freight intensive industries are highlighted in green.
- Employees may live within or outside of the region.

There are over 5,000 freight intensive businesses estimated in the region. These businesses make up 29% of businesses in the region. By number of businesses, construction and retail trade make up the greatest share of those that are freight intensive. Over 55,000 people are estimated to be employed by freight intensive businesses, which makes up 33% of the number of jobs in the region. Manufacturing and retail trade make up the greatest share of freight intensive employers (by number of employees). The corporate headquarters and manufacturing facility for Sikorsky Aircraft (Lockheed Martin) are located in the north of Stratford: over 7,000 people are employed by Sikorsky.

Table 5: Businesses & Employees by Industry | 2025

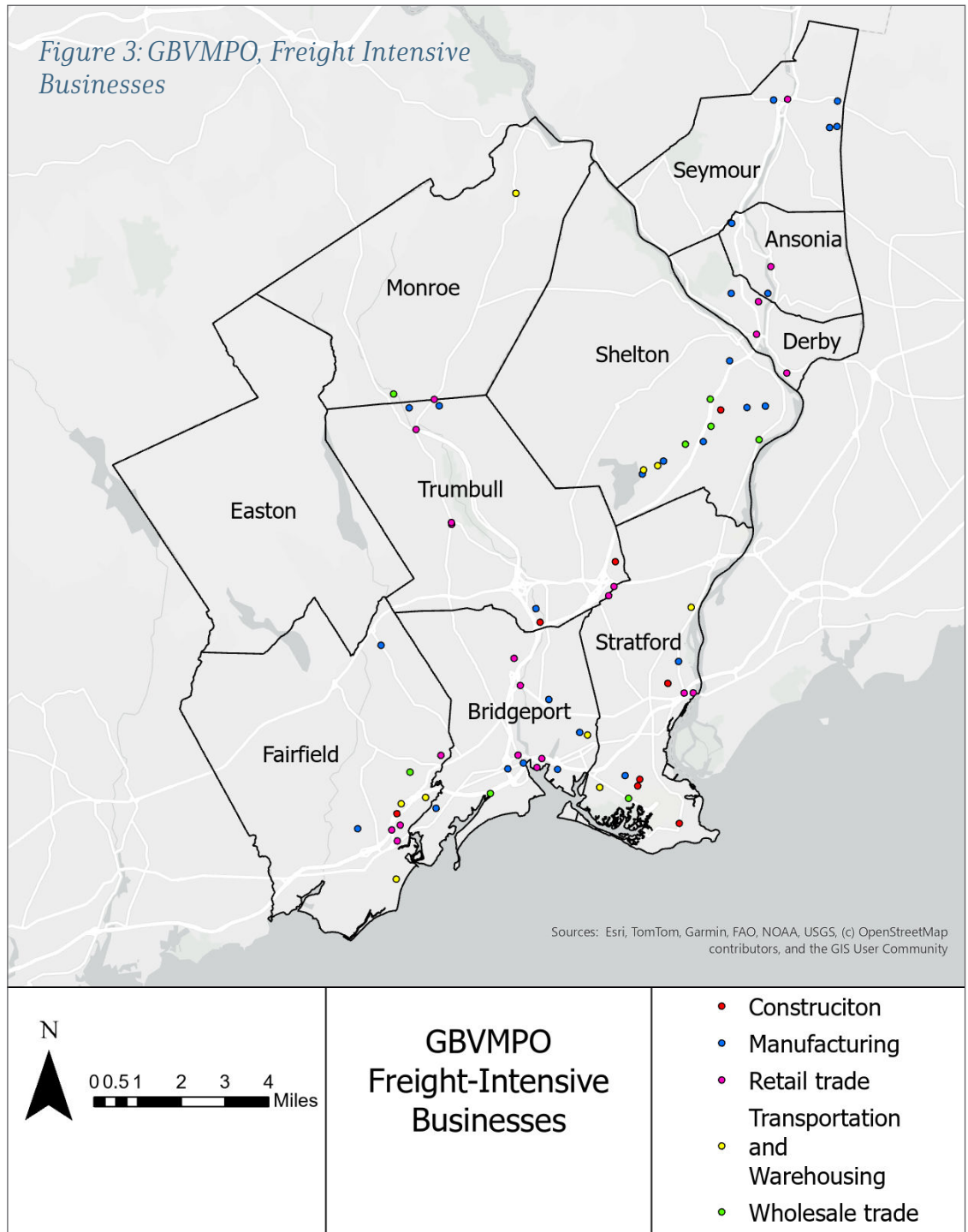
INDUSTRY	BUSINESSES		EMPLOYEES	
	NUMBER	%	NUMBER	%
Accommodation & Food Services	1,212	7.1%	10,660	6.4%
Administrative, Support & Waste Mgmt	817	4.8%	4,832	2.9%
Agriculture, Forestry, Fishing & Hunting	35	0.2%	121	0.1%
Arts, Entertainment & Recreation	359	2.1%	3,108	1.9%
Construction	1,754	10.2%	8,423	5.1%
Educational Services	464	2.7%	14,404	8.7%
Finance & Insurance	770	4.5%	5,178	3.1%
Health Care & Social Assistance	1,811	10.6%	30,417	18.4%
Information	324	1.9%	5,809	3.5%
Management of Companies	50	0.3%	343	0.2%
Manufacturing	615	3.6%	20,447	12.4%
Mining	10	0.1%	242	0.1%
Other Services Except Public Admin	2,322	13.6%	11,064	6.7%
Professional, Scientific & Tech Services	1,826	10.7%	11,148	6.7%
Public Administration	491	2.9%	7,766	4.7%
Real Estate, Rental & Leasing	765	4.5%	4,828	2.9%
Retail Trade	1,871	10.9%	17,551	10.6%
Transportation & Warehousing	292	1.7%	4,217	2.5%
Unclassified Establishments	846	4.9%	116	0.1%
Utilities	15	0.1%	248	0.1%
Wholesale Trade	480	2.8%	4,493	2.7%
Grand Total	17,129		165,415	
Freight Intensive	5,012	29.2%	55,131	33.3%

ESRI Business Analyst, 2025

FREIGHT INTENSIVE BUSINESSES

Figure 3 shows the freight intensive businesses in the region with over 100 employees, using data from the Connecticut Department of Labor. Most of these businesses are concentrated within the vicinity of major roadways. Sikorsky Aircraft (Lockheed

Martin), located in Stratford, has the highest number of employees. Other major businesses include manufacturing companies such as Bic USA Inc. and Revvity in Shelton and retail trade stores such as Walmart, Big Y, and Home Depot, which have multiple locations throughout the region.



Freight Performance

The Congestion Management Process for the Bridgeport-Stamford, CT-NY Urbanized Area Transportation Management Area (2023) and future updates identified the principal transportation arterials in the Greater Bridgeport and Valley Region as I-95, CT Route 8, and CT Route 25. Principal arterials in proximity to the region include I-84 and US Route 7.

The CMP outlined peak congestion times for each arterial; for example, for I-95, southbound congestion is more apparent in the morning and early afternoon, while northbound congestion is more concentrated in the afternoon and early evening. The CMP also outlines the level of travel time reliability, which is closely related to congestion, and confirms that I-95 is the most unreliable: southbound in the morning and northbound in the afternoon. Route 25 is also highly unreliable, particularly for southbound travel.

Freight movement is assessed by the Truck Travel Time Reliability (TTTR) index. The Truck Travel Time Reliability metric is the ratio of long travel times (95th percentile) to a normal travel time (50th percentile). The longest travel times are in the 100th percentile. This measure considers factors that are unique to the trucking industry, including:

- Use of the system during all hours of the day;
- High percentage of travel in off-peak periods; and
- Need for shippers and receivers to factor in more 'buffer' time into their logistics planning for on-time arrivals.

The TTTR is a measure of truck travel time reliability, not congestion. Segments of the highway that are regularly and predictably congested will not have a high TTTR index number. Rather, those segments of highway where delays are unpredictable and

severe are scored highest. The TTTR index only applies to roads on the National Highway System. The time-period with the highest TTTR is used to determine the overall segment's TTTR, which is weighted by the segment length. The TTTR five statutorily defined time periods are:

- AM peak period (Monday – Friday 6 am – 10 am)
- Mid-day period (Monday – Friday 10am – 4pm)
- PM peak period (Monday – Friday 4pm – 8pm)
- Overnight (All Days 8pm – 6am)
- Weekends (Saturday – Sunday 6am – 8pm)

A truck travel time reliability index score of 1.5 or lower represents reliable travel time; as of 2024, the score for the region was 2.5. Although the score has slightly improved from 2023, I-95 still has low levels of reliability, particularly in the western portion of the region. This indicates that major road segments for freight travel throughout the region are impacted by traffic and delays.

FAIRFIELD COUNTY

FREIGHT PROFILE

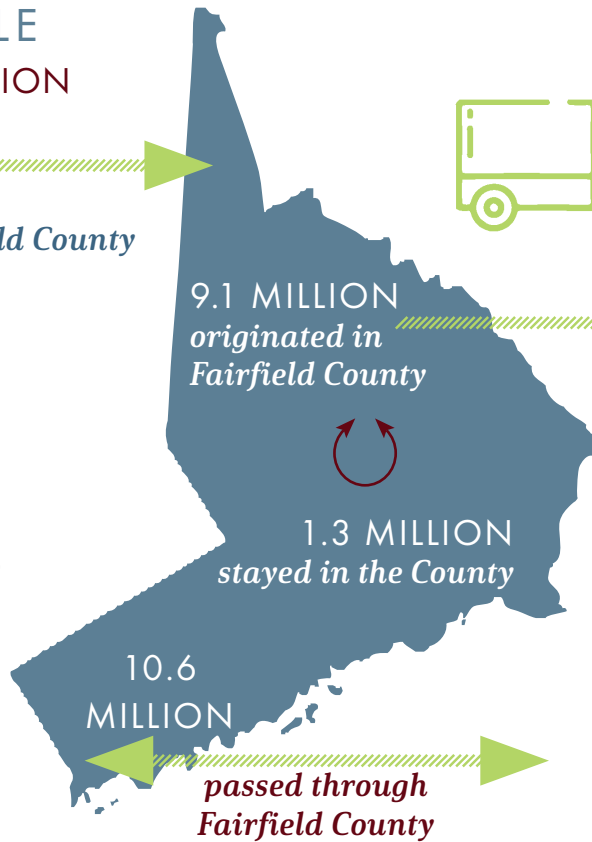
IN **2023**, 21.9 MILLION TONS OF FREIGHT

came from outside & terminated in Fairfield County

- 74%** of this freight was from the Northeast:
- New Jersey: 22%
 - New York: 20%
 - In-state: 16.9%
 - Pennsylvania: 11%
 - Massachusetts: 3.8%

19% consisted of secondary traffic*

19% consisted of non-metallic minerals**



Truck is the primary mode of transport

7.8 MILLION TONS

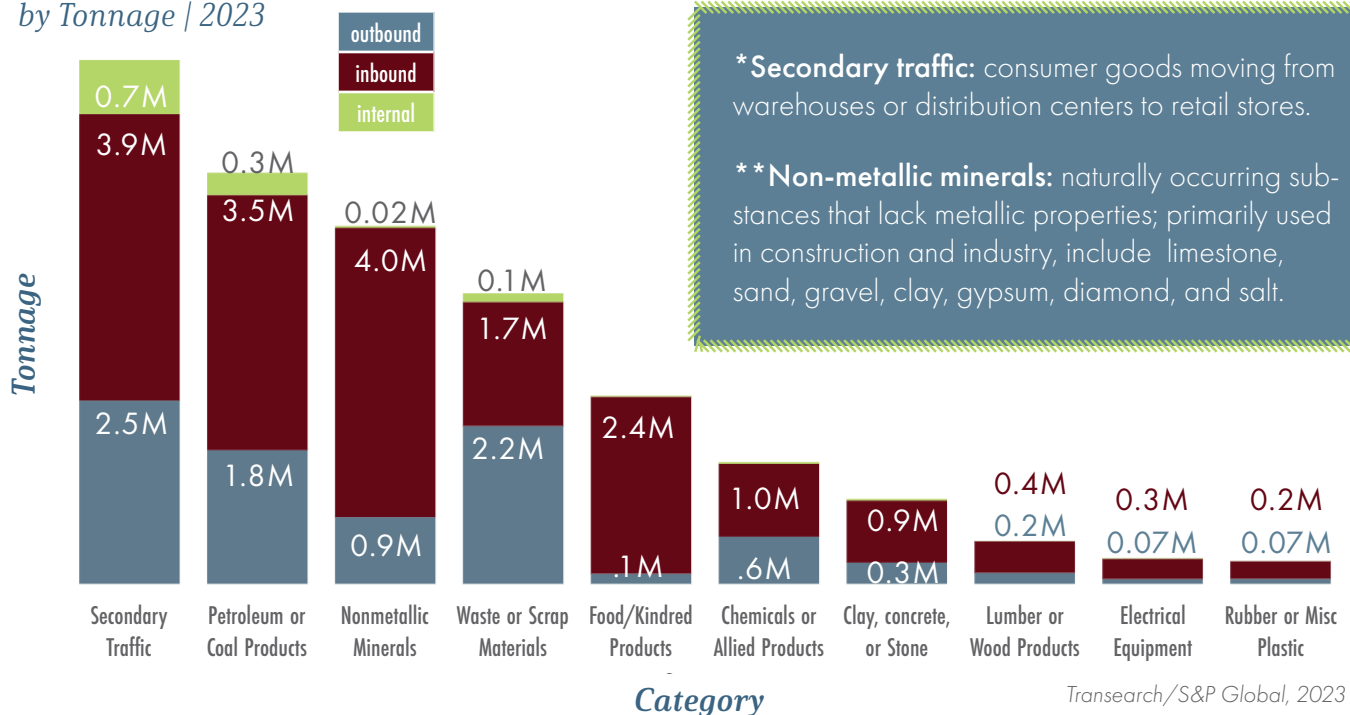
originated in & left Fairfield County

- 90%** of this freight stayed in the Northeast:
- In-state: 33%
 - New York: 28%
 - New Jersey: 14.7%
 - Pennsylvania: 9.8%
 - Massachusetts: 4.8%

28% consisted of secondary traffic*

24% consisted of waste/scrap materials

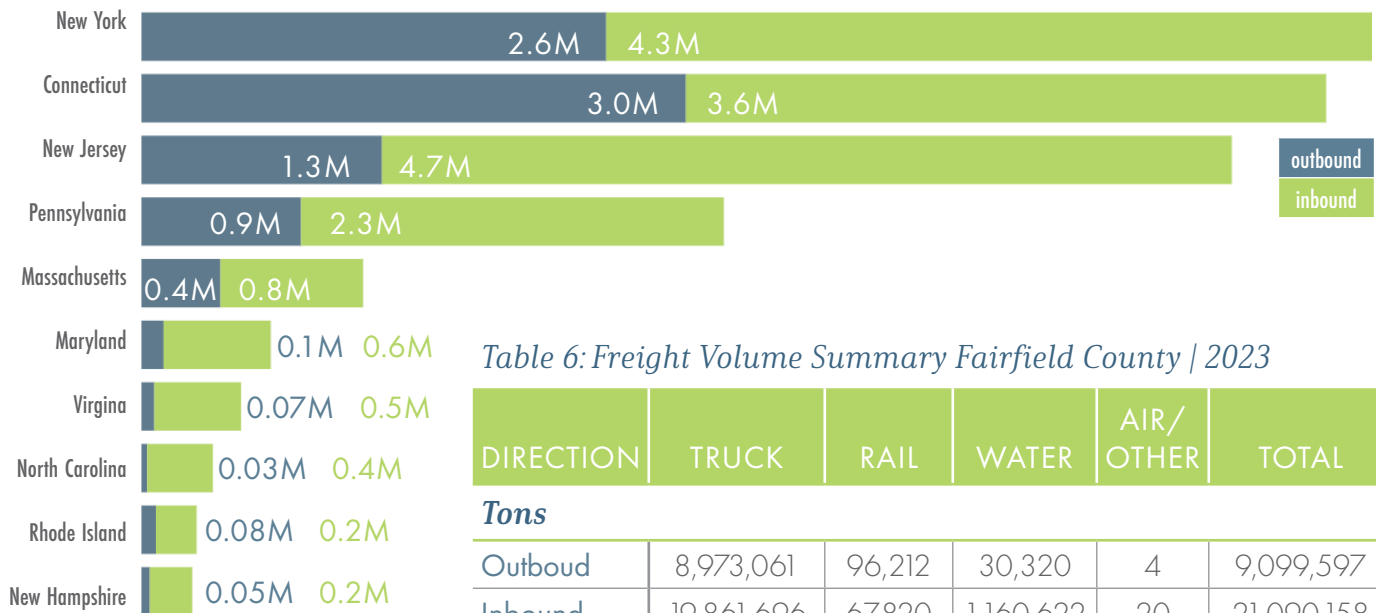
Figure 4: Fairfield County Commodities by Tonnage | 2023



* **Secondary traffic:** consumer goods moving from warehouses or distribution centers to retail stores.

** **Non-metallic minerals:** naturally occurring substances that lack metallic properties; primarily used in construction and industry, include limestone, sand, gravel, clay, gypsum, diamond, and salt.

Figure 5: Top Origins and Destinations of Freight Tonnage, Fairfield County | 2023



Freight Flows

Across all modes of freight (truck, rail, water, and rail), approximately 9.1 million tons of freight originated in Fairfield County while 21.9 million terminated in Fairfield County. Approximately 1.3 million tons of freight originated and terminated in Fairfield County.

Notably, more freight tonnage passes through Fairfield County than originates in it: 10.59 million tons passed through the County in 2023. Truck is the dominant mode for all directions of freight travel.

As detailed on the previous page, 90% of the freight tonnage that originates in Fairfield County primarily terminates in the Northeast. Freight that terminates in Fairfield County follows a similar pattern. Commodities are summa-

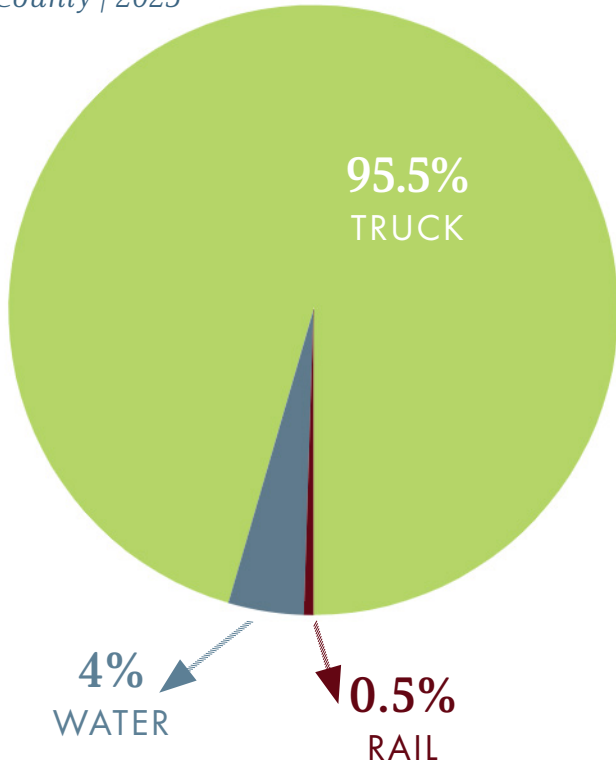
Table 6: Freight Volume Summary Fairfield County | 2023

DIRECTION	TRUCK	RAIL	WATER	AIR/ OTHER	TOTAL
Tons					
Outbound	8,973,061	96,212	30,320	4	9,099,597
Inbound	19,861,696	67,820	1,160,622	20	21,090,158
Intra	1,282,776	5,705	0	0	1,288,481
Through	10,468,653	0	128,767	0	10,597,420
Total	40,586,186	169,737	1,319,709	24	42,075,656
Units					
Outbound	1,096,618	985	0	0	1,097,603
Inbound	1,318,418	919	0	0	1,319,337
Intra	97,464	0	0	0	97,464
Through	1,044,760	0	0	0	1,044,760
Total	3,557,260	1,904	0	0	3,559,164
Value (millions)					
Outbound	\$14,052	\$24	\$57	\$5	\$14,138
Inbound	\$43,046	\$102	\$997	\$3	\$44,147
Intra	\$2,101	\$0	\$39	\$0	\$2,140
Through	\$18,143	\$0	\$92	\$0	\$18,235
Total	\$77,342	\$126	\$1,185	\$8	\$78,660

Transearch/S&P Global, 2023

rized in Figure 4 (previous page) and origins/destinations in Figure 5. A summary of volume, units, and value, by direction and mode is provided in Table 6.

Figure 6: Mode Split, Tonnage, Fairfield County | 2023



Mode Split

For freight traveling to, from, or within Fairfield County, 95.5% travels by truck, 4% travels by water, and 0.5% travels by rail, based on tonnage in 2023 (Figure 6).

Road Segments

Fairfield County’s highway network connects major Connecticut cities, such as Bridgeport and Stamford, to New York and New Jersey through I-95 and Danbury to New York through I-84. I-95 also connects to New Haven, New London, and Rhode Island, while I-84 also connects to Hartford and Massachusetts.

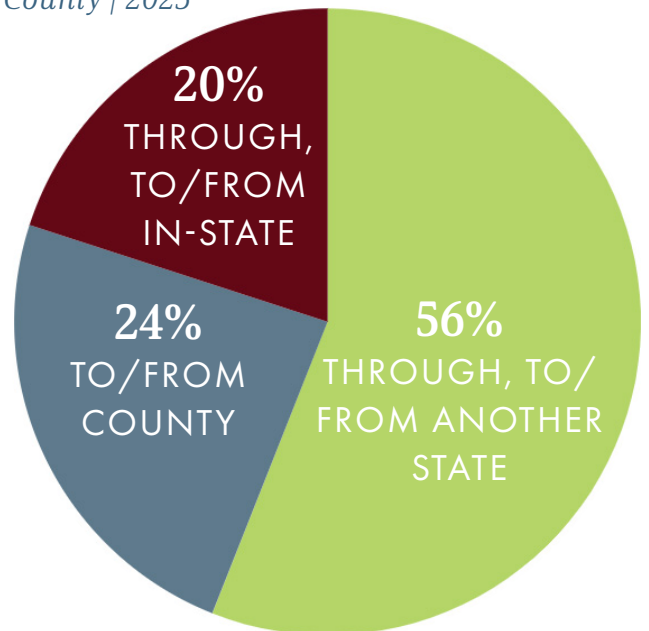
For both outbound and inbound traffic, the road segment with the highest tonnage in 2023 was I-84 from Hartford to Danbury, with between 60-70 million tons. For outbound traffic, the US-7

to I-95 road segment had over 5 million tons in 2023, while CT-58 to I-84 had nearly 1.5 million tons. These road segments also had the highest tonnage for inbound traffic, with nearly 12.5 million tons for the US-7 to I-95 segment and 2.4 million tons for the CT-58 to I-84 segment.

Highway Link Analysis

Different highways can be used by trucks carrying freight in different ways, with some highways having a high percentage of local traffic with others having a high percentage of pass-through traffic. In Fairfield County, 24% of traffic is to or from the county, 20% of traffic is through Fairfield County and to or from other counties in Connecticut, and 56% of traffic is through Fairfield County and to or from other states (Figure 7). This evidence supports Connecticut being a pass-through state.

Figure 7: Highway Link Analysis, Fairfield County | 2023



COMMODITY FLOW FORECAST | 2050

Tonnage, Growth Rate

By 2050 commodity flows out of Fairfield County are expected to increase by 20%, from 9.1 million to 10.9 million, while flows into Fairfield County are expected to increase by 29%, from 21.1 million to 27.2 million tons. Secondary traffic is expected to remain the number one commodity transported by tonnage for both outbound and inbound flows. The highest growth rate overall is expected to be for electrical equipment. Growth rates for most commodity groups are expected to increase from 10% (clay, concrete, glass, or stone) to 120% (electrical equipment). Petroleum or coal products will decrease for both outbound and inbound traffic. Outbound commodity flows are detailed in Table 7. Inbound flows are detailed in Table 8.

Table 7: Top 10 Outbound Commodities, Tons | 2050

COMMODITY	TONS 2023	TONS 2050	GROWTH RATE
Secondary Traffic	2,519,178	3,032,114	20%
Waste or Scrap Materials	2,169,912	2,792,965	29%
Nonmetallic Minerals	917,407	1,388,391	51%
Chemicals or Allied Products	648,299	1,226,151	89%
Petroleum or Coal Products	1,837,421	1,210,885	-34%
Clay, concrete, glass or Stone	291,193	319,462	10%
Food or Kindred Products	139,513	217,680	56%
Electrical Equipment	67,147	145,247	116%
Rubber or Misc Plastics	70,603	112,627	60%
Machinery	51,142	103,902	103%

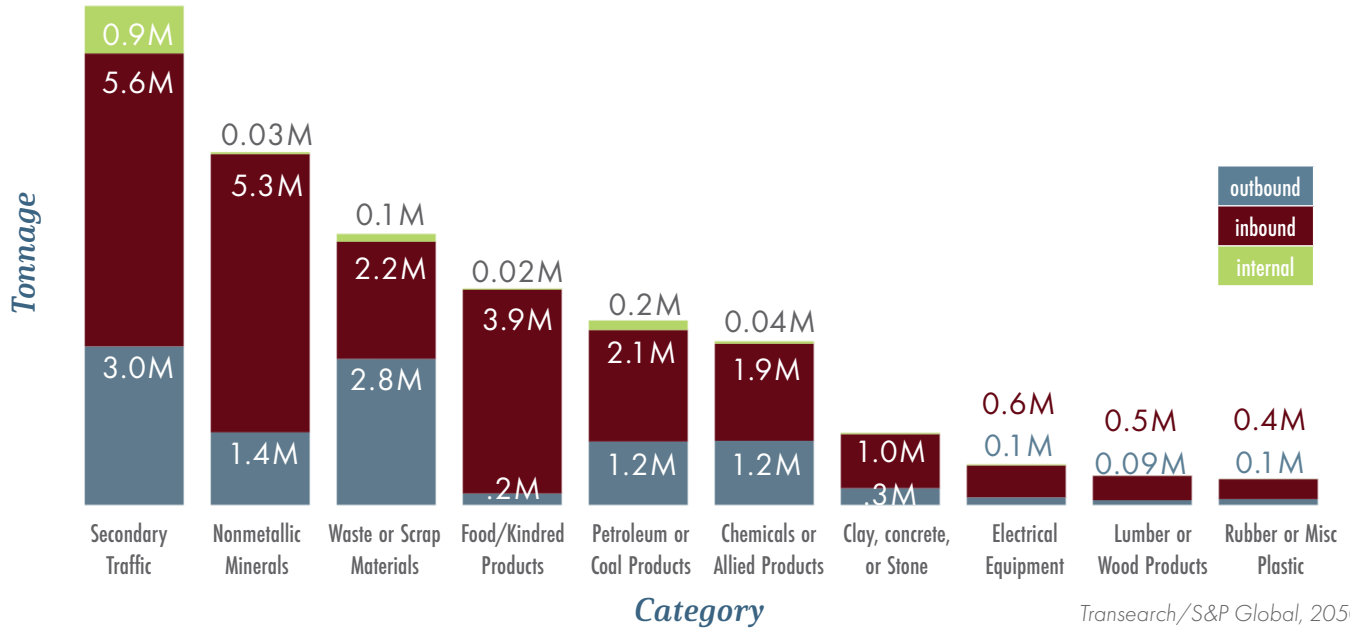
Transearch/S&P Global, 2023 & 2050

Table 8: Top 10 Inbound Commodities, Tons | 2050

COMMODITY	TONS 2023	TONS 2050	GROWTH RATE
Secondary Traffic	3,937,331	5,603,698	42%
Nonmetallic Minerals	3,977,220	5,322,441	34%
Food or Kindred Products	2,432,943	3,900,800	60%
Waste or Scrap Materials	1,705,603	2,241,963	31%
Petroleum or Coal Products	3,507,800	2,135,112	-39%
Chemicals or Allied Products	1,002,194	1,858,680	85%
Clay, concrete, glass or Stone	854,368	1,035,675	21%
Farm Products	738,910	1,011,078	37%
Electrical Equipment	277,689	611,605	120%
Primary Metal Products	326,401	484,697	49%

Transearch/S&P Global, 2023 & 2050

Figure 8: Fairfield County Commodities by Tonnage | 2050



Volumes & Directions

The directional movement of shipments containing the top ten commodities is expected to remain constant as well. In 2050, like 2023, about 28% of outbound commodities consisted of Secondary Traffic, while this consists of 21% of inbound commodities. All other commodities will increase in tonnage or remain relatively constant, with the exception of Petroleum or Coal products, which will decrease. These patterns are summarized in Figure 8.

Figure 9: Top Origins and Destinations of Freight Tonnage, Fairfield County | 2050

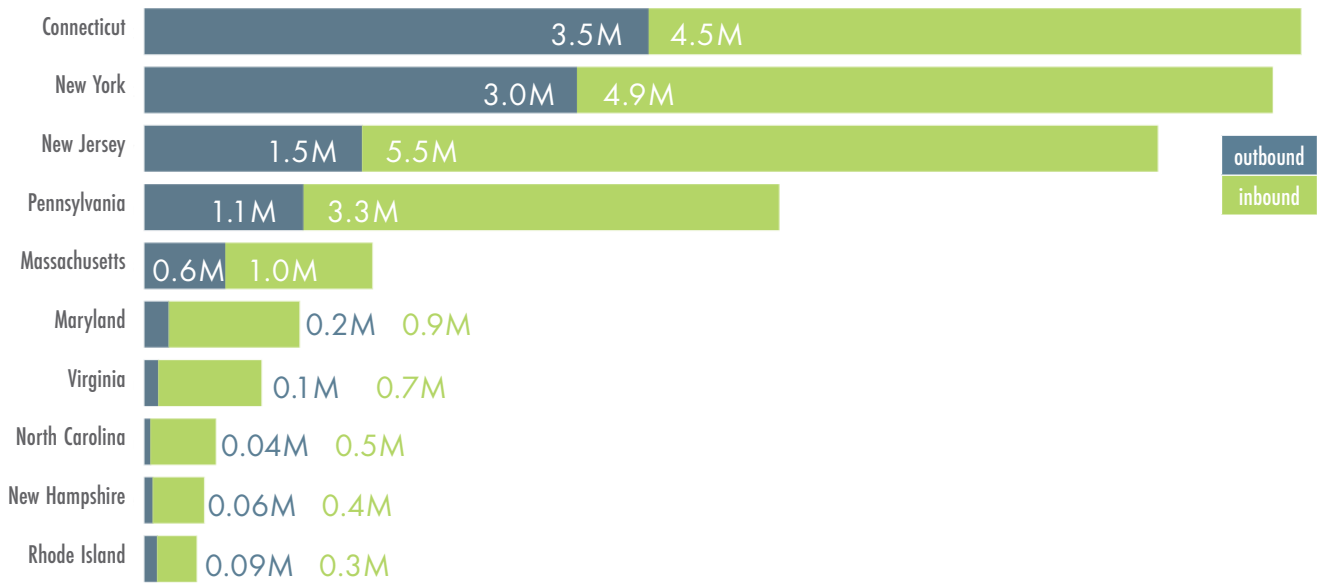
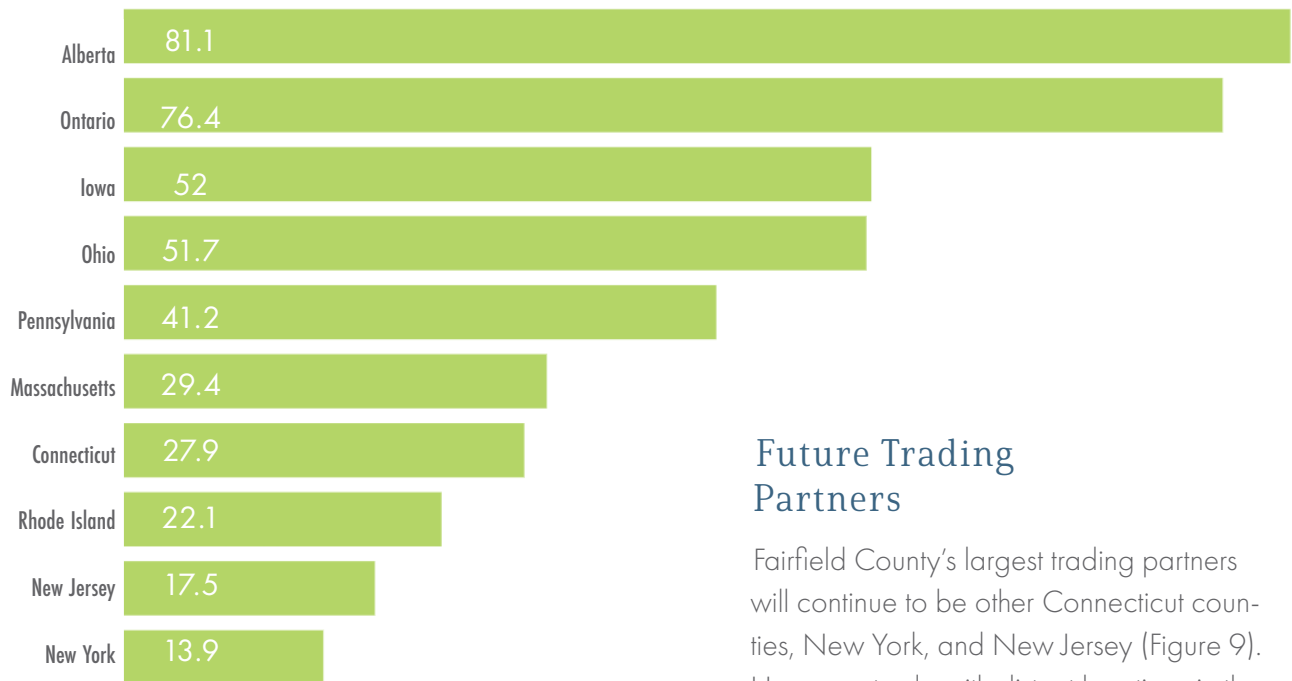


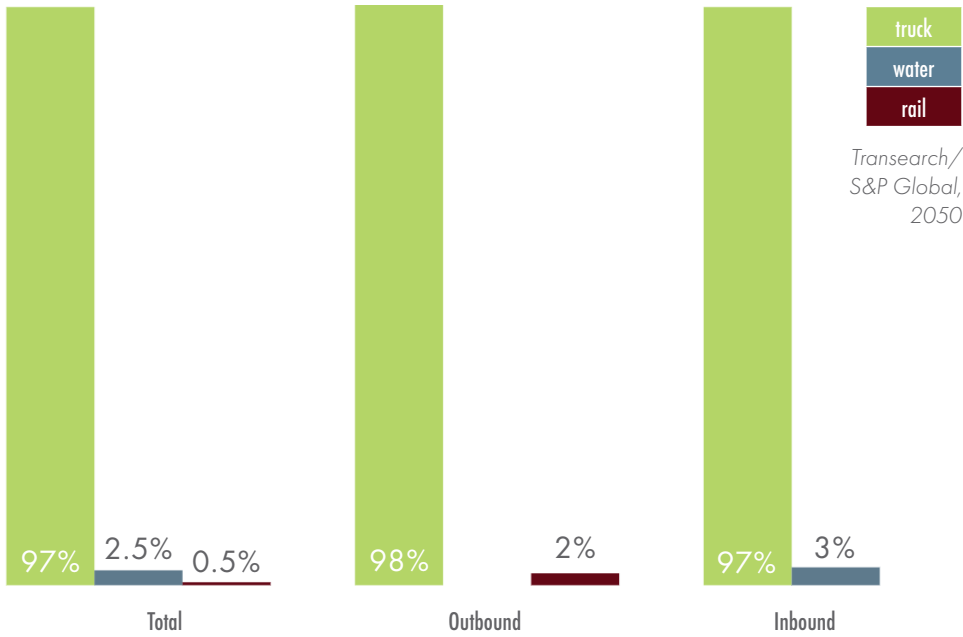
Figure 10: 2023-2050 Growth (percentages)



Future Trading Partners

Fairfield County’s largest trading partners will continue to be other Connecticut counties, New York, and New Jersey (Figure 9). However, trade with distant locations in the Midwest and Canada, such as Ohio, Iowa, and Ontario, is expected to grow faster than trade with New York and New England between 2023 and 2050 (Figure 10).

Figure 11: Freight Tonnage by Mode & Direction | 2050



Future Modes

The forecast anticipates that freight mode splits in 2050 will be similar to 2023 mode splits. Trucks are expected to carry nearly 97% of all freight tons, while water is expected to carry nearly 3% of all freight tons, with less than 1% being carried by rail. Rail will have a slightly higher share among outbound traffic (about 2%) relative to inbound traffic, where it is negligible. Likewise, water will have a higher share among inbound traffic (over 3%) relative to outbound traffic, where it is negligible. Trucks will remain by far the highest mode, rail will take up a small portion of outbound traffic, and water will take up a small portion of inbound traffic. Trucks will carry nearly 100% of intra-County freight (Figure 11).

Future Highway Network Utilizations

In 2050, Fairfield County’s highway network is expected to remain the primary conveyor of freight into, out of, within, and through the County. Tonnage is expected to increase by 1 million from 2023 for the US-7 to I-95 segment for outbound freight, while it is expected to increase by 4 million for inbound freight. Likewise, tonnage for the CT-58 to I-84 segment will increase by 350,000 for outbound freight and over 1 million for inbound freight. The number of trucks traveling on I-84 and I-95 through Fairfield County will increase significantly.

NEW HAVEN COUNTY

FREIGHT PROFILE

IN **2023**, 18.87 MILLION TONS OF FREIGHT



Truck is the primary mode of transport

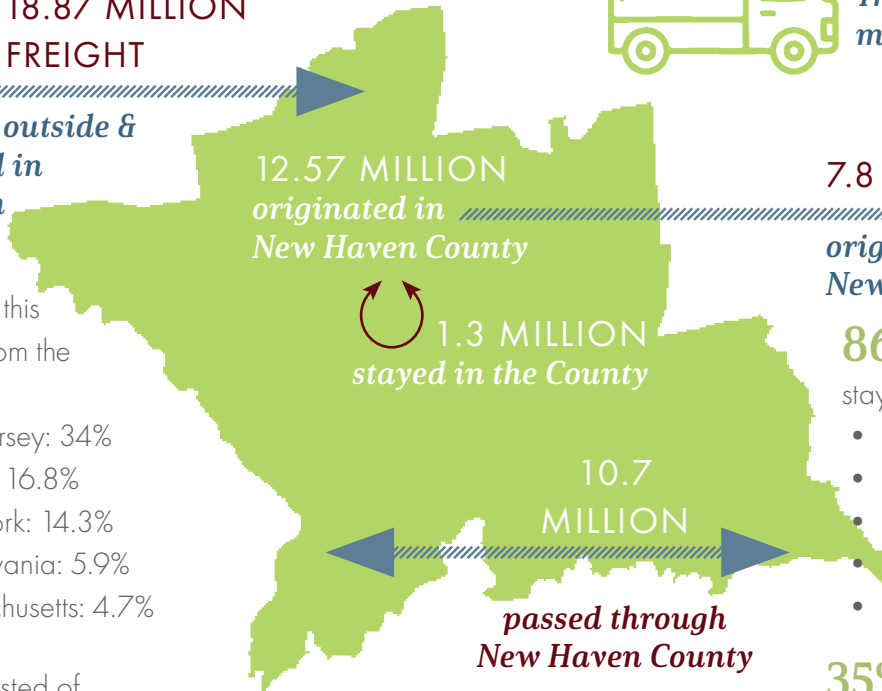
came from outside & terminated in New Haven County

75.8% of this freight was from the Northeast:

- New Jersey: 34%
- In-state: 16.8%
- New York: 14.3%
- Pennsylvania: 5.9%
- Massachusetts: 4.7%

34% consisted of petroleum or coal products

15.5% consisted of non-metallic minerals*



7.8 MILLION TONS originated in & left New Haven County

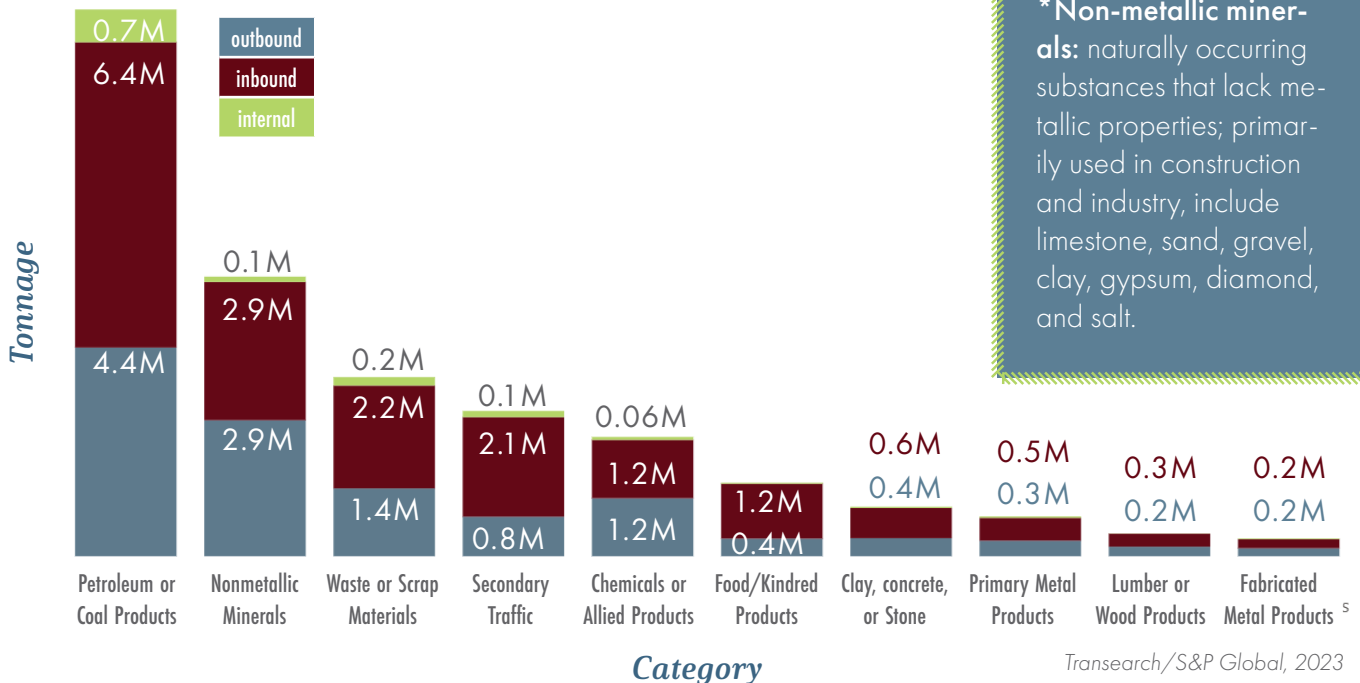
86% of this freight stayed in the Northeast:

- New York: 29%
- In-state: 26%
- New Jersey: 16.6%
- Massachusetts: 8.3%
- Pennsylvania: 5.7%

35% consisted of petroleum or coal products

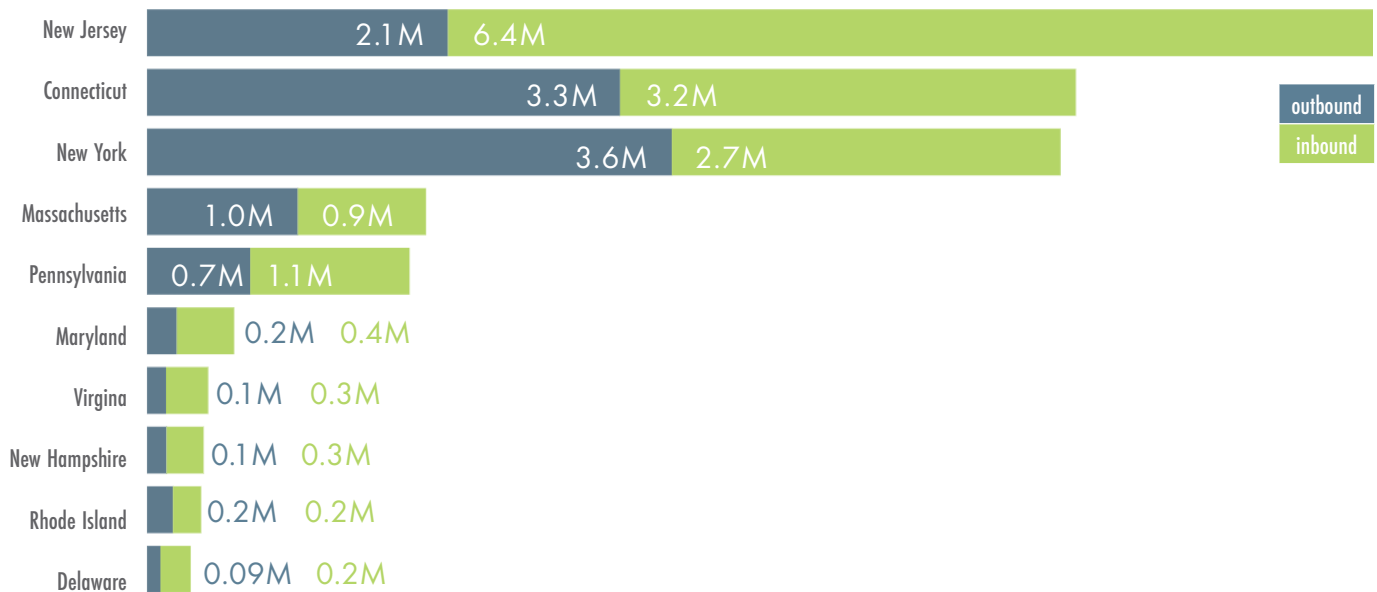
23% consisted of non-metallic minerals*

Figure 12: New Haven County Commodities by Tonnage | 2023



*** Non-metallic minerals:** naturally occurring substances that lack metallic properties; primarily used in construction and industry, include limestone, sand, gravel, clay, gypsum, diamond, and salt.

Figure 13: Top Origins and Destinations of Freight Tonnage, New Haven County | 2023



Freight Flows

Across all modes of freight (truck, rail, water, rail, and pipe), approximately 12.57 million tons of freight originated in New Haven County while 18.87 million tons terminated in New Haven County. Approximately 1.29 million tons of freight originated and terminated in New Haven County.

A significant amount of freight tonnage passes through New Haven County: 10.73 million tons passed through the County in 2023. Truck is the dominant mode for all directions of freight travel. In addition to truck, rail, water, and rail, a small percentage of freight that originates in New Haven County is carried via pipeline.

86% of the freight tonnage that originates in New Haven County primarily terminates in the Northeast: 29% in New York, 26% in Connecticut, 16.6% in New Jersey, 8.3% in Massachusetts, and 5.7% in Pennsylvania. Freight that terminates in New Haven County is predominantly from the Northeast but also includes Canada: 75.8% of freight tonnage that flows into New Haven County is from one of the states listed above. Of the remaining 26%, states

in the top 10 also include New Brunswick (3.1%), Quebec (2.2%), Maryland (2.1%), Virginia (1.6%) and New Hampshire (1.4%).

Commodities are summarized in Figure 12 (previous page) and origins/destinations in Figure 13. A summary of volume, units, and value, by direction and mode is provided in Table 9 (next page).

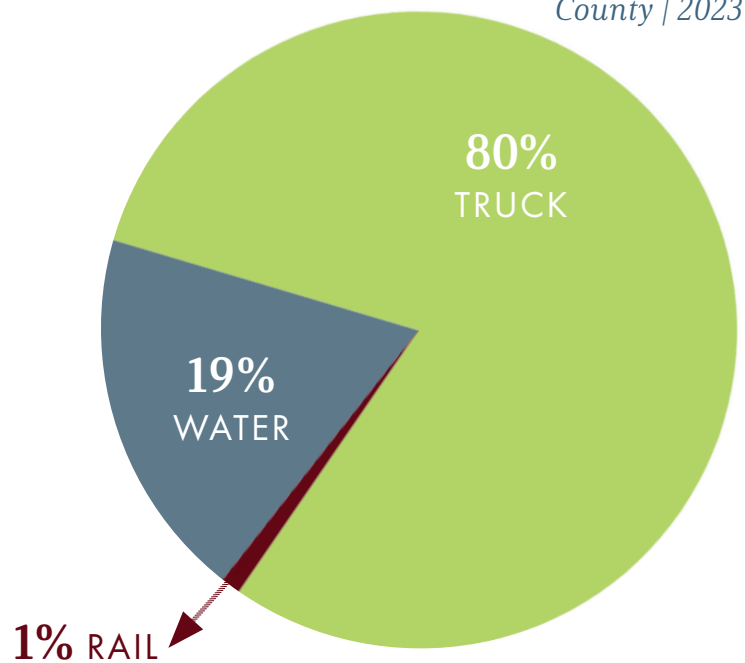
Table 9: Freight Volume Summary, New Haven County | 2023

DIRECTION	TRUCK	RAIL	WATER	PIPE	AIR/ OTHER	TOTAL
Tons						
Outbound	11,856,817	231,236	390,700	96,957	68	12,575,778
Inbound	13,361,397	84,288	5,430,960	0	11	18,876,656
Intra	1,171,669	0	126,575	0	0	1,298,244
Through	10,728,313	0	5,705	0	0	10,734,018
Total	37,118,196	315,524	5,953,940	96,957	79	43,484,696
Units						
Outbound	1,010,849	2,228	0	0	0	1,013,077
Inbound	1,118,597	1,158	0	0	0	1,119,755
Intra	96,933	0	0	0	0	96,933
Through	1,022,882	0	0	0	0	1,022,882
Total	3,249,261	3,386	0	0	0	3,252,647
Value (millions)						
Outbound	\$22,993	\$71	\$186	\$25	\$1	\$23,277
Inbound	\$23,500	\$106	\$4,966	\$0	\$2	\$28,575
Intra	\$2,206	\$0	\$91	\$0	\$0	\$2,296
Through	\$19,141	\$0	\$39	\$0	\$0	\$19,180
Total	\$67,841	\$177	\$5,282	\$25	\$3	\$73,329

Transearch/S&P Global, 2023

Mode Split

For freight traveling to, from, or within New Haven County, 80% travels by truck, 19% travels by water, and 1% travels by rail, based on tonnage in 2023. For inbound tonnage, water is significantly higher at 29%, while it is only 3% of outbound tonnage (Figure 14).



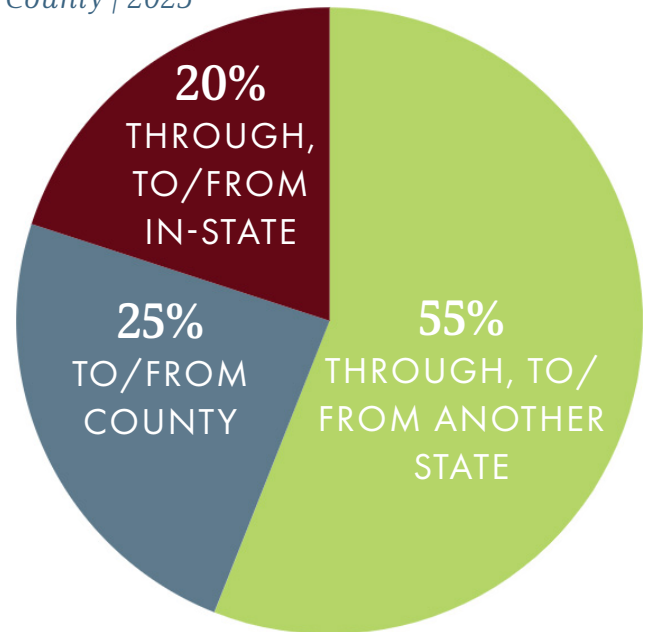
Road Segments

New Haven County's highway network connects the city of New Haven to other Connecticut cities such as Meriden, New Britain, and Hartford through I-91 and Bridgeport, Stamford, and New London through I-95. For both outbound and inbound traffic, the road segment with the highest tonnage in 2023 was I-95 through New Haven, with nearly 32 million tons. For outbound traffic, the CT-8 to I-95 road segment had nearly 7 million tons in 2023, while I-91 from Hamden to Meriden had over 2 million tons. These road segments also had the highest tonnage for inbound traffic, with over 6 million tons for the CT-8 to I-95 segment and 2.5 million tons for the I-91 segment.

Highway Link Analysis

Different highways can be used by trucks carrying freight in different ways, with some highways having a high percentage of local traffic with others having a high percentage of pass-through traffic. In New Haven County, 25% of traffic is to or from the county, 20% of traffic is through New Haven County and to or from other counties in Connecticut, and 55% of traffic is through New Haven County and to or from other states (Figure 15). This evidence supports Connecticut being a pass-through state.

Figure 15: Highway Link Analysis, Fairfield County | 2023



COMMODITY FLOW FORECAST | 2050

Tonnage, Growth Rate

By 2050 commodity flows out of New Haven County are expected to increase by 15%, from 12.5 million to 14.5 million, while flows into New Haven County are expected to increase by 14%, from 18.9 million to 21.6 million tons. Nonmetallic minerals will become the number one commodity by tonnage, with a 53% growth rate for outbound traffic and a 45% growth rate for inbound traffic. The highest growth rate overall is expected to be for Chemicals or Allied Products. Growth rates for most commodity groups are expected to increase from 9% (Clay, concrete, glass, or Stone) to 88% (Chemicals or Allied Products). Petroleum or Coal Products will decrease for both outbound and inbound traffic. Outbound commodity flows are detailed in Table 10. Inbound flows are detailed in Table 11.

Table 10: Top 10 Outbound Commodities, Tons | 2050

COMMODITY	TONS 2023	TONS 2050	GROWTH RATE
Nonmetallic Minerals	2,873,054	4,404,463	53%
Petroleum or Coal Products	4,408,537	3,017,210	-31%
Chemicals or Allied Products	1,225,843	2,253,351	84%
Waste or Scrap Materials	1,433,263	1,603,726	12%
Secondary Traffic	835,447	954,696	14%
Food or Kindred Products	373,402	551,244	48%
Clay, Concrete, Glass or Stone	382,276	415,961	9%
Primary Metal Products	329,037	403,791	23%
Lumber or Wood Products	202,381	197,309	-3%
Fabricated Metal Products	170,247	186,581	10%

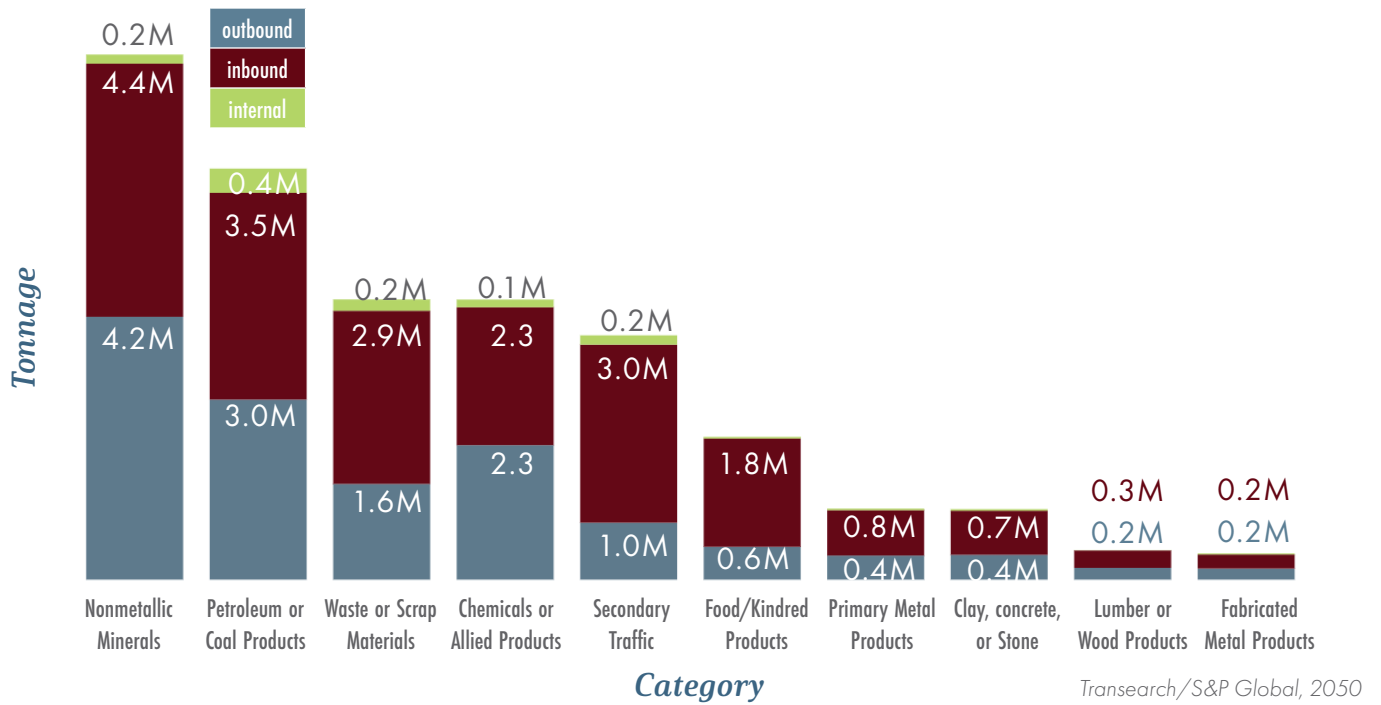
Transearch/S&P Global, 2023 & 2050

Table 11: Top 10 Inbound Commodities, Tons | 2050

COMMODITY	TONS 2023	TONS 2050	GROWTH RATE
Nonmetallic Minerals	2,921,395	4,241,100	45%
Petroleum or Coal Products	6,448,370	3,464,145	-46%
Secondary Traffic	2,103,340	2,982,837	42%
Waste or Scrap Materials	2,172,314	2,901,366	34%
Chemicals or Allied Products	1,232,269	2,311,060	88%
Food or Kindred Products	1,159,534	1,813,245	56%
Primary Metal Products	482,561	760,521	58%
Clay, concrete, glass or Stone	639,845	738,773	15%
Farm Products	237,633	327,732	38%
Pulp, paper or Allied Products	253,656	298,733	18%

Transearch/S&P Global, 2023 & 2050

Figure 16: New Haven County Commodities by Tonnage | 2050



Volumes & Directions

The directional movement of shipments containing the top ten commodities is expected to remain constant as well. In 2050, about 30% of outbound commodities will consist of Nonmetallic Minerals, while this consists of 20% of inbound traffic. All other commodities will increase in tonnage or remain relatively constant, with the exception of Petroleum or Coal products, which will decrease. These patterns are summarized in Figure 16.

Figure 17: Top Origins and Destinations of Freight Tonnage, New Haven County | 2050

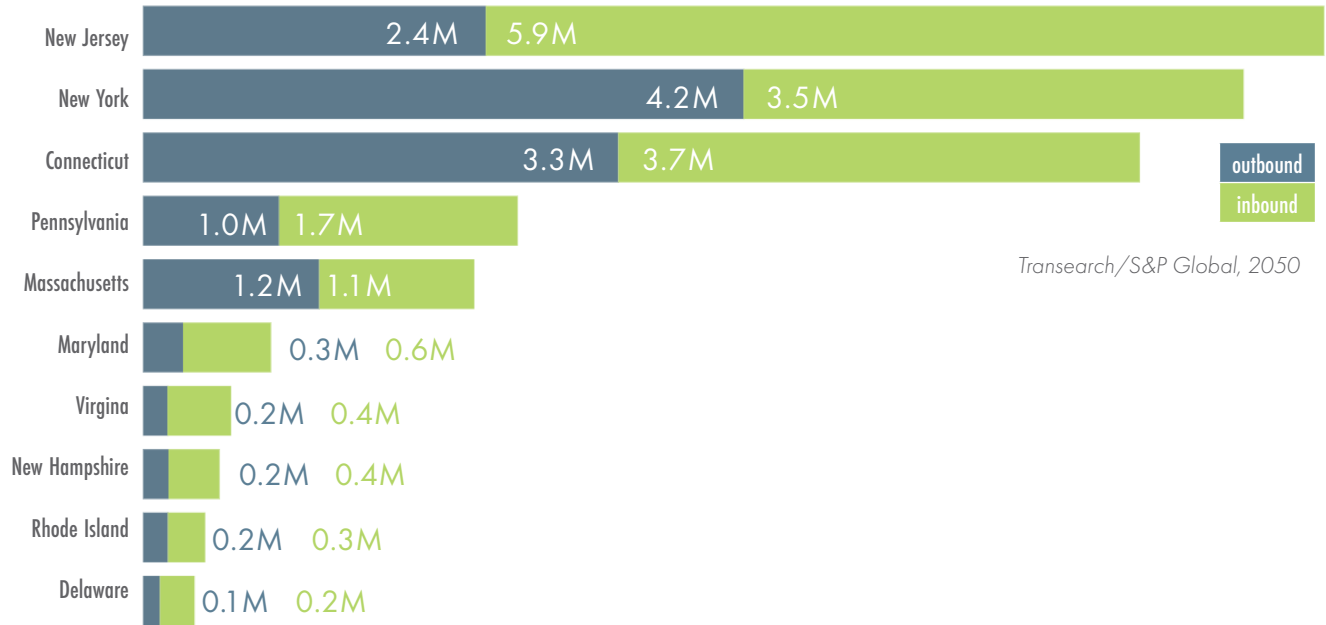
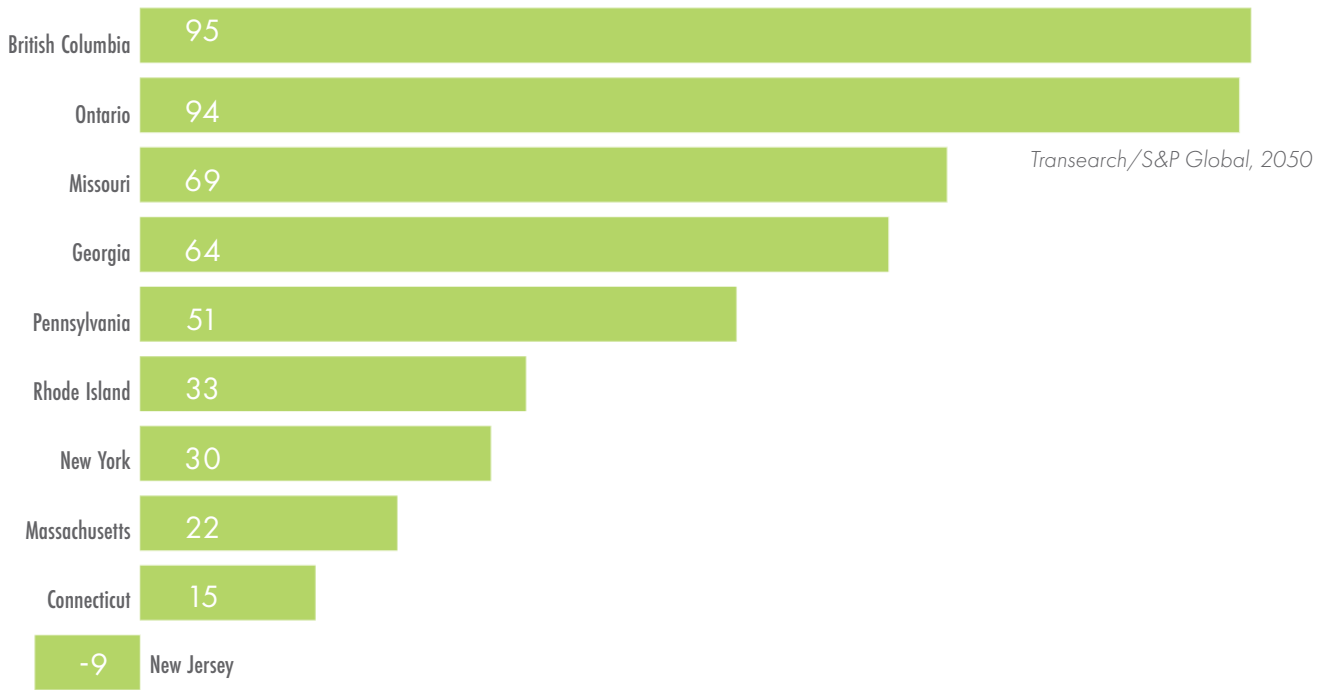


Figure 18: 2023-2050 Growth (percentages)

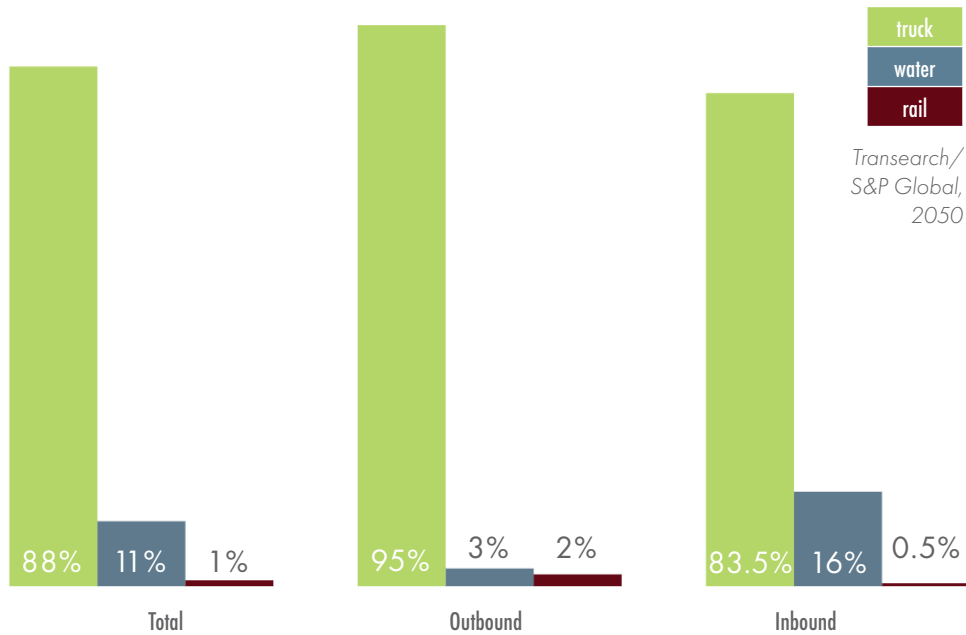


Future Trading Partners

New Haven County’s largest trading partners will continue to be other Connecticut counties, New York, and New Jersey (Figure 17). However, trade with distant locations in the South and Canada is

expected to grow faster than trade with New York and New England between 2023 and 2050, with a negative growth rate for trade with New Jersey (Figure 18).

Figure 19: Freight Tonnage by Mode & Direction | 2050



Future Modes

The forecast anticipates that freight mode splits in 2050 will be similar to 2023 mode splits. Trucks are expected to carry nearly 88% of all freight tons, while water is expected to carry nearly 11% of all freight tons, with 1% being carried by rail. Water will have a significantly higher share among inbound traffic (16%) relative to outbound traffic (3%). Rail will have a slightly higher share among outbound traffic (2%) relative to inbound traffic (0.5%). Trucks will remain by far the highest mode, followed by water. Trucks will carry nearly 93% of intra-County freight (Figure 19).

Future Highway Network Utilizations

In 2050, New Haven County's highway network is expected to remain the primary conveyor of freight into, out of, within, and through the County. Tonnage is expected to increase by over 1 million for the CT-8 to I-95 segment for outbound freight, while it is expected to increase by over 2 million for inbound freight. Likewise, tonnage for the I-91 segment from Hamden to Meriden will increase by nearly 350,000 for outbound freight and 900,000 for inbound freight. The number of trucks traveling on I-95 and I-91 through New Haven County will increase significantly.

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Bridgeport	Mayor Joseph P. Ganim	Seymour	First Selectwoman Annmarie Drugonis
Derby	Mayor Joseph L. DiMartino	Shelton	Mayor Mark Lauretti
Easton	First Selectman Dan Lent	Stratford	Mayor David Chess
Fairfield	First Selectperson Christine Vitale	Trumbull	First Selectman Vicki Tesoro
Greater Bridgeport Transit	Doug Sutherland	Valley Transit District	Mayor Mark Lauretti



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