



# Chapter 9 - ECONOMIC VIABILITY & FREIGHT MOVEMENT



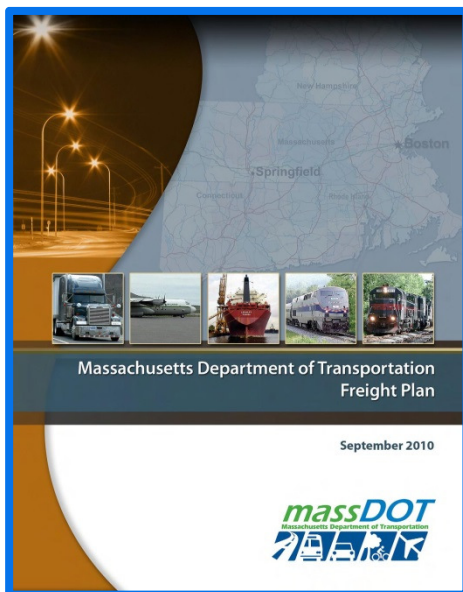


## Chapter 9 – Economic Vitality & Freight Movement

### Introduction

An efficient and cost effective system that allows for the movement of freight and services is essential to the economic vitality of the region and Massachusetts. All aspects or components of a transportation network work together in the delivery of these goods. From rail and highways to airports and seaports, maintaining these systems to insure an effective and efficient network produces benefits that often reach beyond the borders of a region and a state.

### 2010 MassDOT Freight Plan and the MMPO Region



The Commonwealth developed the *Massachusetts Department of Transportation Freight Plan (Freight Plan)* in 2010 which provides “a comprehensive evaluation of the Commonwealth’s freight transportation system, its operations, and its effect on economic development and quality of life.” This section will review some of the major highlights of the *Freight Plan* and examines how it relates to the region. This section also examines regional issues and concerns. The *Freight Plan* encompasses all modes of freight within the Commonwealth. Existing conditions, issues, policies and impacts to and associated with the economic development and quality of life for the state were examined. MassDOT is expected to update the *Freight Plan* in 2015. For the complete *Freight Plan*

please click on the following link:

<https://www.massdot.state.ma.us/portals/17/docs/freightplan/MAFreightPlanSeptember2010v2.pdf>

### Statewide Goals

The following overarching goals were identified for the *Freight Plan*:

- Infrastructure – Promote the preservation and improvement of the freight system infrastructure in all modes
- Operations – Facilitate appropriate freight system capacity and redundancy, enhance operational efficiency, and achieve a balanced mix of capacity and connections across all modes

- Economic Development – Facilitate freight transportation system improvements, policies and investment strategies that will enhance economic development opportunities and manage consumer costs
- Environment and Quality of Life – Ensure that the freight system preserves the environment and contributes to the quality of life in Massachusetts

### Existing Conditions – Massachusetts Freight System

The Massachusetts freight system is a critical connection of highway, rail, sea and air infrastructure that maintains an economy that in 2006 employed approximately 122,000 people and produced \$13.7 billion in economic output that is expected to continue growing.

#### Highway Infrastructure

The majority of freight in the state (as well as the MMPO region) travels by truck, thus an efficient and viable highway network is critical to the economical movement of goods. According to the *Freight Plan*, Massachusetts “has a 7,058 mile system of Interstate highways, state highways, and arterial roadways that connect all major cities and freight facilities.”

#### Rail Infrastructure

The rail system in Massachusetts consists of 1,153 miles of tracks that carry both freight and passenger services. There are thirteen freight railroads that operate in Massachusetts. The four largest railroads are 1) CSX Transportation, 2) Pan Am Southern Railways, 3) Providence & Worcester Railroad, and (4) New England Central Railroad. These four railroads provide the major rail connections to the national system along three corridors. The first three operate in the MMPO region.

#### Air Infrastructure

Within Massachusetts, Boston’s Logan Airport handles all major freight operations. Several smaller airports are prevalent across the Commonwealth but are limited to passenger service exclusively. Refer to the *Freight Plan* for data related to air freight operations. Air freight does not play a role in the operation of the three airports located in the MMPO region. The airports are located in Fitchburg, Gardner and Sterling.

### Major Issues, Constraints, Initiatives

Below are summaries of the major issues, constraints, and initiatives identified in the *Freight Plan* that impact the MMPO region. For complete information regarding this and other issues, please see the full *Freight Plan* (click on link above).

#### Major Issues and Constraints

A number of overarching infrastructure issues and constraints were identified within the *Freight Plan* that often limits modal choices for goods movement throughout the Commonwealth.





- Freight transportation infrastructure is aging. Massachusetts' older infrastructure is in need of improvement to continue to accommodate existing freight movements and support the larger, heavier, and more cost-efficient loads that are becoming the standard in the freight industry.
- Freight transportation activity often conflicts with other land uses. Implementing regulatory changes with sustained policy incentives to preserve and strategically locate freight activities has been challenging.
- Many freight transportation issues are linked to passenger transportation. Many rail corridors are subject to complex ownership and operation agreements between private freight railroads and public passenger services by Amtrak or the MBTA. This shared usage of tracks presents the challenge of scheduling to avoid bottlenecks, but also provides an opportunity for public-private partnerships to fund improvements. Additionally, the trucking industry is hindered by the same traffic congestion that affects auto traffic in the Commonwealth.

### **Major Initiatives**

**Massachusetts Accelerated Bridge Program:** Since 2008, the Accelerated Bridge Program (ABP) has been investing nearly \$3 billion in funding to improve the condition of bridges in every corner of the Commonwealth. This program is ongoing and will greatly reduce the number of structurally deficient bridges in the Commonwealth, improve safety, reduce weight restrictions, increase bridge heights, and improve all freight movements throughout the MMPO region. Refer to the Infrastructure Chapter of this RTP for a more detailed discussion on bridge conditions in the MMPO region.

**Pan Am Southern Railways:** Pan Am Railways and Norfolk Southern partnered to establish the Pan Am Southern (PAS) Railways. PAS Railways operates on the rail lines that include the "Patriot Corridor" that begins in Mechanicville, New York, continuing into northwestern Massachusetts and terminating in Ayer. PAS Railways was formed to provide an improved rail connection in Massachusetts that provides additional options for connections to a Class 1 railroad. Recent track and infrastructure improvements provide for 286,000 pound weight-on-rail capacity between Ayer and the western border with New York. Track speeds will be increased and the completed improvements to the intermodal facilities at Ayer are predicted to increase container traffic handled at that location. The vertical clearance of 19'6" of the Hoosac Tunnel in western Massachusetts will limit intermodal container to single stacked container or double stacked containers with less than maximum height containers until the Northern Tier Rail Improvements are completed.

### **Freight Investment Scenarios**

Based upon the data gathered and input received, five investment scenarios were developed within the *Freight Plan* to address the issues and initiatives identified within the Commonwealth. These scenarios were then evaluated through a cost-benefit analysis. In addition, an assumption was made that a "baseline" of planned transportation improvements



would be implemented within a 5 to 10 year period. The *Freight Plan* recommended the following three investment scenarios that directly impact the MMPO region.

- **Truck Freight Improvements (TFI)** – Recognizing the continued prevalence of truck and highway-oriented goods movement, this scenario examines major highway capacity expansions throughout the Commonwealth, primarily on the Interstate system, to attempt to accommodate growth in freight truck activity along key corridors.

Timeframe: 2014-2024. Estimated cost: **\$7.4 billion** (all statewide projects)

However, as the estimated cost show when compared to the estimated cost of the other 2 scenarios (below), the **TFI** scenario is by far the most expensive of the three investment scenarios. Also, the **TFI** scenario would result in greater greenhouse gas emissions which would be contrary to the GreenDOT policy goal of reducing greenhouse gas emissions. The *Freight Plan* recommends that the benefits from the **TFI** scenario should be considered when evaluating planned highway projects.

- **Northern Tier Rail Improvements** – This is the shared use rail line between PAS Railways and the MBTA. This scenario provides enhanced freight rail corridor connections from the New York border to Ayer, and from Ayer to Maine with emphasis on 286,000 weight-on-rail and “second generation” double-stack rail capacity upgrades. Such improvements enhance intermodal operations in Ayer and possibly to Maine, and rail connections to Worcester and Springfield.

Timeframe: 2014-2024. Estimated cost: **\$100.6 million** (all statewide projects)

- **Central and Western MA Rail Improvements** – This scenario focuses on second generation double-stack and weight-on-rail north-south rail linkages on Pioneer Valley, New England Central, PAS Railways, and Providence & Worcester railroad corridors, in addition to improved truck access to intermodal and aviation facilities, and a full service truck stop.

Timeframe: 2014-2024. Estimated cost: **\$74.2 million** (all statewide projects)

### Freight Plan Recommendations

Final findings and recommendations within the *Freight Plan* include projects and policy issues based upon the evaluation conducted. Projects recommendations were based upon their expected return on investment (ROI) while policy issues were based upon how to best utilize the “existing freight transportation system...and to support potential investments.”

### High Return Projects

Through cost-benefit analysis, projects within each scenario were examined to determine an expected ROI. See **Planned Freight Improvement Projects** below for specific *Freight Plan* freight improvement projects that directly impact the MMPO region.



### Policy Issues

Various policies and initiatives were identified to assist the Commonwealth in utilizing its existing freight network. These policies include:

- A freight intensive land use policy that seeks to preserve land used for freight uses
- A statewide inventory of sites to identify suitable locations for freight uses
- Freight intensive land use development to preserve parcels suitable for freight uses

### Funding Issues

Funding to address the investments and policies outlined in the *Freight Plan* is critical to improving and expanding the state's freight network.

The funding options for consideration are:

- Greater consideration of goods movement in funding allocations
- Strategic multi-modal investments in projects of statewide significance
- Creation of an industrial rail access program (IRAP)
- Increased public-private partnership opportunities and funding

### Freight in the MMPO Region

Within the region, freight movement makes use of all of the regular modes and networks available in the Commonwealth with the exception of sea and air. As outlined in the *Freight Plan*, the economic vitality of the State is dependent on an efficient and effective network that links the rural and urban communities which is also true for the region. Improvements to these systems are highlighted and documented in the *Freight Plan* for the entire Commonwealth and in some cases specific improvements can be related directly to the region. A **Moving Forward** recommendation and **Action Step** that supports the economic vitality goal and the Bike and Pedestrian challenge of promoting the economic advantages of the regional trail network and recreational destinations is also provided.

### Existing Conditions

As stated above, the primary network for the movement of goods in the region consists of the highway and rail systems.

### Highway Infrastructure

Within the region, the highway network operates as the primary system for the distribution and movement of goods, services and individuals. This network links the urban and rural communities of the region through a series of roads from the limited access interstate I-190 (functionally classified as a principal arterial) to Route 2 (also a limited access principal arterial and the major east-west thoroughfare for the region) to important arterials and collectors such as Routes 12, 13, 117, 119 and 140. Route I-190 links the region to I-290 and eventually to I-90



(MassPike). Please refer to the Highway Systems Chapter of this RTP for a more detailed breakdown of the network.

### ***Rail Infrastructure***

Three of the four major freight rail carriers operate within the MMPO region:

- CSX Transportation
- PAS Railways
- Providence & Worcester Railroad (P&W)

The following table summarizes the approximate miles of track owned by each rail operator in the region. See the Active Rail map below for the freight rail carriers.

Operator	Rail Line Mileage
CSX	20.7
PAS	102.8
P&W	25.2
<b>Total</b>	<b>148.7</b>

### ***Terminals***

According to the *Freight Plan*, terminals are defined as locations where freight routes connect and/or terminate. Due to the reduction of boxcar use, most major terminals in the state have been reduced in size.

The existing freight terminals and their general function within the MMPO region are illustrated below. See the Active Rail map below for the location of the terminals.

#### **Freight Terminals in the MMPO Region**

City/Town	Name of Facility	General Function	Other Information
Ayer	Pan Am Auto Site	Automotive	Inactive



City/Town	Name of Facility	General Function	Other Information
Ayer	Ayer Auto Facility	Automotive	auto-unloading terminal





## Freight Terminals in the MMPO Region (continued)

City/Town	Name of Facility	General Function	Other Information
Lunenburg	East Fitchburg Yard	Merchandise Freight	Primarily plastic resin transload and some local freight



City/Town	Name of Facility
Ayer	Hill Yard*
General Function	Other Information
General Freight	Supports intermodal and merchandise traffic

\*just north of Intermodal Yard



City/Town	Name of Facility
Ayer	Intermodal Yard
General Function	Other Information
Intermodal	Intermodal terminal handling mostly containers and trailers

City/Town	Name of Facility	General Function	Other Information
Gardner	Gardner Yard	Merchandise Freight	Interchange with Providence and Worcester RR



## Trends, Initiatives & Constraints

### Trends & Initiatives

**Traffic Growth:** traffic counts conducted by the MRPC on various roadways throughout the region showed a significant decrease in traffic growth over the four- year period from 2006 - 2010. Growth rates were negative for both urban and rural roads as well as the region as a whole (-0.46%, -1.42% and -0.81%, respectively). This can be attributed to a slowdown in the economy of the Commonwealth and the nation. However, for the same time period, traffic within the region showed increases along the major highway network, i.e. Route 2 and I-190. MassDOT count station information showed a growth rate of approximately 1.38% on Route 2 and 3.35% on I-190. Please refer to the Highway Systems Chapter of this RTP for a more detailed discussion of traffic growth rates in the region.

**Montachusett Annual Traffic Growth Rates (2006-2010)**

	No. of Count Locations	2006 Total Volume at All Locations	2010 Total Volume at All Locations	Avg. Annual Growth Rate per Year 2006-2010
Total (Urban & Rural)	93	749,935	725,959	-0.81%
Urban	41	478,081	469,255	-0.46%
Rural	52	271,854	256,704	-1.42%

**Fitchburg Commuter Rail line:** this line which runs from Fitchburg to Boston within the region, is receiving significant investment upgrades. This line is part of the PAS Railway. Federal and state funding totaling \$150 million has been allocated to major improvements that will benefit the commuter rail line as well freight traffic. Additionally, the new Wachusett Station commuter rail station in west Fitchburg will include a new layover facility for MBTA and commercial freight train engines. Please refer to the Transit Chapter of this RTP for a more detailed description of these improvements.

### Road Network Constraints

Road network constraints are a land use conflict that impact, or potentially impact, freight movement. The constraints include congested roads and bottlenecks, and safety issues at railroad at grade crossings.

**Congestion/Bottlenecks** - Congestion occurs at intersections and along road segments throughout the region that may adversely impact the efficient movement of goods. Traffic “bottlenecks” are specific locations on roadways that routinely and predictably experience congestion because traffic volumes exceed highway capacity. The system analysis review outlined in the Congestion section of this RTP has not identified any railroad crossings that experience congestion constraints in the region. However, truck freight movement is hindered by the same traffic congestion that affects auto traffic in the region. Please refer to the Congestion Chapter of this RTP for a more detailed description of the congestion constraints.





Safety at Railroad At-grade Crossings - Railroad at-grade crossings present a potential safety problem in many municipalities throughout the region. Unsafe or inadequate crossings can increase the risk of train and vehicle crashes resulting in potential loss of life or injury, vehicles and other equipment, goods, and time.

TOTAL HIGHWAY & RAIL CROSSING CRASHES			
2011	2012	2013	2014
8	8	16	13
FATAL & INJURY PORTION OF TOTALS			
2011	2012	2013	2014
Fatal			
1	0	1	1
Nonfatal			
0	2	7	4

Source: Federal Railroad Administration  
Office of Safety Analysis

Fortunately in the Commonwealth, crashes do not occur at at-grade railroad crossings very often. Approximately 100,000 crashes occur on Commonwealth roads every year. Based on the table above, the total crashes that occur at railroad at-grade railroad crossings represent a very small portion of the total crashes statewide.

### Planned Freight Improvement Projects

#### Freight Plan High Return Projects for the MMPO region

Based on the evaluation conducted in the *Freight Plan*, The following table of freight projects that directly impact the region was developed. The recommended investments are to the rail network by improving north/south and east/west connections by upgrading tracks to the 286,000 weight-on-rail capacity and double-stack clearance improvements where needed.

Project Name	Investment	Project Status
Mechanicville, NY to Ayer (PAS)	Double-stack Clearance (21")	Under study (existing: 19.6')
Ayer to Maine (PAS)	Double-stack Clearance	No project at this time (existing: 19' 3")
	286,000 Weight-on-Rail Capacity	Completed by end of 2015
Worcester to Ayer (PAS)	286k Weight-on-Rail Capacity	Completed
Worcester to Gardner (P&W)	Double-stack Clearance	Not Completed
	286,000 Weight-on-Rail Capacity	Completed

**Double-stack upgrades:** the PAS Railway between Mechanicville (NY) and Ayer and will extend into Maine, and for the P&W Railroad between Worcester and Gardner.

**286,000 weight-on-rail improvements:** are nearly completed for the PAS Railway from Ayer and extend to Maine and are completed for the PAS Railway from Worcester to Ayer and the P&W from Worcester to Gardner.

**Estimated total cost:** of these identified investments listed in the above table is approximately \$174.8 million (at completion).

**Benefits associated with the investments include:** reduced shipping costs from transporting more freight by rail; enhanced competitiveness of the economy of the MMPO region; reduced consumer costs to residents; an improved environment; and significant roadway congestion benefits resulting in reduced emissions and safety costs.

### Future Freight Improvement Projects

- Improve freight movement on the Athol/Phillipston segment of Route 2 and construct a new interchange with Route 2 at South Athol Road. This segment is also recommended for safety analysis
- Improve freight truck access to Route 2 within Athol which is severely constrained
- Improve freight truck access on Route 31 in Fitchburg which is severely constrained. Route 31 provides direct access to Route 2

See the **Financial Analysis** chapter for the estimated cost of these projects.

### Route 31 Railroad Bridge Constrains Development of Complete Streets and Freight Movement



Public at-grade rail crossings in the region were re-examined to determine if they were gated and/or had advanced warning signs and/or pavement markings installed in the last 4 years.

- There are 49 active public at grade crossings in the region. Sixteen of the 49 crossings have gates, 6 have “cross buck” warning signs, 26 have flashing lights and 2 have stop signs.

- A review of the data reported at these crossings show that 25 crossings have no daily train activity. Of the remaining 24 locations, 13 have gates currently installed. Therefore, 11 locations were assumed to be able to benefit from gates.

The table below lists the locations and they are displayed on the Freight Recommendations map below.

Municipality	Street	Current Type of Warning	Total Tracks	Daily Trains	ADT	Railroad
Clinton	Sheehans X-Ing	Flashing lights	1	5	1,400	B&M
Gardner	Upper So. Main St	Flashing lights	1	2	1,300	P&W
Hubbardston	New Westminster R	Flashing lights	1	2	2,500	P&W
Lancaster	Damons X-Ing	Flashing lights	1	5	13,800	B&M
	Center Br.Rd.	Flashing lights	1	5	2,500	B&M
	Mill St	Flashing lights	1	5	2,100	B&M
Leominster	Willard St	Flashing lights	1	1	4,300	CSX
	Mechanic St	Flashing lights	1	1	10,900	CSX
Sterling	Gates Rd	Flashing lights	1	5	1,400	B&M
	Pratts Jct. Road	Flashing lights	1	1	3,500	CSX
	Pratts Jct. Road	Flashing lights	1	1	3,200	CSX

### Recommended Locations for Gate Installation – At Public Crossings

The following public at-grade crossings currently have gates or flashing lights but based upon site visits the crossings would benefit from advanced warning signs, pavement markings or both.

#### Locations in Need of Advanced Warning Signs and/or Pavement Markings

City	Street	Current Type of Warning	Advanced Warning Signs	Pavement Markings
Ayer	Sandy Pond Road	Gates	yes (Y)	no (N)
Ayer	Snake Hill Road	Gates	Y	N
Ayer	Willows Road	Gates	Y	Y
Ayer	Groton-Harvard Road	Gates	Y	N
Lancaster	Neck Road North	Flashing lights	Y	N
Leominster	Litchfield Street	Gates	N	N
Shirley	Ayer Road	Gates	N	Y
Sterling	Newell Hill Road	Gates	N	N

Although the crossings listed below have been identified as having no train movements, they are considered active and due to the ADT volumes for the crossing street, it is also recommended these crossings be considered for proper signage and/pavement markings.



**Additional Locations in Need of Advanced Warning Signs and/or Pavement Markings**

Municipality	Street	Current Type of Warning	Advanced Warning Signs	Pavement Markings	ADT
Ayer	Bishop Road	Cross bucks	N	N	1,700
Ayer	Fitchburg Road	Cross bucks	Y	N	8,500
Ayer	Groton Shirley Road	Cross bucks	N	N	1,200

**Estimated Project Recommendation Costs**

The costs to implement projects for gates, advanced warning signs, and pavement markings are estimated based on the following assumptions:

- Installation of reflectorized gates would cost in the same magnitude as traffic control signals at an intersection with minor curbswork and paving. MassDOT Highway Division has provided generalized unit costs of approximately \$200,000 to 250,000 per intersection. A median figure of \$225,000 is estimated for new gates
- Installation of pavement markings and advanced warning signs is estimated to cost approximately \$15,000 per location. Installation of either pavement markings or advanced warning signs is estimated to cost approximately \$7,500 per location

Estimated and total estimated project costs are as follows:

City	Street	Type of Improvement	Est Cost
Ayer	Sandy Pond Road	Pavement Markings	\$7,500
	Snake Hill Road	Pavement Markings	\$7,500
	Groton-Harvard Road	Pavement Markings	\$7,500
	Bishop Road	Advanced Warning Signs/Pavement Markings	\$15,000
	Fitchburg Road	Pavement Markings	\$7,500
	Groton Shirley Road	Advanced Warning Signs/Pavement Markings	\$15,000
Clinton	Sheehans X-Ing	Installation of Gates	\$225,000
Gardner	Upper So. Main St	Installation of Gates	\$225,000
Groton	West Groton Road	(Tracks removed from intersection)	
Hubbardston	New Westminster Rd	Installation of Gates	\$225,000
Lancaster	Damons X-Ing	Installation of Gates	\$225,000
	Center Br.Rd.	Installation of Gates	\$225,000
	Mill St	Installation of Gates	\$225,000
	Neck Road North	Pavement Markings	\$7,500
Leominster	Willard St	Installation of Gates	\$225,000
	Mechanic St	Installation of Gates	\$225,000
	Litchfield Street	Advanced Warning Signs/Pavement Markings	\$15,000
Shirley	Ayer Road	Advanced Warning Signs	\$7,500
Sterling	Gates Rd	Installation of Gates	\$225,000
	Pratts Jct. Road	Installation of Gates	\$225,000
	Pratts Jct. Road	Installation of Gates	\$225,000
	Newell Hill Road	Advanced Warning Signs/Pavement Markings	\$15,000
Total			\$2,580,000



## Challenges

- How can we improve freight mobility throughout the region?
- How can we improve access to main freight pipelines (i.e. Route 2) in the region?
- How can we utilize our freight infrastructure to create economic benefits for the region?

## Moving Forward – Addressing the Challenges

- Continued maintenance and improvement projects to upgrade the region roads, bridges, intersections, and pavement. The condition of the infrastructure directly affects the ability to move freight, as well as all users, across the region. Improvements to eliminate deficient bridges and pavement, congested and unsafe roads and intersections and will create benefits to all users of the road system within the region.
- Continued implementation of improvements and upgrades to the rail lines and infrastructure as outlined in the MA State Freight and Rail Plan. In addition, continued improvements to the commuter rail line that impact freight movement should be implemented as outlined in the Transit Chapter.
- In order to improve the marketability of the region as a viable industrial area, rail improvements to industrial sites should be encouraged. Effective and usable spur lines will enhance communities and developers ability to attract and retain business by providing multiple alternatives to receive and deliver their goods.
- The MRPC will work with the MRTC to develop a plan to promote the economic advantages of the regional recreational destinations (see Bicycle and Pedestrian chapter for more)

Maintaining economic vitality and freight related Performance Measures set in this plan are important, however, main benefits to the region-wide freight network rely largely on the investment of funds. While many developments are underway as outlined in this plan, the ability to re-assess and adapt to changes remains important. Beyond improvements made in the region it is also important to remain marketable in order to utilize the full potential of the system.

### Action Steps

Action	Next Steps	Outcome
Complete double stack clearance on all rail networks	Under study or further study needed and project development	Doubled freight train capacity by double stacking containers on railroad cars that sharply reduces costs per container
Continue implementing improvements to rail lines and infrastructure	Complete improvements to commuter rail line that impact freight movement as outlined in Transit Chapter	Improved rail connections to industrial sites

Action Steps continued below

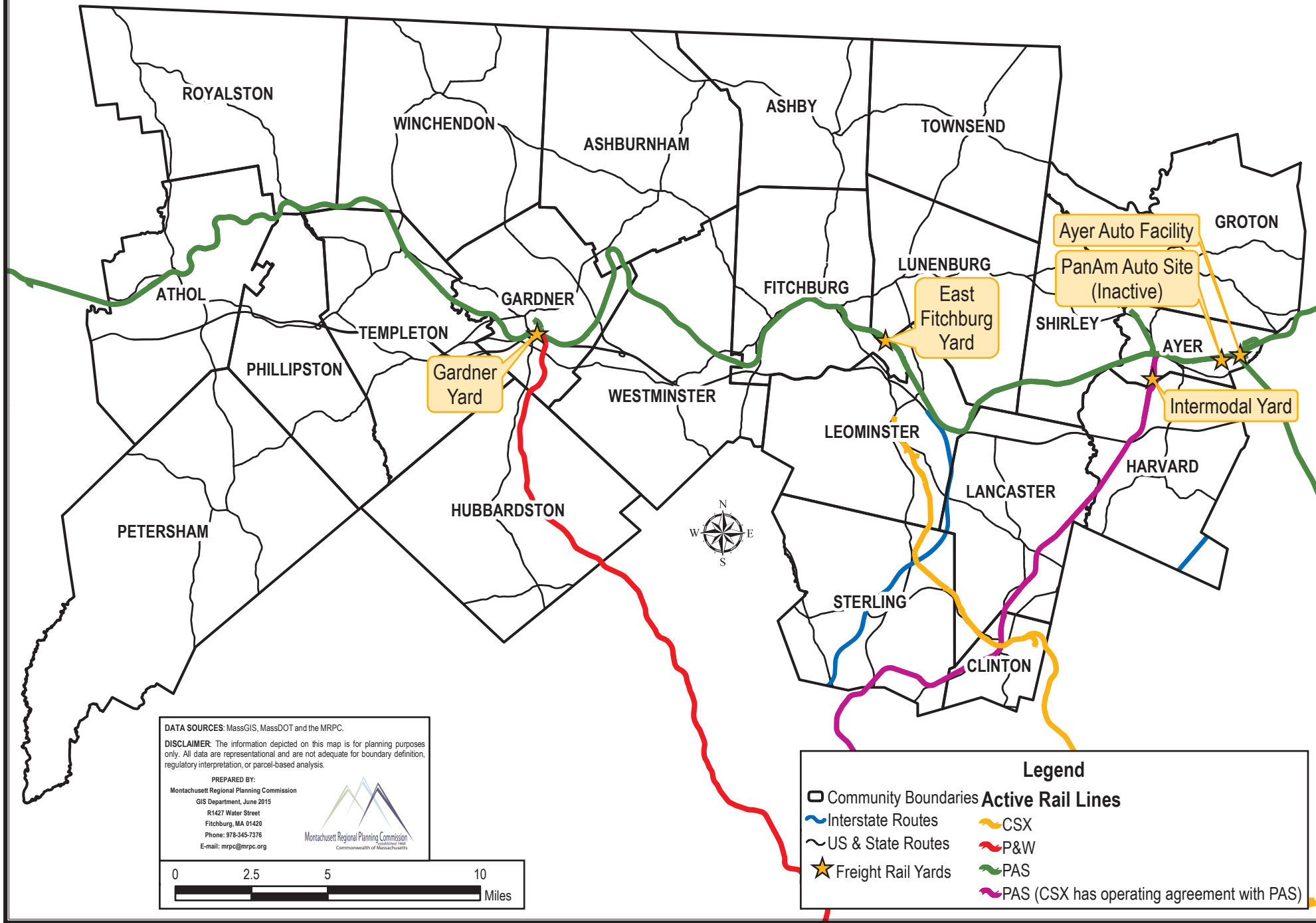
Action	Next Steps	Outcome
Continue roadway rehabilitation and improvement projects to upgrade roadway facilities	Complete projects currently listed on the TIP	Improved safety and freight mobility that will produce economic benefits
Improve freight movement on Route 2 in Athol and Phillipston	Further study needed that includes safety analysis and adding a new interchange on Route 2 at South Athol Road and project development	Improved safety and freight mobility that will produce economic benefits
Improve freight truck access within Athol	Further study needed and project development	Improved complete street options and freight mobility that will produce economic benefits
Improve freight truck access on Route 31 in Fitchburg	Further study needed and project development	Improved complete street options and freight mobility that will produce economic benefits
At railroad crossings install gates, advanced warning signs, and pavement markings	Further study needed and project development	Railroad crossings with improved visibility that are safer for all roadway users
Conduct freight corridor studies	Develop a UPWP task	Recommendations to improve freight movement
Promote the economic advantages of the regional trail and recreational destinations	Work with the MRTC to develop a plan and develop a UPWP task. See Bike and Ped Chapter and Action Steps	Increased number of users and awareness of regional trails and recreational destinations





# MRPC: RTP 2016

## Active Rail Lines and Freight Yards



# MRPC: RTP 2016

## Freight Recommendations

