The Massachusetts Rail Program





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Introduction

In the past three years the Massachusetts rail system has received more than \$500 million in new investment through competitive grants, public funds and private investment. These investments represent the most significant improvement in the Commonwealth's rail system as a whole in decades. Massachusetts' passenger rail system has been enhanced through a series of competitive federal grants, stimulus funding through the American Recovery and Reinvestment Act (ARRA) and other sources which have provided upgrades to rail lines operated by both the Massachusetts Bay Transportation Authority (MBTA) and Amtrak. The *South Coast Rail* project has made significant progress through planning and environmental permitting and reconstruction of three critical rail bridges will begin in October 2010. Finally, as a result of landmark transportation reform, the Commonwealth's entire transportation system has been placed under one single organization, The Massachusetts Department of Transportation.

MassDOT Reorganization

The Massachusetts Department of Transportation (MassDOT) is responsible for the development, promotion, preservation and improvement of a safe, efficient and convenient rail system for the movement of passengers and freight in the Commonwealth. Chapter 161C of the General Laws specifically requires that MassDOT work to encourage and develop rail services which promote and maintain the economic well-being of the residents, visitors, and businesses of the Commonwealth and which preserve the environment and the Commonwealth's natural resources. To this end, MassDOT has long sought to ensure dependable, widely accessible passenger rail service and to improve the relative position of freight rail service within the overall transportation network, as a means of encouraging economic development and preserving the quality of life its residents enjoy.

MassDOT independent is an authority and component organization of the Commonwealth established November 1, 2009. It is governed by a five member board and headed by a Secretary/CEO. While it has an appointed board and is independent of the Commonwealth as a separate body politic, MassDOT continues to be governed by state laws, rules and policies.

The People

Governor

MassDOT Board

Secretary / CEO
Centralized Services

Highway

Office of Transportation Planning

MBTA

RTAS

Freight and Passenger Rail

MassPort

Rail and Transit

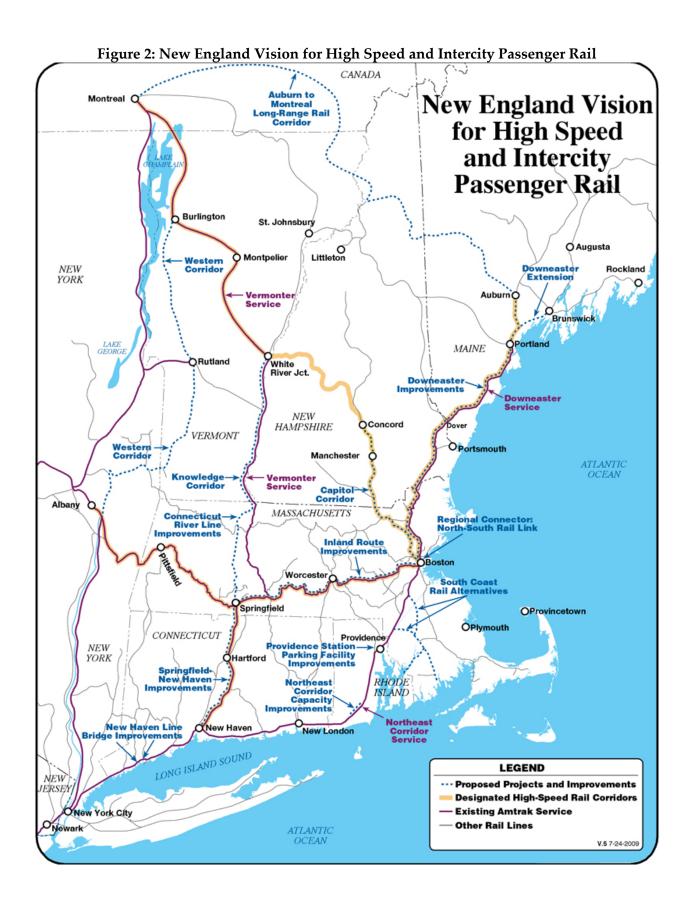
MassPort

Registry of Motor Vehicles

Figure 1: MassDOT Organization Chart

As one of five MassDOT operating Divisions, **the Rail & Transit Division** is responsible for all transit, freight and intercity rail initiatives and oversees the MBTA and all Regional Transit Authorities of the Commonwealth. The MBTA Board of Directors serves as the governing body of the MBTA, which itself remains a separate authority within MassDOT. However, the five members of the MassDOT Board of Directors also serve as the MBTA Board of Directors.







High Speed and Intercity Passenger Rail (HSIPR) Program

Massachusetts and our partner states have coordinated efforts to present the *Vision for the New England High Speed and Intercity Rail Network*. This Vision for the rail system will help provide a foundation for economic competitiveness and promote livable communities through a network of High-Speed and Intercity Passenger Rail routes connecting every major city in New England with its smaller cities and rural areas and beyond to the rest of the United States and internationally to Montreal. The fast and frequent rail service provided by this integrated rail and transportation network will encourage people to leave their cars behind, promote energy efficiency and environmental quality while further enhancing movement of freight throughout the region. The following projects are key components of this Vision.

Knowledge Corridor – The Federal Railroad Administration awarded MassDOT \$70 million in the first round of the competitive HSIPR Program to rehabilitate 49 miles of track and construct two stations for the Vermonter train service in Western Massachusetts. This project is complemented by others in Connecticut and Vermont that will improve service on the entire New Haven - St Albans corridor. Pan Am Southern will rehabilitate the line for passenger operation with oversight provided by the MBTA Design and Construction Department. Service is expected to begin in October 2012.

Northeast Corridor – As the nation's first High Speed Rail line, the Northeast Corridor is a critical element to the transportation and economic health of the New England and Mid-Atlantic states. Massachusetts and the other corridor states are committed to complete the necessary environmental and planning documents to allow significant investment in the corridor for Amtrak and commuter trains. The recently completed Northeast Corridor Master Plan indentifies more than \$50 billion in rail projects on the corridor whose completion will advance the Northeast Governors' goal of doubling the number of riders on the corridor by 2030.

Inland Route/Knowledge Corridor Montreal Study – Massachusetts and Vermont are using Federal Railroad Administration Planning grants to develop High Speed and Intercity Passenger service along two routes from Boston to New Haven via Springfield and from Boston to Montreal. This study would identify a set of improvements necessary to operate high-speed passenger rail service along the route. The preferred improvements would be determined based on identified corridor constraints, economic development opportunities and estimated ridership. Completing this plan will then allow the identified improvement projects to compete for future rounds of federal funding.

The expansion of South Station will provide new tracks to accommodate additional passenger service on Amtrak and MBTA trains. This project is a priority for future rounds of HSIPR funding for Massachusetts. MassDOT has begun preparing an application to request funds for Preliminary Engineering and Environmental work as a foundation for a future request for construction funds.

Downeaster – Another priority for future rounds of HSIPR funding would be improvements to the Downeaster route, to reduce travel times between Portland and Boston. This project would



involve close partnership with the Northern New England Passenger Rail Authority (NNEPRA). A major component of the improvements necessary in Massachusetts is rehabilitation of the Merrimack River Bridge in Haverhill which is a critical element of the region's transportation system.

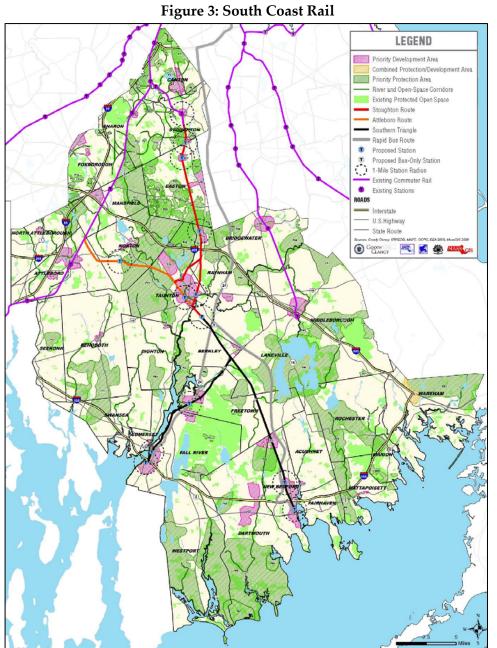
North South Rail Link – MassDOT has resubmitted a previous request for 100% federal funds to advance the environmental and engineering for this complex project.

Commuter Rail Projects

South Coast Rail - Massachusetts was awarded TIGER Discretionary funds to reconstruct three structurally-deficient bridges immediately north of the planned Whale's Tooth Station in New Bedford for the South Coast Rail project. The bridge work will cost \$20 million and is the first

in step groundbreaking "Fast Track New Bedford" project will that help revitalize New Bedford's waterfront and initiate construction of a key component of South Coast Rail.

The South Coast Rail project expects the Army Corps to release the Draft Environmental Impact Statement this summer. We expect the document will stop short just of identifying the preferred alternative. The project has also completed the South Coast Rail Economic Development and Land Use Corridor *Plan,* which projects

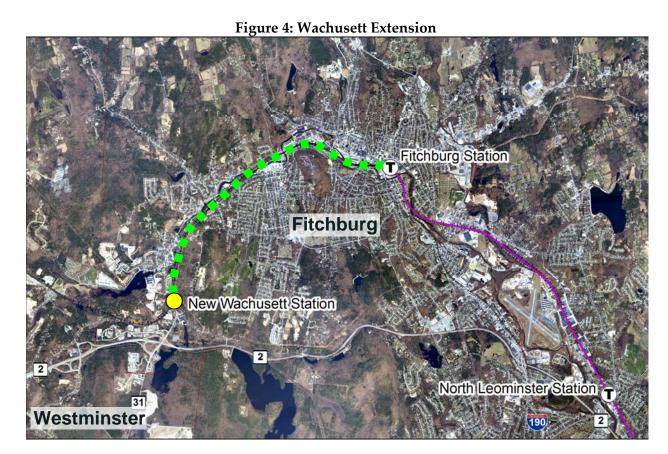




\$500 million in new annual economic activity. Its Smart Growth framework and civic engagement process recently won the president's award for outstanding planning from the Massachusetts Chapter of the American Planning Association.

Fitchburg Line Improvements – MassDOT and the MBTA are investing just under \$200 million for improvements along the Fitchburg Commuter Rail Line, including interlocking work, double-tracking, and other improvements. The funds include \$10.2 million in ARRA funds for the first stage of the Fitchburg Commuter Rail Improvement Project; an additional \$39 million in ARRA funding for double-tracking; and \$150 million in New Starts funding from the Federal Transit Administration to support installation of new switches and signals, to renovate two stations and to reconstruct the existing track on the state's oldest commuter rail line.

Wachusett TIGER Project – The Fitchburg Commuter Rail Line will also benefit from the TIGER Funded Wachusett Commuter Rail Extension Project which will extend passenger rail service approximately 4.5 miles west of the Fitchburg commuter rail station, construct a new "Wachusett Station" and a new MBTA layover facility.



Haverhill Line Improvements - The MBTA will use \$17.4 million in ARRA funds to install double-tracking and improve the train control systems between Lawrence and Andover. This project will improve reliability and on-time performance for the Haverhill commuter rail line, Amtrak's Downeaster trains as well as freight rail operations.



Worcester Frequency Improvements – A major benefit of the CSX transaction mentioned below is the agreement between CSX, MassDOT and the MBTA to add 20 new weekday commuter rail trips to Worcester. This fulfills a long standing objective of the Commonwealth to improve and increase the service on the Worcester Line.

Berkshire Line Improvements – MassDOT recently reached an agreement with the Housatonic Railroad to continue the MassDOT supported passenger easement that enables the operation of tourist passenger trains operated by the Berkshire Scenic Railroad between the towns of Lenox and Stockbridge in Berkshire County. The continuance of this easement supports tourism in the area and provides infrastructure improvements for the freight rail system in the Berkshires.

Extension of MBTA service to T. F. Green Airport – This fall, the MBTA Providence Line service will be extended to T. F. Green Airport in Warwick, Rhode Island as part of the long standing *Pilgrim Partnership* agreement with the State of Rhode Island. Under the agreement, Rhode Island provides capital funds to the MBTA in exchange for operating service in and to the state. The MBTA uses these capital funds to purchase equipment and make improvements to facilities in Massachusetts.

Figure 5: Housatonic Line PITTSFIELD 20 RICHMOND LENOX 20 STOCKBRIDGE LEE STOCKBRIDGE TYRINGHA ALFORD [7] GREAT B RRINGTON MONTEREY EGREMONT Legend Passenger Service

New Commuter Rail Equipment – The MBTA is in the process of acquiring twenty new locomotives and seventy five Bi-Level passenger cars to replace existing equipment which is nearing the end of its useful life. The MBTA will place the order for the new locomotives in the second half of this year and the contract will include options for the purchase an additional twenty. The first locomotives are expected to be in service within 36 months and the first new

passenger cars are expected in 2011 with the last cars being completed by the end of 2014.

Positive Train Control – In October 2008, a new Federal rail safety law was passed, that required the installation by 2015 of positive train control (PTC) safety systems on most of the U.S. rail network, including most of the MBTA commuter rail network. PTC is a sophisticated safety overlay to existing railroad signaling systems with the goal of avoiding four specific events: train to train collisions, over speed derailments, incursions into established work zones, and the movement through a switch left in the wrong position.

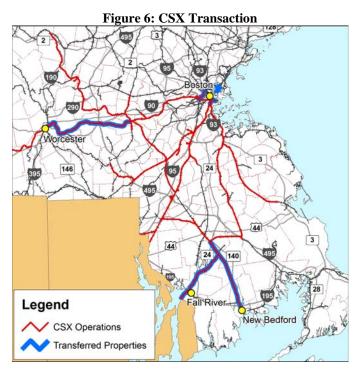
Although PTC installation would improve safety, the cost of nationwide PTC installation is expected to be as much as \$10 billion. There are significant questions of how the system would be funded and implemented by the railroads and public



agencies such as the MBTA. Further there remains a national debate on the reliability of and maturity of the technology for all forms of mainline freight trains and high density environments. The MBTA submitted the required implementation plan in April 2010 as required in the Federal law.

Freight Railroad Initiatives

Rail, unlike highways and other public infrastructure, is mostly privately owned. Therefore, most improvements involve investment of private capital. Over the past three years Massachusetts has benefited from major private investments by freight railroads on two major freight corridors. One of these, the CSX Transaction, included an innovative public-private partnership with MassDOT.



CSX Transaction – On September 23, 2009, the Commonwealth of Massachusetts finalized the terms of a comprehensive multiyear rail transportation agreement with CSX Transportation (CSX). Through this agreement, MassDOT will acquire CSX owned rail lines in Massachusetts in two phases (for a cost totaling \$100M) in order to improve transportation services in the Commonwealth.

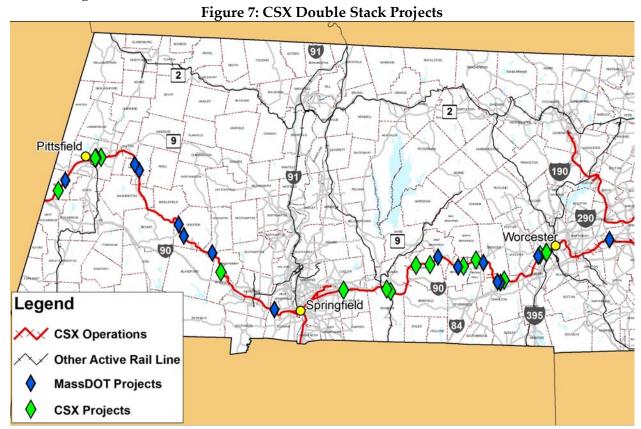
On June 11, 2010, the Commonwealth and CSX completed the first closing of the transaction during which MassDOT acquired the South

Coast Lines from CSX to support the South Coast Rail Project. With the first closing MassDOT also acquired CSX's ownership of the Boston Terminal Running Track, West First Street Yard in South Boston, and the Grand Junction secondary line that extends from Beacon Park Yard through Cambridge to East Boston.

Through the second closing, scheduled for September 2011, MassDOT will receive the property rights along the Boston Main Line (principally from Framingham to Worcester) rail line from CSX, allowing for the addition of at least 20 more commuter trains in 2012 to and from Worcester. Through the development of this agreement, the MBTA has already been able to add five Framingham-Boston commuter trains on CSX's Boston line.



CSX Double Stack Initiative and Intermodal Investment - As an element of the CSX transaction, MassDOT and CSX are providing full double stack access to Massachusetts by improving the clearance on 31 bridges along the CSX line. This full double stack access will provide efficiencies and cost savings in the movement of goods to and from Massachusetts which will be shared with businesses and consumers. In addition CSX will be making a \$100 million plus investment in intermodal facilities in Worcester, West Springfield and Westborough.



Pan Am Southern - On May 15, 2008 Norfolk Southern and Pan Am Railways announced the formation of a joint venture called Pan Am Southern, which will conduct freight rail operations and invest in rail infrastructure across parts of Massachusetts. The new entity was approved by the US Surface Transportation Board early in 2009 and began operations in the spring. This joint venture will significantly enhance rail competition in New England with the addition of another Class 1 freight railroad operating in the Commonwealth.

An important element of the joint venture is the rehabilitation of the Pan Am Southern Main Line between Ayer and Mechanicville, NY. The partnership includes rehabilitation of 138 miles of track, replacement ties, and adding just over 35 miles of new rail. The \$47.5 million effort that began in 2009 and is expected to be completed in 2010 is one of the largest new private investments in the Commonwealth's rail system in decades. A new intermodal and auto terminal will be constructed in Mechanicville, NY, and expansions and improvements will be made to the auto and intermodal facilities in Ayer.



MassDOT Freight Rail Program – MassDOT is charged with the care and control of a portfolio of railroad properties on behalf of the Commonwealth of Massachusetts. The portfolio includes approximately 100 miles of active railroad rights-of-way; approximately 35 miles of inactive rights-of-way and 80 acres of railroad property. The Commonwealth acquired most of the properties in the early 1980s in order to preserve rail service on light density freight lines that otherwise would have been abandoned by their respective railroad owners.

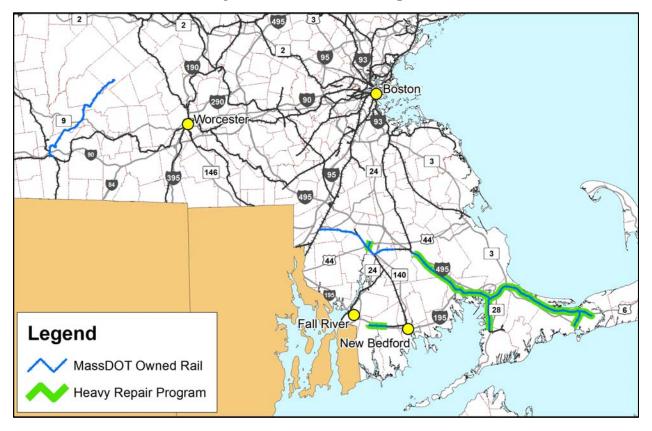


Figure 8: MassDOT Rail Properties

MassDOT has maintained freight rail service on its acquired properties by contracting with various private railroad companies. Currently, MassDOT has license and operating agreements with two railroads for two separate lines. These agreements contain terms under which each railroad operates, maintains and improves their respective licensed properties. In particular, MassDOT requires in each agreement that the operating railroad maintain their respective lines and MassDOT at its discretion makes capital improvements to each property, including the initial \$2.5 million Heavy Repair Program on the lines in Southeastern Massachusetts.

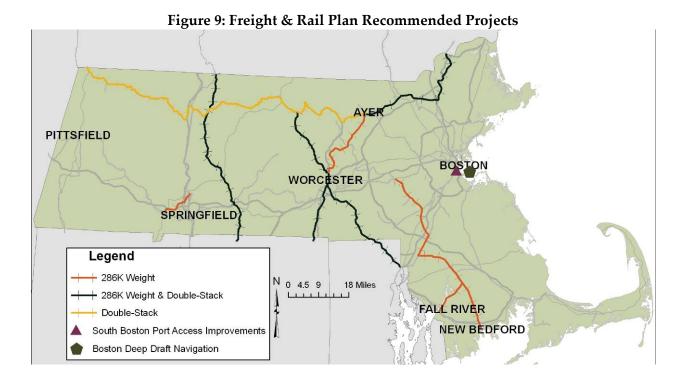
Freight and Rail Plan

MassDOT is in the final stages of completing its first comprehensive evaluation of the Commonwealth's freight transportation system, its operations, and its effect on economic development and quality of life. It will also provide a vision for the future. The analysis has shown that freight movements across all modes is projected to increase by 70% by 2035, with rail mode share expected to drop from 6.45% to 6.13% without investment in the system. The



plan includes a series of recommendations for policies and strategic investments in the freight system, which if implemented could raise the rail market share to 7.1% of all freight movements in the Commonwealth representing an additional 26,280 bulk carloads and 175,620 intermodal carloads on the rail network. The rail-related recommendations focus on the benefits of having the private rail freight carriers upgrade their infrastructure to meet the newer shipping efficiency standards of 20′-8″ clearance for double-stacked containers and 286,000 carloads for bulk goods. Ensuring that Massachusetts takes advantage of its widespread rail infrastructure for shipment of freight helps keep trucks off of the highway system and helps lower costs for businesses, keeping Massachusetts economically competitive.

The 2010 Massachusetts State Rail Plan is the Commonwealth's first State Rail Plan since 1989. It proposes a 20-year plan for the state's rail system (through 2030) and describes a set of strategies and initiatives aimed at enhancing rail transportation so that it can effectively fulfill its critical role in the state's multimodal transportation network.



Moving Massachusetts Forward.

Mass DOT



