

A Rail Investment Plan for the Northeast Corridor

# Our Future on Track

HIGHLIGHTS OF THE TIER 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT



NOVEMBER 2015



U.S. Department of Transportation  
**Federal Railroad Administration**



457  
MILES LONG

2,200  
DAILY TRAINS

750,000  
DAILY PASSENGERS

THE NEC IS THE BUSIEST  
RAIL CORRIDOR IN THE  
NATION, AND IS VITAL  
TO THE ECONOMY  
AND CITIES OF THE  
NORTHEAST.

# Why NEC FUTURE?

The Northeast United States—stretching from Washington, D.C., to New England—is a dominant force in the national economy with its vast job base, highly educated and diverse workforce, strong and stable communities, vibrant cities, quality educational institutions, and rich history and culture. **The continued economic competitiveness of the Northeast depends on a transportation system that supports the region's growing needs.** And yet today, the region's transportation system—its highways, airports, maritime ports, and rail networks—is already operating at or above capacity. By 2040, the Northeast is expected to add seven million new residents, putting further pressure on all travel modes. Stronger, more reliable transportation options are essential to support mobility and the region's continued economic growth.

The Northeast Corridor (NEC) passenger rail line—a central transportation spine of the entire region—is critical to regional mobility. **However, the NEC today operates on outdated infrastructure with capacity constraints that cannot accommodate future growth.** Determining how these needs will be met, and defining the role that the NEC will play in the overall transportation system is the focus of NEC FUTURE.

## NEC FUTURE: ADDRESSING CRITICAL NEEDS

The Federal Railroad Administration (FRA) is preparing a comprehensive plan for the NEC that will define a long-term vision and an incremental approach to achieving that vision. The plan considers the needs of all types of passengers on the NEC—commuters as well as intercity riders. The result of NEC FUTURE will be the FRA's adoption of an investment program to guide passenger rail improvement projects on the NEC through 2040.

The FRA is preparing a Tier 1 Environmental Impact Statement (Tier 1 EIS), in compliance with the National Environmental Policy Act and other regulations, to evaluate the effects of proposed investment program alternatives. This document provides highlights of the Tier 1 Draft EIS, which will be available for public comment through January 30, 2016. The full document, as well as the accompanying Draft Programmatic Agreement, prepared in compliance with the National Historic Preservation Act, are available at [www.necfuture.com](http://www.necfuture.com) and at libraries along the NEC.

## Study Partners

The FRA is the lead agency for NEC FUTURE, working closely with a number of key partners including:

- Federal Transit Administration
- NEC Infrastructure and Operations Advisory Commission
- Railroad operators (including Amtrak, eight commuter rail authorities, and freight railroads)
- State and federal agencies, as well as local jurisdictions along the NEC

The FRA coordinates regularly with environmental resource and regulatory agencies, and consults with federally recognized tribes.

## Key Needs



Aging Infrastructure



Connectivity



Capacity



Performance



Resiliency



Sustainability



Economic Growth

## How will the FRA select a vision for the NEC?

The FRA will identify a preferred investment program (Preferred Alternative) based on the analysis presented in the Tier 1 Draft EIS, FRA policy guidance, and comments received from all stakeholders—agencies, railroad operators, interested organizations, and the public—by January 30, 2016. Your comments on the alternatives, and the analysis presented in the Tier 1 Draft EIS, are critical to the decision-making process. For information on how to participate in this historic decision, see the end of this brochure.



## Choices for the NEC

The FRA has identified three distinct Action Alternatives for the NEC, each of which presents a different vision for the future role of passenger rail in the transportation system of the Northeast. In developing these Action Alternatives, the FRA considered a broad range of possibilities for the NEC to respond to future travel market trends, passenger service needs, and public input. The Tier 1 Draft EIS compares each Action Alternative to a baseline, the No Action Alternative.

**Alternative 1 MAINTAINS** the role of rail with sufficient additional service to keep pace with population and employment growth.

**Alternative 2 GROWS** the role of rail with service to new markets and accommodates a greater portion of the population.

**Alternative 3 TRANSFORMS** the role of rail by becoming a dominant mode choice for travel in the Northeast.

## Enhanced Service Concepts

Each of the Action Alternatives includes enhanced service concepts to improve the passenger experience and increase efficiency. These concepts include a new type of Intercity service that stops at more stations, high-performance equipment, coordinated scheduling and ticketing, and easier transfers.

### WHAT'S INCLUDED IN AN ACTION ALTERNATIVE?

The investment program for each Action Alternative consists of a set of geographic markets to be served by passenger rail; a Representative Route (or footprint) that connects these markets; assumptions about the level of passenger rail service that will be provided to these markets; and infrastructure improvements that support this level-of-service. In addition, each of the three Action Alternatives:

✔  
Maintains and improves passenger rail service on the existing NEC

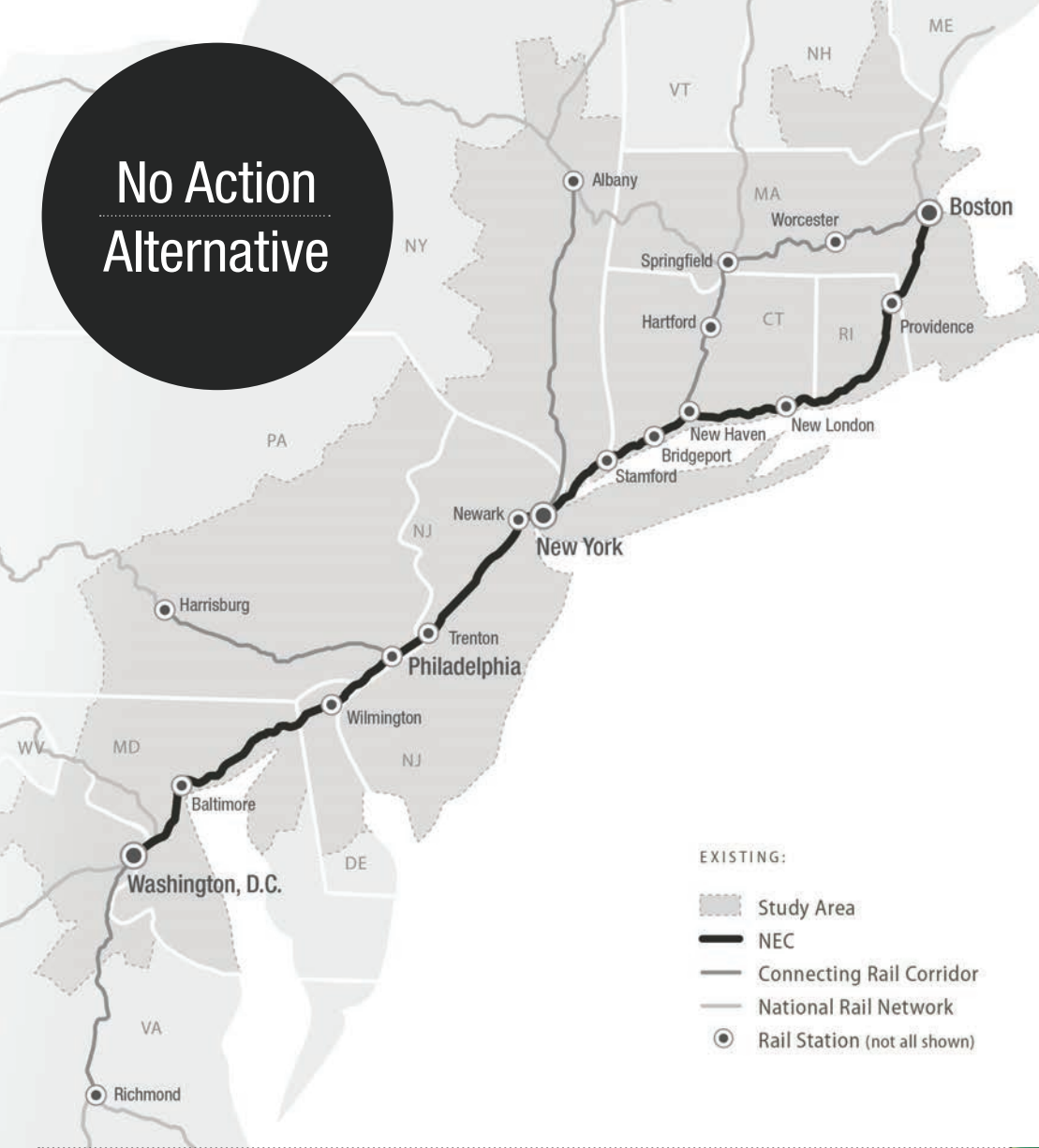
✔  
Incorporates innovative approaches to improve the passenger experience and increase efficiency.

✔  
Brings the NEC to a state of good repair

✔  
Addresses the most pressing chokepoints that limit the railroad's capacity and undermine reliability

✔  
Protects freight rail access and the opportunity for future expansion

# No Action Alternative



## No Action Alternative

### WHAT DOES IT MEAN FOR THE FUTURE OF THE NEC?

The No Action Alternative is the baseline against which the FRA compared each of the Action Alternatives. It includes projects currently planned and programmed, and repairs to keep the railroad operating, but only at today's level-of-service.

Except for planned improvements, such as the Long Island Rail Road's East Side Access project, the No Action Alternative:

- ▶ Does not increase capacity to meet unmet demand or accommodate growth
- ▶ Does not improve reliability
- ▶ Does not address gaps in connectivity
- ▶ Does not expand service to new markets
- ▶ Does not bring the NEC into a state of good repair

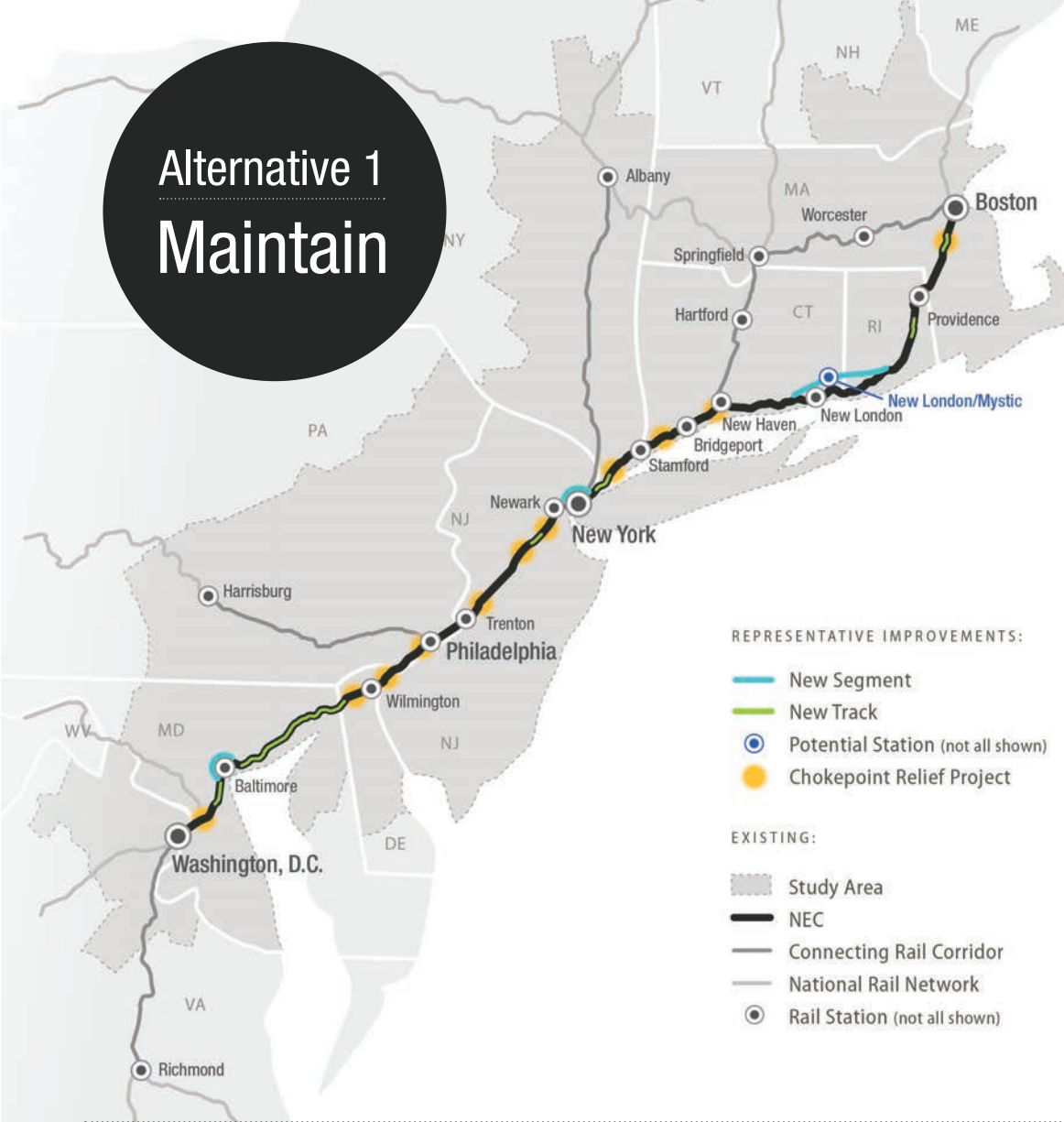
With its continued reliance on constrained and aging infrastructure, the No Action Alternative means a declining role for rail in the Northeast transportation system. Moreover, with minimal new investment in capacity or reliability, the No Action Alternative provides limited ability for the NEC to recover from major storms and other disruptive events, and hinders freight movement.

The No Action Alternative requires investment in the NEC by the federal government, states, and railroads that exceeds historical levels of funding. If sufficient funding to meet even the minimum requirements of the No Action Alternative is not available, the reliability and quality of service on the NEC would be further degraded, driven in large part by insufficient capacity and aging infrastructure.

The No Action Alternative cannot accommodate the full volume of passengers who will want to travel by rail. **The tightest constraint is at the Hudson River, where demand will exceed capacity by over 6,000 passengers per hour in 2040.**



# Alternative 1 Maintain



## Alternative 1 Benefits

{ as compared to the No Action Alternative }

### AGING INFRASTRUCTURE

- ▶ Brings the existing NEC to a state of good repair

### CONNECTIVITY

- ▶ Improves connections between metropolitan areas with more frequent intercity service

### CAPACITY

- ▶ Provides sufficient capacity to accommodate demand at all places along the corridor (except at the Hudson River) through 2040, but lacks sufficient additional capacity to support growth in demand after 2040
- ▶ Increases capacity for through-trips on connecting corridor services south of Washington, D.C., and along the Keystone, Empire, and New Haven-Hartford-Springfield Corridors

### PERFORMANCE

- ▶ Increases Intercity and peak-hour Regional rail (commuter) service
- ▶ Top Intercity-Express operating speeds of 160 mph on portions of the corridor
- ▶ Travel time between Washington, D.C. and Boston reduced by up to 35 minutes
- ▶ New service types with a range of pricing to attract more passengers

### RESILIENCY

- ▶ New segment between Old Saybrook, CT, and Kenyon, RI, provides resiliency, avoiding movable bridges and waterways along the Long Island Sound and providing an alternative to portions of the existing NEC adjacent to the Connecticut shoreline

### SUSTAINABILITY

- ▶ Net decrease in emissions of pollutants and greenhouse gases and reduction in roadway vehicle miles traveled
- ▶ Shifts 69 million annual trips from other modes to passenger rail

### ECONOMIC GROWTH

- ▶ Improves access to jobs within and between metropolitan areas for existing stations; generates some travel time savings for intercity travel

Alternative 1 **maintains** the role of rail as it is today, with significant increases in the level of rail service as required to keep pace with the growth in population. It enables the NEC to continue to support the transportation needs of the growing region through 2040, but provides little additional capacity to support growth after 2040.

# Alternative 2 Grow



Alternative 2 **grows** the role of rail, expanding rail service at a rate greater than the proportional growth in regional population and employment. It adds service to new markets in New England and provides modest capacity to support growth beyond 2040.

## Alternative 2 Benefits

{ as compared to the No Action Alternative }

### AGING INFRASTRUCTURE

- Brings the existing NEC to a state of good repair

### CONNECTIVITY

- Connects new travel markets in the Connecticut River Valley
- Provides Intercity service to T.F. Green Airport in Providence, RI, and Philadelphia International Airport
- Improves interregional connections by introducing Intercity service at select rail stations

### CAPACITY

- Provides sufficient capacity to accommodate demand at the Hudson River and provides room for growth at other locations post-2040
- Addresses capacity and speed constraints with a new route adjacent to the NEC between New Haven and Hartford, CT, and Providence, RI; this supplements existing service between New York City and Boston and connects new travel markets
- Increases capacity for through trips on connecting corridor services south of Washington, D.C., and along the Keystone, Empire, and New-Haven-Hartford-Springfield Corridors

### PERFORMANCE

- Provides five times as much Intercity service and more than doubles peak-hour Regional rail service
- Top Intercity-Express operating speeds of 160 mph on the majority of the corridor
- Travel time between Washington, D.C. and Boston reduced by up to 1 hour 5 minutes

### RESILIENCY

- New inland route through Connecticut and Rhode Island provides an alternate route if coastal inundation or other hazards affect services along the coastline

### SUSTAINABILITY

- Net decrease in emissions of pollutants and greenhouse gases and reductions in roadway vehicle miles traveled
- Shifts 93 million annual trips from other modes to passenger rail

### ECONOMIC GROWTH

- Improves access to jobs within and between metropolitan areas for existing and new stations with increased service frequency, service types, and improved travel times
- Provides improved access between metropolitan areas and commercial centers such as Wilmington, DE, and Hartford, CT
- Creates opportunities for economic and station area development

# Alternative 3 Transform



Alternative 3 **transforms** the role of rail. Along with improvements to the existing NEC, a second spine from Washington, D.C., to Boston supports faster trips and serves markets not currently well connected by passenger rail. Rail becomes the dominant mode of travel in the Northeast, with the capacity to support the regional economy well into the future.

## Alternative 3 Benefits

{ as compared to the No Action Alternative }

### AGING INFRASTRUCTURE

- ▶ Brings the existing NEC to a state of good repair

### CONNECTIVITY

- ▶ Connects new travel markets throughout the NEC with the addition of a second spine and new stations
- ▶ Provides Intercity service to T.F. Green Airport in Providence, RI, and Philadelphia International Airport
- ▶ Improves interregional connections by introducing Intercity service at select rail stations on the existing NEC

### CAPACITY

- ▶ Provides excess capacity at all locations along the corridor to accommodate additional off-corridor trips and future growth post-2040

### PERFORMANCE

- ▶ Provides six times as much Intercity service and up to three times the amount of peak-hour Regional rail service
- ▶ Top Intercity-Express operating speeds of 220 mph on the second spine
- ▶ Travel time between Washington, D.C. and Boston reduced by up to 2 hours 55 minutes

### RESILIENCY

- ▶ Inland route options through either Long Island or Connecticut, and Massachusetts assist in reducing service disruptions should a coastal flooding event affect assets along coastal Connecticut and Rhode Island

### SUSTAINABILITY

- ▶ Net decrease in emissions of pollutants and greenhouse gases and reductions in roadway vehicle miles traveled
- ▶ Shifts 141 million annual trips from other modes to passenger rail

### ECONOMIC GROWTH

- ▶ Improves access to jobs within and between metropolitan areas for existing and new stations with increased service frequency, service types, and improved travel times
- ▶ Creates opportunities for economic and station area development with more connections within and between metropolitan areas both along the existing NEC and to markets served with a second spine
- ▶ Provides passenger rail network coverage and capacity to support population and employment growth beyond 2040

# Evaluating the Alternatives

The Tier 1 Draft EIS presents a detailed evaluation of the No Action and Action Alternatives for NEC FUTURE, including their effects on transportation, the economy, the built and natural environment, as well as projected ridership, capital and operating costs, construction requirements, and phasing.

The range of benefits and effects varies by Action Alternative, based on the service and infrastructure proposed. Examples of the findings are shown on this page.

## EFFECTS ON THE BUILT AND NATURAL ENVIRONMENT

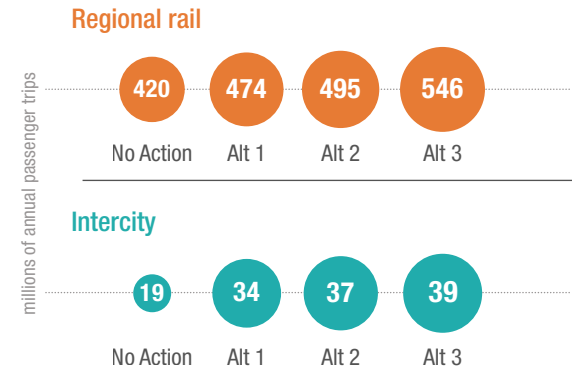
**Alternative 1:** Environmental impacts occur with the addition of two segments in Connecticut and Rhode Island outside of the existing NEC right-of-way, including impacts on land cover, water resources, ecological resources, prime farmlands, and prime timberlands.

**Alternative 2:** Environmental impacts primarily occur with the addition of a new segment between New Haven and Providence, via Hartford. Much of this area is less developed and key considerations are the effects of acquisitions and displacements in noted environmental justice communities, and impacts on prime timberlands and floodplains.

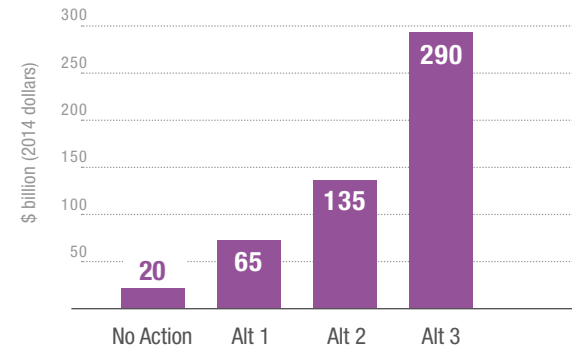
**Alternative 3:** Impacts to the built and natural environment occur along the entire length of the additional spine between Washington, D.C., and Boston, MA. A range of effects occur north of New York City, due to variations in routing; impacts include conversion of undeveloped land, acquisition of developed land, impacts on water and ecological resources, and conversion of prime farmland and timberlands.

More-detailed environmental reviews at the Tier 2 (project) level will be needed to identify specific community and resource impacts and benefits, seek public and agency input, and identify mitigation measures, if necessary.

## RIDERSHIP



## LEVEL OF INVESTMENT \*



\*Estimates are intended to be representative of the relative levels of investment that could be required and are for comparative purposes.

## The Benefits of Action

### For Passengers

- + More frequent, reliable service – often with shorter travel times – and far fewer delays
- + Ability to reach many more destinations conveniently by rail
- + Greater range of ticket price options, allowing more affordable travel
- + Easier travel arrangements across the NEC

### For the Region

- + Easier travel and interaction among businesses
- + Economic development of station areas and cities along the NEC
- + Reduction in roadway vehicle miles traveled, energy use, and greenhouse gas emissions
- + World class transportation to power regional growth and mobility for future generations



# What's at stake in this decision?

The selection of an investment program for the NEC will have far-reaching effects on transportation in the Northeast. It will help to define how and when the federal government, states, and railroads invest in upgrades to the NEC, with implications for the mix of rail services offered, service frequency, travel times, and stations served. The construction of new infrastructure and the operation of expanded services would create jobs and economic development opportunities, as well as result in impacts to properties and effects on the natural environment. The FRA has analyzed the No Action and Action Alternatives at a Tier 1 (broad) level of detail in order to understand and compare these effects. The analysis is presented in the Tier 1 Draft EIS.

## WHAT HAPPENS NEXT?

After considering the analysis presented in the Tier 1 Draft EIS and comments received from the public, agencies, and railroad stakeholders, the FRA will identify a preferred investment program (Preferred Alternative) that provides a framework

for future rail improvements on the NEC. The Tier 1 Final EIS will describe and evaluate this Preferred Alternative. The FRA will formally select an alternative (Selected Alternative) in a Record of Decision to complete the Tier 1 environmental review process, and develop a Service Development Plan that defines the process for implementing the Selected Alternative.

The Selected Alternative will be a road map for incremental improvement of the NEC necessary to achieve the selected vision for passenger rail in the NEC. A phasing plan will describe the priorities and proposed approach to implementing the improvements so that benefits throughout the NEC are maximized. As a framework for future rail improvements on the NEC, the Selected Alternative does not require any rail operator to fund or construct new infrastructure, but ensures that future investments by any entity are consistent with the long-term NEC vision and benefits all of its users. Improvements will be carried out as discrete projects that will undergo more detailed planning and environmental analysis.

## Help us make the smartest choice!

NEC FUTURE is a historic opportunity to shape the future of the NEC and help ensure that the Northeast region continues to thrive. The Action Alternatives reflect public and stakeholder input, but the FRA's work is not done. We still need your help and feedback to identify a Preferred Alternative.

## WHAT ROLE SHOULD THE NEC PLAY IN THE FUTURE OF THE NORTHEAST?

We hope you will help us make the best choice to keep our future on track. Please review the Tier 1 Draft EIS and submit your comments online, by email, or by letter until January 30, 2016, or attend a public hearing. Details are at the end of this brochure.

## REVIEW THE TIER 1 DRAFT EIS

Visit [www.necfuture.com](http://www.necfuture.com); copies are also available at libraries along the NEC.

The selection of an investment program for the NEC will have far-reaching effects on transportation in the Northeast.



# 4 ways you can submit your comment



Comment in person by:  
**Attending a Public Hearing**



Submit a comment online at:  
**[www.necfuture.com](http://www.necfuture.com)**



Comment via email:  
**[comment@necfuture.com](mailto:comment@necfuture.com)**



Or send comments to:  
**NEC FUTURE**  
**Rebecca Reyes-Alicea**  
U.S. DOT Federal Railroad Administration  
One Bowling Green, Suite 429  
New York, NY 10004

Para información en español, visite: [necfuture.com/es](http://necfuture.com/es)

**Let us hear from you by January 30, 2016!**

## PUBLIC HEARING SCHEDULE

Wednesday, December 9	Boston, MA
Monday, December 14	New Haven, CT
Tuesday, December 15	New York, NY
Wednesday, December 16	Washington, DC
Thursday, December 17	Providence, RI
Monday, January 11	Philadelphia, PA
Tuesday, January 12	Mineola, NY
Wednesday, January 13	Hartford, CT
Thursday, January 14	Baltimore, MD
Tuesday, January 19	Newark, NJ
Wednesday, January 20	Wilmington, DE

For locations, visit [www.necfuture.com](http://www.necfuture.com).

Each hearing will run from 4-7 p.m., with scheduled presentations at 4:30 p.m. and 6:00 p.m. There will be an opportunity to speak following each presentation; if you plan to speak, please sign up when you arrive. A stenographer will also be available for private testimony, if you prefer. Comment cards will be available at each hearing. In the event of inclement weather, hearings may be canceled or rescheduled; please check the website at [www.necfuture.com](http://www.necfuture.com). If you require assistance to attend, please contact the NEC FUTURE team at [comment@necfuture.com](mailto:comment@necfuture.com) at least five days prior to the hearing you wish to attend.



Thanks for your help in keeping

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