

Appendix M: Freight and Intermodal

Intermodal transportation refers to the integration of transportation systems. It is the transport of passengers and freights in such a way that all the parts of the process, including information exchange, are efficiently connected and coordinated to offer all user maximum flexibility.

Intermodal transportation is customer oriented. It is the facility, hardware, and equipment involved with the movement of freight and people as well as the logistics of the movement.

The intermodal assets within the SMMPO region include:

- Highway network, which is comprised of internal arteries and land based connections to the rest of the country;
- Rail, the historic freight movers and re-invented movers of people;
- Seaports, the base of the fishing industry and connection to ocean ports throughout the world; and
- Airports, which connect the region to other parts of the nation and world when speed is essential.

Intermodal transportation planning explores the interdependency of these assets to each other by examining existing transportation modes, their linkages, and their need for improvements to achieve the economic goals set forth by past and present transportation legislation. The movement of freight is highly dependent on the intermodal transportation system, as it relies more heavily on all four modes than passenger transportation.

Freight movements have unlimited potential to become more sustainable and less costly via the use of water and rail for shipping. These two modes use significantly less fossil fuels per ton of freight shipped than trucking and air transport. The SMMPO region has assets in both of these modes, with direct water access to major ocean shipping lines via Buzzards Bay and over 115 miles of rail. The potential to reduce truck traffic along the congested I-95 corridor is a significant one for this region, as goods could effectively be shipped between Fall River or New Bedford and other East Coast ports via water, a concept known as *Short Sea Shipping*. See figure M-1 showing the regions freight network.

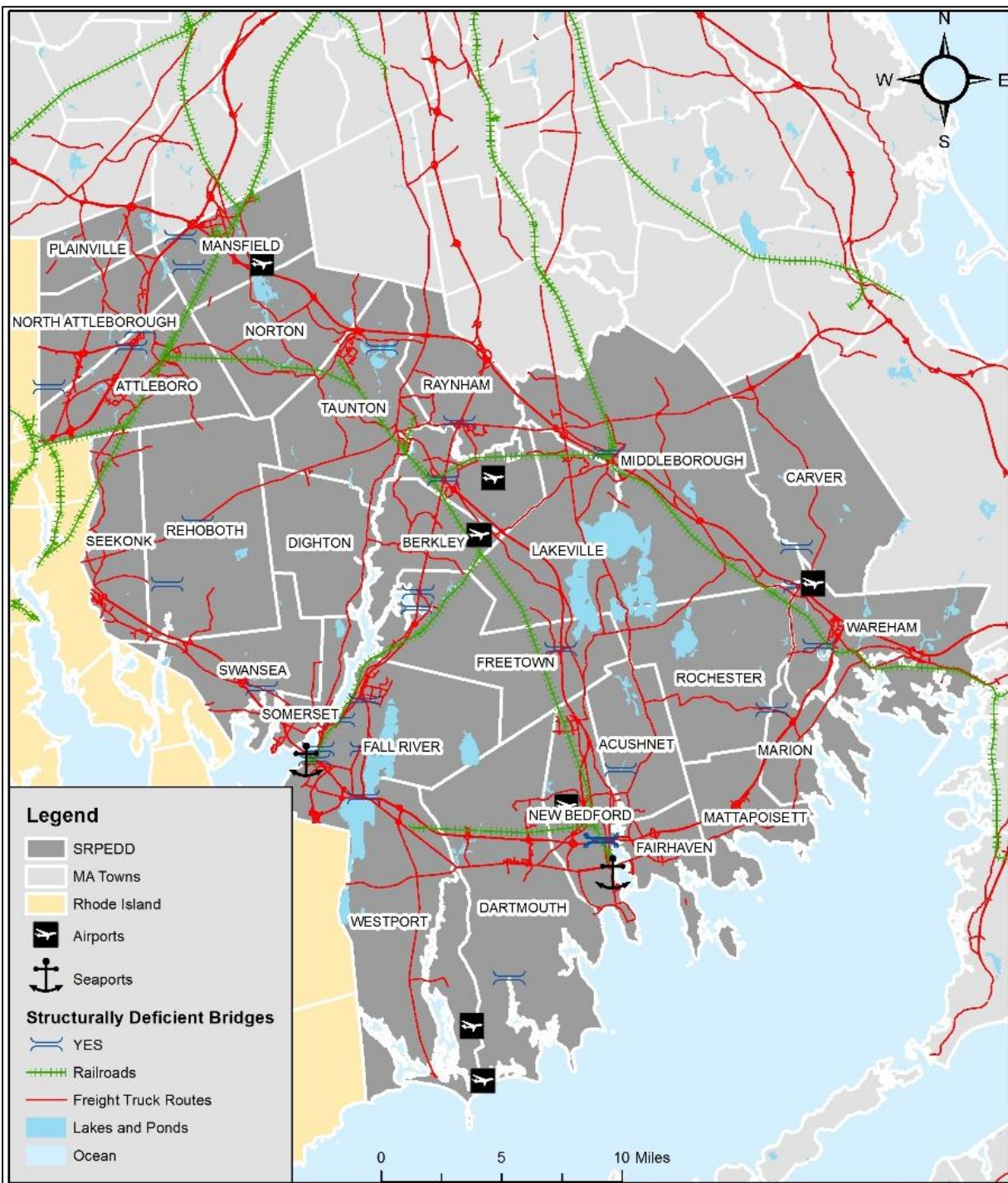


Figure M-1 SRPEDD Regional Freight Network

Regional Freight Issues

The efficiency of intermodal transportation is extremely important in the transfer of freight. Whether it's seafood or other time sensitive products, the speed and cost of moving freight dictates how the product is delivered. Therefore, it is important to have a regional intermodal system that is efficient enough and flexible enough to accommodate the transfer and shipment of freight.

The Massachusetts Department of Transportation (MassDOT) Freight Plan was completed in 2018. It was prepared by Cambridge Systematics with Regina Villa Associates under MassDOT and with input from the Regional Planning Agencies. The MassDOT Freight plan lays out a vision for a multimodal freight system that is safe, secure, resilient, efficient, reliable, sustainable, and one that catalyzes economic development while supporting the continued competitiveness of the Commonwealth. The strategies identified in this plan have been developed through a risk-aware, scenario-based process and are believed to be appropriate responses to whatever the future holds.¹

The plan identified the most cost-effective infrastructure improvements for freight movement in the state:

- Build or expand truck stops on primary truck routes;
- Upgrade rail lines to 286K standard;
- Resolve key bottlenecks on highways;
- Maintain uncongested freight access to airports, seaports, and rail terminals in mixed-use urban settings; and
- Modernize container terminal facilities.

Regional scenarios were also developed and analyzed for their cost-effectiveness. A South Coast Multi-modal Freight Improvement Scenario was part of these and included the following components:

- Marine terminal facility improvements at the Fall River State Pier and expansion of the New Bedford North Terminal;
- Navigational dredging projects in New Bedford;
- Improved truck access to New Bedford via Route 18 and JFK Highway improvements and reconstructed Route 6 bridge to allow larger ships access to the North Terminal;
- 286K weight-on-rail capacity enhancements from CSX Boston Line from Framingham south to Taunton area;

¹ Massachusetts State Freight Plan, 2018

- Other track improvements to Fall River and New Bedford (coordinated with the South Coast Rail Project); and
- Expanded transloading and distribution center operations in the region to handle, warehouse, and exchange goods between rail and truck.

Overall, an investment in freight infrastructure can deliver significant economic benefits to a myriad of areas within the Southeastern Region.

Industrial Rail Access Program (IRAP)

The Industrial Rail Access Program (IRAP) is a public/private partnership that combines funding to help eligible applicants invest in industry-based freight rail infrastructure improvement projects. The goals of the program are to stimulate economic development, grow Massachusetts corporations, keep manufacturing jobs and create new jobs through increased efficiency, production capacity, and improved distribution logistics.

Seaports

The region's two major ports are the New Bedford/Fairhaven Harbor on the Acushnet River and the Fall River/Somerset Harbor on the Taunton River. Each harbor contains water, rail, and highway access, making them truly intermodal locations. Each harbor has prepared Master Plans with funds from the Seaport Bond Bill as provided by the Seaport Advisory Council. The New Bedford/Fairhaven Harbor Plan was published in November 2002, with an update completed in 2009. The Fall River Waterfront Urban Renewal Harbor Plan was completed in February 2018.

The most critical need for both ports has been dredging. Shipping operations by larger vessels have been hampered by a lack of water channel depths.

Fall River/Somerset

The general purpose of the Fall River Waterfront Urban Renewal Plan is to identify current conditions that have been obstacles to private investment, determine the needs of the waterfront and the goals for its redevelopment, and define those actions that will create incentives for the private market, over time, to address the existing conditions.² The primary purpose of the Plan is to address the future development of the parcels created by the realignment of the current Route 79/Davol Street road and highway system, a project under the purview of MassDOT. Figure M-2 represents a redevelopment of the Fall River Harbor. The Fall River Harbor and Downtown Economic Development Plan lists the following recommendations:

² Fall River Waterfront Urban Renewal Plan, February 2018

- **Strengthening Current Assets: Arts, Museum, Parks** – The waterfront is anchored by the USS Massachusetts exhibits, the Maritime Museum and the Narrows Center for the Arts. Presently, the plaza is an attraction for bicyclists and pedestrians and serves as a venue for public celebrations. Renovating the fountain in the plaza and enhancement of the landscaping of the nearby Firestone Pond and city owned Crab Pond could advance the potential of the area as a destination as well as an intermodal connector to the Columbia Street cultural and historic district immediately to the south and ultimately to the downtown.
- **Developing a New Community: Route 79 and Davol Street** – The reorganization of the connections between Route 79 and I-195 at the Braga Bridge have set the stage for the realignment of Route 79 and Davol Street to the north. This realignment will open up new parcels that would be available for redevelopment and increase economic opportunities in Fall River. The realignment of Route 79 and Davol Street will encourage residents and visitors to walk between the neighborhoods and the waterfront. The city of Fall River should also seek to: extend the existing Bicentennial Park Trail along the waterfront; realign the existing roadways to the west of Davol Street to ensure the appropriate alignment with the extended streets from the neighborhoods; make improvements to pedestrian and bicycle access from the waterfront and the existing neighborhoods to the realigned Route 79 and Davol Street; and make improvements to bicycle and pedestrian access from existing neighborhoods to the new commuter rail platform and parking facility.

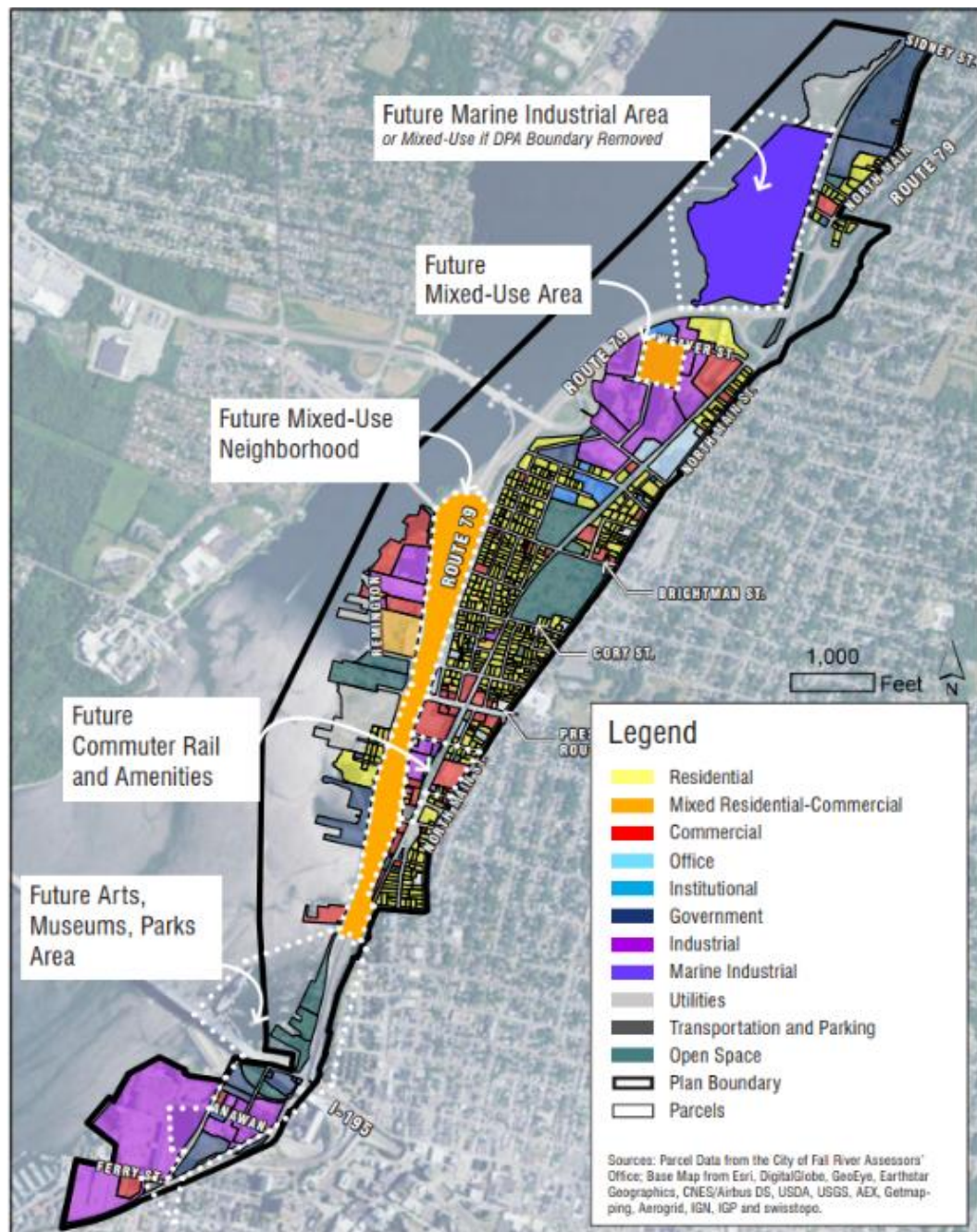


Figure M-2: Fall River Waterfront Redevelopment

- Rehabilitating Land for Jobs and Open Space/Recreation Use: Shell Oil Site Area – The previous use of the former Shell Oil site is industrial. The history and the location of the site continues to be appropriate for water-dependent, industrial uses. The site could also accommodate uses that support water-dependent industry, such as offices, warehouses, and parking. Any open space available after the redevelopment should be connected to publicly accessible sites along the waterfront both north and south of the

Shell Oil site to ensure connected paths for bicyclists and pedestrians along as much of the waterfront as possible.³ Figure M-3 illustrates the potential Shell Oil Site Redevelopment.



Figure M-3: Shell Oil Site Redevelopment

Port Roadways

The roadways serving the Fall River port (intermodal connectors, to be discussed further) were identified in SRPEDD's 2009 Regional Truck Route Study. Pavement conditions were also analyzed as part of their overall assessment, in the 2016 Regional Transportation Plan and

³ Fall River Waterfront Urban Renewal Plan, February 2018

found that 38% needed reconstruction and 36% needed rehabilitation. In 2017, MassDOT completed construction on the major connectors associated with Route 79 and I-195. Many of these connectors were replaced with the Route 79/I-195 /Braga Bridge Interchange Project.

Electric Power Generating

The Brayton Point Power Station is located at the tip of the Town of Somerset. The 1,530-megawatt power station was New England's largest coal-power facility and a regular on the Toxics Action Center's "Dirty Dozen" list of polluters.

Brayton Point had been the target of criticism by fisherman, state agencies and environmental groups such as Save the Bay and the Conservation Law Foundation. Three of the plant's four units were fueled by low sulfur coal. As a result, the plant was the largest single source of air pollution in Rhode Island. Concerns were also expressed over the level of mercury emissions from the plant as well as the damage to Mount Hope Bay's marine life by the facilities cooling system.

The Brayton Point Power Station was decommissioned as a coal powered facility in May 2017.

The Commercial Development Company Inc. (CDC) purchased the decommissioned Brayton Point Power Station in January 2018. Since the purchase in January 2018, CDC has been engaged in an extensive repositioning process designed to bring the retired power plant out of blight and back to productive reuse. In April 2019, the chimney and cooling towers at the power plant were demolished. The redevelopment project is intended to return Brayton Point to a state of productivity and growth by utilizing many of the same attributes that made the site successful in the past – 300 acres of waterfront property, a deep water port, and access to a strong local talent pool.

The location of Brayton Point provides a unique opportunity to support the emerging offshore wind energy sector due to the proximity to the offshore wind energy tracts in the Atlantic Ocean, a deep water port, access to major highway transportation, and public support for energy diversification. It is anticipated that Brayton Point will be utilized as a logistics manufacturing, and support center for offshore wind and other industries.⁴ Figure M-4 shows Brayton Point Power station.

Strategic Advantages:

- 50 Miles to Boston;
- 17 miles to New Bedford;
- 37 Nautical Miles to Offshore Wind Areas;

⁴ Brayton Point Commerce Center, 2018

- Deep Water Port with 34-foot Draft Depth - Brayton Point is equipped with a 34' deep water port capable of berthing large trans-Atlantic vessels. Previously used for coal, it will now be used as manufacturing and logistical support for offshore wind and other industries.;
- Opportunity for New Industrial Station Development - With an unmatched amount of waterfront industrial real estate in Southeast Massachusetts, Brayton Point represents a rare opportunity for development found few other places in New England.;
- Secure site with gated access;
- National Grid substations and transmission lines on site;
- Clear-span building with two 100 ton cranes.



Figure M-4: Brayton Point Power

It should be noted that the town of Somerset in conjunction with CDC are currently studying improved highway access to this site. Exit 4 (Lee's River Avenue/Route 103) on Interstate 195 is currently not conducive for freight movement and abuts several residential neighborhoods. At the time of this plan's update, the town had hired a consultant to explore a new configuration or possible connections to Brayton Point Road that has direct access to the site. However, because this access involves an interstate highway, guidelines set by the Federal Highway Administration and managed by MassDOT will ultimately determine if and where these connections can occur.

New Bedford/Fairhaven Harbor

The port of New Bedford, pictured in Figure M-5, is located on the Acushnet River approximately three miles north of Buzzard's Bay. The port is managed by the New Bedford

Harbor Development Commission. The port includes facilities in New Bedford on the west side of the river and in Fairhaven to the east.

The 6.5-acre State Pier acts as the main general cargo facility, with approximately 140,000 square feet of enclosed storage space.

Between 2015 and 2018, the economic contribution of the Port of New Bedford grew by 1,591 direct, induced and indirect jobs. Direct business revenue increased by \$473.6 million, state and local taxes increased by \$23.4 million and federal taxes increased by \$54.4 million. Overall, the total economic value of the Port of New Bedford grew by \$1.4 billion. In 2018, the port generated \$11.1 billion of total economic value.⁵

Commercial Fishing/Seafood Processing - In 2018, commercial fishing/seafood processing activity in the New Bedford/Fairhaven Harbor generated the following impacts:

- 39,697 jobs were supported by the seafood and commercial fishing industry
- 6,237 direct jobs
- As the result of purchases by these 6,237 directly generated jobs, an additional 3,807 induced jobs are created in the local economy.
- The \$398.7 million of local purchases by the firms located in the New Bedford Harbor and surrounding area created an additional 3,155 indirect jobs in the local economy.
- Another 26,499 jobs are classified as related jobs and include downstream logistics operations involved in the seafood processing industry in 2018.

Marine Cargo, Ferry and Marina – In 2018, a total of 312,000 tons of cargo moved through the marine facilities owned by the Port of New Bedford and was also home to many recreational boating activities such as water taxis, ferries, and recreational marinas. These 312,000 tons included petroleum, aggregates, and imported fruits. The ferries take passengers back and forth to locations such as Martha’s Vineyard, Cuttyhunk Island, and Nantucket. Additionally, the seven marinas moored 570 recreational boats in 2018.

1,231 jobs were generated by the marine cargo, ferry and marina activity in the Harbor:

- 571 direct jobs;
- 400 induced jobs were supported by the purchases of the 571 directly employed individuals;
- 259 indirect jobs were generated as a result of \$43.0 million of local purchases by firms directly dependent upon non-seafood activity at Port of New Bedford marine cargo and marina facilities.

⁵ The 2018 Economic Impact of the Port of New Bedford and the New Bedford/Fairhaven Harbor

Dredging – Four phases of the State Enhanced Remedy process have been completed. The next phase of this project, Phase V, could serve up to 65 waterfront properties and businesses and remove up to 500,000 cubic yards (cy) of impacted and unsuitable for offshore disposal material from the Harbor bottom, enhancing the cleanup efforts and maintaining harbor depth that users depend upon. Dredging will also generate more than 850 jobs in New Bedford, and generate \$69.4 million in annual wages and re-spending/local consumption impacts to the Commonwealth’s economy. In addition, the project would generate \$30.2 million annually in new federal tax revenue.

The federal channel has not been dredged since the 1950’s. In order to unlock the full potential of the New Bedford Port, dredging the inner harbor an additional 4 feet is necessary. The federal government requires the average depth during low tides to be 30 feet. Currently, the depth sits at 28.5 feet.⁶ The US Army Corps of Engineers (USACE) and the National Oceanic and Atmospheric Administration (NOAA) requires the average channel depth during low tides to be 30 feet. Currently, the depth sits at 28.5 feet.



Figure M-5: Port of New Bedford

⁶ The 2018 Economic Impact of the Port of New Bedford and the New Bedford/Fairhaven Harbor

In total, seafood valued at approximately \$427.0 million was landed in New Bedford Harbor in 2018 and an additional 275.3 million pounds of domestic and international seafood was processed. The largest seafood type processed and landed in New Bedford is sea scallops, which accounted for more than 30 percent of the landed catch in 2018. Other seafood that is landed and processed in New Bedford includes Jonah crab, surf clams, Atlantic herring and mackerel, lobster, haddock, squid, hake, flounder, skate, cod, and pollock as well as several other species. Tourism is of grave importance for the harbor. New England Fast Ferry provides service to Martha's Vineyard and carries passengers, as well as transporting break-bulk freight. The Cuttyhunk Ferry also transports passengers and freight. Additionally, there are 8 marinas in the port with 950 moorings and 961 slips for recreational boating. There are frequent sailing tours and yacht races. American Cruise Lines uses the harbor for ports of call.

Planned Projects

Since 2007, over \$157.4 million in grants have come to the New Bedford Port Authority for harbor improvements.⁷ The New Bedford Port Authority (NBPA) will plan, develop and secure funding for new port infrastructure and upgrades to existing facilities based on the anticipated needs of port industries in the foreseeable future. More specifically, the NBPA should continue to advance the following projects:

North Terminal – The development of North Terminal would expand access for fish processors, international shipping companies, and island freight services. In addition, as the offshore wind industry continues to develop, the expansion of North Terminal would provide the Port with the capacity to handle two separate offshore wind installation projects in the future. The entire North Terminal bulkhead extension of 1,600 feet could be constructed in part with clean fill from the dredging of the harbor, yielding considerable savings and environmental benefit. The NBPA continues to seek federal and state funding for the construction of the terminal.

EPA Facility – For nearly twenty years the EPA has operated a "de-watering" pier and warehouse facility along the North Terminal area to support its Superfund cleanup of the harbor. Once the EPA removes the soil with the highest levels of contamination, it will no longer ship sediments out of the City by rail. This also means the EPA will no longer need the de-watering facility, whose ownership will revert to the City. The NBPA will develop a business plan for this facility.

Pope's Island Marina Upgrades – With 198 seasonal slips and dozens of transient moorings, Pope's Island Marina has significant capacity to serve as the Port's primary recreational boating

⁷ Economic Impact Study of New Bedford/Fairhaven Harbor, September 2016

center. Many of the docks and slips are in need of repair or replacement, the entire marina is in need of electrical upgrades. The Welcome Center also would greatly benefit from updated amenities. The marina's recent success has led to a waiting list for space, and the need for expansion and parking management. Before major investment can occur, however, there will need to be a clearer understanding of who owns the facility now and who would be responsible for future repairs. The state's Department of Conservation and Recreation built the original marina but has no management role over the facility.

Berth and Navigational Dredging - Harbor dredging is critical for ports to make their infrastructure available for use, yet New Bedford has not been able to undertake comprehensive harbor dredging in over 60 years. The primary problem has been the pervasive contamination of the harbor by nearby industry, which has made the cost of disposing dredge spoils prohibitively expensive, resulting in many shallow, unusable berths. The EPA's ongoing cleanup of the harbor and regular private berth dredging through the State Enhanced Remedy process, however, will open the door to more routine dredging in future.

The more immediate opportunity lies in a current proposal that NBPA has put before the state to undertake dredging along several shallow areas of the harbor to open them up for marine industrial development. This project will set the stage for waterfront businesses to go forward with their own infrastructure projects and continue investing in the city and local workforce. A recent economic study of the Port projects that this dredging project would create nearly 900 permanent jobs. This project will offer the added benefit of making clean fill available (from the excavation of related Confined Aquatic Disposal cell) for use in constructing the North Terminal, which would reduce the cost of that project by several million dollars.⁸

In the meantime, the New Bedford Port Authority must continue to work with the U.S. Army Corps of Engineers to dredge the harbor's main channel down to its authorized depth of -30 feet. This would remove the challenge posed to cargo freighters that at times must wait for the tide to rise before entering or leaving the inner harbor.

Under these principles, 15 newly proposed or on-going initiatives were supported, some of which include continued harbor dredging, transportation improvements, wharf/dock expansion/improvements, public amenities and waterfront access points, expanded use of State Pier, revitalization of the former power plant site and a comprehensive "green port" strategy. Under these initiatives, the Harbor Development Commission and the state submitted applications for one Better Utilizing Investments to Leverage Development Transportation Discretionary Grants Program (BUILD) in New Bedford for the Terminal Extension Project which will construct 800 feet of additional bulkhead, backfill the constructed bulkhead with clean material from maintenance harbor dredging, and extend three rail spurs to increase multimodal

⁸ The 2018 Economic Impact of the Port of New Bedford and the New Bedford/Fairhaven Harbor

operations. The improvements will increase capacity and reduce costs at the port to allow more fishing vessels to use it and will increase the port's competitive advantage. The improvements will also extend the useful life of the port, and expanded space will create safer working conditions by allowing for safer movement of cranes and vehicles. Figure M-6 outlines the North Terminal expansion project.



Figure M-6: North Terminal Extension Project

The New Bedford - Fairhaven Bridge – One of the most significant transportation projects related to the Port of New Bedford is the replacement/relocation of the Route 6 Bridge. The purpose of the relocation is to relieve a major obstacle to port development, expand harbor capacity, and improve Route 6 cross-harbor roadway connections by removing the existing swing-span drawbridge, which inhibits shipping to the North Harbor. The existing bridge has a horizontal clearance of 94 feet at the west span and 95 feet at the east span, with a vertical clearance of six feet at the mean high water level when the bridge is open to vehicular traffic. Bridge openings have increased considerably over the last 30 years from 1,776 in 1970

to 5,212 from May 2018 through April 2019. Maritime vessels accessing the inner harbor and North terminal include commercial fishing boats, tugs, barges and tankers, as well as sailboats and other pleasure crafts.

MassDOT has classified the New Bedford-Fairhaven Bridge as “functionally obsolete,” and it estimates that repair costs will exceed \$45 million in the coming years. At the same time, the bridge is a physical barrier to North Terminal for larger vessels and stymies the growth of the cargo and offshore wind industries. The lower harbor lacks space for continued development, leaving the upper harbor ripe for growth, but until the bridge is replaced to allow for wider clearance, the Northern Harbor will not realize its full economic potential. The New Bedford Port Authority will continue to press the state administration to fund the replacement of the bridge, which would cost approximately \$100 million.⁹

This particular facility has been studied numerous times within the last 20 to 30 years including the potential relocation of the bridge that was studied in 2004 by STV Incorporated and Vanasse Hangen Brustlin, Inc. through a contract with the City of New Bedford and a Transportation, Community and System Preservation Program (TCSP) grant from FHWA. The study, “Conceptual Alternative Study for the Relocation of the Route 6 Bridge over New Bedford Harbor,” concentrated only on the relocation proposal, and did not evaluate the bridge's replacement on the existing alignment. Although the report was not made public, and was not critically reviewed by MassDOT, an important statement on the condition of the existing bridge is worth quoting in this RTP: “The history of repairs of this bridge has been extensive and costly. Most of the operational problems are due to the mechanical nature of the swing span, which is prone to excessive wear and is now considered an obsolete design. Other structural deteriorations have been intensified by the harsh salt water environment which has accelerated damage to the bridge.”

In 2005 the city received a Congressional Earmark through the SAFETEA-LU High Priority Program for a Feasibility Study and Design/Environmental Studies to relocate or replace the New Bedford-Fairhaven Bridge. The 2012, 2016 and this current Regional Transportation Plan, recommends the replacement of the Route 6. New Bedford-Fairhaven Bridge, not relocation. In 2014, MassDOT contracted with HDR, Inc. and began a feasibility study for the replacement of the existing facility. A new bridge will provide a new more reliable drawbridge with a wider channel opening to allow larger vessels to enter into the North Harbor area. MassDOT conducted a study of the New Bedford-Fairhaven Bridge Corridor in 2015. The two bridge alternatives recommended for advancement by the MassDOT study, into the project development phase are a tall vertical lift bridge, and a Double-leaf Dutch Bascule Bridge.

⁹ The 2018 Economic Impact of the Port of New Bedford and the New Bedford/Fairhaven Harbor

Preliminary estimates for the replacement of this bridge range from as low as \$60 million to as much as \$180 million, depending on the bridge type.

Route 18 – The redevelopment and redesign of Route 18, also known as the John F. Kennedy Highway, was funded through a Congressional High Priority Project designation. The conceptual phase of the project has been completed and engineering design began in 2006. The goal of this project is to "enhance access to waterfront businesses, improve pedestrian connections between downtown New Bedford and the central waterfront and provide an expanded network of pedestrian and bicycle connections between existing and potential future components of a harbor wide open space network. In 1998, the city secured \$15 million for the implementation of the project. TEA-21 provided \$12 million, to be matched with \$3 million in state funding for the planning, engineering and construction needed to accomplish this goal. Phase II was programmed on the 2016-2020 TIP and was advertised for \$9,157,334.25. Phase II of the redesign of Route 18 consists of roadway resurfacing and reconstruction, traffic signal installation, sidewalk and bike path installation on a section of Route 18 (JFK Highway) south of the downtown section ending at Cove Street. New signs and pavement markings are included in the .95-mile-long project. Construction was set to end in the Fall of 2019 but as of May 7, 2019 Route 18 mainline has been paved to intermediate course from Griffin Court to Cove Street. Normal work hours are Monday thru Friday 7:00 AM to 3:30 PM

New Bedford Ferry Terminal – The Harbor Development Commission operates the New Bedford Ferry Terminal located on the north side of State Pier. The ferry terminal bridge allows intermodal transfers of waterborne freight and freight carried by truck and rail. The terminal features a 27-foot pier depth and Roll-On/Roll-Off capability, as well as offsite cold storage and easy access to the interstate highway system. The ramp is 100 feet long and 18 feet wide and will hold up to 200 tons. An 8,500-square foot passenger terminal has been constructed within the State Pier building to support passenger ferry services. The terminal features a climate-controlled waiting area, ticketing facilities, baggage area, restrooms, and visitor information center. Work also included structural improvements to separate passenger operations from freight activities. Ferry parking is available at the nearby Whale's Tooth Parking Lot (located near Routes 6 and 18). The HDC operates a shuttle service to transport ferry passengers a short distance from the lot to the terminal at State Pier. An expansion of ferry service from New Bedford to Martha's Vineyard should be considered in order to alleviate congestion currently being experienced at ferry terminals on Cape Cod. Expanded service would also help to alleviate traffic congestions accessing Cape Cod's terminals via the Bourne and Sagamore Bridges.

The New Bedford Hurricane Barrier – Completed in 1966 at a cost of over \$18 million, the Hurricane Barrier protects approximately 1,400 acres of heavily developed industrial and commercial properties from New Bedford Harbor to Clark's Cove, including the fishing fleet in

the inner harbor. Stretching 3.5 miles east towards Fairhaven and standing 26 feet above mean high tide, the barrier is the largest stone structure in the eastern United States. See figure M-7: The New Bedford Hurricane Barrier. The barrier encloses the harbor with the exception of a 150-foot opening. The two massive gates, each weighing 40.5 tons, can close in 12 minutes to seal the opening. The navigation gate is manned and operated by the Army Corps of Engineers. The gates may be closed if major coastal storms or strong high tides are forecast. Other features of the barrier, including a street gate and pump station, are operated and maintained by the city. Two multi-use paths, the Harbor Walk and the Cove Walk, were constructed on top of the Hurricane Barrier.

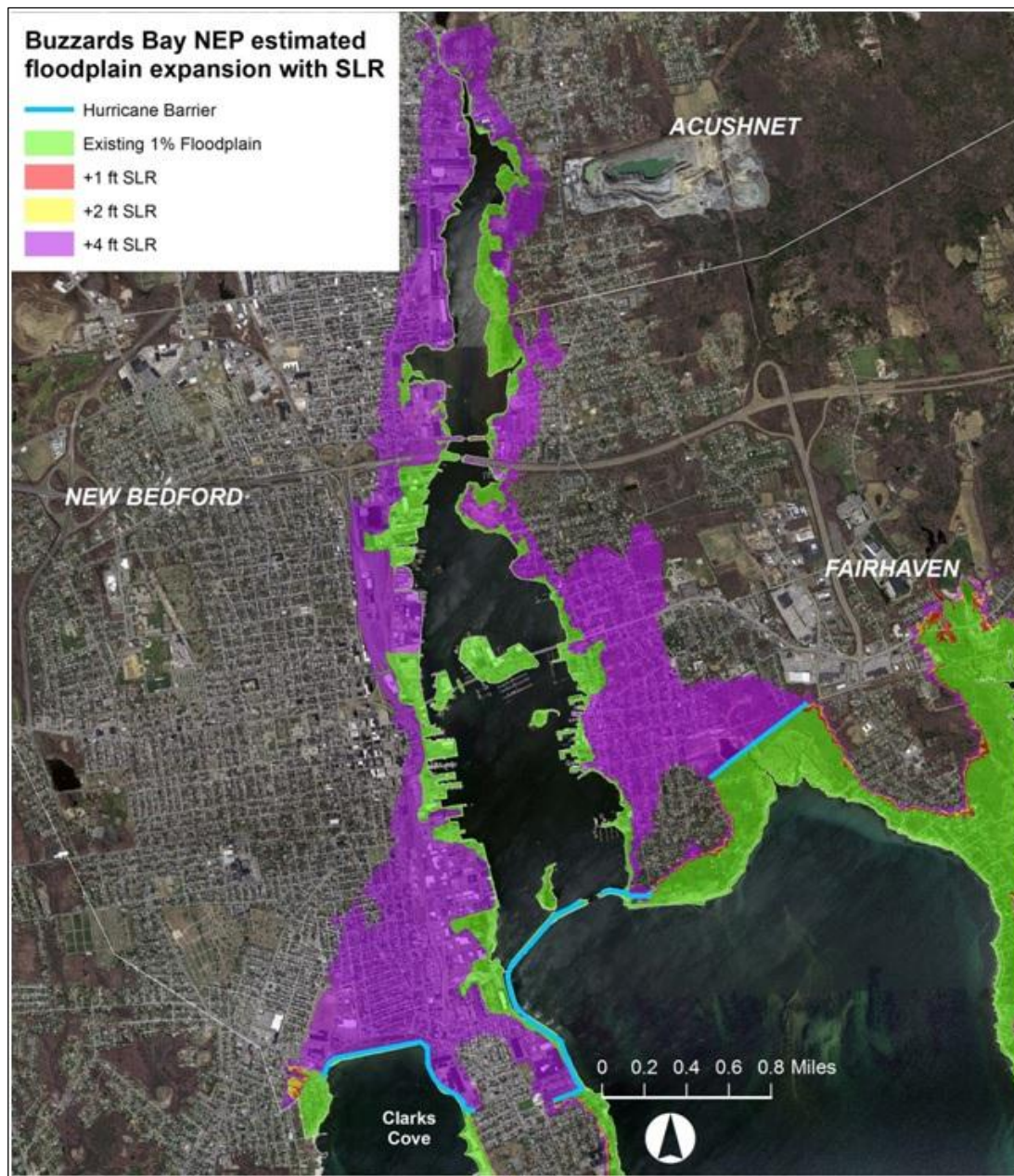


Figure M-7: New Bedford Hurricane Barrier

M-95 Marine Highway Corridor – The Port of New Bedford was recently designated as part of the M-95 Marine Highway Corridor by the US Department of Transportation’s Maritime Administration. This corridor stretches from Maine to Florida and includes Atlantic coastal waters, intra-coastal waterways, channels, ports and harbors. The Corridor contains 15 of the largest 50 ports in the United States and parallels several major freight bottlenecks, including the Hudson River Crossings in New York and New Jersey. Under this program, New Bedford was also identified in the East Coast Marine Highway Initiative, sponsored by the I-95 Corridor Coalition. This initiative will ship international containers and trailers via water between New Bedford, Baltimore, MD and Port Canaveral, FL offering multiple medium and long-haul options for shippers along the corridor.

Green Ports Initiative

The Green Ports initiative is a strategy to support on-going efforts to clean up the Harbor and to incorporate energy efficiencies, operational improvements and recycling initiatives. Specific initiatives include shore-side power, bilge water storage, solar - powered compacting trash cans, alternative fuel use, storm water management and the “Fishing for Energy” program, where derelict fishing nets are burned for fuel.

Airports

Airport transportation helps to drive economic development and is an important part of the region’s intermodal transportation system. The vision of the Regional Transportation Plan is to provide a fully integrated, seamless transportation link between the people and products of Southeastern Massachusetts. An efficient airport network is critical to our economic development success.

Four public municipal airports serve the 27 communities in the SMMPO region, including the New Bedford Regional Airport, the Taunton Municipal Airport, the Mansfield Municipal Airport and the Plymouth Municipal Airport. More information and recommendations for the New Bedford Regional Airport and other airports in the region can be found in this RTP, in the Appendix L – Airports.

Railroads

Massachusetts’ rail carriers provide essential transportation connections in support of domestic and international trade. The major products shipped in Massachusetts by rail include pulp and paper, mixed shipments, chemicals, waste or scrap materials and food or kindred products. In 2015, 7,489,130 tons of goods were shipped by rail into, out of, within or through Massachusetts. Figure M-8 illustrates freight rail tonnage.¹⁰

¹⁰ Massachusetts State Rail Plan, 2018

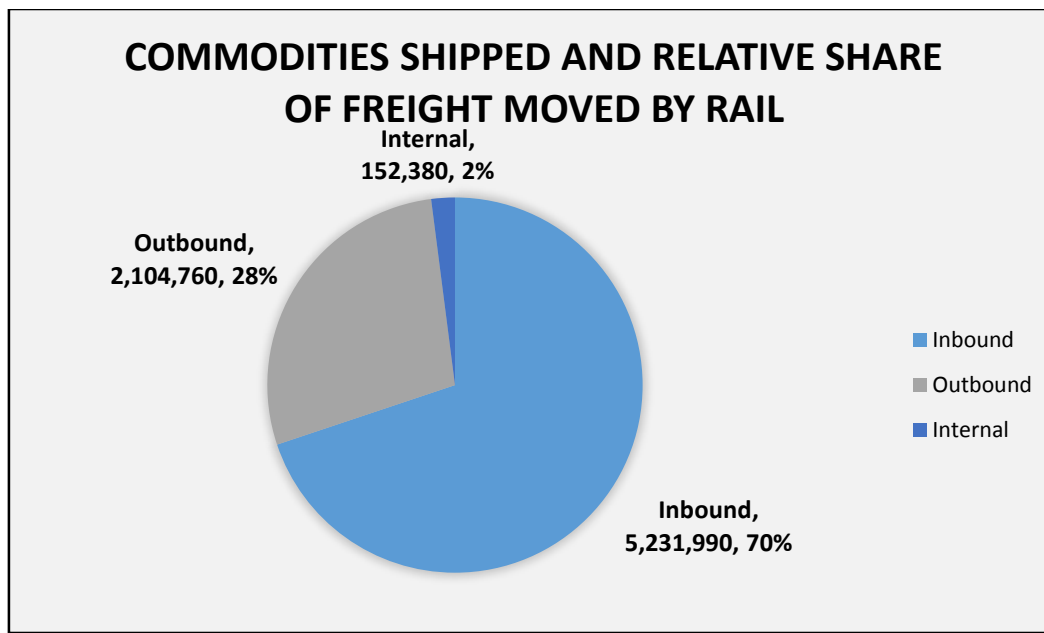


Figure M-8: Freight Rail Tonnage

The SMMPO region contains 14 active rail links totaling 117 miles. Most carry freight only, with the exception of the Northeast Corridor, which carries passengers only, and the Middleborough Line, which carries both passengers and freight. All of the active rail lines in the region have a 263,000-pound capacity with the exception of the Middleborough Line north of Middleborough Center, which has a 273,000-pound capacity. Table M-1 outlines the active links within the region.¹¹ Figure M-9 illustrates a map of all the Active Rail links in the SMMPO region.

Table M-1: Active Rail Links Within the SMMPO Region, 2019

Segment Name	Operator	Limits and Portions (SRPEDD Only)	Miles	Speed Limit	Type
1. Northeast Corridor	AMTRAK	Mansfield to Attleboro to Rhode Island State Line	9	150	Passenger
2. East Junction Secondary	MBTA	East Junction to Rhode Island State Line	3.8	10	Freight
3. East Providence Branch	P&W	Valley Fall to East Providence	0.3	15	Freight
4. Framingham Secondary	CSX	Foxborough T/Lto Mansfield	5.3	25	Freight
5. Middleborough	CSX	Attleboro to Cotley	16	30	Freight

¹¹ Massachusetts State Rail Plan, 2018

6. Middleborough Secondary	CSX/MassCoastal	Cotley to Alden	4.9	30	Freight
Segment Name	Operator	Limits and Portions (SRPEDD Only)	Miles	Speed Limit	Type
7. Dighton Industrial	MassCoastal	Longmeadow Road to Weir Village	3.9	10	Freight
8. Myles Standish Branch	MassCoastal	Whittendon to Yard	1	20	Freight
9. Fall River Secondary	MassCoastal	Myricks to the Rhode Island State Line	11.5	10	Freight
10. Dartmouth Industrial (Watuppa Line)	Bay Colony/ MassCoastal	New Bedford: Nash Road to Westport	6.1	10	Freight
11. New Bedford Secondary	MassCoastal	Cotley to New Bedford	18.5		
		A. Cotley to Myricks	3.6	25	Freight
		B. Myricks to Nash Road	12.3	25	Freight
		C. Nash Road to Whales Tooth	2.6	10	Freight
12. Buzzards Bay Secondary	MassCoastal	Middleborough to Buzzards Bay	20.0		
		A. Middleboro to Tremont		10	Freight
		B. Tremont (Wareham) to Buzzard's Bay		10	Freight
13. Middleborough Line	MBTA	Middleborough to Bridgewater	7.2	70	Passenger
	CSX	(to Braintree)		40	Freight
14. Attleboro Line	AMTRAK		9.4	35	Freight
15. Dean Street Industrial	MassCoastal	Taunton to East Norton Depot	1.5	25	Freight

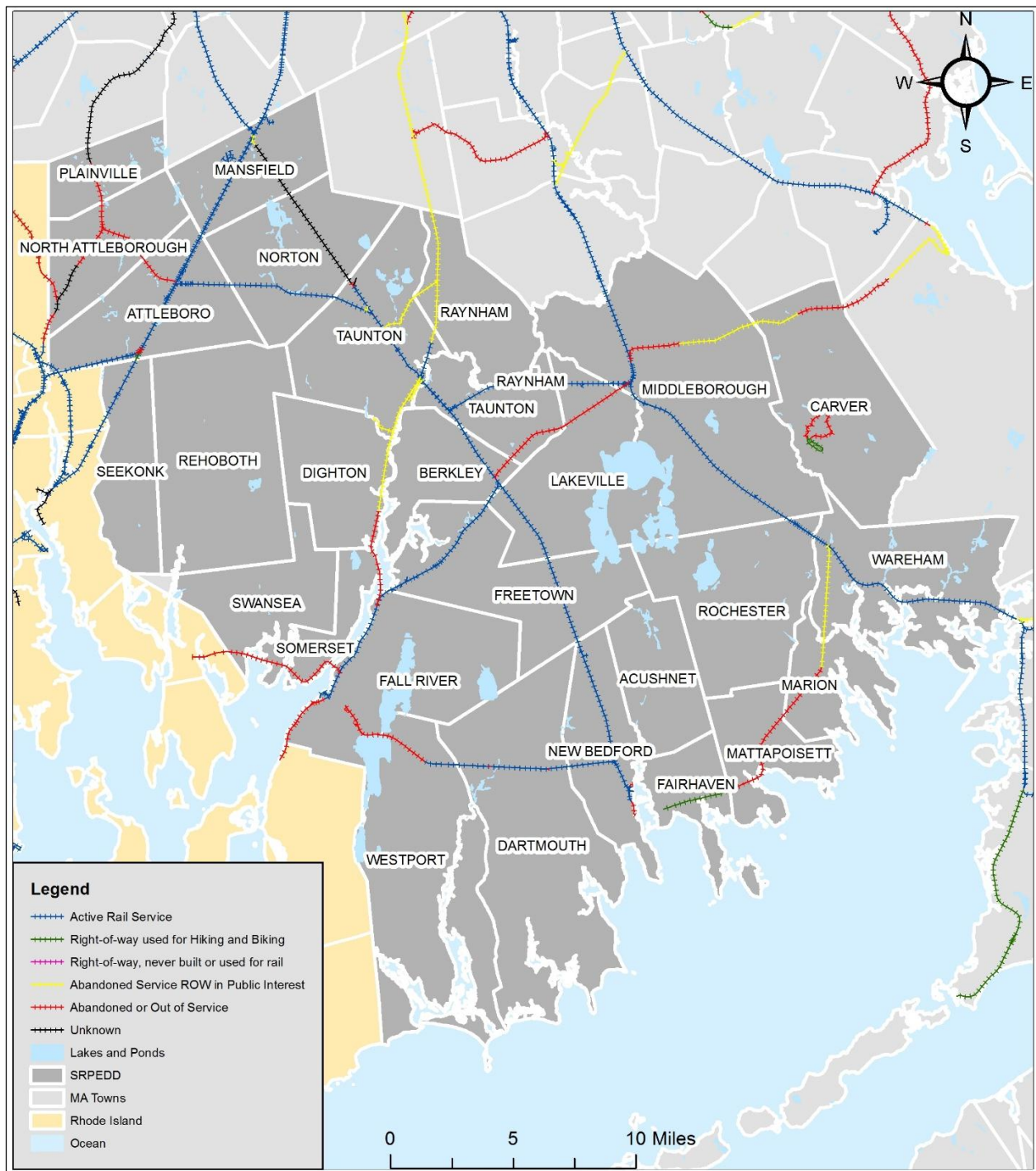


Figure M-9: Active Rail Links

At-Grade Rail Crossings

As part of the FAST Track TIGER grant, there were improvements made to four railroad bridges in New Bedford thus, speeds on the New Bedford Secondary branch from Nash Road to Whales Tooth in New Bedford to 25 mph.

Other than the Northeast Corridor, every rail line in the region has at-grade crossings with roadways. In total, the region has 87 at-grade rail crossings along active rail lines. Forty-seven of these crossings are under signal control and 40 have flag crossings only. Figure M-10 details all of the at-grade rail crossings in the region. A full listing of these crossings can be found in Table M-2.

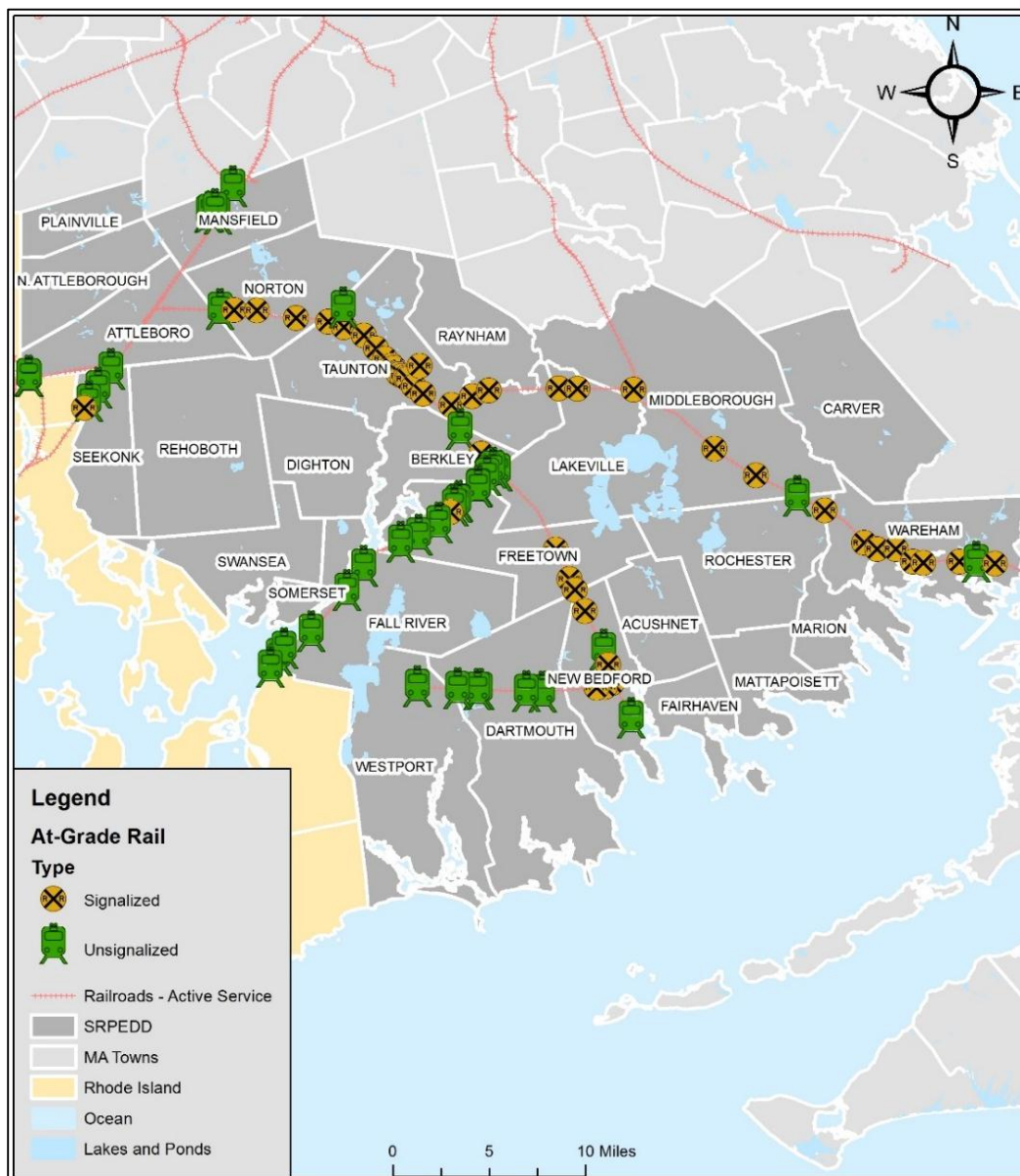


Figure M-10: At-Grade Rail Crossings

Table M-2: At-Grade Rail Crossings

Rail Line	Operator	Community	Roadway Crossing	Type	Preemption
East Junction	P&W	Seekonk	Oakhill Avenue	Unsignalized	No
East Junction	P&W	Seekonk	Pine Street	Unsignalized	No
East Junction	P&W	Seekonk	Tower Road	Unsignalized	No
East Junction	P&W	Seekonk	Newman Avenue	Signalized	Yes
East Providence Branch	P&W	Attleboro	Mann Street	Unsignalized	No
East Providence Branch	P&W	Attleboro	Jencks Street	Unsignalized	No
Middleborough Secondary	CSX	Norton	Union Road	Unsignalized	No
Middleborough Secondary	CSX	Norton	John Scott Blvd	Signalized	No
Middleborough Secondary	CSX	Norton	South Worcester Street	Signalized	No
Middleborough Secondary	CSX	Norton	Woodward Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Harvey Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Crane Avenue	Signalized	No
Middleborough Secondary	CSX	Taunton	Fremont Street	Signalized	No
Middleborough Secondary	CSX	Taunton	West Britannia Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Danforth Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Tremont Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Oak Street	Signalized	Yes

Middleborough Secondary	CSX	Taunton	Porter Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Cohannet Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Winthrop Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Harrison Avenue	Signalized	No
Middleborough Secondary	CSX	Taunton	Somerset Avenue	Signalized	No
Middleborough Secondary	CSX	Taunton	Weir Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Ingell Street	Signalized	No
Middleborough Secondary	CSX	Taunton	Hart Street	Signalized	No
Middleborough Secondary	CSX	Taunton	County Street	Signalized	Yes
Middleborough Secondary	CSX	Taunton	Middleboro Avenue	Signalized	No
Middleborough Secondary	CSX	Taunton	Old Colony Avenue	Signalized	No
Myles Standish Branch	CSX	Taunton	John Hancock Road	Unsignalized	No
Dighton Industrial	MassCoastal	Taunton	Dean Street (Rte 44)	Signalized	Yes
Middleborough Secondary	CSX	Lakeville	North Precinct Street	Signalized	No
Middleborough Secondary	CSX	Lakeville	Leonard Street	Signalized	No
Middleborough Secondary	CSX	Middleborough	West Clark Street	Signalized	No
Buzzards Bay Secondary	MassCoastal	Middleborough	Miller Street	Signalized	No
Buzzards Bay Secondary	MassCoastal	Middleborough	Spruce Street	Signalized	No

Buzzards Bay Secondary	MassCoastal	Middleborough	Private Way (Sippican Commerce Park)	Unsignalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	County Road	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Station Street	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Hathaway Street	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Main Street @ Tihonet Road	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Sandwich Road (Rte 6)	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Indian Neck Road	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Depot Street	Signalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Private Way (Walmart Plaza Rear)	Unsignalized	No
Buzzards Bay Secondary	MassCoastal	Wareham	Main Avenue	Signalized	No
New Bedford Secondary	MassCoastal	Berkley	Cotley Street	Unsignalized	No
New Bedford Secondary	MassCoastal	Berkley	Padelford Street	Signalized	No
New Bedford Secondary	MassCoastal	Berkley	Myricks Street (Rte 79)	Signalized	No
New Bedford Secondary	MassCoastal	Lakeville	Malbone Street	Unsignalized	No
New Bedford Secondary	MassCoastal	Freetown	Chace Road	Signalized	No
New Bedford Secondary	MassCoastal	Freetown	Braley Road	Signalized	No

New Bedford Secondary	MassCoastal	Freetown	Chipaway Road	Signalized	No
New Bedford Secondary	MassCoastal	New Bedford	Samuel Barnett Blvd	Signalized	No
New Bedford Secondary	MassCoastal	New Bedford	AAA Recycling Driveway	Unsignalized	No
New Bedford Secondary	MassCoastal	New Bedford	Tarkiln Hill Road	Signalized	Yes
New Bedford Secondary	MassCoastal	New Bedford	Nash Road	Signalized	No
New Bedford Secondary	MassCoastal	New Bedford	Herman Melville Blvd	Unsignalized	No
Dartmouth Industrial Line	MassCoastal /Bay Colony	New Bedford	Mount Pleasant Street	Signalized	No
Dartmouth Industrial Line	MassCoastal /Bay Colony	New Bedford	Airport Road	Signalized	No
Dartmouth Industrial Line	MassCoastal /Bay Colony	Dartmouth	Faunce Corner Road	Unsignalized	No
Dartmouth Industrial Line	MassCoastal /Bay Colony	Dartmouth	Hixville Road	Unsignalized	No
Dartmouth Industrial Line	MassCoastal /Bay Colony	Dartmouth	Reed Road	Unsignalized	No
Dartmouth Industrial Line	MassCoastal /Bay Colony	Dartmouth	Old Reed Road	Unsignalized	No
Dartmouth Industrial Line	MassCoastal	Westport	Davis Road	Unsignalized	No
Fall River Secondary	MassCoastal	Berkley	Private Way off 79	Unsignalized	No
Fall River Secondary	MassCoastal	Berkley	Adams Lane	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Beechwood Road	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Richmond Road (Rte 79)	Unsignalized	No

Fall River Secondary	MassCoastal	Freetown	Forge Road	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Richmond Road (Rte 79)	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Forge Road	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Elm Street	Signalized	No
Fall River Secondary	MassCoastal	Freetown	High Street	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Copicut Road	Unsignalized	No
Fall River Secondary	MassCoastal	Freetown	Private Way off South Main Street	Unsignalized	No
Fall River Secondary	MassCoastal	Fall River	Private Way (golf course)	Unsignalized	No
Fall River Secondary	MassCoastal	Fall River	Private Way (Weavers Cove)	Unsignalized	No
Fall River Secondary	MassCoastal	Fall River	Water Street (3 spurs)	Unsignalized	No
Fall River Secondary	MassCoastal	Fall River	Birch Street	Unsignalized	No
Fall River Secondary	MassCoastal	Fall River	Private Way to Draper Street	Unsignalized	No
Fall River Secondary	MassCoastal	Fall River	Private Way to Atlantic Blvd	Unsignalized	No
Foxborough Branch	CSX	Mansfield	Private Way to County St	Unsignalized	No
Cabot Industrial Park	CSX	Mansfield	Norfolk Street	Unsignalized	No
Cabot Industrial Park	CSX	Mansfield	Forbes Blvd	Unsignalized	No

Cabot Industrial Park	CSX	Mansfield	Hampden Road	Unsignalized	No
Cabot Industrial Park	CSX	Mansfield	Middlesex Road	Unsignalized	No

Intermodal Connectors

A number of businesses in the SMMPO region utilize rail to ship goods. These properties, along with the region's seaports and the New Bedford Regional Airport, serve as intermodal connection points between freight moving by truck and freight moving by rail, sea, or air. Intermodal connectors are roads that provide access to major truck, rail, sea or air freight terminals. They are typically short segments of road generally less than two miles in length and can be part of intermodal freight movements, shipments of goods involving two or more modes of transportation under a single contract of carriage.

Conditions along the region's intermodal connectors were assessed as part of SRPEDD's Regional Truck Route Study, completed in 2009, and the Massachusetts Freight Plan, completed in 2018. In addition to locating structurally deficient/functionally obsolete bridges, crashes involving trucks, congested areas and pavement conditions were assessed along these intermodal connectors. Figure M-11 displays these connectors. A detailed list of these connectors are shown in Table M-3.

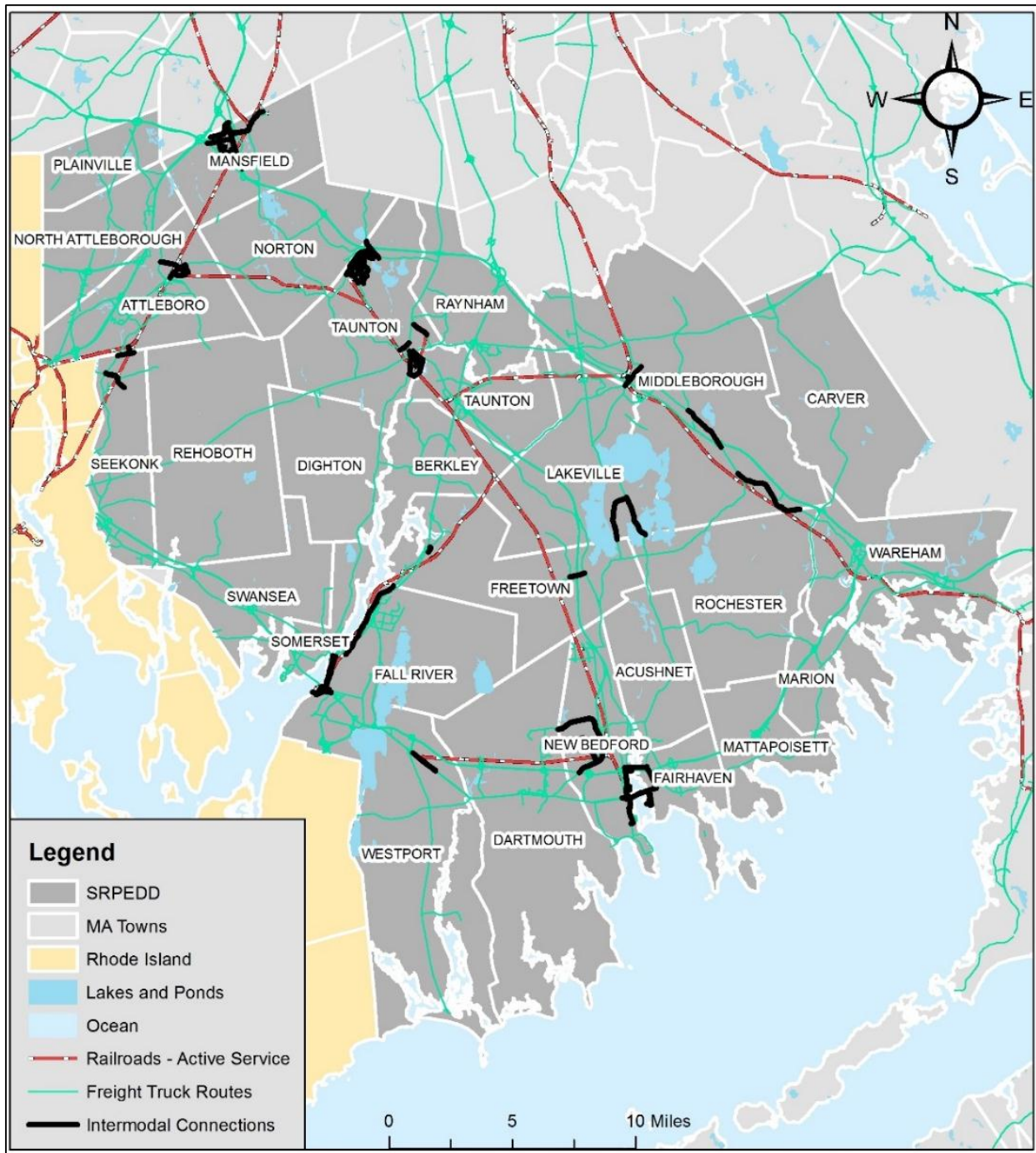


Figure M-11: Intermodal Connections

Table M-3: Intermodal Connectors

Community	Roadway/Right-of-Way	Connecting To:
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Attleboro	Starkey Ave, Holden St.	Holland Manufacturing Company
Attleboro	Willard Rd. Haggerty Highway, Forest St. Route 6, Center St, Washington St, South St,	Corporate Campus
Attleboro	Fuller Ave. South Main St.	Robert N. Karpp Co.
Attleboro	Jencks Street, Bacon Street	Schnitzer Steel
Fairhaven	Water Street, Union Street, Middle Street, Main Street, Route 6, Center Street, Washington Street, South Street	Port of Fairhaven
Fall River	Central Street, Water Street, Ferry Street, Anawan Street, Pocasset Street, North Main Street, Broadway, Davol Street North, Davol Street South	Port of Fall River
Fall River	New Street, North Main Street, Wayland Street, Herman Street, Route 79	Weavers Cove
Freetown	Ridge Hill Road	Campanelli Business Park
Freetown	Chace Road	JM Equipment Company
Lakeville	Lakeville Business Park Drive, Route 18, Barnstable Road	Business Park
Mansfield	Oakland Street/Maple Avenue, Francis Avenue	Tighe District/Industrial Park
Mansfield	West Street, Forbes Blvd, Suffolk Road, Cabot Blvd, Hampshire Street, Norfolk Street, Rte. 140, Hampden Street	Cabot Business Park
Middleborough	Wareham Street, County Road	Sippican Commerce Park
Middleborough	West Clark Street, South Main Street	Keolis Layover Yard
New Bedford	Shawmut Avenue, Hathaway Road, Mt. Pleasant Street, Downey Street, New Plainville Road	New Bedford Airport

New Bedford	Herman Melville Blvd, MacArthur Drive, North Front Street, Coggeshall Street, Washburn Street, Killburn Street, Harvey Tichon Drive, Antonio Costa Avenue, Sawyer Street	Port of New Bedford
Seekonk	Pine Street, Woodland Avenue	Phoenix, Inc.
Seekonk	Clyde Street, Oak Hill Avenue	Roberts Chemical
Taunton	John Hancock Road, Robert Treat Paine Road, John Quincy Adams Road, Myles Standish Blvd. Industrial Park Road, Bay Street	Myles Standish Industrial Park
Taunton	Ingell Street, Cushman Street, Sumner Street, Wier Street, White Street, First Street	Salt Shed/Taunton Department of Public Works
Taunton	Winter Street, Longmeadow Road, Washington Street	Ventura Grain
Westport	Route 6, Davis Road	Mid-City Scrap

New Bedford/Fall River Commuter Rail Extension (South Coast Rail)

The most extensive proposed rail project in the region is the commuter rail extension to Fall River and New Bedford. Several different alternatives and alignments are being analyzed for this project, with an ultimate goal to address regional traffic issues such as reducing congestion on highways, thus increasing highway safety, improving air quality by reducing emissions, improving regional transit capacity, and aiding economic development.

The South Coast Rail project will restore commuter rail service between Boston and southeastern Massachusetts. Taunton, Fall River and New Bedford are the only major cities within 50 miles of Boston that do not currently have commuter rail access to Boston. South Coast Rail will reconnect this region to jobs and generate economic development. While a previous estimate projected that Phase 1 would allow for passenger rail service between Boston and Taunton, New Bedford and Fall River to begin in late 2022, based on the consensus of the three independent reviews, the date for start of service is now projected to be in late 2023.

On April 22, 2019, MassDOT and the MBTA announced that the South Coast Rail Program has reached two critical Phase 1 milestones: a finance plan has been completed and will be fully funded in the Commonwealth's Capital Investment Plan and the U.S. Army Corps of Engineers (USACE) has approved the final federal permit required for the program to advance.

Meanwhile, early action steps are underway including infrastructure work and the acquisition of land for stations.

According to Stephanie Pollack, Transportation Secretary and MassDOT CEO "Phase 1 of South Coast Rail will be funded one hundred percent by the Commonwealth and the MBTA will not be required to provide any capital funding or issue any revenue bonds that might otherwise impact the MBTA's future operating budget. We are now well on our way to offering passenger rail service to the South Coast in a few short years with the financing secure, major permits in hand and infrastructure being built."

Improving the railroad tracks and right-of-way for commuter rail will provide improved infrastructure for rail freight carriers, and enhance their ability to compete for freight business in the region. As previously mentioned, the improvements to four railroad bridges in New Bedford under the Fast Track New Bedford TIGER grant will allow for faster freight movements in and out of the port area. In order to enhance both the movement of freight and the scheduling of commuter trains it is recommended that double track be constructed on the rail lines from Taunton south to New Bedford and Fall River, along with upgrades to a 286,000-pound capacity.¹² Figure M-12 outlines the South Coast Rail Extension.

¹² South Coast Rail Project Page, 2018

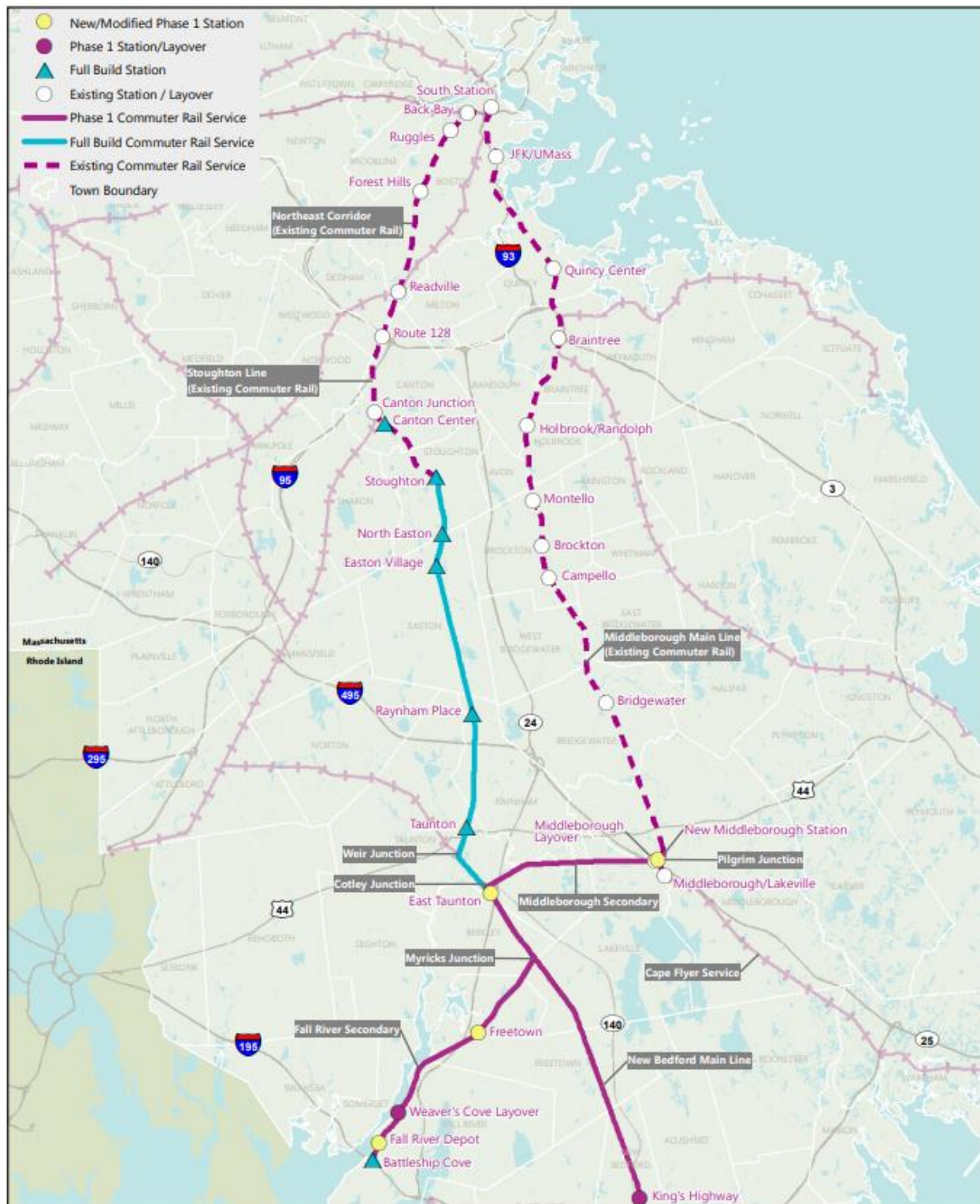


Figure M-12: South Coast Rail

Trucking

The vast majority of freight moved in, out and within the SRPEDD region is done so by truck, totaling 96% overall. In this regard, highways are the region's greatest factor influencing intermodal freight movement. Therefore, the issues facing freight trucking in southeastern Massachusetts are similar to those facing automobiles and include congestion and safety. Crashes and lengthy commutes caused by a densely populated, growing region, along with geographic constraints also impact the trucking industry. SRPEDD completed a *Regional Truck Route Study* in 2009 that identified all the major truck routes in the region. These routes were based on the locations of major freight generators (including industrial parks, seaports, warehousing sites, manufacturing facilities, retail clusters, etc.) and vehicle classification counts. Figure M-13 illustrates all of the region's major freight generators, including those with rail access.

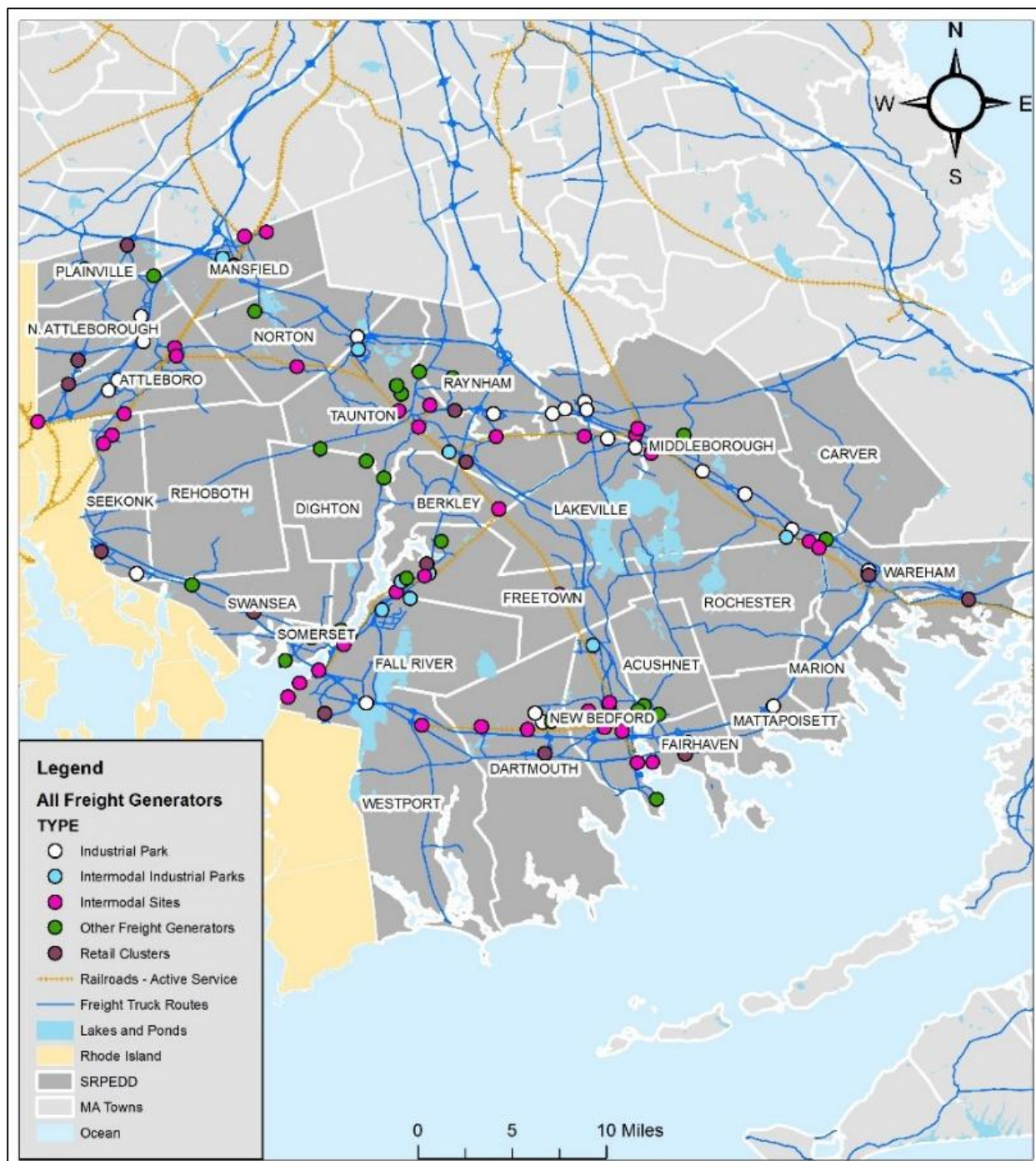


Figure M-13: Major Freight Generators

Truck Routes/Truck Parking in the SMMPO Region

Issues of traffic congestion, poor pavement conditions, poor roadway geometry, weight-restricted bridges and lack of adequate truck parking areas were all identified as deficiencies affecting the movement of trucks and mapped against truck routes as part of the SRPEDD Truck Route Study, completed in 2008. These deficiencies have the following effects on trucks. Figure M-14 illustrates the regional truck route deficiencies.

- Congestion: Increases truck travel time leading to increased costs to shippers.
- Poor Pavement Conditions: Can cause damage to goods being shipped and can lead to lengthy delays, detours, all increasing truck travel time.
- Poor Geometry: Low bridges, tight turning radii and narrow streets can lead to unnecessary crashes, lengthy detours, increasing truck travel time.
- Weight-restricted/Structurally Deficient Bridges: Necessitate lengthy detours that increase truck travel time.
- Lack of Truck Parking: Can cause drivers to violate national truck driver rest laws or park in unsafe areas subject to looting and/or crashes.

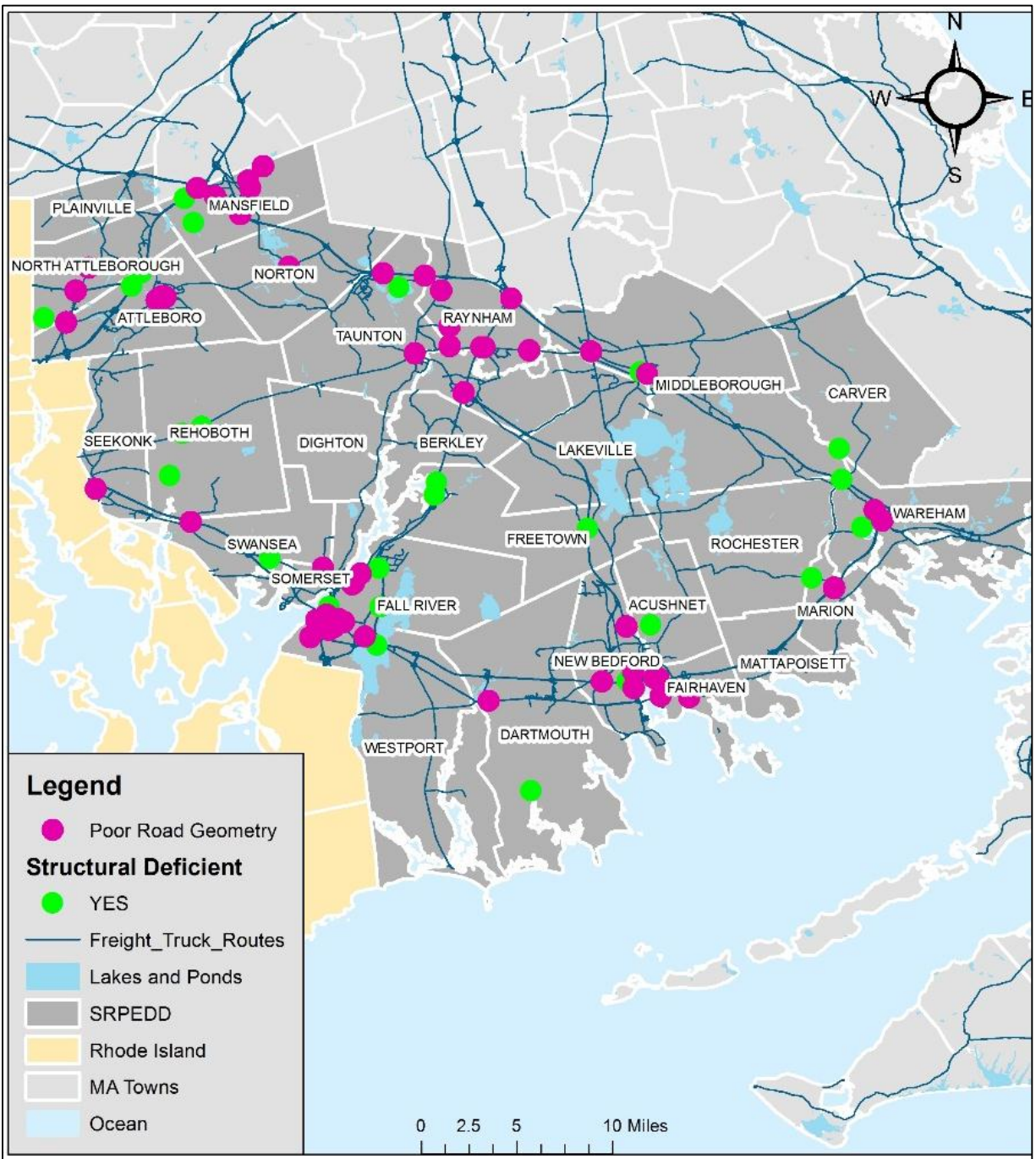


Figure M-14: Regional Truck Route Deficiencies

Truck Parking

Three rest areas were identified as being congested during peak parking periods based on counts completed in 2008: I-95 Northbound in Mansfield, Route 24 in Bridgewater, and I-195 eastbound in Swansea. All three of the rest areas have upland available within their state owned parcels for expansion. The I-195E Swansea and I-95N Mansfield rest areas were closed due to a lack of operating funds, further exacerbating the situation. Because they are located on interstate highways, they are prohibited from being leased to any profit-oriented businesses such as fast food outlets like McDonalds, Burger King, and Wendy's as well as gas stations such as Mobil and Shell. The prohibition should be reviewed for possible changes since it makes rest areas difficult to run efficiently and cost-effectively.

Truck parking is also needed to serve Myles Standish Industrial Park in Taunton. Originally, SRPEDD recommended that MassDOT purchase a vacant parcel in the Northwoods Plaza on Bay Street across the street from the Industrial Park and make this into a full service truck stop. However, the parcel was leased. Additional vacant land exists north of the I-495 ramps on Bay Street and should be considered instead. The vacant state owned land surrounding the I-295/I-95 interchange in Attleboro should also be considered for a full service truck stop facility. Any expansion of existing rest areas or construction of new ones should include electrification infrastructure to prevent the idling of trucks for extended periods of time. Potential funding sources for electrification infrastructure include CMAQ funding through FHWA and National Clean Diesel Grants through the EPA. Figure M-15 illustrates all of the Truck Rest Areas in the SMMPO region.

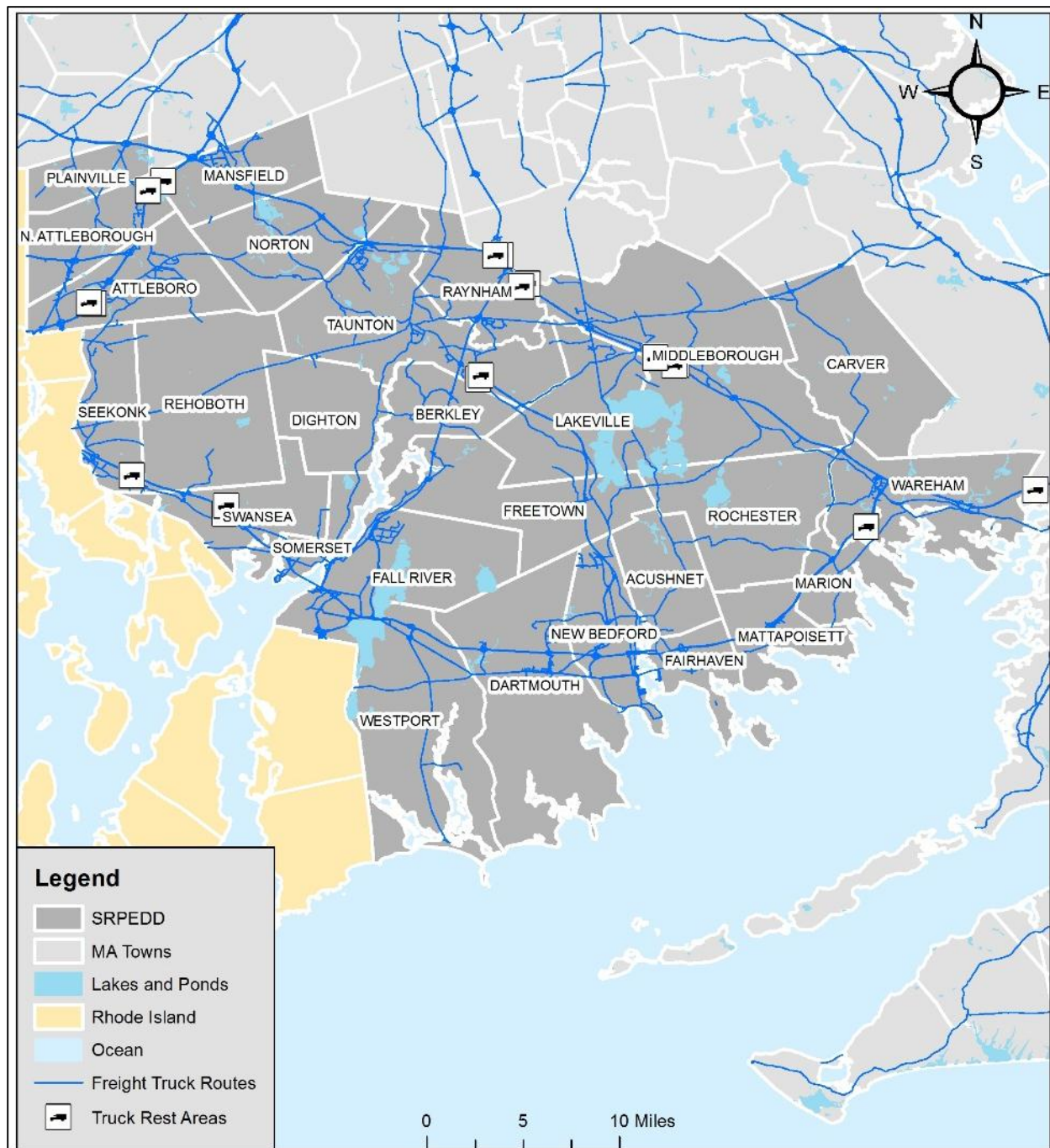


Figure M-15: Truck Rest Areas

Recommendations

The efficient flow of freight from, to and through the SMMPO region is vital to its growth and vitality. By enhancing infrastructure and making policy changes, goods will better flow on trucks, rail, airplanes, freighters, and barges. The following is a list of infrastructure/service Improvements that will vastly improve the efficiency of freight movement within the SRPEDD region.

- Plan double tracks along the New Bedford Secondary and Fall River Branch rail lines. Double tracks are needed to allow both freight rail and commuter rail to operate at maximum efficiency.
- Upgrade the Framingham Secondary, Attleboro Secondary, Middleborough Secondary, Northeast Corridor and Fall River/New Bedford Branch Railroad lines to 286,000-pound capacity.
- Plan an additional freight track along the Northeast Corridor.
- The City of New Bedford should begin studies to locate and construct a truck staging area for the Port of New Bedford.
- Pursue efforts to fund replacement of the New Bedford-Fairhaven Bridge.
- Continue Harbor Maintenance dredging in accordance with the plans by the HDC in New Bedford.
- Continue maintenance dredging in the Taunton River as proposed by the Somerset Power Plant
- State Seaport Bond Funds should be sought for the \$40 million multi-use terminal on the Fall River State Pier. The terminal should include adequate space for an expansion of freight activity, including Short Sea Shipping infrastructure and support facilities.
- Procure the necessary infrastructure (roll-on/roll-off ramp, mobile cranes and a rail link to State Pier) to facilitate Short Sea Shipping from the Port of New Bedford, particularly at North Terminal, South Terminal, and State Pier. Other planned projects, including Tonneson Park and the South Terminal Marine Park should also be implemented.
- The use of the roll-on roll-off ramp at the Fall River State Pier for Short Sea Shipping.
- Continue the Industrial Rail Access Program (IRAP) and work to extend it to Southeastern Massachusetts. Since 2010, Massachusetts has developed a Public Private Partnership with CSX to incorporate double stacks on all freight rail. The objective of this program is to stimulate economic development, retain and grow corporations in Massachusetts, keep manufacturing jobs and create new jobs.
- Construct additional truck parking capacity on the region's limited access highways. Reopen and/or expand the rest areas on I-95 northbound in Mansfield, I-195 eastbound in Swansea, and the Route 24 rest areas in Bridgewater, or construct new rest areas along I-95 northbound near the interchange with I-295 or I-495 between Route 24 and I-

95 should be designated. All new or expanded facilities should include electrification infrastructure.

- Prioritize improvements to roadways designated as truck routes by SRPEDD's Regional Truck Study and the Massachusetts Freight Plan that have identified deficiencies along them. Weight restricted and structurally deficient bridges followed by congested locations should be top priorities.
- Expand ferry service from New Bedford to Martha's Vineyard in order to alleviate traffic and ferry congestion from Cape Cod to Martha's Vineyard.
- In accordance with the Massachusetts Future of Transportation Plan continue to work with movers of freight to develop new transportation technologies have the potential to improve safety, speed and efficiency; expand mobility options; and reduce greenhouse gas emissions.

Policy Improvements

- Work with state and national legislators to change policy to allow profit-oriented businesses to manage and locate in rest areas along interstate highways. This will provide services to the patrons of these rest areas, including truck drivers, as well as off-set operation costs normally funded through state and federal dollars.
- Preserve those sites identified in Table M-1 as having rail access so that any future land uses should be pursued at the state and local levels, as recommended by the *State Freight and Rail Plan*.
- Support the development of an Industrial Rail Access Program (IRAP) at the state level that will allow cost sharing among the public sector, rail carriers and shippers for the creation or upgrades of a rail switch or siding, particularly at those properties identified in Table M-2.