

# NEC FUTURE

A Rail Investment Plan  
for the Northeast Corridor



## SCOPING PACKAGE



## INTRODUCTORY LETTER FROM THE FRA'S ADMINISTRATOR, JOSEPH SZABO



We are pleased to announce the beginning of the public scoping portion of NEC FUTURE, a unique planning process for the Northeast Corridor (NEC) recently launched by the Federal Railroad Administration (FRA). The NEC, the rail transportation spine that runs from Boston to Washington, D.C., accommodates over 2,000 passenger trains and 70 freight trains each day. The NEC faces serious problems, with century-old infrastructure, outdated technology and insufficient capacity to reliably meet today's travel demand or to expand travel options as the region grows. With highways and airports facing similar problems, the Northeast is facing mobility challenges that could have economic repercussions for the region and the nation as a whole.

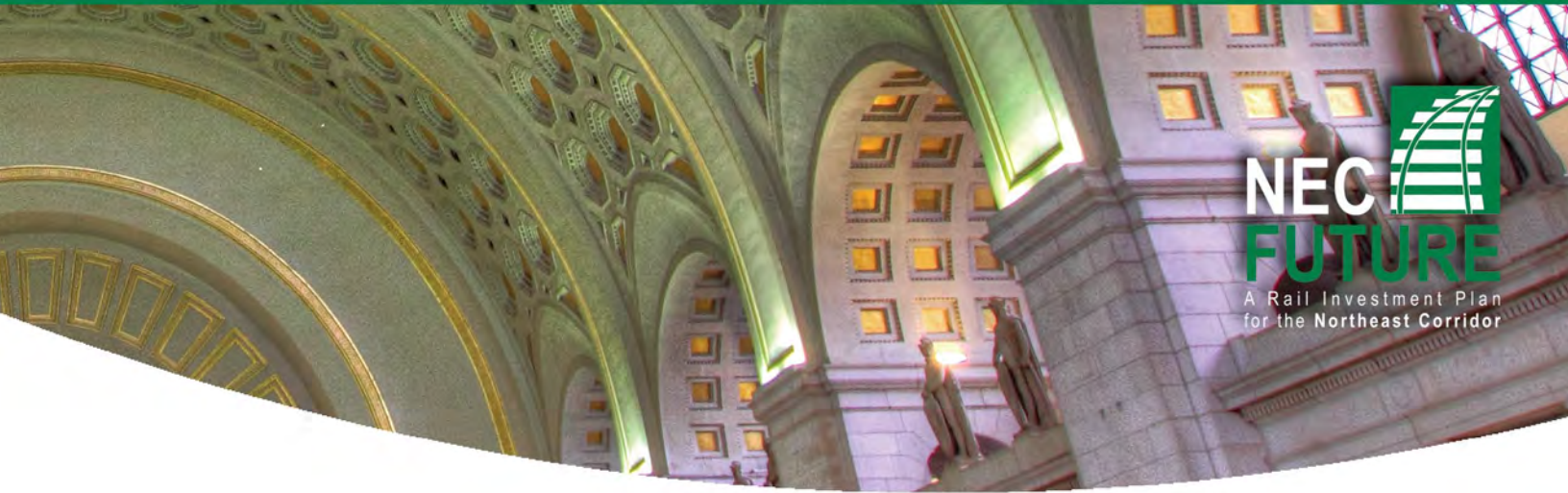
The FRA has initiated the NEC FUTURE program to develop an integrated passenger rail solution for the Northeast, including an investment program to grow the corridor to meet the transportation needs of the region's economy. At the core of the program's public engagement activities is the public scoping process that will involve public meetings in each of the corridor's eight states and in the District of Columbia. These meetings, scheduled for this coming August, will allow the FRA and its NEC FUTURE team to describe the program and its associated studies and to hear the thoughts, concerns and interests of the public regarding these issues. Interested parties can also go to the program's newly established website at [www.necfuture.com](http://www.necfuture.com) to obtain project information and submit comments on the proposed scope and other aspects of NEC FUTURE.

Your participation in this public scoping process and in all aspects of NEC FUTURE is essential to the success of a program that will help determine future transportation investments of vital importance to all people who live, work and travel along the NEC. This Scoping Package presents further details on the program, the proposed studies and schedule, and ways that you can remain involved. I would like to thank you for supporting this important effort, and we look forward to seeing you at the scoping meetings and on our website.

Sincerely,

A handwritten signature in black ink that reads "Joseph C. Szabo". The signature is written in a cursive, flowing style.

Joseph C. Szabo  
Administrator



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## TABLE OF ACRONYMS

Term	Acronym
Americans with Disabilities Act	ADA
Central Business District	CBD
Coalition of Northeastern Governors	CONEG
Connecticut Department of Transportation	ConnDOT
Consolidated Rail Corporation	Conrail
Council on Environmental Quality	CEQ
CSX Transportation	CSXT
Draft EIS	DEIS
Environmental Impact Statement	EIS
Executive Order	EO
Federal Aviation Administration	FAA
Federal Highway Administration	FHWA
Federal Railroad Administration	FRA
Federal Transit Administration	FTA
Final EIS	FEIS
Gross Domestic Product	GDP
High-Speed Intercity Passenger Rail	HSIPR
Maryland Area Regional Commuter	MARC
Massachusetts Bay Transportation Authority	MBTA
Metropolitan Planning Organization	MPO
MTA-Long Island Rail Road	LIRR
MTA-Metro-North Railroad	MNR
National Environmental Policy Act	NEPA
New Haven-Hartford-Springfield	NHHS
New Jersey Transit	NJ TRANSIT
Next Generation High-Speed Rail	NextGen
Northeast Corridor Infrastructure and Operations Advisory Commission	NEC Commission
Northeast Corridor rail line	NEC
Notice of Intent	NOI
Passenger Rail Corridor Investment Plan	PRCIP
Passenger Rail Investment and Improvement Act	PRIIA
Record of Decision	ROD
Service Development Plan	SDP
Shore Line East	SLE
Southeast Pennsylvania Transportation Authority	SEPTA
U.S. Department of Transportation	USDOT
Virginia Railway Express	VRE



# I. INTRODUCTION

NEC FUTURE is a major initiative of the U.S. Department of Transportation's (U.S. DOT) Federal Railroad Administration (FRA) to develop an integrated passenger rail transportation solution for the Northeast. The purpose of this solution is to improve mobility, effectively serve travel demand due to population and jobs growth, support economic development, reduce growth in carbon emissions and dependence on foreign oil, and contribute to improved land utilization and investment in both urban and non-urban communities in the region.

The focus of this effort is the Northeast region of the U.S. and the Northeast Corridor (NEC) rail line, an important element of the region's comprehensive, multimodal transportation system. The main line of the NEC, the NEC Spine, is anchored by Washington Union Station in the south, Pennsylvania Station New York in the center and Boston South Station in the north. Several connecting corridors, such as the Keystone Corridor to Harrisburg, Pennsylvania, the Empire Corridor to Albany, New York, and the New Haven-Hartford-Springfield (NHHS) corridor in Connecticut and Massachusetts, extend the rail transportation system throughout the Northeast.

In spite of significant investment in all transportation modes over recent decades, the continued growth and economic vitality of the Northeast is challenged by major congestion and capacity constraints in its transportation system. The NEC and its connecting corridors in many places rely on obsolete technology and aging infrastructure. Substantial investment in state-of-good-repair improvements and key corridor enhancements is required simply to reliably maintain existing levels of service. More extensive improvements will be needed to provide the additional capacity

and service upgrades to meet future travel demands. The NEC FUTURE program recognizes that existing corridor shortcomings left unaddressed could constrain future mobility and economic growth by reducing the competitive position of the Northeast relative to other regions of the U.S. and the world. Present economic projections assume that necessary transportation investments to address identified needs will be made, and a lack of such actions would reduce the region's ability to achieve those projections and protect its economic base. Beyond the investment necessary to maintain existing transportation services, improvements to better meet traveler needs and to gain efficiencies in those services are essential to the economic sustainability of the Northeast region.

NEC FUTURE is the opportunity for those who own portions of, operate on, or travel along the NEC, or who would otherwise be impacted by future investment in the NEC, to participate in a dialogue about the future of the rail corridor. FRA, in partnership with the NEC states, is committed to engaging a broad spectrum of stakeholders in a collaborative planning effort whose goal is to define a framework for future investment in the corridor through 2040. The NEC FUTURE program is required to support an FRA decision to fund and implement a major investment in the NEC passenger rail corridor.

The NEC FUTURE program includes the preparation of a Passenger Rail Corridor Investment Plan (PRCIP) which is composed of (1) a Service Development Plan (SDP) focused on passenger rail service planning and possible alternatives for the corridor, and (2) an environmental analysis of these proposed alternatives as required under the National Environmental Policy Act (NEPA) and related laws and regulations. For this

program, a NEPA Tier I Environmental Impact Statement (EIS) will be prepared. Both activities require significant public outreach and engagement to ensure that key public and stakeholders' concerns, issues, needs, ideas and alternatives are fully considered in the development and analysis of service alternatives.

According to FRA's own Environmental Procedures (64 F.R. § 28545) (FRA Environmental Procedures) and the underlying Council on Environmental Quality (CEQ) regulations (Part 1501 – NEPA and Agency Planning, 43 FR 55992, Nov. 29, 1978), the FRA is required to carry out an "early and open process for determining the scope of issues to be addressed" (CEQ, Part Sec. 1501.7) in its proposed environmental review, and to begin that process as soon as practicable after the agency's decision to prepare an EIS. The NEC FUTURE program, as discussed later in this Scoping Package, will provide interested public and private parties and the general public with detailed information about the proposed activities to be carried out for the NEC FUTURE program and numerous opportunities to comment on that scope and raise related issues or concerns. The FRA and its NEC FUTURE program team will refine the proposed scope to reflect information obtained during this scoping process. This Scoping Package demonstrates how all involved stakeholders in the corridor will play an important role in this scoping process and throughout the NEC FUTURE program.

This Scoping Package provides an overview of the purpose and need for the NEC FUTURE program, the program's major elements, a description of the scoping process (including public scoping meetings in August 2012), and ways that interested parties can participate in this planning process.



## 2. PURPOSE AND NEED

### 2.1 INTRODUCTION

The Northeast region is facing serious mobility challenges, which, if left unaddressed, will have far reaching repercussions on the regional and national economy. The region is served by an extensive passenger and freight transportation system of highways, airports, ports, and rail. That transportation system has outdated technology and lacks sufficient capacity, connectivity and redundancy to support local and inter-regional mobility needs, resulting in major congestion and delays.

Moreover, regional population and economic growth will require investment in this transportation infrastructure to provide businesses with access to a growing workforce and resources and to provide residents with safe, reliable and convenient travel options. Highway, airport, and rail networks all face substantial challenges to meet their share of growing travel demand and each mode requires investment to address capacity and deteriorating conditions. The Northeast rail system has and will continue to play a critical role in shaping and supporting the development of the Northeast. Upgrades to that system are essential for connecting commuters and travelers with growing downtown business centers. A well defined and planned role for investment in passenger rail is required to improve the region's multimodal transportation network and its ability to support population and economic growth along the NEC.

The purpose of the NEC FUTURE program being led by the FRA is to:

- Define current and future markets for improved rail service and capacity on the NEC.
- Develop an integrated passenger rail transportation solution that:
  - Meets the existing and future service, reliability and capacity needs of the region.
  - Can be implemented incrementally.
  - Considers impacts to the environment and supports reductions in energy use.
  - Reflects the region's freight rail needs.
- Create a regional planning framework to engage stakeholders throughout the Northeast in development of this program.

The Purpose and Need Statement will play a pivotal role in every stage of the NEC FUTURE program. This section of the Scoping Package provides an abridged version of the Purpose and Need Statement. It defines the purpose of the program, the present and future challenges facing the Northeast region, and the need for passenger rail transportation solutions to address these challenges. It also establishes the program's goals and objectives that any actions under consideration must achieve to address identified needs. The statement presents a brief overview of the planning and regulatory environment in which the NEC FUTURE program will be advanced. These planning and regulatory elements are further described in other sections of this Scoping Package.

Numerous recent NEC studies will inform the NEC FUTURE program. These



*NEC FUTURE is a roadmap for future investments in an integrated passenger rail transportation system necessary to sustain and advance economic growth.*

include (1) FRA's NEC Programmatic Environmental Impact Statement (PEIS) in 1978, evaluating options for investment in the NEC; (2) the *Northeast Corridor Infrastructure Master Plan* (May 2010), a collaborative effort between key NEC stakeholders to define critical NEC investment needs; (3) extensive studies done for the Coalition of Northeastern Governors (CONEG); and (4) Amtrak's *Vision for High-Speed Rail in the NEC* and similar studies of NEC high-speed rail options by the University of Pennsylvania and the Regional Plan Association. These and other regional studies and individual railroad capital programs will be particularly useful in developing reasonable estimates for transportation system capacity, growth and travel demand forecasts.

### 2.1.1 Study Area

The Northeast region – an area comprising just 2 percent of the nation's land that generates over 20 percent of the nation's Gross Domestic Product (GDP) output<sup>1</sup> – encompasses eight states and the District of Columbia (see **Figure 1**) and is served by an extensive intermodal passenger and freight transportation system of highways, airports, ports, and rail systems linking the major metropolitan areas of Washington D.C., Baltimore, Philadelphia, New York and Boston.

The NEC, the existing rail transportation spine of the Northeast region – anchored by Washington Union Station in the south, Pennsylvania Station New York in the center, and Boston South Station in the north – is a vital component of this regional transportation system, with 80 percent of the region's residents living within 25 miles of an existing or proposed intercity passenger rail service.<sup>2</sup> Like the broader transportation system, the NEC currently faces serious capacity and operational constraints that limit opportunities to expand and improve services to support existing travel demand

Figure 1: Study Area



and projected population and economic growth. Many components of the system are in a state of disrepair or, worse, have reached the point of obsolescence.

For the purposes of defining and analyzing transportation alternatives for NEC FUTURE, the defined program Study Area

(see **Figure 1**) encompasses the region served by the NEC, plus those areas that can be reached from the NEC directly by train or via a single transfer to connecting corridors (e.g., the Empire Corridor in New York). The Study Area will be refined as NEC FUTURE progresses and alternatives are identified.

<sup>1</sup>“Regional Economic Accounts,” United States Department of Commerce Bureau of Economic Analysis, accessed May 2012, <http://www.bea.gov/regional/index.htm>.  
<sup>2</sup>Council of Northeastern Governors (CONEG) Policy Research Center, Inc., “A Regional Context for Intercity Passenger Rail Improvements in the Northeast” (prepared by Matthew Coogan, Resource Systems Group, Inc. and SmartMobility, Inc., August 24, 2009), [http://www.coneg.org/reports/regional\\_context.pdf](http://www.coneg.org/reports/regional_context.pdf).

## 2.2 NEC FUTURE NEEDS

### 2.2.1 Introduction

The Northeast region is served by a comprehensive, multimodal transportation network. This rich transportation system supports a population density triple the national average<sup>3</sup> and is the backbone of a \$2 trillion economy.<sup>4</sup> However, the limitations of the region’s transportation network within all modes will constrain the growth, competitiveness and economic development of the region. These limitations will likely have impacts beyond the Northeast region and could impact how and where future population and business growth takes place in regional, national, and global contexts. The following sections will further describe projected growth in the Northeast, the associated projected increase in travel demand, the challenges the existing transportation network will face and the role that rail will play in meeting those future demands.

Findings presented in this Scoping Package rely on existing reports and datasets, which assume different baseline years, horizon years, and study areas, and present a piecemeal view of the region. The lack of an available, cohesive data set for the NEC FUTURE Study Area demonstrates the need to create a unified representation of the Northeast region as it currently exists through the horizon year of this program, 2040.<sup>5</sup> This study relies on published 2040 projections for population and employment. For other projections or forecasts related to travel demand, 2040 figures are used where available and 2050 projections, in some instances, are used to interpolate 2040 estimates. Lastly, projections for other years, including 2025 and 2030, are included in this statement to support stated 2040 projections or to provide

information where there is none currently available for 2040 or beyond. The available forecasts present a reasonable representation of the Northeast region, suitable for initial development of the program purpose, needs, goals, and objectives. As the NEC FUTURE program advances, a set of forecasts to 2040 will be developed to more consistently evaluate future conditions and to inform subsequent analyses.

### 2.2.2 Projected Population and Employment Growth

The NEC connects four of the nation’s ten largest metropolitan areas (see **Figure 2**), making the corridor an economic anchor for the nation.<sup>6</sup> Projections by MoodysEconomy.com predict that both population and employment growth within the Northeast region will remain strong over the coming decades.

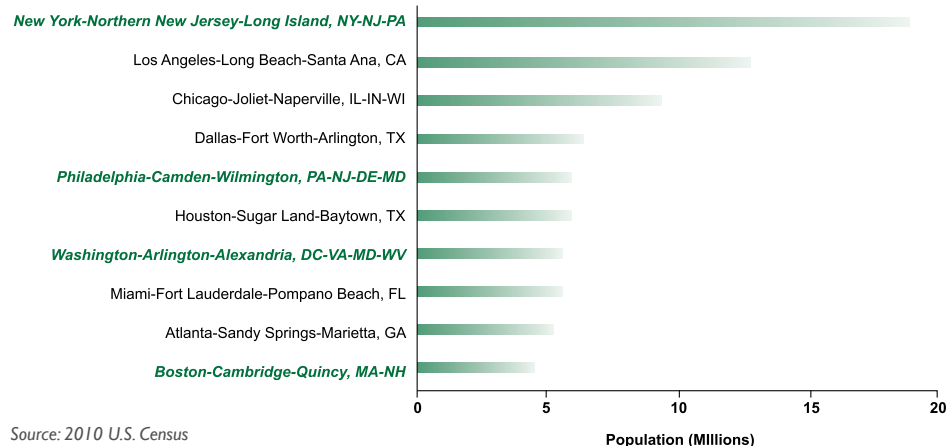
Population and employment in the program Study Area are projected to grow by approximately 6.7 million and 5.5 million, respectively, from 2010 to

2040, representing a 13 percent growth in population and a 23 percent growth in employment.<sup>7</sup> GDP in the Northeast is projected to grow by approximately 75 percent by 2040 (in constant \$2010; see **Figure 3**). The four largest metropolitan areas – Boston, New York, Philadelphia and Washington, D.C. – are projected to continue to account for approximately 70 percent of the region’s employment and population.<sup>8</sup> Roughly three-fourths of the region’s employment growth is projected to occur in these four metropolitan areas.<sup>9</sup>

### 2.2.3 Projected Growth in Travel Demand

Although population and employment projections developed by public agencies and the private sector differ in certain ways, they are consistent in their forecasts that demographic and economic growth within the Northeast will remain strong over the next 30 to 40 years. This growth will result in travel demand and goods movement increases, which will place increasing pressures on the existing transportation infrastructure in the Northeast region.

Figure 2: Largest U.S. Metropolitan Areas (2010)



<sup>3</sup>CONEG, “Regional Context.”

<sup>4</sup>The NEC Master Plan Working Group, *The Northeast Corridor Infrastructure Master Plan* (May 2010).

<sup>5</sup>2010 is the baseline year and 2040 is the horizon year. Data used to estimate future population, economic, and travel conditions, however, rely on existing data sources each of which was created at different points in time for different purposes and with different forecast dates.

<sup>6</sup>U.S. Census Bureau, “Population Distribution and Change: 2000 to 2010, 2010 Census Briefs” (March 2011), Table 3, <http://www.census.gov/prod/cen2010/briefs/c2010br-01.pdf>.

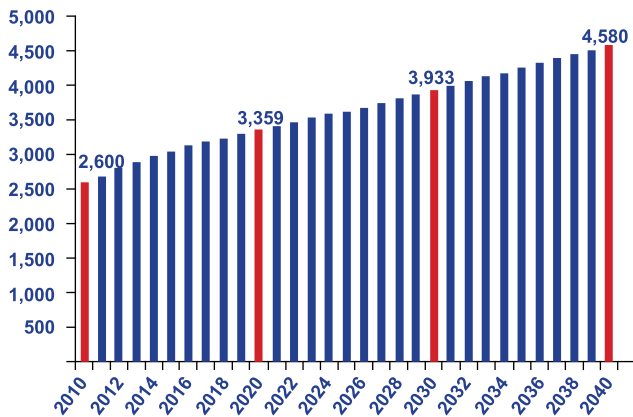
<sup>7</sup>Moody’s Analytics, Inc., 2012 data retrieved from Forecast and Historical Databases, <http://www.economy.com/home/products/databases.asp?src=left-nav>.

<sup>8</sup>Moody’s Analytics, Inc., 2012.



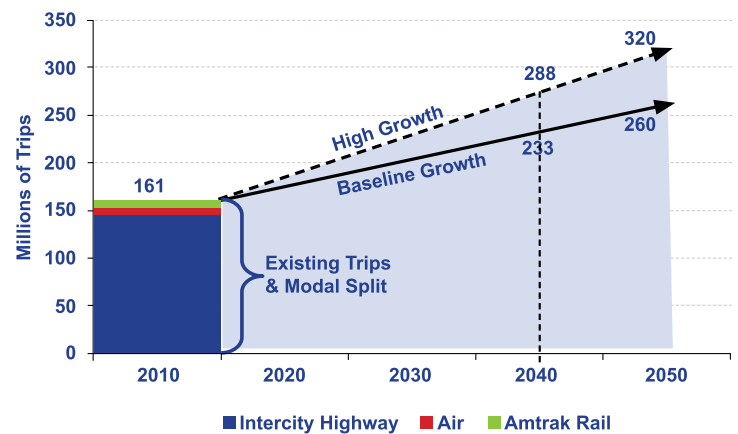


Figure 3: Projected GDP in Northeast Corridor (Billions \$2010)



Source: MoodysEconomy.com (2010)

Figure 4: Annual NEC Corridor Travel Volumes



Source: Amtrak, A Vision for High-Speed Rail in the Northeast Corridor, September 2010

**Regional Travel**

For regional commuter markets, Metropolitan Planning Organizations (MPO) project substantial trip growth, posing challenges for highway, rail and other transit modes. For example, strong growth in the Manhattan Central Business District (CBD) employment (25 percent from 2005 to 2030)<sup>10</sup> will increase demand for the largest commuter operators in the area – MTA-Long Island Rail Road (LIRR), MTA-Metro-North Railroad (MNR) and New Jersey Transit (NJ TRANSIT) – all of which already face significant capacity limitations.<sup>11</sup> Commuter railroad riders today are not just peak-period commuters heading into a region’s

major CBD. In recent years, commuter railroads have seen significant growth in travel during off-peak periods on weekdays and weekends and in off-peak directions. For example, over the 1990 to 2010 period, off-peak trips into Manhattan on NJ TRANSIT trains grew faster than peak-hour volumes, with the off-peak period’s share increasing from 48 percent to 58 percent of total daily trips into the city.<sup>12</sup> These patterns demonstrate that difficulties in addressing commuter railroads’ present capacity and reliability problems and the challenge of higher future demand will increasingly impact much more than the traditional commuter market. Left unaddressed, the impacts will be noticed in the traditional

business sectors as well as the travel and leisure markets. Average weekday travel demand is projected to increase in the New York region by roughly 3.3 million trips from 2005 to 2030, with over 80 percent of those trips absorbed by highways and the balance by transit.<sup>13</sup> The Northeast’s other high-growth metropolitan areas face equally pressing challenges; the Washington, D.C., metro area, for example, anticipates severe stop-and-go highway congestion conditions to be prevalent throughout the region by 2040.<sup>14</sup>

**Intercity Passenger Travel**

According to commercially developed population and economic projections,<sup>15</sup>

<sup>9</sup>Moody’s Analytics, Inc., 2012.

<sup>10</sup>Regional Plan Association, *Tomorrow’s Transit* (October 2008); Data source: New York Metropolitan Transportation Council Technical Memorandum by Urbanomics June 15, 2005.

<sup>11</sup>The NEC Master Plan Working Group, *The Northeast Corridor Infrastructure Master Plan* (May 2010).

<sup>12</sup>New York Metropolitan Transportation Council, *Hub-Bound Travel*, 2011.

<sup>13</sup>Regional Plan Association, *Tomorrow’s Transit* (October 2008); Data source: Metropolitan Transportation Authority - Regional Transportation Forecast Model - O/D Trip Matrices - 2005/2030 for Autos and Transit Trips.

<sup>14</sup>“Constrained Long-Range Plan, Congestion,” Metropolitan Washington Council of Governments, accessed May 2012, <http://www.mwcog.org/clrp/performance/congestion.asp>.

<sup>15</sup>Moody’s Analytics, Inc., 2010 data retrieved from Forecast and Historical Databases, <http://www.economy.com/home/products/databases.asp?src=left-nav>.



total intercity trips will reach approximately 230 million by 2040, representing about a 45 percent increase from the 161 million trips in 2010<sup>16</sup> (see **Figure 4**). In fact, a study undertaken for the CONEG, a non-partisan association of governors, concluded that by 2025 (about halfway into NEC FUTURE's 2040 planning horizon) travelers in the Northeast region<sup>17</sup> would make over 200 million annual long distance trips to destinations within the region, each of which crossed a state line and was over 100 miles in length.<sup>18</sup>

### Goods Movement

In addition to increases in regional and intercity passenger travel demand, overall population and economic growth in the region is expected to generate growth in goods movement. The existing freight demand of 40 tons per capita annually is forecast to increase as the population of the region continues to grow.<sup>19</sup> Estimates from the Federal Highway Administration's (FHWA) Freight Analysis Framework predict that by 2040, freight movement to and from the nine jurisdictions included in the Study Area will increase by 34 percent over 2010 totals, including 31 percent and 26 percent increases in truck and rail freight volumes, respectively. The growth in rail freight tonnage will require additional rail freight traffic along the NEC, increasing the potential for conflicts with projected increases in passenger rail service in the corridor. Growth in truck freight, which will continue to handle the majority of freight in the corridor, will increase congestion on already crowded highways in the Northeast region.

#### 2.2.4 Ability of Transportation Network to Meet Future Demand

The NEC FUTURE Study Area is served by the nation's most comprehensive and complex transportation network, providing a broad range of passenger and

Figure 5: Study Area – North



freight transportation services. **Figures 5 and 6** identify the main highway, commuter and intercity rail networks and airports. The following sections discuss the region's existing highway, air and rail networks and services, the considerable challenges they face in meeting existing demand levels and the even larger challenges predicted when faced with the projected growth in travel demand.

### Highway Network and Service Issues

The Northeast is served by a dense network of Interstate and secondary state and federal highways, which collectively handle the bulk of the local, regional and intercity person and goods movement trips, including close to 90 percent of all intercity trips (i.e., those greater than 75 miles) within the Study Area. The Study Area's highway system, especially near

<sup>16</sup>Moody's Analytics, Inc., 2010.

<sup>17</sup>The CONEG study area included Maine to Washington, D.C., but did not include Virginia.

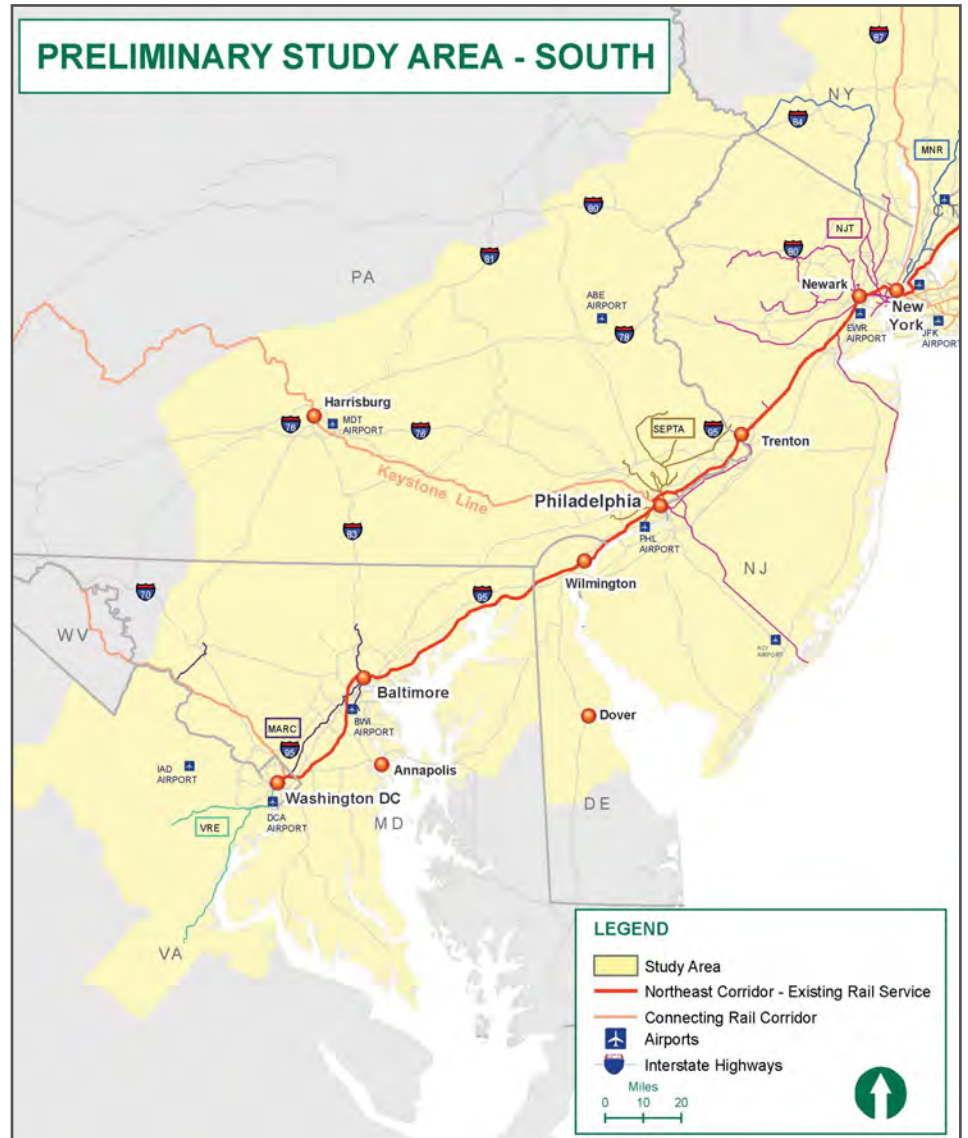
<sup>18</sup>CONEG, "Regional Context."

<sup>19</sup>NEC Commission Freight Committee, "Current and Future Freight Use of the NEC" (March 2012).

the major metropolitan areas served by the NEC, is already heavily congested.<sup>20</sup> The Interstate 95 corridor is the main continuous north-south highway within the market area of the NEC (see **Figures 5 and 6**) and serves the Cross Bronx Expressway, the most congested highway segment in the country.

FHWA studies on the nation's National Highway System<sup>21</sup> indicate that by 2035 many major highway routes in the NEC FUTURE Study Area, especially those near the heavily developed urban areas along the NEC, will be operating above capacity and under congested conditions. A 2040 vision study<sup>22</sup> by the I-95 Corridor Coalition, an alliance of transportation agencies, toll authorities, and related organizations from Maine to Florida, indicates a 70 percent increase in unconstrained demand<sup>23</sup> for roadway travel by 2040, assuming no substantial changes in competing modes. The urban Interstate roadways would be unable to handle the expected growth, resulting in an 84 percent increase in delay. The study's conclusions indicated that other modes would also have to add capacity to maintain their existing share<sup>24</sup> of regional demand. A more sustainable future would require tripling local/commuter transit

Figure 6: Study Area – South



<sup>20</sup>I-95 Corridor Coalition, *A 2040 Vision for the I-95 Coalition Region: Supporting Economic Growth in a Carbon-Constrained Environment* (December 2008), [http://www.i95coalition.org/i95/Portals/0/Public\\_Files/pm/reports/2040%20Vision%20for%20I-95%20Region\\_Full%20Report.pdf](http://www.i95coalition.org/i95/Portals/0/Public_Files/pm/reports/2040%20Vision%20for%20I-95%20Region_Full%20Report.pdf).

<sup>21</sup>"National Statistics and Maps," Federal Highway Administration, accessed April 2012, [http://www.ops.fhwa.dot.gov/freight/freight\\_analysis/nat\\_freight\\_stats](http://www.ops.fhwa.dot.gov/freight/freight_analysis/nat_freight_stats).

<sup>22</sup>I-95 Corridor Coalition, *2040 Vision*.

<sup>23</sup>Unconstrained demand is not limited by the capacity of the existing system

<sup>24</sup>I-95 Corridor Coalition, *2040 Vision*, ES 4.



ridership and increasing rail passenger ridership eight fold.<sup>25</sup>

Also, the existing highway system faces the challenge of upgrading an Interstate highway network substantially built during the 1950s and 1960s and older parkways and other highways built earlier in the 20<sup>th</sup> century. Rebuilding these heavily congested roadways under full operation will be challenging, creating substantial disruption and reduced effective capacity during those periods.

Over the past decade, intercity bus operations have responded to increases in travel demand in many markets throughout the country. Since 2006, intercity bus operations have experienced nationwide growth, much of which is attributable to low-cost curbside bus operations in the Northeast. Those operations grew by 23.9 percent<sup>26</sup> between 2009 and 2010 alone, driven largely by new Megabus hubs in Philadelphia and Washington, D.C.<sup>27</sup> Both the larger national bus operators and smaller carriers continue to provide expanded services that will further expand their role in the major Northeast travel markets (e.g., NYC-Boston, NYC-Philadelphia, etc.).<sup>28</sup> Nonetheless, intercity buses are dependent on the regional highway system, which, as noted, already is

*Table 1: FAA 2010 Annual Boardings and 2040 Forecasts for “Core Airports” in the Corridor (000s)*

Airport	2010	2040	Growth
JFK	22,395	64,707	189%
Newark	16,498	34,281	108%
Philadelphia	14,827	30,972	109%
Boston	13,234	24,264	83%
LaGuardia	11,801	16,508	40%
Dulles	11,160	35,676	220%
BWI	10,611	23,321	120%
Reagan National	8,536	11,934	40%
<b>Total Boardings</b>	<b>109,062</b>	<b>241,663</b>	<b>122%</b>

Source: FAA, Terminal Area Forecast Summary, Fiscal Years 2011 to 2040, 2012 (data from page 9)

congested and faces an unsustainable increase in demand in the coming decades.

### Aviation Network and Service Issues

The region’s airports, including some of the nation’s largest, serve travel within and outside of the Northeast. **Table 1** shows boardings in 2010 and the FAA’s projected growth in air travel at key airports<sup>29</sup> in the Northeast region during the NEC FUTURE planning horizon. As shown, these airports handled over 100 million passengers in 2010, and substantial growth is projected by 2040.<sup>30</sup> However, with capacity constraints on the current aviation infrastructure, the existing air

network has been fraught with delay<sup>31</sup> and these airports are already among the nation’s most congested.<sup>32</sup> The top four most delay-prone airports in the country are found in the Northeast,<sup>33</sup> with New York metro area airport delays alone accounting for roughly one-third of the air service delays nationwide. These delays spill over into the rest of the nation’s air network – resulting in economic and social costs for passengers, airlines and others.<sup>34</sup> The costs attributed to estimated passenger delays and associated higher fares for the major airports of the NEC FUTURE Study Area are expected to increase from over \$2.4 billion in 2010 to \$7 billion by 2025.<sup>35</sup>

<sup>25</sup>The Coalition’s 2040 Vision study used a vision of inter-city rail which had been developed for the National Surface Transportation Policy and Revenue Study Commission to guide its assumptions about passenger rail in the future.

<sup>26</sup>Excludes Chinatown bus operations.

<sup>27</sup>Chaddick Institute for Metropolitan Development, DePaul University, “The Intercity Bus: America’s Fastest Growing Transportation Mode 2010 Update on Scheduled Bus Service” (2010), [http://las.depaul.edu/chaddick/docs/Docs/Intercity\\_Bus\\_2010\\_Update\\_Final.pdf](http://las.depaul.edu/chaddick/docs/Docs/Intercity_Bus_2010_Update_Final.pdf)

<sup>28</sup>Chaddick Institute for Metropolitan Development, DePaul University, “The Intercity Bus Rolls to Record Expansion: 2011 Update on Scheduled Motor Coach Service in the United States” (2011), <http://las.depaul.edu/chaddick/ResearchandPublications/index.asp>.

<sup>29</sup>T. G. Green Airport in Rhode Island is not treated as a Core Airport and its forecasts were not included in this FAA source material. This airport has a presently underused station along the NEC rail line.

<sup>30</sup>Federal Aviation Administration (FAA), Terminal Area Forecast Summary Fiscal Years 2011 to 2040 (2012), [http://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/aviation\\_forecasts/taf\\_reports/media/TAF\\_summary\\_report\\_FY20112040.pdf](http://www.faa.gov/about/office_org/headquarters_offices/apl/aviation_forecasts/taf_reports/media/TAF_summary_report_FY20112040.pdf).

<sup>31</sup>Airport Cooperative Research Program (ACRP), “ACRP Report 31: Innovative Approaches to Addressing Aviation Capacity Issues in Coastal Mega-regions,” Transportation Research Board of the National Academy of Sciences (2010), accessed April 2012, [http://onlinepubs.trb.org/onlinepubs/acrp/acrp\\_rpt\\_031.pdf](http://onlinepubs.trb.org/onlinepubs/acrp/acrp_rpt_031.pdf).

<sup>32</sup>FAA, Terminal Area Forecast.

<sup>33</sup>“Chronically Delayed Flights,” United States Department of Transportation Bureau of Transportation Statistics, accessed April 2012, [http://www.bts.gov/programs/airline\\_information/chronically\\_delayed\\_flights/](http://www.bts.gov/programs/airline_information/chronically_delayed_flights/).

<sup>34</sup>ACRP, “ACRP Report #31.”

<sup>35</sup>ACRP, “ACRP Report #31.”

Recent studies<sup>36</sup> by the FAA addressing capacity limitations and airports in the Northeast highlight that many airports, even with planned Next Generation (NextGen) air traffic control and airport capacity growth, will be unable to handle the projected air travel demands. These studies further note the need to address both alternative modes for some of these intercity trips and improved transit connections to the airports. Given these limitations, policy analysts at the FAA have highlighted the need to better understand options to meet growing travel demand in high-density travel corridors, including increased high-speed ground transportation.

### NEC Rail Network and Service Issues

The NEC and its connecting corridors (New Haven-Hartford-Springfield [NHHS], Empire, and Keystone), shown in **Figures 5 and 6**, are among the most heavily utilized rail networks in the world. Use of the NEC is shared by intercity, commuter and freight operations. The extensive passenger and freight rail system reflects a history of dense development around rail networks. Approximately 80 percent of the region's residents live within 25 miles of an existing or proposed intercity passenger rail service.<sup>37</sup> The NEC moves more than 259 million passengers<sup>38</sup> and approximately 370,000 tons of freight per year.<sup>39</sup>

Amtrak owns 80 percent of the 457-mile NEC, with the balance shared by Connecticut DOT, Massachusetts and MTA Metro-North.<sup>40</sup> There are also several connecting corridors, which have multiple owners including Amtrak, individual states, and freight railroads. This varied network is depicted on **Figures 5 and 6**.

Amtrak operates intercity rail service throughout the NEC and its connecting corridors. Amtrak's Acela Express is its premium service, reaching speeds of 150 mph between Boston and New Haven and 135 mph in segments south of New York City. Amtrak's Northeast Regional service, as well as state corridor services that traverse corridor segments en route to off-corridor destinations (the Vermonter, Ethan Allen, Adirondack, Maple Leaf, Keystone, Pennsylvanian, Amtrak Virginia and Carolinian), operate at speeds of up to 125 mph. These services run between Boston, New York City, Washington, D.C., and intermediate stations. Amtrak also operates Empire service between New York, Albany and Buffalo extending to Toronto, as well as limited Northeast Regional, Vermonter, and Shuttle service on the NHHS Rail Corridor. Near-term plans also call for Boston-Springfield-New Haven service on the Inland Route and the NHHS Rail Corridor. Longer-distance Amtrak trains heading to Chicago, New Orleans, Miami

and other locations outside the region also operate over the NEC. Amtrak operates more than 150 daily intercity trains, carrying 13 million passengers annually on the NEC.

The following eight commuter rail systems operate about 2,200 weekday trains transporting 246 million annual passengers on portions of the NEC<sup>41</sup> (see **Figures 5 and 6**):

- Massachusetts Bay Transportation Authority (MBTA)
- Shore Line East (SLE)
- MTA-Metro-North Railroad (MNR)
- MTA-Long Island Rail Road (LIRR)
- New Jersey Transit (NJ TRANSIT)
- Southeast Pennsylvania Transportation Authority (SEPTA)
- Maryland Area Regional Commuter (MARC)
- Virginia Railway Express (VRE)

Rhode Island and Delaware support extensions of commuter rail services to their states via MBTA and SEPTA, respectively.

Both commuter and intercity services on the NEC already face major challenges that limit current service and will further constrain their ability to meet future passenger rail demand:

<sup>36</sup>Federal Aviation Administration, *Capacity Needs in the National Airspace System, 2007-2025, An Analysis of Airports and Metropolitan Area Demand and Operational Capacity in the Future* (prepared by the MITRE Corporation, May 2007); ACRP; "ACRP Report #31."

<sup>37</sup>CONEG, "Regional Context."

<sup>38</sup>The NEC Master Plan Working Group, *Infrastructure Master Plan*.

<sup>39</sup>NEC Commission Freight Committee, "Current and Future Freight Use of the NEC" (March 2012).

<sup>40</sup>The NEC Master Plan Working Group, *Infrastructure Master Plan*.

<sup>41</sup>The NEC Master Plan Working Group, *Infrastructure Master Plan*.

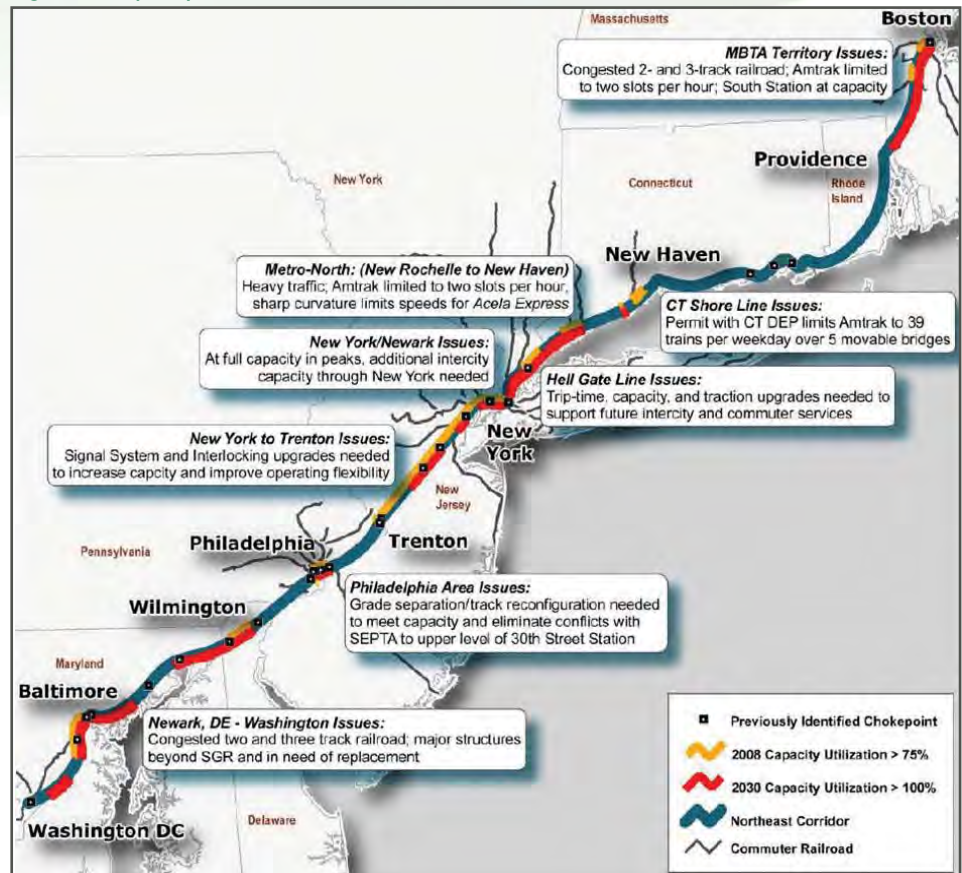


- Severe capacity constraints at critical chokepoints along the corridor limit service expansion or improvement, reduce operational efficiency, and increase operating and maintenance costs (see **Figure 7**).
- Reliability and performance problems tied to limited track capacity and aging infrastructure create delays, increase trip times, and degrade service quality.
- Speed and travel time performance measures are inconsistent with world-class high-speed passenger service found in other major rail corridors around the world.

### NEC State-of-Good-Repair Challenge

Generally, the NEC rail network lacks the capacity and overall infrastructure to provide reliable and convenient service in those segments where competing intercity and commuter rail services strain the network's capabilities. These conditions make it difficult to accommodate existing riders or attract new riders, as the functionally obsolescent infrastructure cannot provide the required reliability and quality of service even for today's market. Without actions, these problems will worsen. For example, rail operating statistics collected on a weekday in November 1995 by NJ TRANSIT indicate that 14 NJ TRANSIT trains heading into PSNY between 7:25 a.m. and 8:50 a.m. were delayed an average of 21 seconds by unanticipated incidents. Data for the same period in 2005 showed 28 trains delayed an average of 6.8 minutes.<sup>42</sup> Conditions creating such delays have only worsened in the subsequent years. Incremental maintenance and repairs to address problems resulting from aging infrastructure will only result in further service disruptions and degradations in service quality during construction. As indicated in the *NEC Infrastructure Master Plan*, a comprehensive effort to

Figure 7: Capacity Constraints on the NEC



Source: NEC Infrastructure Master Plan (May 2010)

address the NEC's substantial state-of-good-repair issues is needed. The corridor railroads need those long-delayed repairs and upgrades to reliably provide the service levels to meet today's demand requirements. These improvements, some of which will likely include some capacity and performance enhancements for affected sections of the NEC, will also provide a solid foundation for the types of more extensive capacity and travel time improvements being considered in NEC FUTURE to meet the future demands faced by the NEC states and passenger railroads.<sup>43</sup>

In the *2010 NEC Infrastructure Master Plan*, commuter rail demand is projected to grow 58 percent by 2030 (from 246 to 389 million annual passengers), requiring

a 40 percent increase in commuter trains. Similarly, intercity rail demand over that period will rise by 76 percent (from 13 million riders in 2010 to 23 million by 2030). By that time, the number of over-capacity NEC infrastructure segments will more than triple without substantial improvements and operational changes (see **Figure 7**).<sup>44</sup>

Freight railroads operating on the NEC include Consolidated Rail Corporation (Conrail), Providence and Worcester, Norfolk Southern, and CSX Transportation (CSXT). Generally, freight trains carry a variety of commodities and operate during designated operating windows, often at night or with short-distance daytime runs.<sup>45</sup> Freight traffic includes a variety

<sup>42</sup>NJ TRANSIT Rail Operations, 2006.

<sup>43</sup>The NEC Master Plan Working Group, *Infrastructure Master Plan*.

<sup>44</sup>The NEC Master Plan Working Group, *Infrastructure Master Plan*.

<sup>45</sup>NEC Commission Freight Committee, "Current and Future Freight."

of movements along the corridor itself, with local freight serving customers on customers' sidings and branch lines with service provided by shortline railroads.<sup>46</sup> Freight demand along I-95 is projected to more than double over the next 30 years.<sup>47</sup> With over 40 percent of large-truck traffic<sup>48</sup> traveling on the already heavily congested interstate highway system, alternative modes of travel such as rail are an important option for meeting increasing future freight demand, which could put pressure on the already constrained passenger rail network. Rail freight movement on the NEC has already reached the levels forecast for 2030 in the NEC Infrastructure Master Plan, growing from 50 to 72 trains a day.<sup>49</sup>

### 2.2.5 Institutional and Operating Challenges Constrain the Ability of the Transportation Network to Address Needs

The ability to define a common solution to provide reliable, safe, time-competitive and efficient transportation across the Northeast region has and will continue to be limited by a variety of factors:

- Federal and state policies treat transportation modes differently, depending on funding sources, federal and state law, and infrastructure ownership. This includes separate funding mechanisms for highways, air, transit and Amtrak. Policies also differ based on mode and infrastructure owner.
- Several different owners and operators share responsibility for

delivering passenger and freight rail service along the NEC. The different operating requirements for intercity, commuter and freight railroads, in combination with their specific service requirements, impact the mix, capacity and reliability of service overall. Commuters focus most on frequency and reliability; for intercity travelers, trip time is often critical and modal decisions are also often based on price. Over time, service providers have responded to these needs with a variety of transportation options that are often duplicative and consume available transportation infrastructure capacity inefficiently.

- Intensive development along and around transportation corridors and hubs limits the ability to expand facilities or otherwise address congestion and capacity constraints. This impacts rail lines, airports and highways alike, and prevents redistribution of trips to more efficient and travel-appropriate modes.

Equally as important, creating a planning platform to formulate a regional approach to transportation has been a challenge because the Northeast consists of multiple independent states and jurisdictions, each with its own interests and transportation policies. Planning efforts like those undertaken by the I-95 Corridor Coalition and the Coalition of Northeastern Governors have helped to define the Northeast region's

transportation needs. However, there has yet to be a regionally-based approach to define and implement a balanced, efficient regional transportation network.

Regional planners and air and highway service interests have called for an increased role for rail modes, but the funding and institutional governance necessary to increase rail capacity have been lacking. The FRA's NEC FUTURE program is a critical initial step to creating the needed regional rail planning platform.

### 2.2.6 Regional Considerations

#### Energy and Environmental

The Northeast's overall high-density settlement pattern is a legacy of development that occurred before widespread use of the automobile. It is expected that between 2010 and 2040, population will grow by 13 percent, an increase of approximately 6.7 million people.<sup>50</sup> If this new population is accommodated in the similarly land-intensive manner of recent decades, important rural and open spaces will disappear, putting pressure on ecological and natural systems. Water quality would degrade both by the addition of impervious surface and because natural water recharge systems, such as the Delaware River Basin (which provides drinking water for 15 million people),<sup>51</sup> would be degraded by the pressure of increased land utilization. A passenger rail system would be part of a compact growth solution that concentrates new

<sup>46</sup>NEC Commission Freight Committee, "Current and Future Freight."

<sup>47</sup>NEC Commission Freight Committee, "Current and Future Freight."

<sup>48</sup>I-95 Corridor Coalition, 2040 Vision.

<sup>49</sup>NEC Commission Freight Committee, "Current and Future Freight."

<sup>50</sup>Moody's Analytics, Inc., 2012.

<sup>51</sup>Regional Plan Association, *Northeast Megaregion 2050: A Common Future* (November 2007).



growth and development around stations, thus conserving land and easing pressure on natural resources.

Furthermore, based on national data on passenger travel and energy use, intercity rail is a more energy-efficient mode compared to car or air travel.<sup>52</sup> Rail is 26 percent less energy intensive than travel by car, and 17 percent less energy intensive than air travel. Because carbon emissions are related to energy use, rail has comparably reduced carbon emissions on a per passenger-mile basis versus car travel and air travel.<sup>53</sup>

### Economic

The Northeast region already endures costs from delays created by congestion of its transportation network. Various studies have confirmed this:

- Highway congestion and air travel delays together cost the Northeast almost \$30 billion a year in lost productivity.<sup>54</sup>
- The Northeast contains three of the seven most congested metropolitan areas, with roughly an additional \$1,100 a year in congestion costs<sup>55</sup> incurred per auto commuter.<sup>56</sup>
- The congestion and lack of redundancy of the NEC, highlighted by the recent problem in the NEC's Hudson River tunnels into New York City – a common problem throughout this highly congested and often antiquated corridor – resulted in extensive delays from Boston to Washington.<sup>57</sup>

Future burdens due to reduced mobility and higher congestion would only intensify these pressures and their associated costs will constrain the economic

competitiveness of the region. These economic burdens would reduce the attractiveness of the Northeast region's key center city locations, leading to losses to other domestic and international corridors and providing an incentive for less efficient and sustainable growth in suburban and exurban areas.<sup>58</sup> This has particular economic importance given that the NEC's four major "hub" metropolitan areas generate roughly 88 percent of the corridor's GDP.<sup>59</sup> The core cities in these metropolitan areas collectively grew by roughly 8 percent over the 1990-2010 period, although Philadelphia and Washington, D.C. experienced 1 to 4 percent declines in population over this period. While the Northeast is the densest region in the U.S., much of the region's recent growth has occurred outside of core areas, and greater population and employment dispersion has increased travel patterns that overcrowd highways.<sup>60</sup>

Investment in the NEC and similar efficient investments in the other intercity passenger and freight networks to help meet the mobility requirements of a growing corridor is both a transportation and an economic need. The Northeast population and employment projections available from Moody's Economy.com (and used for this study) assume that infrastructure and services would be improved sufficiently to maintain stable productivity and meet future mobility needs sufficiently to support that productivity. Actions that would worsen passenger and freight mobility would reduce productivity and lower projected growth.<sup>61</sup> These factors collectively confirm that major investments in the NEC and other modes are needed for the Northeast to grow and remain

economically competitive in national and international markets.

Environmental, energy, and economic impacts from growth are not only local, but cross jurisdictional boundaries through waterways, air quality and energy consumption, and regional economic development. Only a regional approach to addressing these impacts can result in a comprehensive solution. This emphasizes the need for a collaborative process to understand how local actions can affect larger geographic areas and vice versa. Coordinated improvements to the passenger rail system and other transportation networks can help to alleviate some of the potentially negative effects of growth.

### Redundancy

In addition to environmental and economic considerations, transportation redundancy is needed to address safety and security considerations and to support overall improvements to the Northeast's transportation system. Rail network redundancy is critical to safe, efficient and reliable rail operations in the corridor. In the event of the unforeseen loss of essential network links, the availability of redundant components provides the necessary back-up that can maintain the services on which the economies of the larger, more rail-dependent urban areas depend. In addition, redundant network elements greatly facilitate completion of extensive improvements to often 100+ year-old infrastructure (e.g., the North River Tunnels into Manhattan) that would otherwise result in extensive delays and higher costs for these activities.

<sup>52</sup>Oak Ridge National Laboratory, *Transportation Energy Data Book: Edition 27*, ORNL-6981 (prepared for the U.S. Department of Energy, 2008).

<sup>53</sup>Oak Ridge National Laboratory, *Transportation Energy Data Book: Edition 27*, ORNL-6981 (prepared for the U.S. Department of Energy, 2008).

<sup>54</sup>Texas Transportation Institute (TTI), *2011 Urban Mobility Report* (September 2012); ACRP, "ACRP Report #31."

<sup>55</sup>Congestion cost is calculated using the value of travel time delay and excess fuel consumption.

<sup>56</sup>TTI, *Urban Mobility Report*.

<sup>57</sup>"Commuter Train Derails under Hudson River in New York City Disrupts Trains Throughout the Northeast," *Washington Post*, August 9, 2011.

<sup>58</sup>Newark Regional Business Partnership, *Northeast Corridor Action Plan: A Call for a New Federal-State Partnership* (prepared by Alan Voorhees Transportation Center of Rutgers and Hamilton, Rabinovitz & Alschuler, Inc.).

<sup>59</sup>Moody's Analytics, Inc., 2010.

<sup>60</sup>-95 Corridor Coalition, *Northeast Rail Operations Study (NEROps) Phase I Final Report* (June 2007), [http://i95coalition.org/i95/Portals/0/Public\\_Files/pm/reports/\\_NEROps-Final-Report\\_COMPLETE\\_071607.pdf](http://i95coalition.org/i95/Portals/0/Public_Files/pm/reports/_NEROps-Final-Report_COMPLETE_071607.pdf).

<sup>61</sup>Moody's Analytics, Inc. "Model Methodology: The Moody's Analytics U.S. State Economic Model System" (January 2011).



## 2.3 PROGRAM GOALS AND OBJECTIVES

The NEC FUTURE Goals and Objectives will form the basis for evaluating and screening alternatives and eventually recommending a Preferred Alternative. As such, the program goals must broadly define those elements that proposed alternatives should possess to best address identified needs and meet the program purpose. In light of the critical role that the NEC and its connecting corridors play in the overall mobility and economic vitality of the Northeast, the program goals must reflect not only a long-term vision and roadmap for future investment, but a phased approach to implementing those more urgent, shorter term improvements necessary to meet current capacity requirements. Similarly, the program goals and objectives must recognize the complex mix of ownership and service provider needs ranging from high-speed intercity travel to daily commuter services and goods movement.

Seven goals and supporting objectives have been developed to address the market growth, transportation network capacity, reliability, connectivity, and other needs of NEC FUTURE articulated in Section 2. While the program goals more broadly define those elements that proposed alternatives should possess, the objectives provide established metrics for fair comparison across the range of alternatives to gauge their potential to meet the purpose of the investment program. These broad goals and specific objectives will continue to be refined through dialogue

with the stakeholders, agencies and the public during the program Scoping process to provide the basis for evaluating whether identified alternatives meet the overall purpose and need for the program. The seven goals and objectives of the overall program are to:

- Develop a NEC rail network that is part of an integrated comprehensive passenger rail transportation solution for the Northeast and complements planned investments in other modes serving the region.
- Develop program alternatives that would provide attractive, competitive, high-quality passenger rail service that offers customers:
  - Capacity (frequency, train seating) to meet growing demand
  - Improved connectivity (timed connections, network integration, station design, multimodal access)
  - Competitive travel times
  - High levels of reliability
  - Safe and secure travel
  - Convenient and fare-competitive service
  - A user-friendly system
- Define a network that strengthens intermodal connections between intercity passenger rail modes and corridors, regional and local transit services, and other modes.
- Produce a market-supported intercity rail investment plan that provides near- and long-term solutions to the

Northeast region's mobility problems and supports the region's ability to meet expanding freight rail demand.

- Create a phased improvement program that reflects funding and financial limitations as well as the challenges of improving the existing corridor under full operation.
- Establish an intercity rail investment plan that supports the Northeast region's need to reduce environmental impacts and energy use resulting from projected growth in travel demand.
- Produce a cost-effective investment plan that identifies and encourages private sector involvement in future corridor improvements and operations.

## 2.4 PLANNING CONTEXT

The 2008 Passenger Rail Investment and Improvement Act (PRIIA) and the 2009 American Recovery and Reinvestment Act (ARRA) established guidelines for the funding and development of intercity and high-speed rail corridors in the U.S. On April 1, 2010, the FRA published the FY 2010 Multi-State Planning Proposal Solicitation under the High-Speed Intercity Passenger Rail (HSIPR) Program, inviting proposals for federally-led, multi-state high-speed and intercity passenger rail corridor planning demonstration projects.<sup>62</sup> The FRA received proposals from various groups of states and a proposal submitted collectively by the NEC states was selected by the FRA to fund and advance a PRCIP for the NEC.

<sup>62</sup>In the FY 2010 Department of Transportation Appropriations Act, Congress supported the use of planning funds to facilitate development of a Service Development Plan (SDP) and related Environmental Impact Statement (EIS) for high-speed rail corridors located in multiple states.





### 3. THE NEC FUTURE PROGRAM

NEC FUTURE includes two program components: an SDP and a Tier 1 EIS conducted under NEPA. Development of these documents will be carried out in three phases. The following reviews these two project components and the planned phasing of their various elements.

#### 3.1 SERVICE DEVELOPMENT PLAN

An SDP provides a platform to improve existing rail service (e.g., faster or more frequent service) and/or develop new service to meet the growing travel needs of the public. The SDP defines these improvements and evaluates the operational, network and financial impacts of the proposed changes, with the goal of weighing the benefits and costs of the proposed investment. The SDP for NEC FUTURE must include:

- The program’s rationale (including purpose and need),
- Service/operating plan and a prioritized capital plan,
- An implementation plan (including project management approach, stakeholder agreements and financial plan), and
- An assessment of the benefits and costs of implementing the changes.

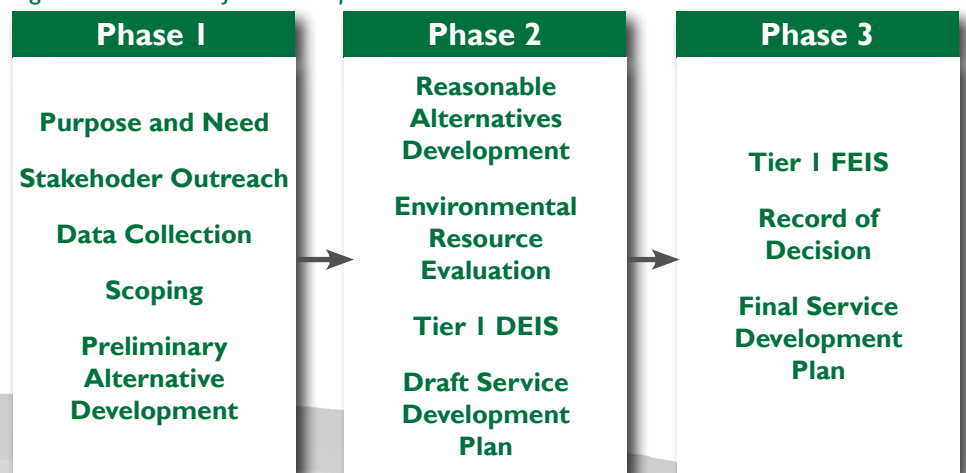
As shown in Section 3.3, the Draft SDP will be developed at the end of Phase 2 of NEC FUTURE, based on the program alternatives identified under Phase 1 and further developed, screened and analyzed in the Tier 1 EIS review process in Phase 2. It will then be finalized at the completion of Phase 3.

#### 3.2 TIER 1 EIS REVIEW

For major rail corridors such as the NEC that require substantial improvements to implement expanded conventional<sup>63</sup> or high-speed rail services,<sup>64</sup> FRA is initiating a “Service NEPA” or “Tier 1” review to address such broad questions as the type of service(s) being proposed, the markets to be served, route alternatives and the types of operations envisioned.

This type of environmental review, which will assess the broad, corridor-wide impacts of a Preferred Alternative, must be completed before any substantial investments in the corridor can be made. Site-specific actions required to implement the Preferred Alternative will then go through a “Project NEPA” or Tier 2 environmental review. Further details on this tiered environmental review process are included in Section 5. Consistent with NEPA and FRA requirements, a Tier 1 Draft EIS (DEIS) will be prepared for public review and comment and then a Tier 1 Final EIS (FEIS) will be issued. The final federal action is the issuance of a Record of Decision (ROD) for the Tier 1 FEIS.

Figure 8: Phased Project Development



<sup>63</sup>Conventional rail is defined by the FRA in its Vision for High-speed Rail in America as “Traditional intercity passenger rail services of more than 100 miles with as little as one to as many as 7-12 daily frequencies; may or may not have strong potential for future high-speed rail service. Top speeds of up to 79 mph to as high as 90 mph generally on shared track. Intended to provide travel options and to develop the passenger rail market for further development in the future.”

<sup>64</sup>High-speed rail is defined by the FRA in PRIIA as “intercity rail passenger service that is reasonably expected to achieve operating speeds of at least 110 miles per hour.”



### 3.3 NEC FUTURE PHASES AND SCHEDULE

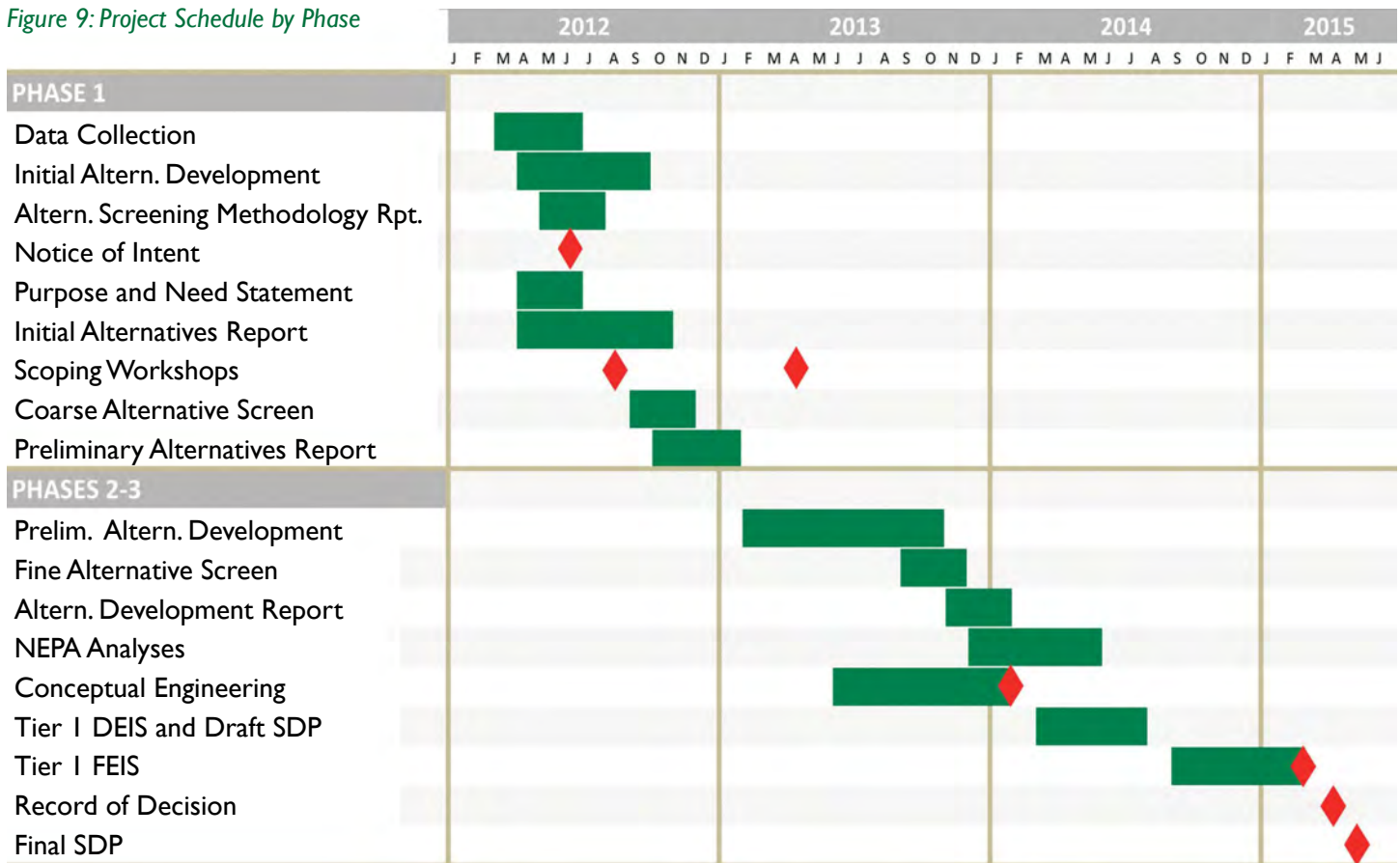
The NEC FUTURE program will be advanced in three phases (see **Figure 8**). During Phase 1, the data collection effort will be carried out concurrent with the development of the Purpose and Need Statement and Preliminary Alternatives. During this phase, an Initial List of Alternatives developed with input through the agency and public scoping processes will be screened against an initial set of criteria (see Section 4 for further details on the alternatives development process) to create a shorter list of Preliminary Alternatives.

The public scoping process will also be held during Phase 1. Scoping is a process which provides an opportunity for public, stakeholder, and agency involvement early in the project development process. The feedback provided during scoping will help to guide the identification of reasonable alternatives and potential environmental considerations.

Phase 2 of the NEC FUTURE program will include the further service planning and development and screening of Build Alternatives as well as the preparation of the Tier 1 DEIS which documents existing environmental conditions within

the study area and assesses the potential impacts and benefits of proposed Build Alternatives. Phase 3 will include the Tier 1 FEIS, ROD, and Final SDP. **Figure 9** shows the projected schedule for these three phases, with Phase 1 completed in early 2013 and Phases 2 and 3 completed over the subsequent two years, culminating in early 2015.

Figure 9: Project Schedule by Phase





## 4. NEC FUTURE ALTERNATIVES DEVELOPMENT

### 4.1 ALTERNATIVES DEVELOPMENT PROCESS

The NEC FUTURE alternatives development and screening process will be closely tied to the program’s Purpose and Need, and associated Goals and Objectives. The alternatives will address market growth, transportation network capacity, reliability, connectivity, and environmental and economic needs of the NEC.

A No Action Alternative (required under NEPA procedures) and Build Alternatives will be developed and considered as part of the program’s Tier I EIS (see Section 5). The No Action Alternative represents the future rail system with planned/funded improvements. The Build Alternatives consist of potential service, infrastructure upgrades and alignment recommendations developed by the project team and by stakeholders and the public.

The scoping process and ongoing stakeholder outreach discussed in Section 7 will provide input to the development

of the Initial List of Alternatives, a broadly defined set of potential alternatives further described in Section 4.2.2. The Build Alternatives will be developed at a broad corridor level and will focus on addressing the NEC transportation needs, described by the Purpose and Need Statement (see Section 2), including travel markets, general alignments/physical improvements, service types/operations, general station locations and technology. **Figure 10** shows the Alternatives Development Process.

### 4.2 INITIAL PROGRAM ALTERNATIVES

#### 4.2.1 The No Action Alternative

Development of a No Action Alternative is required under NEPA regulations (Part 1502 – Environmental Impact Statement). The No Action Alternative – representing future conditions in the study area in the absence of the proposed action (alternative infrastructure and service improvements in the NEC), provides a

baseline against which future conditions of these proposed alternatives can be compared. For NEC FUTURE, the No Action Alternative will include on-going, funded or planned transportation improvements which can reasonably be expected to be in place by the project’s future planning horizon of 2040. The No Action Alternative will reflect planned improvements to the air, highway, and rail networks as documented in State and regional long-range plans, federal funding legislation or individual railroad operators’ capital plans.

#### 4.2.2 Initial List of Alternatives

The NEC FUTURE program team will first develop an Initial List of Alternatives, a broadly defined set of potential alternatives that looks to capture all reasonable alternatives that may warrant consideration in the proposed studies. These efforts will take a market-based approach to this process, building up the alternatives around existing services and ridership and projected growth in

Figure 10: Alternatives Development Process

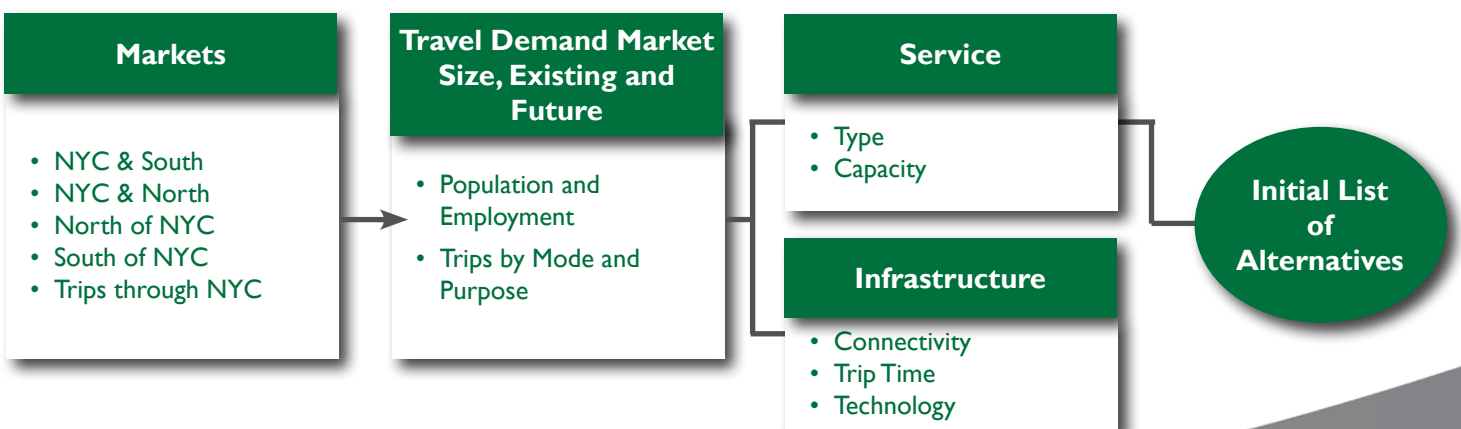
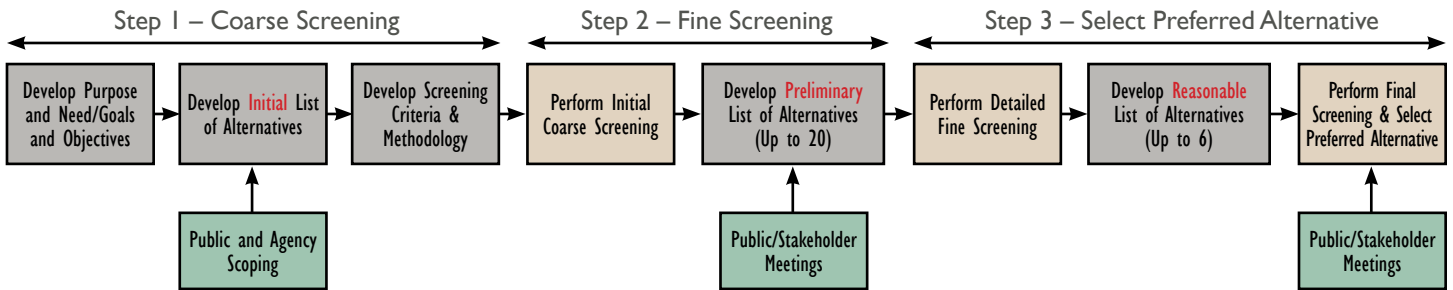


Figure 11: Alternatives Screening Process



travel demand within the following five travel markets that effectively capture all passenger rail travel along the NEC:

- **New York City and South** – Travel between New York City Metropolitan Area (NYC Metro) and locations to the south of NYC Metro (e.g., NYC Metro – Washington, NYC Metro – Philadelphia), including travel south of Washington on the Southeast HSR Corridor.
- **New York City and North** – Travel between New York and locations to the north of New York (e.g., New York – Boston, New York – Providence), including travel to and from locations on the Empire Corridor, the NHHS Corridor, the Vermonter Corridor to Essex Junction, the Springfield – Boston Inland Route Corridor, and the Boston – Brunswick Downeaster Corridor.
- **Trips Through New York City** – Travel between locations south of New York and locations north of New York (e.g., Washington – Boston, Philadelphia – Boston).

- **North of New York City** – Travel between locations north of New York, including locations to and from the connecting corridors (e.g., Boston – Hartford).
- **South of New York City** – Travel between locations south of New York (e.g., Washington – Philadelphia), including locations on the Keystone Corridor and on the Southeast HSR Corridor.

The Initial List of Alternatives will focus on service, railroad operations and infrastructure improvements to enhance service to and within the five NEC markets. The alternatives will include a wide range of proposals, from physical improvements to specific track sections or support facilities (stations, shops and yards, power substations, etc.) on the NEC to corridor-wide improvements to the NEC Spine to increase capacity, enhance safety, modernize the physical plant, improve reliability and on-time performance, and reduce trip time. There could also be proposed service or operational improvements (e.g., more frequent trains and shorter travel time)

that provide rail service to new markets or changes to existing patterns of high-speed, intercity, commuter or freight rail service in one or more markets. In addition, there could be new alignments both along the existing NEC or off-corridor.

Often an alternative will represent a package of individual projects that work together to achieve specific goals in one or more market area. Alternatives will include a proposed phasing for implementation of their individual elements and for their overall plan, and will relate that phasing to other proposed corridor improvements. These phases will range from focused near-term improvements to the longer-term implementation of a corridor-wide proposal with activities extending to the NEC FUTURE’s 2040 planning horizon.



## 4.3 ALTERNATIVES SCREENING PROCESS

### 4.3.1 Three-Step Screening Process

The NEC FUTURE Build Alternatives will be screened in a three-step process, as shown in **Figure 11**. Each level of screening will be directly tied to the program's Purpose and Need and Goals and Objectives and will reflect the available level of detail for the supporting technical analysis at each step in the process. The first (Coarse) screen will reduce the Initial List of Alternatives to a shorter list of Preliminary Alternatives. The second (Fine) screen will result in a list of Reasonable Alternatives. The final screen will further narrow the list of Reasonable Alternatives to a Preferred Alternative. Meetings with the public and corridor stakeholders will occur at every step of this process.

### 4.3.2 Basis for Screening Criteria

Criteria developed to screen the Initial List of Alternatives start off broad and qualitative in nature; as the list of alternatives is reduced, the alternatives are somewhat more defined and the criteria grow more specific and quantitative in nature. As the screening process advances, more refined criteria will allow for the quantification of improvements and greater measurement of the relative differences among alternatives.

Criteria will measure how well the alternatives address the goals of the program. The initial (Coarse) screening criteria may fall within the following categories:

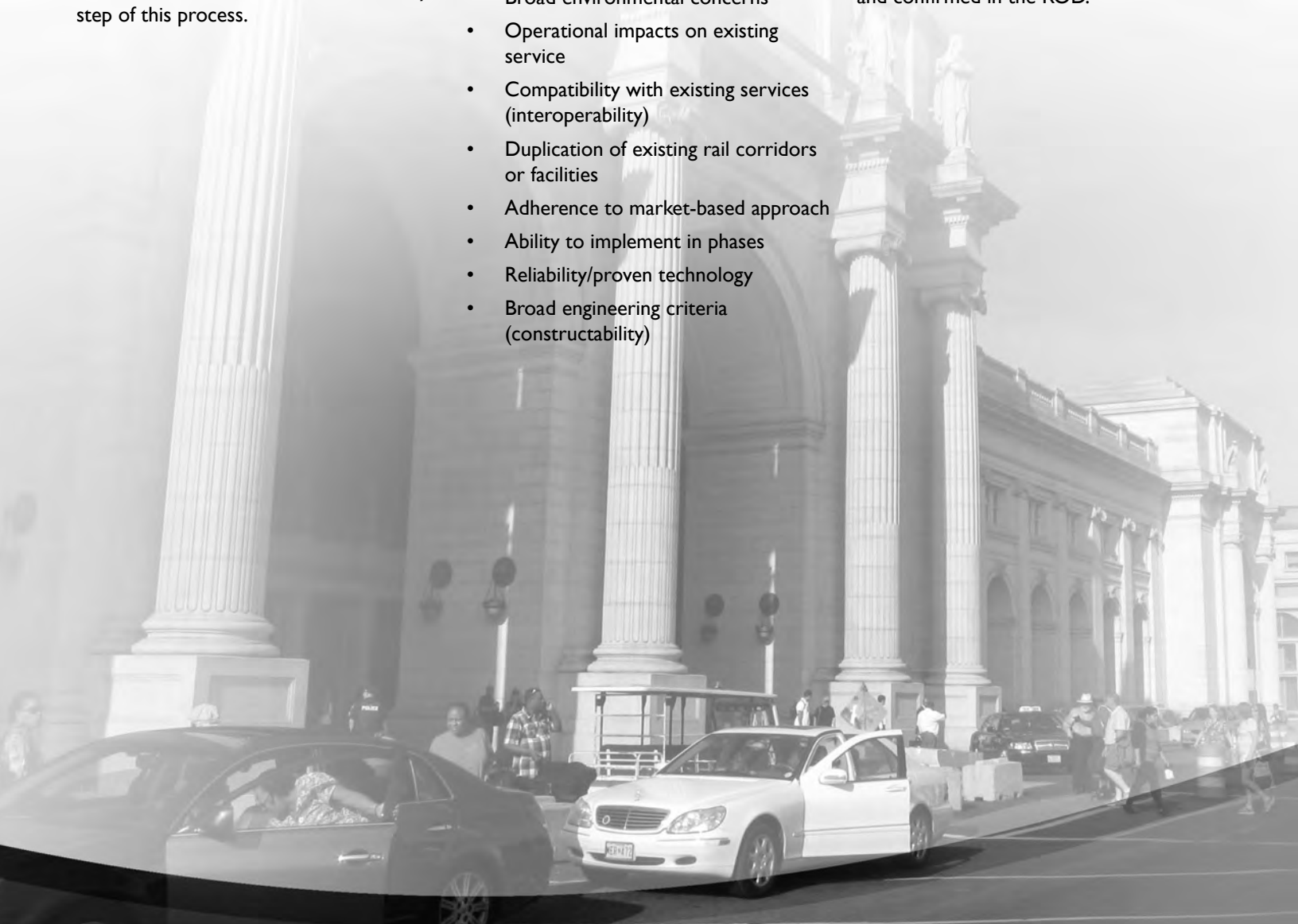
- Appropriateness for evaluation in the Tier I Service NEPA review
- Broad environmental concerns
- Operational impacts on existing service
- Compatibility with existing services (interoperability)
- Duplication of existing rail corridors or facilities
- Adherence to market-based approach
- Ability to implement in phases
- Reliability/proven technology
- Broad engineering criteria (constructability)

Subsequent screening criteria will focus on specific quantifiable impacts relating to:

- Ridership
- Operations
- Capacity
- Capital and operating cost
- Benefits and costs
- Environmental impacts

### 4.3.3 Selection of Preferred Alternative(s) and Service Development Plan

The SDP will provide the business case for the selection and implementation of the Preferred Alternative. The set of Reasonable Alternatives will be evaluated in the Tier I DEIS, with a Preferred Alternative identified in the Tier I FEIS and confirmed in the ROD.



## 5. TIER I EIS ANALYSIS FRAMEWORK

### 5.1 INTRODUCTION

The NEC FUTURE program includes the completion of a PRCIP, composed of both an SDP and a Tier I EIS. The Tier I EIS is mandated for a federally-funded project under NEPA and related laws and regulations. This section describes the Tier I EIS process proposed by the FRA to satisfy this requirement. An overview of the regulatory environmental framework for these analyses, the study areas involved, the impact assessment procedures and related documentation for the NEC FUTURE Tier I EIS are also provided.

### 5.2 ENVIRONMENTAL REVIEW PROCESS

This Tier I environmental review process will comply with several federal laws including the NEPA, Section 106 of the Historic Preservation Act and Section 4(f) of the U.S. Department of Transportation Act. Consideration of other Federal laws include the Clean Water Act, Clean Air Act, Executive Orders (EO) pertaining to Environmental Justice, Floodplains, and other regulations will also be required.

#### 5.2.1 National Environmental Policy Review Act (NEPA)

In accordance with NEPA, the NEC FUTURE program will include a Tier I EIS review. The CEQ regulations for

implementing NEPA allow for federal agencies to prepare a broad level environmental evaluation for large-scale projects, such as the NEC FUTURE. “Tiering” takes a broad approach to the overall analysis and typically uses readily available information to establish baseline conditions and conduct analysis. While the level of analysis and detail are different than a typical EIS, the process followed is still the same.

A tiered approach was selected for NEC FUTURE due to the scope, complexity and long-term nature of this multi-state planning effort. Project- or site-specific actions required to implement the Preferred Alternative will be reviewed under subsequent Tier 2 environmental reviews.

The Notice of Intent (NOI) published on June 22, 2012 is required to formally initiate the program, notifying agencies and the public that a federal agency intends to undertake and prepare an EIS. For NEC FUTURE, FRA is the lead federal agency, and the FRA’s NOI provides basic project information such as the limits of the project, project purpose and problems to be solved, Initial List of Alternatives to be evaluated, and information on who to contact in the event that there are questions or clarifications needed.

Following the NOI, the lead agency initiates a scoping process, during which preliminary information on the project is provided to affected federal, state and local agencies and the public, who are invited to provide comments on the proposed project through an open comment period and at scoping meetings. Further details on the public scoping process are provided in Section 7. At the conclusion of that process, a Scoping Summary Report will be prepared that outlines how all comments received during the scoping process will be addressed as part of the Tier I DEIS (see Section 7 for more details).

At the beginning of Phase 2 of the NEC FUTURE program, FRA will begin to prepare the Tier I DEIS that will consist of the following elements:

- Project Purpose and Need,
- Alternatives Considered,
- Affected Environment and Environmental Consequences, and
- Potential Measures to Minimize or Mitigate Impacts.

Upon approval by the FRA, the Tier I DEIS will be circulated for agency and public comment, and the subsequent public review process will include public hearings throughout the NEC FUTURE study area and multiple other opportunities

to provide the FRA with comments on the draft document. All comments received during the comment period will be reviewed and the FRA will prepare responses to those comments. Based on this public input and the results of the Tier 1 analyses, the FRA will recommend a Preferred Alternative. The response to comments on the Tier 1 DEIS and an evaluation of the Preferred Alternative will be presented in the Tier 1 FEIS.

After the Tier 1 FEIS is prepared, a notice will be published indicating its release and noting where the document can be reviewed. After the public review of that document is closed, the FRA will prepare a ROD. The ROD will document selection of the Preferred Alternative and layout all agreed upon mitigation strategies and project commitments to be carried out during the Tier 2 environmental analysis and documentation. The results of this process will provide the basis for development of the final NEC FUTURE SDP.

### 5.2.2 Other Regulatory Requirements

In addition to the requirements of NEPA, the NEC FUTURE project is also subject to several other overarching environmental regulations including FRA's Procedures for Considering Environmental Impacts (64 FR 28454) (FRA Environmental Procedures), Section 106 of the National Historic Preservation Act (36 CFR Part 800), Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. 303), Clean Water Act (33 U.S.C. §1251 et seq.), Clean Air Act (42 U.S.C. §7401 et seq.) and other applicable federal and state laws and regulations, EOs and USDOT Orders.

### 5.2.3 Tier 1 Framework and Relationship to Tier 2

The framework of the Tier 1 EIS and the SDP will set the stage for the development of project components

of the SDP and their respective Tier 2 environmental reviews. The Tier 1 EIS and the final SDP will identify markets to be served, general corridors and station locations and related program elements. Through the Tier 1 EIS, the FRA will work with affected stakeholders to identify key issues early for resolution during Tier 1 documentation or for further more in-depth analysis or coordination during applicable project-level or Tier 2 reviews.

While no federal or state resource agency permits would be required during the Tier 1 environmental review, those resource agencies will assist the FRA in identifying likely critical issues that future Tier 2 projects would encounter. FRA recognizes that many of the jurisdictions potentially affected by the project have their own state environmental review requirements. FRA understands that many of the state-level environmental review requirements would not be triggered until a specific project's Tier 2 reviews begin. At that time, FRA, or the project sponsor, will coordinate more closely with the state environmental resource agencies to ensure that all state requirements are met.

## 5.3 NEC FUTURE STUDY AREA

### 5.3.1 Overall Study Area

The NEC FUTURE Study Area, as presented in **Figure 1** in Section 2, includes eight Northeastern states plus the District of Columbia. It incorporates the NEC and adjacent and connecting freight and intercity and commuter passenger rail lines. This study area encompasses the region served by the NEC, plus those areas that can be reached from the NEC directly by train or via a single transfer to connecting corridors (e.g., the Empire Corridor in New York). The exact extent of this study area will be refined as NEC FUTURE progresses and alternatives are identified.

### 5.3.2 Determination of Impact Areas for Environmental Effects

At this time, it is unknown whether or not Build Alternatives would entirely utilize existing rail rights-of-way or would require segments of new alignment. The limits of most of the study areas for various Tier 1 (and Tier 2) impact assessments (e.g., wetlands, noise, property acquisition, cultural resources, etc.) will generally be relatively close to these existing or new alignments. FRA will work with the resource agencies to best identify the appropriate "impact" areas for each resource for proposed improvements along the existing rail rights-of-way as well as those elements that may extend beyond existing rights-of-way.

## 5.4 ENVIRONMENTAL ANALYSIS

### 5.4.1 Resource Areas for Evaluation

In accordance with NEPA and FRA's Environmental Procedures, various resource areas will be evaluated for potential effects. The level of analysis and detail pertaining to each resource area will be commensurate with Tier 1 level of NEPA documentation, which will be based on readily available information and limited field verification. Resources to be evaluated include, but are not limited to, the following:

- **Transportation** – Consideration of all modes within the corridor and potential effects of the proposed action on those modes and affiliated services, as applicable.
- **Air Quality** – Identification of attainment and non-attainment areas, as defined by the Clean Air Act.
- **Noise and Vibration** – Identification of potentially sensitive land uses along the corridor that could be affected by noise and vibration.



- **Energy** – Identification of potential energy conservation and consumption as related to proposed alternatives.
- **Land Use** – Identification of land use controls and comprehensive regional planning efforts that may be affected by the proposed alternatives.
- **Communities and Socioeconomic Conditions** – Identification of communities, significant community resources and socioeconomic characteristics (demographics), including Environmental Justice populations, which could be affected by the proposed alternatives.
- **Federally Owned Land, Open Space, Parklands, State Forest, Wildlife Refuges and Conservation Easements** – Identification of public recreation areas and lands, and designated uses.
- **Farmlands** – Identification of designated agricultural lands, prime farmland soils and soils of statewide importance.
- **Visual and Aesthetic Characteristics** – Identification of visually sensitive resources.
- **Contamination and Hazardous Materials** – Identification of known hazardous waste sites and areas of contamination.
- **Cultural Resources:** Identification of cultural resources listed on or eligible for listing on the National Register of Historic Places, including architectural resources, archaeological resources, and sacred Native American grounds.
- **Geologic Resources:** Identification of protected or sensitive geologic resources or conditions.
- **Hydrologic/Water Resources:** Identification of surface waters, wetlands, floodplains and coastal zones.
- **Biological Resources:** Identification of protected species and critical habitats.
- **Secondary and Cumulative Effects:** Identification of potential secondary effects (indirect effects) and cumulative effects (direct effects) on applicable resources.

#### 5.4.2 Evaluation Format

Each resource topic noted above will be evaluated for potential effects associated with each alternative documented in the Tier 1 EIS. As part of the scoping process, FRA will work collaboratively with agencies having jurisdiction over identified resources to develop an appropriate methodology to assess potential effects at the Tier 1 level. During the Tier 2 documentation, evaluation methodologies will be revised to provide more detail and be more site-specific.

The affected environment (the areas in which impacts of the proposed action could potentially occur) will be documented as part of the Tier 1 EIS. This information will be used to establish the baseline, or existing conditions, for each resource area evaluated. Given the scale of this project, the affected environment will be documented primarily through the use of readily available information and will include existing mapping, studies and reports and a wide range of federal and state resource databases. Resource agencies will also be contacted to document the affected environment.

Based on agreed upon impact methodologies to be established with affected resource agencies, an evaluation of how each alternative would affect the existing environment will be prepared. For potential adverse effects identified, FRA will coordinate with the applicable resource agency to develop potential mitigation or minimization strategies for unavoidable effects, appropriate for the Tier 1 level of analysis. Detailed mitigation and minimizations strategies will be more thoroughly developed during the Tier 2 documentation.



## 6. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

### 6.1 INTRODUCTION

The NEC FUTURE public outreach program will be conducted in compliance with FRA policies and regulations, NEPA and related regulations, including the CEQ's regulations implementing NEPA (40 CFR Section 1500-1508), Section 4(f) of the Department of Transportation Act of 1966, Section 6(f) of the Land and Water Conservation Fund Act of 1965, Section 106 of the National Historic Preservation Act of 1966, EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994, and the Final U.S. DOT Environmental Justice Order 5610.2A, released on May 2, 2012. As discussed in Section 3, NEC FUTURE is being conducted in three phases, with the proposed scoping process occurring within the summer and early fall of 2012 as part of the overall 12-month schedule for Phase I. The public involvement process has already begun and will operate continuously throughout all three phases.

#### 6.1.1 Public Involvement Goals

The NEC FUTURE program seeks to provide the public with accurate information about the program and its progress, using convenient and varied methods to provide that information and engage stakeholders and the public to help define the issues to be evaluated in the program. This will enable the NEC FUTURE team to develop, screen and select alternatives in a manner that reflects public priorities for improved service (see Section 4). Every effort will be made to accommodate persons with disabilities and non-English speakers in the public involvement process and to accurately document public comments and responses in accordance with FRA policy and NEPA requirements.

#### 6.1.2 Role of Public Involvement in Tier I Review

The following are the major public involvement activities during Phase I of the NEC FUTURE program:

- **Notice of Intent** – This public notice published in the *Federal Register* on June 22, 2012, announces

FRA's intent to complete a Tier I environmental review process, and is an important initial communication tool in Phase I.

- **Scoping Package** – This Scoping Package includes a detailed Purpose and Need Statement, an Initial List of Alternatives and analysis and screening methods, and the scope for further development of those alternatives and their analyses in the Tier I DEIS (as discussed in Section 5).
- **Scoping Meetings** – Nine Scoping meetings are planned in August 2012 – one in each of the study area's states plus the District of Columbia (see Section 7).
- **Development of Alternatives** – Agency and public input on alternatives will be solicited through a variety of methods that may include regional workshops, regional or topical advisory groups, e-mail and social media communications, as well as close coordination with project partners.



### 6.1.3 Executive Order 12898, Environmental Justice Requirements

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994, requires federal agencies to ensure greater public participation from communities with substantial minority and/or low-income populations. The policy directives of the EO were affirmed in the Final Department of Transportation Environmental Justice Order 5610.2A, released on May 2, 2012. The outreach program will include targeted methods of engaging low-income and minority residents, including the use of minority media, such as newspapers or radio stations owned by or primarily serving minority populations in the identified communities.

## 6.2 AGENCIES, STAKEHOLDERS AND POTENTIALLY AFFECTED GROUPS

Strategies included in the NEC FUTURE Public Involvement Plan will inform and engage a wide range of potential stakeholders and interested groups. Working in partnership with the NEC states and the rail operators within them, the NEC FUTURE team will look to involve a broad range of governmental agencies and non-governmental organizations, rail and intercity passengers, the general public, and Environmental Justice populations, among others. The geographic limits for outreach to target audiences are consistent with the NEC FUTURE study area.

The agency coordination process for the Tier I EIS will occur in parallel with the overall public involvement

program. Early coordination is occurring with federal and state environmental resource agencies as a part of the NEC FUTURE program. Cooperating and participating agencies will be identified and additional coordination will occur via individual agency meetings, briefings, and correspondence.

A protocol will be developed for consultation with federally recognized Indian Tribal Governments, following the process specified by Section 106 of the National Historic Preservation Act of 1966. All tribal consultation will be conducted by the FRA.

A unique avenue for collaboration with key stakeholders is the recently formed Northeast Corridor Infrastructure and Operations Advisory Commission (NEC Commission). The NEC Commission includes representatives from the USDOT, Amtrak, the District of Columbia and the eight study area states served by the NEC. It also includes non-voting representatives from freight railroads, adjacent states, and commuter operators. Regular coordination meetings with this key partner are planned throughout the project. The NEC Commission is also conducting a public outreach process consistent with its mandate, which is distinct from, but closely related to, that of the NEC FUTURE program.

Interaction between the FRA and other administrations within the USDOT will also take place within a working group comprised of the FRA, FAA, FHWA, and the Federal Transit Administration (FTA). In addition to involving key federal and state agencies, the NEC FUTURE program will also engage numerous county and local jurisdictions potentially affected by future construction. Outreach to local jurisdictions may include

meetings, webinars or videoconferences, and informational mailings or e-mail communications. Individual meetings will be sought with mayoral and/or transportation staff for the NEC's largest cities. There will also be extensive involvement with the MPOs in these and other metropolitan areas along the corridor.

A variety of non-governmental organizations are potential stakeholders for NEC FUTURE, including business, economic development and tourism organizations, environmental, land conservation, historic preservation and rail organizations and advocacy groups and numerous other organizations and institutions. Meetings, webinars, the project website and social media will be used to engage these types of organizations. The NEC FUTURE program will also be of interest to a variety of unaffiliated citizens and residents who live or work near the rail line or depend on NEC rail service. Regular rail passengers (whether long-distance, short-haul, intercity or commuter) are another significant stakeholder category, as well as those who regularly fly or drive to destinations within the NEC.

The NEC FUTURE team will also develop procedures to identify communities with substantial minority or low-income populations, and to identify established groups in those areas and appropriate methods for engaging them. If community issues arise that require more focused engagement of these populations, additional outreach methods will be arranged to ensure their involvement in all program-related activities. For persons with limited English proficiency, materials may be translated and interpretation services offered at meetings based on advance needs assessment.

### 6.3 PUBLIC INVOLVEMENT ACTIVITIES

A variety of activities are planned to accomplish the program’s public involvement goals and to engage each of the categories of stakeholders identified previously. These activities will be timed and framed to support project team efforts to develop alternatives and undertake the environmental review conducted as part of the Tier I EIS. The following activities and tools are planned for Phase I of the project.

#### 6.3.1 Communication Tools

The following communication tools will be developed to support the public outreach and environmental review process. Tools will be utilized flexibly as appropriate to the project phase, region and issues under consideration. Project communications will use a common name, logo and color scheme for ready identification and to enhance public awareness.

- **Website** – The project website ([www.necfuture.com](http://www.necfuture.com)) will be the primary portal for informing the public and stakeholders about the project, as well as soliciting comments about the project. The site will provide information on corridor rail improvement projects currently planned or underway, Frequently Asked Questions, information on upcoming meetings and a document library with copies of all public reports and meeting materials. The website will be updated frequently to provide current information.

- **Contact Database/Mailings** – A master contact database will be created and updated throughout the project using a stakeholder database to generate mailings and e-mail alerts, as well as to manage and respond to comments received through the project website.
- **Fact Sheets and Newsletters** – A newsletter/e-newsletter is planned to keep stakeholders and the public up to date on project developments and solicit input. Fact sheets will also be prepared for distribution at meetings and briefings, with all materials posted on the website.
- **Presentation** – A slide presentation suitable for general audiences will be developed and updated at major milestones.
- **Social Media** – A social media communication program will be developed for the project. This may include the use of Facebook, Twitter, and other social media to direct interested persons to the project website.

#### 6.3.2 Stakeholder and Public Meetings and Interviews

A variety of meetings and briefings will be held throughout each phase of the program to provide for dialogue and timely exchange of information. All public meetings will be held at convenient times in locations that are Americans with Disabilities Act (ADA) accessible, and where feasible, transit-served accommodations will be made for persons with special needs. Interviews with key stakeholders or groups will be held during Phase I to engage these groups, identify other potential stakeholders and include them in the process going forward. Regional advisory groups may be formed toward the conclusion of Phase I or early in Phase 2 to address identified concerns in greater detail.





## 7. TIER I SCOPING PROCESS

Consistent with the requirements of FRA NEPA procedures and CEQ requirements, the goal of the Tier I scoping process is to involve and obtain input from the key public and private stakeholders along the NEC regarding the activities and studies planned for the NEC FUTURE program, including the proposed scope for the preparation of the Tier I EIS and the development of program alternatives and the Draft SDP. The following are the elements of this scoping process presented in **Figure 12**.

Figure 12: Scoping Process



### 7.1 PUBLIC SCOPING MEETINGS

#### 7.1.1 Purpose and Format

The purpose of the public scoping meetings is to allow representatives of the FRA and its NEC FUTURE program team to interact with agencies and public and private stakeholders, to inform the public about this program and the scope of the studies to be completed, and to hear the thoughts, concerns and interests of the public regarding these important transportation issues. Public scoping meetings will be held in an informal open house-type format, including display stations with presentation boards staffed by team members to answer questions and obtain participants' input and a short presentation.

Comments submitted by planning and regulatory agencies and the general public will be documented and a summary of key issues will be prepared and published on the NEC FUTURE website ([www.necfuture.com](http://www.necfuture.com)).

#### 7.1.2 Dates, Meeting Locations and Times

Agency and public scoping meetings are planned for the weeks of August 13th and August 20th, 2012. These scoping meetings will be held in each of the study area's eight states and the District of Columbia. **Table 2** provides the tentative locations for these meetings.

The timing and location of these meetings will be publicized through newspaper advertisements, on the program's website, news releases and media alerts, e-mail notices, print communications, and mailings. Confirmation of the exact meeting locations and times, along with information regarding directions to these locations, transit access, and parking availability, will be provided at least 30 days prior to the scheduled meeting dates.

#### 7.1.3 Methods of Participation

Those attending the scoping meetings will be able to view materials, hear presentation, discuss issues with NEC FUTURE team members and present any comments they may have in oral and/or written form. Stenographers will also be available to record individuals' comments separately. Interested parties can also submit comments in writing by mail, email at [info@necfuture.com](mailto:info@necfuture.com), or by posting on the program's website at [www.necfuture.com](http://www.necfuture.com). Those unable to attend the meetings will be able to view scoping materials and submit comments at [www.necfuture.com](http://www.necfuture.com). Comments on the Tier I EIS scope will be accepted until September 14, 2012.

## 7.2 SCOPING DOCUMENTATION

At the conclusion of the scoping process, a Scoping Summary Report will be prepared and posted on the NEC FUTURE website. The report will summarize the overall results of the scoping process, including comments received, organized by section of the program scope, along with any adjustments to the scope to reflect comments received from agencies, other interested parties and the general public.

*Table 2: Agency and Public Scoping Meeting Locations*

State	City
Massachusetts	Boston
Rhode Island	Providence
Connecticut	New Haven
New York	New York City
New Jersey	Newark
Pennsylvania	Philadelphia
Maryland	Baltimore
Delaware	Wilmington
District of Columbia	Washington, D.C.

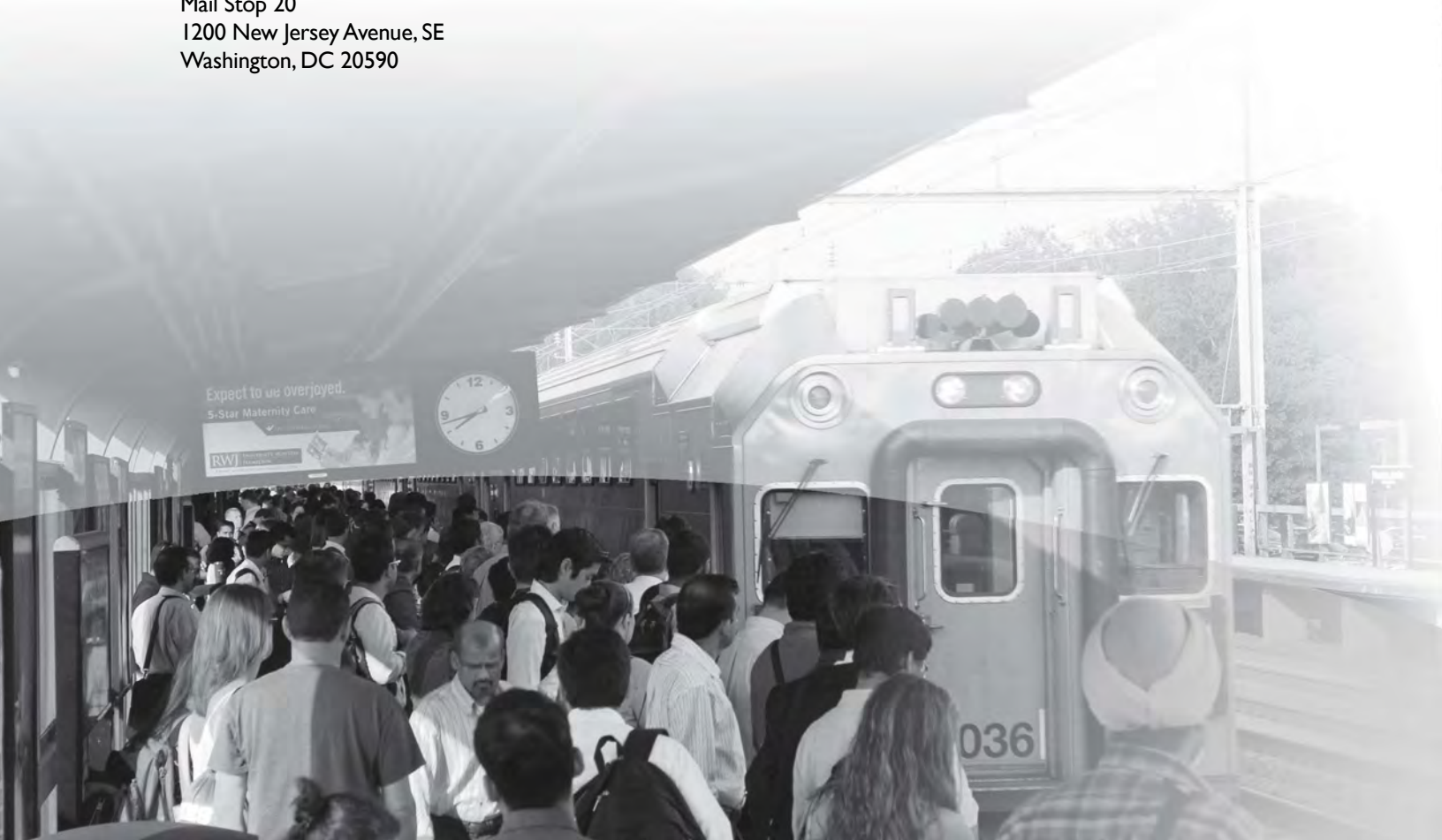
## 7.3 CONTACT INFORMATION

For more information or to submit comments in writing, please contact the NEC FUTURE team at one of the following addresses:

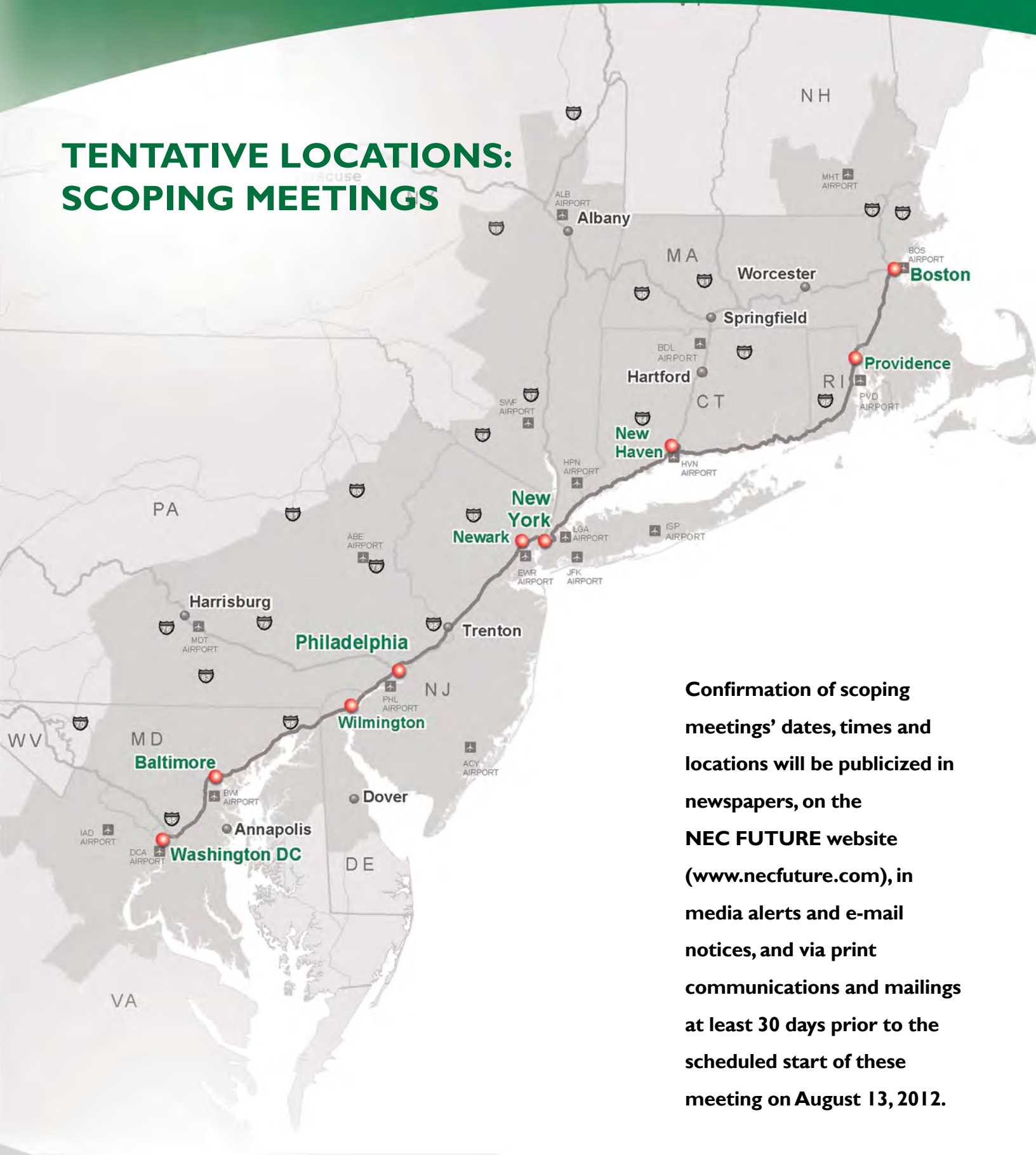
Website: [www.necfuture.com](http://www.necfuture.com)

Email: [info@necfuture.com](mailto:info@necfuture.com)

Mail: Rebecca Reyes-Alicea  
 USDOT, Federal Railroad Administration  
 Office of Railroad Policy & Development  
 Mail Stop 20  
 1200 New Jersey Avenue, SE  
 Washington, DC 20590



## TENTATIVE LOCATIONS: SCOPING MEETINGS



**Confirmation of scoping meetings' dates, times and locations will be publicized in newspapers, on the [NEC FUTURE](http://www.necfuture.com) website ([www.necfuture.com](http://www.necfuture.com)), in media alerts and e-mail notices, and via print communications and mailings at least 30 days prior to the scheduled start of these meeting on August 13, 2012.**

For more information or to submit comments in writing, please contact the NEC FUTURE team at one of the following addresses:

Website: [www.necfuture.com](http://www.necfuture.com)

Email: [info@necfuture.com](mailto:info@necfuture.com)

Mail: Rebecca Reyes-Alicea  
USDOT, Federal Railroad Administration  
Office of Railroad Policy & Development  
Mail Stop 20  
1200 New Jersey Avenue, SE  
Washington, DC 20590



Scan for quick access  
to the NEC FUTURE  
website



U.S. Department  
of Transportation

**Federal Railroad  
Administration**