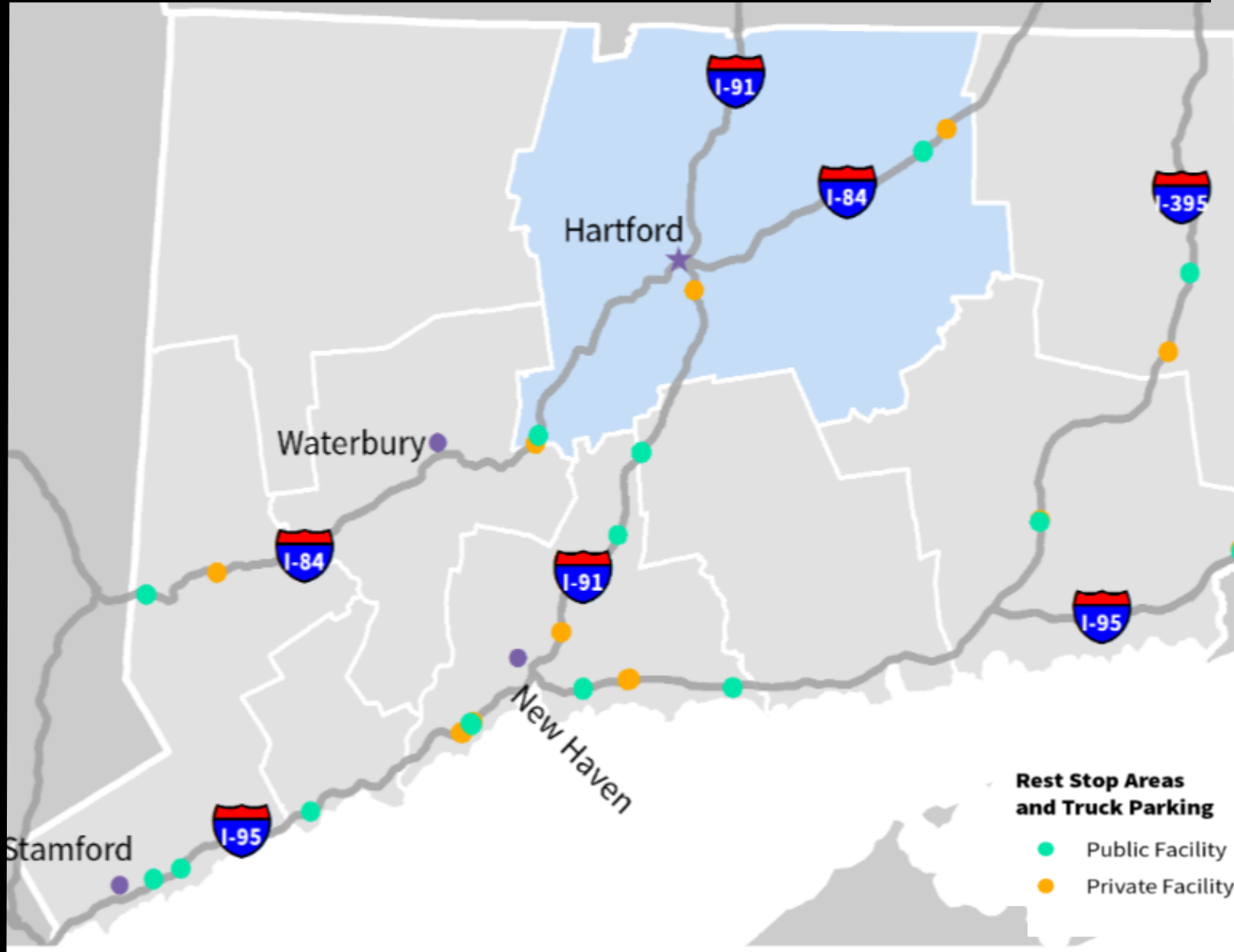
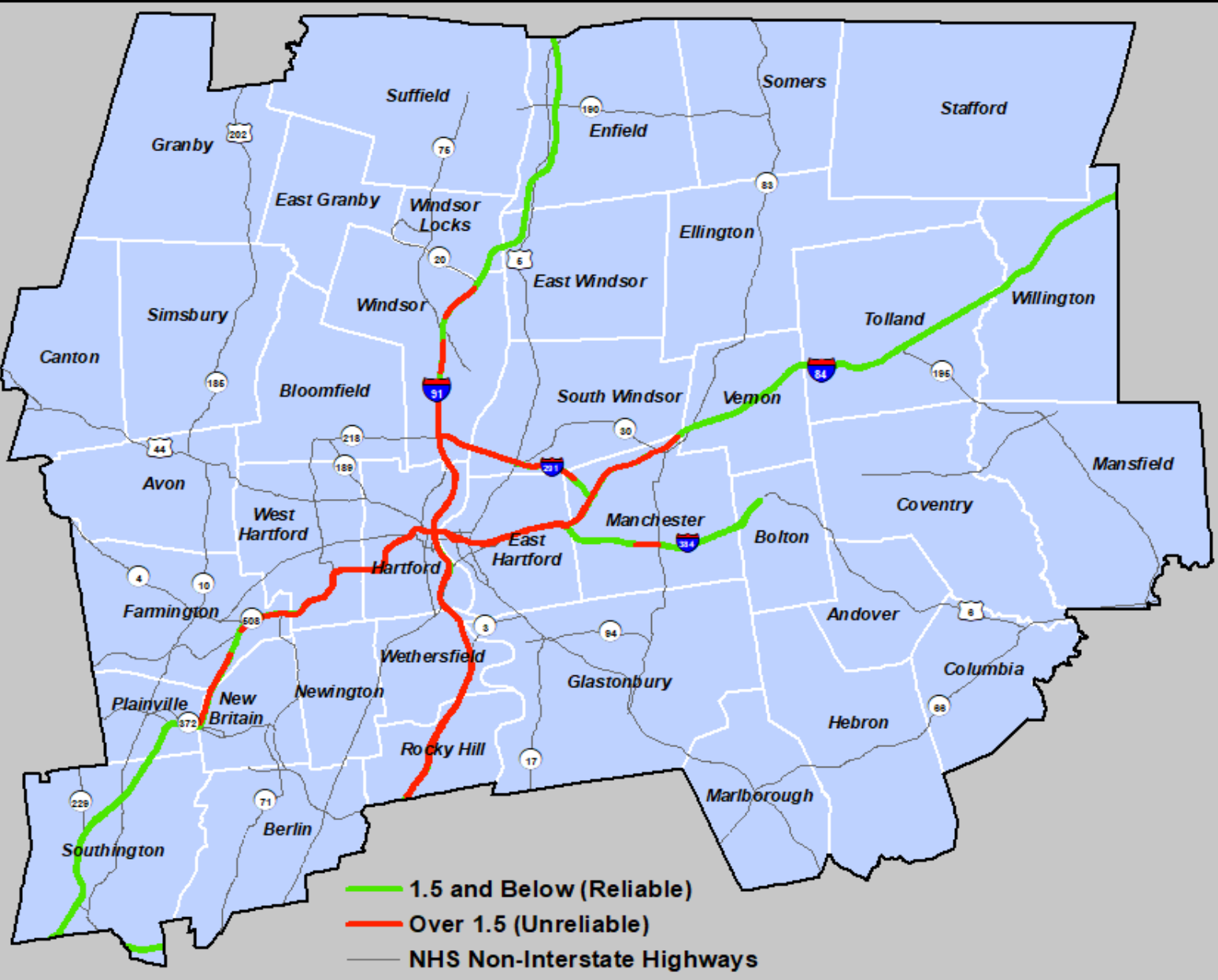


## Introduction

The movement of freight plays an important role in economic growth. The significance of freight transport is obvious in economies dominated by industries that ship massive quantities of heavy and/or bulky materials. However, even in economies dominated by financial, insurance, service industries, and advanced manufacturing, such as that of the Capitol Region, efficient movement of freight is still vital. Per the Code of Federal Regulations §450.306 and §450.316, the Capitol Region Council of Governments (CRCOG), which is the Metropolitan Planning Organization (MPO) for the region, has an important role in freight planning.<sup>1</sup> As such CRCOG has developed a planning process that fulfills these mandated planning requirements.

## CRCOG Freight Planning Approach

Due to the location of CRCOG within the Northeast, freight planning in the region requires a state and multi-state approach. A very important part of CRCOG's freight planning strategy is close coordination with the Connecticut Department of Transportation (CTDOT), neighboring planning organizations, as well as rail, truck, and air freight operators. This is to ensure that all aspects of freight movements within the region are reflected in the planning efforts at the State and New England level. CRCOG's freight strategy is a top-down and bottom-up approach where all entities collaborate to ensure that freight planning and public freight transportation infrastructure are addressed on all levels.



Freight Reliability

Rest Areas

INBOUND FREIGHT **2:1** EXCEEDS OUTBOUND

## Current State of Freight in the CRCOG Region

The primary modes of freight movement in the Capitol Region are trucks, rail, air, water, and pipelines. The tonnage of freight in the region is projected to increase by 0.8 percent annually between 2014 and 2040.<sup>2</sup>

### HIGHWAYS (TRUCKS)

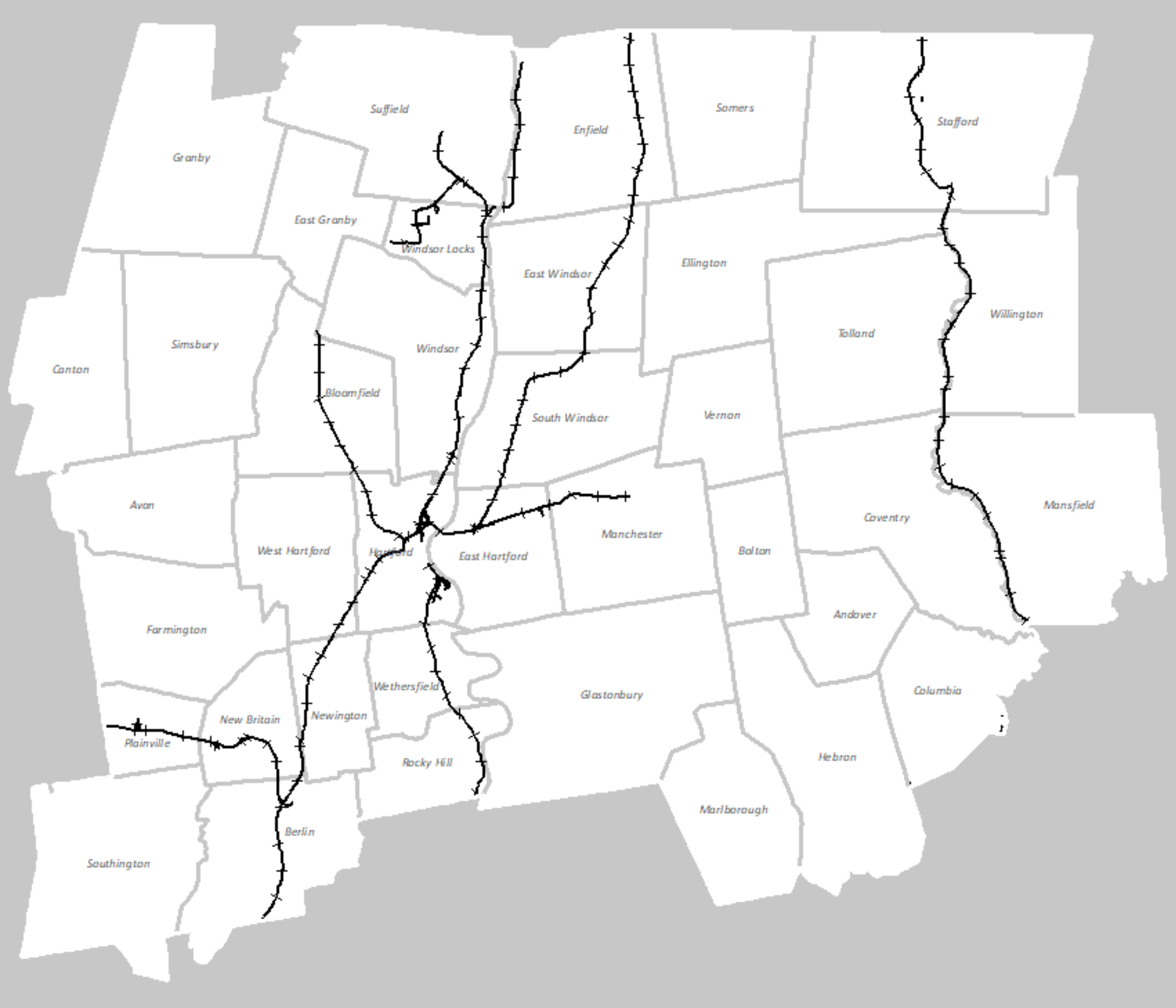
In Connecticut trucks carry over 90 percent of the freight, in terms of both tonnage and value. About 40 percent of truck traffic in the CRCOG region is through traffic, and inbound freight exceeds outbound freight by more than a 2:1 margin. Interstates highways are the main channel for truck traffic, with an estimated 80 percent of truck freight moved on these highways. There are two main truck traffic bottlenecks in the Capitol Region: I-84 at its interchange with I-91 and I-91 at its intersection with Route 5/15 (Charter Oak Bridge). I-84 at its interchange with I-91 has been listed on the American Transportation Research Institute's (ATRI) top 100 truck bottleneck list.<sup>3</sup> The current regional truck travel time reliability (TTTR) index in the region is 1.85, however, CRCOG has adopted CTDOT's target of 1.83. Per Federal Highway Administration (FHWA) standards, reliable truck travel times are indicated by a TTTR index that is less than 1.50.<sup>4</sup>

Truck (90%) Other (10%)

Within CRCOG (60%) Through Traffic (40%)

FREIGHT TYPE

TRUCK DESTINATION



### RAILROAD

The primary route for moving rail freight to, from, and through the Capitol Region is the Hartford Line between New Haven and Springfield. The Connecticut Southern Railroad (CSO) carries freight for the national rail freight carrier CSX over this line. Other rail freight carriers in the region include Central New England Railroad, Providence and Worcester Railroad, Pan Am Southern, and the New England Central Railroad. It is estimated that the maximum truck-to-rail mode shift in the Capitol Region is about 12 percent.





## AIR

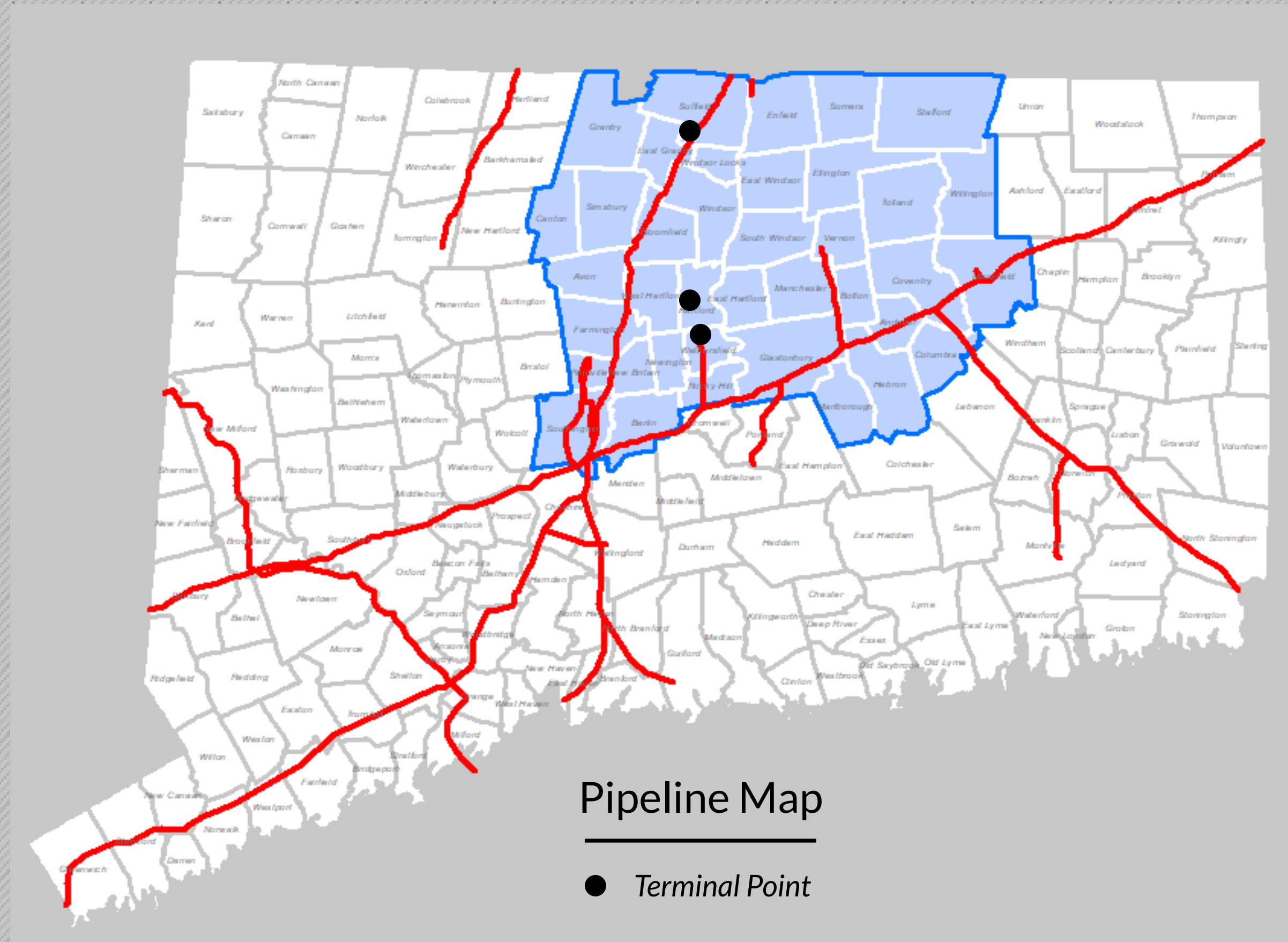
Air freight accounts for a small portion of the total freight movement in the region. Air freight facilities within the CRCOG Region are located at Bradley International Airport (BDL), which houses several types of freight activities such as small freight operations, dedicated freight operations, airmail, and other freight forwarding services. BDL has three cargo complexes including the Roncari Freight Facility, the Aviation Facilities Company, and the UPS Air Express Sorting Hub. In 2018 BDL ranked 32nd out of 138 air cargo airports and handled 481,000 tons of cargo.<sup>5</sup>

## WATER

There are no major inland or deep-water seaports in the CRCOG Region. However, the three main ports in Connecticut (Bridgeport, New Haven, and New London) are all connected to the CRCOG Region through highways, rail lines, and pipelines. The expansion of the Panama Canal is expected to shift freight to East Coast ports (Boston, New York and New Jersey), which are in proximity to the CRCOG Region. However, this is not expected to have a significant impact on the mode or direction of freight movements in Connecticut.

## PIPELINE

Out of the 212 million tons of freight moved over Connecticut's transportation system in 2014, about 288,000 tons (0.1 percent) were moved over pipelines. Petroleum products are transported into and through the CRCOG Region by a private pipeline network that originates at the Port of New Haven. Terminal points are located in Wethersfield, Hartford, and Windsor Locks (Bradley International Airport).<sup>4</sup> Additionally, portions of the Tennessee and the Algonquin lines run through the region.



Pipeline Map

● Terminal Point

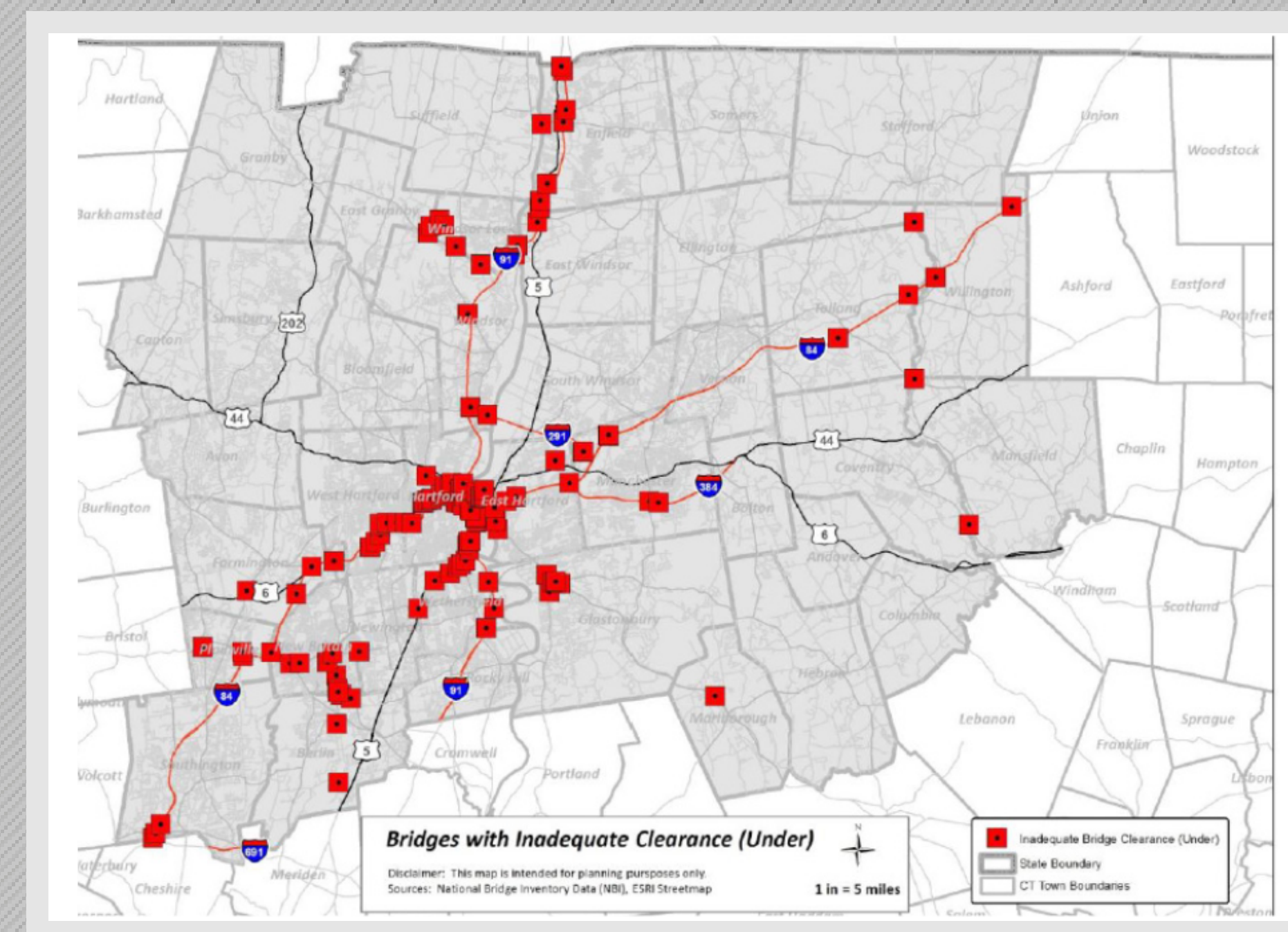
# Limitations / Challenges

## HIGHWAYS (TRUCKS)

- Bridge under clearance restrictions – 154
- Bridge vertical clearance restrictions – 12
- Bridge weight restrictions – 17
- Limited rest areas / truck parking
- Limited space for trailer storage
- Truck bottlenecks – I-84 at its interchange with I-91, and I-91 at its interchange with Route 5/15 (Charter Oak Bridge).

## AIR

- Limited space for storing trailers
- Difficulty in accommodating freight carrier schedules
- Difficulty in identifying specific commodities as niche markets



## RAIL

- Weight restrictions: mostly 263,000-lbs capacity (some upgrades to 286,000-lbs planned)
- Height restrictions: Albany Avenue overhead bridge (Hartford), I-91 overpass (Windsor Locks)
- Width restrictions: Asylum Bridge abutment (Hartford)
- Limited operating time for freight rails due to the lack of double tracking
- Car-mile fees charged by Amtrak place financial burden on freight operators

# Way Forward

## HIGHWAY (TRUCKS)

- Develop and improve parking and rest stop facilities for trucks
- Improve highway conditions (address truck bottlenecks and advance key highway construction projects)

## RAIL

- Upgrade rail tracks to meet national rail freight standards (double tracking and 286,000-lbs gross vehicle weight)
- Upgrade rail bridges along the Hartford Line

## AIR

- Explore and pursue airport area development
- Construct a new airport cargo facility to accommodate future air cargo demand

Find out more about freight planning in the Capitol Region or Connecticut by visiting <https://crcog.org/transportation/multi-modal-planning/freight/> <https://portal.ct.gov/DOT/Freight/CTDOT-Freight-Program-Main-Page>

### References

1. Capitol Region Council Governments. *Summary of Freight Planning Efforts* (Hartford, CT 2015). *Setting* (Hartford, CT 2018).
2. Capitol Region Council of Governments. *Metropolitan Transportation Plan – Long Range Transportation Plan for the Metro-Hartford Capitol Region (Connect 2045)*, (Hartford, CT 2019).
3. American Transportation Research Institute: Top 100 Truck Bottlenecks – 2020. <https://truckingresearch.org/2020/02/18/2020-top-truck-bottlenecks/>
4. Connecticut Department of Transportation. *Connecticut Statewide Freight Plan, 2017*, prepared by CDM Smith (Newington, CT 2017).
5. Crandall E., Richard. "Impacts of the Panama Canal Expansion on Global Supply Chains." *SCM NOW MAGAZINE*, January/February 2017. <https://www.apics.org/apics-for-individuals/apics-magazine-home/magazine-detail-page/2017/01/30/impacts-of-the-panama-canal-expansion-on-global-supply-chains>.