

August 6, 2010

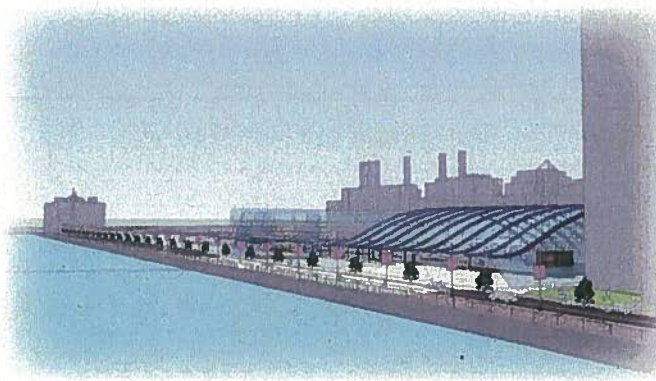
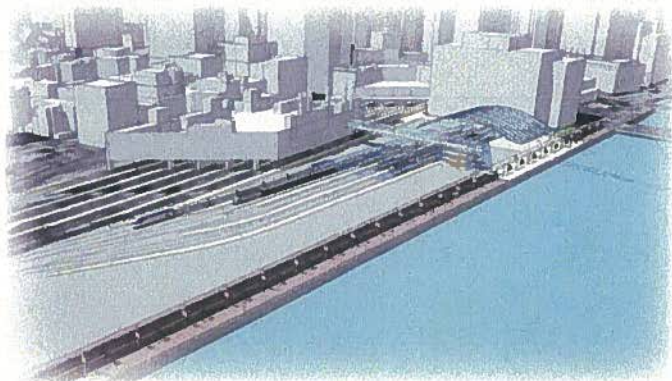


Boston South Station High Speed Intercity Passenger Rail Expansion Project

| Boston, Massachusetts

Submitted by:





August 5, 2010

Joseph C. Szabo, Administrator
Federal Railroad Administration
United States Department of Transportation
MS-20, 1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Administrator Szabo:

On behalf of Governor Patrick and the Massachusetts Department of Transportation, I am pleased to submit this application for \$32,500,000 for the Preliminary Engineering /National Environmental Policy Act phase of the Boston South Station High Speed Intercity Passenger Rail (HSIPR) Expansion Project.

South Station, the northern terminus of the Northeast Corridor (NEC), is New England's most significant transportation asset. Its expansion presents a unique 100-year opportunity to implement a project of national significance that will ensure sufficient capacity for NEC operations for generations to come. The project will advance design and complete environmental permitting to expand South Station from thirteen existing terminal platform tracks to twenty total platform tracks. The Commonwealth of Massachusetts proposes as a match a parallel effort to advance through the Preliminary Engineering /National Environmental Policy Act of a layover facility solution for trainsets using the station. Together with track junction, rail system, and passenger terminal improvements, the station terminal expansion would enhance the NEC by improving HSIPR service delivery and making HSIPR growth in and out of Boston possible.

As conceived, the Boston South Station HSIPR Expansion Project will make the transportation, economic, community, and environmental benefits identified in the newly-released *Northeast Corridor Infrastructure Master Plan (NEC Master Plan)* possible. Capacity enhancements at the station and surrounding terminal are essential for faster, more reliable, efficient and attractive Amtrak service and are required for the NEC Master Plan to be

implemented. Awarding grant funds for environmental permitting and preliminary design is the first step towards achieving the nationally-significant benefits that the project promises.

As you know, the NEC Master Plan lays the framework for a 50% increase in Amtrak Acela Express high-speed passenger service to Boston and other Corridor cities north of New York. It also proposes an alternate intercity passenger rail connection between Boston, New York, and Washington, DC: the Inland Route. Designated by the Federal Railroad Administration (FRA) as a high-speed rail corridor, this route would link Boston with New Haven, CT and add interstate service at existing Massachusetts stations, including Springfield, Worcester, and Framingham.

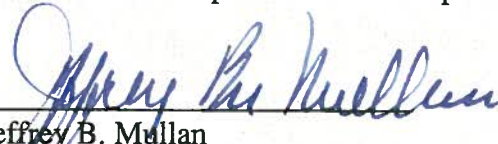
The project also helps make increased Massachusetts Bay Transportation Authority (MBTA) commuter rail service possible. The MBTA operates the nation's fifth largest commuter rail network, with over two-thirds of its service connecting to South Station. Because it currently operates at its design capacity, South Station limits growth for the MBTA in Boston, just as it does for Amtrak intercity Service.

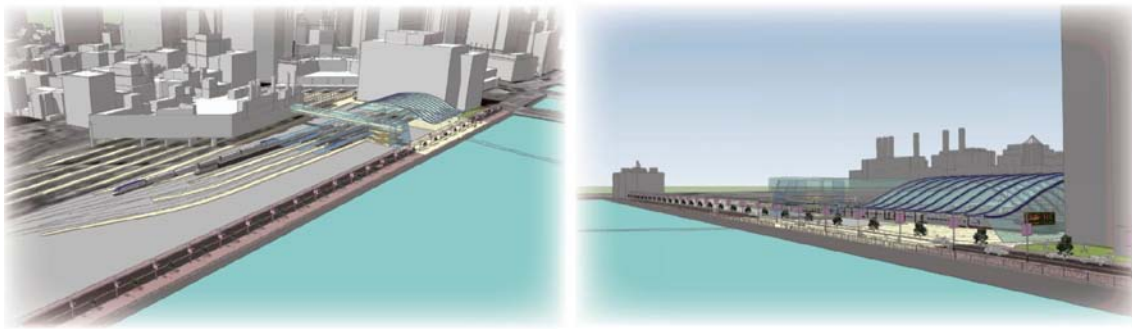
Lastly, to secure the site for the expansion of South Station, we envision the acquisition and relocation of the United States Postal Service's (USPS) adjacent general mail facility, and we are working cooperatively with the USPS. The project would begin design and deliver environmental permits for a new USPS facility. This efficient and LEED-certified facility will replace one of the oldest general mail facilities in the country providing a benefit to this federal organization

I am pleased to submit this proposal and look forward to building on the success of the projects made possible by the ARRA Grant Program. In addition to the Application Form, I invite you to review the attached Executive Summary. It contains a complete overview of the Project and an introduction to technical analyses supporting the application.

Sincerely,

Massachusetts Department of Transportation


Jeffrey B. Mullan
Secretary and Chief Executive Officer

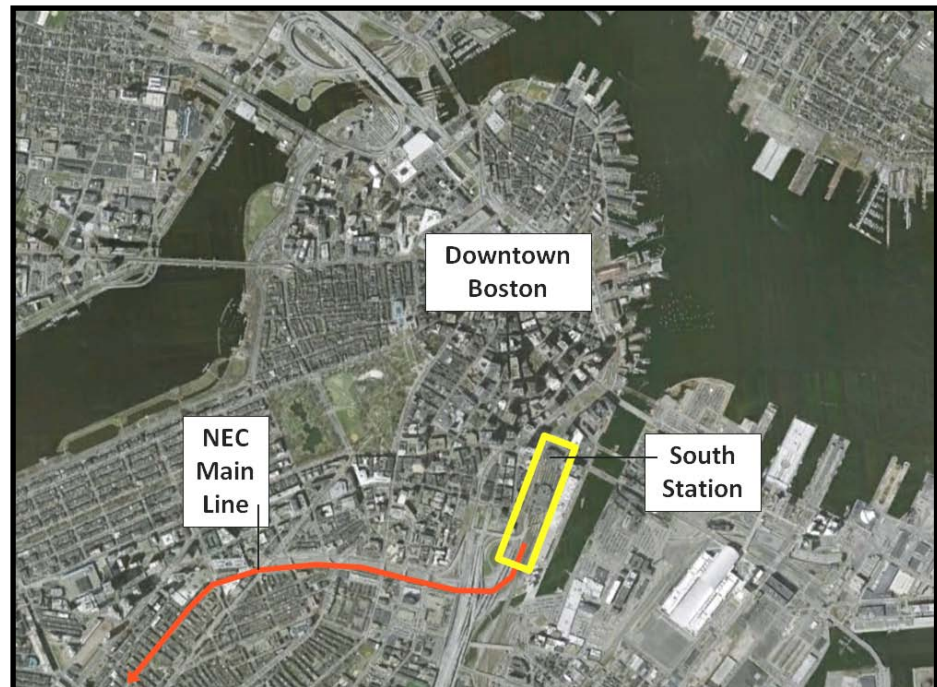


Executive Summary

INTRODUCTION

The Massachusetts Department of Transportation (MassDOT) is requesting federal funding for environmental clearance and preliminary design for an expansion of Boston's South Station, one of three major high speed rail terminals on Amtrak's Northeast Corridor (NEC). This project affords Massachusetts and the entire Northeast corridor a once in a generation opportunity to expand one of the most critical pieces of rail infrastructure on the East Coast. The importance of this station is clearly established in the newly-released Northeast Corridor Infrastructure Master Plan ("NEC Master Plan") by Amtrak. Strong local and regional support for this expansion, coupled with the strong support for rail by both the Obama and Patrick-Murray Administrations, has created the ideal moment to expand South Station.

The Boston South Station High Speed Intercity Passenger Rail (HSIPR) Expansion Project (the "Project") would enable faster and more efficient operations, as well as planned



Downtown Boston and South Station



Historic South Station Terminal

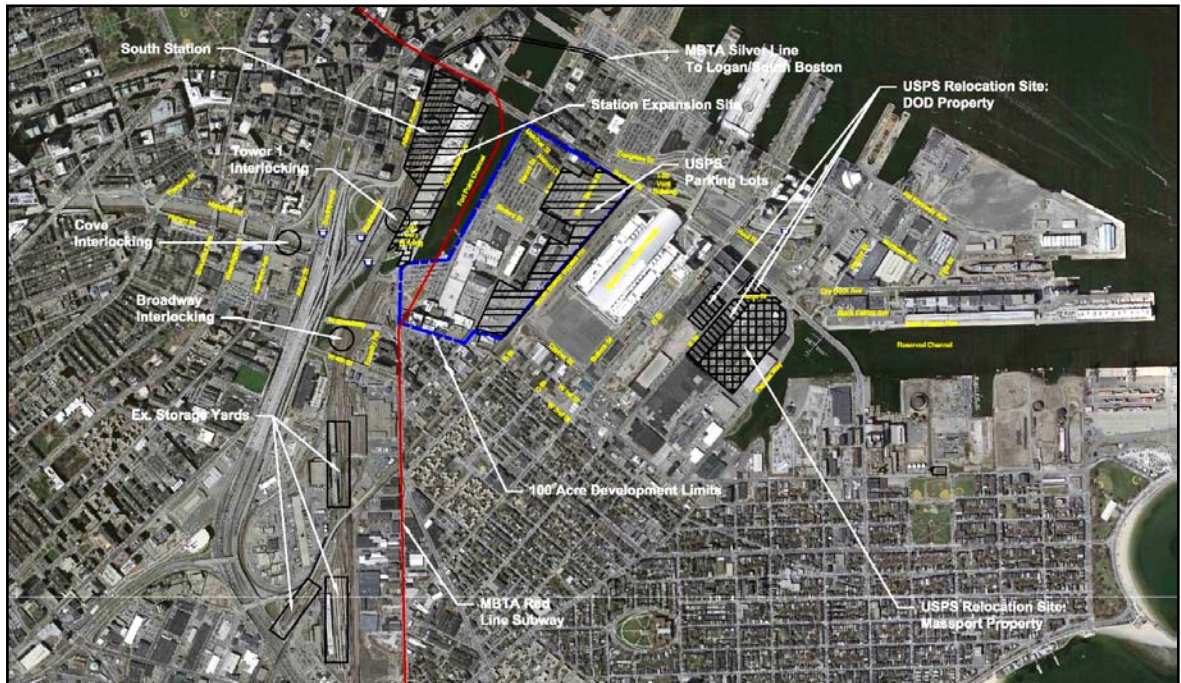


Acela at South Station, existing USPS South Annex structure to left

increases in both Amtrak and Massachusetts Bay Transportation Authority (MBTA) Commuter Rail services. This Project enjoys the strong support of and partnership with Amtrak. This application seeks funding under the Fiscal Year 2010 Individual Project solicitation for Preliminary Engineering and National Environmental Policy Act compliance (PE/NEPA) activities.

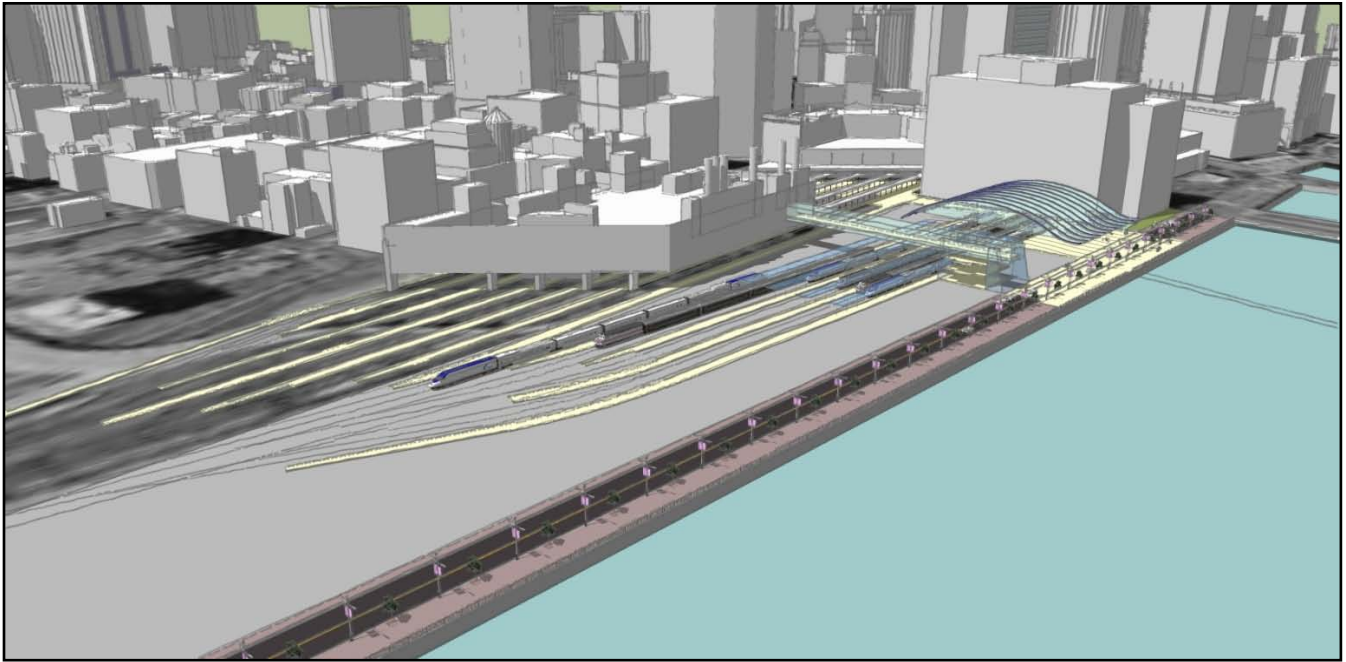
South Station currently hosts high speed intercity passenger rail (HSIPR), including Amtrak *Acela Express* and *Northeast Regional* services. It is also the terminus for Amtrak's *Lake Shore Limited* service between Boston and Chicago. The MBTA operates commuter rail, subway, and guideway bus services at the station. The station's Bus Terminal is the hub for private intercity and regional motor coach carriers in eastern Massachusetts. South Station is situated in downtown Boston, at the convergence of the Financial District, Chinatown, Fort Point Channel and the Rose F. Kennedy Greenway. It is the most heavily used and widely known passenger rail facility in New England.

The importance of rail along Northeast Corridor cannot be better emphasized than by comments made by JetBlue Chief Operating Officer Robert Maruster in a June 2010 conference. Mr. Maruster said of his company's five daily flights between Boston and New York, "it just may not make that much sense for an airplane on a 150-mile route to fly over 300 air miles to get there. Maybe there's a different mode of transportation that may be better to carry those customers from point A to point B." He went on to tout the potential for high speed rail in the corridor.¹ A more credible expression of the need for South Station expansion is hard to find.



South Station Terminal Expansion overview

¹ Comment made at "Airports: 21st Century Makeovers for the New York Metro Region," June 2010. <http://consumerist.com/2010/06/jet-blue-flying-from-nyc-to-boston-is-stupid.html>



Overview of South Station Expansion elements at the Terminal

The enclosed HSIPR Application Form provides further detail on both the ultimate Project and the PE/NEPA activities the awarded grant funds would provide.

THE CASE FOR THE BOSTON SOUTH STATION HSIPR EXPANSION PROJECT

Purpose

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. The Project also allows more attractive and increased MBTA Commuter Rail service. The MassDOT and our stakeholders including Amtrak intend to leverage transportation investments to generate economic development and maximize livability and sustainability benefits in Boston and Northeast Corridor metropolitan areas. The overarching Project purpose is to facilitate a more efficient and attractive passenger rail network for the northeastern United States.

Benefits of an Expanded South Station

The expansion of South Station would eliminate operating capacity constraints—at the terminal, approach interlockings, in traction power and other systems—that currently impact on-time performance for services into the station. Boston's South Station currently operates near or above its realistic design capacity for efficient train operations. In the first half of 2010, Amtrak reported eight delays of at least one-half hour, attributed at least in part to terminal congestion. In the same timeframe, MBTA

Commuter Rail reported 467 minutes of delay associated with South Station congestion. Over 20 of these incidents caused delays of about 10 minutes or more.

The 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 would these targets be missed, but on time performance would deteriorate even further from today's existing percentages.

Amtrak's 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 operational capacity at South Station. Different state and local transportation plans highlight South Station's current limitations on existing Northeast Corridor and MBTA operations and growth potential.

Expansion also makes possible a new service along an alternate Boston to New York corridor, the proposed *Inland Route*. The Inland Route is a Federal Railroad Administration (FRA) designated HSIPR corridor. MassDOT is working with Amtrak and the State of Connecticut 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. The 60-mile segment between New Haven and Springfield is the subject of a HSIPR application by the Connecticut Department of Transportation (ConnDOT). Nearly identical in length to the NEC Main Line between Boston and New Haven, CT, the *Inland Route* would serve the metropolitan areas of Worcester, MA, Springfield, MA, and Hartford, CT. Both the NEC Main Line and the *Inland Route* can support frequent intercity passenger rail service and both depend on expanded capacity at South Station for these services.

Increased Northeast Corridor HSIPR service can reasonably be expected to reduce both highway traffic congestion and short-haul flights. 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 2008.² Additional and more-reliable HSIPR service would logically shift even more trips to rail.

Locally, South Station's expansion would enable a planned expansion of MBTA Commuter Rail service, including growth on most lines connecting to South Station. These lines currently represent about 67% of MBTA commuter rail service to Boston. The expansion would also improve safety and convenience for all train services at South Station.

² Amtrak (2009). Presentation by Thomas C. Carper, Chairman, Board of Directors, Amtrak, before the Subcommittee on Railroads, Pipelines, and Hazardous Materials of the House Committee on Transportation and Infrastructure. October 14, 2009.

Travelers switching from highways to rail will mean fewer users on the roadways, resulting in a reduction in emissions, congestion, and other costs to society.

The Boston South Station HSIPR Expansion Project is also an investment in the New England and Northeastern States economies. Project-attributed jobs were calculated 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.

Project Description

The South Station HSIPR Expansion Project will advance design and complete state and federal environmental permitting to expand South Station from the 13 current terminal platform tracks to 20 total platform tracks. The Project would accomplish this expansion by extending South Station onto the current United State Postal Service (USPS) South Annex site, an 8-acre parcel that was historically part of South Station. USPS previously agreed to relocate from the site to support rail terminal expansion and site redevelopment. Due to the economic downturn, that redevelopment plan is no longer being pursued. MassDOT is now pursuing a new relocation agreement with USPS to create the space required for station expansion. A relocation site, owned by the Port Authority of Massachusetts (MassPort), has been identified in South Boston. A relocation agreement between MassPort and MassDOT is included with this application.

The Project also includes improvements at track junctions, to rail systems, and at the passenger terminal. 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. The concourse would also speed emergency egress from the center and southern end of the platforms. The Project also includes a train layover solution, to be located near South Station for efficiency. Together, these improvements would improve HSIPR service delivery and enable HSIPR growth in and out of Boston. This station expansion is the only practical solution for more reliable operations and future service growth. Project elements include:

- Relocating the USPS facility to South Boston;
- Demolishing the existing USPS South Annex;
- Adding seven (7) tracks and four (4) canopied platforms at the terminal, while lengthening several of the existing platforms;
- Expanding the passenger terminal, including a secondary headhouse for the new tracks and two new concourses;

- Reconfiguring track interlockings and improving signals, traction power, and communication systems;
- Restoring Dorchester Avenue, a historic South Boston connection along the Station's harbor edge, for station access, station properties access, and public use; and
- Preparing available Station parcels and air rights for potential private real estate development.

Project Management

MassDOT has broad powers and responsibilities for transportation in the Commonwealth of Massachusetts. Under Massachusetts General Laws Chapter 161 c, it is directed to improve the rail system in the state. 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 funds. The agency's rail office has overseen 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.

A "Project Team" will be formed and will include the combined staffs of MassDOT, MBTA, and a consultant team. The Project Team will 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. The Team will also include 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 hierarchy of the Project Team is further explained in the attached Project Management Plan (Attachment 3).

The Project Team will work towards the common goal of successfully completing the Project, and complying with the FRA Cooperative Agreement and applicable terms of associated Stakeholder Agreements. The PE/NEPA Consultant will 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. The Consultant will also be responsible for 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 will be developed during the PE/NEPA Process.

Conclusion

Expanded capacity at Boston South Station is critical for growth in Northeast Corridor High Speed Intercity Passenger Rail services, particularly those between Boston and New York. A rail network simulation, performed to support this application, demonstrates that existing South Station cannot reliably support projected 2030 Amtrak and MBTA rail operations. The simulation, included as Appendix A1, also demonstrates that the proposed Project improvements would establish an efficient and reliable terminal for the projected 2030 operations.

The Boston South Station HSIPR Project makes possible the transportation, economic, community and environmental benefits identified in the NEC Master Plan. Capacity enhancements at the station are essential for faster, more reliable, efficient and attractive Amtrak service. Realistically, failure to address capacity issues at South Station will hinder long-term connectivity within the Northeast Corridor, and will prevent this critical business corridor from growing. The station expansion also promotes a Smart Growth opportunity for metropolitan Boston and sets an example for other Northeast Corridor regions. Awarding grant funds for environmental permitting and preliminary design is the first step towards achieving the nationally-significant benefits that the Boston South Station HSIPR Expansion Project promises.