

SOUTH COAST RAIL PLAN FOR ACTION



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#### **EXECUTIVE SUMMARY**

This Plan for Action – developed within the first ninety days of the Patrick-Murray Administration – lays out, comprehensively and in detail, the steps necessary for the Commonwealth to design and construct a new passenger rail line to the South Coast region of Massachusetts. Passenger rail to the South Coast has been extensively studied over the past decade; this Plan for Action is a symbol of the commitment of the Patrick-Murray Administration to move South Coast Rail to implementation.

The South Coast Rail project, to be managed cooperatively by the Executive Office of Transportation and the Massachusetts Bay Transportation Authority, will restore passenger rail transportation between South Station in Boston and the cities of Fall River and New Bedford. As one of the fastest growing regions of the Commonwealth, the South Coast is home to burgeoning communities for which improved transportation access could be a catalyst for economic development and job-creation. Other benefits of the South Coast Rail project include:

- Addressing long-standing transportation inequity by extending MBTA service to a region of the Commonwealth – and particularly to two urban areas with large immigrant and lowincome populations – currently under-served by the existing transportation network.
- Encouraging economic development and job-creation by providing significantly improved transportation access to a key region of the Commonwealth, one with affordable housing and a growing population.
- Making it possible for residents of the South Coast to use public transportation to access jobs and services in the Boston area.
- Promoting smart and sustainable growth by encouraging residents to reduce their automobile-usage, particularly through transit-oriented development in and around new station locations.
- Enhancing tourism opportunities for the culturally and historically rich South Coast area.

The South Coast Rail project is complex, and presents both opportunities and challenges for the Commonwealth. This Plan for Action identifies a series of ACTION ITEMS that will be initiated to advance the South Coast Rail project, including:

- Pursuing economic development and land use planning.
- Implementing an inclusive and comprehensive public outreach campaign.
- Acquiring all necessary rail right-of-way and any ancillary property.



- Determining preferred alignment through the completion of an Environmental Impact Report/Environmental Impact Statement and complete design and permitting.
- Constructing all rail infrastructure including terminal facilities in Fall River and New Bedford.
- Procuring necessary locomotives and passenger coaches.
- Expanding track-capacity at South Station.
- Siting and constructing a new midday layover facility.

South Coast Rail is anticipated to be open for passengers in December 2016. The Executive Office of Transportation and the Massachusetts Bay Transportation Authority will work closely with all project stakeholders to ensure that the implementation of this regionally important project remains on schedule and within budget.

Passenger rail is important to the communities of the South Coast and to Massachusetts as a whole – important for transportation, for economic development, and for quality of life. The Executive Office of Transportation and the Massachusetts Bay Transportation Authority will collaborate with other government agencies, municipal stakeholders, elected officials, and the general public to make the South Coast Rail project a reality, recognizing its regional significance and benefits and fulfilling a premier initiative of the Patrick-Murray Administration.



#### INTRODUCTION

The administration of Governor Deval Patrick and Lieutenant Governor Tim Murray supports the restoration of passenger rail between the cities of Fall River and New Bedford and downtown Boston as a key economic development initiative for the Commonwealth of The South Coast area is one of the fastest growing regions of the Massachusetts. Commonwealth, home to burgeoning communities for which improved transportation access could be a catalyst for economic development and job-creation. In addition, the cities of Fall River and New Bedford, both economically disadvantaged, are some of the largest municipalities within a 50-mile radius of Boston without rail transit service, service that could provide a much-needed link between job opportunities and affordable housing for the residents of the Commonwealth. The existing highway network connecting the South Coast to the Boston area is inadequate for the needs of today, causing traffic congestion, safety concerns, and air quality degradation, with expectations for even greater congestion in the future. For all of these reasons, the Patrick-Murray Administration will pursue the implementation of passenger rail service to the South Coast as a means to promote the sustainable economic growth that is crucial for Massachusetts.

#### **PROJECT DESCRIPTION**

The South Coast Rail project will restore passenger rail transportation from South Station in Boston to the cities of Fall River and New Bedford along an existing rail freight corridor running south from Taunton to Fall River and New Bedford. The project will include the construction of several passenger stations and two terminal layover facilities.

The restoration of passenger rail service to the South Coast region has been extensively studied for almost twenty years. In 2000, the Massachusetts Bay Transportation Authority (MBTA) completed a Draft Environmental Impact Report (DEIR) that considered the feasibility of six potential routes for bringing passenger rail service to the region, ultimately focusing on three Commuter Rail alternatives: extending the existing Stoughton Line, the existing Middleborough Line, or the existing Attleboro Line to Fall River and New Bedford. In a 2002 Final Environmental Impact Report (FEIR), the MBTA identified the 'Stoughton Alternative' as the preferred route. This designation exists only within the Massachusetts Environmental Policy Act Office (MEPA) process, since no official action was taken to enter the project into the federal environmental review process. The Commonwealth recognizes that the final determination of a recommended alternative will occur through a combined state and federal environmental review. The Executive Office of Transportation (EOT) will now begin a transparent and comprehensive evaluation of alternatives through a combined Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) process.

Figure 1 shows a map of South Coast Rail alternatives defined in the DEIR.

Whatever alignment is ultimately selected, the construction of a new midday layover facility within the vicinity of South Station and an increase in track-capacity at South Station are both pre-requisites for accommodating new passenger rail service from Boston to Fall River and New



# Bedford.

In the 2002 FEIR, the MBTA proposed a schedule of three inbound trips from each terminal (six total) during the weekday morning peak-period and three outbound trips to each terminal (six total) during the weekday evening peak-period, for a total of 36 trains per day – peak and off-peak – between the terminal points in Fall River and New Bedford and South Station. This is a level of service that meets the MBTA's minimum weekday and weekend service criteria. As the project evolves, however, revised service plans will be developed, at which point the MBTA will more specifically define the level of service for South Coast Rail. As it does with all of its Commuter Rail service, the MBTA will attempt to provide the most robust service plan possible given infrastructure and vehicle limitations.

## **PROJECT SCHEDULE**

The project is anticipated to be open for passengers in December 2016. The schedule assumes that all of the environmental issues can be resolved within the permitting timeframe described here. Several items on the critical path of the project – including environmental permitting and capacity-expansion at South Station – are particularly vulnerable to potential delays that could influence the schedule of the project as a whole.

EOT and the MBTA will work closely with all project stakeholders to ensure that the implementation of this regionally important project remains on schedule.

Detailed information on the timetable of the South Coast Rail project is presented in the PROJECT SCHEDULE, COSTS, AND FINANCING section of this Plan for Action.





#### Figure 1: South Coast Rail Alternatives (as identified in the 2000 DEIR)



## **PROJECT BENEFITS**

The South Coast region offers many resources to the Commonwealth: a growing population, affordable housing, educational institutions such as the University of Massachusetts-Dartmouth and Bristol Community College, cultural institutions like the New Bedford Whaling National Historical Park, and an industrial base that, although diminished from what it once was, still provides economic opportunity for many. The potential impact of the reintroduction of passenger rail on the South Coast has been studied for more than a decade as part of local, regional, and statewide planning efforts, and many potential benefits have been suggested, including:

- Addressing long-standing transportation inequity by extending MBTA service to a region of the Commonwealth – and particularly to two urban areas with large immigrant and lowincome populations – currently under-served by the existing transportation network.
- Encouraging economic development and job-creation by providing significantly improved transportation access to a key region of the Commonwealth, one with affordable housing and a growing population.
- Making it possible for residents of the South Coast to access jobs and services in the Boston area.
- Creating an environment to attract new private investment to the communities of the South Coast.
- Allowing Boston-area workers to more easily take advantage of affordable housing in the South Coast.
- Promoting smart and sustainable growth by making it possible for residents to reduce their automobile-usage, particularly through transit-oriented development in and around new station locations.
- Reducing automobile congestion and attendant safety, air quality, and productivity impacts on the roadways of the South Coast.
- Providing South Coast municipalities with the planning tools they need to leverage the
  opportunities inherent in a future that includes passenger rail to downtown Boston. EOT
  will work in tandem with the Executive Office of Housing & Economic Development to
  support the corridor municipalities in developing a multi-jurisdictional blueprint for
  sustainable growth.
- Creation of design- and construction-related employment opportunities for the duration of the South Coast Rail project.



Passenger rail is important to the communities of the South Coast – important for transportation, for economic development, and for quality of life. The Patrick-Murray Administration has prepared this Plan for Action as a symbol of its commitment to putting South Coast Rail on track to implementation.



## **ACTION ITEMS**

Ten ACTION ITEMS have been identified as necessary for the timely and successful implementation of the South Coast Rail project. An issue is considered to be an ACTION ITEM if it is fundamentally necessary for project completion. It is included on the critical path if it is an identified pre-requisite for other significant project ACTION ITEMS, such that an unexpected delay in the completion of one could have a ripple effect and delay the ultimate implementation of the overall project.



## Action Item 1: Economic Development and Land Use Planning

The improved transportation access and additional transportation capacity created by infrastructure projects on the scale of the South Coast Rail project generate opportunities for economic development in corridor communities. It will be vital for the South Coast Rail corridor municipalities to coordinate and collaborate to appropriately manage and channel any growth associated with the project. EOT and the MBTA plan to thoroughly analyze the economic development potential of all rail alternatives being considered in the EIS/EIR process through a corridor-wide economic development and land use study. Current land management regulations and techniques, as well as housing, utility, and other supportive infrastructure, will be addressed as part of this process.

In the execution of this ACTION ITEM, EOT and the MBTA will work with corridor communities, Metropolitan Planning Organizations, Regional Planning Agencies, and other relevant municipal, regional, and state stakeholders. To date, the Southeastern Massachusetts Commuter Rail Task Force – a collaboration of the MBTA, the Southeastern Regional Planning & Economic Development District, and the Old Colony Planning Council – has served as an excellent model of regional participation and cooperation. This model will be pursued as the South Coast Rail project moves forward.

#### Issues/Status

The South Coast Rail project provides the opportunity for significant economic growth. However, experience with passenger rail projects both within Massachusetts and elsewhere indicates that, without significant planning efforts at the state, regional, and local levels, development opportunities are often not realized. Harnessing prospective benefits requires multiple planning and zoning actions to occur, as described below.

This effort will include an analysis of existing conditions – zoning, infrastructure, development patterns, and land ownership, among other items – and potential changes needed to make new development possible. It will also include an analysis of the market along the potential rail corridors and in corridor municipalities to determine the opportunities for development – industrial, commercial, retail, and residential – and job-creation.

The following tasks will contribute to the development of an overall economic development and land use strategy for the South Coast Rail project:

- Examine existing build-out studies for growth projections.
- Analyze proposed station-sites for ownership, current and proposed zoning, and existing
  infrastructure. Develop recommended lists of needs at each site such as water, sewer,
  zoning, and transportation access improvements to ensure that the development potential
  of the sites can be met.
- Examine areas within a certain distance of the proposed station-sites for potential

commercial/industrial/retail/residential development opportunities. Analyze infrastructure, zoning, and transportation access needs.

- Analyze the regional and local market(s) for commercial/industrial/retail/residential uses near proposed station-sites and potential job-creation/relocation to those areas.
- Conduct a study of the potential for increases in housing costs within the area of the proposed station-sites.
- Consider opportunities to develop Commonwealth- or MBTA-owned lands near proposed station-sites.
- Develop site-specific zoning tools, working with the individual communities, to provide a zoning framework that will allow for transit-oriented development.
- Analyze what financial options might be available, based on the projected economic development, for covering/recouping some of the costs of the South Coast Rail project.
- Examine the regional economic, demographic, and land use impacts of other passenger rail extensions – both MBTA and in other states – and closely examine projected benefits versus actual economic results.
- Examine examples of value-capture methods a public financing mechanism in which increases in land values attributable to new public investment are 'captured' through a land assessment, in all or in part, to contribute to the cost of the investment – for their applicability to passenger rail projects.
- Examine other creative financing opportunities and public/private partnerships to generate revenue sources to help finance the project.

In addition to the tasks described above, EOT will fund the development of a 'growth management portfolio' of land use and other strategies – tailored to each of the municipalities within the selected project corridor – for achieving local and regional growth and economic development aims, while also endeavoring to mitigate any negative impacts associated with the South Coast Rail project. These tools will be consistent with the Commonwealth's Sustainable Development Principles, particularly goals for transit-oriented development, brownfield reclamation, open space protection, affordable housing construction, and innovative zoning practices, among other planning objectives.

Once the portfolios have been developed and a preferred route is identified, EOT will fund technical assistance to the corridor municipalities for the implementation of strategies included in the portfolios. This may include working with local officials and other stakeholders to revise existing zoning codes; analyzing the potential applications of MGL Chapters 40R and 40S;



reviewing proposed development projects; making use of the Community Preservation Act, Transit Oriented Development Bond Program, and other Commonwealth funding and policy programs; and other financial mechanisms to leverage any economic growth generated by new infrastructure; and exploring transportation demand management techniques to promote mobility and reduce potential congestion in the region.

In Massachusetts, the majority of land use decision-making is done at the municipal level, and many communities closely guard their regulatory authority so as to maximize the perceived local benefits of a particular project or development. EOT and the MBTA will work closely with the Southeastern Regional Planning & Economic Development District, the Old Colony Planning Council, and other involved municipal, regional, and state entities in executing this ACTION ITEM. The objective will be to achieve the best possible land use decisions and to ensure that this planning process reflects municipal priorities within the context of overall statewide development goals and priorities.

## Schedule

The Economic Development and Land Use Planning ACTION ITEM will begin immediately upon the launch of the project and will continue for the duration of the project.



## **Action Item 2: Public Outreach**

To ensure effective and inclusive public outreach throughout the various stages of project development, EOT is currently engaged in and will be further expanding a comprehensive public outreach campaign for the South Coast Rail project. This will involve all stakeholders, both supporters and opponents of the project. This outreach – which will build off the stakeholder working group developed by the Southeastern Massachusetts Commuter Rail Task Force – will include the corridor municipalities, the Legislative delegation, members of the public, and interest and community groups in each potential project corridor. The primary objective of this outreach is to engage stakeholders in a manner that enables EOT and the MBTA to integrate and address concerns in a way that moves the project forward expeditiously.

#### Issues/Status

In expectation of the implementation of the South Coast Rail project, the Southeastern Massachusetts Commuter Rail Task Force was formed in 2004 to help the region prepare for the impacts of the re-introduction of passenger rail to the South Coast. Its membership includes representatives from the MBTA, other regional transit authorities, municipal and regional representatives, and business and economic development organizations. Among other responsibilities, the Rail Task Force has provided a forum for state and local officials to review and discuss all aspects of the project and to work toward consensus on the design and operational aspects of the project, as well as provide assistance to EOT and the MBTA on matters related to public input.

The Rail Task Force's work is an essential building block for the ultimate implementation of the South Coast Rail project. The current Task Force advisory group will be broadened, as the planning proceeds through the combined EIS/EIR process, to reflect the greater number of communities which may be impacted by the possible routes for the South Coast Rail project. The input of the Rail Task Force members will be vital to the station-siting process, as well as the design and construction phases of the project.

Throughout the years of planning, the expansion of passenger rail to the South Coast has enjoyed public and local government support. Concerns about the project have historically centered around environmental impacts, perceived threats to community character, and abutter concerns regarding safety, noise, and air quality. A key challenge to moving the South Coast Rail project forward will be keeping stakeholders of all perspectives engaged in the planning process.

#### Website-www.south coastrail.com

EOT will shortly be launching a website (<u>www.southcoastrail.com</u>), to act as an information gathering place, where interested parties can share their opinions, learn about project developments, and get information about upcoming public meetings. As a forum for people to submit their comments to EOT and the MBTA, the website will enable transportation agency staff to secure an initial benchmark upon which additional outreach can be conducted. In addition, EOT and MBTA staff will be able to share project-related documents and other



information, including regular project newsletters. Additional on-line features will be added as the South Coast Rail project progresses through the various planning stages.

#### Public Meetings

Public events offer an opportunity for EOT and MBTA staff and community stakeholders to discuss ongoing developments and exchange feedback regarding the progress of the project. Public meetings and other events will be particularly important for this project, which has an unusually large base of interested stakeholders, including not only residents and representatives of all of the affected communities, but also local and regional educational institutions like the University of Massachusetts-Dartmouth, Bristol Community College, and Stonehill College; cultural institutions like the National Park Service and Battleship Cove; and statewide organizations like the Massachusetts Smart Growth Alliance, the Sierra Club, and the Conservation Law Foundation.

## Engagement by Public Officials

Governor Deval Patrick, Lieutenant Governor Tim Murray, and Transportation Secretary Bernard Cohen have all visited the South Coast region during the first two months of the Patrick-Murray Administration. In particular, Lieutenant Governor Murray and Secretary Cohen participated in a South Coast 'listening tour' on February 23, 2007, including a meeting with the Rail Task Force and a tour of portions of the right-of-way and proposed stationlocations. These visits, which have included meetings with local elected officials, planners, community representatives, and members of the public, have helped to crystallize the public perception of the benefits South Coast Rail could bring, have generated renewed momentum for the project, and have also provided local stakeholders with occasions to share their feelings about the project.

## Schedule

The Public Outreach ACTION ITEM has already begun and will continue throughout the duration of the project.



## Action Item 3: Right-of-Way Acquisition

The Commonwealth is currently in negotiations with CSX Corporation, Inc. to purchase a set of rail assets, including those necessary for the South Coast Rail project (a 30-mile stretch of right-of-way from Taunton south to the cities of Fall River and New Bedford). Advancing the South Coast Rail project requires access to the CSX right-of-way for surveying and wetlands delineation. While other critical path issues can proceed concurrently with right-of-way acquisition, delays in acquiring the right-of-way and/or securing access to it for survey and wetlands delineation could negatively impact the other critical path issues of design, permitting, and construction.

#### Issues/Status

EOT is negotiating to purchase the rail properties owned by CSX Corporation, Inc. that are necessary to permit, design, construct, and operate South Coast Rail. Those properties include:

- The Fall River Secondary Line (Myricks Junction to Fall River, approximately 14.2 miles)
- The New Bedford Secondary Line (Cotley Junction to New Bedford, approximately 17.4 miles)
- A portion of the Dartmouth Industrial Track (approximately six miles)
- The New Bedford Yard

## Schedule

The Right-of-Way Acquisition ACTION ITEM is currently underway.



## **Action Item 4: Project Design**

As part of the development of the 2002 FEIR, the MBTA has already performed a minimum level of design for the South Coast Rail project. In particular, the design for the segment south of Cotley Junction that is owned by the MBTA – and which will be required for any of the rail alternatives under consideration – has progressed to approximately 45%.

#### Issues/Status

The design consultant has been re-engaged to perform the EIS/EIR that will ultimately determine the preferred route for the South Coast Rail project. During this process, EOT and the MBTA will jointly assess the most efficient and cost-effective mechanisms for procuring future design and construction services.

Once a preferred alternative has been identified, design will continue in a three phase process:

Conceptual Design, which will bring the major components of the project to a 10%- to 15%-design level, is the stage at which the basic and fundamental elements of the project are defined. A preliminary operations plan is developed in order to establish general infrastructure requirements. From this, a basic alignment is developed and station and layover sites are identified. A conceptual design is created so as to identify, at a preliminary level, what land acquisition and right-of-way needs are, what the wetland and environmental considerations and impacts are, as well as the other project components.

In addition, during Conceptual Design, a full design/boundary survey of the rail right-ofway, along with a full wetlands survey, including wetlands flagging, needs to occur. A geotechnical and environmental boring program must also be completed.

- During the Preliminary Engineering phase, the work produced during Conceptual Design evolves to a 30% level. During Preliminary Engineering, more specific elements of the project are detailed, including drainage concepts and hydrological analysis, vertical and horizontal alignment of the track, location of passing sidings and cross-overs, and other rail elements. During Preliminary Engineering, construction plans and sequencing are developed.
- Final Design is the point at which all project design components progress first to a 60% level and then to completion (100%), which includes the development of construction plans and specification documents. The exact dimensions of the track and the stations will be developed during Final Design, and site-specific impacts will be fully articulated. The permitting process will be substantially complete and all of the means and measures to reduce impacts will have been implemented into the design. At this point, a 10% construction contingency is carried for changes during construction.

#### Terminal Layover Facilities

The project design will need to include terminal storage and layover facilities in both Fall River



and New Bedford. The MBTA has developed preliminary recommendations for locating these facilities, but specific recommendations will be re-visited in the EIS/EIR.

The New Bedford layover facility has been proposed for the northern portion of the suggested New Bedford Station site, to be located between the station and Herman Melville Boulevard. The facility will consist of four tracks, with the possibility for a future fifth track. This site is ideally suited for a terminal storage/layover facility, as it is located in an industrial area adjacent to a freight railyard and is at the end of the line, reducing the need to operate trains in nonrevenue service.

The location for the Fall River layover facility has not yet been finalized. As with the New Bedford facility, the Fall River facility will require four tracks with a future fifth track. In 2001, the MBTA issued a Notice of Project Change that provided an alternative analysis for a Fall River facility. Seven sites were considered during this analysis. Of these sites, two were considered worthy for further consideration: Alternative 1 located off Ridge Hill Road in Freetown and Alternative 2 located off South Main Street in Freetown. While both of these sites is currently available and has sufficient land area to support the proposed facility, they each have environmental and operational challenges. For these reasons, a final site has not yet been selected. All potential sites will be re-examined in order to select a site that provides the optimal operational benefits and minimizes environmental impacts.

## Schedule

The Project Design ACTION ITEM will begin in April of 2009 and is anticipated to require approximately 36 months to complete.



## Action Item 5: Station Siting

Pending the final selection of the rail alignment, EOT and the MBTA will identify the best number and location of stations for South Coast Rail. To date, several planning efforts have considered the issue. In addition to locations recommended in the 2002 FEIR, the Southeastern Massachusetts Commuter Rail Task Force has also proposed several alternative station locations. The optimal number and placement of stations will be resolved as part of the final design and permitting process.

The final determination on station locations will include consideration of land use, land takings, the need for parking and other supportive infrastructure, transit-oriented development opportunities, and environmental consequences. As discussed in the Economic Development and Land Use ACTION ITEM, the placement of stations is enormously important not only to create an effective transportation service but also to encourage associated economic growth, which must be coupled with an awareness of the environmental impact of transportation infrastructure. For these reasons, EOT and the MBTA will work in close collaboration with state, regional, and local stakeholders to identify, evaluate, and select potential station locations.

As part of the submitted FEIR, the MBTA identified the following station sites in Freetown, Fall River, and New Bedford, one of which has since become less feasible due to adjacent land development:

• Freetown - Ridge Hill Road

The Lumber Warehouse and proposed Boston Beer development will likely preclude both the proposed layover and station locations proposed in the FEIR for this site.

• Fall River - Davol Street

This site is adjacent to industrial, residential, and commercial areas, but lacks safe and convenient pedestrian access due to its proximity to Routes 79/138. The construction of an MBTA station could encourage the redevelopment of the area.

• Fall River - Battleship Cove

Battleship Cove has been proposed as a station site for use during off-peak hours and on weekends. The proposed station area, which fronts on Porta Delgada Boulevard, is separated from an adjacent residential neighborhood by large factories, the Braga Bridge, rail tracks to the north, and Route 138 to the east. A portion of the proposed site is being used for Gates Across the Atlantic Park, and could serve as an attractive entrance to the station.

New Bedford - Herman Melville Boulevard

The Herman Melville Boulevard site is isolated from the rest of New Bedford by Route 18, which separates the city to the west and prohibits safe pedestrian transportation to this site.

Figures 2-5 provide aerial photographs of the proposed station sites in Freetown, Fall River, and



New Bedford, the area that has received the most planning attention to date.

#### Schedule

The Station Siting ACTION ITEM will be completed as part of the Project Design ACTION ITEM.



# Figure 2: Freetown - Ridge Hill Road





# **Figure 3: Fall River - Davol Street**





# **Figure 4: Fall River - Battleship Cove**





#### **Figure 5: New Bedford - Herman Melville Boulevard**





## Action Item 6: Environmental Permitting

Because this project has the potential to impact environmentally and historically sensitive areas of the Commonwealth, environmental permitting will be extensive and complex. It is anticipated that up to nine different state and federal agencies may be involved in the permitting process depending on the preferred alternative.

Prior to the project proceeding with permitting, completion of the requirements of both the federal National Environmental Policy Act (NEPA), as well as the Massachusetts Environmental Policy Act (MEPA) is necessary.

The MEPA regulations (310 CMR 11.00) require that substantial activity on the project proceed within three years of the availability of the FEIR being noticed in the Environmental Monitor. If no progress has been made on the project, the proponent must file a Notice of Project Change (NPC) so as to re-engage the MEPA process. If no progress has been made within five years, the proponent must file a new Environmental Notification Form (ENF) for the project, effectively restarting the MEPA process.

The FEIR for the project was noticed in the Environmental Monitor in July 2002; EOT and the MBTA could file the NPC before July 2007 in order to extend the validity of the Certificate.

A full alternatives analysis must be undertaken as part of the federal environmental process prior to the project advancing. Many major components of the project, as well as the alternatives previously considered but rejected, have changed, as have the demographics in the region. Therefore, this alternatives analysis will be conducted within the environmental review process so as to allow a full vetting of the issues and to provide the public, as well as public agencies, the opportunity to comment on the alternatives analysis. A new MEPA approval process will be conducted in parallel with the federal process.

Due to the complexity of the permitting process, EOT and the MBTA will work closely with the Executive Office of Energy and Environmental Affairs (EOEEA), including MEPA, the Department of Environmental Protection (DEP), and the Department of Fish and Game, as well as the US Army Corps of Engineers, the U.S. EPA, US Department of Fish and Wildlife, and other federal regulatory agencies to develop a joint federal and state environmental review process. This process will result in a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR), a document that is designed to satisfy both federal and state environmental review requirements.

EOT and the MBTA will also continue to work proactively with state, regional, and municipal stakeholders to identify measures to reduce impacts, as well as any mitigation program that is developed for the preferred alternative to address the impacts of the project, and the prospect of challenges that could significantly delay the project. While other critical path issues can proceed concurrently with environmental permitting, access to the right-of-way and substantial



completion of design are necessary prerequisites for much of the permitting work. Unexpected delays in permitting could negatively impact construction.

#### Issues/Status

In September 1995, the MBTA commenced the state-level environmental review process for the South Coast Rail project with the submission of an Environmental Notification Form. MEPA review of the project was completed in the form of a Certificate for the FEIR, issued by the Secretary of the Executive Office of Environmental Affairs on August 30, 2002.

Because the MBTA previously identified the Stoughton alternative in the FEIR, significant environmental impact analysis has been completed on this route. Major conservation and/or recreation areas include the Hockomock Swamp, the Bird Street Conservation Area in Stoughton, the Pine Swamp Conservation Area in Raynham, the Freetown-Fall River State Forest, and the Acushnet Cedar Swamp State Reservation in New Bedford. Significant historic resources have also been identified adjacent to the rail corridor.

Elements of these previous evaluations will be helpful for the segments of the corridor that are south of Taunton. However, detailed evaluations of environmental impacts will need to be completed during the EIS process for other potential routes.

#### The Environmental Permitting Process

Completion of the EIS will ultimately identify the preferred alignment for the South Coast Rail Project. Any of the commuter rail routes selected are likely to require the following permits:

Permit/Approval	Issuing Agency					
Mass. Wetlands Protection Act Variance <sup>1</sup>	Department of Environmental Protection					
Mass. Wetland Protection Act – Orders of	Canton Conservation Commission and					
Conditions	Lakeville Conservation Commission					
Section 401 Water Quality Certification	Department of Environmental Protection					
Massachusetts Endangered Species Act,	The Massachusetts Natural Heritage and					
	Endangered Species Program of the Department					
Conservation Permit <sup>2</sup>	of Fish and Game					
Section 404 Permit for the Federal Clean Water Act	U.S. Army Corps of Engineers					
Coastal Zone Management Consistency Review	Coastal Zone Management					
National Pollutant Discharge Elimination System	U.S. Environmental Protection Agency					

<sup>1</sup>The Commissioner of DEP is authorized to grant variances to otherwise applicable requirements for the wetlands protection regulations, provided she determines that the project meets each of the variance criterion in 310 CMR 10.05 (10) which necessitates findings that (1) the variance is necessary to accommodate an 'overriding' public interest, (2) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with the wetlands regulations, and (3) that mitigation measures are proposed for the project that will contribute to the protection of the interests identified in the Wetland Protection Act.

<sup>2</sup> A Conservation Management Plan will need to be developed and issued by the Natural Heritage and Endangered Species Program.



Permit/Approval	Issuing Agency					
Construction Permit						
Massachusetts Historic Act Review	Massachusetts Historic Commission					
National Historic Preservation Act Review	Massachusetts Historic Commission /Army Corps					
Chapter 91 License or Permit <sup>3</sup>	Department of Environmental Protection					

Whatever route is ultimately determined, some combination of these permits will be required. In developing a strategy for the permitting of the preferred alternative for the South Coast Rail project, EOT and the MBTA are assuming that the project will be constructed entirely with non-federal funding sources. Should federal funds be considered as an option to support the project, the permitting approach, and particularly the federal environmental review process and schedule would change. This will be reviewed as necessary should this option be pursued.

Detailed schedule information on the permitting process is provided in the PROJECT SCHEDULE, COSTS, AND FINANCES section of this Action Plan.

## Environmental Permitting - Early Action Items

A key element throughout the EIS/EIR process will be close coordination with the relevant state and federal agencies. Such coordination will help to achieve a preferred route that will satisfy the alternatives analysis requirements of the regulatory agencies. EOT and the MBTA will continue this close cooperation to expedite the permitting process as much as possible.

An important first step in the EIS/EIR process will be filing a Notice of Intent, which starts off the federal environmental review process. This document will also serve as an Environmental Notification Form (ENF), the first step of the MEPA process. A full public comment period will be held prior to EOEEA issuing a Scope for the MEPA review as well as before ACOE issues a Scoping Document.

EOT and the MBTA will need to initiate the pre-application process with the U.S. Army Corps of Engineers (Army Corps) and EOEEA to obtain a consensus Purpose and Need, range of alternatives, and minimization measures, as well as, to determine the level of the NEPA and MEPA review. As previously mentioned, it will be important to coordinate with all the relevant permitting agencies to pursue an alternatives analysis strategy that meets all their respective guidelines.

#### Schedule

The Environmental Permitting Action Item will begin in April of 2007. The EIS/EIR will require 30 months, including necessary pre-process administration (interagency coordination, consultant procurement, scoping, etc.). It is anticipated that project permitting will require approximately 36 months to complete, although some overlap between the EIS/EIR process and actual project permitting may be possible, resulting in a total of approximately 60 months for the entire environmental review process.

<sup>&</sup>lt;sup>3</sup> Multiple licenses or permits will be necessary for various locations along the corridor.



## Action Item 7: Project Construction

The specific elements of construction will be defined as the route is identified in the EIS/EIR process. Elements necessary to construct the South Coast Rail project, regardless of specific route, include extensive track rehabilitation, the replacement of numerous bridges, as well as the construction of passenger stations and terminal layover facilities. Unlike other critical path issues – with limited exceptions such as the reconstruction of existing bridges – construction of this project is wholly dependent upon the completion of other ACTION ITEMS. Prior to any significant construction of the project, EOT and the MBTA must acquire the necessary rail right-of-way and potential station locations, complete the necessary design, and receive all necessary permits.

#### Issue/Status

Since the completion of the 2002 FEIR, certain project-related construction efforts have been completed, including:

- The MBTA has completed the rehabilitation of the Cove Street, Clinton Street, Pearce Street, and Turner Street bridges along the Fall River line and the Cedar Grove Street, Weld Street, and Logan Street bridges along the New Bedford line.
- The City of New Bedford has constructed approximately 800 parking spaces at the State Pier to serve users of the ferry to Martha's Vineyard (New England Fast Ferry Company); these spaces could also serve South Coast Rail riders. EOT has also provided funding to the New Bedford Harbor Development Corporation for parking improvements at this facility.
- The City of Fall River has constructed a pick-up/drop-off area at the prospective site for a Battleship Cove Station.

These early infrastructure items all took place south of Myricks Junction, and therefore are integral to the overall project, regardless of selected route. In addition, significant construction must still be done elsewhere along the right-of way, including reconstructing existing track and signals, adding a second track in some areas, building stations, making grade-crossing improvements, and constructing or improving parking and access roads.

## **Operations** Testing

Following completion of major construction activities, the constructing contractor will be required to perform Final Acceptance Testing in order to ensure that the project is in full compliance with all contract drawings and specifications. Thousands of individual tests will need to be performed and recorded. Many of the tests will likely result in unacceptable values and will trigger the need for adjustments, repair, or replacement of material and/or equipment.

## Schedule

The Project Construction ACTION ITEM will begin in April of 2012 and is anticipated to require approximately 55 months to complete.



## Action Item 8: Vehicle Procurement

Passenger rail service to the South Coast will require the purchase of additional locomotives and passenger coaches. All South Coast Rail vehicles will be powered by Ultra Low Sulfur Diesel and will meet or exceed current federal standards for clean emissions. The procurement of vehicles can and should proceed concurrently with other ACTION ITEMS on the critical path, as none are prerequisites to its completion.

#### Issue/Status

The rolling stock purchased for the South Coast Rail project will reflect recent advances in locomotive emissions and fuel characteristics. The new locomotives will meet the new and very strict federal emissions standards for rail vehicles, making these newest MBTA locomotives significantly cleaner than what has been in use in the Commuter Rail system previously. In May 2004, U.S. EPA mandated the use of Low Sulfur Diesel (LSD), a change that will decrease the allowable levels of sulfur in fuel used by locomotives by 99%. Traditional diesel can have a sulfur content of upwards of 3,000 parts per million, while LSD is required to have fewer than 500 parts per million. These fuel improvements will create significant environmental and public health benefits. The U.S. EPA requirement is for all locomotives to use LSD by 2007. By the time the South Coast Rail project comes on line, however, the fuel source used will be even cleaner, as U.S. EPA rules require that all locomotives run on Ultra Low Sulfur Diesel (ULSD) by 2012. ULSD must have a sulfur content of less than 15 parts per million.

Not only is the fuel source cleaner now than ever before, but locomotive engines themselves will become significantly cleaner in the near future. Recently, U.S. EPA proposed a three-part program to dramatically reduce emissions from diesel locomotives of all types; the proposal aims to cut particulate emissions from these engines by 90% and Nitrogen Oxides NOx emissions by 80%. The proposal would set new emissions standards and idle reduction requirements for locomotives, to begin in 2009. The proposal would also tighten emission standards for existing locomotives when they are remanufactured, to take effect as soon as certified systems are available (as early as 2008), but no later than 2010. Any of the locomotives purchased for the South Coast Rail project would meet or exceed these new standards.

Furthermore, the MBTA has established stringent standard operating procedures to limit excessive locomotive idling. As part of this procedure, each of the South Coast layover facilities – as well as the Boston-area midday storage facility – will be equipped with 'plug-ins' and electric engine blocks so that locomotives do not have to idle excessively to protect their engines during cold weather.

## Schedule

The Vehicle Procurement ACTION ITEM will begin in April 2011 and is anticipated to require approximately 48 months to complete.



# Action Item 9: South Station Capacity

Future expansion of MBTA Commuter Rail operations south of Boston requires the construction of between four and six new tracks at South Station. EOT and the MBTA have made initial contacts with representatives of the United States Postal Service in order to acquire rights to a portion of Postal Service property immediately adjacent to South Station, property the Postal Service has indicated a willingness to vacate. Based upon the best available information, the Postal Service will require a four-year window to relocate from its South Station site. During this transition, the MBTA will ensure that design and other project elements are ready to move ahead as soon as the Postal Service vacates its South Station site. While no other critical path issue is a prerequisite to the expansion of South Station, the need for greater capacity at South Station is critical to the operation of the South Coast Rail.

#### Issue/Status

The track and railyard facilities at South Station are, or soon will be, at capacity. South Coast Rail service will add new trains each morning and evening, additional traffic for which South Station does not have sufficient track-capacity.

The current track arrangement at South Station consists of thirteen tracks – six pairs and one single track – all with bumping posts at their northerly end and overhead catenary to allow for electrified Amtrak trains. The existing interlocking at the south end of the terminal allows operation of trains from any track to any line into or out of South Station.

Figure 6 illustrates the proposed expansion of South Station.

For the better part of a decade, the MBTA has expressed interest in securing rights to a portion of the land immediately to the southeast of South Station, land currently occupied by the U.S. South Postal Annex. To do so will require the Postal Service to relocate its facilities, and EOT and the MBTA are currently collaborating – in concert with the Postal Service, the Boston Redevelopment Authority, and the Massachusetts Port Authority – to develop a strategy to transfer Postal Service operations to an identified site in South Boston. In addition, the Postal Service is also pursuing a commercial development on its South Station land, the design for which will need to accommodate the expansion of the South Station tracks.

The South Coast Rail project itself will require three-four new tracks at South Station. However, the movement of Postal Service operations from South Station affords a unique opportunity to expand needed capacity; the opportunity to add tracks to South Station is unlikely to ever be available to the Commonwealth again. The construction of six new tracks would allow for additional future service to be added to the southside lines, including long-discussed Commuter Rail extensions to Milford, Buzzard's Bay, and Millis; increased service on the Worcester Line; and more and higher-frequency service on the Fairmount Line. Nonetheless, the costs attributed to this project will only include the necessary track build-out required for South Coast Rail.



Due to the number of stakeholders involved and the complexity of the undertaking, the expansion of South Station is one of the challenging elements of the South Coast Rail project. Among other issues, the Commonwealth will need to confirm (1) the precise timing of the U.S. Postal Service relocation, (2) the terms under which the MBTA and/or the Commonwealth may secure the necessary property rights at the site, (3) the size and character of any future commercial development on the Postal Service site, and the way that development will interact with rail uses at South Station, and (4) numerous technical challenges to ensure that rail operations are not compromised by property demolition and air-rights development on the Postal Service site and adjacent parcels. Discussions are currently on-going among all of the parties and, most recently, a representative of the Postal Service met with the Secretary of the Executive Office of Housing & Economic Affairs to discuss project schedule and implementation. Involvement of other Executive branches and, perhaps, the Massachusetts Congressional delegation may be needed to bring a satisfactory resolution to this issue.

Based on discussions with the developers representing the Postal Service, EOT anticipates that – once the Postal Service initiates the relocation process – it will take approximately four years for the Postal Service facility to move to a new location. The construction of rail and supporting infrastructure for the new tracks could begin as soon as the Postal Service site is available for demolition.

## Schedule

Assuming that negotiations among the MBTA, the U.S. Postal Service, and the other interested parties continue favorably, it is estimated that the design work required for the South Station Capacity ACTION ITEM will require approximately six to nine months, followed by an additional 12-18 months for construction. The U.S. Postal Service has estimated a timeframe of four years to vacate the facility adjacent to South Station.



# Figure 6: Proposed Expansion of South Station





## Action Item 10: Midday Layover Facility

Currently, the MBTA has two storage yards for southside MBTA Commuter Rail vehicles: Readville Yard and Southampton Street, both within the city of Boston. However, community opposition to the Readville facility has prompted the MBTA to pledge not to expand the facility beyond its current level of operations, and Amtrak has decreased the space within the Southampton Street facility that is available to the MBTA. Therefore, MBTA Commuter Rail operations require the construction of a new and expanded facility in Boston for use during offpeak periods, both to maintain existing southside operations and for any expanded service, including South Coast Rail. This facility will need to include such infrastructure as fueling stations and inspection pits. The siting and construction of this facility can occur concurrently with other work on the South Coast Rail project, since no other critical path issue is a prerequisite for it and the need for the facility is critical to the operation of South Coast Rail.

#### Issue/Status

The issue of a new midday facility has been a pressing one for the MBTA for the past decade. In 1999, the MBTA undertook a study to evaluate possible alternatives to Readville and Southampton, the results of which identified 44 sites with the potential to serve as a midday layover facility for the MBTA. Of these sites, ten were considered possibilities in the short- and medium-term, and six were recommended for investigation as long-range options. The ten short-/medium-term options consisted of sites already used as layover facilities (by the MBTA or others), sites already under the ownership of the MBTA, and land that was soon to be freed up as the Central Artery/Tunnel project neared completion. The sites were all located within a mile of South Station or in the vicinity of Readville, and had the capacity to hold between two and eight trains. While many of these sites are insufficient to handle the MBTA's full southside needs, some may provide for the space required strictly for South Coast Rail.

To ensure that a layover facility is available to accommodate the extension of passenger rail to the South Coast, EOT and the MBTA will renew their efforts to locate and build a facility that is sufficient to accommodate South Coast Rail. EOT and the MBTA will re-consider other locations first examined in the 1999 study, as well as analyze other previously unconsidered possibilities. Although opportunities to construct a full-sized facility will not be precluded, locating a site will not be contingent upon this. If a larger site is identified, only the costs specific to the South Coast Rail will be attributed to the South Coast Rail project. One of the new possibilities that will be pursued for South Coast Rail is Beacon Park Yards in Allston.

## Schedule

The Midday Layover Facility ACTION ITEM will begin in July of 2010 and is anticipated to require approximately 66 months to complete.



#### PROJECT SCHEDULE, COSTS, AND FINANCING<sup>4</sup>

#### Project Schedule

As described in this Plan for Action, the South Coast Rail project will launch in earnest on April 4, 2007. The project is anticipated to be ready to receive passengers in December, 2016.

EOT and the MBTA envision an aggressive but realistic schedule of planning, design, environmental permitting, and construction in order to meet this timetable, given the complexity and magnitude of the project. It should be noted that all large infrastructure projects are vulnerable to some risk, uncertainty, and delay.

The individual timetables associated with the major ACTION ITEMS of the South Coast Rail project are all listed below. Some of the Action Items will occur concurrently, and others will be sequential; almost all are inter-dependent in some way.

- The Economic Development and Land Use Planning Action Item will begin immediately upon the launch of the project and will continue for the duration of the project.
- The Public Outreach ACTION ITEM has already been initiated and will be expanded immediately upon commencement of the South Coast Rail project and will continue throughout the duration of the project.
- The Right-of-Way Acquisition ACTION ITEM is currently underway, with negotiations between the Commonwealth and CSX Corporation on-going, in anticipation of a preliminary agreement in the short term.
- The Project Design ACTION ITEM will begin in April of 2009 and is anticipated to require approximately 36 months to complete.
- The Station Siting ACTION ITEM will be completed as part of the Project Design ACTION ITEM.
- The Environmental Permitting ACTION ITEM will begin in April of 2007, and is anticipated to require approximately 60 months to complete.
- The Project Construction ACTION ITEM will begin in April of 2012 and is anticipated to require approximately 55 months to complete.
- The Vehicle Procurement ACTION ITEM will begin in April of 2011 and is anticipated to require approximately 48 months.

<sup>&</sup>lt;sup>4</sup> This schedule assumes the use of a Design-Bid-Build procurement method, although EOT and the MBTA will continue to explore ways in which the techniques of Design-Build could help to expedite the South Coast Rail project.



- It is estimated that the design work required for the South Station Capacity ACTION ITEM will require approximately six to nine months, followed by an additional 12-18 months for construction. The U.S. Postal Service has estimated a timeframe of four years to vacate the facility adjacent to South Station.
- The Midday Layover Facility ACTION ITEM will begin in July of 2010 and is anticipated to require approximately 66 months to complete.

Figure 7 graphically represents the proposed South Coast Rail project schedule. It identifies the tasks needed to complete the project, highlighting major milestones and task duration for each.



# Figure 7: Project Schedule, by ACTION ITEM

	Task Nama	Duration	2006	2007	2008	2000	2010	2011	2012	2013	2014	2015	2016	2017
1	Initiate Project	17.2 wks	4/4	1	8/1	2005	2010	2011	2012	2013	2014	12015	2010	2017
2	Economic Development and Land Use Planning	505 wks	4/4	•						-			•	12/
3	Dublic Outcoch	505 with	4/4											12
	Public Outreach	505 WKS	4/4	4		-	1	1	1	1				12
4	Right-of-Way Acquisition (CSX)	152.4 wks	4/4	•			<b>4</b> 3/3							
5	Design Phase	156.2 wks			4/2	7	1	-	<b>4</b>	/23				
6	Environmental Permitting	262 wks	4/4	•		-	1	-	<b>4</b>	/9				
	Project Construction	232.6 wks						4/2	5				-	10/
3	Vehicle Procurement	210.2 wks					4/4	•	1		-	4/	13	
)	South Station Capacity Improvements and Mid-Day Layover Facility	455.4 wks	4/9										12/28	
0	South Station & Layover Facility Design	313.4 wks	4/9	٠			() I () I () I () I () I () I () I () I			<b>•</b> 4	8			
1	South Station & Layover Facility Construction	286.6 wks				3	7/1 🔶						• 12/28	
2	System Testing	8 wks										1	10/10 🍓	1
	Start Dovonue Service	0 wks										and the second se	•	1

# **Project Costs and Financing**

An investment in the South Coast Rail project promises to reap economic development, transportation, and environmental benefits for the Commonwealth. It will, however, require a significant investment. Aside from the Central Artery/Tunnel project and the Deer Island project, the South Coast Rail project will be one of the most expensive public works projects in Massachusetts history.

The decision to make the financial commitment required to undertake this project cannot be made lightly. As highlighted by the Transportation Finance Commission's recent report dated March 28, 2007, there are significant capital investments that need to be made to simply maintain our existing transportation infrastructure. The current system of financing and managing our transportation infrastructure is broken and comprehensive reform is needed to ensure financial sustainability. The Governor has called on his Administration to work with the legislature, the Transportation Finance Commission and other stakeholders to develop a proposal for such reform.

The Transportation Finance Commission also acknowledged, however, that the Commonwealth needs to make smart investments in new transportation infrastructure. On page 27 of its March 28, 2007 report, the Commission stated:

"It is not practical, plausible, or prudent to pursue a course excluding any transportation enhancement or expansion projects for two decades. Such a course would put us at a significant competitive disadvantage. So as large as the funding gap is, it does not fully represent what the Commonwealth truly needs."

A "fix-it-first" strategy focused only on maintaining our current transportation infrastructure is not the answer to our transportation financing challenges. In addition to putting us at a competitive disadvantage, this limited capital investment strategy stimulates no new economic development and consequently generates no new state tax revenue needed to adequately fund our infrastructure needs. We must, of course, invest more in our existing transportation infrastructure. But, in order to generate the new revenue needed to make these investments, we must also make smart, new transportation investments that spur economic development and that further our broader transportation and environmental objectives.

The financial viability of the South Coast Rail project will depend in part on the extent of the economic development prompted by the project and of the new tax revenues that will result. It will also depend on any comprehensive reforms to the system for financing and managing our transportation infrastructure that are implemented as a result of the effort initiated by the Governor. Consequently, a complete finance plan for the project cannot be developed until sufficient planning work has been done to make an informed assessment of the new development and revenue that will result from the project and until any such reforms are implemented.



The Patrick-Murray Administration is, however, committed to moving this project forward. At this time, the Administration is making the necessary financial commitments to initiate the project and to develop a viable plan for financing the entire project. Specifically, this plan identifies and commits the funding necessary to analyze the alternative routes for the new rail line, begin the process of seeking the required permits, commence design of the project and pay other preliminary costs of the project. It also identifies and commits the funding necessary to carry out the most proactive and comprehensive economic development study and planning initiative ever conducted in this state in order to ensure that this project reaps the economic development benefits desired and needed to help finance the construction and operation of the project. This plan also sets a schedule for completing the finance plan for the construction and operation of the project and identifies some of the potential funding sources that will be explored in the development of the finance plan.

## Costs of the Project

The total cost of planning and constructing the South Coast Rail project is estimated to be \$1,435,200,000, adjusted for inflation to the mid-point of construction. The following is a breakdown of these estimated costs:

Action Item	Cost
Economic Development and Land Use Planning	\$2,000,000
Public Outreach	\$1,000,000
Environmental Permitting	\$8,000,000
Project Design	\$75,500,000
Station Siting	\$27,600,000
Project Construction	\$1,074,500,000
Vehicle Procurement	\$163,100,000
South Station Capacity	\$31,400,000
Midday Layover Facility	\$52,100,000
Total Project Costs	\$1,435,200,000

It should be noted that this cost estimate was developed based on previous estimates of the cost of extending the existing Stoughton line to Fall River and New Bedford, with modifications to reflect cost inflation, components of the project that were not previously taken into account and an analysis of viable alternatives for locating the new rail line. If another alternative for locating the new line is ultimately pursued, it will change the components and costs of the project.

The MBTA estimates that the annual operating cost for the South Coast Rail will be approximately \$26 million (in 2017 dollars) and that the new annual revenue associated with the new rail line will be approximately \$5 million. This will result in an annual shortfall of approximately \$21 million that will need to be funded from other sources.



## Sources of Funding

For financing purposes, the South Coast Rail project has three phases: (i) the planning phase, (ii) the design and construction phase and (iii) the operating phase.

#### Planning Phase – FY2007-2010

The planning phase of the project is expected to cost \$17,200,000. During this phase of the project, the planning work necessary to determine the optimal location for the new rail line will be completed, the permitting work will be initiated, the initial work on the economic development study and planning initiative for the rail corridor described in action item 1 will be completed and the project design work will begin. This phase of the project is expected to run through fiscal year 2010.

The \$17,200,000 cost of the planning phase of the project will be funded from general obligation bonds of the Commonwealth. This cost will be subject to the Administration's cap on the annual amount of capital costs funded from general obligation bonds. There is currently \$9,000,000 of bond authorization available to fund this phase of the project. This will be sufficient to meet projected spending through fiscal year 2009, but additional bond authorization will need to be requested to fund the balance of the planning phase costs expected to be incurred in fiscal year 2010. The Patrick-Murray Administration plans to file a bond bill in July 2007 to obtain such additional bond authorization.

#### Design and Construction Phase – FY2010-2017

The design and construction phase of the project is expected to cost \$1,418,000,000. During this phase of the project, the design and permitting work will be completed, necessary rights-of-way will be acquired, the rail line vehicles will be acquired and the rail line will be constructed. This phase of the project is expected to commence in fiscal year 2011 and end in fiscal year 2017.

Until the initial work on the economic development study and planning initiative for the rail corridor is completed and any proposed reforms to the system of financing and managing our transportation infrastructure are implemented, it cannot be known for certain what sources of funding will be available to finance the costs incurred during the construction phase of the South Coast Rail project. It is clear, however, that this project will need to be financed to the extent possible with new revenue sources in order to avoid it crowding out the Commonwealth's other significant capital investment needs. To illustrate this point, the peak year annual cost of this project will be more than all of our bond-funded capital spending in fiscal year 2007 for higher education, affordable housing, economic development, land conservation, state office buildings and public safety combined.

The following are some of the potential sources of new revenue that will be considered in developing the finance plan for the hard construction phase of the project:

 New state and local revenues generated from existing taxes that result from economic development along the corridor of the new rail line – consistent with financing models



used for the Boston Convention Center Project and the recent "I-Cubed" infrastructure financing legislation, these new revenues can be captured and dedicated to pay debt service on the bonds issued to finance the project.

- New revenue generated or existing revenue that becomes available to the Commonwealth or to the MBTA as a result of any comprehensive transportation finance reforms that result from the effort initiated by the Governor.
- New revenue generated from fees, assessments or other charges on private property owners in the rail corridor who benefit from the project
- Federal funding

The Patrick-Murray Administration intends to complete the finance plan for the design and construction phase of the project by January 1, 2010. By that time, the preferred alternative for locating the new rail line will have been determined and the initial work on the economic development study and planning initiative for the related rail corridor will have been completed. The finance plan will reflect the new tax revenues expected to be generated based on the economic development planning initiative for the rail corridor. It will also reflect new revenues expected to be available as a result of any reforms to the system for financing and managing our transportation infrastructure that are implemented as a result of the effort initiated by the Governor. The January 1, 2010 date for completion of the finance plan will provide sufficient time to seek any legislative authorization necessary to implement the finance plan before the design and construction phase of the project commences in fiscal year 2011.

#### *Operating Phase – FY2017-thereafter*

As indicated above, the net annual operating cost of the project is expected to be \$21 million (2017 dollars). The additional revenue the MBTA will need to operate the new rail line has not yet been identified. The potential sources of funding this cost will largely be dictated by any comprehensive transportation finance reforms implemented as a result of the effort initiated by the Governor. In order to provide sufficient time to take into account any funding sources made available as a result of these reforms, the Patrick-Murray Administration intends to complete the finance plan for the operating phase of the project by January 1, 2010.



#### **OPTIONS FOR EXPEDITING THE PROJECT AND/OR REDUCING PROJECT COSTS**

There are several opportunities to advance certain project components that will benefit the overall implementation of the South Coast Rail project, both by expediting key elements of the project and by allowing funds to be spent earlier and, thus, allowing the Commonwealth to avoid later cost escalation. Furthermore, some of these recommendations could have utility not only for the South Coast Rail project itself but for the transportation system of the Commonwealth as a whole.

## Procurement Methods

Both the Design-Build and Design-Bid-Build procurement/delivery methods are being evaluated for use on the South Coast Rail project. The Design-Build method has been used for other, recent infrastructure projects in the Commonwealth, including Route 3 North and the Greenbush Commuter Rail restoration, and is allowable on the South Coast Rail project pursuant to the authority set forth in Section 53 of Chapter 246 of the Acts of 2002.

The Design-Build method is most appropriate for projects that have a high level of certainty with issues such as permitting and right-of-way acquisition. Design-Build has the major advantage of consolidating responsibility for the design and construction of an infrastructure project within a single entity and applying risk appropriately; as a result, Design-Build can significantly improve the schedule for completion of a project. However, it can be a challenge to use Design-Build in projects where, as with the South Coast Rail project, environmental permitting is a significant challenge. EOT and the MBTA expect that the key regulatory agencies with jurisdiction over the South Coast Rail project (Army Corps and the Massachusetts DEP, among others) will require detailed design proposals for major elements of the project prior to issuing key permits. Since the timing of these permits is uncertain and since construction of these elements cannot begin until the permits are issued, the key advantages of the Design-Build method – speed and efficiency – could be lost.

The MBTA piloted the Design-Build methodology on the Greenbush Commuter Rail project, scheduled to open to the public during the summer of 2007. The wetland and ecological resource issues on the Greenbush project were sufficiently complicated that the environmental regulatory agencies required an advanced level of design (60% and more in certain locations) before permits could be issued. This effort was not clearly identified in the Design-Build Request for Proposals package, and the timing and complexity of the permit issuances – including lengthy appeals – were significantly greater than originally anticipated, resulting in changes to the project cost and delays to the project schedule.

With the MBTA now able to benefit from the lessons learned on the Greenbush project, it may be possible to formulate a procurement process for the South Coast Rail that uses the Design-Build method but is structured to proceed in stages, after key permits and other important risk issues are properly addressed. More study is needed before a decision can be reached as to whether Design-Build is appropriate for the project. Should it not be, a traditional Design-Bid-Build approach will be used.



## 'Fast-Track' Permitting

EOT and the MBTA may wish to pursue a 'fast-track' method for environmental permitting, which is allowable under recent regulatory authorization when permitting large, complex projects. Under the fast-track program, a project proponent and DEP agree to expedite the permit review. As an expedited process requires greater resources within DEP, the project proponent enters into an agreement to fund a portion of the permitting costs, thus providing DEP with resources that it would not normally have. The result is that fast-track projects receive first attention and priority review by the DEP, all with standard stringent requirements.

Inter-Agency Permitting Task Force

The 2002 FEIR required the establishment of a permitting task force – with representatives of all relevant agencies – to closely coordinate on the environmental permitting tasks necessary to advance the South Coast Rail project. The early convening of this task force could help to expedite the overall permitting process.

Wetlands Banking

The wetlands banking process may make it possible for project proponents to begin certain elements of project-related mitigation prior to the completion of all environmental permitting. This proactive approach could have a beneficial effect on the overall project schedule however, the mechanism to pursue this is not formally in place at this time.

Route 24 Overhead Bridge – Freetown

The existing Route 24 overhead bridge in Freetown (M.P. 13.9) will require full reconstruction to accommodate the double-track required for the South Coast Rail project. The reconstruction of the Route 24 bridge presents an opportunity to improve an existing highway bridge that is nearing the end of its useful life while also preparing a key infrastructure component for the South Coast Rail project.

The design and permitting for the reconstruction of the Route 24 overhead bridge is estimated to require 18-24 months, followed by another 18-24 months for construction. The project in entirety is estimated to cost \$13 million.

Material Procurement

Expedited procurement of all of the major construction items needed for the South Coast Rail project – including rail, ties, signal equipment, turnouts, and other items – will benefit the overall project schedule and cost by foregoing the procurement time typically required for each construction contract. These materials will not only be needed for the South Coast Rail project, but will also provide the MBTA the flexibility to use any surplus materials elsewhere within the Commuter Rail system.

The procuring of advance materials is estimated to require 12-18 months. Costs are to be determined.



## Vehicle Procurement

The MBTA is currently involved in a procurement process for the purchase of new locomotives and coaches for their fleet. It may be possible for the Commonwealth to order any new vehicles that will be required for this project as part of an option that the MBTA will have for the purchase of additional vehicles as part of this contract. Making use of an existing procurement to purchase vehicles for South Coast Rail – may offer some cost- and time-savings for the overall project.



## NEXT STEPS

The South Coast Rail project has the chance to serve as a model transportation project for the Commonwealth of Massachusetts. EOT and the MBTA together have an opportunity to create an environment of collaboration among government agencies, municipal stakeholders, elected officials, and the general public in service of a project with regional significance and regional benefits. In order to advance the South Coast Rail project, the following steps will be necessary:

- Pursue economic development and land use planning.
- Implement an inclusive and comprehensive public outreach campaign.
- Acquire all necessary rail right-of-way and any ancillary property.
- Determine preferred alignment through the completion of an Environmental Impact Report/Environmental Impact Statement and complete design and permitting.
- Construct all rail infrastructure including terminal facilities in Fall River and New Bedford.
- Procure necessary locomotives and passenger coaches.
- Expand track-capacity at South Station.
- Site and construct a new midday layover facility.

EOT and the MBTA will work together to aggressively pursue these goals and make the implementation of South Coast Rail a reality for the people of Massachusetts.