7.0 FREIGHT AND GOODS MOVEMENT

In an increasingly interconnected world, the movement of freight into, out of, and through the region is a critical component for economic vitality. Historically a region developed around the strength of freight rail, the shift in the region's economy and physical development have followed national patterns and now a large majority of freight is shipped via truck over limited access expressways. To support this movement and ensure economic growth is not hindered by freight movements, NVision50 identifies and aims to address issues with capacity, reliability, and ensure that a variety of modes is available for shippers. This includes the region's highway network, rail network, pipelines, and air and seaports.

7.1 TRUCK BORNE FREIGHT

EXISTING CONDITIONS

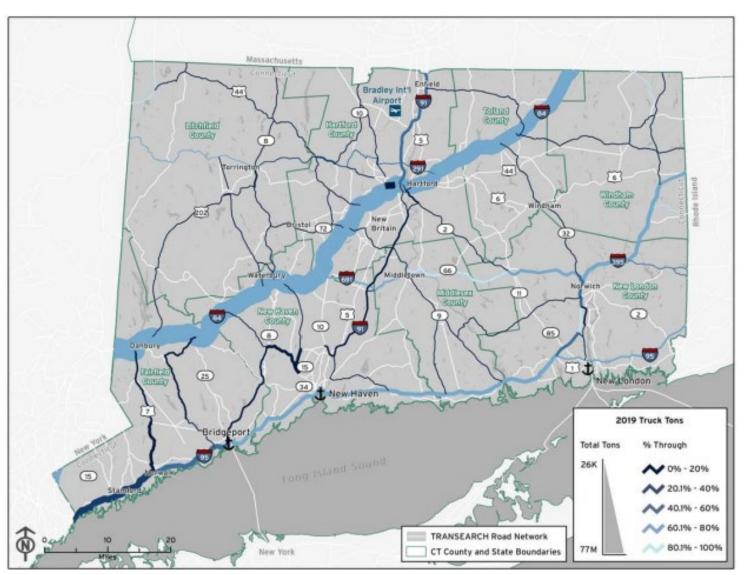
The vast majority of freight in Connecticut moves via trucks, with much of that traffic happening on the state's limited access expressway network. The rise of trucking to move freight since the early 20th century has brought with it both benefits, like the great expansion of markets beyond the traditional rail network, as well as consequences like environmental impacts and safety concerns on the region's roads. NVision50 takes into consideration the importance of trucking to the region's economy, aiming to improve parking and rest facilities for drivers while also ensuring that travel times are reliable.

FREIGHT VOLUME

Freight enters, exits, and passes through Connecticut primarily on the state's highway network. According to the CTDOT's 2022 Freight Plan, trucks carry 91% of the tonnage and 89% of the value of freight moving throughout the state (2019).

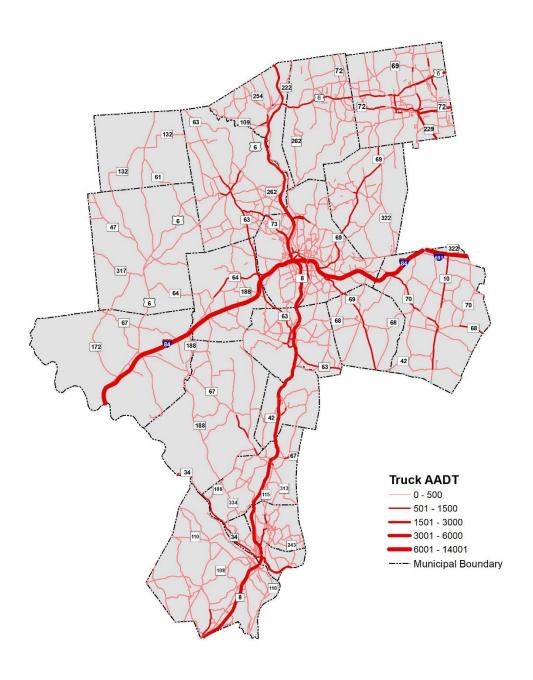
Connecticut serves as a bridge state for freight passing through the Northeast Mega-Region, accommodating the movement of freight from the New York metropolitan area and Mid-Atlantic states into greater New England. As a result, less than half of the State's truck freight traffic, by weight and value, originates in or is destined to Connecticut.

The principal freight corridor within the Naugatuck Valley region is I-84. I-84 is an important corridor not only to local shippers but to shippers across New England and New York. The following graphics excerpted from the Statewide Freight Plan show current highway freight density in tons. This map shows the critical importance of I-84 as an east-west alternative to the highly congested I-95. While I-91 and I-84 service statewide north-south freight traffic, Route 8 is the regional north-south freight corridor.



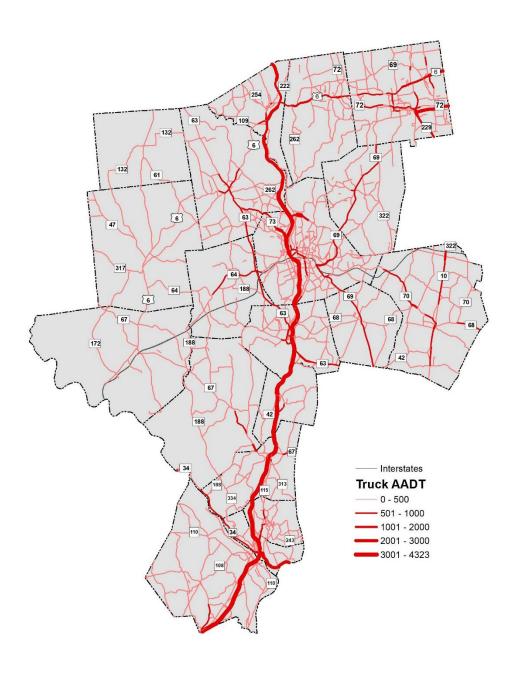
Map 1 Highway freight density (Tons, prepared by CDM Smith, Based on TRANSEARCH® data for 2019)

Mapping truck routes utilizing CTDOT truck average daily traffic data it becomes clear that Interstate 84 is the primary route for the majority of freight within the region, with Route 8 serving as the secondary route and the network of Arterials and state numbered roads carrying additional traffic.



Map 2 Truck AADT within NVCOG region (CTDOT Traffic Counts)

To illustrate regional freight demand, the following map excludes the Interstate System. In this map, Route 8 stands out as the trunk for freight moving north and south throughout the Naugatuck Valley, from Derby to Thomaston. Route 34, Route 72, and US Route 6 appear as important branches, collecting and dispersing local traffic. In Cheshire, Route 10, Route 68, and Route 70 also emerge as important freight feeders, with Route 10 feeding to I-691. In Bristol, US Route 6, Route 72, and Route 229 can be seen as primary intermunicipal freight connectors. Route 63 and Route 69 both provide important local freight connections within the region.



Map 3 Truck AADT within NVCOG region, excluding interstates (CTDOT Traffic Counts)

TRENDS AND DEFICIENCIES

Truck freight volume is forecast to grow substantially over the next 20 years. The following charts show annual freight tonnage in Connecticut for 2019 and projected out to 2040.

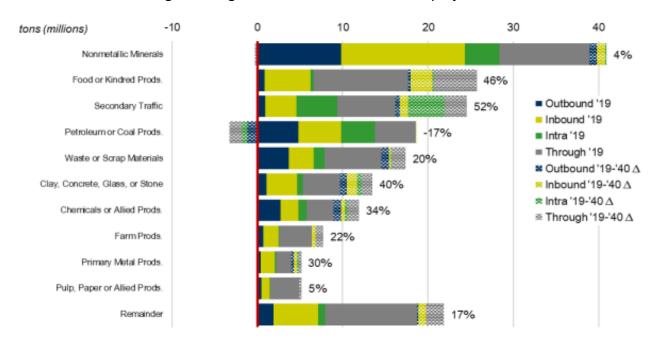


Figure 1 Total Connecticut Freight Tonnage, 2019 (in Millions, prepared by CDM Smith, Based on TRANSEARCH® data for 2019)

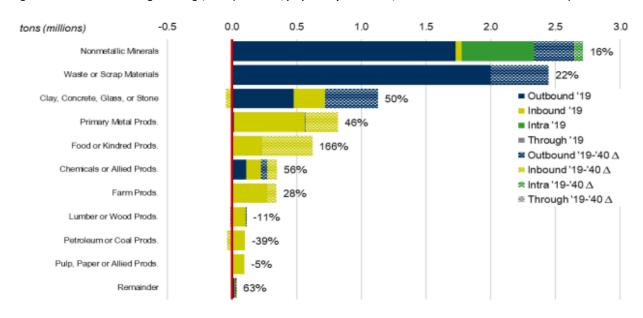
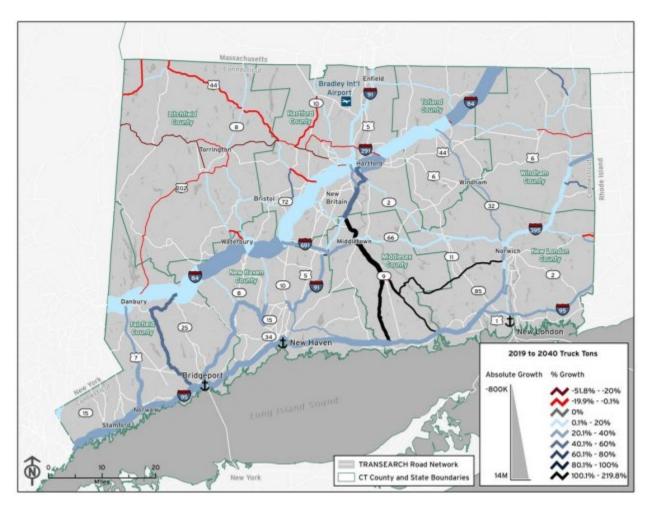


Figure 2 Total Connecticut Freight Tonnage, 2040 (in Millions, prepared by CDM Smith, Based on TRANSEARCH® data for 2019)

The state freight plan estimated the change in freight density by route by 2040, using 2019 as a baseline. These projections are illustrated in the following map. The analysis indicates that I-84, and to a lesser extent, I-691 will continue to absorb significant freight traffic in the coming decades.



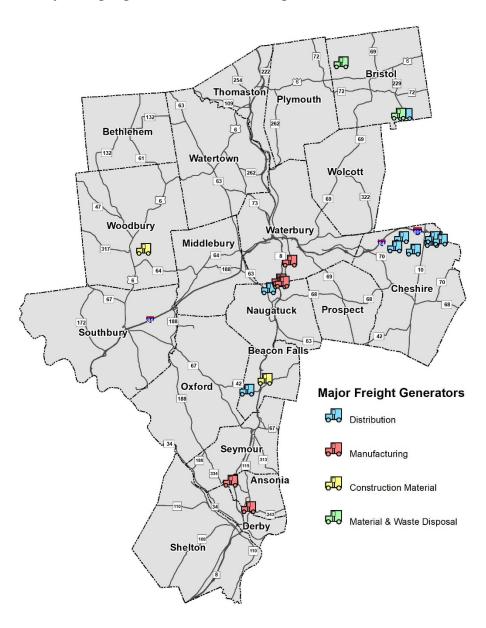
Map 4 Change in Freight Density, 2019 to 2040 (Tons, prepared by CDM Smith, based on TRANSEARCH® data for 2019 and 2040)

Route 8 is not currently included in the Critical Urban/Rural Freight Network. However, ongoing maintenance and improvements to deficient geometry and aging bridges are needed to accommodate projected growth in freight volume along Route 8. Including Route 8 in the NHFN would allow access to federal freight funding for roadway improvements.

LAND USE

Additionally, the junction of I-84 and Route 8 is at the geographic center of the Naugatuck Valley planning region. The interchange between the two expressways provides access for the trucking industry to points through the region, state and larger region of New England and the

entire northeastern United States. Demand for new distribution centers, locations where truckloads of goods are hauled into the region and broken down into smaller loads for further distribution or delivery, is on the rise. Some areas in the region, including parts of Cheshire south of I-691, have used their geographic proximity to develop distribution centers to deliver goods by truck for local retail. Also, the number of these facilities is expected to increase as demand for home delivery continues to rise. Because these facilities are major local freight generators, it is necessary for the region to work closely with municipalities to ensure economic development is supported by regional infrastructure planning. The following papers shows the locations of these major freight generators within the region.



Map 5 Major Freight generators within NVCOG

RELIABILITY

Regional freight reliability is a priority for freight dependent enterprises. Costs increase as shippers are required to run additional or partially loaded trucks. When enterprises cannot rely on just-in-time shipping, they must carry the additional inventory needed to maintain productivity. As a result, reliability directly impacts how enterprises within the region manage their supply chain and compete in the market. For these reasons, federal rules have identified freight reliability as a national performance measure that all states and MPOs must monitor and target. With recent supply chain issues underscored during the COVID-19 pandemic, freight reliability is more important than ever.

This freight specific reliability measure considers factors that are unique to the trucking industry. Some of these unique characteristics include:

- use of the system during all hours of the day;
- high percentage of travel in off-peak periods;
- need for shippers and receivers to factor in more 'buffer' time to their logistics planning for on-time arrivals. [23 CFR 490.607].

The freight specific reliability measure is the Truck Travel Time Reliability (TTTR) index. To calculate this ratio, the 95th percentile travel time is divided by the 50th percentile travel time for each road segment. The highest value from five statutorily defined time periods (AM, midday, PM, overnight, and weekends) is then averaged for all road segments on the Interstate system. The TTTR index only applies to roads in the Interstate System.

The TTTR is a measure of reliability, not congestion. Therefore, segments of the highway that are regularly and predictably congested will not have a high travel time reliability ratio. Rather, those segments of the highway where delays are unpredictable and severe are scored highest. This performance measure prioritizes reliability over congestion and was developed in response to stakeholder outreach with the freight industry which deemed predictability most important factor for scheduling. For the next two and four years, the TTTR targets for the region are 1.95 and 2.02 respectively. These targets are matching the targets that CTDOT has.

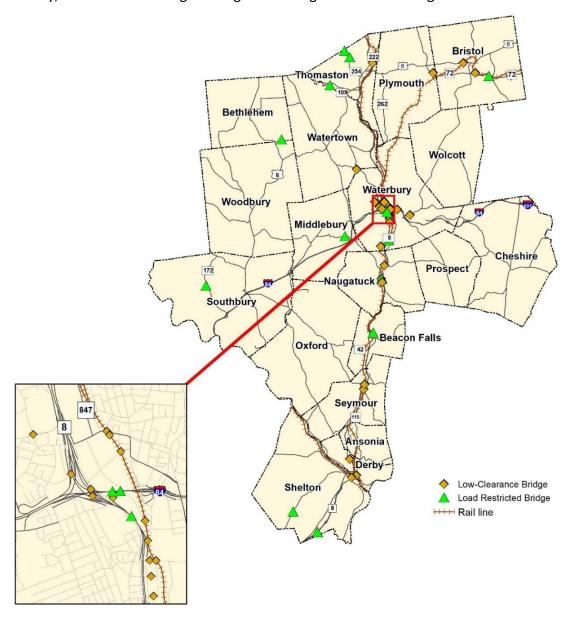
TRENDS AND DEFICIENCIES

The TTTR index shows irregular truck congestion is expected to increase in the coming years. As a result, the reliability of freight movement through the state and region is expected to decrease. Reliability is best addressed by changing how roads are managed and operated, rather than by expanding the system. Increasingly, highway management involves data, communications, and technologies that help system managers optimize traffic flow, and detect and respond to situations as they arise.

INFRASTRUCTURE CONDITION

The state of region's highways is perhaps the most visible element of the freight network. Poor highway conditions increase wear and operating costs on vehicles, increase congestion by reducing highway speeds, and reduce safety. In more extreme cases, deteriorated roadways or bridges can lead to road closures or weight restrictions. It is therefore of great importance to the freight industry that the highway network remains in a state of good repair.

Additionally, the NVCOG catalogues height and weight restricted bridges.



Map 6 FREIGHT RESTRICTIVE BRIDGES WITHIN THE NVCOG REGION, DATA SOURCE: CTDOT

TRENDS & DEFICIENCIES

The indices for both bridge condition and pavement condition are expected to improve statewide during the next four years with performance targets to improve the State of Good Repair of Connecticut's roadways. This trend holds true for both the Interstate System and the non-Interstate NHS.

SAFETY

The NVCOG has adopted a regional approach to highway safety. The NVCOG follows a data driven planning process to first profile crashes throughout the region, assess risk, and prioritize location specific actions to maximize limited fiscal resources available for capital improvements. The NVCOG uses regional crash data from the UCONN Crash Repository. This is a powerful dataset that can be used to highlight high risk areas within the region.

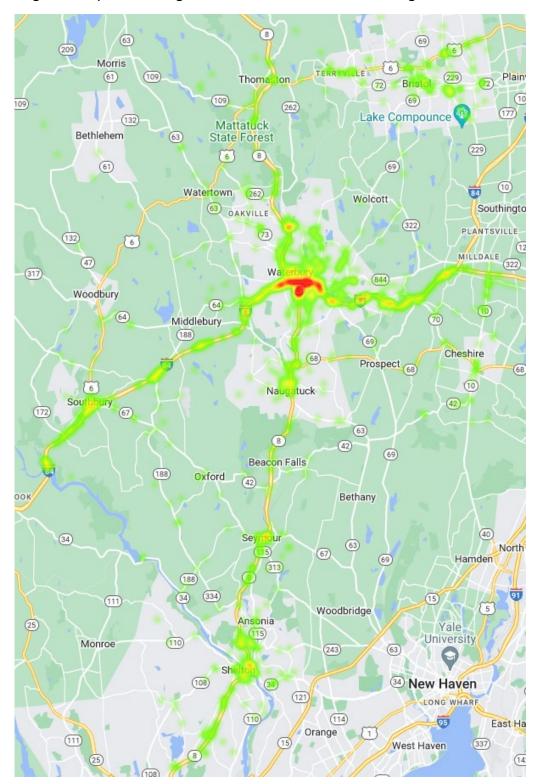
For heavy duty trucks, that is vehicles with a maximum weight limit greater than 26,000 pounds, the following safety measures are used to monitor safety performance:

- Total number of crashes involving heavy duty trucks
- Crashes involving fatalities involving heavy duty trucks
- Crashes involving injuries involving heavy duty trucks
- Number of non-motorized fatalities and non-motorized serious injuries involving heavy duty trucks

Year	Fatal Injury	No Apparent Injury	Possible Injury	Minor Injury	Serious Injuries	Bike and Ped Serious Injury/Fatality	Total
2019	1	452	55	40	1	1	549
2020	0	367	37	29	7	0	440
2021	1	497	27	30	4	0	559

Source: Connecticut Crash Data Repository

The following heat map shows freight related crashes and visualizes high hazard areas.



Map 7 Heatmap of Crashes within the NVCOG region, Data Source: UConn Crash Data Repository

Nationally, fatal crashes involving heavy duty trucks have been on the rise since 2009. Within the state, fatalities and fatality rates are expected to hold constant or increase within the near future. Trucks are increasingly being fitted with new technologies to reduce reaction time and remove blind spots.

TRUCK-BORNE FREIGHT ACTIONS

- Use data driven process to prioritize improvements where demand is strongest.
- Implement ITS infrastructure.
- Designate Route 8 as a critical urban and rural freight corridor.
- Explore emerging technologies.
- Endorse the following FHWA operational strategies to improve reliability:
 - Incident Management Identifying incidents more quickly, improving response times, and managing incident scenes more effectively;
 - Work Zone Management Reducing the amount of time work zones need to be used and moving traffic more effectively through work zones, particularly at peak times;
 - Road Weather Management Prediction of weather events (such as rain, snow, ice, and fog) in specific areas and on specific roadways, allowing for more effective road surface treatment;
 - Planned Special Events Traffic Management Pre-event planning and coordination and traffic control plans;
 - Freeway, Arterial, and Corridor Management Advanced computerized control
 of traffic signals, ramp meters, and lane usage (lanes that can be reversible,
 truck-restricted, or exclusively for high occupancy vehicles);
 - Traveler Information Providing travelers with real-time information on roadway conditions, where congestion has formed, how bad it is, and advice on alternative routes; and
 - Value Pricing Strategies Proactively managing demand and available highway capacity by dynamically adjusting the toll paid by users.
- Continue to prioritize the maintenance of the existing network at a state of good repair.
- Limit heavy duty vehicle speeds. The vulnerability of occupants in passenger vehicles involved in crashes with heavy duty vehicles is a large contributor to fatalities. Reducing the kinetic energy of the trucks with stricter limits on speeds would save lives.
- Pursue safe roadway designs on freight routes to reduce risk of front-to-front crashes.
- Enforce seatbelt regulations.
- Connecticut should continue to develop and implement pilot programs to test connected and autonomous vehicles.

7.2 RAIL BORNE FREIGHT

EXISTING CONDITIONS

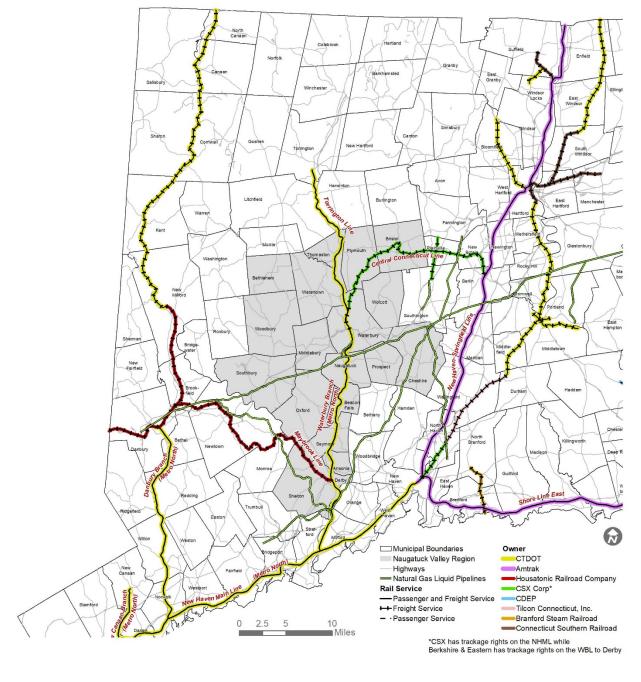
Rail is among the most efficient modes to move goods around the United States. Over the last two decades, due to improved training, technology, and an updated fleet, efficiency has improved 61%. Nationwide the fuel efficiency for a ton of grain moved by rail, adjusted for circuity, is on average between 3.3 and 4.4 times more fuel efficient than the movement of the same bulk materials by five-axle truck. Greater fuel efficiency translates into fewer greenhouse gas emissions. The CNVMPO is required to demonstrate that its plans, program, and projects contribute to the attainment of national air quality standards and do not have adverse impacts on regional air quality. Shifting freight movement from heavy trucks to rail offers potential advantages towards reducing regulated and greenhouse gas emissions and contributing to achieving air quality goals. Rail is best suited for commodities that are bulky, heavy, and not time sensitive. Given this, the State's primary imports via rail include chemicals, pulp and paper, lumber and wood, sand, and iron and steel and primary rail exports include waste, scrap, stone, gravel, and sand.

The benefits related to increased rail freight indicate the increased movement of freight by rail should be prioritized where possible. However, there are some basic pragmatic issues to be considered, such as rail access, that limit a more widespread shift. The 2013 Central Connecticut Rail Study identified the following barriers that inhibit rail-borne freight statewide.

- Constrained Hudson River rail crossings make through shipping of freight west of Connecticut challenging;
- Overhead clearances below 22ft 8in limits the size of freight cars that can be used, including double stacked containers;
- Many freight railroads in Connecticut operate at low speeds, between 10 and 25 MPH, due to low rail weight restrictions and age;
- Car weight restrictions of below 286,000-pound axle loading on many lines do not meet current industry standards. These restrictions limit the amount of commodities carried per car and hurts rail's economic advantage;
- Freight railroads are required to pay track fees for operating over Amtrak rights-of-way;
- The strong competitive position of the trucking industry due to the short distances involved in movement into and through the state; and
- The state increasingly is oriented to business and service activities, which do not generate large volumes of freight suitable for movement by rail.

However, despite these limitations and disadvantages, within the Naugatuck Valley, past investment in the rail network offers a great opportunity for industry. The following map shows the rail, highway and pipeline network for the region, offering opportunities for access for most

regional municipalities. While, the region has good rail connectivity, each line is maintained to a different standard and has a variety of restrictions. The following is a brief description of the current operating capacity on the major rail lines that pass through the region.



Map 8 Railroad ownership map around NVCOG region

As stated, CSX, the State's sole Class I Carrier, does not operate within the planning area, but it remains locally important as the New Haven Main Line (NHML) intersects the Waterbury Branch Line (WBL) in Milford, giving the region access to this freight asset. In 2022, CSX finalized the acquisition of PanAm Southern, who operated on the Central Connecticut Line. A new shortline was chartered to operate on this territory, Berkshire and Eastern, with CSX as one of the stakeholders.

The WBL is the Region's most active rail line with Metro North Railroad operating commuter services throughout the day. This 27.1-mile rail line connects the NHML in Milford to Waterbury. Work has been completed which added four passing sidings, signalization, and positive train control, which allows multiple trains to operate on the line at one time. The track is rated to FRA Class 3 standards and has clearance for Plate F. Currently it carries heavy commuter traffic. Berkshire and Eastern has trackage rights from the junction of the Maybrook Line north to the split between the Central CT line and the Torrington Line in Waterbury.

North of the Waterbury Line, the Naugatuck Railroad, operated by the Railroad Museum of New England based in Thomaston, operates freight services as well as passenger excursion service. As one of the largest originators of freight cars within the region, the Naugatuck Railroad serves as a key stakeholder within the NVCOG region for freight related topics and several of the projects within NVision50 were developed based on feedback from their staff. The line between Waterbury and Torrington, sometimes referred to as the Torrington Line, is a



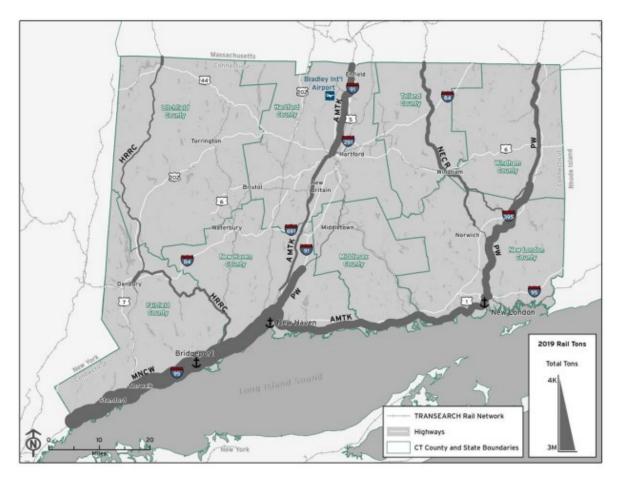
19.5-mile segment that can accommodate 263,000-pound axel loading and has a clearance for Plate C. Currently rated as FRA Class 1, freight movements along the line are limited to 10 mph.

In Derby, the WBL intersects the Maybrook Line, operated by the Housatonic Railroad Company (HRRC). The Maybrook Line, formerly a critical connection between the New Haven Railroad's Cedar Hill Yard in New Haven and Maybrook Yard in Maybrook, New York, currently connects from Derby west to Danbury, where the option exists to continue west into New York State or north to Pittsfield, MA. 2014 data shows heavy utilization of this line, though today no customers exist within the NVCOG region. An ongoing concern about a Downtown Shelton development within the railroad's right of way, potentially obstructing the movement of freight cars, has temporarily stopped the movement of freight over the Housatonic river to the wye with the WBL. Reactivation of the 33.5 mile Maybrook line is identified as a priority within the CTDOT's 2022 freight plan.

Berkshire and Eastern operates on the Central CT Line (Terryville secondary, New Britain Secondary, and the Berlin Secondary), connecting Waterbury east to Plymouth, Bristol, and the Plainfield Yard before connecting to the New Haven-Hartford-Springfield line in Berlin. The Central CT line is currently operating regular freight service and growing its market. The FRA currently rates the Central CT line as a class 2 track, with speeds restricted to 25 mph. However, due to track conditions in certain locations, much of the line functions as a class 1 track with speeds limited to 10 mph. Rail axel loading is limited to 263,000 pounds. Clearance is limited to 17 ft (Plate F). In the 2016 Central CT Railroad Study, CTDOT recommends improving this rail line to meet FRA track class 3 standards, allowing freight to travel at up to 40 mph. The study estimates the cost of these upgrades to be \$170 million.

TRENDS AND DEFICIENCIES

Rail tonnage is forecast to increase from 5.6 million tons in 2019 to 8.6 million tons in 2040, an increase of 30 percent (1.3 percent annually). Rail freight growth is projected to occur on the rail-equivalent corridors of the most heavily traveled truck routes, generally following I-95 and I-91. In percentage terms, the largest growth in rail traffic is projected for the northeastern portion of the state.



Map 9 Connecticut Freight Rail Tonnage, 2019 (Source: CDM Smith and IHS-Transearch data)

While rail will see greater traffic in future years it still remains a less congested alternative to the highway network. The rail network will need increased attention and maintenance if it is to remain a viable freight alternative. Currently speeds are highly restricted on the Central CT Line. The Maybrook line is not active. The Thomaston Branch line is mostly inactive except for a tourist train run out of Thomaston. The prioritization of freight reliant land uses along the rail lines might serve as an effective strategy to revitalize these assets and encourage private investment in rail line maintenance. Shifting modal choice from the highway to the rail will help preserve the system as a whole and postpone expensive highway investments that will be needed to handle expected freight growth.

MULTIMODAL FACILITIES AND INLAND PORTS

The NVCOG seeks to work effectively with regional municipalities and CTDOT to maximize the efficiency and productivity of existing infrastructure. Given the uncertainty and variability of highway funding for capital improvements, the NVCOG prioritizes maintenance and works to promote projects that can improved the complementary nature of existing assets. Improving

the ease of choice among the regions freight modes offers the region benefits that are not available in many parts of the country. Intermodal transfer between rail, pipeline, and truck offers opportunities to reduce highway volumes while improving reliability.

In Naugatuck, an inland port and intermodal transportation hub is being proposed for the mostly-vacant 86.5-acre parcel of land along Elm Street, a brownfield site located between the Waterbury Line and Route 8. The port would consist of warehousing and transloading facilities, allowing consumer goods to be shipped via rail into Naugatuck, stored until ready for distribution, then loaded on to trucks for last-mile delivery. This project is envisioned to reduce costs for shippers while reducing the burden on the regional highway network, benefitting consumers and shippers alike. Serving as a critical site within the Northeast Mega-Region with easy distribution to the New York Metro area, this project would bring economic benefits to the region as well as support NVision50's goals of mode shift and environmental protection.

State departments are collaborating on the project to ensure the environmental remediation to fill and cap the property to the east of the train tracks at the site of the port can be completed and fund are available to build a needed railroad spur to allow trains to pull off the main line and unload their cargo.

Indeed, the CTDOT 2012 Connecticut State Rail Plan recognizes the importance of intermodal facilities and calls for the revitalization of intermodal facilities and inland ports to help remove long-haul trucks from the road as well as increase shipping speed. There is potential to improve the maritime to rail connections in Connecticut's three major ports, reducing the need for trucks to move freight.

A similarly critical project suggested by the Naugatuck Railroad is a Waterbury freight yard to facilitate interchanges of cars with the Berkshire & Eastern. The current process is inefficient and hampers the railroad's ability to expand their customer base. Existing space at the Waterbury Train Station, formerly used as a railyard, could serve this purpose, as could land north of the current station. Although not funded within this plan, this project remains a regional priority and funding opportunities will be sought for this improvement in conjunction with the railroads and CTDOT as the owner of the rail.

ACTIONS

NVision50 aims to support the continued growth of rail freight throughout the region through a series of funded and unfunded priority projects.

- Increase capacity of Amtrak-owned rail bridge over the Connecticut River (Windsor Locks) to accommodate a 286,000 lbs standard car size
- Improve Central CT Railroad to FRA Track Class 3
- Improve Maybrook Line to FRA Track Class 2

- Support the ongoing development of intermodal freight facilities within the region
- Incentivize placing freight intensive land uses adjacent to the region's rail lines
- Construct freight yard at Waterbury to facilitate safer and easier transfer between railroads

7.3 PIPELINE

EXISTING CONDITIONS

Pipeline transmission is an efficient method to ship fuels and can decrease the number of delivery trucks needed on the highway system. These large transmission pipelines for natural gas and petroleum products can be compared to the nation's interstate highway system. They move large amounts of fuel thousands of miles from the producing regions to local distribution companies. There are many interconnections with other pipelines and other utility systems, which offer system operators a great deal of flexibility in moving gas. The top priority listed in the State of CTDOT freight plan is to incentivize fuel delivery companies to utilize the pipeline infrastructure to its fullest capacity.

Four companies operate pipelines in or near the Naugatuck Valley region. The Buckeye Pipeline Company operates an approximately 100-mile refined petroleum fuel pipeline that transports jet fuel from the Port of New Haven through Middletown and Hartford to Bradley International Airport and Westover Air Force Base, just north of Springfield, Massachusetts. The Buckeye transmission pipeline also carries other petroleum products to a pipeline terminal in Wethersfield.

The Iroquois Gas Corp natural gas pipeline traverses the Naugatuck Valley region and interconnects with the Tennessee Gas Pipeline Company (Kinder Morgan, Inc.) in Shelton. The Tennessee Gas Pipeline Company's natural gas transmission pipeline also connects in Shelton, and pipeline owned by Algonquin Gas Transmission LLC (Spectra Energy Partners) connects in Cheshire. The Algonquin Gas Transmission Company has several transmission pipelines traversing the region: one crosses east to west through Southbury, Oxford, Middlebury, Naugatuck, Waterbury, Prospect, and connects to the another in Cheshire that runs north to south. Many of the pipelines in Connecticut are looped, that is there are two or more lines running parallel to each other in the same right of way. This provides maximum capacity during periods of peak demand.

The U.S. Energy Information Administration publishes the current capacity rates for the four major pipelines for transmitting natural gas in the state. The following table displays the entity managing the natural gas pipeline transmission, county of origin, county of destination, and the capacity of each transmission pipeline in 2020.

Pipeline	County From	County To	Capacity (MMcf/d)				
Algonquin Gas Trans. Co.	Fairfield, CT	Putnam, NY	275				
Algonquin Gas Trans. Co.	Windham, CT	Providence, RI	1,142				
Iroquois Pipeline Corp	New Haven, CT	Suffolk, NY	620				
Tennessee Gas Pipeline Co.	Hartford, CT	Hampden, MA	80				
MMcf/d = million cubic feet per day							

TRENDS AND DEFICIENCIES

While pipeline provides benefits for freight movement and has enjoy growing demand in the last decade, as a freight mode it has also faced resistance from communities in the Northeast.

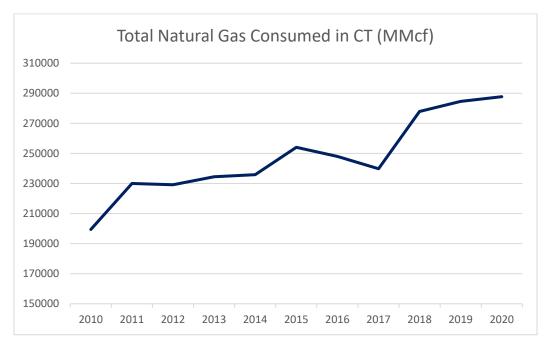


Figure 3 Natural Gas consumption within CT

Connecticut has approximately 590 miles of transmission pipelines currently in operation within the state. Some projects to expand capacity have recently been completed or are under development in or near the region. The Algonquin Incremental Market expansion project, which added thirty-seven miles and 342 million cubic feet per day (MMcf/d) of capacity, was completed in 2016; the Connecticut Expansion Project by the Tennessee Pipeline Company, which added sixteen miles and 72 MMcf/d of capacity, was completed in 2017; Algonquin Gas

Transmission LLC is constructing the Atlantic Bridge Project. The second phase was completed in January 2021.

Additionally, in June 2018, Competitive Power Ventures, in conjunction with General Electric, began operations of CPV Towantic Energy Center, a natural gas-fired electric generating facility, in Oxford and is supplying power to more than 800,000 homes. This project clearly benefits from its location along the Algonquin Gas Transmission Pipeline and the Eversource electricity transmission lines and illustrates the importance of pipeline to the freight network.

Ongoing planning includes the Access Northeast, with the project stakeholders Enbridge Inc., Eversource Energy, and National Grid. This natural gas pipeline will have a peak capacity up to 900,000 dekatherms (approximately 900 MMcf) per day. This project was put on indefinite hold in 2017 after significant public opposition.

ACTIONS

- Leverage the existing pipeline network to reduce the vehicle miles traveled by heavy trailer trucks on the highway system
- Where feasible, encourage land use to support multi-modal facilities along exiting pipeline.

7.4SHIPPING AND AIR FREIGHT

Shipping and air freight have important effects on the regional economy. However, no facilities currently lie within the limits of the planning region. The region is landlocked and while Waterbury-Oxford airport is an important piece of the local economy, the limited size of its runway will not accommodate the needs of bigger, heavier freight airplanes. For more information about freight planning especially how it affects the states ports and airports, please refer to the statewide freight plan.