Regional Plan Association

Northeast Corridor Now

Legislative Proposal & Infrastructure Program

Introduction

NEC Now is a legislative proposal for the reauthorization of the expiring federal rail legislation, the Passenger Rail Investment & Improvement Act of 2008 (PRIIA), that puts a new emphasis on the Northeast Corridor, North America's busiest and most complex rail corridor, situated in the dense and productive Northeast Megaregion, where 18% of the U.S. population lives and 20% of the nation's Gross Domestic Product is produced on only 2% of its land area.

The NEC Now **legislative proposal** charts a path forward for the Northeast Corridor. It proposes a new institutional and financing framework that would initiate and facilitate a comprehensive, corridor-wide overhaul. It calls for the creation of a new federal grant program, changes to the Railroad Rehabilitation & Improvement Financing (RRIF) program, and new governance structures for project selection, management and finance.

The NEC Now **infrastructure program** is a potential first-phase program of capital improvements that should be initiated and accelerated over the next six years, or prior to the expiration of the next federal rail bill. The program includes the corridor's highest-priority infrastructure needs, as well as the construction of an initial segment of high-speed rail that, along with the other projects in the NEC Now infrastructure program and new high-speed trainsets, would cut trip times between New York and Philadelphia to approximately 45 minutes.

NEC Now Legislative Proposal

Northeast Corridor improvements will be achieved through a partnership between the federal government, Amtrak, state governments and the private sector. New funding and institutional provisions in federal law are required to create the right financial tools and project delivery mechanism to achieve the NEC Now infrastructure program.

Funding and Financing

Over the course of the next federal rail bill, a new NEC Now grant program would make available funds for capital improvements on the corridor, which is over and above Amtrak's normal capital maintenance funding. The next federal rail bill should authorize $10 billion for the NEC Now grant program. The grants could be used for capital planning, engineering, design, procurement, construction and/or financing costs.

Credit support for projects in the NEC Now infrastructure program should come from the Railroad Rehabilitation & Improvement Financing program. The RRIF statute should be amended to allow for the federal NEC Now grant funds to be used to supply the credit risk subsidy for RRIF loans.

Project Selection & Cost Allocation

Projects eligible for NEC Now grant funding would be those identified by the Northeast Corridor Infrastructure & Operations Advisory Commission (NEC Commission) as critical rail infrastructure needs. Other projects could be selected by a new project delivery entity (see below). The costs associated with each project and the appropriate allocation of those costs to the stakeholders would be determined by the NEC Commission. Projects would be required to comply with all federal laws, regulations and other requirements.

Eligible Applicant

The release of NEC Now grants would require an application from a new corridor management entity. This new entity would include representation from the Northeast states, Amtrak and possibly others on its governing body. It would require adequate staffing and resources to deliver the NEC Now projects, and the authority to: apply for federal grants and loans; borrow against current or future potential revenue streams; enter into development agreements to buy real property; and to procure equipment and services from Amtrak and/or other partners. Project delivery would rely on Amtrak, private contractors, or design-build teams depending on the particulars of a given project.

NEC Now Infrastructure Program

Given the importance of the NEC to the national economy, the federal government should partner with Northeast states, metropolitan regions and cities to ensure that a comprehensive improvement program is undertaken over the course of the next federal rail bill.

The NEC Now infrastructure program includes $26.7 billion in high-priority, immediate infrastructure needs, which were identified as critical by the NEC Commission.[1] In addition, it also includes an investment of $4 billion to improve New York Penn Station and $9 billion to build a high-speed rail demonstration project, for a total of $39.7 billion.

1 NEC Commission. 2013. Critical Infrastructure Needs on the Northeast Corridor.

Northeast Corridor

The NEC has one of the most complex ownership and operating arrangements of any railway in the world. The 457-mile corridor runs through eight states and the District of Columbia, and its infrastructure is owned by Amtrak from Washington, D.C., to New Rochelle, NY; the states of New York and Connecticut from New Rochelle to New Haven, CT; Amtrak again from New Haven to the border between Rhode Island and Massachusetts; and the Commonwealth of Massachusetts from there north to Boston. Amtrak operates all intercity rail services, seven state agencies operate commuter rail services, and several companies operate freight trains on the NEC. More than 2,200 passenger trains and 70 freight trains use the corridor every day.

Over three quarters of a million people depend on the corridor daily. The NEC Infrastructure Master Plan projects that, by 2030, annual ridership would grow from 260 million to 412 million, or 59%, given the investments that are currently planned.[2] In addition, if Amtrak's Vision for High-Speed Rail in the NEC were implemented, by 2040, intercity rail ridership would increase from nearly 12 million to more than 40 million.[3] The increasing demand for NEC passenger rail service is largely driven by projections that the Northeast Megaregion will add nearly 20 million residents by the year 2050 and its $3 trillion economy will grow at about 2% annually. If investments in the NEC are not made now, however, all of that demand will be added to our already choked highways and airports.

However, Northeast airports are already at capacity. The Northeast is also home to four of the ten most congested highways in the nation. Our rail network has enormous untapped potential and RPA's research has shown that shifting travel to rail provides the greatest benefit in regions where road and air capacity is constrained.

The need for a major NEC improvement program is clear. A recent report by the NEC Commission identified more than $30 billion of projects that are critical.[4] Much of the NEC rail infrastructure was built over a century ago, and a backlog, totaling $9 billion, of deferred maintenance has accumulated. Furthermore, train congestion and antiquated infrastructure prevent increases in speed, frequency and reliability. For example, the New Haven Line, the busiest commuter corridor in the country from Manhattan to New Haven, CT runs along four moveable bridges on the Connecticut shoreline that have been exposed to the natural elements blowing in off the Long Island Sound for decades, and have reached the end of their useful life. One out of every ten times these aging lift or pivot bridges open for a boat to pass they do not close properly, causing disruptive train delays and even cancellations.[5]

In essence, the NEC faces a crisis of success. Robust and growing ridership has used up nearly all available capacity while further diminishing its infrastructure assets. The NEC cannot survive any longer by living off of legacy investments made by past generations. Without a new multiyear, multibillion-dollar federal funding program to fix its aging and broken assets and expand capacity, the Northeast Megaregion's growth will be capped and rail service will continue to deteriorate.

2 The NEC Master Plan Working Group. 2010. The Northeast Corridor Infrastructure Master Plan.

3 Amtrak. 2012. The Amtrak Vision for the Northeast Corridor.

4 NEC Commission. 2013. Critical Infrastructure Needs on the Northeast Corridor.

5 State of Connecticut. 2013. Connecticut State Rail Plan.

Institutional & Governance Issues

One of the biggest challenges facing the corridor is its complex structure of infrastructure management, operations and project delivery. Unlike the rest of the national rail network, Amtrak owns most of the corridor's track and related infrastructure, and operates on it along with eight commuter rail operators that have statutory access rights to use Amtrak-owned segments and three freight railroads that use the corridor for local and through freight services. However, the current governance structure does not balance the needs of these disparate users.

As both the owner and manager of most NEC infrastructure, as well as an operator, Amtrak has near complete control over access rights, capital planning, construction, capital and operating cost allocations, scheduling and dispatching. Until recently, the commuter rail agencies, the primary users of the NEC, have had no formal role in the management of the corridor, at least on Amtrak-owned segments. This situation has stifled the development of new rail services and new, innovative institutional arrangements for intensely shared areas. It has also reduced the states' incentive to contribute financially to needed corridor improvements beyond their own state's borders.

The current rail bill, PRIIA, mandated the creation of the NEC Commission, through which the nine jurisdictions served by the corridor could provide input to Amtrak and the Federal Railroad Administration. The Commission brings these nine parties together to confer on the design and administration of the corridor, future plans and goals, and developing a fair cost allocation formula for future projects, but does not fundamentally change the way NEC infrastructure is managed and rail services are operated.

The administration and operation of high-speed and intercity rail services in Europe offer an alternative approach. The European Union requires national railroads of its member countries to unbundle their train operations and infrastructure maintenance functions, and allow for open access on rail lines. Open access makes it possible for private train operators to offer competing services on the same rail lines.

In keeping with the European model, Amtrak recently created a new business division focused on infrastructure and investment in the NEC, and plans to create a second division focused on NEC operations. The infrastructure division is in charge of all funding, policy, and planning decisions related to improving the existing rail infrastructure and development of world-class, high-speed rail. The operations division will be in charge of making sure rail operations are fast, safe, reliable, convenient and environmentally sustainable, and advancing and eventually managing Amtrak's NEC operations. This will not ensure open access, but is a step in the right direction.

However, delivering the infrastructure projects that will allow for operators to provide a true high-speed rail service in the NEC would be a task far larger than anything Amtrak has ever undertaken, and the largest, most complex public-works project in the nation. A megaproject of this magnitude requires new capabilities, governance and management structures.

RPA recommends that the next federal rail bill authorize the creation of a new corridor management and project delivery structure with representation from the Northeast states and Amtrak, adequate staffing and resources, and the necessary authorities to deliver the NEC Now program.

Funding & Financing Issues

The NEC does not and will not require ongoing public subsidies for operations; however, it will require significant upfront capital investment. If the federal government follows the suggestions in this NEC Now proposal, it will lay the foundation for a federal rail program that does not place an undue burden on public funds. Once these deteriorating federal assets are upgraded, future phases could include substantial private investment.

Federal support for NEC projects could come from grants and loans. The loans could be repaid using Amtrak revenues in much the same way it is repaying a TIFIA loan for new locomotives. As one of the world's busiest corridors, there are enough trains and passengers on the NEC to generate the revenue necessary to repay the loans. For example, a surcharge of less than 10 cents per passenger mile on commuter and intercity rail tickets could support $10 billion of credit over 35 years.

The Railroad Rehabilitation & Improvement Financing Program is an existing federal loan program with enough remaining loan authority to pay for several major projects on the corridor. The RRIF program provides low-interest loans to public and private entities out of a $35 billion pool of revolving credit with $7 billion dedicated to freight projects. To date, less than $2 billion has been lent from the RRIF program.

RPA recommends that the next federal rail bill authorize $10 billion for grants for NEC projects and make changes to the RRIF statute to allow for federal grant funds to be used to supply the credit risk subsidy for the loans.

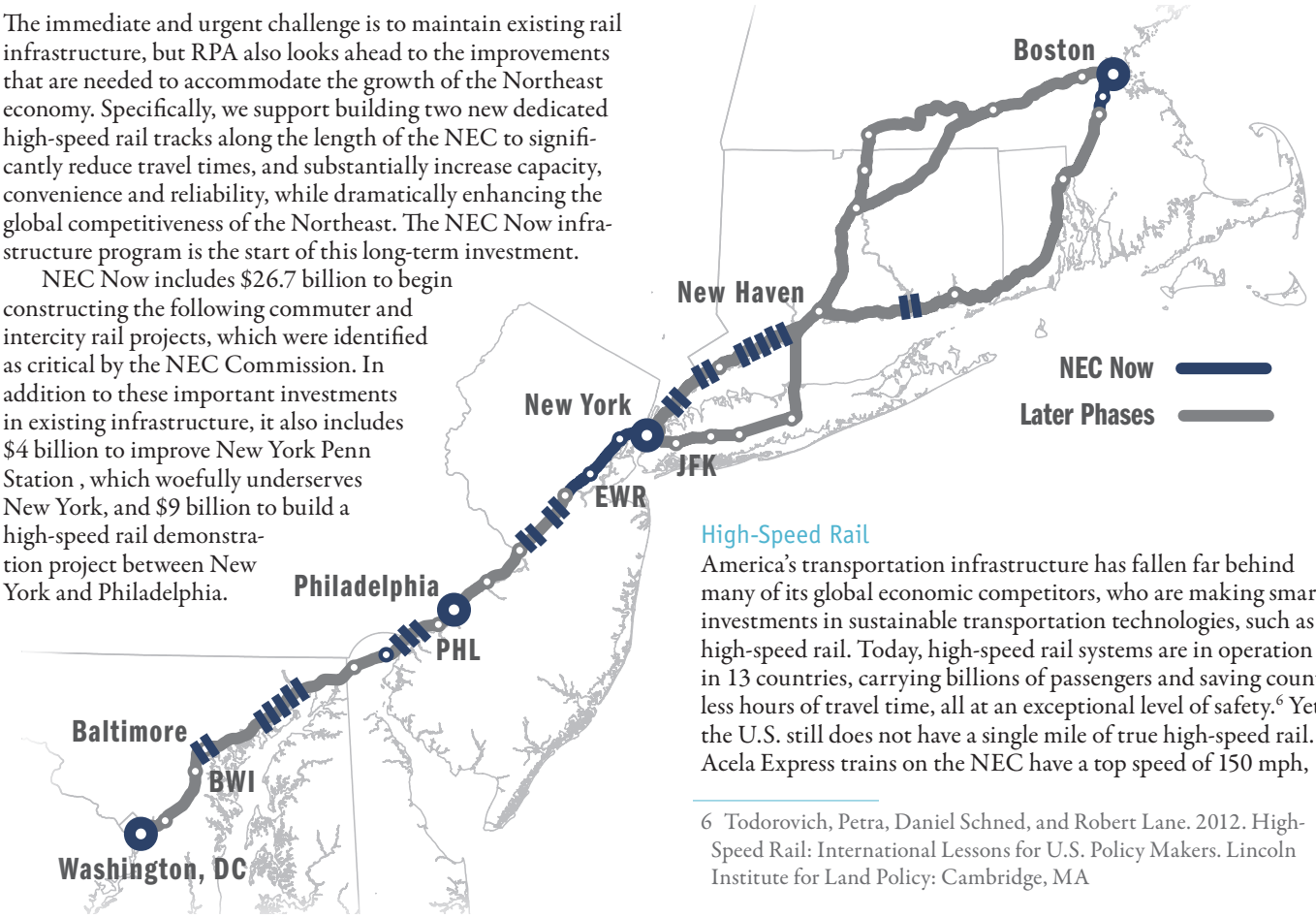
NEC Now Infrastructure Program

The immediate and urgent challenge is to maintain existing rail infrastructure, but RPA also looks ahead to the improvements that are needed to accommodate the growth of the Northeast economy. Specifically, we support building two new dedicated high-speed rail tracks along the length of the NEC to significantly reduce travel times, and substantially increase capacity, convenience and reliability, while dramatically enhancing the global competitiveness of the Northeast. The NEC Now infrastructure program is the start of this long-term investment.

NEC Now includes $26.7 billion to begin constructing the following commuter and intercity rail projects, which were identified as critical by the NEC Commission. In addition to these important investments in existing infrastructure, it also includes $4 billion to improve New York Penn Station , which woefully underserves New York, and $9 billion to build a high-speed rail demonstration project between New York and Philadelphia.

RPA recommends the following projects be initiated by 2020 and accelerated to return the corridor to a state of good repair, improve trip times and reliability by fixing the worst bottlenecks, upgrade train stations to provide world-class gateways and construct the initial segment of a Northeast high-speed rail between New York and Philadelphia that cuts trip times to roughly 45 minutes.

NEC NOW PROGRAM	COST (2013$)
Amtrak's Gateway Program (NY/NJ)	$15,000,000,000
Station Modernization Projects	-
Boston South Station (MA)	$500,000,000
Philadelphia 30th Street Station (PA)	$500,000,000
Washington Union Station (DC)	$1,500,000,000
Bridge & Tunnel Work	-
Connecticut Bridges (CT)	$1,600,000,000
Pelham Bay Bridge (NY)	$250,000,000
Maryland Bridges & Tunnels (MD)	$3,300,000,000
Other Track & System Work	-
Massachusetts Third Track (MA)	$200,000,000
New Haven Line Improvements (CT)	$1,000,000,000
New York East Improvements (NY)	$1,000,000,000
New Jersey Improvements (NJ)	$1,400,000,000
Philadelphia Interlocking Flyover (PA)	$150,000,000
Delaware Track & Interlocking (DE)	$300,000,000
Longer-Term Projects	-
New York Penn Station (NY)	$4,000,000,000
High-Speed Rail Demo Project (NJ)	$9,000,000,000
GRAND TOTAL	**$39,700,000,000**



High-Speed Rail

America's transportation infrastructure has fallen far behind many of its global economic competitors, who are making smart investments in sustainable transportation technologies, such as high-speed rail. Today, high-speed rail systems are in operation in 13 countries, carrying billions of passengers and saving countless hours of travel time, all at an exceptional level of safety.[6] Yet, the U.S. still does not have a single mile of true high-speed rail. Acela Express trains on the NEC have a top speed of 150 mph,

6 Todorovich, Petra, Daniel Schned, and Robert Lane. 2012. High-Speed Rail: International Lessons for U.S. Policy Makers. Lincoln Institute for Land Policy: Cambridge, MA

but average around 75 mph on mixed-use tracks shared with commuter and freight trains. The current international standard for new, dedicated high-speed rail lines is 220 miles per hour.

NEC Now High-Speed Rail Project

The NEC Now infrastructure program also includes a project that would demonstrate the benefits of world-class high-speed rail. RPA proposes that an initial segment of a true, high-speed rail system be constructed between New York and Philadelphia. Two new dedicated tracks would be built between Elizabeth and Edison, NJ, where congestion caused by heavy NJ Transit commuter rail traffic limits the potential improvement of trip times on this segment for hundreds of thousands of commuter and intercity rail travelers every day.

Trip times between New York and Philadelphia could be reduced to approximately 45 minutes once Amtrak's Gateway Program and New Jersey High-Speed Improvement Program are completed (see below), the NEC Now high-speed rail demonstration project and other NEC Now projects are built, and rolling stock on the corridor are upgraded to new, high-speed trainsets capable of reaching 220 miles per hour.

Amtrak's New Jersey High-Speed Improvement Program, between New Brunswick and Trenton, NJ, will allow trains along this 24-mile segment to reach top speeds of 160 mph and operate with greater frequency upon completion in 2017. In addition, Amtrak's Gateway Program between New York and Newark, NJ, will reduce congestion and trip times, and improve reliability upon completion in 2025.

Accelerate Project Delivery

RPA actively supports the Federal Railroad Administration's, NEC Future study, which is developing a vision for future rail investments. However, this study will not be completed until 2015, most likely after the next federal rail bill is passed. RPA also supports the NEC Commission's efforts to build consensus among the Northeast States around a regional investment strategy and develop a fair cost allocation formula for new projects. However, the Northeast states and Amtrak (in its current form) will be unable to shoulder the financial burden of NEC Now improvements, or deliver the projects. Federal leadership and a new corridor management entity with access to federal grants and loans are needed to achieve this bold vision.

Some of the projects in the NEC Now infrastructure program have been subject to at least some preliminary environmental reviews and design, and should therefore be able to proceed to final design prior to the completion of FRA's NEC Future study with only supplemental environmental work. Other projects will need to wait for the completion of the NEC Future study before proceeding. **RPA recommends President Obama put all of the NEC Now infrastructure projects on an accelerated environmental review track, which requires no actions or approvals from Congress.**

Recommendations

- **Federal Leadership**: RPA's top priority is securing funding to return the NEC to a state of good repair and we see this as a federal responsibility. The NEC has a direct impact on the economy of twelve states and the nation's global economic competitiveness. Moreover, the federal government created Amtrak, but then failed to provide it with adequate funding to maintain its assets. The next federal rail bill should authorize $10 billion in federal grants to completely eliminate the backlog of deferred maintenance on the NEC, and include changes to the RRIF program, as well as new funding and institutional provisions that create the right financial tools and project delivery structure to achieve the rest of the $39.7 billion NEC Now infrastructure program. This investment will begin the transformation of the NEC from a deteriorating federal asset into a world-class rail corridor.

- **Funding & Financing**: RPA recommends that the next federal rail bill create a NEC Now grant program authorized to award $10 billion to NEC projects, in addition to Amtrak's normal capital funding. NEC Now grants could be used for planning, engineering, design, procurement, construction or financing costs. The next federal rail bill should also make changes to the statute that authorizes the RRIF program to allow for NEC Now grant funds to be used to supply the credit risk subsidy for the RRIF loans. RRIF loans can be repaid using existing or potential future revenue streams with Amtrak and/or its partners.

- **Institutions & Project Delivery**: Current institutions are inadequate to deliver the NEC Now infrastructure program. RPA recommends that the next federal rail bill authorize the creation of a new corridor management and project delivery structure with representation from the Northeast states and Amtrak, adequate staffing and resources, and the necessary authorities to deliver the NEC Now program.

- **Infrastructure**: RPA recommends that the next federal rail bill be authorized to initiate the NEC Now projects by 2020 to return the corridor to a state of good repair, improve trip times and reliability by fixing the worst bottlenecks, upgrade train stations to provide world-class gateways and construct an initial segment of Northeast high-speed rail between New York and Philadelphia that cuts travel times to 45 minutes.

- **Accelerate Project Delivery**: The FRA's NEC Future study, a critical effort, will not be completed until 2015. By that time, the next federal rail bill will have already been adopted. The NEC cannot wait until 2020 to undertake a major improvement program. RPA recommends that Congress authorize the NEC Now infrastructure program in the next rail bill and President Obama put all of the NEC Now projects on an accelerated environmental review track, such as the *We Can't Wait Initiative*.