Individual PE/NEPA Activities Application Form

High-Speed Intercity Passenger Rail (HSIPR) Program

Applicants interested in applying for funding of Preliminary Engineering (PE)/National Environmental Protection Act (NEPA) activities under the FY10 Individual Project solicitation are required to submit this application form and other required documents as outlined in Section H of this application. List and describe any supporting documentation submitted in Section G. Applicants should reference the FY10 Individual Projects Notice of Funding Availability (NOFA) for more specific information about application requirements. If you have questions about the HSIPR Program or this application, please contact the Federal Railroad Administration (FRA) at HSIPR@dot.gov.

Applicants must use this form by entering the required information in the gray narrative fields, check boxes, or drop-down menus. Submit this completed form, along with any supporting documentation, electronically by uploading them to GrantSolutions.gov by 5:00 p.m. EDT on August 6, 2010.

A. Point of Contact and Applicant Information

Applicant should ensure that the information provided in this section matches the information provided on the SF-424 forms.

<table>
<tr><td colspan="3">(1) Name the submitting agency:
The Massachusetts Department of Transportation (MassDOT)</td><td colspan="3">Provide the submitting agency Authorized Representative name and title.:
David Mohler, Executive Director</td></tr>
<tr><td>Street Address:
Ten Park Plaza, Room 4150</td><td>City:
Boston</td><td>State:
MA</td><td>Zip Code:
02116-3973</td><td>Authorized Representative telephone:
617-973-7844
Authorized Representative email:
David.Mohler@state.ma.us</td></tr>
<tr><td colspan="2">Provide the submitting agency Point of Contact (POC) name and title (if different from Authorized Representative):
Timothy Doherty, Project Manager</td><td colspan="3">Submitting agency POC telephone: 617-973-7840
Submitting agency POC email: Timothy.Doherty@state.ma.us</td></tr>
<tr><td colspan="5">(2) List the name(s) of additional state(s) applying (if applicable):

NA</td></tr>
</table>

B. Eligibility Information

Complete the following section to demonstrate satisfaction of applicant eligibility requirements.

(1) Select the appropriate box from the list below to identify applicant type. Applicant type is defined in Section 3.1 of the NOFA.

- ☒ State
- ☐ Group of States
- ☐ Amtrak
- ☐ Amtrak in cooperation with one or more States

If selecting one of the types below, additional documentation is required. Please select the appropriate box to establish applicant eligibility as described in Section 3.2 of the NOFA and list the supporting document in Section G.2 of this application.

- ☐ Interstate Compact
- ☐ Public Agency established by one or more States

(2) Indicate the planning processes used to identify the underlying project.[1] As defined in Section 3.5.1 of the NOFA, the process should analyze the investment needs and service objectives of the service that the underlying project is intended to benefit. The appropriate planning document must be listed in Section G.2 of this application.

- ☒ State Rail Plan
- ☐ Service Development Plan (SDP)
- ☐ Service Improvement Plan (SIP)
- ☐ Statewide Transportation Improvement Plan (STIP)
- ☒ Other, please list this document in Section G.2 with "Other Appropriate Planning Document" as the title
- ☐ The underlying project is not included in a relevant and documented planning process

[1] PE/NEPA activities include the specific tasks necessary to complete PE/NEPA documentation and other tasks applied for in this application that relate to this phase of the underlying project's development. The underlying project is the larger area and/or infrastructure that will be become the Final Design (FD)/Construction project following completion of the PE/NEPA activities.

C. PE/NEPA Activities Summary

Identify the title, location, and other information of your proposed PE/NEPA work by completing this section.

(1) Provide a clear, concise, and descriptive project name. Use identifiers such as state abbreviations, major cities, infrastructure, and tasks of the underlying project (e.g., "DC-Capital City to Dry Lake Track Improvements").

MA-NEC-Boston South Station High Speed Intercity Passenger Rail (HSIPR) Expansion Project

(2) Indicate the anticipated funding level for the PE/NEPA activities below. This information must match the SF-424 forms, and dollar figures must be rounded to the nearest whole dollar. When the non-Federal match percentage is calculated, it must meet or exceed 20 percent of the total project cost.

Federal Funding Request	Non-Federal Match Amount	Total PE/NEPA Activities Cost	Non-Federal Match Percentage of Total Activities Cost
$ 32,500,000	**$** 10,500,000	**$** 43,000,000	24 **%**

(3) Indicate the activity(ies) for which you are applying. Check all that apply.

☒ Preliminary Engineering ☒ Project NEPA[2]

(4) Indicate the anticipated duration, in months, for these PE/NEPA activities (e.g., 36).

Number of Months: *25*

(5) List the name of the corridor where the underlying project is located.

Northeast Corridor (NEC), Northern New England High Speed Rail Corridor (Boston - Springfield - New Haven)

(6) Describe the underlying project location, using municipal names, mileposts, control points, or other identifiable features such as longitude and latitude coordinates. If available, please provide a project GIS .shp file as supporting documentation. This document must be listed in Section G.2 of this application.

Boston, Massachusetts, NEC Main Line, South Station to Cove Interlocking, 42-21'06.00" N, 71-03'17.00". Please see attached GIS .shp file of the Expansion Project (the "Project") elements, Attachment A1, as listed in Section G.2.

(7) Provide a project abstract outlining the proposed PE/NEPA activities. Summarize the project narratives provided in the Statement of Work in 4-6 sentences. Capture the major milestones and outcomes of PE/NEPA activities and the anticipated benefits that will result from the completion of the underlying project.

The Project would expand South Station to meet planned 2030 capacity requirements for Amtrak HSIPR and IPR operations, as well as MBTA commuter rail. As outlined in the NEC Master Plan, the terminal, including new concourses and a secondary headhouse, would be expanded from 13 to 20 tracks using the current United State Postal Service (USPS) South Annex site. To do this, the USPS facility would be relocated to a site one mile to the east and the existing facility would be razed. Track, train control, and communication system enhancements would extend to major interlockings at three station approaches within four miles of the terminal. PE and NEPA would result in a Project EA/EIR, preliminary design and estimates for:

A. New United States Postal Service (USPS) general distribution facility to be located in South Boston on Port Authority of Massachusetts (MassPort) property;

[2] Project NEPA documentation is required for the specific design alternative identified through Preliminary Engineering and related activities. Project NEPA documentation may also be referred to as site-specific NEPA or Tier II NEPA documentation.

B. Demolition of the Existing USPS South Annex;

C. Expansion of South Station terminal adding 7 new tracks (for 20 total) and platforms, an additional headhouse, and a new passenger concourse, and extending some existing platforms;

D. Reconstructing Cove, Broadway and Tower 1 Interlockings for faster and more efficient operations; adding interlocking south of Tower 1;

E. Providing a layover solution for both Amtrak intercity and MBTA commuter rail equipment within four miles of South Station;

F. Restoring Dorchester Avenue for public and station access along the harborside edge of the expanded terminal; and

G. Producing a Master Plan, environmental constraints, and structural footings for future transit-oriented development (TOD) at terminal ground and air rights sites.

The Project elements are shown in Attachment 1, Figure 1-1 (Project Overview Map). Anticipated benefits of the Project include improved on-time performance for existing Amtrak and MBTA operations and full Boston operational capability for planned 2030 service (as described in the Appendices F1, NEC Infrastructure Master Plan, and F2, MBTA Program for Mass Transportation).

PE/NEPA will develop a complete set of preliminary design drawings, estimates, operational plans and environmental clearances needed to support the final design of the Boston South Station HSIPR Expansion Project (the "Project"). The PE milestones would be:

1. Finalization of the operations plan,
2. Finalization of the Alternatives Analysis for the layover solution,
3. Completion of preliminary design for the layover solution,
4. Completion of preliminary design of the station, trackwork, electrification and signal systems
5. Completion of preliminary design for the new post office distribution facility,
6. A demolition plan for the existing post office distribution facility site,
7. Refined estimates for the final design and construction of the Project, and
8. Completion of a Master Plan and environmental constrains memorandum for joint development of the terminal expansion site.

A more complete overview of the Project is provided in Attachment 2: Executive Summary. The layover solution is described in Appendix B (Layover Solution Memorandum). Environmental constraints are described in Appendix C (Environmental Regulatory Constraints Memorandum).

(8) Indicate the source, amount, and percentage of matching funds for the PE/NEPA activities. The sum of the figures below should equal the amount provided in Section C.2. Click on the prepopulated fields to select the appropriate responses from the lists provided in type of source, status of funding, and type of funds. Dollar figures must be rounded to the nearest whole dollar. Identify supporting documentation that will allow FRA to verify the funding source, and list it in Section G.2 of this application.

Non-Federal Funding Sources	New or Existing Source?	Status of Funding[3]	Type of Funds	Dollar Amount	% of Total Project Cost	Describe Any Supporting Documentation to Help FRA Verify Funding Source
State	Existing	Planned	Cash	$ 10,500,000	24 %	Attachment 4: Financial Plan
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
	New	Committed	Cash	$	%	
Sum of Non-Federal Funding Sources				$	%	N/A

[3] Reference Notes: The following categories and definitions are applied to funding sources:

Committed: Committed sources are programmed capital funds that have all the necessary approvals (e.g., statutory authority) to be used to fund the proposed project without any additional action. These capital funds have been formally programmed in the State Rail Plan and/or any related local, regional, or state capital investment program or appropriation guidance. Examples include dedicated or approved tax revenues, state capital grants that have been approved by all required legislative bodies, cash reserves that have been dedicated to the proposed project, and additional debt capacity that requires no further approvals and has been dedicated by the sponsoring agency to the proposed project.

Budgeted: This category is for funds that have been budgeted and/or programmed for use on the proposed project but remain uncommitted (i.e., the funds have not yet received statutory approval). Examples include debt financing in an agency-adopted capital investment program that has yet to be committed in the near future. Funds will be classified as budgeted when available funding cannot be committed until the grant is executed or due to the local practices outside of the project sponsors control (e.g., the project development schedule extends beyond the State Rail Program period).

Planned: This category is for funds that are identified and have a reasonable chance of being committed, but are neither committed, nor budgeted (e.g., proposed sources that require a scheduled referendum, requests for state/local capital grants, and proposed debt financing that has not yet been adopted in the agency's capital investment program).

D. Underlying Project Overview

Answer the following questions about the underlying construction project that is the subject of the PE/NEPA application.

(1) Indicate the expected service outcomes of the underlying project.[4] Check all that apply.

- ☒ Additional service frequencies
- ☒ Service quality improvements
- ☒ Increased average speeds/shorter trip times
- ☒ Improved operational reliability on existing route
- ☒ Improved on-time performance on existing route
- ☒ Other (please describe) Station access improvements via new pedestrian concourses and along a restored Dorchester Avenue.

Briefly clarify your response(s), if needed:

As demonstrated in the attached Operational Analysis (Appendix A2), the Project would enable full operational capability for planned 2030 Amtrak and MBTA operations. The following Section D(2) indicates planned service improvements for Amtrak HSR Acela Express only between Boston and New York. Improvements for existing Amtrak Northeast Regional HSIPR and Lake Shore Limited, as well as MBTA Commuter Rail would also be enabled. Current and projected future operating characteristics for these services are included in Attachment 1, Table 1-1. Other projected service expansions, including the Amtrak Inland Route and MBTA Commuter Rail growth, are also made possible by the Project.

(2) Quantify the applicable service outcomes of the underlying project. Provide the current conditions and anticipated service outcomes. Future state information is necessary only for relevant service benefits.

	Frequencies[5]	**Scheduled Trip Time** (in minutes)	**Average Speed** (mph)	**Top Speed** (mph)	**Reliability** – Provide Either On-Time Performance Percentage or Delay Minutes
Current	**20**	**210**	**86**	**150**	**%85**
Future	**30**	**188**	**97**	**150**	**%95**

(3) Indicate the type of expected capital investments included in the underlying project. Check all that apply.

- ☒ Structures (bridges, tunnels, etc.)
- ☒ Track rehabilitation and construction
- ☒ Major interlockings
- ☒ Station(s)
- ☒ Communication, signaling, and control
- ☐ Rolling stock refurbishments
- ☐ Rolling stock acquisition
- ☒ Support facilities (yards, shops, administrative buildings)
- ☐ Grade crossing improvements
- ☒ Electric traction
- ☒ Other (please describe) **Relocation of the USPS South Annex postal facility; multi-modal station access improvements, including a passenger concourse through the terminal, restoration of Dorchester Avenue, and Boston HarborWalk completion at the expansion site.**

(4) Select and describe the operational independence of the underlying project.[6]

☒ This project is operationally independent. ☐ This project is not operationally independent.

Briefly clarify your response:

This project would significantly improve the performance of South Station and the tracks accessing South Station for existing operations of Amtrak and MBTA. These improvements would benefit current users in the interim before planned increases in operations along the Amtrak NEC Main Line, Amtrak Inland Route, and MBTA Commuter Rail lines. The Layover Solution

[4] The underlying project is the larger area and/or infrastructure that will be become the FD/Construction project following completion of the PE/NEPA activities.

[5] Frequency is measured in daily one-way train operations. One daily round-trip operation should be counted as two daily one-way train operations.

[6] A project is considered to have operational independence if, upon being implemented, it will provide tangible and measurable benefits, even if no additional investments in the same service are made.

would provide operational efficiencies and operational cost savings to both Amtrak and the MBTA. It does not require other improvements for these benefits to accrue nor does it require other improvements to be implemented.

(5) Provide Right-of-Way ownership in the underlying project area. Where railroads currently share ownership, identify the primary owner. If Amtrak is the Type of Railroad, the Right-of-Way Owner field does not need to be completed. Click on the prepopulated fields to select the appropriate response from the lists of railroad types and status of agreements. If more than five owners, please provide the same information in a separate supporting document, and list it in Section G.2 of this application.

Type of Railroad	Right-of-Way Owner	Route-Miles	Track-Miles	Status of Agreements to Implement
Commuter Railroad or Authority	MBTA	1	8	Master Agreement in Place
Other/Special Situations				Master Agreement in Place
Other/Special Situations				Master Agreement in Place
Other/Special Situations				Master Agreement in Place
Other/Special Situations				Master Agreement in Place

(6) Name the Intercity Passenger Rail Operator and provide the status of the agreement. If applicable, provide the status of the agreement with the partner that will operate the planned passenger rail service (e.g., Amtrak). Click on the prepopulated field to select the appropriate response from the status of agreement list.

Name of Rail Service Operator	Status of Agreement
Amtrak	Final executed agreement on project scope/outcomes

(7) Identify the types of services affected by the underlying project and provide information about the existing rail services within the underlying project boundaries (e.g., freight, commuter, and intercity passenger). Click on the prepopulated fields to select the appropriate response from the list of types of service.

Type of Service	Name of Operator	Top Existing Speeds Within Underlying Project Boundaries		Number of Route-Miles Within Underlying Project Boundaries	Average Number of Daily One-Way Train Operations[7] Within Underlying Project Boundaries	Notes
		Passenger	Freight			
Intercity Pa	Amtrak	30	30	1	40	
Commuter	MBTA	30	30	1	282	
Freight						
Freight						
Freight						
Freight						

[7] One daily round-trip operation should be counted as two daily one-way train operations.

(8) Estimate the share of benefits that will be realized by nonintercity passenger rail service (e.g., commuter, freight) and select the approximate cost share to be paid by the beneficiary.[8] Click on the prepopulated fields to select the appropriate response from the lists of type of beneficiary, anticipated share of benefits, and approximate cost share. If more than three types of nonintercity passenger rail are beneficiaries, please provide additional information in a separate supporting document, and list in Section G.2 of this application.

Type of Nonintercity Passenger Rail	Expected Share of Benefits	Approximate Cost Share
Commuter	Less than 50%	0-25%
Other	Less than 50%	0-25%
Other	Less than 50%	0-25%

[8] Benefits include service improvements such as increased speed, on-time performance, improved reliability, and other service quality improvements.

E. Additional Response to Evaluation Criteria

Provide a separate response to each of the following categories of potential benefits to identify the ways in which the proposed PE/NEPA activities and underlying project will achieve these benefits.[9]

(1a) Transportation Benefits

Describe the ways in which the proposed PE/NEPA activities or underlying corridor program will address the potential of successfully executing these transportation benefits in a cost-effective manner:

- Supporting the development of intercity high-speed rail service;
- Generating improvements to existing high-speed and intercity passenger rail service, as reflected by estimated increases in ridership (as measured in passenger-miles), increases in operational reliability (as measured in reductions in delays), reductions in trip times, additional service frequencies to meet anticipated or existing demand, and other related factors;
- Generating cross-modal benefits, including anticipated favorable impacts on air or highway traffic congestion, capacity, or safety, and cost avoidance or deferral of planned investments in aviation and highway systems;
- Creating an integrated high-speed and intercity passenger rail network, including integration with existing intercity passenger rail services, allowance for and support of future network expansion, and promotion of technical interoperability and standardization (including standardizing operations, equipment, and signaling);
- Encouragement of intermodal connectivity and integration through provision of direct, efficient transfers among intercity transportation and local transit networks at train stations, including connections at airports, bus terminals, subway stations, ferry ports, and other modes of transportation;
- Enhancing intercity travel options;
- Ensuring a state of good repair of key intercity passenger rail assets;
- Promoting standardized rolling stock, signaling, communications, and power equipment;
- Improved freight or commuter rail operations, in relation to proportional cost-sharing (including donated property) by those other benefiting rail users;
- Equitable financial participation in the project's financing, including, but not limited to, consideration of donated property interests or services; financial contributions by freight and commuter rail carriers commensurate with the benefit expected to their operations; and financial commitments from host railroads, non-Federal governmental entities, nongovernmental entities, and others;
- Encouragement of the implementation of positive train control (PTC) technologies (with the understanding that 49 U.S.C. 20147 requires all Class I railroads and entities that provide regularly scheduled intercity or commuter rail passenger services to fully institute interoperable PTC systems by December 31, 2015); and
- Incorporating private investment in the financing of capital projects or service operations.

The Boston South Station High Speed Intercity Passenger Rail (HSIPR) Expansion Project (the "Project") would add operating capacity at this northern terminus of the Northeast Corridor (NEC). The Project is needed because the terminal is currently operating at capacity (as described in Appendix A2: Operations Analysis and Work Program Technical Report) and substantial future service growth is planned. Anticipated service increases include 50% more Amtrak Acela Express trains, as well as the Northeast Corridor (NEC) Inland Route intercity passenger rail connection between Boston, New York, and Washington, DC via Hartford, CT. The Project also enables increased Massachusetts Bay Transportation Authority (MBTA) commuter rail service; MBTA operates the nation's fifth largest commuter rail system, behind only systems in metropolitan New York City and Chicago. About 67% of its service connects to South Station. Attachment 1, Figure 1-1 shows the location of South Station and Project elements. (Please see Attachment 1 for figures and other Exhibits supporting this application.)

The Project would include adding 7 new terminal tracks, for a total of 20 South Station platform tracks (Attachment 1, Figure 1-2). Station approach interlockings would be reconfigured to significantly increase terminal throughput (Attachment 1, Figures 1-3 and 1-4). Together these investments enable higher-speed operations, improve on-time

[9] PE/NEPA activities include the specific tasks necessary to complete PE/NEPA documentation and other tasks applied for in this application that relate to this phase of the underlying project. The underlying project is the larger area and/or infrastructure that will be become the FD/Construction project following completion of the PE/NEPA activities.

performance for existing train services, and make possible the projected service growth. Other Project improvements include an expansion of passenger terminal and pedestrian circulation facilities (depicted in Attachment 1, Figure 1-5), upgraded train control and communication systems, and construction of a relocated United States Postal Service (USPS) distribution facility. A layover solution, which is a Project element, is a parallel effort to the station expansion. Both the station expansion and layover solution are needed today and have independent utility. PE and environmental permitting for layover are included in the Project. The layover site(s) has not been identified but is on schedule to be selected prior to the initiation of PE/NEPA. The layover solution would proceed on a faster schedule than the terminal expansion and would be available before the terminal expansion is complete. The South Station HSIPR Expansion Project has been developed in conjunction with the Northeast Corridor Infrastructure Master Plan (NEC Master Plan, 2010). A full explanation of the PE/NEPA Work Program is provided in Appendix D. A Layover Solution Memorandum, outlining both the need and solution strategies for Boston's layover capacity constraint, is included as Appendix B.

Terminal station expansion and enhanced interlocking throughput have been determined to be the only feasible near term solution to add Boston Northeast Corridor and south side commuter rail capacity. The alternative of run through service would require a capital investment many orders of magnitude greater than terminal expansion, and is not readily available. Terminal capacity is demanded today, and will be essential to operate services planned for implementation by 2030. Therefore, an expansion of South Station is the only near term solution to add Northeast Corridor operating capacity to Boston. Alternatives evaluated during Project development are explained in Attachment 2: Executive Summary.

To accomplish the level of improvements required, the Project includes the relocation of the current United States Postal Service (USPS) South Annex operation from 25 Dorchester Avenue to a new location near the South Boston harborfront. The current post office facility would then be razed and the new tracks would be constructed on the site. The existing USPS site is owned by the Postal Service. South Station and the right-of-way required for track modifications are owned by MBTA. The majority of the site for the new USPS facility is owned by the Port Authority of Massachusetts (MassPort) and the balance of the site is owned by the US Department of Defense.

The Project right-of-way is owned by MBTA. Through agreement, trains are dispatched by Amtrak. The defined Project Area includes approximately 1.25 train route miles and approximately 8 track miles. The right-of-way Project limits are South Station, Cove Interlocking on the NEC Main Line, and Broadway Interlocking on the Dorchester/Old Colony branches. Project layover sites will be determined through a pending Alternatives Analysis process.

For information on the technical aspects of Project design, please refer to the Conceptual Design Technical Memorandum, which is included as Appendix A.

MassDOT requests HSIPR Program funding of $32.5 million for the Project's PE/NEPA activities. The Commonwealth of Massachusetts proposes a match of $10.5 million toward the Project. This match represents the cost of completing PE/NEPA for a layover solution. Additional layover capacity for both Amtrak and the MBTA is a long-standing need. MassDOT has identified candidate locations and will soon begin an extensive Alternatives Analysis to identify the preferred site by January 2011 to allow the PE/NEPA of that site to be included in the Cooperative Agreement with FRA. The layover solution will advance on a faster track than the South Station Expansion and will be operational before the station expands.

This match reflects the anticipated level of benefits both Amtrak and MBTA would receive from the Project. This benefits balance is derived, in part, from the MBTA's most current projected operations in the year 2030. These operations reflect natural growth in the legacy system's use and include anticipated future service to the South Coast of Massachusetts. These projected operations do not, however, reflect an ongoing discussion about increased Boston to Worcester service. Potential Worcester increases, with up to a possible doubling of service, was not included in the operations analysis for this application. As part of the operations analysis component of PE/NEPA, MassDOT would work with Amtrak and FRA to confirm the benefits share from the Project. This refined benefits share would be reflected in a future request for funding for Final Design and Construction through the HSIPR Program.

CURRENT AND PLANNED RAIL OPERATIONS AND RIDERSHIP

Currently, Amtrak Acela Express and Northeast Regional high speed rail services operate a combined 18 daily

round trips between Boston, MA, and Washington, DC, with an additional 2 daily round trips between Boston and New York. This service operates over the NEC Main Line. A single daily round trip between Boston, Albany, and Chicago also connects at South Station (the Amtrak Lake Shore Limited service), raising the terminal's current daily total intercity round trip count to 20. These trains represent approximately 40 daily revenue movements at the terminal. MBTA currently operates 143 daily inbound trains and a total of 282 daily revenue movements.

By the year 2030, Amtrak plans to add 5 daily Acela Express roundtrips, plus 5 daily roundtrips along the proposed Inland Route. This robust 50% increase in both high speed and total intercity service would add 20 revenue movements, raising Amtrak's daily total to 60. In the same timeframe, MBTA anticipates adding 7 daily round trips, or 14 revenue movements. This modest 5% increase would raise daily total MBTA revenue movements to 296. Combined, Amtrak and MBTA service would grow from the current 322 revenue moves to 356 revenue moves per day by year 2030. As demonstrated in Appendix A1 (Network Simulation Analysis), these projected train operations far exceed the terminal's reliable operating capacity and terminal operations already exceed reliable operating levels. Therefore, the anticipated 2030 operation is not possible with the existing terminal configuration.

MBTA Commuter Rail reported 467 minutes of delay associated with South Station congestion in the first half of 2010. Over 20 of these incidents caused delays of around 10 minutes or more. In the same timeframe, Amtrak reported eights delays of at least one-half hour, attributed at least in part to terminal congestion. Attachment 1, Table 1-2 displays both current and anticipated revenue train movements at South Station. A detailed analysis of the terminal's operating capacity is included as Appendix A2, Operations Analysis and Work Program Technical Memorandum.

Capacity and system enhancements would also support Amtrak's efforts to match its targets for on-time performance and shortened run times. According to the NEC Master Plan, corridor on-time performance is approximately 85% for Acela Express and 75% for Northeast Regional trains. The 2030 target on-time percentage is 95% for Acela Express and 90% for Northeast Regional trains. Without expansion of South Station, not only will these targets be missed, but on time performance will deteriorate even further from today's existing performance. Without an adequate Boston terminal, Amtrak will not be able to achieve its goal of reducing travel times between Boston and New York form 3.5 hours to 3.13 hours. The new terminal and interlockings configuration would significantly reduce delays and increase speeds from 8 mph to between 30 and 45 mph through Cove Interlocking.

It should be noted that the NEC Transportation Plan--New York City to Boston (1994) projected similar service levels in 2010 to the NEC Master Plan estimates for year 2030. The 1994 plan assumed that capital improvements would enable 3 hour trips between New York and Boston by 2010 (as opposed to the existing 3.5-hour trip for Acela Express). That plan also assumed that capacity would be available to meet ridership demand. Several of these assumed capacity enhancements have yet to be implemented, including terminal expansions in both Boston and New York. The NEC Master Plan presents the best available information to project 2030 operations and is the basis for this application.

Nearly 1,288,000 Amtrak passengers travelled through South Station in 2009, or nearly 3,600 passengers per day. These passengers represent high passenger mile counts: about 290,000,000 annual and 800,000 daily passenger miles. The station is also a portal for 48,000 weekday commuter rail passengers, over 16,000 daily Bus Terminal passengers, and nearly 28,000 additional weekday subway and bus transit passengers.

By enabling more service, the Project establishes the foundation for both Amtrak and MBTA to achieve their year 2030 ridership projections. By 2030, the NEC Master Plan projects a 96% increase in both Amtrak NEC Main Line passengers and passenger miles between Boston and New York: about 3,580,000 annual boardings and 341,000,000 annual passenger miles. These volumes do not include the addition of Inland Route service. Amtrak anticipates their South Station riders to increase by 98% to over 2,500,000 passengers per year. MBTA anticipates a 28% growth in South Side commuter rail riders, with about 115,400 daily system passengers. This projected growth cannot be attained without more terminal capacity in Boston.

IMPACTS ON AIRPORT AND HIGHWAY TRAVEL

Increased Amtrak service would impact air travel between Northeast Corridor cities. Amtrak data indicates that the train and air travel market share for HSIPR is strong between the end cities (Boston, Washington) and the midpoint (New York). Amtrak reports that its share of the market grew significantly since the introduction of Acela Express and electrified Regional service in 2000. Along the New York to Boston corridor, the rail market share grew from

20% to 41% by 2002, and to 49% by 2008. Increased frequency in Acela Express service to Boston would further enable a shift from commuter jet travel to rail, with associated airport congestion relief, environmental and economic benefits. Reduced demand for short haul flights can be expected to create gate capacity for more profitable long haul flights and may delay or eliminate the need for some planned investments in airport capacity.

Enhanced rail mobility is also expected to shift travel from highway modes to more efficient trains. The NEC Master Plan reports that northeastern US highway travelers currently experience three times the delay compared to rail passengers. Rail service improvements in the NEC Master Plan are expected to reduce annual highway vehicle miles travelled (VMT) by 3.5 billion. These projected reductions in airport and highway travel are not possible without additional South Station capacity.

PASSENGER TERMINAL

A build-out of Project elements would improve safety and convenience at South Station. The existing station platforms have a single access and egress point: the rail heads. The Project would design a new, elevated passenger concourse spanning all station platforms at their midpoint. This concourse would provide an alternate route to and from train cars, particularly those at the far end of platforms relative to the headhouses. It would also speed emergency egress from the center and southern end of the platforms. This concourse would incorporate the existing bus terminal concourse, thus maximizing previous investments and better integrating multimodal operations. It would also significantly enhance station area connectivity, providing a linkage through the station from the Chinatown Gate to Fort Point Channel, and potentially across the Channel by way of a future footbridge. The Project also includes additional emergency egress provisions for the southernmost platform endpoint areas. Attachment 1, Figure 1-5A shows pedestrian circulation at South Station before and after the proposed expansion.

SUPPORT FOR EXISTING AND FUTURE PASSENGER RAIL SERVICES

The South Station Expansion Project would significantly enhance and is fully compatible with existing high-speed and intercity rail operations. The expansion enables an expanded intercity network, including the near-term addition of the Inland Route. It also supports the conversion of conventional intercity corridors to future HSIPR capability.

The proposed Inland Route is almost identical in length to the NEC Main Line between Boston and New Haven, CT and would serve the metropolitan areas of Worcester, MA, Springfield, MA, and Hartford, CT. The combined population of these metropolitan areas is about 2,270,000 residents. The Inland Route is designated by the Federal Railroad Administration (FRA) as a HSIPR corridor. MassDOT is working with Amtrak and the State of Connecticut (ConnDOT) on a long-term plan to upgrade the Inland Route corridor. In addition to serving new markets, this corridor is expected to relieve capacity constraints on the NEC Main Line between New Haven, Providence, and Boston. Initial phases of this tri-state effort include using HSIPR rail and state funds to provide double track the entire length between New Haven and Springfield, improve stations and platforms, and upgrade signal and communication systems.The NEC Master Plan proposes electrifying the 60-mile segment between New Haven and Springfield by 2030. Both the NEC Main Line and the Inland Route demand frequent intercity passenger rail service and both depend on expanded capacity at South Station. The NEC Main Line, NEC Branches, Inland Route, Existing and Near-Term Amtrak services to Boston are depicted in Attachment 1, Figure 1-6.

MULTI-MODAL CONNECTIONS

South Station is one of the nation's most diversified multi-modal transportation centers. It is is fully integrated with MBTA’s Boston subway and bus network. It is also the regional hub for intercity and commuter passenger motor coach service. Amtrak and Commuter Rail passengers transfer within the terminal to MBTA Red Line subway, the transit spine for communities west and south of downtown Boston. A Silver Line bus tunnel station is co-located with the Red Line station. One tunnel route, the Silver Line SL1 Bus Rapid Transit (BRT), connects South Station with all passenger terminals at Boston Logan International Airport. At street level, the new Silver Line SL4 BRT travels between South Station, Boston’s South End, and Roxbury. Commuter ferries dock at Rowes Wharf, about four blocks from the station. Transit connections at the station are shown in Attachment 1, Figure 1-7.

MAINTAINING A STATE OF GOOD REPAIR

The South Station Expansion Project maintains a state of good repair of the Northeast Corridor Boston terminal. The Project would reconstruct the Cove, Broadway and Tower 1 Interlockings at the terminal approach. An additional interlocking south of Tower 1 would simplify train movements through Tower 1. Combined, these interlocking enhancements, depicted in Attachment 1, Figure 1-3, would enable significantly higher speeds south of Tower 1. A new Boston traction power substation (TPSS), included in the Project, would provide sufficient traction power for the expanded station, HSIPR service increases, and ultimately potential MBTA commuter rail electrification. Electrification of the MBTA Providence and Stoughton Lines, which operate on the NEC Main Line, would reduce the difference in operating speeds between Amtrak and MBTA, narrowing the required windows between trains and reducing delays.

New platforms would be appropriately sized for intercity operations and several existing platforms would be extended to accommodate longer intercity trains. The longer platforms add terminal capacity and simplify some moves in and out of the terminal.

The Project's layover solution would provide additional layover capacity beyond that currently available at the Southampton Street Yard and Readville facilities where both Amtrak and the MBTA are already at capacity. Readville is located approximately 8.4 track miles from South Station, which requires considerable non-revenue operations compared to other East Coast systems with typical 2-mile travel distances to layover yards. The Project is anticipated to provide layover for all trains in an area between 2 and 4 miles from South Station. Candidate sites have been identified and the Project's layover solution will be defined through a pending Alternatives Analysis. A Layover Solution Memorandum is included as Appendix B.

POSITIVE TRAIN CONTROL

The Project also supports the full implementation of positive train control (PTC) for Boston South Side operations. All trains operating on the Northeast Corridor Main Line use a cab signals systems and PTC technology titled Advanced Civil Speed Enforcement System (ACSES). This is the only PTC system thus far approved by the FRA for use along a high-speed rail corridor. The technology has been readopted by FRA for continued use beyond December 31, 2015. The northern limit of its application is Cove Interlocking, the NEC Main Line approach to South Station, which would be reconstructed as part of the station expansion. This same PTC technology is potentially applicable along other lines connecting to South Station, including the future Amtrak Inland Route; this would require the installation of cab signals along the Inland Route.

FINANCIAL PLAN FOR PE/NEPA

A Project Financial Plan (Attachment 4) explains that MassDOT requests HSIPR Program funding of $32.5 million for the Project’s PE/NEPA activities. The Commonwealth of Massachusetts proposes a match of $10.5 million toward the Project. This match represents the cost of PE/NEPA for the Project’s layover solution. Additional layover capacity for both Amtrak and the MBTA is a long-standing need. MassDOT has identified candidate locations and will soon begin an extensive Alternatives Analysis to identify the preferred site. The layover solution will advance on a faster track than the South Station Expansion and will be operational before the station expands.

(1b) Other Public Benefits

Demonstrate the potential of the proposed PE/NEPA activities or underlying project to achieve other public benefits in a cost-effective manner:

- Environmental quality and energy efficiency and reduction in dependence on foreign oil, including use of renewable energy sources, energy savings from traffic diversions from other modes, employment of green building and manufacturing

methods, reductions in key emissions types, and the purchase and use of environmentally sensitive, fuel-efficient, and cost-effective passenger rail equipment;
- Promoting interconnected livable communities, including complementing local or state efforts to concentrate higher-density, mixed-use, development in areas proximate to multi-modal transportation options (including intercity passenger rail stations);
- Improving historic transportation facilities; and
- Creating jobs and stimulating the economy. Although this solicitation is not funded by the American Recovery and Reinvestment Act of 2009 (Public Law 111-5), these goals remain a top priority of this Administration. Therefore, Individual Project applications will be evaluated on the extent to which the project is expected to quickly create and preserve jobs and stimulate rapid increases in economic activity, particularly jobs and activity that benefit economically distressed areas, as defined by section 301 of the Public Works and Economic Development Act of 1965, as amended (42 U.S.C. 3161) ("Economically Distressed Areas").

ENVIRONMENTAL BENEFITS

The NEC Master Plan points out significant environmental benefits stemming from increased, faster and more-reliable NEC HSIPR service. Shifting more travel from inefficient short haul flights to rail holds promise for reducing GHG emissions throughout the northeastern United States. The Intergovernmental Panel on Climate Change identifies our nation's high reliance on short haul flights compared to countries with more developed passenger rail services. It also classifies short haul flights as one of the most energy intensive and greenhouse gas emitting travel modes. By comparison, HSIPR is energy efficient and, as an electrified service, is potentially powered by clean and renewable energy.

NEC Master Plan improvements are projected to reduce annual gasoline consumption by 136 million gallons and eliminate 1.2 million metric tons of greenhouse gas emissions. This reduction is a natural step towards reducing national dependence on fossil fuels, offshore drilling, and foreign oil. A percentage of these gains can be attributed to NEC enhancements north of New York. Unlike highway traffic, the existing, electrified HSIPR trains emit no air pollutants along the railway. These North End benefits cannot be realized without the Boston South Station expansion.

URBAN REVITALIZATION AND SMART GROWTH

Projected NEC service improvements would breathe fresh life into historic urban centers along the corridors. Governor Patrick's administration has actively promoted smart growth and transit-oriented development in the Commonwealth of Massachusetts. This is evidenced by the Transit-Oriented Development (TOD) Bond Program, which funds both transit access improvements and compact development near transit centers. Because the Project promotes rail station-oriented development throughout the northeastern United States, it clearly supports USDOT livability innitiatives.

The Project advances multiple station area plans developed by the City of Boston. In 2002, the Boston Redevelopment Authority (BRA) issued the Fort Point Channel Watersheet Activation Plan (the "Watersheet Plan") for the area east of South Station. This plan, included as Appendix F6, called for water edge development, public waterfront enhancements, parks, and dockside harbor attractions (including an expanded Boston Tea Party Ship and Museum dock), and extension of the Boston HarborWalk around Fort Point Channel. The HarborWalk is a waterfront promenade surrounding much of the city of Boston. As of Fall 2009, it extends for 38 miles, with completion of a final 9 miles anticipated by 2014. The only downtown gap in the HarborWalk is at the South Station Expansion site.

In compliance with the Watersheet Plan, much of the Fort Point Channel harbor edges have recently been transformed into a waterfront promenade. New developments along its edges include the Boston Children's Museum and Children's Wharf Park, the InterContinental Boston Hotel, office developments, and a renovated Fort Point Channel Historic District. The largest channel edge property yet to transform according to the Watersheet Plan is the South Station Expansion site.

Relocating the postal facility for station expansion presents an opportunity to restore public access along a nearly half a mile segment of the Channel harborfront, formerly Dorchester Avenue. Restoring the avenue as a multi-modal, "complete street" corridor would be a major step towards completing the Watersheet Plan. This corridor would re-link South Boston with downtown and the station.

One opportunity presented by a restored Dorchester Avenue is a direct transit connection between South Station and South Boston. One bus route currently connects the majority of South Boston with South Station; this is MBTA Route 11. The Route connects with both the Broadway and South Station Red Line stations, with headways of 7 to 10 minutes throughout

the day. Dorchester Avenue is the natural path between these stations. Because Dorchester Avenue is currently closed to all traffic, Route 11 follows a one-way loop, 0.7 miles in diameter, around the South Station/USPS complex and Fort Point Channel. An evaluation of bus rerouting along Dorchester Avenue and time savings opportunities would be performed during Preliminary Engineering.

Across Fort Point Channel, USPS employee parking lots comprise almost one third of a major potential redevelopment area. BRA's Fort Point District 100 Acres Master Plan (2007) for the area, which includes a future footbridge connection to South Station, hinges on structured consolidation of this parking.The South Station Expansion Project includes preliminary design for a new USPS facility served by existing subway and surface bus services. Employee parking that is now spread over expansive lots east of the channel, would be consolidated and structured. Thus, the surface lot properties, comprising about one-third of the "100 Acres" area, would be available for redevelopment. The 100 Acres Master Plan is included as Appendix F7.

MassDOT has begun analysis on the future joint development of track expansion air rights and the Dorchester Avenue edge. The Boston South Station HSIPR Expansion Project includes preliminary design for development footings, both for ground parcels along Dorchester Avenue and for the air rights above the tracks and terminal. The track expansion area, the 8-acre USPS facility site, has long been considered one of Boston's most coveted pieces of downtown real estate. This uniquely transit and intercity passenger transportation-oriented site fronts Fort Point Channel, near urban renaissance areas downtown and along the South Boston waterfront. The USPS site presents an opportunity for a flagship mixed-use development precisely where regional development should be focused. MassDOT has begun analysis on the future joint development of track expansion air rights and the Dorchester Avenue edge. The Boston South Station HSIPR Expansion Project includes preliminary design for development footings, both for ground parcels along Dorchester Avenue and for the air rights above the tracks and terminal. Future transit-oriented development on the site will be subject to the City of Boston's requirement for LEED "certifiable" development. Attachment 1, Figures 1-8 and 1-9 depict a footprint for future ground-level, transit-oriented development and its relation to a restored Dorchester Avenue.

INVESTMENT IN HISTORIC SOUTH STATION

The Project would, of course, further establish the prominance of historic South Station in Boston. South Station opened in 1899 with 30 platforms and one of the world's largest train sheds (removed in the 1930s due to corrosion). In 1910, it was the busiest railway station in the country. During World War II, station ridership peaked at over 125,000 passengers per day. Reflecting national trends, station use declined significantly after the war.

The station was sold to the Boston Redevelopment Authority (BRA) in 1965. In the years following, the headhouse wings were truncated and other structures were removed. An office building was constructed on station property at the corner of Summer Street and Dorchester Avenue. The United States Postal Service (USPS) South Annex mail sorting and distribution facility replaced several tracks in the eastern half of the complex and structures along Dorchester Avenue. BRA intended to replace the entire station with a smaller terminal, but these plans were never realized.

In 1978, the remaining headhouse and station elements were listed on the National Register of Historic Places. Shortly thereafter, the station was sold to the Massachusetts Bay Transportation Authority (MBTA), the region's commuter rail and transit operator. BRA retained ownership of air rights above the sixth storey.

In 1984, the station headhouse was renovated, with some of its office space replaced by the existing atrium. Tracks were realigned and high platforms constructed for level boarding. A wide concourse was constructed between the headhouse and the track heads, and footings were constructed for the planned bus terminal and future air rights development. In 1995, the existing bus terminal with station parking above was completed. MBTA and the Hines Development Group have an agreement in place to expand the bus terminal from 35 to 50 bays, connect the Bus Terminal with the headhouse. In addition to the bus terminal, permitted air rights development at the site could add a 49-story, 980,000-square-foot office tower, a 190-room hotel, a 155-unit residential condominium building, a nine-story, 500,000-square-foot office building, and structured parking. The South Station tower development has been pre-certified as a LEED Silver project under the U.S. Green Building Council. This development scenario is expected to proceed as economic recovery continues.

JOBS

The South Station HSIPR Expansion Project is expected to generate significant construction and permanent employment

opportunities in metropolitan Boston and in other Northeast Corridor communities. The NEC Master Plan forecasts 64,400 annual corridor-wide jobs created and/or maintained by planned intercity passenger rail improvements. A share of these jobs can be attributed to growth in service between Boston and New York, for which the station expansion is a prerequisite.

South Station Expansion-attributed jobs were estimated using the methodology and assumptions described in the Executive Office of the President, Council of Economic Advisers, May 2009 memorandum regarding jobs estimates associated with federal infrastructure investments. It is estimated that 466 jobs will be generated as a result of the PE/NEPA spending alone. Of this, nearly 300 are expected to be direct or indirect jobs. The constructed Project is expected to generate nearly 8,000 jobs, over 5,000 of which would be directly or indirectly generated. The Project would help invigorate economic recovery in New England.

(2) Project Delivery Approach

Consider the following factors to determine the risk associated with the PE/NEPA activities delivery within budget, on time, and as designed:

- The applicant's financial, legal, and technical capacity to implement the project, including whether the application depends upon receipt of any waiver(s) of Federal railroad safety regulations that have not been obtained;
- The applicant's experience in administering similar grants and projects, including a demonstrated ability to deliver on prior FRA financial assistance programs;
- The soundness and thoroughness of the cost methodologies, assumptions, and estimates for the proposed project;
- The reasonableness of the schedule for project implementation;
- The thoroughness and quality of project management documentation;
- The timing and amount of the project's future noncommitted investments;
- The overall completeness and quality of the application, including the comprehensiveness of its supporting documentation;
- The readiness of the project to be commenced; and
- The timeliness of project completion and the realization of the project's anticipated benefits.

APPLICANT'S CAPACITY TO IMPLEMENT THE PROJECT

The Massachusetts Department of Transportation (MassDOT) has broad powers and responsibilities for transportation in the Commonwealth of Massachusetts and under Massachusetts General Laws (MGL) Chapter 6A, Sections 19 and 19A, Chapter 161C, and continued through the provisions of Chapter 29 of the Acts of 2009 (An Act Modernizing the Transportation Systems of the Commonwealth) to fund rail capital projects. As with all major engineering and infrastructure improvement projects under the management of MassDOT, this project would proceed through extensive stakeholder reviews and consultation through both Preliminary Engineering and construction/implementation.

MassDOT owns and oversees active railroad corridors and is the umbrella organization for transportation agencies with significant experience in designing and building rail projects and in administering ARRA and other federal funds. The agency's rail office has overseen capital, repair and rehabilitation projects of its stations and on its rail lines for the past 20 years, with the support of consultants and experienced staff at agencies within the transportation secretariat. It would be acting on behalf of and in partnership with the Massachusetts Bay Transportation Authority (MBTA), which owns and oversees active railroad corridors, including the Northeast Corridor Main Line in Massachusetts. No waivers of Federal railroad safety regulations are anticipated to be required for the Project.

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. MassDOT's Rail & Transit Administrator also serves as the General Manager of the MBTA.

The Massachusetts Bay Transportation Authority (MBTA) is a body politic and corporate, and a political subdivision of the Commonwealth of Massachusetts. The MBTA is duly organized and existing pursuant to

Chapter 161A of the Massachusetts General Laws (as amended) and has a usual place of business at 10 Park Plaza, Boston, Massachusetts. Its primary purpose is to hold, operate and manage the mass transportation facilities and equipment acquired by the Authority.

MassDOT has managed numerous complex commuter rail development and extension projects (including the recent Old Colony and Greenbush expansion projects) and regularly undertakes maintenance and capital improvement projects (estimated annual value of $125m) along its commuter rail network. This network includes track portions shared with intercity passenger rail services operated by Amtrak. MassDOT has only recently become an FRA grantee and is currently working on two FRA-administered ARRA projects. For the Fast Track New Bedford TIGER project, contracts for construction of three railroad bridges are expected to be issued on August 11, 2010. Progress on the Knowledge Corridor project includes MassDOT anticipating a Cooperative Agreement in Fall 2010. The Knowledge Corridor project has involved extensive conversations with the railroads on design and the host railroad agreements.

METHODOLOGIES, ASSUMPTIONS, AND ESTIMATES

The Project has been planned following established engineering and project management procedures. Project planning is documented in the attached Executive Summary (Attachment 2). The cost estimates have been developed following the FTA SCC format including the provision of appropriate allowances for contingency, administration and soft costs. The cost methodologies, assumptions and estimate techniques were scrutinized through a multi-phase quality assurance review process at MassDOT and within the consultant team retained by The Commonwealth.

PROJECT MANAGEMENT PLAN

MassDOT has developed a Project Management Plan (PMP) for the Boston South Station HSIPR Expansion Project, which is included as Attachment 3. The PMP introduces the South Station Project Management Team (the "Project Team"), which would oversee Preliminary Engineering and National Environmental Policy Act Compliance (PE/NEPA) for the Project in accordance with all applicable federal and state laws and regulations, codes and guidelines. These include the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), as well as the Cooperative Agreement executed by and between the Federal Railroad Administration (FRA) and MassDOT. The PMP describes the structure, integration, and interfaces of the Project organization. For clarity, the MassDOT / MBTA organization is described in Section 2 of the PMP, Organization and Staffing.

The Project Schedule, which can be found in the PMP (Attachment 3), includes reasonable durations for the required tasks in a logical sequence with adequate provision for each Project phase. Both the PE/NEPA schedule and the project construction schedule may be found in PMP Attachments C and D, respectively.

MassDOT will incorporate recommended and required HSIPR Program provisions into the PMP and relevant Stakeholder Agreements. The expertise of the MBTA, Amtrak, MassPort, and other stakeholder agencies would be employed to ensure full HSIPR Program compliance. MassDOT's staff capacity can also be augmented quickly and as necessary by a range of highly skilled independent contractors. These contractors are available under a contract structure, in place for several years, and through other available contract mechanisms consistent with applicable state and federal requirements.

The Project would be accomplished by the concerted efforts of various organizations and responsible parties, who would work together as an integrated team providing multiple levels of oversight to ensure a successful outcome. The Project Team would be comprised of the combined staff of MBTA and the PE/NEPA Consultant, together with MassDOT staff. The Project Team would also include members of, or be responsible for regular consultation with, other key support and stakeholders such as MassPort, USPS, Amtrak, and the City of Boston, as well as support staff from MassDOT Planning and other state agencies involved in programming federal funds and providing requisite reports to state and federal oversight personnel.

The Project Team would work towards the common goal of successfully completing the Project, and complying with the FRA Cooperative Agreement and applicable terms of Stakeholder Agreements. The PE/NEPA Consultant would be responsible for moving the design from the conceptual Engineering accomplished to date through

completion of the PE/NEPA documents required for final design and construction, completion of any environmental documents, as well as all documents and submittals required as part of the FRA's grant program. The approach for Final Design and Construction would be developed during the PE/NEPA Process.

Upon receipt of the requested funding MassDOT is fully prepared to initiate the PE/NEPA services described in the enclosed Work Program. Solicitation of consultant bids to execute the PE/NEPA services is currently being assembled at MassDOT, therein allowing MassDOT to fast-track efforts to proceed with selection of a team prior to the awarding of funds. MassDOT believes this is the best approach to instilling readiness of the Project for immediate commencement. The Project is of such high value to MassDOT that the PE/NEPA scope shall be released to the selected consultants prior release of funding. A broad overview of the PE/NEPA schedule, prior to issuance of the Notice to Proceed (NTP) may be found below:

- Issuance of the RFQ shall begin in August, 2010
- Qualifications shall be received throughout October, 2010
- Shortlisting shall be conducted in November, 2010
- Consultant selection shall occur in January 2011, with Board approval thereafter

FINANCIAL PLAN FOR FINAL DESIGN AND CONSTRUCTION

MassDOT has begun developing a Finance Plan for Final Design and Construction. MassDOT, in consultation with FRA and our many stakeholders, would refine this Plan during PE/NEPA.

The Project would provide 100% of the improvements needed for successful implementation of the terminal expansion, layover capacity expansion, and other Project elements, with sufficient lead time to accommodate the increases in service planned in the NEC Master Plan. The Project has independent utility for existing Amtrak and MBTA operations and is anticipated to immediately reduce delays, travel times and non-revenue operating costs. To repeat, both the PE/NEPA schedule and the project construction schedule may be found in Attachment 3, the Project Management Plan (PMP), specifically as PMP Attachments C and D.

This application has all of its required components per FRA guidance as provided in the Notice of Funding Availability (NOFA). The supporting documentation (listed in Section G.2 of this application) speaks accurately, comprehensively and with sufficient detail to demonstrate project readiness.

(3) Project Delivery Approach

Address the likelihood of realizing the proposed project's benefits:

- The quality of financial planning documentation that demonstrates the financial viability of the HSIPR service that will benefit from the project;
- The availability of any required operating financial support, preferably from dedicated funding sources for the benefiting intercity passenger rail service(s);
- The quality and adequacy of project identification and planning;
- The reasonableness of estimates for user and non-user benefits for the project;
- The comprehensiveness and sufficiency, at the time of application, of agreements with key partners (including the railroad operating the intercity passenger rail service and infrastructure-owning railroads) that will be involved in the operation of the benefiting intercity passenger rail service, including the commitment of any affected host-rail carrier to ensure the realization of the anticipated benefits, preferably through a commitment by the affected host-rail carrier(s) to an enforceable on-time performance of passenger trains of 80 percent or greater;
- The favorability of the comparison between the level of anticipated benefits and the amount of Federal funding requested; and
- The applicant's contribution of a cost share greater than the required minimum of 20 percent.

The Project investes in currently-successful HSIPR operations, for which the Northeast Corridor Infrastructure Master Plan indicates a latent demand. Amtrak, the HSIPR operator, has shown an ability to capture market share along the NEC and has gained renewed support from Congress and the White House. Amtrak is in a healthy position to ensure ongoing reauthorization of operating funding, and its HSIPR operation is profitable. No operating funds are required for the PE/NEPA phase of this Project.

PROJECT IDENTIFICATION AND PLANNING

The attached Executive Summary (Attachment 2) describes the level of planning underlying this application. These planning activities include the completion of operational simulations of the proposed improvement, development of track schematics, development of conceptual designs for the proposed improvements, operations cost estimates, capital cost estimates, a Project Management Plan and implementation schedules, as well as a work program for Preliminary Engineering and NEPA.

The primary planning document for the South Station Expansion is the Northeast Corridor Infrastructure Master Plan (NEC Master Plan, 2010), July 2010 revised version. This and other referenced planning documents are included in Appendix F. The NEC Master Plan makes clear the terminal capacity constraints in Boston and at the other major NEC terminals: New York Penn Station and Washington Union Station. The NEC Master Plan proposes a 50% increase in both high speed and total intercity service to Boston. As a necessary result, the Plan includes an expanded South Station terminal and additional layover capacity in its 2030 operating plan. The proposed service increases and resulting benefits are unattainable without the South Station expansion.

The decision to expand terminal track and operating capacity at South Station results not from a formal Alternatives Analysis process, but is an established direction based on commonly understood necessity. The South Station footprint was reduced in the 1970s, when the eastern half of the track area was replaced by the USPS distribution facility and Dorchester Avenue was truncated. (The City of Boston has since sought to reopen Dorchester Avenue.) Prior to the development of the Northeast Corridor (NEC) high-speed main line and maturity of the MBTA Commuter Rail system, the station's reduced footprint seemed adequate.

The South Station Bus Terminal was built above the terminal tracks in the 1990s. This addition and vertical constraints south of the terminal station eliminated the option of aerial rail track expansion. Aerial expansion would have required preservation of the at-grade platform tracks to increase capacity, further complicating the alternative. Underground rail expansion would have to avoid interference with highway tunnels and building foundations. This would require double decking the track platform area to increase capacity and would be exceedingly expensive even if feasible. The final option is to relocate a single, relocatable user (USPS) occupying the former track footprint. Both the elevated and underground alternatives would be difficult and very expensive, if not impossible. Horizontal expansion emerged as the only feasible and prudent alternative to provide sufficient terminal capacity within a 10-year horizon.

In addition to the NEC Master Plan, several other planning documents include the South Station Expansion as prerequisite to rail service expansion. Some of these documents are referenced as appendices to this application. A Draft State Rail Plan, which is not included in the Appendices, is expected to be submitted to FRA for review on September 15, 2010.

The Regional Transportation Plan (RTP)—the Boston Metropolitan Planning Organization (MPO) Journey to 2030 Amendment (2009, included as Appendix F4)—specifically identifies the need to expand South Station. The station's expansion and layover facilities for both Amtrak and MBTA are included among unfunded "Illustrative Projects."The RTP notes USPS' intent at the time to self-relocate its South Annex distribution facility for station expansion, with relocation funded by property redevelopment.

The MBTA Program for Mass Transportation (2009, Appendix F2) identifies South Station as having reached its terminal capacity. It also mentions the anticipated expansion of the terminal onto the USPS property. The document goes on to identify track expansion as the proposed solution to terminal capacity at South Station.

The 2009 Vision for New England High-Speed and Intercity Rail (Appendix F3), a four-page document on high-speed rail concepts, was prepared by a multi-state coalition. While not specifically mentioning South Station improvements, this document identifies the Inland Route as a future HSIPR corridor and proposes a structure for HSIPR planning in the corridor. The Vision recommends that NEC coordination and planning be directed through the NEC Master Plan process. It also looks to the NEC Master Plan effort as a model for the Northern New England High Speed Rail Corridor, which includes the Inland Route.

The NEC Transportation Plan--New York City to Boston (1994) proposed a NEC Main Line operating plan following electrification of the corridor. This plan assumed that capital improvements would enable 3 hour trips between New York and Boston by 2010 (as opposed to the existing 3.5-hour trip for Acela Express). It also assumed that capacity enhancements would be implemented, including an expanded South Station, to enable the proposed operation. Several of these capacity enhancements have yet to be implemented.

The Project's compatibility with City of Boston planning is evident in three plans: the Access Boston 2000-2010 municipal Transportation Plan (2003), the Fort Point Channel Watersheet Activation Plan (2002) and the Fort Point District 100 Acres Master Plan (2006). These palns are included with this application as Appendices F5, F6, and F7, respectively. Access Boston identifies terminal track capacity constraints at South Station, and hints at USPS' willingness to relocate for a track expansion. This plan also identifies opportunities for air rights development above the tracks and a demand for improved pedestrian circulation within and through the station.

The Watersheet Activation Plan identifies the station expansion site as a priority area for water edge public space improvements and redevelopment. It proposes a re-opened Dorchester Avenue, including an extension of the Boston HarborWalk running the length of the station expansion site. The 100 Acres Plan proposes a major planned district, one-third of which is currently occupied by USPS employee parking lots. By relocating USPS to a new facility with structured parking, redevelopment of the 100 Acres parcels is made possible. The plan includes a future pedestrian bridge connection between the district and South Station. The proposed location for this bridge lines-up with both new concourses proposed in the South Station Expansion.

Finally, a rail network simulation, performed to support this application, demonstrates that the existing South Station cannot reliably support projected 2030 Amtrak and MBTA rail operations. The attached Network Simulation Analysis (Appendix A1), also demonstrates that the proposed Project improvements would establish an efficient and reliable terminal for the projected 2030 operations.

AGREEMENTS WITH KEY PARTNERS

Measurable and projected service outcomes, developed during the PE/NEPA process, are expected to be the basis for any required agreements between MassDOT and FRA, in consultation with various stakeholders. In the Project Area, Amtrak operates over MBTA track and dispatches all trains by means of a long term operating agreement, known as the "Attleboro Agreement." A master operating agreement for both the expanded South Station and layover facilities will be developed during the PE/NEPA phase. A letter of Project support from Amtrak is included as Attachment 5.

MassDOT is pursuing a relocation agreement with USPS to create the space required for the station expansion. A relocation site, owned by the Port Authority of Massachusetts (MassPort), has been identified in South Boston. The attached letter signed by both MassDOT and MassPort (Attachment 5A) provides the framework for advancing the relocation of the USPS distribution facility through the PE/NEPA process. An interagency agreement for the USPS relocation is anticipated as the PE/NEPA process continues. Under this agreement, some Project PE/NEPA efforts would be directed by MassPort, which would retain ownership of the new USPS site. USPS may also oversee some PE/NEPA activities. USPS has been supportive of the station expansion for many years and has been involved in Project planning since 2000.

COST-BENEFIT ANALYSIS

A Cost-Benefit Analysis for the Project is included as Attachment 4A.This analysis relies on methods and parameters consistent with US DOT guidance as well as past benefit-cost models of rail applied on rail studies throughout the country. Sensitivity analyses were also conducted as part of the analysis, including a comparison of the benefit-cost results assuming a discount rate of 3% and 7%.

The analysis measures three general categories of benefits associated with the South Station improvements: 1) Benefits to rail users; 2) Benefits to remaining highway users; 3) Environmental benefits. These benefits are monetized in the Analysis using standard industry methods. Project costs include the initial capital construction costs, as well as the operating and maintenance (O&M) costs associated with the enhanced service out of South Station. Detail related to the methodology, assumptions, and results of the analysis are provided in the attached Analysis.

Using a reasonable discount rate of 7%, the Analysis concluded that South Station improvements will result in:

- Total benefits of $2,265.9 million in present value terms

- Total costs of $1,674.9 million in present value terms
- Total net present value of $591.0 million, with a benefit-cost ratio of 1.35, indicating that the project is economically feasible.

The analysis concluded that 62 percent of the benefits associated with the Boston South Station HSIPR Expansion Project are attributable to Amtrak (not factoring the Inland Route), while 38 percent are attributable to the commuter rail service improvements.

PE/NEPA FINANCIAL PLAN

MassDOT recognizes that PE/NEPA is the first step in the larger South Station Expansion Project. MassDOT requests HSIPR Program funding of $32.5 million for the Project's PE/NEPA activities. The Commonwealth of Massachusetts proposes a match of $10.5 million for the layover solution toward the Project. The total PE/NEPA budget is $43.0 million, toward which MassDOT has committed a 24% match. This match reflects the anticipated level of benefits both Amtrak and MBTA would receive from the Project. This benefits balance is derived, in part, from the MBTA's most current projected operations in the year 2030. These operations reflect natural growth in the MBTA system. Scheduled service increases for MBTA's Boston to Worcester service and future service to the South Coast of Massachusetts have been included to the extent that service plans were complete when the operational analysis was conducted. As part of the operations analysis component of PE/NEPA, MassDOT would work with Amtrak and FRA to confirm the benefits share from the Project. This refined benefits share would be reflected in a future request for funding through the HSIPR Program. MassDOT expects that FRA will recognize the opportunity to use HSIPR funds to advance a project of national significance during a time when state funds are more constrained than national funds.

While this application is based on a 24% local match going forward from a Cooperative Agreement for grant project funding, anticipated in February 2011, this is not the whole of the Commonwealth's contribution. MassDOT anticipates contributing upwards of $750,000 between the enactment of the FY 2010 Consolidated Appropriations Act (Title 1 of Division A of Public Law 111-117, December 16, 2009) and the Cooperative Agreement. This would increase the Match to represent 26% of the total PE/NEPA budget.

F. Statement of Work

Provide a detailed response for how the PE/NEPA activities will be carried out in the text fields and tables provided. The tables in this section are unlocked; applicants can add rows, as necessary, for additional tasks. If you reference a supporting document, it must be listed in Section G.2.

(1) Background. Briefly describe the events that led to the need for the proposed PE/NEPA activities and the underlying issue the project will address. Also describe the rational planning process used to analyze the investment needs and service objectives of the full corridor on which the individual underlying project and the PE/NEPA activities are located.

South Station operates above its design capacity for efficient train operations. MBTA Commuter Rail reported 467 minutes of delay associated with South Station congestion in the first half of 2010. Over 20 of these incidents caused delays of around 10 minutes or more. In the same timeframe, Amtrak reported eights delays of at least one-half hour, attributed at least in part to terminal congestion. Several transportation plans highlight South Station's limitations on existing Northeast Corridor and MBTA operations and growth potential. Yet the NEC Master Plan proposes a robust 50% increase in both high speed express service and cumulative intercity passenger rail service to Boston. These service increases are not possible without additional system capacity at the station.

The Boston South Station HSIPR Expansion Project supports Amtrak's efforts to meet its on-time performance goals. Today's Northeast Corridor on time performance is approximately 85% for Acela Express and 75% for Northeast Regional trains. The 2030 target on time performance is 95% for Acela Express and 90% for Northeast Regional. Without expanding South Station, not only will these targets be missed, but on time performance will deteriorate even further from today's existing percentages. Because of these capacity constraints and limitations on the entire Northeast Corridor, pertinent transportation plans—including the NEC Master Plan, MBTA Program for Mass Transportation, Regional Transportation Plan, Access Boston Transportation Plan, and the Draft State Rail Plan—all acknowledge the need to expand South Station.

(2) Scope of Activities. Clearly describe the scope of the proposed PE/NEPA activities and identify the general objective and key deliverables.

(2a) General Objective. Provide a general description of the PE/NEPA work to be accomplished through this grant, including PE/NEPA activities, the underlying project study area, and other parties involved. Describe the end-state of the project, how it will address the need identified in Background (above), and the outcomes that will be achieved as a result of these PE/NEPA activities and underlying project.

The Purpose of the South Station HSIPR Expansion Project is to improve Northeast Corridor service delivery in Boston and enable growth in high speed and other intercity passenger rail service throughout the Northeast, particularly between Boston and New York. The Project also allows more attractive and increased MBTA Commuter Rail service. Project proponents intend to leverage transportation investments to generate economic development and maximize livability and sustainability benefits in Northeast Corridor metropolitan areas, including Boston. The overarching Project purpose is to advance a more efficient and attractive high speed passenger rail network for the northeastern United States

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(2b) Description of Work. Provide a detailed description of the specific tasks to be accomplished through this grant in a logical sequence that would lead to the anticipated outcomes and the end state of the activities.

A detailed scope of services is included in Appendix D: the Preliminary Engineering and NEPA/MEPA Work Program. This scope of services includes project management, public participation, data collection, operations analysis, conceptual engineering, preliminary capital and operating cost estimates, alternatives analysis, and preparing an Environmental Notification Form (ENF) and a Draft Environmental Assessment/Environmental Impact Report (Draft EA/EIR) for the Boston South Station HSIPR Expansion Project.

It is expected that the Draft EA/EIR will provide a reasonably complete and stand-alone description and analysis of the project, project alternatives, proposed action and environmental impacts, and will adequately address mitigation, such that the Draft EA/EIR may be reviewed as, and be deemed adequate by MEPA/NEPA as, a Final EIR for the project.

Elements of the overall project include the following:

1. Construction of a new United States Postal Service General Mail Facility (USPS GMF)
~To be constructed on land in Boston identified and acquired by MassDOT

2. Implementation of a layover solution for both Amtrak and MBTA trains, to be located within four miles of South Station.

3. Site preparation at South Station
~Demolition of the existing USPS GMF between Dorchester Avenue and Track 13
~Installation of foundations to allow for future transit-oriented development

4. South Station Construction
~Installation of 4 (four) new platforms and 7 (seven) new terminal tracks
~Re-work existing Interlockings to accommodate new tracks and enable faster, more efficient and reliable train operations
~Construction of a headhouse to accommodate new platforms and tracks
~Construction of two new passenger concourses to provided and enhance safe and convenient access and circulation within and through the passenger terminal:
a. An at-grade concourse connecting the existing headhouse with the new headhouse and platforms, and
b. An elevated concourse above all tracks, extending from the existing Bus Terminal concourse and providing vertical circulation to all station platforms.

5. Pedestrian, Transit, Bicycle and Vehicular Access Improvements
~Construction of a restored Dorchester Avenue and extended Boston HarborWalk to create a multi-modal connection along the station's eastern edge, from Summer Street to South Boston.

(2c) **Deliverables.** Provide FRA with a list of the deliverables in the table below. List the deliverables, both interim and final, that are the outcomes of the project tasks. This should include a first deliverable 1 – Detailed PE/NEPA Workplan and Schedule. Add rows to the table as necessary.

	Deliverable	Task
	Detailed PE/NEPA Work Plan and Schedule	1.0 Final PE/NEPA work plan and schedule to be set prior to the initiation of the tasks below, draft attached
1	Project Procedures Manual (with Project Management Plan)	1.1 Project Procedure Manual
2	Project Schedule	1.6 Project Scheduling
3	Meeting Notices, Agenda, Materials, and Conference Notes	1.2 Kick-off Meeting 1.3 Project Management and Coordination Meetings
4	Issues/Action Item List with monthly updates	1.4 Issue/Action Logs
5	Monthly Progress Reports	1.8 Progress Reports and Invoices
6	Weekly Scope Management List	1.5 Scope Management

7	Project Invoices	1.7 Cost Monitoring and Reporting
8	QA/QC Manual	1.9 QA/QC
	Throughout Project – Ongoing	2.0 Document Management
	Civic Engagement	3.0 Civic Engagement
9	Meeting handouts & graphics	3.2 Public Information Meetings
10	Meeting notes	3.3 Project Coordination/Interagency Meetings
11	Up-to-date Project Website	3.4 Project Website
12	Up-to-date Project Newsletter	3.5 Project Newsletter
	Federal Funding management	4.0 Federal Funding Management
13	Federal Funding submittal materials	4.1 Federal Funding Management
	Data Collection – Existing Conditions – South Station/Existing USPS Property	5.0 Data Collection – Existing Conditions – South Station/Existing USPS Property
14	Documented survey plans and reports (as applicable) for the site including surveys of soils, geological/seismic, major utilities, base, limit of work, and property lines and ownership	5.1 Control Surveys 5.2 Major Utility Surveys 5.3 Subsurface Geological/Seismic Exploration 5.4 Soils 5.5 Site/Field Reviews for Existing Inventory
15	Traffic counts for the area roads adjacent to the project locus	5.6 Existing Traffic Counts
16	Memorandum detailing structural integrity of structures identified	5.7 Existing Structural Analysis/Visual Inspection
17	Collaborative ridership forecast with CTPS	5.8 Assist CTPS with Ridership Forecast
	Data Collection – Existing Conditions – Proposed Layover Facility	6.0 Data Collection – Existing Conditions – Proposed Layover Facility
18	Documented survey plans and reports (as applicable) for the site including surveys of soils, geological/seismic, major utilities, base, limit of work, and property lines and ownership	6.1 Control Surveys 6.2 Major Utility Surveys 6.3 Subsurface Geological/Seismic Exploration 6.4 Soils 6.5 Site/Field Reviews for Existing Inventory
19	Traffic counts for the area roads adjacent to the project loci	6.6 Existing Traffic Counts
20	Memorandum detailing structural integrity of structures identified	6.7 Existing Structural Analysis/Visual Inspection
	Data Collection – Existing Conditions – Proposed USPS Location	7.0 Data Collection – Existing Conditions – Proposed USPS Location
21	Documented survey numbers for the site including surveys of soils, geological/seismic, major utilities, base, limit of work, and property lines and ownership	7.1 Control Surveys 7.2 Major Utility Surveys 7.3 Subsurface Geologic/Seismic Exploration 7.4 Soils
22	Traffic counts for the area roads adjacent to the project locus	7.5 Existing Traffic Counts
	Operations Analysis and Simulation	8.0 Operations Analysis and Simulation
23	Railroad and Bus Operations Reports	8.1 Railroad Operations 8.2 Bus Operations

24	Pedestrian and Traffic Flow Report	8.3 Pedestrian Circulation and Existing Analysis
	Preliminary Engineering – South Station Trackwork	9.0 Preliminary Engineering – South Station Trackwork
25	South Station track diagrams	9.1 Track Layout/Engineering
26	South Station track structure plans	9.3 Track and Station Structures
27	South Station track system plans	9.4 Track Systems
28	South Station safety and security plans	9.5 Safety and Security
29	South Station mechanical plans	9.6 Mechanical and Electrical Plans
30	South Station site/civil plans	9.7 Site/Civil Plans
31	South Station egress evaluation report	9.8 Pedestrian Circulation/Emergency Egress Evaluation
32	South Station vehicular access plan	9.9 Vehicular Access
	Preliminary Engineering – Layover Facility Trackwork	10.0 Preliminary Engineering – Layover Facility Trackwork
33	Layover Facility track diagrams	10.1 Track Layout/Engineering
34	Layover Facility track structure plans	10.3 Track Structures
35	Layover Facility track system plans	10.4 Track Systems
36	Layover Facility mechanical plans	10.5 Mechanical and Electrical Plans
37	Layover Facility site/civil plans	10.6 Site/Civil Plans
	Station Preliminary Engineering Design	11.0 Preliminary Engineering – Headhouse, Platforms, and Concourses
38	Preliminary site/civil plans for the Headhouse, Dorchester Avenue, Pedestrian Concourse, and Service Road Extension	11.1 Site/Civil Plans
39	Design competition solicitation package, TOD Design, TOD Development Plan, TOD Solicitation Package	11.2 Design Competition
40	Conceptual Architectural plans for future over-build	11.3 Architectural Plans – Future Build
41	Preliminary Architectural plans for Headhouse and appurtenances	11.4 Architectural Plans – Headhouse Concourses
42	Preliminary M/E/P plans for Headhouse and appurtenances	11.5 Mechanical/Electrical/Plumbing (M/E/P)
43	Preliminary Structural Plans for Headhouse, Pedestrian Concourse, Service Road Extension	11.6 Building Structural 11.7 Vehicular/Pedestrian Access Plans
44	Preliminary report outlining steps taken to obtain LEED certification	11.8 Leadership Energy & Environmental Design (LEED)
	Preliminary Engineering of the new USPS facility	12.0 Preliminary Engineering – Proposed USPS GMF
45	Preliminary site/civil plans	12.1 Site/Civil Plans
46	Preliminary Architectural	12.2 Architectural Plans
47	Preliminary M/E/P plans	12.3 Mechanical/Electrical/Plumbing (M/E/P)
48	Preliminary Structural plans	12.4 Building Structural
49	Preliminary report outlining steps taken to obtain LEED certification	12.5 Leadership in Energy & Environmental Design (LEED)
50	Roadway plans for MassDOT Highway Access Permit	12.6 Roadway Plans

51	Land Acquisition Plans	12.7 Land Acquisition Plans
	Staging and Phasing Plans	13.0 Staging and Phasing Plans
52	Construction Phasing Plans	13.1 Railroad Infrastructure Construction Phasing 13.2 Operating Phasing 13.3 Building Construction Phasing 13.4 Pedestrian/Vehicular Access Phasing
	Environmental Assessment	14.0 Environmental Assessment
53	Provide Technical reports for each of the environmental topics studied	14.1 Environmental Analysis
54	Draft EA/EIR	14.2.2 Prepare and File Draft EA/EIR
55	Final EA/EIR	14.2.3 Prepare and File Final EA/EIR
	Preliminary Cost Estimating	15.0 Preliminary Cost Estimating
56	Baseline cost estimate	15.1 Baseline Cost Estimate
57	Claims avoidance review	15.2 Claims Avoidance Reviews
58	Intermediate, pre-final, and final cost estimates	15.3 Intermediate, Pre-Final and Final Cost Estimates
	Flagging and Railroad Protective Insurance	16.0 Flagging and Railroad Protective Insurance
59	A Right of Entry Agreement	16.1 Right of Entry Agreement
60	A schedule of Flagging Services	16.2 Scheduling of Flagging Services
	On-Call Support Services	17.0 On-Call Support Services
61	An estimate for the amount to be allotted to On-Call Support Services	17.1 On-Call Estimate
	Preparation/Packaging of Solicitation/RFP	18.0 Preparation/Packaging of Solicitation/RFP
62	Request for Responses	18.1 Prepare a RFR
	Specifications	19.0 Specifications
63	A set of contract specifications between the contract and the state and federal agencies, as well as any other participants	19.1 Project Specifications and Requirements

(3) Project Schedule. In the table below, list all tasks and estimate the approximate duration for completing each task identified above in Deliverables. For example, "6 months after start date the first task or interim deliverable will be complete." Add rows to the table as necessary.

	Task	Task Duration
1	Develop PMP	18 weeks from NTP
2	Design New USPS Facility	24 months from NTP
3	Design USPS Building Demolition	20 months from NTP
4	Layover Facility	19 months from NTP
5	Station and TOD Design Competition	10 months from month 5 after NTP
6	TOD Development Plan	17 months from month 3 after NTP
7	Station Expansion Plan	30 months from month 3 after NTP
8	Environmental Process	25 months from NTP
9	Preliminary Engineering Products	8 months from month 17 after NTP
10	Public Involvement and Information	26 months from month 5 after NTP

(4) Project Cost Estimate/Budget. Provide an overall cost summary, by phase, of PE/NEPA activity in this section, using Appendix 3 of the NOFA. Ensure that the information below corresponds to the list of tasks provided above. The figures in this section of the Statement of Work should match exactly with the funding amounts requested in the SF-424 and in Section C of this application. If there is any discrepancy between the Federal funding amount requested in this section, the SF-424 form, or Section C of this application, the lesser amount will be considered as the Federal funding request. Round to the nearest whole dollar when estimating costs.

The total estimated PE/NEPA activities cost is provided below, for which the FRA grant will contribute no more than the Federal funding request amount indicated. Any additional expense required beyond that provided in this grant to complete the PE/NEPA activities shall be borne by the Grantee.

PE/NEPA Activities Overall Cost Summary		
#	Task	Cost in FY 2011 Dollars
1	PE and NEPA—Terminal, Track, Systems and Access improvements; USPS Relocation	$ 32,500,000
2	PE and NEPA—Layover Solution	$ 10,500,000
	Total PE/NEPA activities cost	$ 43,000,000

Federal/Non-Federal Funding			
		Cost in FY 2011 Dollars	Percentage of Total Activities Cost
	Federal funding request	$ 32,500,000	76 %
	Non-Federal match amount	$ 10,500,000	24 %
	Total PE/NEPA activities cost	$ 43,000,000	100 %

G. Optional Supporting Information

Provide a response to the following questions, as necessary, for the proposed PE/NEPA activities.

(1) Please provide any additional information, comments, or clarifications and indicate the section and question number that you are addressing (e.g., Section E, Question 3). Completing this question is optional.

(2) Please provide a document title, filename, and description for all optional supporting documents. Ensure that these documents are uploaded to GrantSolutions.gov or that an active link is provided with your application and use a logical naming convention.

Document Title	Filename	Description and Purpose
Attachment 1: Application Exhibits	MA_S_Stn--ATTACHMENT_1_APP_EXHIBITS	Supplement to the Application Form
Attachment 2: Executive Summary	MA_S_Stn--ATTACHMENT_2_Executive_Summary	Optional Supporting Documentation, including Eligibility confirmations.
Attachment 3: Project Management Plan	MA_S_Stn--ATTACHMENT_3_PMP	Project Delivery supporting documentation
Attachment 4: Financial Plan Attachment4A: Cost/Benefit Report Attachment 4B: PE/NEPA Budget Detail	MA_S_Stn--ATTACHMENT_4_Financial_Plan MA_S_Stn--ATTACHMENT_4A_Cost-Benefit_Analysis MA_S_Stn--ATTACHMENT_4B_PE_NEPA_Budget_Detail	Project Delivery supporting documentation
Attachment 5: Amtrak Letter of Support Attachment 5A: MassDOT/MassPort Letter Regarding the USPS Relocation Attachment 5B: Amtrak/MBTA Operating Agreement ("Attleboro Agreement")	MA_S_Stn--ATTACHMENT_5_AMTRAK_Support_Letter.pdf MA_S_Stn--ATTACHMENT_5A_MassDOT_MassPort_Letter.pdf MA_S_Stn--ATTACHMENT_5B_Attleboro_Operating_Agreement	Project Delivery supporting documentation
Appendix A: Conceptual Design Technical Memorandum Appendix A1: Network Simulation Analysis of Proposed 2030 MBTA/Amtrak Operations at South Station Appendix A2: Operations Analysis Work Program Technical Memorandum	MA_S_Stn--APPENDIX_A_Conceptual_Design_Tech_Memo.pdf MA_S_Stn--APPENDIX_A1_Network_Simulation_Analysis.pdf MA_S_Stn--APPENDIX_A2_OA_Work_Program_Memo.pdf	Optional Supporting Documentation

Appendix B: Layover Solution Memorandum	MA_S_Stn--APPENDIX_B_Layover_Solution_Memo	Optional Supporting Documentation
Appendix C: Environmental Regulatory Constraints Memorandum	MA_S_Stn--APPENDIX_C_Environmental_Constraints_Memo.pdf	Optional Supporting Documentation
Appendix D: Preliminary Engineering and NEPA/MEPA Work Program	MA_S_Stn--APPENDIX_D_PE_MEPA_NEPA_SCOPE.pdf	Scope, Schedule and Budget. Optional Supporting Documentation
Appendix E: Project Drawings	MA_S_Stn--APPENDIX_E_FIG2-1_and_FIG3-1	Project location, conceptual layouts and renderings. Optional Supporting Documentation
Appendix F1: Northeast Corridor Infrastructure Master Plan (2010)	MA_S_Stn--APPENDIX_F1_NEC_MasterPlan_2010.pdf	Plans and Documents demonstrating Project development
Appendix F2: MBTA Program for Mass Transportation (2009)	MA_S_Stn--APPENDIX_F2_MBTA_PMT	Plans and Documents demonstrating Project development
Appendix F3: Vision for New England High-Speed and Intercity Rail (2009)	MA_S_Stn--APPENDIX_F3_Vision_NE_HS&IC_RailNetwork_2009.pdf	Plans and Documents demonstrating Project development
Appendix F4: Boston MPO Journey to 2030 Regional Transportation Plan (RTP) Amendment (2009)	MA_S_Stn--APPENDIX_F4_Boston_MPO_Journey_to_2030_TranPlan.pdf	Plans and Documents demonstrating Project development
Appendix F5: Access Boston 2000-2010, Boston's Public Transportation and Regional Connections Plan	MA_S_Stn--APPENDIX_F5_AccessBoston2000-2010.pdf	Plans and Documents demonstrating Project development
Appendix F6: Fort Point Channel WAP 2002	MA_S_Stn--APPENDIX_F6_FtPoint_Channel_WAP_2002.pdf	Plans and Documents demonstrating Project development
Appendix F7: Fort Point District 100 Acres Master Plan 2006	MA_S_Stn--APPENDIX_F7_FtPointDistrict_100AcresMasterPlan_2006.pdf	Plans and Documents demonstrating Project development

H. Checklist of Application Materials

Use this section to determine the thoroughness of your PE/NEPA application prior to submission.

Documents	Format
1. Application Form	
☒ HSIPR Individual Project Application Form – PE/NEPA (this form)	Form
2. OMB Standard Forms	
☒ SF 424: Application for Federal Assistance	Form
☒ SF 424A: Budget Information-Non Construction	Form
☒ SF 424B: Assurances-Non Construction	Form
3. FRA Assurances Document	
☒ FRA Assurances Document (See Section 4.2.4 of the NOFA)	Form
4. Project Development Supporting Documentation	
☒ Project Planning Documentation (See Section 4.2.5 of the NOFA)	No Specified Format
5. Project Delivery Supporting Documentation	
☒ Project Management Documentation (See Section 4.2.6 of the NOFA)	No Specified Format
☒ Financial Planning Documentation (See Section 4.2.6 of the NOFA)	No Specified Format
☒ Railroad and Project Sponsor Agreements (See Section 4.2.6 of the NOFA)	No Specified Format
6. Optional Supporting Documentation	
☒ Other Relevant and Available Documentation (See Section 4.2.7 of the NOFA)	n/a
☒ Eligibility Documentation (See Section 3.2 of the NOFA)	n/a

PRA Public Protection Statement: Public reporting burden for this information collection is estimated to average 32 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is **2130-0583**.