

**DEVELOPING TRUE HIGH SPEED RAIL  
IN THE NORTHEAST CORRIDOR—  
STOP SITTING ON OUR FEDERAL ASSETS**

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(112-1)

**HEARING**  
BEFORE THE  
**COMMITTEE ON  
TRANSPORTATION AND  
INFRASTRUCTURE**  
**HOUSE OF REPRESENTATIVES**

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

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JANUARY 27, 2011  
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January 27, 2011

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**SUMMARY OF SUBJECT MATTER**

**To:** Members of the Committee on Transportation and Infrastructure  
**From:** Subcommittee on Railroads, Pipelines, and Hazardous Materials  
**Subject:** Hearing on “Developing True High Speed Rail in the Northeast Corridor – Stop Sitting on our Federal Assets”

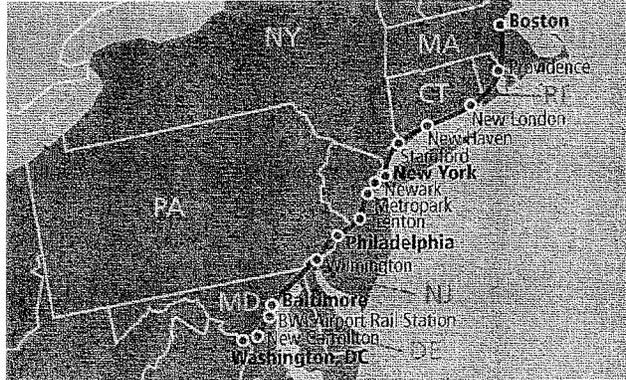
**Purpose of Hearing**

On Thursday, January 27, 2011, at 10:00 a.m., at Grand Central Station, Northeast Balcony, New York City, New York, the Committee on Transportation and Infrastructure is scheduled to meet to receive testimony regarding developing true high speed rail in the Northeast Corridor. The hearing will highlight the importance of high speed rail to economic development; opportunities and incentives for private sector investment in the Northeast Corridor; and the need for competition and public private partnerships.

Immediately following the hearing, Members will participate in an informal roundtable with government and private sector participants to continue and build upon the issues raised and discussed in the formal testimony at the hearing.

**History of the Northeast Corridor**

The Northeast Corridor (NEC) is one the most valuable transportation assets in the United States, providing the only continuous physical link, along with I-95, between the major population centers of Washington, DC, Baltimore, Philadelphia, New York City, and Boston. The Northeast mega-region is the most densely populated area in the United States, with 18 percent of the nation’s population living in just 2 percent of its land area. Taken as a whole, the NEC region would be the sixth largest economy in the world with a GDP of \$2.59 trillion, and a population equal to the United Kingdom.



Amtrak, the government-subsidized intercity passenger rail provider, owns and controls nearly the entire NEC. In 1976, Amtrak acquired most of the NEC assets from the freight rail operator Conrail as part of the disposition of the bankrupt Penn Central Transportation Company's assets. Conrail, the consolidated government-supported freight operator, did not want to operate passenger services and essentially donated this valuable property to Amtrak.

Other than in the NEC, Amtrak relies almost entirely on the privately owned freight railroad network. The nation's freight railroads host Amtrak on approximately 22,000 miles of track, while Amtrak owns only 650 miles of track nationwide. Of the 437 total miles of the NEC, Amtrak owns and controls 363 miles, with states controlling the remainder in portions of the route north of New York City.

Over the last three decades, Amtrak and the Federal Railroad Administration (FRA) have managed two major capital improvement projects to the NEC at a total cost to taxpayers of nearly \$6 billion. However, despite these capital improvement projects, the NEC still falls far short of international high-speed standards. The Acela, Amtrak's high speed service, averages only 83 miles per hour between DC and New York and only 72 miles per hour between New York and Boston. Internationally, high-speed trains can average 150 mph and many nations are upgrading systems to achieve top speeds of 220 mph.

#### **International Examples of High-Speed Rail**

High-speed rail was first introduced with the Japanese Shinkansen, or so-called "bullet," trains which in 1964 began operating at speeds of more than 150 mph. In 1981, France inaugurated a 255 mile HSR line between Paris and Lyon, cutting travel time from four hours to two hours. In 1991, Germany unveiled a 203-mile HSR service between Hanover and Wurzberg and a 62-mile HSR service between Mannheim and Stuttgart. Since then, other nations have created additional HSR lines. In 1992, Italy and Spain started new services. In 1998, Sweden upgraded its rail lines to accommodate HSR and in 2000 the Netherlands started HSR service between Amsterdam and Brussels.

Today's HSR systems fall into two categories: steel-on-steel systems and magnetic levitation systems. The only magnetic levitation system in current revenue operation is the Shanghai Pudong International Airport line, a 19-mile alignment where the train reaches speeds of 268 mph, the world's fastest train in regular commercial service. Steel-on-steel HSR systems are vastly more common, and operate on exclusive rights-of-way through a combination of electrification and other advanced components, expeditious alignments, and state-of-the-art rolling stock. These HSR systems can attain performance well above what is capable with conventional rail technology.

#### France

France has 18,144 miles of track in revenue service, of which 963 miles were high speed lines. According to the Government Accountability Office, France's system comprises the largest use of high speed rail trains in the world. In 2005, SNCF carried 974 million passengers, of which 95 million (10%) were TGV passengers; the remainder were regional passengers (roughly comparable to commuter rail and transit service in the U.S.).

France's major rail companies were nationalized in 1938 and put under the direction of the newly created Societe Nationale des Chemins de Fer Francais (SNCF), which operates intercity rail services on the French government-owned infrastructure. New infrastructure projects are contracted out on the basis of competitive tender.

France's high-speed rail system is composed of high-speed track (Lignes à Grand Vitesse, "high-speed lines," or LGVs) and high-speed trains (Trains à Grand Vitesse, "high-speed trains," or TGVs). In 1981, SNCF began high-speed operations with the opening of the Paris-Lyon TGV line. SNCF reports that its TGVs command a dominant share of the air-rail travel market in several of its corridors – over 90% in the Paris-Lyon market (with a travel time of less than 2 hours) and about 60% where the travel time is 3 hours (Paris-London, Paris-Marseilles).

#### Germany

Construction on the first German HSR lines began shortly after that of the French LGVs. The first generation of ICE trains were introduced in 1991, operating at a maximum speed of 155 mph on new tracks; a second generation was put into service in 1997, and operate at 174 mph on new track; and a third generation train was put into service in 2000, which can operate at speeds up to 186 mph on new track.

There are three distinct differences between the French and German HSR systems: (1) the ICE makes more stops at intermediate destinations, compared to the TGV trains, which tend to focus on connecting distant cities with few intermediate stops; (2) Germany focused on upgrading existing rail lines rather than build new high-speed rail track; and (3) most ICE services run on convention rail lines, with the exception of the Cologne-Frankfurt line, while the TGV mainly runs on dedicated HSR lines. Speeds on the conventional rail lines are limited to 125 mph.

Japan

Japan is perhaps France's biggest rival when it comes to high-speed rail. It was the unveiling of Japan's first high-speed train, the Tokaido Shinkansen (New Trunk Line), that spurred France to develop the TGV. Construction began in 1959, and in 1964, the world's first high-speed rail line was unveiled to the public on the eve of the Tokyo Olympics, then operating at a speed of 200 km/h (about 125 mph).

Japan is an extremely densely populated country: more than 70% of the land surface is mountainous and thus uninhabitable or unsuitable for road travel and parking. In fact, drivers must prove they have a parking space before they can buy a car. With such a population density, the only practical possibility for transportation across the country is rail. In fact, after World War II, the Japanese government officially deemed rail as the preferred mode of travel.

In 1970, the construction of a nationwide Shinkansen railway network was authorized by law. By 1973, the Ministry of Transport approved construction plans for five additional lines and basic plans for 12 others. Despite the approval, financial considerations intervened; the cost of the five lines (five trillion yen, or roughly \$18 billion US at the 1973 exchange rate), combined with the recession in the 1970s and early 1980s resulted in some lines being cancelled and others delayed until 1982. Today, Japan has eight Shinkansen lines, and is planning construction of five new Shinkansen lines to be completed by March 2016.

A Japanese consortium led by the Central Japan Railway Company has been researching new high-speed rail systems based on maglev technology since the 1970s. Test trains JR-Maglev MLX01 on the Yamanashi test line have reached speeds of 361 mph, making them the fastest trains in the world. These new maglev trains are intended to be deployed on new Tokyo-Osaka Shinkansen maglev route, called the Chuo Shinkansen, at an estimated total project of \$84 billion.

Construction of new Shinkansen lines are paid two-thirds by the federal government and one-third by the prefecture (local) government. The private sector Japanese Railway Company operates the lines on a regional basis, and pays a usage fee to the government. As Shinkansen lines build up ridership and become self-sustaining, the regional JR Company has the option to buy the corridor infrastructure, as well as managing the train operations. This model has put Japan in the position of having the lowest international rail operations subsidy in the world on a per passenger basis.

**The Need for Improved and Expanded High-Speed Rail in the Northeast Corridor**

Without question, the NEC represents the best opportunity for true high speed rail in the United States. In general, the highest demand for high speed rail occurs in city pairs that are located 100 – 500 miles apart with large populations and economies, along with the presence of regional and local transit networks to provide connectivity for intercity passengers.

The Northeast Corridor region is home to four of the ten most populous metro regions in the nation – New York, Philadelphia, Washington, DC, and Boston. The region is home to 18 percent of the nation's population living in just 2 percent of its land area.

Some of high speed rail's competitive advantages over air travel include the ability to bring passengers directly into a city center and to attract riders through connecting local and regional transit networks. High speed rail systems attract greater numbers of riders if they end in central downtown locations and tie into existing commuter rail and transit systems. The Northeast Corridor region is home to eight commuter rail systems carrying approximately 350 million annual riders and is home to the busiest subway system in the nation (New York) and the second busiest (Washington, DC).

Business travel is also critical to sustaining the ridership of high speed rail systems, and business travel is highest in places with the most productive economies. Gross Domestic Product (GDP) per capita is the broadest measure associated with both economic productivity and personal income. The Northeast Corridor accounts for four of the ten most productive metro regions in the national and accounts for one-fifth of the nation's GDP.

Congestion reduction, both at airports and on highways, is another important motivating factor for building high speed rail. In the Northeast Corridor, the I-95 Corridor Coalition estimates that over 60 percent of the urban road miles of Interstate 95 are heavily congested. Additionally, the airspace above New York is the most complex and congested in the nation. All three New York metro airports are among the five airports in the nation with the worst on-time arrival rate. In total, there are five Northeastern airports in the bottom ten performing airports in the nation for on time performance, including Philadelphia and Boston.

In summary, the NEC typifies the ideal corridor for high speed rail and shares many similar attributes with successful existing corridors around the world. Population density in the NEC region is higher than anywhere else in the nation, higher than nearly anywhere in Europe, and is similar to some densities in Japan. The NEC is home to extensive transit and regional rail systems that complement intercity passenger rail traffic and productive economies with an extensive existing travel market. Additionally, New York and Washington, DC are separated by just over 200 miles with two major cities in between – Philadelphia and Baltimore.

### **History of the Federal High-Speed Rail Programs**

#### **Early Legislation**

In 1965, Congress passed the High-Speed Ground Transportation Act, which began a Federal effort to develop, and demonstrate where possible, contemporary and advanced HSGT technologies. The HSGT program also included a comprehensive multimodal transportation planning effort focusing on long-term needs in the Northeast Corridor "megalopolis," as well as a pioneering research and development program in such advanced technologies as tracked air-cushion vehicles, linear electric motors, and magnetic levitation (Maglev) systems. The HSGT program was authorized for a total of \$90 million, and funds appropriated for this program went primarily for research, development and planning.

When HSGT Act appropriations ended in 1975, the focus of Congressional efforts shifted to upgrading the Northeast Corridor infrastructure with the objective of enhancing reliability and allowing shorter trip times, particularly between New York City and Washington, D.C. The Railroad Revitalization and Regulatory Reform Act of 1976 authorized federal funding for the Northeast Corridor Improvement Project (NECIP), a major engineering and construction effort to improve major sections of the NEC main line.

In the 1980's, at least six States formed high-speed rail entities, and ultimately Florida, Ohio, Texas, California, and Nevada awarded franchises to private sector consortia to build and operate intercity high-speed rail or Maglev systems. For a variety of reasons, none of these original proposals has yet led to construction, though the current California and Florida high-speed rail programs are based on this early work and development.

#### ISTEA and the Swift Rail Development Act

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which established a program to fund safety improvements at highway-rail grade crossings on corridors that were "designated" as high-speed intercity passenger rail corridors based on their present utility and their potential for future development. At present, up to eleven corridors are authorized for designation, of which the Secretary of Transportation and/or the Congress have designated ten corridors:

1. California Corridor
2. Pacific Northwest Corridor
3. South Central Corridor
4. Gulf Coast Corridor
5. Chicago Hub Network
6. Florida Corridor
7. Southeast Corridor
8. Keystone Corridor
9. Empire Corridor
10. Northern New England Corridor

The Northeast Corridor (NEC) is notably absent from the list of designated high-speed rail corridors. The reason for this is that by the time ISTEA was passed, the NEC had already undergone extensive renewal and upgrading, and was already free of grade crossings south of New York and largely free of them to the north. Thus, there was no reason to "designate" it under what was, in ISTEA, essentially a grade crossing upgrade program.

The Swift Rail Development Act of 1994 was the first federal authorization for high-speed rail corridor planning activities for the establishment of high speed rail service in the United States, with a modest authorization level of \$35 million a year.

#### Passenger Rail Investment and Improvement Act of 2008

In October 2008, President Bush signed the Passenger Rail Investment and Improvement Act (P.L. 109-432). Two new capital grant programs were authorized in PRIIA, the intercity passenger rail service grants to states (49 U.S.C. 24402), and the high-speed rail corridor development grants (49 U.S.C. 26106). The state capital grants were authorized for a total of \$1.9 billion over five years; the high-speed rail grants were authorized for a total of \$1.5 billion over five years (fiscal year 2009-2013). The purpose of the intercity passenger rail capital grants to States was to improve existing or establish new passenger rail services. These are not high-speed rail projects, but can be discrete stand-alone improvements such as straightening a curve, replacing a bridge, or double-tracking a section of track that will result in significant improvements to intercity passenger rail service.

The purpose of the PRIIA high-speed rail corridor development program was to provide grants to States to establish passenger rail corridors with service of at least 110 miles per hour. FRA was directed to give greater consideration to applications for projects that make direct intermodal connections with other transportation modes; allow for improvement to conventional intercity rail, freight, and commuter rail operations; and that encourage partnered financial participation with donated land, contributions from other benefiting rail carriers, and financial commitments from the States and the private sector.

### **High-Speed Rail Funding and Program Implementation**

#### **ARRA and FY 2010 Appropriations and DOT Awards**

The American Recovery and Reinvestment Act of 2009 provided appropriations of \$10.5 billion under a consolidation of the two PRIIA passenger rail capital grant program, calling the grants "High Speed and Intercity Passenger Rail" (HSIPR). Combining these two separately authorized programs meant that the distinction between the two program functions and targeted benefits was also lost. The HSIPR program is often referred to as the "high-speed rail grants", but only a few of the grants awarded by the Department of Transportation using these funds are truly high-speed, as defined in the underlying authorization.

The Northeast Corridor is the spine of the region's passenger rail network; 10.4 million passengers traveled this corridor in fiscal year 2010, making it by far the busiest intercity rail service in the United States. (Amtrak's total national ridership in FY 2010 was 28.7 million passengers.) Despite the high ridership and need for added capacity and capital improvements on the Northeast Corridor, the Department of Transportation's awards process under the High Speed and Intercity Passenger Rail grants bypassed the Northeast Corridor almost entirely. Out of \$12.5 billion appropriated for the HSIPR grants, only \$165 million was awarded for projects on the Northeast Corridor (1.3 percent).

The American Recovery and Reinvestment Act of 2009 provided \$8 billion for HSIPR grants. Of this, a total of only \$109.1 million was awarded to projects on the Northeast Corridor: \$60 million to complete engineering and environmental work for a new tunnel in Baltimore; \$9.4 million for station and track improvements at Baltimore-Washington International station; \$38.5 million for the final design of a new bridge to replace the Portal Bridge in New Jersey; and \$1.2 million for track design work in Rhode Island.

The FY 2010 Consolidated Appropriations Act provided \$2.5 billion for HSIPR grants. Of this, a total of \$45.8 million was awarded to projects on the Northeast Corridor: \$32.5 million to fund an environmental study and preliminary engineering for the South Station expansion in Boston; and \$13.3 million to install 1.5 miles of high-speed rail track, construct additional crossovers, and replace a bridge near Wilmington, DE. Additionally, FRA will be the lead agency on the Northeast Corridor-wide environmental impact statement that the agency has determined is needed before more significant federal funds flow to the NEC. FRA awarded itself \$10 million from FY 2010 high-speed rail planning funding for this effort.

### Plans for True High-Speed Rail Service on the NEC

#### Northeast Corridor Infrastructure Master Plan

In June 2010, Amtrak released the Northeast Corridor Infrastructure Master Plan, prepared by a working group made up of Amtrak, representatives of the State departments of transportation of 12 northeastern States and the District of Columbia, eight commuter railroads and three freight railroads that use the NEC. The Master Plan goes beyond the NEC "Spine" from Washington DC to Boston, and includes other intercity lines such as the Philadelphia to Harrisburg, PA route, the New York City to Albany, NY route, and the New Haven to Springfield, CT route. The Master Plan calls for \$52 billion in capital investment over 20 years to maintain the current NEC system in a state of good repair, integrate intercity, commuter and freight service plans, and move the NEC forward to meet expanded service, reliability, frequency, and trip-time improvements envisioned by the Northeastern States and other stakeholders. Under this plan, express service between Washington DC and New York City (with 2 stops) would take 2 hours and 15 minutes, compared to the 2 hours and 45 minutes current travel time for Acela. The annual number of riders is estimated to increase from 13 million to 23 million, and the average number of weekday NEC intercity trains would increase from 154 to 210.

#### University of Pennsylvania Study of High-Speed Rail in the Northeast Corridor

In Spring 2010, the University of Pennsylvania School of Design released a report called "Making High-Speed Rail Work in the Northeast Megaregion". This report outlined a bold new proposal for world-class high-speed rail in the Northeast Corridor, creating two dedicated high-speed rail tracks from Boston to Washington. The report found that this new capacity would enable the Northeast Corridor to achieve significant improvements in capacity, reliability and travel times. Proposed new HSR service will cut travel times in half, with one-and-a-half-hour service between New York and Washington, D.C., and one-hour-45-minute service between New York and Boston. It will enable a six-fold increase in the frequency of intercity service and a ten-fold increase in the capacity of the system. The study estimated the capital costs of the new alignment at \$98 billion.

To manage such a large project, the UPenn study advised approaching Northeast Corridor high-speed rail as a long-term investment, giving the private sector an opportunity to invest in the HSR through public-private partnerships, and allowing the government to recoup a significant portion of its investment in high-speed rail. Different public financing mechanisms were discussed, including establishing a Northeast Corridor Commission Trust Fund, new interstate tolls, user fees, value added tax, and station area sales taxes to capture the value of development around high-speed rail stations. The private financing model envisioned in the UPenn study has the public sector financing and building the system, and the private sector partially repaying the government through a long-term operating lease, or concession agreement, though the report outlined opportunities for the private sector to fund station construction and development, rail equipment, and train operations.

#### A Vision for High-Speed Rail in the Northeast Corridor

In September 2010, Amtrak released its "Vision for High-Speed Rail in the Northeast Corridor", a proposal that, like the UPenn study, lays out a true high-speed rail alternative for the Northeast Corridor utilizing a dedicated right-of-way for 220-mph service, with 96 minute trip time from

Washington DC to New York, and 93 minute trip time from New York to Boston. The plan is estimated to cost \$117 billion and would take 30 years to fully implement. Amtrak estimates ridership on the Northeast Corridor to grow by 44 percent at full build-out of the NEC Vision Plan, and for revenues to generate an annual operating surplus of \$900 million.

#### **Private Sector Financing and Public-Private Partnership Models**

The Federal government cannot carry the full financial burden of public infrastructure projects. Private industry must step up and help fill the gaps in HSR funding and operations.

Recent U.S. Treasury estimates show \$400-\$500 billion in available uncommitted capital in the U.S. investment community. The investment community has indicated strong interest in participating in high-speed rail development. The following are some examples of private sectoring financing models and public-private partnerships that could be utilized in financing high-speed rail on the Northeast Corridor.

##### **Great Britain HS1**

The British high-speed rail line running 67 miles from London to the British end of the Channel Tunnel known as HS1 was built by the British government. In 2009, the UK government auctioned off a 30-year concession for the right to own and operate the corridor. The sale generated approximately \$3.4 billion dollars and was sold to a consortium of two Canadian pension funds - Borealis Infrastructure and Ontario Teachers' Pension Plan. The concession sale is estimated to return 40 percent of the construction cost to the British treasury. At the end of the concession period (in 2040), the railway reverts back to the government, which anticipates re-bidding it for an equal or higher price. Over time, the UK government plans to recoup much of its upfront capital costs by using the concession model.

##### **Denver Eagle P3**

The Denver Regional Transit District is partnering with a consortium of private companies to design-build-operate-maintain and finance two new light commuter rail lines (the East Corridor and the Gold Line) and a new commuter rail maintenance facility under a single contract. Under this public-private partnership, RTD will retain all assets while shifting much of the risk of building the projects on time and on budget to the private partners. In return, RTD will make lease payments to the private partner over a number of years, allowing the agency to spread out large upfront costs over a longer period of time. The total cost of the Eagle P3 projects is \$2 billion. The Federal Transit Administration will pay one-half of the capital costs, and approximately \$848 million of the cost will be financed through private equity, with the remainder coming from local sales tax revenues and other local funding sources. This project is expected to break ground in May 2011 under a full funding grant agreement.

The government cannot solely be relied upon to carry the full financial burden of public infrastructure projects. Private industry must step up and help fill the gaps in HSR funding and operations.

Successful public-private partnerships share financial between the public and private partners. The private sector is incentivized to participate in financing a project when risk is minimized and there is a consistent federal or state partner. Incentives such as guaranteed loans, tax credits, and possibly deferring payments on loans until profits are made may also make private financing more attractive. Private sector financing will allow high-speed rail projects to be developed and constructed with less reliance on public funds, which can speed up the process and result in lower-cost projects. In these arrangements, the public partner retains some control and management of the overall rail program to ensure that public requirements and governments standards are met.

**HEARING WITNESSES**

The Honorable Michael Bloomberg  
Mayor  
City of New York

The Honorable Ed Rendell  
Co-Chair  
Building America's Future

Mr. Thomas Hart  
Vice President, Governmental Affairs  
U.S. High Speed Rail Association

Ms. Petra Todorovich  
Director, America 2050  
*Representing the Business Alliance for Northeast Mobility*

Mr. Perry Offutt  
Managing Director  
Morgan Stanley

Mr. Robert Scardelletti  
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The Honorable Jeffrey Mullan  
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President & CEO  
U.S. High Speed Rail Association

Mr. Perry Offutt  
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## **DEVELOPING TRUE HIGH SPEED RAIL IN THE NORTHEAST CORRIDOR—STOP SITTING ON OUR FEDERAL ASSETS**

Thursday, January 27, 2011

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,  
WASHINGTON, DC.

The committee met, pursuant to call, at 10:10 a.m., at Grand Central Station, Northeast Balcony, New York, New York, Hon. John L. Mica [chairman of the committee] presiding.

Mr. MICA. I call to order the Committee on Transportation and Infrastructure of the United States House of Representatives. Welcome, everyone, to this field hearing. This is the first field hearing for our committee; and we are pleased to be in Grand Central Station in New York City.

The order of business today will be: First, we will have opening statements by the principal leaders of the committee: Myself, chairman of the full committee; Mr. Shuster is chairman of the Rail Subcommittee. Then we will hear from the Democrat leader and the ranking member of the full committee, Mr. Rahall, the gentleman from West Virginia.

We will hear from Ms. Brown, who is the Democrat leader and ranking member of the Rail Subcommittee.

We are going to start with a little different order. We will allow each of those individual members to give opening statements. After those opening statements, we're going to begin hearing from our witnesses. Mayor Bloomberg is a bit delayed. We will hopefully keep the program on schedule and we will hear from him as he arrives.

When we have heard from the Mayor and Governor Rendell, we will allow other members who are with us today for opening statements or questions, however they would like to utilize their time.

We have been joined by several other members of the New York delegation. This is one of the largest gatherings, I think, historically, of the House Transportation Infrastructure in New York City. And we are pleased to be here and discuss a very important topic.

The title of today's hearing is "Developing True High Speed Rail in the Northeast Corridor." And that's also part of a report that we released entitled "Stop Sitting on our Federal Assets." Last fall we produced that report.

And certainly, the Northeast Corridor is one of the most valuable Federal assets that the American people have an interest in; and

that's our interest in being here. And as I said, we'll start with my opening comments here.

This hearing, in fact, is being held as a follow-up to the Transportation and Congressional report. You see the title here, "Sitting on our Assets." The Federal Government has misused the taxpayers' own assets. One of the most valuable and potentially productive Federal assets in the United States is, in fact, the Northeast Corridor. This 437 mile stretch of incredibly valuable real estate covers the distance between Washington, our Nation's capital, and Boston, Massachusetts.

Halfway up the corridor, here in New York City, we are right now in America's business and financial and the world center of those activities. This is also our Nation's most congested and densely populated area; yet New York City is not served by true high speed rail, and true high speed rail may not be realized here for more than three decades to come.

Unfortunately, this is a valuable national transportation asset and the development of true high speed passenger rail on the Northeast Corridor has been largely ignored. President Obama last year said there is no reason why Europe and China should have the fastest trains when we can build them right here in America.

High speed trains move in Europe at an average speed of 186 miles per hour. Amtrak's Acela chugs along an average between D.C. and New York at 83 miles an hour. On Amtrak yesterday, on my ride up here, they travelled at the lightning speed, an average speed of 65 miles an hour between New York and Boston. By comparison to Europe and Asia, the Acela is moving at a snail's pace.

America's current plan is to bring true high speed rail to the Northeast Corridor—and actually, I misstated that—to bring what they call high speed rail to the Northeast Corridor. Amtrak's plan would require \$117 billion and would not be completed until 2040. This is their plan.

This low speed schedule of bringing true high speed rail service to the Northeast Corridor or any level of high speed rail to the Northeast Corridor, would never allow President Obama to meet the goal he has stated before the Nation just two nights ago in the State of the Union address; that within 25 years, our goal is to have 80 percent of Americans access to high speed rail.

Now, Mr. Shuster told me that the Northeast Corridor accounts for 20 percent of the population of the United States. So maybe that plan does not include the Northeast Corridor, that's the 20 percent that's been left out; just do the math.

My hope that this timetable can be dramatically improved. Let me say, we're going to do everything possible to work with the administration, everyone on both sides of the aisle, to improve that schedule.

Entering into public-private partnerships to assist in the financing of high speed rail development on the Corridor, I believe can get the project done much faster and dramatically bring down costs. We can also bring down the amount of money that the taxpayer would have to put into the project; that is, with some private sector investment funding.

Unfortunately, one of our Nation's most valuable assets, including some of the most prime real estate in the world, has been left

behind. Instead of providing visionary transportation to link America's crowded corridor, we continue to support an antiquated and unproductive corridor that struggles to meet the needs of its many users.

Finally, why should Members of Congress, from more than a dozen states here today, care about the Northeast Corridor?

Let me state some of the reasons.

First, the Northeast Corridor is a tremendously, incredibly valuable Federal asset.

Second, we're the stewards and the trustees of these assets. I believe we have an obligation to all Federal taxpayers and the citizens of these great cities.

Third, this is our Nation's most congested corridor, on the land and also in the air.

Fourth, 70 percent of our chronically delayed air flights in the country, chronically delayed in the country, 70 percent—get this—start right here in the New York air space.

So there are benefits to the entire country by us being here today and actions to move this project forward.

Fifth, Amtrak, I can tell you—this is my 19th year of following Amtrak—will never be capable of developing the Corridor to its true high speed potential. The task is too complex and too large scale, and can only be addressed with the help of private sector expertise, those who have done this before, those who can do it in the future. And also, they will never get the funding for it with the plan they have currently proposed.

Sixth, bringing true high speed rail to the Northeast Corridor will benefit the entire Nation.

So those are some of the reasons that I think we have got to move ahead.

The large turnout today by members of the Transportation and Infrastructure Committee, and New York area members, is a testament of the high level of interest and commitment to new and innovative transportation solutions.

I want to thank everyone for attending today, and particularly thank our witnesses in advance. I look forward to your testimony. I particularly want to thank Governor Rendell. He is here and he is going to speak in a few minutes. He took Amtrak and took public transit, I think two subway lines to get here today. That's remarkable, and we appreciate not only getting here today, but his continual leadership on this issue.

We will have Mayor Bloomberg in just a few minutes, and we appreciate both of their long term support.

Mr. MICA. Due to the schedule, the demands, I again will proceed with hearing first from our ranking members. And I will turn to my good colleague, new partner in this endeavor, the gentleman from West Virginia, and welcome again his input for this important topic, Mr. Rahall.

Mr. RAHALL. Thank you, Mr. Chairman. I appreciate it. I appreciate the opportunity to be here in New York City as the committee begins its hearings on Amtrak and high speed rail in the Northeast Corridor.

In the 2008 Congress, we charted a new course for passenger rail in the U.S., an enactment of bipartisan legislation, the Passenger

Rail Improvement Act. That law created two new national programs for the development of high speed intercity passenger rail.

It also reauthorized Amtrak, which currently holds 69 percent of the air rail market shared between Washington, D.C. and New York.

After years of battling starvation budgets for Amtrak, Congressional efforts to eliminate certain routes, the Bush administration's budget proposal to destroy Amtrak in bankruptcy; we're all proud to report that for the first time in decades, the 2008 act set forth a new path for investing in one of America's greatest assets, Amtrak.

In addition, that law created a process for the U.S. DOT to issue a request for proposals through the private sector, to finance, construct and operate high speed rail service in the ten dedicated corridors in the Northeast Corridor.

Accordingly, DOT, eight private sector proposals were submitted and then forwarded to the Volpe National Transportation System, DOT Research Center, for review. The Volpe Center then recommended five proposals for DOT consideration.

The French National Railway submitted four proposals for development of high speed rail in Florida, the Midwest, California and Texas. And the California High Speed Rail Authority submitted the fifth proposal.

I would note that no private sector proposals were submitted for the Northeast Corridor. In the year after the 2008 act, Congress provided the most significant investment in passenger rail since the creation of Amtrak in the 70s.

The American Recovery and Reinvestment Act of 2009 provided \$8 billion for the development of high speed inner city passenger rail; and \$1.3 billion for Amtrak capital improvements. In addition, 2 and a half billion dollars for passenger rail for fiscal year 2010.

These grants for the first time in the history of Amtrak have enabled the national passenger railroad to release the brakes, to pull the throttle out of survival mode and turn its full attention to future service and equipment improvements to meet growing demands, including the development of high speed rail in the Northeast Corridor, a plan that Amtrak unveiled last September.

While I'm pleased with continuing efforts to invest in and improve the Northeast Corridor, one thing I believe that this Congress needs to remain focused on is developing a national program. After all, it was a national vision that led to creation of the world's most advanced highway and aviation networks, helping to spur unprecedented economic growth to foster new communities, connect cities, towns and regions, and create millions of jobs.

The Federal Government, the states and local communities and the private sector have all worked together to recognize that national vision. But it did not happen overnight. It took 60 years and \$1.8 trillion to get where we are today.

That same national vision was established by Congress in 2008 and reiterated by President Obama in his vision for high speed rail, combined with those same partnerships, is what is needed today to develop a truly national rail system in the United States.

Thank you, Mr. Chairman, for the time. I look forward to hearing from today's witnesses.

Mr. MICA. Thank you.

I yield to the chair of the Rail Subcommittee, the gentleman from Pennsylvania, Mr. Shuster.

Mr. SHUSTER. Mr. Chairman, thank you for holding this hearing today in this historic building. My colleague leaned over and said he doesn't think a building like this could be built again. It's a beautiful structure, and it's great to be here. It's great to have this hearing on true high speed rail in the Northeast Corridor.

I would also like to welcome Governor Rendell and Mayor Bloomberg for their efforts on building infrastructure; and of course, the Governor for the success he's had in Pennsylvania with some of your projects over the years.

It is an exciting time to be a member of the Transportation Committee. There's a lot of progress to be made in this country. I believe we in the Committee are going to be able to tackle and address many of those, especially the need for high speed rail in this corridor.

I believe it's important to the future to have high speed rail as a better way to move large numbers of people on passenger rail. My home state of Pennsylvania, and I think the governor will touch upon the Keystone Corridor. I'm not going to go into the details; he will hopefully touch upon that.

He made the investment in Amtrak and improved the Keystone Corridor from Harrisburg to Philadelphia. I'm a poster child, somebody that 20 years ago said, "I'll never get out of my car again to go on the rails, I want to use my car with flexibility." Today, I don't travel to Philadelphia from Washington. I take the train from Harrisburg because of the convenience of it, the reliability of it. It's a great success story, when it comes to passenger rail in United States.

Unfortunately, the United States is far behind the curve. Our friends in Europe and Japan have decades on us working on high speed rail. The Japanese have a train that travels over 300 miles an hour. And the Chinese are spending \$300 billion dollars to build 8,000 miles of high speed rail. They say they're going to complete that in the year 2020.

Our competition in the world is doing it. We need to keep up with the competition. For a hundred years, the United States was the unquestionable leader when it came to passenger rail trains. Unfortunately, the rail delivery industry, the passenger rail industry, highways and aviation caused its demise.

But the times are changing. We want to get back on the rails. Look at the population of the United States. Just in 2006, we crossed the 300 million person threshold in America. By 2039 there'll be 400 million American citizens.

We need to figure out ways to move that population, especially in urban areas. Look at the map. Not everybody lives in the Northeast Corridor, Florida and Arizona. But the Northeast Corridor continues to be the most densely populated area of the United States. And again, we need to figure out a way to move people effectively and efficiently, and I believe high speed rail is the way to do that.

Unfortunately, the President had stimulus money and a vision, but he took that stimulus money and he spread it too thinly across

the Nation, instead of focusing on the Northeast Corridor. In his State of the Union address on Wednesday night, he talked about building high speed rail in America, having access for 80 percent of the population.

I don't believe that's realistic. I believe if he were truly committed to high speed rail he would start here in the Northeast Corridor, for many of the reasons the Chairman said. Twenty percent of the population lives here. The existing line is here, and we need to upgrade it. I believe we will be able to have high speed rail, which will spread throughout this country over time.

This corridor is critical, the investment is critical, and we need to attract the private sector to this effort. I believe, Mr. Chairman, we need to have the private sector involved to produce a high speed rail corridor that can be built in a relatively short period of time.

Again, I want to thank the Chairman and thank our witnesses for being here today. I look forward to hearing your testimony.

Mr. MICA. Thank you.

I am pleased to yield to the former chair of the Rail Committee, and current ranking member, my colleague from the state of Florida, a great advocate of transportation, Ms. Brown.

Ms. BROWN. I want to thank Mr. Mica and Mr. Rahall for holding this first hearing of the 112th Congress, on the issue I think is so important for this country. I also want to thank my colleagues. We have 14 members here from all over the country. We have people from the New York delegation joining us and people from the New Jersey delegation joining us. It is a lot of excitement about the rails.

And I also, looking at the audience, want to thank some of our stakeholders. Labor is here. They are very interested in what's happening. Business people from all over the country are here. So there is a lot of interest in what is going on with rail.

Also, Amtrak is in the room. And I personally asked they be at the table, because I thought it very important that they who run the Northeast Corridor be involved in giving us information as to what works, what does not, and what kind of investment needs to be made in the system.

We invested a lot of money in the highway system, \$1.3 trillion in our Nation's highway system; and \$484 billion dollars in aviation. And since 1970, when Congress created Amtrak, we have invested just \$67 billion in passenger rail.

I got to tell you, I love this new bipartisan working together. But keep in mind, for eight years under the Bush administration, every budget that arrived to Congress was zeroed out for Amtrak. I want to thank President Barack Obama for the first time making a major investment in high speed rail, for the first \$8 billion.

I know that's a beginning. Keep in mind, China is putting \$300 billion, and that's our competition. We need to work together to augment the system. But we also need to work with our partners and stakeholders as we develop a system. It is not the Federal Government telling the state and local governments what to do.

I think there are a lot of stakeholders involved, and as we develop how we're going to develop the Northeast Corridor in the United States, it is going to be as, like military people say, one team, one fight, working together.

Thank you very much, Mr. Chairman, for holding this hearing. I'm looking forward to hearing from the presenters.

Mr. MICA. Thank you, Ms. Brown.

We are pleased to go ahead and begin the hearing with our witnesses. We have four of the five witnesses who will be before us here. We'll go ahead and proceed in that order.

I'll just say that we in fact gave Amtrak—it took us three hours to get here last night, and they had more time than anyone will have with all of the Members of Congress to brief us on the train. We were captive to their system. And I thought we had a great discussion, which went on for some time.

Let me tell you, first order of the day, this is going to be a fairly brief hearing. I like brief hearings; it is scripted, as you know. But we do have an opportunity for some discussion here.

When we conclude this hearing, we will have an open forum upstairs—the MTA's board room, as many people as want to participate, will follow this with a discussion. And there will be an open discussion. Some people sitting here have good questions and good ideas. I welcome you to participate. It will be open, it will have to be orderly and limit some of your time. But I will be operating the committee in a different fashion, so that hopefully we can get productive input and exchange.

Amtrak will also be available at that session too, and others who we couldn't get in this panel.

Then, our final business of the day, since we have many new members, 19 of the Members of the Committee on Transportation and Infrastructure who did not serve in Congress before; and we're going to take them down to show them the mega-New York project. And we'll also be briefed by Mayor Bloomberg and some transportation staff on the projects that New York City has going.

These projects are important, not only to New York City and this region, but the Nation. And we need to have the information about these.

And finally, we're going to move forward in the Northeast Corridor. The sleet and the snow, the slush, whatever, if we can get here today, we are going to make this work and give a new meaning to "The Great White Way."

With that, I yield—

VOICE. I have a statement from Carolyn Maloney to be included in the record.

Mr. MICA. Carolyn Maloney, without objection, so ordered.

She asked me to express her strong support for development of the Northeast Corridor. She is a champion of it. She has another commitment and could not break away, otherwise she would be here. I view her as a true valuable partner, along with the others that are here today.

With that, let me introduce our first witness. This gentleman has left the most important position in Pennsylvania government. He has been a tireless advocate of improving the Nation's infrastructure. He is on the other side of the aisle, but that doesn't mean squat to me. I view him as, again, one of the strongest voices in America for moving our infrastructure forward, getting people working again, getting us on the right track to moving the economy and people around this country and our Nation.

I am pleased to welcome for the Transportation Committee; I recognize at this time Governor Ed Rendell.

Welcome, sir.

**TESTIMONY OF HON. ED RENDELL, CO-CHAIR, BUILDING AMERICA'S FUTURE; THOMAS HART, VICE PRESIDENT, GOVERNMENTAL AFFAIRS, U.S. HIGH SPEED RAIL ASSOCIATION; PETRA TODOROVICH, DIRECTOR, AMERICA 2050, REPRESENTING THE BUSINESS ALLIANCE FOR NORTHEAST MOBILITY; ROBERT SCARDELLETTI, INTERNATIONAL PRESIDENT, TRANSPORTATION COMMUNICATIONS INTERNATIONAL UNION; AND HON. MICHAEL BLOOMBERG, MAYOR, CITY OF NEW YORK**

Mr. RENDELL. Good morning, Mr. Chairman. Thank you, Chairman Mica, Ranking Member Rahall, and Members of the Committee. Thank you very much for coming here and having these hearings.

I'm going to start off by saying I agree with everything Mayor Bloomberg said, because I read his statement. He is not here, but remember I agree with everything he said.

I also want to recognize, of course, Chairman Shuster from Pennsylvania, and Congressman Meehan, a friend of mine from the Philadelphia area.

Congressman Meehan, it's nice to see you here.

The Committee, and your statements have recognized it, the four members who spoke, that passenger rail has been seriously underfunded for decades and decades in the United States. We recognize what is going on in other parts of the world.

Not only in the way high speed rail operates, as Congresswoman Brown said, but the difference in funding in China, our biggest economic competitor, is making, compared to what we are making. So I'm not going to go over those.

Let me say, President Obama, as Congressman Rahall said, deserves credit as the first American president to put significant dollars into passenger rail; over 10 and a half billion dollars distributed in the last 18 months.

It was a great start, and the President and Secretary LaHood deserve praise for going down that road. But I think we need to get real. The way we are doing high speed rail right now in America will amount to nothing. It will amount to nothing for two reasons.

One, it's too diffuse. You cannot do high speed rail politically. In the first allocation, the Federal Government gave \$7.9 billion to 36 states. In the second, \$2.5 billion to 23 states, but for 54 separate projects.

It won't work. It's not enough money to make a dent in any project. And first of all, he has to convince the American people that high speed rail is viable, it makes sense, and it can be cost effective.

The answer to the question Chairman Mica posed, why start in the Northeast? Because we've got to make sure there's one at least in California, in Florida, or in the Northeast Corridor. We know these systems work, they're viable, it's sustainable, many people will ride them.

If we don't do that, we won't get the American people to give support for high speed rail funding at all. So first, it's too diffuse. Let's concentrate on one or two or three projects. The Northeast Corridor is number one. America 2050 just released a report in which it ranked the top ten potential corridors for high speed rail: New York to Washington, number one; New York to Boston, number two.

If we were a business, we would look no further. That's where we would put our money. When it comes to high speed rail, we have got to become more like a business.

So, second reason: It's too slow. We're spending money to go from 80 to 110 miles an hour. The Chairman said it was slow speed rail, snail speed rail. I have described it as mid speed rail.

By the way, I'm here in my capacity as the co-chair of Building America's Future. I'm also here in the capacity as a former governor who invested a lot of state resources in passenger rail.

It's too slow. We're going to compete with all of those countries. Do you know they're testing high speed rail systems in Shanghai that go 360 miles an hour? In France, 357 miles an hour? And we're talking about spending billions of dollars to get to 110 miles an hour. It makes no sense. We've got to get real.

And I think there are two road maps for getting real. Road map number one is the Amtrak plan; \$117 billion over 30 years to cut the cost of the speed from Washington to New York from 162 minutes to 96. You get Washington and New York down to 96 minutes, you will end the air shuttles, and you will improve dramatically the air traffic delays in the corridor with the Nation's busiest airports.

New York City to Boston from 215 minutes to 84 minutes; an hour and 24 minutes. The speed on Amtrak realized is 220 miles per hour.

It's not just Amtrak. The University of Pennsylvania School of Design, one of the very best in country, did a student project. These students, four of them are here today. They developed a plan that I'd like to submit to the committee on making high speed rail work in the New York mega-region. It's a plan that would cost \$98 billion and take 30 years.

Why so long?

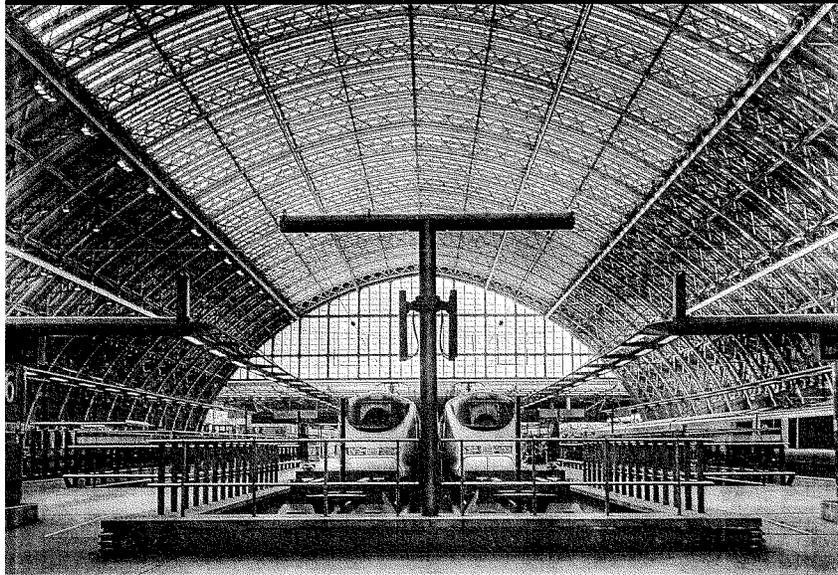
The only way that high speed rail really works is with dedicated tracks. It can't share tracks with freight rail, it can't share tracks with commuter rail, because it would never achieve the speeds necessary. You have to build dedicated tracks, and that means right of way. If China can spend \$300 billion in ten years, I believe we can spend \$100 billion in a lot less than 30 years.

That's a task that I think the Congress should address itself to.

Mr. MICA. Mr. Shuster moves that that report be made part of the record. With unanimous consent, without objection, Governor, we'll get that in right now.

[The executive summary of the report follows; the full report can be found online at <http://studio.design.upenn.edu/hsr/node/81>.]

# MAKING HIGH-SPEED RAIL WORK IN THE NORTHEAST MEGAREGION



UNIVERSITY OF PENNSYLVANIA SCHOOL OF DESIGN  
DEPARTMENT OF CITY AND REGIONAL PLANNING  
SPRING 2010 STUDIO: EXECUTIVE SUMMARY

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*This June, read the full report at <http://studio.design.upenn.edu/hsr>*



Cover image: almonkey via flickr

## EXECUTIVE SUMMARY

If the United States Northeast Megaregion is to grow and prosper, its cities and states must work together to become a single, globally competitive economic powerhouse. This report outlines a bold new proposal for world-class high-speed rail in the Northeast Megaregion, which will transform the economic geography of the whole Northeast.

By creating two dedicated high-speed rail (HSR) tracks from Boston to Washington, the Northeast Corridor will achieve significant improvements in capacity, reliability and travel times. Simultaneously addressing system-wide congestion and intercity connectivity, this new HSR network will sustain the Northeast's role as the country's premier economic and cultural driver. It will enable the region to meet the needs of a growing economy and population in the most environmentally responsible, cost-effective way. With this new mobility system in place, the Northeast can compete successfully with the great cities and nations of the world—many of which are already reaping the benefits of their own high-speed rail networks.

Proposed new HSR service will cut travel times in half, with one-and-a-half-hour service between New York and Washington, D.C., and one-hour-45-minute service between New York and Boston. It will enable a six-fold increase in the frequency of intercity service and a 10-fold increase in the capacity of the system. This enhanced network will translate to improved connectivity for the Northeast's global cities—the anchors of New York, Washington, Philadelphia and Boston—and increased potential for other cities along the corridor.

Building this transformative high-speed rail network will require champions both in government and from the grassroots. The Obama administration has committed to building HSR around the country, and this proposal captures that forward-looking commitment to present new ideas for innovative and long-term funding of the project. As the following pages detail, in order for HSR to succeed, implementation must include dense population and ridership, walkable station districts, extensive regional transit connections, land use planning for transit-oriented development, cooperation among transportation authorities and investors, and perhaps most important, support from both the market and voters.



**NEC vs. U.K.:** The Northeast Corridor and the United Kingdom, shown here at the same scale, have strikingly similar profiles when measured by population, GDP and proposed length of train line.

#### EXISTING CONDITIONS

Taken as a whole, the Northeast Corridor is the sixth-largest economy in the world, with a GDP of \$2.59 trillion and a population the size of the United Kingdom. By 2050, the region is projected to grow to 70 million people with a \$7 trillion GDP. In the same time period, the amount of urbanized land in the NEC is expected to increase by more than 23,000 square miles, anchored by five of the world's great cities—Boston, New York, Philadelphia, Baltimore and Washington, D.C.—and supported by a constellation of other cities and towns.

The megaregion is well served by existing road, rail and air networks, including 10 port authorities, 12 major airports and Amtrak's Northeast Corridor services. However, road and air networks suffer from substantial congestion, dragging down travel times on those modes. Among Amtrak's services, which serve 250 million passengers a year, the Acela Express is the fastest, with average speed around 70 miles an hour. At top speeds, the Acela can get passengers from Washington to New York in two hours and 45 minutes, and from New York to Boston in three and a half hours.

Although the Northeast Corridor is Amtrak's busiest region nationally, it faces a number of challenges including negotiating myriad rail operators, interacting with freight, poor on-time performance, speed and capacity constraints, and the ongoing costs of maintenance and incremental improvements.

**The Current Costs of Congestion**



**825,000**  
Wasted Hours  
(20,625 weeks of  
vacation time)



**\$17.6 billion**  
Total Costs of  
Congestion

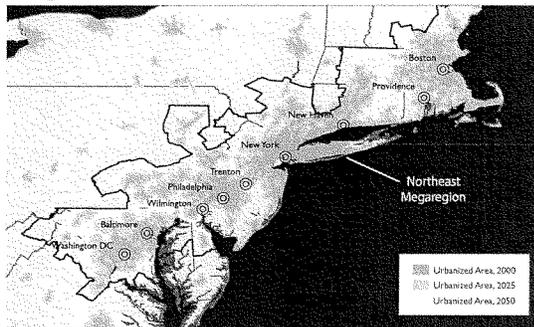


**540,000**  
Wasted Gallons  
of Gasoline

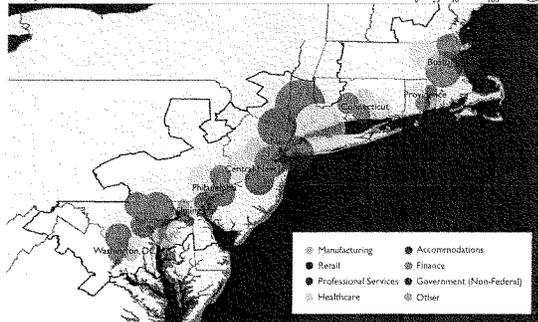


**5,240 tons**  
CO<sub>2</sub> Emissions

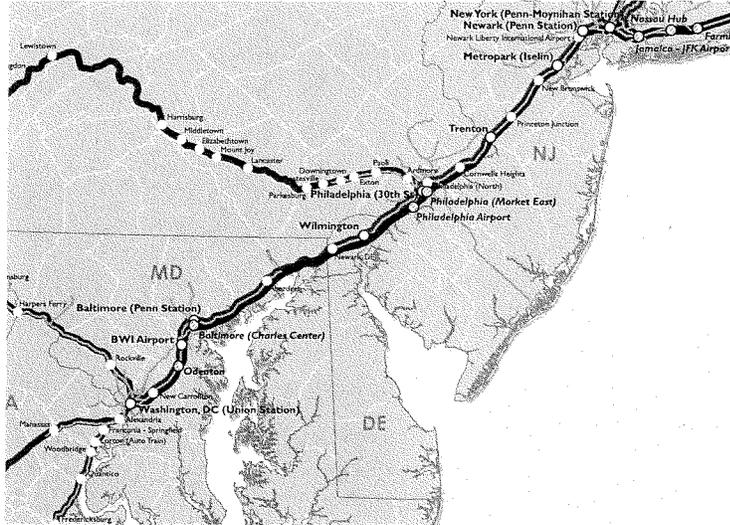
**Land impact:** The Northeast Corridor is full of challenges—road congestion, increased urbanization—but also offers great potential for diverse industries and a skilled workforce to work more closely together.



**Projected Urbanization**



**Major Regional Employers by Industry**

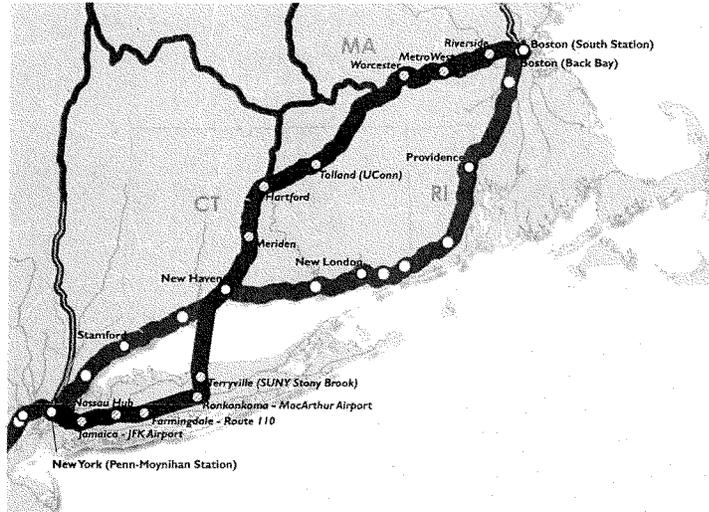


**Southern alignment:** Between Washington, D.C., and New York City, dedicated high-speed tracks travel new alignments through the city centers of Baltimore and Philadelphia, enabling trains to maintain shorter travel times throughout the route.

**DESIGN: HIGH-SPEED RAIL LINE**

In order to operate a high-speed rail line that achieves serious trip-time reductions, the network needs to be built along a two-track railroad that runs throughout the corridor. The addition of two dedicated high-speed lines between Washington and Boston will make existing infrastructure capacity available to commuter services and freight traffic, reduce trip times to be competitive with air and auto travel, and dramatically increase the viable connections between residence and workplace. By improving service with a new alignment and service plan, the Northeast Corridor has the potential to triple its current annual ridership by 2040, serving more than 35 million annual riders by 2040.

The proposed two-track dedicated service between New York's Moynihan Station and Boston's South Station may follow a significantly different alignment than the existing NEC. Simultaneously solving the problems of tightly curving and constrained alignments through New York and southwestern Connecticut and the isolation of Long Island



**Northern alignment:** Two options exist for getting from New York to New Haven. An upgraded existing route from New Rochelle to Stratford, which is already heavily used, has a constrained and circuitous right-of-way and would likely have severe NIMBY concerns: an alternative route, which travels through Long Island and inland through Connecticut and Massachusetts, can compete for the service, as was done with HSI in the U.K.

from the rest of the Northeast, the new alignment proceeds east from New York across Long Island, then north through a new, three-track tunnel across Long Island Sound to New Haven. From there it travels inland to Hartford, then along the I-84 corridor toward Worcester, and finally east to Boston along the Massachusetts Turnpike. As an alternative northern alignment, full Amtrak service will be retained or expanded along the existing coastal route, with New Haven becoming the new linchpin of the northern end. The southern half of the dedicated high-speed rail line relies mostly on existing right-of-way from Washington's Union Station to New York's Moynihan Station. Here, the physical challenge is primarily an urban one—the tricky alignments through Philadelphia and Baltimore limit speeds for the whole line. Solving two problems with one change, the proposed alignments utilize tunnels to dramatically improve speeds through these cities while also creating new downtown stations in areas ripe for economic development. Further linkages include direct service to Philadelphia International Airport and improved regional connections.

Proposed service would reduce travel times between Washington and New York to one and a half hours, between Philadelphia and New York to 37 minutes, and between New York and Boston to one hour 45 minutes, at an estimated cost of \$98.1 billion. The line will be built in phases, starting with the New York-Philadelphia connection in the south and New Haven-Boston in the north, followed by completion of the southern end to Washington, D.C., and eventually the connection of the northern end through Long Island.

#### DESIGN: INTERMODAL LINKS AND REGIONAL CONNECTIVITY

Rail anywhere, at any speed, performs better when it's connected to other modes. In order for any high-speed rail network to succeed, it must be fully integrated with the connecting regional transportation networks: not just commuter trains, but subways, light-rail systems, cars, buses and planes (for long-distance travel) as well. This not only increases ridership; it also supports the extension of new land use patterns concentrated around transit.

Links between modes must be seamless, both physically and temporally. They require an integrated fare system—riders should be able to swipe one card to get from origin to destination, no matter the number of different modes they travel on—and closely coordinated schedules with an absolute minimum of waiting. The more times passengers have to consult a schedule, the more likely they are to find a different way to get there.

Since high-speed rail will need to stop in central locations in NEC cities, the regional transportation networks need to ensure that underserved areas have suitable connections to the HSR network. And HSR fare structures need to reflect the economic and social diversity of the Northeast. If the NEC is to realize all of HSR's potential benefits, residents from all social classes must be able to access the train, and the train operators must be able to draw on as broad a passenger base as possible.

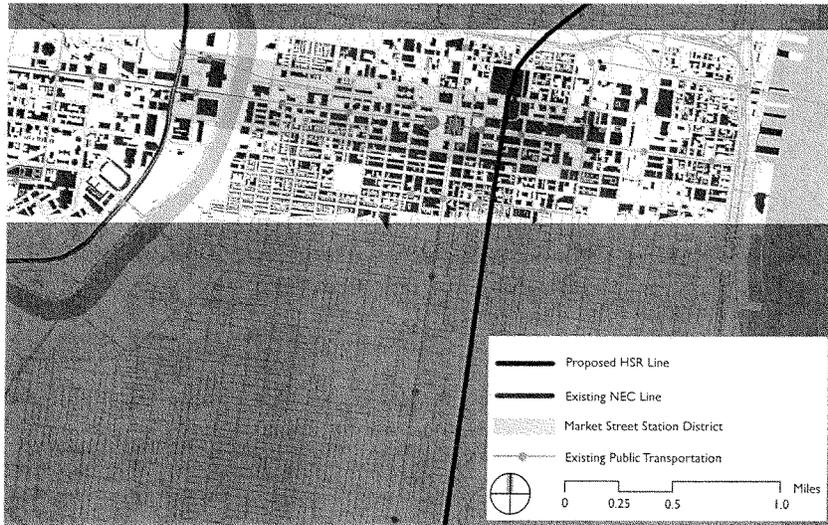
#### DESIGN: STATIONS AND STATION AREAS

To achieve the land use benefits of HSR investment, cities and regions must define and implement development and management plans to direct and coordinate public and private investment. Stations and station areas must be planned and constructed to value viable public spaces and an active public realm; encourage private investment and public/private partnerships in and around the stations; and promote social equity. For areas in and around train stations along the Northeast Corridor,

transportation can direct the movement of people in a way that catalyzes development. In many cities, high-speed rail will be a catalyst to develop stations as nodes that direct growth. When done successfully, this can create new city centers, and extend and strengthen existing central business districts.

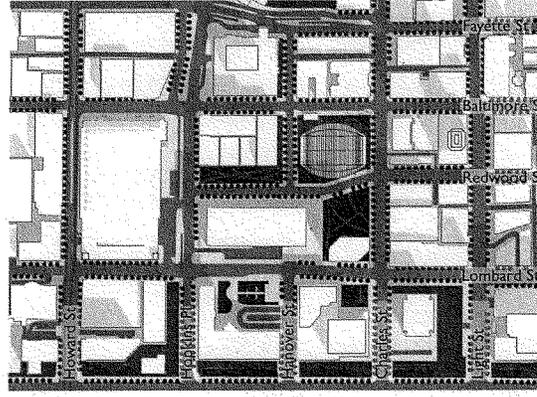
In Philadelphia, a new Market East Station becomes the centrally located stop for high-speed rail. This station works in tandem with 30th Street Station to restore the Market Street corridor from Center City to University City. By creating a cohesive visual element along Market Street, connecting the Schuylkill River waterfront to the University of Pennsylvania and drawing on Old City's tourism, these two complementary stations can create an energy that elevates the entire corridor.

A new alignment through Baltimore creates a station at the Charles Center, in the heart of the city's central business district. Besides taking advantage of a straighter path that will allow for faster speeds in and out

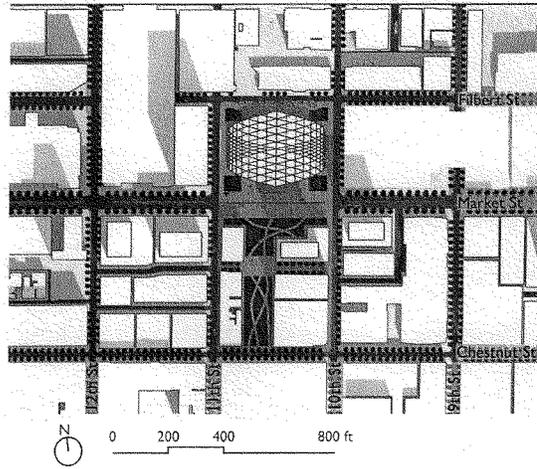


**The Market Street District:** By bringing high-speed rail through Philadelphia at a new Center City station, the entire corridor becomes an economic anchor for the city, with 30th Street Station and University City at the western end.

**Baltimore:** The new high-speed rail station at Charles Center is strategically located in the city's central business district.



**Philadelphia:** A remade Market East Station anchors high-speed rail in Center City, complementing 30th Street Station just across the Schuylkill River.

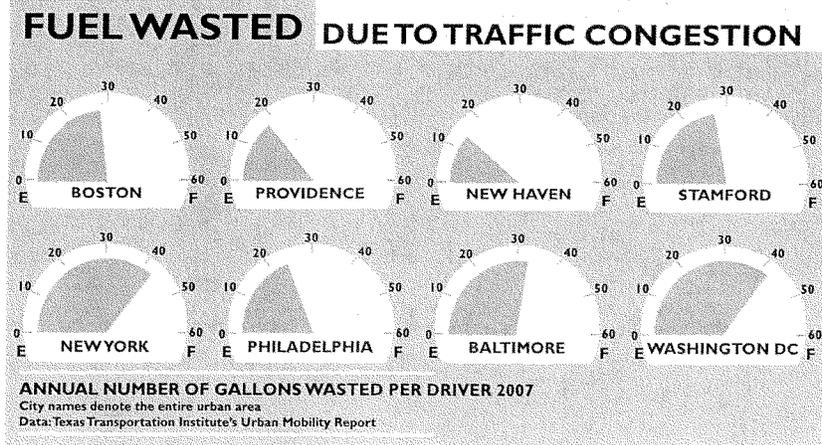


of the city, the new station can capitalize on a vibrant network of public spaces in the surrounding area.

Finally, urban design, development and management guidelines for the Northeast Corridor will ensure that stations and station areas are constructed in a way that values viable public space and an active public realm; enables public/private partnerships to fund development; and promotes social equity for those living near or accessing the stations.

**SUSTAINABILITY**

When looking at environmental, economic and social factors related to the need for increased mobility in a growing region, high-speed rail is the most effective way to achieve an overall sustainability strategy in the Northeast. Rail's performance ranks highest in the five key aspects of environmental sustainability: land use, air quality, water quality, energy and connectivity. Transportation is responsible for 29 percent of U.S. carbon emissions, which have been linked to global warming and decreased air quality. More trains mean fewer new roads built, which reduces the number of permeable surfaces whose runoff affects water quality. In terms of energy, even if trains are coal-powered, they reduce our dependence on foreign oil. And when quality regional transportation systems link to high-speed rail, connectivity and its environmental benefits follow.



High-speed rail's central locations support and encourage greater concentration of land use around stations. When a train station becomes a center-city hub, activity is concentrated there, discouraging sprawl and allowing for businesses to feed off of one another.

High-speed rail can promote social sustainability. By widening the market of jobs available to workers, HSR levels the playing field, provided it is affordable enough to be accessed by multiple classes of riders.

#### TRANSFORMATIONS

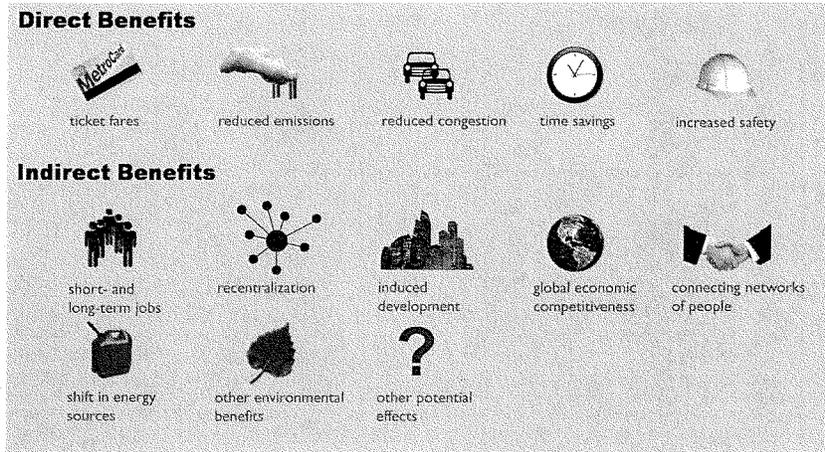
The proposed high-speed rail system, complemented by the improved connectivity of regional and inter/intracity transit, has the potential to transform the spatial relationships of the Northeast Corridor. High-speed rail improves connectivity between businesses, facilitating the movement of labor and goods resulting in a new economic geography—one that may be particularly valuable for the knowledge industries that will benefit from agglomeration economies. This new geography will result in economic growth in the corridor's major cities, making the Northeast Corridor more competitive in the global market. Improved connectivity will be particularly valuable for new household formation and extended work-home distances in newly urbanized areas.

Large cities with major economies require a different development strategy than cities those with growing economies. Places like New York, Boston and Washington—cities that are growing, and have higher educational attainment and area median incomes—will benefit differently from high-speed rail than Philadelphia, Baltimore or other smaller cities along the corridor. These places need a strategy that ensures they don't lose economic activity as a result of their new proximity to strong-market cities. Furthermore, none of these cities can be considered all strong or all weak: While New York, for example, has higher educational attainment, it also has higher unemployment. Economic development strategies, therefore, must vary carefully from city to city and region to region.

#### COST-BENEFIT ANALYSIS

A generation of transportation projects has been evaluated, often by transportation agencies, on the basis of a ratio between the benefits they engender and their costs. Analytical literature suggests that the quantification of benefits is difficult to do and that the methodologies used for cost-benefit analysis inherently favor smaller projects as well as those with low, or no, capital cost.

Notwithstanding these limitations, the cost-benefit analysis—prepared



**Cost-benefit analysis:** Not all effects of high-speed rail can be easily quantified. This analysis for proposed service accounts for the direct impacts listed, but indirect benefits can be a boon to the region as well.

for the proposed NEC HSR with ticket fares, emissions reduction, improved connectivity, time savings and increased safety as its benefits—shows a positive benefit-cost ratio, indicating the economic feasibility of high-speed rail. But, more important, the investment brings broad and long-lasting—although less measurable—benefits to jobs, land use, development, connectivity, economic competitiveness, energy use and the environment.

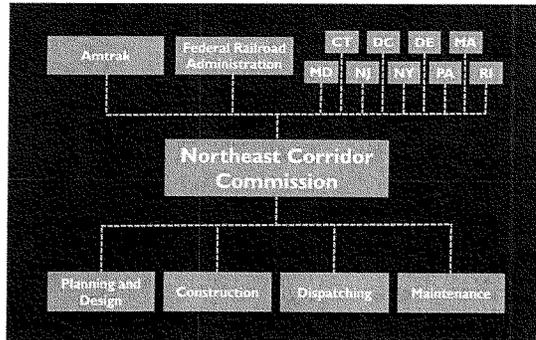
#### IMPLEMENTATION

In order to successfully build a new interstate high-speed rail network, creative methods of governance, financing and environmental review will need to come together. Nearly all of the countries that have initiated HSR systems have done so with funding from national governments, and this should be done here as well. A matching contribution from Northeast states and regions will help meet capital costs, and a portion of the up-front investment could be recouped through a long-term lease of the corridor, as the U.K. is now proposing to do with its HSI line, where an expected 40 percent of the public investment is expected to be returned to the government.

Since funding will need to be largely from the federal government, a new agency, known as the Northeast Corridor Commission (NECC), will bring the interstate politicians and authorities to the same table to figure out how to cooperate in order to get federal dollars to the region. This new entity will manage the implementation process, and will ensure that discrete agencies are talking with each other and working together toward the ultimate goal of a rail network that benefits the entire region.

There needs to be a system for dedicated and sustainable financing that can handle the large costs and complicated jurisdictional structure of building in the Northeast Megaregion. The responsibility of financing the construction of HSR and ensuring continued funding should be taken on by the federal government, or a regional agency, because it has the capacity to manage the risk of the project and realize the long-term benefits. By approaching HSR as a long-term investment, the government provides an opportunity for the private sector to invest in the HSR system through public-private partnerships, where the government can recoup its investment in HSR, and where funding can be dedicated, sustainable and guaranteed. Public financing mechanisms include the creation of a Northeast Corridor Commission Trust Fund, government grants, a region-wide tax increment financing district, and a range of tools to cover operating costs including gas taxes, interstate tolls, user fees, value added tax and station area sales tax. After the public sector has taken on the financing of building HSR, opportunities develop for private sector investment.

**A new governance model:** The Northeast Corridor Commission can achieve the fundamental goals of building high-speed rail in the NEC, preserving unified corridor operations, increasing states' involvement, balancing operators' needs, obtaining dedicated revenue streams, and successfully competing for federal HSR grants.



## CONCLUSION

The authors of this report strongly advocate for the implementation of high-speed rail in the Northeast Corridor as the key to unlocking the economic growth and competitive advantage of the Northeast Megaregion. At the same time, investment in high-speed rail in the Northeast Corridor is but one element among several high-speed rail networks serving America's 10 other megaregions as part of a national rail plan, which can transform the connectivity, economic geography and performance of the entire country.

With the federal government committed to high-speed rail, the country is poised to take up the challenge of such a substantial, potentially transformative new infrastructure project—one that can and will fundamentally change the way our cities work, and work with each other. The 21st-century narrative will be one not of global cities, but of global megaregions. When megaregions work as unified markets, strongly linked internally and externally, they can achieve the investment and innovation necessary to compete on an international stage.

For the past two centuries, each generation of Americans has embraced the latest transportation mode to shape the country's mobility systems and with them, the nation's destiny. Now is the time for American high-speed rail that will sustain the country's economic potential through the 21st century. By building the nation's premier world-class high-speed rail network, the Northeast can lead the way.



Mr. RENDELL. I arranged to brief the Vice President on this report, as well.

So, cost. Amtrak needs \$17 billion in track costs, right? In human terms; Congresswoman Brown made the point that China is spending \$300 billion to lay 16,000 miles of high speed rail connecting all of their major cities.

We should not fly airplanes on any flight less than 500 miles. It should be high speed rail. That's the way it's done in Europe, that's the way it's done in Japan, that's the way it's done in China. It is almost embarrassing what we are doing in the United States.

Now, what are the benefits of spending a lot of money, investing a lot of money? The Penn study, Mr. Chairman, the Penn study shows that the overall benefits for spending \$98 billion dollars will outstrip the cost by \$70 billion. If you take the Department of Transportation's study, it shows that for every billion dollars in infrastructure we produce 25,000 jobs. This effort would create two and a half million jobs by itself.

These are well paying jobs that can't be outsourced. And where would the materials come from to build out this high speed rail? From American factories, from American steel plants and concrete plants, asphalt plants and lumber plants, a number of plants.

We would be buttressing American manufacturing, we would make the construction industry take off, we would create jobs. Would it help the environment? You bet it would. Congressman Mica, over and over again, given the statistics, we would be stronger by having a high speed rail system that absolutely works.

Air traffic, it would change the face of air traffic in America. The build-out of high speed rail, of course, would demonstrate to the country that it can work. The estimates are that a high speed rail system traveling 220 miles an hour from Boston to Washington would make almost a billion dollars a year in profit. So we can do it with government dollars, we can do it with private dollars, we can do it with a combination of dollars.

We should build this dedicated train line and we should have competition on the line. Competition. Amtrak will run it? Fine. It should open to private competition, as well. We know what happens when there is competition. It's best for the riding public.

Lastly, the field of dreams: If you build it, they will come. Absolutely, no doubt, Congressman Shuster—the Keystone Corridor line. In Pennsylvania, Amtrak and the state both invested 72 and a half million dollars, \$145 million for the rail line.

The trip used to take two hours from Philadelphia to Harrisburg. When it took two hours we had 890,000 riders a year. Within two years, once we speeded up and got to 110 miles an hour, now we have—from a ridership of 890,000 to 1.1 million, a 22 percent increase by just shaving a half hour off of the time.

I think it was Congressman Shuster or Rahall who said that Amtrak now has 69 percent of the air and rail traffic from New York to Washington; 69 percent now. Ten years ago it had 37 percent. The Acela changed airport travel from 37 percent of the air rail traffic to 69 percent. Boston to New York used to be 20 percent by rail, now it is almost half, 49 percent by rail.

If you build it, they will come. We need to get serious. We cannot do this by politics. The original grants given out to Pennsylvania,

we had a number of applications, and we were awarded \$27 million. And no governor is ever ungrateful about receiving—no governor ungrateful, proved me wrong.

Generally, no one is ungrateful for the award of money. But that \$27 million didn't make a dent in Pennsylvania. Most of the money handed out didn't go to major projects. It was money wasted. It was done to say we gave Pennsylvania some money, Senator Spector, it can't be all that bad, et cetera.

We can't do this politically. It is too important. Infrastructure in this country generally can't be done politically. High speed rail cannot be done politically. Find the routes that make the most sense, the routes that will produce big ridership, routes that are sustainable economically and that can demonstrate to the American people that it can work; and the American people will not only ride it, they will support it.

Mr. MICA. Thank you, Governor.

I will go ahead and recognize the next witness out of order, Mayor Bloomberg. And then we'll have everybody available for the members to either make opening comments or ask questions.

So I'd like to welcome Mr. Thomas Hart, the Vice President for Government Affairs for the U.S. High Speed Rail Association.

Mr. Hart, you're recognized.

Mr. HART. Thank you, Mr. Chairman. I appreciate you holding this hearing.

On behalf of the United States High Speed Rail Association, its president, Andy Kunz, who's here today, and 250 members, I extend greetings to the prestigious bipartisan Transportation and Infrastructure Committee. I also want to recognize ranking member Rahall, Subcommittee Chair Shuster, and ranking member Brown.

I am here representing the U.S. High Speed Rail Association as its Vice President for Government Affairs General Counsel. The U.S. High Speed Rail Association is a not-for-profit group with a vision for advancing a state of the art, nationwide, true high speed rail dedicated track, to be completed in phases around the country.

The U.S. High Speed Rail Association is pleased to share its thoughts on high speed rail development in the Northeast Corridor. In fact, this past November, we hosted an international conference featuring Secretary Ray LaHood, Karen Ray and others. Over 400 attendees in New York that focused on the Northeast Corridor. This was a priority of the association and a priority of mine, personally.

Today, we are delighted to express our common interest and vision with the Chairman. We believe the rapid creation of a true high speed system in the region, funded in part by the private sector through innovative public-private partnerships, is in the Nation's interest.

We are encouraged by Amtrak's recent hiring of Al Engel, a seasoned veteran of the high speed rail industry. And we're also encouraged by the recent focus of the high speed rail industry and this corridor by the Federal Rail Administration. They both have to step up their efforts, Mr. Chairman.

We agree with you that we do not have 30 years to develop high speed rail in the Northeast Corridor. With the price of oil rising again towards \$100 a barrel, it is of the utmost importance that

we develop the new rail systems to offer new transportation systems not dependent on oil.

Ironically, increased oil prices translate into increased rail ridership, which in turn improves the business case for high speed rail. We already saw this happen in the summer of 2008, when oil hit \$147 a barrel, and ridership on America's rail system rose to record levels.

So we have a sense of urgency today. We've all heard of the advantages of the Northeast Corridor. It is a demographic region for high speed rail development, and it will spark investment by the private sector.

However, it's not without challenges that the Northeast Corridor has an opportunity for high speed rail. The states along the proposed routes, as Governor Rendell knows all too well, have a combined deficit of over \$45 billion. They are currently dealing with widespread deteriorating infrastructure.

Also, any major regional investment will require political bipartisanship, and that's what I like about this committee and the leadership on both sides; they do work together. We must encourage the governors to do the same thing among the seven states in the Northeast Corridor.

One of the most troubling aspects of the Northeast Corridor is that, unfortunately, it is not shovel ready. That's because of the absence of a comprehensive environmental impact study, lagging regional planning, and finally, token investments in the high speed rail corridor, as Governor Rendell just spoke, over the past few years and decades.

Nevertheless, these challenges can be overcome by consensus building and efforts of the government and private sector.

Amtrak is not offering a true high speed system now. High speed trains regularly operate at speeds of 185 to 250 miles per hour. Although Acela is the best that Amtrak offers, it falls short of the potential of a true high speed rail line to deliver service to consumers and profit to its operators.

While we strongly support high speed rail in the Northeast Corridor, we also support high speed rail in the corridors of California, Chicago and Florida. They are dependent, however, upon private sector investments.

We were also delighted to see President Obama announce continued Federal investment in high speed rail. That announcement came just two days ago in the State of the Union. But more capital is needed. We must spark private investment in this industry.

For example, the British government just recently auctioned off a 30-year lease. After building the HS1 system linking London to the Euro Tunnel, they leased it to private industry and recaptured \$3.4 billion. It was sold to a consortium of two Canadian pension funds.

This concession returned 40 percent of the original construction cost. That's a model that we must look at in developing our own public-private partnerships in this area.

The key to success for public-private partnerships is lowering risk and maximizing rate of return. The incentives can be created through Federal legislation. In the next few weeks, the United States High Speed Rail Association will propose the Private Invest-

ment in Infrastructure Act of 2011, looking at the best practices throughout the country and throughout the world, to create specialized benefits such as guaranteed loans, tax credits, deferred payments and other concessions to increase investments in operations and construction in the Nation's rail lines.

We have one opportunity right in front of us now, to create a public-private partnership to fill the \$300 million gap for high speed rail funding in the state of Florida. The private-public partnership team that developed that model will be successful in bringing high speed rail, not only to Florida, but throughout the Nation.

We believe in this association that market forces will make the business case for high speed rail and fill the \$300 million gap needed in Florida to bring high speed rail to that state.

In closing, Mr. Chairman, we advise the committee and attendees at this hearing to continue this discussion at our upcoming High Speed Rail Summit in Washington, D.C., February 8th, 9th and 10th on Capitol Hill.

Thank you, Mr. Chairman, for your time and leadership; and the High Speed Rail Association is looking forward to working with you in the future and other Members of this Committee.

Thank you, Mr. Chairman.

Mr. MICA. Thank you for your testimony and participation.

I notice that the Mayor has arrived. I'll give him a minute to get his thoughts ready. We'll go ahead and hear from Petra Todorovich. She is the director of America 2050, and she's representing the Business Alliance for Northeast Mobility.

Welcome, and you are recognized.

Ms. TODOROVICH. Thank you very much, Mr. Chairman. Good morning, Ranking Member Rahall and Members of the Committee. Thank you for the opportunity to appear before you today to discuss the future of high speed rail in the Northeast Corridor.

I'm speaking on behalf of the Business Alliance for Northeast Mobility, which is a coalition of over 30 leading business and civic groups from Boston to Washington, D.C. We came together in 2006 to support appropriations for Amtrak in the Northeast Corridor, because of its indispensable role in the Northeast mega-region's economy.

I am here to inform the committee of the Business Alliance's strong support for bringing the Northeast Corridor, first to a state of good repair, and to explore dedicated, world class high speed rail service on the corridor; in order to create jobs and boost the economy in the Northeast mega-region and the Nation as a whole.

The Northeast Corridor moves approximately three quarters of a million people each day to their jobs or to major downtown business hubs of the corridor. These movements are critical to the Northeast's \$2.6 trillion economy, 20 percent of the U.S. GDP.

Imagine if today, 750,000 additional passengers were suddenly added to Interstate 95 and the Northeast's major airports, already the most congested in the Nation. Our transportation networks would come to a standstill, as they regularly do already, because of their inadequate capacity and failure to meet existing demand.

High speed rail is a way to expand capacity and economic growth in the Northeast mega-region without further dependence on foreign oil.

In 2008, the Business Alliance strongly supported the passage of PRIIA, the Passenger Rail Investment Improvement Act, which provided a dependable rail authorization for Amtrak and created the High Speed Intercity Passenger Rail Program, for which high-speed rail funding was appropriated in the Stimulus Bill and the Fiscal Year 2010 budget.

Unfortunately, we've only begun chip away at our \$8.7 billion backlog in deferred maintenance that has accumulated on the Corridor, due to inadequate Federal funding.

As a coalition, our top priority has been to secure funding to bring the Corridor to a state of good repair, which we see as a Federal responsibility stemming from the Federal Government's creation of Amtrak and the critical role this Corridor plays in the economies of the 12 Northeast states and the Nation as a whole.

While the immediate and urgent challenge is to maintain the Corridor's existing infrastructure, we are also looking ahead to the improvements 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 Corridor, to significantly reduce trip times and substantially increase capacity, convenience and reliability, while dramatically enhancing the global competitiveness of the Northeast.

The recent Amtrak and Penn Design studies that Governor Rendell mentioned have demonstrated the feasibility of building world class high speed rail here, slashing trip times to less than two hours from New York to Boston, and New York to Washington, while providing up to twelve high speed rail trains per hour, compared to the one or two trains we currently have per hour on the Corridor today.

The cost, as you have heard, are estimated at \$5 billion a year for 30 years, or about \$117 billion. And upon completion, the Amtrak plan estimates generating a \$900 million annual operating surplus, with revenues from fares, food and other services, outweighing total operation and maintenance costs.

It also envisions an interoperable system, which new high speed rail lines interconnect at key points with existing Northeast Corridor operations, facilitating a comprehensive service plan.

Such a plan will enable all communities in the mega-region to have access to the new service and benefit from this public and private investment.

The Northeast Corridor has the population density, concentration of employment, connections to rail transit networks, and proven demand between city pairs to justify this investment.

For example, the recent America 2050 study documented that in the five largest metro regions in the Northeast Corridor alone, almost 19 million people work within 25 miles of a major train station. More than 34 million people live within 25 miles of a major train station. And more than one-third of the inhabitants of the major metro areas in the Northeast Corridor are within walking distance of a rail transit station which connects to inner city rail stations on the Northeast Corridor.

These figures of population and employment density around rail in the Northeast dwarf every other mega-region in the Nation. Further, as these high speed rail lines are built, they reinforce private

investment around the employment hubs and train stations, insuring that population and job growth can occur in a way that reduces our dependency on foreign oil.

But it is critical that we get started in building these plans while we still have the momentum of a new national commitment to high speed rail in America. Unfortunately, the mainline Northeast Corridor was largely excluded from major capital grants awarded in the first two rounds of high speed rail grants in 2010, because we lacked an up-to-date environmental impact statement for the corridor.

A year later, the EIS has not yet begun.

In December, the Business Alliance sent a letter to Transportation Secretary Ray LaHood, asking for his leadership to expedite the corridor-wide EIS process, and we met recently with his staff to discuss the details.

We are anxiously awaiting the start of the EIS process, which should consider all of the major proposals for providing high speed rail service in the Northeast Corridor, including the recent Northeast Corridor Master Plan that was completed by 12 states with Amtrak, the Penn Design Plan, the Amtrak plan.

Once scoped, we ask for the help of the committee in looking at the ways the Northeast Corridor EIS process can be tiered and shortened so we do not waste another two or more years waiting for its completion to start construction.

Finally, we do believe that the private sector has an important role to play beyond the traditional engineering and construction contracts placed by public agencies in delivering large capital projects, such as the East Side Access project before you today.

We would like to meet with you, Mr. Chair, and the Committee members, to discuss specific proposals for public private partnerships in the Northeast Corridor.

However, the necessary precursor to private investment and implementation is agreement on the vision. And for this, we ask for your leadership. We ask for your support of a bold vision for the Northeast Corridor. And we ask for you to work with the Northeast states and Amtrak and the business community to agree on a practical strategy for accommodating the 21st century transportation needs of the Northeast and national economy.

Thank you very much.

Mr. MICA. Thank you for your testimony.

We will wait on the Mayor a second here.

And I want to hear from labor first, and we've got a representative of the people who are doing all the work on these projects, Mr. Scardelletti. We want to welcome and recognize the International President of the Transportation Communications International Union.

Welcome sir, and you are recognized.

Mr. SCARDELLETTI. Thank you, Mr. Chairman. Thank you very much, Mr. Chairman, Ranking Member Rahall and members of the Committee.

Before I make my remarks, I want to take a moment to bring you greetings and from, and frankly acknowledge the thousands of dependable rail workers on the Long Island Railroad, Metro North, New Jersey Transit, Amtrak. They're all on the job today, up and

down the Northeast Corridor, to provide safe, reliable transportation to our country's people; many of whom work right here in this building, this terminal, and many of whom work a couple of blocks down the street at Penn Station.

My name is Robert Scardelletti, and I'm the International President of the Transportation Communications Union. Our union represents over 50,000 members, most of whom work together with another 120,000 railroad workers, who represent eleven other rail unions, which are identified in my written testimony.

We work in both freight and passenger rail, as well as on commuter lines throughout the United States. TCU is the largest union on Amtrak, representing six separate crafts and classes under the Railway Labor Act.

TCU has been a long supporter of high speed rail in the Northeast Corridor and throughout the United States. Amtrak is by law the Nation's rail carrier, and the only current provider of high speed rail through Acela Service Express.

Amtrak and a dedicated work force will celebrate 40 years of service in May, after being established by Congress to provide a national rail passenger service to the citizens of our country; because, frankly, the private companies could not.

Over ten years ago, Amtrak launched Acela Express, the Nation's first and most advanced high speed rail service. It has now become extremely popular in the region, sold out almost every train.

Actually, Amtrak transports more passengers in the Northeast Corridor than all the airlines combined within this area. Most importantly, Amtrak has a dedicated and experienced work force: Ticket agents, baggage handlers, carmen, on-board service crew, supervisors, machinists, electricians, train dispatchers, signalmen, maintenance of way workers, sheet-metal workers, firemen and oilers, engineers and conductors.

Those workers are critical to operating the current and future high speed rail service. You cannot oppose funding and then criticize that Amtrak does not provide a good service. If our country is committed to providing a world class high speed rail system in the Northeast Corridor, than it needs to treat Amtrak as an asset and provide Amtrak with a dedicated, long term funding source.

The government should expand on Amtrak's success and embrace their vision for a more ambitious high speed train that will travel the Northeast Corridor up to speeds of 220 miles an hour, significantly cutting trip time.

Amtrak's plans would be a major step forward in building the Northeast Corridor for the future; and yes, the plan requires a major commitment by our government.

This new high speed rail system will create thousands of new jobs. These are jobs, under the rail laws of the United States, that will be good paying jobs with benefits, the kind of middle class jobs the country needs. In other words, the kind of middle class jobs to sustain and fulfill the American dream.

Congress must reject privatization of the Northeast Corridor. We know from experience that passenger rail is better left to the public sector. This is because of the unique safety and security concerns associated with high speed rail.

To achieve quality high speed rail service, significant ongoing investments must be made in rolling stock, signal equipment, stations, tracks and employee training.

It is unfortunate that Amtrak could not be part of this hearing today to brief the Committee on its plan for the future of the Northeast Corridor and the NextGen High Speed Rail service. While this service can and should be expanded, we do not understand how the public will benefit by allowing a private operator to take over one of Amtrak's most successful routes.

In conclusion, the framework of successful expansion of high speed rail in the Northeast Corridor for the coming decades is already in place. Amtrak in this proposal is treated as a national asset to be used to its fullest potential.

And one more comment. A lot of comparison was made to Communist China. They won't need an immediate environmental study. In fact, they don't need anything. It's a dictatorship. If they want to put a train line through your house, your house is coming down, like they did when they built the Three Rivers Gorge electrical plant. Tens of thousands of citizens, whatever they call them in China, were evacuated, whether they wanted to or not.

So I don't believe that it's proper for our government to compare ourselves to a Communist regime.

That's all I have. Thank you.

Mr. MICA. Thank you for your testimony.

Now, we have in our midst probably one of the great political leaders in the country, and I have had the opportunity to work with the Mayor of New York and Governor Rendell, both of them, along with Governor Schwarzenegger from California, who led a national effort to bring high speed rail to the country.

I can't tell you how much I appreciate the leadership of Mayor Bloomberg. We would not have the provisions in the PRIIA, the Passenger Rail Investment Act, it would not have been signed into law in the last administration without his help, I can tell you that. And I salute him today. The last time when we came together we had to delay our meeting. He had an emergency. This Mayor takes care of his city. The city is first.

I remember that day, Mayor, you had a collapse of a crane, people were killed, I think, and injured. And we delayed our meeting. Then we spent quality time. And a lot of politicians give you a lot of hot air, and they pat you on the back.

And within, literally, a few hours' time after we finished our discussion, he was supportive of the effort. I was in the minority. I couldn't have done squat without this guy. And he helped us to move that Federal legislation forward.

We have not passed a passenger rail reauthorization in eleven years; and it wouldn't have been done without Mayor Bloomberg.

Now, here I am, Mayor. I hope this isn't an omen, but today you've had another serious natural challenge. But you've met it. I got up this morning and looked out of my hotel room and then you see again, members who haven't been here, the splendor of one of the great cities in the world, and this financial center. And I'm so frustrated that it's not connected by true high speed rail.

Mayor Bloomberg, Governor Rendell has said he agrees with everything you said; and you haven't said it, but I wanted to let you know.

Again, I can't thank you enough for your leadership, for your being with us today. I know you have a limited amount of time, so we're going to recognize you with as much time as you need. And thank you for being here today. We look forward to hearing the other witnesses also.

Welcome, and you are certainly recognized.

Mr. BLOOMBERG. Mr. Chairman, thank you very much for those kind words. They were not deserved. My recollection is that the last time you were here we had Florida weather for you. Your wife was here helping our economy, and Governor Rendell as well, what he'd rather do when he's here, spend money so he can generate sales tax revenue. That's the way we pay our people.

And I just want to say thank you to and to Ranking Member Rahlhal for inviting me, and Subcommittee Chair Shuster; and Jerry Nadler, my Congressman.

I apologize for being late, but I've been up since 4:30 this morning implementing the mayor's program to prevent a drought this summer. People call it snow, but we have to look on the bright side.

Anyway, it's appropriate that you're holding this hearing in Grand Central. Like the Erie Canal or the Transcontinental Railroad and the Interstate Highway System, it is a monument to our Nation's tradition of dreaming big and investing in our future. Together, the transportation networks opened up new markets and made us the global economic superpower that we are.

But that was a long time ago. And today, our Nation invests just over 2 percent of our GNP in infrastructure; while Europe invests at least twice that rate, and China almost three times that rate.

In 2007, I visited Shanghai and I landed at the airport and got on what they call a Maglev train, a magnetic levitation train that travels at—I think it was running at a slow speed, because at night it was going only 250 miles an hour. I had a full cup of coffee and I watched the clock when I started, took the trip and landed. It didn't vibrate once. It was really quite amazing.

Other countries are trying to do the same thing, create other modes of transportation that are much more efficient, much more rapid and answer the needs of a global world. And Asia, Europe and the Middle East, they're building bullet trains and we're just sitting here. What is America waiting for?

I don't want to spend money we don't have. I'm sympathetic to the cost of debt. I'm sympathetic to encumbering our descendants with the cost of building things. But this is not wasted money. Infrastructure is one of those things that gives us a future.

And I would venture to say no one here remembers whether Central Park was built on time and on budget; whether the Erie Canal or Transcontinental Railroad, any of these things that transformed this country and transformed the world, were on time and on budget.

The bottom line is, there are certain infrastructure things that you just have to do. I couldn't be happier to be partners with Governor Rendell and Governor Schwarzenegger in trying to urge this

country to make those kinds of investments. They are our future. And if we want to leave our children something, we want them to be able to look back and say "You are the parents who had the courage and the foresight to dream big and to go ahead and do things," where maybe there at the time we have to raise some money, somebody else is there at the time we finally cut the ribbon; but at least we've done the right thing.

We have a bipartisan coalition Ed and Arnold put together, called Building America's Future. It's been working to build a consensus around this country, and your committee's strong interest in high speed rail is something that I'm glad to hear. The consensus is emerging around the Nation that it should be built here in the Northeast.

As you know, the Northeast is the Nation's largest economy. The region is home to the Nation's major centers of business, government, finance, medicine, entrepreneurship and education. And it is where you have multiple cities very close together, where rail does make some sense.

Other parts of our country, the cities are far apart and there are other alternatives. We have 162 Fortune 500 companies who make their headquarters here in the Northeast; and 7 of the world's top 20 research universities. They have to be able get around, and they have to be able to attract the best and brightest from around the world if we're going to have a future.

Most of our population is in dense cities, close enough to each other to travel by trains, much more convenient than flying. And Europe is a good example. They do not have short flights. They have come to rely on trains that are reliable and affordable because they've had the courage to make the investments.

At the same time, because all of this activity, the Northeast is approaching, you should know, a transportation crisis. Our airports are among the most clogged, our highways are among the most congested, and our train corridor is among the most heavily used in the country.

And all of that is just going to get worse as the regional population is expected to grow by 40 percent by the year 2050. That doesn't just affect New York, it affects the whole country. As Chairman Mica noted, the New York clogged airports are responsible for flight delays around the country and around the world.

If you want to reduce those delays and engineer growth driving the American economy, you need to unclog the fuel lines. And I think one of the best ways is with high speed rail. High speed rail adds the equivalent of about 1900 lane miles of interstate, except of course this would be interstate with a speed limit something like 220 miles an hour, which really make an enormous difference.

High speed rail in the Northeast would be a boon for our region and country in other ways, as well. It would generate tourism and travel, raise property values, cut pollution and our dependence on foreign oil; and by reducing congestion on our highways and our airports and on our commuter trains, it will increase economic activity. We estimate that high speed rail would generate more than \$7 billion of economic activity and create 100,000 new jobs by the year 2040.

Because the businesses and industries are brought closer together, they inevitably see greater profits, creativity and greater productivity.

President Obama and Congress have taken the first good first step by allocating \$10 billion for high speed rail. And I was encouraged the other night when the President affirmed his commitment in his State of the Union speech, setting a goal for 80 percent of Americans to have access to high speed rail within 25 years.

That is certainly a laudable goal. But we all know that the money isn't there for that yet. So we ought to start with what makes sense economically right now. I think at the moment it's fair to say we're not doing that. Funding for high speed rail projects has been divided across 36 states, spreading our money so thinly we run the risk of achieving nothing at all.

In fact, the current Federal plan allotted just over 1 percent of all high speed rail spending for the Northeast, and that simply doesn't make any sense; especially because the Acela at the moment is the only profitable line run by Amtrak; and the Northeast is the only corridor that has demonstrated a high demand for high speed, at all.

What we need is a new approach to spend the Transportation Department's money, one that is not dictated by politics, but based on economics. You might not get all the high speed trains you want, but we will get the high speed trains we need.

I understand the politics. Everybody in this country has got to pull together. Everybody contributes and everybody wants to get the benefits. But in some cases the benefits are going to be in one part of the country and then they'll spill over into others. In other kinds of endeavors, like the Interstate Highway System and building airports, every city can share in that.

But high speed rail only fits certain parts of the country, but it is something that's good for all of us.

Before I close, let me just mention one final idea that we should explore, to see the feasibility. High speed rail could cost over \$100 billion and take a generation to build. While government should take the lead, we should make sure that we have the structure and rules in place that don't discourage private investment.

I listened to my friend down on the left and there is the argument for public transportation, and there is the argument for private transportation. I take public transportation to work every day. The subway works fine, it's a public system. I've always thought that it is very well run. Jay Walder came up with me. He's the guy who runs the MTA.

But there are also places in this country where we've had experience with the private sector. And just don't have the luxury of ruling out anything. Competition is good. I think the best thing for government is to have the private sector compete with government. That's what holds our feet to the fire, that's what makes us more efficient and more accountable.

And this country really does need to make smart investments in the 21st century, but we don't have all the money, we don't have enough money. So we do have to reach out to the private sector, as well. High speed rail in the Northeast Corridor, I think, is one of the smartest investments we can make.

And it really is the the future. So thank you very much. For those of you who don't live in New York City and perhaps it's one of the first times you've visited, welcome. I represent 8.4 million people who want to say thank you to all of you for everything you do. We always go to Congress to ask for things. We seldom go to Congress to say thank you, but we have a lot to be thankful for from Congress. And Jerry, thank you in particular for all you do to represent us.

Thank you.

Mr. MICA. Thank you, Mayor, and thank you for your leadership. What we'll do is, change the order a bit. We have a couple of our senior members with all our junior members here.

I will recognize Mr. Nadler. He's up for either comment or question. Mr. Nadler, thank you for having us here in New York.

He's a senior member. I worked with him on the Transportation Infrastructure Committee.

Mr. NADLER. Thank you very much. Let me ask for consent to include my statement for the record.

Mr. MICA. Without objection, so ordered.

Mr. NADLER. Thank you.

Obviously, we need high speed rail. Obviously, what Governor Rendell said and some others, about not diffusing efforts to get visible results, it makes sense. Also, to build a constituency where the American people see that they're getting something for their money and see real results. Then you can start getting someplace else, too.

Also, obviously, we are in a situation where there's a lot of austerity people talking are talking about. I don't agree with some of it, but some of it is obvious. And the Republican's committee suggested zeroing out Amtrak again, doing no high speed rail. I hope the Republicans as a whole don't go along with that; who knows. It's a situation that makes it daunting to get these funds.

And I have a couple of questions. First of all—I forgot who commented on this—why can't we start some of the projects that will be good, either if we develop the separate high speed rail or if we don't?

In other words, projects that are necessary, cost money to bring the corridor up to good repair and to improve the existing corridor; but will also be necessary as precursors to a new high speed rail system. Why do we have to wait for an EIS on that? We should be able to go ahead with that rapidly.

And my second question is: Yes, we clearly want the private sector involvement to the maximum extent we can get it. But, as we saw, no private company submitted any kind of bid for the Northeast Corridor high speed rail. We put up the bid.

The question really is, how can we get the private sector to cooperate with the public sector, because neither is going to do it alone?

Mr. MICA. Ms. Todorovich.

Ms. TODOROVICH. Thank you, Chairman.

Yes, Congressman, I can address the first question. We do believe the Northeast states may proceed in completing projects on the corridor that are already covered by existing Northeast Corridor EIS, completed, I understand, in 1978 or '79.

Between that EIS and other EIS's in the corridor, there are projects such as signaling systems and overhead catenary replacement that can get started right away. And what needs to happen is, those projects need to be identified. Someone needs to do that work.

There was recently created the Northeast Corridor Infrastructure and Operation Advisory Commission, which was created by PRIIA, and which includes a representative of each of the Northeast states, Amtrak and the FRA.

That commission could be the commission to do this work. They've only had two meetings yet. The next meeting is March, I believe. And they haven't really gone through that process yet. But we would encourage them to get started right away, working with the FRA. We think the FRA would provide leadership on this.

Mr. MICA. They will be at our discussion, which will proceed after this hearing.

I might, as a general member, yield briefly. On the no private sector proposals coming in—and I share this with the ranking member. Having drafted those provisions in law, I followed it very closely.

I can tell you, everything was done to discourage and dissuade, and actually make certain the private sector did not offer a proposal.

If I have to, I will subpoena people in and we will reveal what took place. I don't want to have to do that, but I'm telling you it's not going to happen again, and we will have a private public partnership considered and the opportunity to compete.

And for the labor brothers and sisters that are listening, they can take it from me as the chair of this Committee, that we will protect their position. And whatever construct is brought forth, they will be protected.

But if you leave things the way they are going—when I came on the Committee we had 29,000 Amtrak workers, and we now have 19,000. If that is the future people want to look to—and not have high speed rail, true high speed rail, to see increasing employment and opportunities for these workers, and make certain they get the benefits and salaries and see the future they deserve.

Sorry, Mr. Nadler, I took some of your time. Your time is not expired.

One more question from other members.

Mr. RENDELL. Number one, we will not come up with the money for a project like this without private sector involvement. What I'd say to my labor friends is, I'm a good Democrat and give labor support all the time. That's a fact of life.

Chairman Mica is right. The number of jobs will grow, two and a half million new jobs if we do this corridor project correctly. A lot of those jobs, the vast majority, will be union.

Secondly, private sector's rate of return. On small stuff you can't get the rate of return. In Pennsylvania, we had plenty of offers including a top bid was \* \* \* billion dollars; because there was a predictable rate of return. High speed rail is different than a turnpike or a highway. But the projections and the studies have shown across—the Acela is profitable.

This, over the long run, could be extremely profitable. I think the Mayor said almost a billion dollars a year in profit, operating profit. We can get plenty of private sector interest in that.

Mr. MICA. We want to go through the panel and try to get everybody in the discussion. We have another senior member, the gentleman from Tennessee. I'm going to yield to him and also yield the chair to him for a couple of minutes. And then we need to go next to our members.

Mr. DUNCAN. Thank you very much, Mr. Chairman. I thank all the witnesses for very helpful testimony. I have one question. It has, really, two parts; both relate to cost.

First of all, we heard today about the fact that it would cost \$117 billion, specifically, to build this over a 30 year period. Realizing it's very, very difficult; in fact, it may be impossible to really estimate what the cost will be 20 or 30 years from now.

And most transportation projects, the Big Dig in Boston is a prime example, cost way more than what we originally estimate. What can be done to see that these costs don't far, far exceed what the estimates are at this moment in time?

Secondly, I think Mr. Nadler started to touch on it. The newest Fenway Airport is a few years old. It took 14 years for completion. It only took 99 construction days, and the delays were almost entirely because of environmental laws, rules and regulations.

What can we do? We are taking two to three times as long on all types of transportation projects because of the environmental rules and regulations. Mr. Scardelletti touched on it. He said dictators do it faster. Even nations with dictatorships do it much, much faster.

Mr. RENDELL. Let me answer the first. Pennsylvania is number one in Congressional ratings for a state spending stimulus highway and bridge money. The reason we did is, I knew the stimulus was coming, I got the contractors in and got the bureaucrats in.

And I said to the contractors, "We're putting out an RFP for this work. You're not going to get 120 days to respond. You guys want work, you'll get 30 days to respond."

"Bureaucrats, you are not getting 90 days to review it. You'll get 45 days to review it."

Guess what? They did it. They did it. We build in such incredible time gaps developing EIS, it's just untenable. It's not necessary. One of the things that you must do in any infrastructure project, high speed rail, anything else: Do legislation not to eradicate EIS, but to make them more timely. You can do that.

I always say if someone walked into a law firm and said, "I need an opinion on this complex matter by Tuesday," and it's Thursday afternoon; the head of the law firm says, "Our law firm's got the highest reputation. You'll never get that in four days."

If that person pulled out a check for \$2 million, my guess is that everyone in that law firm would be working 24 hours a day for the next four days.

There's no excuse for the time it takes. We are not a dictatorship, we're not abusing people's rights. If you examine the EIS process, walk the EIS to its end, it will drive you crazy.

The time it takes to do things can be done in a much shorter timeline. To rebuild the bridge in Minnesota, do you know how long it took? Anybody on the Committee?

VOICE. 437 days.

Mr. RENDELL. A brand new bridge in Pennsylvania takes a minimum of two, two and a quarter years. If we want to, we can do it.

Mr. BLOOMBERG. The Empire State Building was built in one year. I think it was actually one day short of a year. In New York City we have an environmental agenda that I think is probably more aggressive than anyplace else in America that I know. We really care about the air we breathe and the water we drink and the future we're going to leave our kids.

And yet, with all of that, we've done an awful lot of projects. Every one of our 1400 bridges is up to standard. We're building a new water tunnel, we're building two new subways. You can get it done.

But let me address the first part of your question as to why these projects are so over budget.

I'm old enough—I grew up in Boston. I remember, not the Big Dig—I remember when the Southeast Expressway was first put through and they ripped down the North End and everybody moved out from Medford, where I lived. The project went through a whole cycle of a road being built and then being torn down and buried.

I think the real answer to your question is that people are afraid of big projects, they're afraid to actually give a real quote for what's likely to happen with mission creep as you add new things. And in the real world nobody is going to stand up and say, "OK, let's do it."

So the only way, in a tactical sense, to make progress is to start out with a quote that we all sort of know is very low and unrealistic in time and in money; but that at least they get it going.

And we can later on yell and scream and "should have" and "would have" and "could have"; but at least we have the project done. That is true with big software projects, that's true with big construction projects. We're just not politically willing to be realistic and—wink, wink, it works.

Mr. DUNCAN. We need more penalties.

Mr. MICA. We're not going to speak to that, because I want to get through the members. I've got a number of upstaters. I was born in Binghamton, a salmon that swims upstream back to New York.

We have Mr. Hanna, a new number from upstate New York. Let us recognize him for a question or comment.

Mr. HANNA. I defer to my friend Tom.

Mr. MICA. We've got another New Yorker. I'm proud to have more New Yorkers. Let's go to Mr. Reed. And Mr. Reed is the Vice Chair of the Rail Committee; and he is from the Rochester area.

Mr. REED. Corning.

I'm a fellow Mayor, and I share a lot of his concerns. It's much different in the city of Corning.

The question I have is, I'm in a public private partnership, and I think Mr. Hart touched on it a little. He referenced the British sale recently.

I've always tried to look down over the horizon. And under those sessions, under those sales, was the discussion or the agreement ironed out, about who is going to take care of the maintenance and replacement after we build this?

Say we build this in the next 30 years. Who is going to take—across the public and private partnership, P3—who takes responsibility for maintaining and improving that down the road in Britain, and do they incorporate that in their agreements?

Mr. HART. Yes. On point with Congressman Nadler and Duncan: You can build that into the concession, into the agreement; and they are doing that in Florida now. Passing through the risks factors in construction, passing through the operation and maintenance obligations to the private firms, to help bring the contracts to certainty. That's how you keep it on time, on budget.

Because the private sector is good at limiting their risk. Once they have a contract and an obligation, they'll see to it that the operation is done on time.

What is particularly impressive about the systems in Europe and some in Asia, if you are operating a train, a high speed rail system, and you're five minutes late in arrival, they will refund your money 100 percent.

Can you imagine that type of obligation being readily being accepted by the private sector American transportation system? They will do that if they have the opportunity to manage and operate the system from inception, and they understand the rules of the game at the beginning.

So yes, sir, that's a good idea to reduce risk and increase certainty by bringing in the private operators.

Mr. RENDELL. We were not going to sell the Acela, we were going to lease it; which meant we controlled how fast the tolls would go up, we governed part of the contract. We controlled and oversaw the schedule of maintenance.

Now if you sell it, you're counting on the private sector to maintain it by itself. And you might say, the private sector will not maintain it, it's all about maximizing profits.

No; because if they want people to ride the train, as opposed to driving, that system's got to be well maintained and function to arrive on time. The profit motive is built in. But if you're really worried about maintenance, you lease these projects, and the government has control over them going forward.

Mr. MICA. Thank you.

Let me yield next to Mr. Meehan from Pennsylvania, a new member of the Committee. And you can give an opening statement or ask a question.

Mr. MEEHAN. Thank you, Chairman Mica, for the opportunity to be part of this very important moment. And I appreciate that Governor Rendell took the time to come and took two different subways to get here. I'm noting how life changes when the state police aren't here. The governor's been a great proponent of transportation in Pennsylvania.

We asked this question a couple different ways, Governor. But I worked on the one thing that, really, I think addresses the major concern all of us are going to have as we look at funding long term commitments to transportation.

I'm aware right now that lot of the way that we fund transportation now is through taxes, which frankly is going down. We lost \$35 billion dollars, which is a good thing, I guess, since we're not consuming as much oil.

But what have you learned from the work you did when you tried to look at a way to make the turnpike operable? That would give a sense of being close as you can guarantee those nay sayers, that the private sector will step in and give you a sense of confidence in the financial commitment that allows you to match that with the government commitment?

Mr. RENDELL. Three things.

One, the government will lease and not sell.

Two, we were prepared to do what Congressman Mica said with the unions, we were prepared to guarantee rates of employment in the contract lease, the contract with the private operators.

And three, we're going to control the rate of return by agreeing to follow a schedule. And if you do sell—I'm not saying necessarily you should—you've got sudden competition.

If you are a private operator of the Pennsylvania Turnpike, you want to maintain that very, very well, because as you know, Congressman, there's I-80, just above the turnpike, and it is free. So you better maintain it well or people will drive on to alternate routes. That's number one, and I think it's very, very important.

Two, in terms of how we finance, the private sector has to be part of it. I sound like a broken record, over and over again. You all realize that \* \* \* The only political subdivision in this country that doesn't have a capital budget? Mayor Bloomberg would not have done the incredible things with New York City infrastructure without a capital budget.

For the first time, Pennsylvania is decreasing the number of structurally deficient bridges, 1600 bridges at the same time, because of the money invested in our capital budget and because of the stimulus.

The Federal Government is the only political subdivision without a capital budget. It pays for paper clips with a 40 day life span the same way it helps to build bridges with a 40 year life span. No business would do that, no other government would do that.

I know that the OMB and CBO want a capital budget. I think Congress should take control away from the bean counters and do what everybody else does; get a capital budget. The American Society of Civil Engineers says we need \$2.2 trillion just to keep the American infrastructure in fair condition. That's not even talking about high speed rail.

If you did have a capital budget, \$2 trillion, \$3 trillion, it would be doable. We would figure that we're going to need so many jobs, we'd revitalize American manufacturing. I can't understand why nobody pays any attention to the capital budget.

Mr. MICA. The Mayor has asked to respond.

Mr. BLOOMBERG. There's a difference between government and private development. The private side has some capital, there's ad-

ditional sources of capital. There is expertise, from my experience, in both the private sector and the government, and you can get expertise in either one.

So what are the real differences? There's two things. Being able to adjust the size of the work force to the need, and being able to charge whatever the market will bear. If you don't want to have those two things—it's a perfectly reasonable position—then the taxpayer is going to have to subsidize it.

And the taxpayers have got to decide, do they want to guarantee jobs and do they want guaranteed below market rates for what you charge straphangers and people who go through toll booths, or people who get water by the gallon? Or do they want to let the markets do that? But you can't have it both ways. Those are four reasons, four differences between the private sector and the public sector, for financing any of this stuff.

Mr. MICA. Thank you.

I recognize now the gentleman from Ohio, Mr. Gibbs. He is the new chair of the Water Resources Subcommittee. Our Committee welcomes you. You're recognized for an opening statement or question.

Mr. GIBBS. Thank you, Mr. Chairman. It's a pleasure to be here for what's going on in this corridor. It's interesting to realize this corridor was part of the congestion, and I agree. That's the reason why I'm here from Ohio.

I guess I wanted to try to expound on it a little bit. I think Mayor Bloomberg kind of hit on it the most. I was in the Ohio Senate last year and served on the Transportation Committee. And I was really concerned about the proposal that came to Ohio as part of that \$8 billion from the Feds, and \$400 million from Ohio, to build quote, what they think is high speed rail.

It turned out it wasn't going to be high speed rail in Ohio. It was 39 miles average speed.

And the second lesson to be learned is, it was going to be on the freight system.

The question was, who is going to have priority, freight or passenger? I think everybody here pretty much said—I know the governor did—it has to be a separate system. I agree with that.

I think we have to keep in mind the situation the Federal Government has gotten themselves into now, budgets and economic deficits and debt. And I think that to move forward, there's going to have to be a public private partnership. I don't think we can expect the taxpayer to do everything. I think Mayor Bloomberg hit on that a little bit. We have to work on that.

So I think that one lesson I learned in Ohio, we also have to have connectivity. You can't build a high speed rail system from Point A to Point B and don't have place for people to go off the high rail system. That's what you've got here, Washington, D.C. to New York, you've got a place to go. I think that's great. We didn't have that.

I want to say, too, we have to make sure there's a proposal out there that makes economic sense. The private sector has to buy in and be part of that partnership. And when you move forward across the country, you diffuse, dilute the funds, as mentioned. In

Ohio we're glad we have a new governor who's returned that money, not \* \* \* To cost more money to begin with.

So you lose credibility when you advocate for high rail, press for a project that doesn't make any economic or common sense. So I'm glad to hear that. We can move forward and have projects that make sense and private sector capital is involved, with private business can have competition, and then that might be something to look forward to.

But my second reason for being involved in this is because, as Chairman Mica said, 70 percent of the air traffic congestion problems arise in this corridor, and has an impact throughout the country.

Mr. Chairman, I don't have a question.

Mr. MICA. Thank you for your statement and participation.

I yield next to another subcommittee chair. The gentleman from California who is going to chair the Economic Development, Public Buildings and Emergency Management Subcommittee of the House Transportation Committee; the gentleman from California, Mr. Denham, for his opening statement or question.

Mr. DENHAM. Thank you.

Good morning. I represent an area in California recently granted a large sum of money for high speed rail. It is being started in a small town called Borden, which I represented for eight years now. The problem was, I went and asked anybody in my district where the town of Borden was. They said that was the town that was there 70, 80 years ago.

So my concern is, as we move forward, my question to Mayor Bloomberg and Governor Rendell, as co-chairs with Governor Schwarzenegger of the organization Building America's Future: What is the goal of this organization, and how important is it to build America's future to achieve high speed passenger rail in the Northeast Corridor? And what safeguards are put in place to insure that decisions aren't made out of the blue for political reasons, or money being spent—an expanded budget that continues to grow outside of what the taxpayers already approved?

Mr. RENDELL. There is no question that's a problem. If we see a problem it doesn't make any sense to spend a whole lot of money for low speed; it's not going to accomplish anything. We know how precious dollars are. We want every dollar to be spent well and bring us maximized return on our investment.

The answer to your question is, problems like this, in my judgment—I'd like the Mayor to follow up. We think projects like this should have to go to something like a National Infrastructure Bank. The President has talked about creating one. It should be staffed by transportation experts, former state DOT directors, academics, people who work in the business, people from finance. They would make the decisions, totally devoid of politics; and employ a cost benefit analysis. The Penn study did a great cost benefit analysis.

That's how major transportation projects should be decided. Not who's a powerful Congressman—no offense to the men and women on this panel—but it should be on a cost benefit analysis: What is the national benefit? What is the regional benefit? What is the economic benefit? What is the demonstration benefit?

It can only be done by taking it out of the political process. Who would set the criteria for an infrastructure bank and make its decisions? Congress. You would write into the bill an agency that creates what the infrastructure and the criteria could be; even decide what the weighting would be. Improvement of the environment, reduces CO2 to the environment. There has to be criteria taken into consideration.

Benefit to existing business, cutting cost, that would be considered. All things that enter into cost benefit analysis, that's how we should be deciding major projects.

By the way, that is not in any way an expression of lack of confidence in the men and women of Congress.

Mr. BLOOMBERG. I would answer differently. I think if there's a local interest with their money on the line, they will insure that the project has some value. They may make mistakes. But you want to get it down to the lowest level of whatever you're trying to build is actually used.

So, I've always thought that Congress made a terrible mistake with all the stimulus money by not having a local component. "You'll have X dollars, but you have to put in a certain percentage of that yourself."

That's local politicians, the local public, the local community boards, the local press, would insure there is a need for the project; because they would have some of their own skin in the game, if you will. Instead, Congress comes and says, "We're going to build something," and you find out that the town wasn't there for 70 years.

Get down to the operating level, and then you will get a lot more real feedback in terms of whether it's a valuable project.

Mr. RENDELL. We have a very significant match, and the local has a much greater share \* \* \* Transportation project \* \* \* Federal Government share.

Mr. MICA. Thank you.

I yield to the gentleman from Minnesota, and he is the new vice chair of the Aviation Subcommittee, Mr. Cravaack.

Mr. CRAVAACK. Thank you. I want to be the first guy not to have to tap his microphone this morning.

Thank you, Mr. Chairman. I appreciate the time. I thank the panel. I appreciate your being here today and taking the time from your valuable schedule.

I truly admire the passion that you all have for the Northeast Corridor; and I applaud the move of the government and/or private sector cooperation.

But I also come with a caution. I come with a caution from the American public who sent the 112th Congress to Washington, D.C. to be fiscally responsible. And my question is—and it's a generic question:

Where will it leave the Nation in order to come up with the financing? How much more are we going to borrow from—as Mr. Scardelletti so aptly put it—from Communist China?

How much more in debt is this Nation going to become, which is now rapidly approaching our gross domestic product?

So I applaud and I therefore strongly encourage this distinguished panel, so that we all can advance this project forward, to seek a private sector competition and to invest and attain the best

transportation system at the most efficient cost to the American taxpayer.

Additionally, I applaud—I thought my name was hard—Ms. Todorovich, for bringing up another point of government bureaucracy in the environmental impact study and how long it's taken to obtain this.

I would look very well into trying to expedite this project and trying to get an environmental impact statement out to the public, so we can start moving this project forward. We in Minnesota have our own challenges with environmental impact studies, as well. So I agree with you wholeheartedly on that.

So, bottom line is, I thank you very much for the passion that you all have. I look forward to this committee and working for this project and maintaining a fiscal responsibility to the American taxpayer.

So thank you.

Mr. RENDELL. On the debt issue, we've run up a lot of debt very recently and gotten very little for it. Give us the debt to do this work, this infrastructure, and you will get millions of new jobs, we will get the revitalization of American manufacturers. That's important. It is probably the number one issue in the mind of the public right now.

Number 2, the November 2010 election. Deficit reduction and spending cuts were paramount in the election itself. Yet 61 percent of transportation ballot initiatives were approved by voters throughout the country by an overwhelming amount of 64 percent yes votes, for either increased tolls, taxes or increased borrowing.

The American people get investing in infrastructure as something important to them, to their quality of life, to public safety, and to job creation, real, good paying jobs, as the union representative said.

So if we're going to have debt, let's get something in return on the investment.

Mr. MICA. Thank you.

Waiting patiently for his opening statement or question, the gentleman from Indiana, Mr. Reed. I thank you for your patience.

Mr. REED. Thank you, Mr. Chairman. I'm happy to be here in New York City. As the Chairman said, I'm from Indiana, and my governor and the state has done a few novel things with the infrastructure in my state. It's called for major moves that resulted in now over 200 infrastructure project being funded, primarily by the turnover of the management of the interstate highway system in our state to a private company, leaving the state government with almost \$4 billion being distributed, as I said, to 200 projects across the state.

My question is for Mr. Scardelletti. Related to the fact that I grew up in Illinois, my dad was a coal miner, I was raised with respect for the workers. And I'm here today because of my dad's well paying job in the coal mines.

That being said, I'm also familiar with the history of the safety record of the coal mining industry, starting out in the early part of the 20th century; and the government involvement in regulation and work rules which have been developed over the years, to help make the work environment very safe in that industry.

And my question is: On public-private involvement in projects such as that, does it matter if there are good jobs for the government or good jobs for your members working for the private sector at the organization level?

I'm curious why there would be resistance to any job creation, whether public or private, and what the downside to that would be; knowing that, in my view, local, state and Federal Government has passed laws historically to promote worker safety and worker rights.

So, thank you.

Mr. MICA. Thank you. I want to thank each of our panelists, too, for their participation. I want to go now to questions.

I owe a public apology to Ms. Hayworth as she didn't get to make a commentary. I didn't realize she had to leave early. She's not on the panel but she was great to come out today in support of this effort, and I request unanimous consent that her statement be made part of the record without objection.

So ordered.

Now I'll go to questions, a round of questions. Ms. Brown has been patiently waiting to ask a question.

Ms. Brown?

Ms. BROWN. I do have a question. First, from a previous statement, I want to clear something up. It's very important that we don't mislead the people in this room. When we came up with the \$8 billion dollars, we received, the Federal Government received, the Department of Transportation received, over 270 applications.

And keep in mind, those proposals were put together by region. When the person said he didn't know, he was just elected. Keep in mind, that mayor, that community, put in an application. We didn't just award a grant. It was applied and they went through an extensive study. Just to keep the record straight.

And when you mentioned—keep in mind, whatever system we developed, we're looking at a system that is completely external. There is no system in Europe or Asia that is an integrated system like we are in the Northeast Corridor. So when we develop a system, let's keep that in mind.

Because one of the things—this is the second time for the English to put their proposal out. The first time they had to take it back because of the number of accidents occurring in the system.

So all of these facts you have to keep in mind as you develop a comprehensive system. Let's keep that in mind.

Let me go to my question.

The Republican Committee in their proposal last year, that would eliminate all funding for Amtrak, which we experienced for eight years in the Republican administration, which would force the railroad into bankruptcy; strand hundreds of thousands of commuters, and eliminate a minimum of 20,000 jobs nationwide.

The Committee also proposed to resend the \$2.5 billion of the high speed rail fund it awarded to the states that goes to the 2008 Federal funding level. There was no high speed rail program in 2008.

My question is, how do we educate members the importance of—we are talking about high speed rail, we're talking about high speed, more speed, in all of the hearings they always talk about

high speed is important. What is also important is reliable train times, knowing it will come at 8:00 every day.

How do we develop and educate new members who may come from areas that don't understand the importance of developing a comprehensive system?

And the union person, I also want to know whether or not you think that those are union jobs? Because when I travel those systems, it is interesting. How many jobs are in the system and how safe the systems are?

Mr. HART. Congresswoman, I'll take a quick shot at that.

We are very focused on a public awareness campaign, and it is not only targeted to Members of Congress, but to the public in general. Most of the public is not aware of the value that rail transportation contributes to America. Freight rail, passenger rail, high speed rail. It is very important that people understand the benefits that rail transportation provides.

And also, the outstanding record that Amtrak has done in certain markets. And it is not at all in the interest of America to zero out Amtrak's budget. It is important, though, that Amtrak realize it must do better in operating its system and upgrading its focus as a priority urgency to bring high speed rail to Americans.

Mr. MICA. Mr. Scardelletti, a question was directed to you.

Mr. SCARDELLETTI. Thank you for you comments.

The rail labor unions have been involved in the railroad industry since the 1800s. And through all these years we have established a wage scale and benefit level that is clearly what is described as middle class. And they're good jobs and most people who work on the railroad work their entire life; and then they retire on a pension that's funded by our employers and by the employees for the rest of their life.

There are Federal laws, safety laws, and I don't think anybody can match that. But if we are privatized, the private sector—what I see in this scenario is, it's all about beating down the worker to the new wage level, which is 12 bucks. Everybody wants to pay 12 bucks, to compete with our friends in China; which is insane, in my opinion.

You mentioned the zero funding. You work for a company that every year a group, the president of the United States wants zero funding, put you out of business.

How in the world are you going to take that company, to try to make improvements, when half of the government wants to put them out of business? It's not going to happen. We have all these things you're talking about now.

We would have them today, if a series of presidents of our country, both parties, would have took the initiative to say, "Let's invest in Amtrak and have high speed rail, like the French government and all the other governments did to create their high speed rail." Our country didn't do that. Our Congress, half for it, half against it, and we just get by. What we do, we get by.

But it's been here throughout all the fights, all the Congresses and all the zero budgets, it's still here, 40 years.

Amtrak still provides the best service that can possibly be provided under the conditions that our government mandates to Amtrak. You can't do all these things. You can straighten the rail out,

you have to end all these curves in the Northeast Corridor, and you will get your fast trains.

There's no will to do it from our government. It is up to the government. We could have had it. We wouldn't even have this conference. We'd have high speed rail and the other countries would be talking about us instead of us talking about them. That's what I see.

Mr. MICA. We're now seven minutes into this, and I would like to yield to Mr. Shuster and then continue quickly.

Mr. SHUSTER. Thank you, Mr. Chairman.

To keep the record straight, the stimulus, as my good friend points out—there was criteria put in place. We think the FRA used, but we don't know, because they won't share that information with Congress—when they put those dollars out there, if they used the criteria to do that. I have my doubts, and now that we're in the majority we might be able to find out exactly how those dollars were spread throughout the country.

I agree with the governor and the mayor that dribs and drabs around this country are not going to get us high speed rail.

Respectfully, I don't think Amtrak is currently capable of putting this kind of program into place—maybe a partner to it, but I think we have to have private sector dollars invested. The Amtrak plan is out there, spend \$52 billion for the next 30 years. It won't get us high speed rail.

We need to partner with private sector dollars, and to bring the private sector in to give them a piece of the action and a return on their investment. So I think there are people out there who are willing to do it as long as we in Congress and the stakeholders are willing to be involved.

Again, Amtrak spending \$52 billion over 30 years won't increase capacity. And, in fact, they said 20, 40. If they spent \$52 billion they would be maxed out on capacity. So we really have to look at this in a smarter way. We've got to make sure that the money being invested makes sense. We need all the stakeholders involved.

Mr. Scardelletti, rail labor is extremely important to this. We've got to look beyond the way the country has done things in the past. I think your brothers and sisters in freight rail are doing very well for themselves. They're working for private companies.

Again, the question that was put out there and I want to ask you: Does it really matter, if we get the guarantees for labor unions to be part of this system? Does it really matter if it's private sector or public sector or the company that you are working for?

Mr. SCARDELLETTI. Here's my experience. Amtrak started 40 years ago. I know what we have. In my opinion, part of the objective in moving to the private sector is to reduce everything we have.

Mr. SHUSTER. But in the freight system you are getting more dollars. When you work without a contract for several years the Federal Government won't negotiate with you. The private sector folks are doing quite well. And, I might add, are increasing job opportunities.

Amtrak over the last ten years has lost 10,000 jobs; 800,000 over the years. I think if we take a new model, a new approach to this,

not only can we stabilize, I think we can increase the employment in the high speed passenger rail system.

Mr. SCARDELLETTI. You use that remark you made about the loss of jobs. We have lost the same amount of jobs in freight railroads, or more. The loss of jobs is a result of technology that we can't stop. For example, we had carbon paper, that's how you did everything. You made carbon copies and you had a copy machine and you had a lot of people and the equipment broke down a lot and you had to repair it a lot.

Today's equipment is far more efficient. On the internet \* \* \* There is no paper. This is where the jobs went, just like in any other corporation. Could Amtrak put more trains on the track? We have more riders than we ever had. So that's not why we lost the jobs.

We lost the jobs because we're more productive as people, and all people are today in all industries. And technology has literally—if you had ten people, you might need one, or none, because the computer does it. That's where the jobs went. That's all I'm saying.

Mr. SHUSTER. If you had high speed rail and it grew, these jobs would follow, whether on the train, whether they're producing new—

Mr. SCARDELLETTI. I don't disagree with you. If you gave a company established in 1970 the motivation and the money to do what you want, and they didn't do it, that would be a whole different hearing. I might agree with some of what you said. Instead, you beat them down at every turn of the corner. You beat them down, discouraged employees. How would you like to work for a company where you didn't get a raise for years?

Mr. SHUSTER. I haven't got a raise in three years. I'm in Congress. Sometimes you have to deal with that.

Mr. MICA. I thank the gentleman. His time has expired. I hope you guys can stay around for the discussion.

I yield to our ranking member, the gentleman from West Virginia, Mr. Rahall.

Mr. RAHALL. Thank you, Mr. Chairman. I appreciate the yield.

You know, we had matters in this Committee on Transportation and Infrastructure in the past over worker protection. Bob, you recall them very well; 13C protection for transit workers. But I have a great deal of confidence that this year we'll be working together and there's not going to be these wholesale attacks on worker protection. Certainly not in the Northeast Corridor, where it's needed more than ever.

I said that the other day in our Committee. I hope our politics ends at our committee's doors when we work on these issues of transportation.

Mayor, I understand your criticism for the lack of any local match. You stated that was one of the problems with the stimulus program. Of course, the goal of the stimulus program is to get 100 percent of it out there as quickly as possible.

But in the PRIIA act, we have established for the grant program where a 20 percent local match is required; and that just started in 2010. So I hope those issues, yours about local concern, which I share, will be resolved in the PRIIA act as it gets implemented.

One of the criticisms that we heard on the PRIIA act—or rather, one of these processes set in place for the PRIIA act—in 2008, for the DOT to request proposals from the private sector for financing high speed rail service grants in certain corridors, including the Northeast Corridor. Yet no one has submitted a proposal to DOT.

So my question would be to you, or to other members of this panel: Why have there not been private proposals submitted to DOT?

Mr. BLOOMBERG. I think the answer to that is that nobody thought the government would let the project satisfy the demands of the market. The government would constantly intervene and prevent the investor from charging what the market will bear; preventing the developer from adjusting the size of the work force based on the needs of the system.

And if you stack the deck against them, all you're doing is transferring the problem from one to another. There's no reason why the other side would want to take that on.

I was struck by Congressman Cravaack's comment on China. And one thing; when you think about China—nobody is more of a capitalist than I am. And I really don't think that capitalism is the only system, I don't think that we should privatize everything in government. There are certain things, at least in New York City—which I have a little bit of expertise in—that work quite well with government. I'm quite proud of what we have done here.

But it is true that the Chinese must be doing something right, because they're the ones that are loaning us the money so we can subsidize things like Amtrak. Whereas, if you took the amount money that we spend on Amtrak and divide it by the number of riders and offer everybody that amount of money, they'd mostly walk.

This is ridiculous. Nobody needs—I'm the biggest proponent of high speed rail service. But you have to get serious. Do you want to build out or do you want a jobs creation program?

And one of the problems with the stimulus thing is, we talked about wanting to get people working quickly, and we also want to do infrastructure. Remember shovel ready and that sort of thing? Go back to the way we came out of the Depression. We built all of the major municipal buildings; we built the railroads; we built the bridges.

That's what we did with that money, but it took a while to get going.

We can't have it both ways. If you're going to create jobs right away, you're going to waste most of it. If you want to build for the future, you have to plan and you have to say, "OK, if the project doesn't justify the investment, we're not going to do it."

That politically today may just be so naive and so unrealistic that we can't do it. That's what you guys and women have to wrestle with. What are you trying to do? And you can't do everything.

Thank you, Mr. Chairman. I have to go worry and make sure we clean the snow.

Mr. MICA. Thank you, Mayor, for being with us. And I know Governor Rendell only has a couple of minutes. He changed his entire schedule.

Mr. BLOOMBERG. Anything Ed says I'm in favor of.

Mr. MICA. Thank you both for coming on a difficult day, for your leadership. You guys have been fantastic. The Committee owes you a debt of gratitude. We hope you continue to work with us. We're all headed in the right direction. We have a couple of bumps in the road before we get there.

VOICE. One question to the Mayor. Is that your snow shovel outfit?

Mr. BLOOMBERG. I don't have a Class C license, so I couldn't drive a plow.

Mr. MICA. Governor, I'll excuse you. You can go ahead and scoot if you have to leave.

Mr. RENDELL. Thanks very much for you all being here. It's impressive that so many came out, given the weather forecast and impediments. I also want to say to all of you, I know we've got proposals for spending the money.

I think the President was right last night. We've got to cut the deficit, but we've also got to keep investing. There isn't a business out there that's successful that doesn't invest in itself. If you stop investing, you stop growing as a country. If you stop growing as a country, you'll be a second rate power relatively soon. You've got to find a way to do both. The only way to do both is to forget about the election, and spend this year trying to find real solutions to real problems.

The fact you are here, the fact that the Chairman and \* \* \* Really supply advice and leadership on this. We can do big things in America again. This is a big thing. You shouldn't shy away from this because it's difficult. You shouldn't shy away because of cost. It's a lot of money. We could put people to work. We can make this transportation system first class. We can lead the world again.

Mr. MICA. What I'd like to do is, I know you're leaving, and thank you again, Governor, for being with us. We have the other three panelists. If you would please join us in our discussion, our open forum is open to the public. We'll try to start that a little early, maybe about 12:45. That will give members and other folks a few minutes to reconvene.

If you have any closing comments, Mr. Scardelletti?

Mr. SCARDELLETTI. Mr. Chairman, I want to make one—I'm not trying to be obstructionist. The Mayor said about the subsidy to Amtrak, "you could walk." That is really unfair. Who is going to walk? Where are you going to get these millions of people, how are you going to move them? You could say the same thing about bus, air and highways, how much money our government put it highways.

How much money does our government put into highways? How much money does it put into airways? So that's not the right thing. That's not the kind of thing that is conducive to good debate, to say that kind of comment.

Mr. MICA. Thank you.

We have to give the opportunity to respond.

Ms. Todorovich, any closing comments?

Ms. TODOROVICH. Yes, thank you.

Quickly, on the local match issue. No high speed rail system around the world has been built with significant local contribu-

tions. If we rely on 20 percent local match from each of the 12 states in the Northeast, it's never going to happen.

I think the governor pointed out that there's a \$47 billion combined deficit among these states. So there's a paradox, in that the Northeast mega-region is the place in the country most suited for high speed rail anyplace in the United States, with the density and the population.

But it's also the most difficult place to build this system because we're crossing all these state boundaries.

If this committee is serious about building two dedicated tracks for high speed rail, I think you have to develop a new public authority or a public benefit corporation, or some type of entity that has the ability to finance and raise revenue and hold firms accountable and get this project done.

If we rely on an infrastructure advisory commission—everything is advisory—it's never going to happen. That's something that I would look to all of your leadership for.

Mr. MICA. Great comments.

Mr. Hart.

Mr. HART. Chairman Mica, thank you and the members here today for giving me the opportunity to present a couple of thoughts.

Congressman Rahall, your point about private sector investment. I've been involved in this for a while. I want to continue to advocate for private investment.

The most important thing to public-private investment is consistency. They hate change, and they're not going to invest big money if one government supports high speed rail, and a new governor or new legislature comes in and cancels it.

And that is why the Florida project is so important, and why Chairman Mica's leadership, along with Congresswoman Brown, in compelling a new model, where the shortfall in the match can be made up by private sector investment.

And that is going to happen. It will be a \$300 billion investment from some entity. And there are eight private companies that are competing in Florida. Let them compete and let them make the commitment to invest, take the risk in management and operations, maintenance and operations; they will do it, if the level of playing field is consistent and the commitment to high speed rail is consistent.

The Tampa-Orlando route is not the worst route in the country. It's also not the best route, but it is a start. The route from Orlando to Miami is extremely opportunistic for investment. So continuing to motivate the private sector, give them the opportunity to put the money up, and they will do it.

Thank you. That's my closing comment.

Mr. MICA. Thank you, Mr. Hart.

We are pleased, again, to be here in New York, and pleased to have Mr. Nadler who is a senior member of our T&I Committee. I'd like recognize him.

Mr. NADLER. Thank you, Mr. Chairman.

I wanted to start with Mr. Hart. Mr. Hart observed, I think correctly, that you are not going to get private sector investment on a long term project if you have very uneven public sector involvement.

Things can change on a dime, because today you have an administration and a Congress willing to put money, and tomorrow you don't. Maybe next year you do again. You need certainty in planning.

This leads me to the conclusion that, obviously, if you're going to have high speed rail—or for that matter bring up a rail up to a state of good repair—we have to have it in the public sector. However much the private sector wants to get involved, we must have some certainty in the public sector. We must have some guaranteed funding source.

We must have assurance that, depending on the vicissitudes of this election, after this election, we don't double the financing, and after the next election zero it out, and after the next election after that, triple it.

You have got to have some guaranteed funding source at some reasonable level, which may go up and down from time to time but returns to a reasonable level; so that, number one, the public sector can participate; and number two, so you can get the private sector to participate in either one of them.

I would ask Mr. Hart or the Governor to comment.

Mr. HART. I agree with you, Congressman. That's very important and I consider it to be political sustainability; financial sustainability, environmental sustainability. Political sustainability is the objective here, and it will spark private sector investment. We do need a dedicated fund, revenue for high speed rail; and Amtrak needs additional funding, as well.

So I agree with your observations.

Mr. RENDELL. Congressman, I would say that's another reason for an infrastructure bank. If we did it, Congress has control of the amount of its capacity. But that's going to be there administration after administration. It's going to make a binding commitment for the long term, whatever the public subsidy will be, obviously matched by the private sector. It's going to have the ability to make those long term commitments.

Mr. MICA. I yield to Mr. Reed.

Mr. REED. Thank you, Mr. Chairman.

I have a closing comment in response to my colleague, Ms. Brown from Florida, about the proposed cuts out there; specifically Amtrak.

My philosophical point is: The freshman class gave up a tremendous amount to go to Washington, D.C. We were charged by the American people on November 2nd to get our deficit under control and make the hard decisions and cut spending down in Washington, D.C.

I am committed and I am aware, Mr. Chairman, that we are having this discussion as to where we're going to spend our Federal dollars in a public session, with all these people here, so that this debate can be open, it can be vigorous.

And I am so pleased that our leadership down in Washington has been engaged in the open rules, so that this discussion can continue on the floor of the House. Because the pros and cons of each dollar being spent has to be discussed in public. Through that public dialog and through that public scrutiny, we'll get certainty. Be-

cause there will be a commitment from the American people to know our dollars are being spent wisely.

And I'm just honored to be part of this debate and I appreciate the Chairman, and we're going to have this debate publicly. And those final decisions will be made with that participation.

And I yield the rest of my time.

Mr. MICA. I thank the gentleman.

Any other members that seek a last comment or recognition?

Thank you so much for coming out today. Thank you, Governor. Thank you Ms. Todorovich. I want to thank labor, Mr. Scardelletti, Mr. Hart of the High Speed Rail Association.

There being no further business before the Transportation Infrastructure Committee of the U.S. House of Representatives, this meeting is adjourned.

And I invite you to participate in the open discussion that will follow.

[Whereupon, at 12:18 p.m., the committee was adjourned.]

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Statement of Congresswoman Carolyn B. Maloney  
Committee on Transportation and Infrastructure Field Hearing:  
"Developing True High-Speed Rail to the Northeast Corridor:  
Stop Sitting on Our Federal Assets"  
January 27, 2011

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*Carolyn B. Maloney*

I want to thank Representative John Mica and the members of the Committee on Transportation and Infrastructure for holding this hearing in New York City on the development of true high-speed passenger rail service in the Northeast Corridor. High Speed rail has been the wave of the future for more than 40 years – Japan got its first system in 1964 – and yet the United States has never been able to get on board.

America's fastest trains crawl compared to the high speed rail trains used in Europe and Asia. Acela averages only 83 miles per hour along the Northeast corridor, while their trains race by at more than 180 miles per hour. Where once American ingenuity brought rail service through the wilderness from coast to coast, in recent decades we have systematically failed to invest in a modern rail system. Instead of developing energy-efficient mass transit, we have allowed our rail system to deteriorate.

I am pleased that the federal government is investing in local mass transit with East Side Access and Second Avenue Subway, both of which are being constructed in my district. East Side Access will improve commuting times for passengers on the LIRR line and will provide service to Long Island City, which is New York's fourth central business district. Second Avenue Subway, the first expansion on New York City's subway system in more than half a century, will relieve overcrowding on the Lexington Avenue line, the nation's most overcrowded subway. These projects are providing much-needed investment in New York's economy during tough times and creating 38,000 jobs. Our region is known for having the longest commuting times in the nation and the greatest proportion of commuters who use mass transit. Unlike the much-derided bridges to nowhere, once completed, these projects will be used by hundreds of thousands of people each day. What's more, by reducing commuting times, they will increase our region's economic competitiveness.

The Northeast Corridor is a perfect place to launch high speed rail, and there are great reasons for commuters to choose high speed rail over other modes of transportation. The Northeast corridor is one of the most heavily used railroad routes in the nation. The Northeast Corridor's stations are conveniently accessible in city centers, making them easier to reach for business travelers than the airport. Rail passengers avoid the delays incurred by airplane travelers who must go through security and can expect long waits on the tarmac before their planes take off. Furthermore, rail travel is far faster and less stressful than driving.

The American Recovery and Reinvestment Act included \$8 billion for high speed rail and Amtrak officials released a concept report for next-generation high-speed rail within the Northeast corridor on October 1, 2010. The report offers high speed rail fans both good news and bad. At an average speed of 137 mph, a trip between Washington and New York would take just 96 minutes, reducing travel time by about an hour. The trip between New York and Boston, would average 148 mph and take just 84 minutes, shaving more than two hours from the trip. Unfortunately, with an estimated price tag of \$117 billion and construction time of 25 years, commuters have good reason to wonder whether America will ever make it into the modern era of railroad travel.

If the federal government had invested sooner in high speed rail, we could already be enjoying the benefits of fast, efficient, cost-effective rail travel. I hope we will not be waiting two or three more decades for fast trains to be available here. I applaud the efforts of this Committee thus far in supporting high speed rail, and I look forward to the day when high speed rail is operating in the Northeast Corridor.

Chairman Mica's Statement

This hearing is being conducted as a follow-up to a Transportation and Infrastructure Committee Congressional report produced last year entitled, "Sitting on Our Assets: The Federal Government's Misuse of Taxpayer-Owned Assets."

One of the most valuable and potentially productive federal assets in the United States is the Northeast Rail Corridor. This 437-mile stretch of incredibly valuable real estate covers the distance between Washington, D.C., our nation's capital, and Boston, Massachusetts.

Halfway up the corridor, here in New York City, is America's business and financial center. This is also our nation's most congested and densely populated area. Yet New York City is not served by true high-speed rail – and true high-speed rail may not be realized here for more than three decades.

Unfortunately, this valuable national transportation asset, and the development of true high-speed passenger rail on the Northeast Corridor, has been largely ignored.

In January of last year, President Obama said, "There's no reason why Europe or China should have the fastest trains when we can build them right here in America." While high-speed trains in Europe travel at 186 miles per hour, Amtrak's Acela chugs along at an average speed between D.C. and New York of 83 miles per hour – a snail's pace by comparison.

Amtrak's current plan to bring high-speed rail to the Northeast Corridor would require \$117 billion, and would not be completed until the year 2040. This slow-speed schedule for bringing true high-speed rail service to the Northeast Corridor will never allow President Obama to meet his goal announced in Tuesday's State of the Union address that, "Within 25 years, our goal is to give 80 percent of Americans access to high-speed rail."

Just do the math.

It is my hope that this timetable can be dramatically improved. Entering into public-private partnerships to assist in financing high-speed rail development on the corridor will get it built much faster and bring down costs.

Unfortunately, one of our nation's most valuable assets, including some of the most prime real estate in the world, has been left behind. Instead of providing a visionary transportation link in America's most crowded corridor, we continue to support an antiquated and unproductive corridor that struggles to meet the needs of its many users.

Finally, why should Members of Congress from more than a dozen states here today care about the Northeast Corridor? Let me state some of those reasons:

The Northeast Corridor is an incredibly valuable asset.

As stewards of these assets, we have an obligation to all federal taxpayers and the citizens of these great cities.

This is our nation's most congested corridor, on land and in the air.

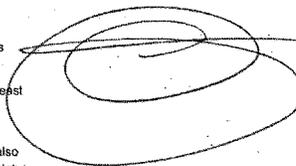
70% of our chronically delayed flights begin in New York airspace.

Amtrak will never be capable of developing this corridor to its true high-speed potential. The task is complex and large-scale, and can only be addressed with the help of private sector expertise and funding.

Bringing true high-speed rail to the Northeast Corridor will benefit the entire nation.

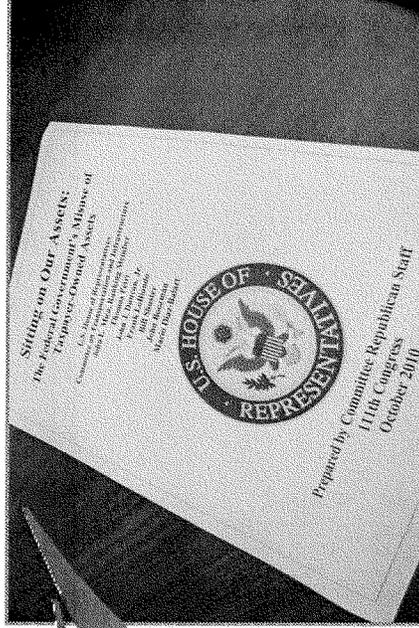
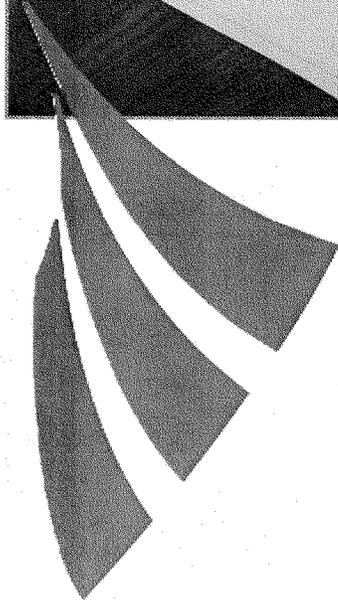
The large turnout today by Members of the Transportation and Infrastructure Committee and New York area Members is a testament to the high level of interest and commitment to new and innovative transportation solutions.

Thank you for attending this hearing. I thank the witnesses in advance, and look forward to your testimony. I particularly want to thank Mayor Bloomberg and Governor Rendell for their long-term support on this project.



***Developing True High Speed Rail  
in the Northeast Corridor:***

**AMTRAK®**



***Stop Sitting on our Federal Assets***

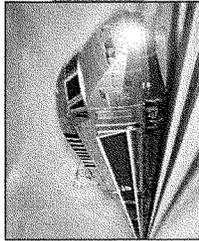
**“There’s no reason  
why Europe or China  
should have the fastest  
trains when we can  
build them right here in  
America.”**

*- January 28, 2010*

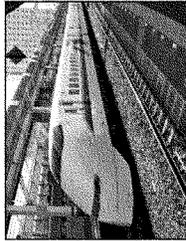


# America vs. Our Competitors

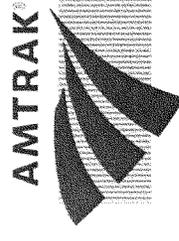
## *slow out of the starting gate*



Paris to London: 306 miles 2hrs, 15min 186MPH



Tokyo to Osaka: 320 miles 3 hours 167MPH



DC to New York: 225 miles 2hrs, 42min 83MPH

# The Future of High Speed Rail

**Amtrak's Plan for High Speed Rail**

**2040**  
**\$117 Billion**

**VS.**

**NEC Vision**

1/2 Time + PPP\*

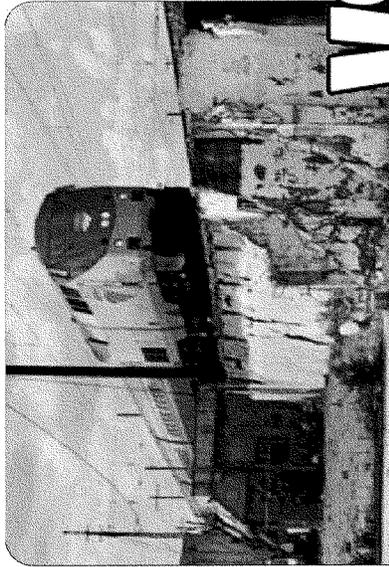
\*Half the time, plus public-private Partnerships = Real High Speed Rail

# ***Great Expectations... ...Uncertain Direction***



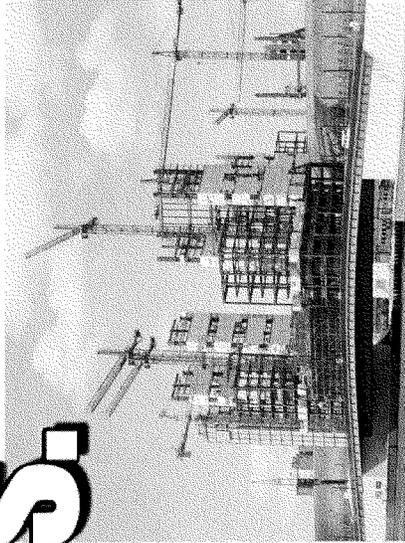
**"Within 25 years, our goal is to give 80 percent of Americans access to high-speed rail."**

**- January 25, 2010**



Northeast Corridor Rail Line

**VS.**



Construction of the Berlin Central Rail Station \*

\* Photo by Steve Johnson;  
[www.flickr.com/photos/47164178@N00/1430150824/](http://www.flickr.com/photos/47164178@N00/)

  
 U.S. REPRESENTATIVE JERROLD NADLER (D-NY)  
 OPENING STATEMENT  
 TRANSPORTATION & INFRASTRUCTURE COMMITTEE HEARING  
 "Developing True High Speed Rail to the Northeast Corridor"

January 27, 2011

Thank you, Chairman Mica, and Ranking Member Rahall, for holding this hearing today on high speed rail in the Northeast Corridor. I'd like to welcome everybody to New York, and thank everyone for taking such an interest in passenger rail which is so vital to this City and to this region. Nobody relies on the Northeast Corridor more than <sup>I do.</sup> ~~me~~. I take the Acela virtually every week from my district to Washington. Even though the trip time is a little longer than the plane, it is consistently a more reliable and manageable way to travel.

Chairman Mica and I have had several conversations over the years on this topic, and we both agree that we should work to achieve true high speed rail on the Northeast Corridor. It simply makes no sense to travel by air between NY and DC or Boston, or frankly between any <sup>two</sup> cities within a 500 mile radius. As many of us know from personal experience, LaGuardia, JFK and Newark are among the most congested airports, and experience frequent delays that ripple across the country. High speed rail can provide competitive trip times and fares, freeing up airspace, while also benefiting our environment, economy, and national security. The

benefits of high speed rail are clear. However, building high speed rail lines will take a significant investment.

That is why I, and many of my colleagues, supported the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), and have supported funding for high speed rail development and for Amtrak. Under the Bush Administration there was an effort to starve Amtrak in order to bankrupt it. In the last few years, we have finally started to dig out of that hole and invest in the Corridor. Amtrak received \$1.3 billion in the <sup>Economic</sup> Recovery Act and another \$700 million for northeast upgrades. This investment is long overdue, and a step in the right direction. If we want to improve service on the Northeast Corridor, we should continue investing in it.

I'm concerned by the proposal from my friends on the other side of the aisle to reduce federal funding to at least 2008 levels. There was no High Speed Rail program in 2008, so does that mean they want to eliminate this funding completely? The Republican Study Committee (RSC) certainly wants to do this, and has specifically called for the elimination of Amtrak and of all intercity and high speed rail grants.

The idea that the private sector will somehow step in and fill the void seems to be more of a wish than a reality at this point. I am happy to review proposals, but the DOT solicited proposals for private development of high speed rail and received none for the Northeast Corridor. And proposals I've heard about anecdotally still require some form of backing from the federal government.

The fact is that every major transportation system has been created with federally funded capital investments. Every mode of transportation – highways, transit, aviation – relies on some form of public subsidy. Why should rail be any different?

I wish that Amtrak were testifying today, because it actually has a plan for “Next Gen” high speed rail in the Northeast. Under Amtrak’s plan, trains would reach speeds up to 220 miles per hour and provide a trip time of 1 hour 36 minutes between NY and DC, and of 1 hour 23 minutes between New York and Boston. It would cost \$117 billion over 30 years, or about \$4-5 billion per year. To put this in perspective, we just spent twice that amount, \$8 billion, on high speed rail grants in the Recovery Act. And in FY10 alone, we spent about \$70 billion on highways, transit and aviation. Spending \$4-5 billion a year to develop high speed rail would represent only about 5% of our entire transportation budget, and would be well

worth the money, considering it would create 44,000 jobs annually over the construction period, 120,000 permanent jobs and would generate an operating surplus of \$900 million per year. Not to mention that Amtrak's plan could be implemented without completely disrupting the current service.

*And don't forget freight.*

I look forward to hearing from the witnesses today, but I am very concerned that, as we explore private financing, we don't use it as an excuse to eliminate federal investment in passenger rail. Chairman Mica, I'm sure we will have many more discussions about the Northeast Corridor this year. I look forward to continue to work with you on our shared goal of developing true high speed rail.

Thank you.



Chairman Shuster's Statement

Thank you to New York City for hosting us here today at historic Grand Central Station and to Chairman Mica for holding this important hearing today on true high-speed rail in the Northeast Corridor and the importance of competition and private sector investment. It is also my pleasure to welcome our distinguished witnesses today, including Mayor Bloomberg and Governor Rendell.

It is truly an exciting time to be on the House Transportation Committee and to be the Chairman of the Railroads, Pipelines, and Hazardous Materials Subcommittee. It is particularly exciting because our nation is finally moving ahead in the areas of intercity passenger rail, and specifically high-speed rail.

High-speed rail is essential to our nation's transportation future and our best hope for easing crowding on our congested highways and airspace. There is simply no better way to move large numbers of people from city-center to city-center than on high-speed rail.

In my home state of Pennsylvania, upgrades to the Keystone Corridor to speeds of 110 mph have resulted in significantly higher ridership that only continues to grow. Higher speeds would only make this service more attractive. Now when I travel to Philadelphia, I refuse to drive and the Keystone Corridor train is my preferred method of transportation.

Unfortunately, the United States is far behind the international curve on high-speed rail. Our friends in Europe have been at work for decades on an impressive high-speed rail network. Japan is working on a new high-speed train that will carry passengers at up to 310 miles per hour between Osaka and Tokyo, augmenting their existing bullet trains. And China is spending nearly \$300 billion to develop 8,000 miles of new high-speed track by 2020. That's enough rail to go from here to Los Angeles – three times over.

For nearly 100 years, America was the unquestioned global leader in passenger rail and trains were the primary, and in many cases only, mode of transportation available for medium and long distance travel. But the advent of commercial aviation and the interstate highway system changed the equation. In the face of this stiff competition, our nation's passenger rail system faded into disuse and disrepair.

However, today things are beginning to change. The population concentration in our urban areas is increasing, in particular on the eastern seaboard and the Northeast Corridor between Washington, DC and New York City. In 2006, the United States population reached 300 million people. And by 2039 we are expected to break the 400 million mark.

Congestion costs continue to rise. Crippling congestion and poor roads cost businesses and commuters almost \$116 billion a year in wasted time and fuel – that is up from \$24 billion in 1982 (adjusted for inflation). And Americans spend more than 4 billion hours per year stuck in traffic. It is clear the time for investment in high-speed rail and improvements to our intercity passenger rail system is now.

Unfortunately, instead of focusing on key corridors, scarce federal dollars have been spread too thin among too many different projects, leading to incremental progress that could slow our already delayed entrance into high-speed rail. Perhaps the biggest missed opportunity was the failure to invest in the Northeast Corridor, which, for the most part, was kept out of the selection process. Failing to invest in the critical Northeast Corridor will ensure continued congestion in our nation's most densely populated region and on the corridor that presents the best opportunity for true high-speed rail and profitable service.

Most importantly, we must focus on how we can bring private sector investment to this critical corridor by introducing competition and incentives for investment. In this constrained budget environment, it is more important than ever for us to leverage private sector funds so we can continue to move forward in the area of high-speed rail and intercity passenger rail.

In the Passenger Rail Investment and Improvement Act (PRIIA) of 2006, I was proud to author a provision regarding competition. My provision, Section 214, created a pilot program to allow two Amtrak intercity routes to be opened up to private sector competition for up to five years. Unfortunately, my provision has thus far been ignored by the Federal Railroad Administration (FRA) and this competition has yet to take place.

I am particularly interested to hear from our witnesses today regarding their thoughts and interest in partnering to help finance true high-speed rail in the Northeast Corridor and how high-speed rail development can bring economic development.

**CONGRESSWOMAN LOUISE M. SLAUGHTER**  
**STATEMENT AT PUBLIC FIELD HEARING ON THE NORTHEAST**  
**CORRIDOR AND HIGH SPEED RAIL**  
**JANUARY 27, 2011**

I apologize for not being able to attend today's field hearing but I appreciate the opportunity to address you all today. I am a Co-Chair of the Northeast Rail Caucus because I recognize the need for us to work closely together in order to ensure our region's transportation needs are collectively met.

Today I write to urge you to answer our nation's transportation challenges with a comprehensive solution. Like President Obama, I share the goal of giving 80 percent of Americans access to high speed rail within 25 years. While we should continue to invest in the Northeast Corridor and make high speed rail in the Northeast a reality, it is imperative that we also develop a national high speed rail network, including a high speed rail line along the Empire Corridor, to keep our country the premiere global power of the 21<sup>st</sup> Century.

When our nation's interstate highway system was built, we invested in a transportation network that passed through every state in the union, benefitting commerce and private citizens alike. The interstate highway system project was neither "targeted" nor "limited"; it was a bold step towards an American future, and the investment paid-off. The interstate highway system helped to secure America's position as the dominant economic world power throughout the remainder of the 20<sup>th</sup> Century.

It is also a little-known fact that the interstate highway system contributed to our military security throughout the Cold War and up to today. The interstate highway system was indeed born of a desire to protect our national security interests.

It is no coincidence that one of our great military leaders, President Eisenhower, led the effort to build our highway system, in part to

facilitate the easy movement of troops and supplies across our country. Today we face a similar opportunity to protect our national security by building a modern transportation network that provides for rapid transportation of people and cargo and gives our country the modern infrastructure to better protect our land.

Sixty-five years after the passage of legislation to build our interstate highway system, we stand at a point of uncertainty with regards to America's position in global affairs. Countries around the world, from Germany and France to Japan and China, already have, or are quickly completing, high speed rail networks. China is quickly becoming the world leader in high speed rail, with trains that have reached 311 miles per hour and regularly operate at over 250 miles per hour.

With the opening of a high-speed rail line between Beijing and Shanghai, China will be able to move passengers across 600 miles in four hours. In a knowledge economy, this speed and efficiency will pay dividends for the Chinese economy and global influence in the years to come.

Meanwhile, here at home, debates of the 20<sup>th</sup> Century are being re-litigated, reconsidered and debated while the world moves ahead. While we debate the past, six billion people begin to reorganize the global order, and secure their standing for the next 50 years.

The truth is that there has never been a better time to invest in a national high speed rail network, and the investment environment may never be this favorable again. Construction costs are at their lowest level in decades, with raw materials, labor and borrowing costs all quite low. As our economy rebounds, costs will only increase. Not investing today will only cost us more in the future. The time to build a national high speed rail network is now.

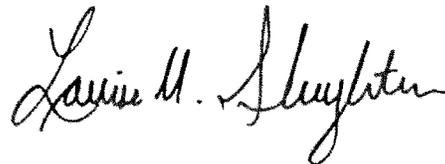
Investing now would also create much needed jobs for thousands of workers throughout New York. According to the Capital District

Transportation Authority, high-speed rail will bring 12,000 new jobs to New York State. In Upstate New York alone, 3,500 workers are employed by 30 companies that manufacture railroad equipment. Together these companies bring in more than \$750 million in annual sales. Another 11,000 Upstate workers are employed by businesses that produce and distribute goods to sectors that are heavily relied upon by the railroad industry. High speed rail will not only benefit travelers, but the thousands of employees who will build our high speed rail network.

Finally, a high speed rail line in Western New York as currently planned would reduce travel time significantly, and expand the Western New York labor market to 955,562 workers. This would make the Buffalo-Niagara Falls-Rochester metro area the 26th largest in the nation.

Some look at Upstate New York and see a high speed rail line between small regional cities. Those of us involved the development of high speed rail in Upstate New York see much more. We see high speed rail as an international gateway tying together knowledge hubs like Montreal, Toronto and New York City with the skilled and talented labor of Buffalo, Rochester and Niagara Falls. It also would break down the east-west barrier of current American train travel, by providing access to Boston to the east, and Detroit and Chicago to the west- a notion that is unheard of today.

In short, we cannot compete in the 21<sup>st</sup> Century without a nationwide transportation network of high speed rail. We must continue to develop the Upstate Corridor, and a national high speed rail network, in order to meet our transportation needs and win the global competition for the 21<sup>st</sup> Century.

A handwritten signature in cursive script, reading "Louise M. Shuyfiter". The signature is written in black ink and is positioned at the bottom right of the page.

**TESTIMONY BY MAYOR MICHAEL R. BLOOMBERG  
DEVELOPING TRUE HIGH SPEED RAIL TO THE NORTHEAST CORRIDOR  
U.S. HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE**

Good morning, Chairman Mica and Ranking Member Rahall. Thank you for calling this hearing and inviting me to testify. I'd also like to recognize Subcommittee Chair Bill Shuster and Congressmen Jerrold Nadler and Michael Grimm from New York City.

It's appropriate that this hearing is taking place in Grand Central. Like the Erie Canal, the transcontinental railroad, and the interstate highway system, it's a monument to our nation's tradition of dreaming big and investing in our future.

Together, those transportation networks opened up new markets and made us the globe's economic superpower. But that was a long time ago. Today, our nation invests just over 2 percent of our GDP in infrastructure. Meanwhile, Europe invests at twice that rate and China at almost three times it.

In 2007, I visited Shanghai. I landed at the airport and got on a magnetic levitation train capable of traveling at 250 miles per hour. Other countries in Asia, Europe and the Middle East are building bullet trains too. So what is America waiting for?

If we're going to maintain our global economic competitiveness, we must re-commit to infrastructure.

With former Governors Rendell and Arnold Schwarzenegger, I've formed a bi-partisan coalition called "Building America's Future" that has been working to build support on this vital issue. We welcome your committee's interest in building a high-speed rail network and I'm glad to hear that a consensus is emerging around why it should be built here in the Northeast.

As you know, the Northeast is the nation's largest economy. The region is home to the nation's major centers of business, government, finance, medicine, entrepreneurship, and education. 162 Fortune 500 companies are headquartered in the Northeast. In addition, seven of the world's top 20 research universities are located in the region. And most of our population is consolidated in dense cities close enough to each other to make travel by train much more convenient than flying.

At the same time, because of all this activity, the Northeast is approaching a transportation crisis. Our airports are among the most clogged, our highways are among the most congested, and our train corridor is the most heavily used in the country. All of that is only going to get worse with the region's population expected to grow by 40 percent by 2050.

If we want this engine to keep driving the American economy, we need to unclog its fuel lines. And the best way is via a high-speed rail line. High-speed rail would add the equivalent of about 1,900 lane miles of interstate except, of course, this would be an interstate with a speed limit of 220 miles per hour.

High-speed rail in the Northeast would be a boon for our region and our country in other ways. It would generate travel and tourism, raise property values, and cut pollution and dependence on foreign oil. And by reducing congestion on our highways, at our airports and on our commuter trains it would increase economic activity.

We estimate that high-speed rail would generate more than \$7 billion in economic activity and create about 100,000 new jobs by 2040. Because when businesses and industries are brought closer together, they inevitably see greater profits, creativity, and productivity.

President Obama and Congress have taken a good first step by allocating \$10 billion for high-speed rail. And I was encouraged that the President reaffirmed this commitment during the State of the Union, setting a goal of giving 80 percent of Americans access to high-speed rail within 25 years. That's certainly a laudable goal, but the money isn't there for it yet. So we ought to start with what makes sense economically right now. And at the moment, we're not doing that.

Funding for high-speed rail projects has been divided across 36 states, spreading our money so thinly that we run the risk of achieving nothing at all. In fact, the current Federal plan allots just over 1 percent of all high-speed rail spending for the Northeast. That simply doesn't make sense. Especially because Amtrak is the only profitable line run by Amtrak and the Northeast is the only corridor where there's demonstrated high demand for high-speed rail.

What we need is a new approach to spending transportation money - one that's not dictated by politics, but based on economics. We might not get all the routes we want, but we will get the high-speed trains we need.

Before I close, I want to mention two ideas we need to explore if we want this to be feasible.

First, high-speed rail could cost over \$100 billion and take a generation to build. While government should take the lead, we need to look at new structures and financing that will attract private dollars.

Second, we don't need to wait to start testing new ideas. We should consider stimulating private investment and innovation by opening the tracks to competing franchised operators. They're doing that with the English Channel tunnel and it will lead to more options, cheaper tickets, and better service. Who knows what options might emerge for the Northeast? JetBlue offering trains with leather seats and TVs?

The country needs to make smart investments in 21st century transportation. And the evidence could not be any stronger: high-speed rail in the Northeast corridor is the smartest possible investment for a track to the future.

Thank you.



TESTIMONY OF THOMAS A. HART, JR., ESQ.  
VICE PRESIDENT FOR GOVERNMENT AFFAIRS AND GENERAL COUNSEL  
US HIGH SPEED RAIL ASSOCIATION

To US House of Representatives, Transportation and Infrastructure Committee, Field Hearing in  
New York City, NY with Chairman John Mica Presiding

January 27, 2011

On behalf of the United States High Speed Rail Association (USHSR), its President, Andy Kunz, and its 250 members, I extend greetings to the prestigious Transportation and Infrastructure Committee. I am here representing USHSR as its Vice President for Government Affairs and General Counsel. The USHSR is a non-profit trade association born from a vision for advancing a state-of-the-art nationwide "true" high speed rail (HSR) system to be completed in phases around the country. Our mission is to build widespread public, business, and political support for major investments in a national HSR network.

The USHSR is pleased to share its thoughts on HSR development in the Northeast Corridor. This past November, USHSR hosted an international conference featuring Secretary Ray LaHood and 400 attendees in NYC that focused on the Northeast Corridor. The conference yielded much support and enthusiasm for building a true HSR system in this corridor. Today, we are delighted to express a common interest in the Chairman's vision for the rapid creation of a true HSR system in the Northeast Corridor funded in part by the private sector through innovative public-private partnerships.

This national HSR system will revive our economy and manufacturing sector by creating millions of new jobs. It will be the catalyst for the next national real estate boom as well as significantly reduce our dependence on foreign oil. It will also shrink our national carbon footprint, and it will create efficient mobility that's safe and affordable for its passengers. Aside from these great benefits is the desire to keep America more competitive through the constant development and innovation of its transportation systems as President Obama mentioned 2 days ago in his State of the Union Address.

Presently, all of our national transportation systems are overloaded and in a state of disrepair - which causes countless delays and waste - costing the nation more than \$100 billion dollars per year in lost time and wasted fuel. With the price of oil rising again and heading towards \$100 per barrel, it is of the utmost importance that we quickly get these new rail systems built to offer a redundant transportation system not dependent on oil or subject to oil price fluctuations. Ironically, increased oil prices translate into increased rail ridership, which in turn improves the business case from HSR. We have already seen this happen in the summer of 2008 when oil hit \$147 per barrel, and the ridership on America's rail systems rose to record levels.

Just one year ago this week, President Obama in his State of the Union Address, announced a commitment of \$8 billion dollars for this new visionary HSR program by remarking, "[t]here's no reason Europe or Asia should have the fastest trains." The very next day executives from USHSR joined the President and Vice President Biden in Tampa for the announcement of HSR's arrival to Florida and America's introduction to 21<sup>st</sup> century's transportation.

The popular Washington, DC to Boston passenger train route, otherwise known as the Northeast Corridor is particularly ideal for HSR investments not only because it stretches across seven states totaling 480 miles, it has the most robust ridership level from a population of approximately 50 million. In 2009, Amtrak's daily rail ridership in the Northeast Corridor was more than 27,000 passengers. Economically strong, the Northeast Corridor has among the highest income levels per capita in the nation. Such demographics make the Northeast Corridor ripe for HSR development and investment by the private sector. Despite these advantages, the Northeast Corridor's plan for HSR presents numerous challenges. The states connected along the proposed routes have a combined deficit of over \$45 billion and are currently dealing with widely deteriorating infrastructure. Also, any major regional investment will require bipartisanship due to mixed control of the governorships among the seven states. Additionally, the Northeast Corridor is not shovel ready due to the absence of a comprehensive environmental impact study, lagging regional planning, and the Federal Railroad Administration's and the incumbent carrier's token investments in HSR over the past decade. Moreover, the purchase of real estate and other freight control right of ways will be costly as well as the labor and construction

costs for building a new dedicated HSR track. Nevertheless, these challenges can be overcome by key consensus building efforts from government leaders and private investors.

Despite the common misconception, Amtrak's Acela is not true HSR. Globally, HSR trains regularly operate at speeds of 186 to 220 mph. Although the Acela has merits, it falls short of maximizing the potential a true HSR line would deliver to both consumers and its operators. Currently, Acela is limited by its own operating speed compounded by the lack of separate, dedicated track. The Acela averages 79 mph most of the line because it shares its track with other passenger and freight trains. Therefore, the development of a true HSR system would necessitate new dedicated track independent of freight operations. Additionally, the two routes that Amtrak runs out of NYC along the Northeast Corridor generate much of the entire system's revenue and are two of the few Amtrak lines that actually return considerable profits. However, with the right development and adequate investment in HSR, there is a vast consumer base that can be tapped into for a true HSR line that can deliver safe, efficient, and faster travel.

The debate is now how do we fund one of America's most important infrastructure projects. With the continuing economic and political climate of reducing public spending and the challenges in attempting to balance the budget, the future HSR development in the Northeast Corridor will heavily depend upon private sector investment. In addition, the price tag is encouraging some state government institutions to redirect capital away from these types of projects. In spite of this, there has been a renewed commitment for federal investment from the Obama administration, but more capital is needed to ensure a successful project that meets the expectations of consumers in an efficient and profitable manner. Public-private partnerships are needed to carry out this important national program and global experience shows that they can be successful.

Last year, the UK government auctioned off a 30-year concession for the right to own and operate its first high speed railway, the HS-1, linking London to the Channel Tunnel. The sale generated approximately \$3.4 billion dollars<sup>1</sup> and was sold to a consortium of two Canadian pension funds - Borealis Infrastructure and Ontario Teacher's Pension Plan. The concession sale is estimated to return 40 percent of the construction cost to the

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<sup>1</sup> Mark Reutter, British Deal Shows Private Investment Demand for High-Speed Rail, PROGRESSIVE FIX (December 10, 2010) available at <http://www.progressivefix.com/british-deal-shows-private-investment-demand-for-high-speed-rail>.

British treasury.<sup>2</sup> Such savings is likely to help reduce the British's government's record deficit. In 2040 - when the concession ends, the railway reverts back to the government, which anticipates re-bidding it for an equal or higher price. "[O]ver the course of its 150-year-plus lifecycle, [HS-1] repays its construction cost, probably several times over."<sup>3</sup> Reportedly, the "higher-than-expected bids for the UK's only dedicated [HSR] line revealed [a] strong demand for such assets" and demonstrates an alternative solution to funding HSR development, especially in the Northeast Corridor which has one of the densest market of riders.<sup>4</sup>

Although there has not been a public-private partnerships undertaken in America for the railroad industry, there have been several other developments of transportation infrastructure in a similar manner, particularly in the development of toll roadways. Creative public-private partnerships will allow governments to tap into the \$400 billion that is currently available for investment in such projects from private financial institutions on Wall Street, in pension funds, and in the banking sector. Furthermore, there is a potential for a high ROI (return on investment) for public projects such as this because of the current market of riders that exists in large urban areas like New York City, Philadelphia, and Boston.

The key for success is to incentivize the private sector in conjunction with targeted expenditures of public funds. These incentives can be created and implemented through federal legislation. Next week, USHSR will propose the "Private Investment in Infrastructure Act of 2011." Under such legislation, private companies seeking to invest in public projects stand to gain specialized benefits such as guaranteed loans, tax credits, possible deferred payments on loans until profits are made as well as other concessions for investment in the construction and operation of the nation's rail lines. HSR corridors can then be developed with a less reliance on public funds, thereby expediting its development, design, and construction at a lower cost. Meanwhile, the public partner retains some control and management of the overall rail program to ensure that public requirements and government standards are met.

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<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> Robert Wright, £2.1bn HS1 Sale Lifts Privatisation Prospects, FINANCIAL TIMES (November 10, 2010) available at <http://www.ft.com/cms/s/0/6be9c170-e90d-11df-a1b4-00144feab49a.html#axzz1BgsRnLPT>.

Public funding and support is very important but it is the private sector's investment that will ensure the development of a commercially viable HSR transportation system. The government cannot solely be relied upon to carry the full financial burden of public infrastructure projects. Private industry must step up and fill the gaps in HSR funding and operations. Also, it is equally important that government investment, minimum guarantees, tax credits and other means are made available to give the private sector the comfort and assurances to invest in this long term project. In essence, there must be a permanent and on-going federal HSR program established to signal that this project is of national significance similar to the way interstate highway system was built.

At this time, the case in Florida is an excellent opportunity for a public-private partnership model to fill the State's \$300 million dollar gap for HSR funding. The public-private partnership team that successfully develops that model will likely be engaged for decades as the country develops HSR systems in California, Chicago, and the Northeast Corridor. Thus, we are confident that market forces will make the business case. The first test of the private market will occur in Florida as the Florida Rail Enterprises is expected to release its Requests For Qualifications (RFQs) to bidders next week and it is expected to contain a requirement for private investment to fill the funding gap. In closing, we invite this Committee to continue this discussion at our upcoming HSR Summit in Washington, DC February 8th, 9th, and 10th on Capitol Hill.

Thank you, Mr. Chairman for your time and your leadership. We look forward to working with you in the future and welcome the Committee's questions and comments.

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Edward G. Rendell, Former Governor, Pennsylvania  
Arnold Schwarzenegger, Former Governor, California

**Testimony of the Honorable Edward G. Rendell  
Northeast Corridor High Speed Rail  
House Committee on Transportation and Infrastructure  
January 27, 2011**

Chairman Mica, Ranking Member Rahall, and Members of the Committee, thank you for the opportunity to testify before you on high speed rail in the Northeast Corridor.

President Obama has ignited the nation's imagination with a bold 21<sup>st</sup> Century transportation vision with its centerpiece being a network of high speed rail corridors. There have been just a handful of times in our nation's history when we have had the opportunity to undertake transformative changes regarding our mobility. The building of the 363-mile Erie Canal is one such example. Regarded at the time by critics as "Clinton's folly" (New York Governor DeWitt Clinton), it has since been lauded as the engineering marvel of the 19<sup>th</sup> Century.

Once the Erie Canal became operational in 1825, its impact on trade and mobility was immediate as settlers poured westward and trade exploded. In

nine years Canal tolls more than recouped the cost of construction. And within 15 years of the Canal's opening, New York was the busiest port in America, moving tonnages greater than Boston, Baltimore and New Orleans combined.

The most transformative undertaking of the 20<sup>th</sup> Century was the construction of the Interstate Highway System. The mobility afforded to both people and goods by this vast network has greatly contributed to our nation's economic growth.

The construction of a state-of-the-art high speed rail system should be the defining transportation initiative of the 21<sup>st</sup> Century.

But in order to succeed we will have to be smart, strategic and make tough and honest choices about paying for a first-rate rail system – something this country has long struggled to do. While total public expenditures on highways, aviation and rail have grown over time, rail has lagged way behind the other two. According to the Congressional Budget Office, in 1956 total public expenditures on highways was \$6.9 billion, aviation \$334 million and rail at \$8 million. In 2004 total public for highways was \$120.4 billion, \$26.6 billion for aviation and \$1.5 billion for rail. Sadly that is only a fraction of

what our European and Asian counterparts have invested in their world-class high speed rail systems.

The French TGV has been up and running since 1981 and now achieves speeds of 199 miles per hour. The Japanese Shinkansen was inaugurated in 1964, at a speed of 130 mph, and is now up to 186 miles per hour. The Beijing-Tianjin train runs up to 217 miles per hour; the Shanghai maglev train achieves speeds up to an incredible 268 miles per hour. In 2009, China announced a plan to expand its high speed rail system to a network of over 16,000 miles by 2020 and invested over \$50 billion in this system. Later this year, when a new Beijing to Shanghai high speed line will open (a year ahead of schedule), those fast trains will cut to just four hours the travel time for the 600-mile journey between China's two most important cities. In addition, Spain plans to spend more than \$100 billion over the next decade to lay 6,200 miles of track and build Europe's biggest high speed rail network.

Yet here in the United States we have only begun to finance high speed rail with an initial investment of \$8 billion that was contained within the American Recovery and Reinvestment Act (ARRA). Much of that funding was spread over high speed rail projects in 36 states so no single system could be built out in its entirety.

Building a first-rate high speed rail network will require public and political will to invest beyond the initial \$10.5 billion that has been allocated to date. California's system alone is estimated to cost at least \$45 billion. As I said, we must be strategic about our investments. And both the federal and state governments must step up to the plate. We also must carve out an appropriate role for private investment. The good news is that I and many other elected officials across this country stand ready to support the effort.

In 2008, I joined with then-California Governor Arnold Schwarzenegger and New York City Mayor Michael Bloomberg to form Building America's Future. Our bipartisan coalition of state and local elected officials shares a vision for a new era of smart national infrastructure investments that will spur job creation and long-term economic competitiveness, address climate change and our dependence on fossil fuels, boost goods movement and enhance safety and quality of life for our citizens. Promoting investment in passenger rail is a key priority for our group.

For example, in 2006, Pennsylvania completed a relatively modest \$145 million improvement project with Amtrak to increase speeds on the Keystone Corridor to 110 miles per hour between Harrisburg and Philadelphia. The trip time dropped from two hours to 90 minutes and the result was a 26 percent boost in annual ridership from 890,00 to 1.1 million.

There are similar projects all across the country, where improvements to existing track and improved signaling can reduce trip times and spur big increases in ridership for relatively modest costs. There are a number of these that we should undertake. But with limited resources, we must be smart and strategic about where to invest. It is critical that these investments be made in corridors that have the most promise for success. And that means targeting corridors that have the population density and the proven ridership to make it work. There must also be local political support and a willingness of the states along the corridor to share in the costs. The Northeast Corridor is the ideal place to focus more of our resources to establish true high speed rail.

Earlier this month America 2050 released a report which studied potential high speed rail corridors of 600 miles or less around the country and scored them based on regional and city population size and density, employment concentrations, rail transit accessibility, air travel markets and the composition of job markets by sector. The report found that high speed rail works in very specific conditions, primarily in corridors of 100-600 miles where major employment centers are connected. Based on these criteria, it's no surprise that the highest ranked corridor was Washington to New York with Boston to New York a close second.

The Northeast Corridor is the nation's densest and most economically productive with its 55 million people and a \$2 trillion economy. Its population density is roughly 12 times the national average and *The Wall Street Journal* reported in 2008 that it was the world's second largest mega-region – behind greater Tokyo. If the Northeast was an independent country, it would represent the fifth largest economy in the world. Additionally, the Northeast Corridor moves more than 259 million passengers and 14 million car-miles of freight per year.

The complex air traffic system in the New York metro area has greatly contributed to congestion in our skies. Three of our nation's busiest airports (LaGuardia, JFK and Newark) are located within 25 miles of each other and approximately one-third of the flights departing from them have destinations within 500 miles, including 200 daily flights heading for destinations along the Northeast Corridor. And since so much of our nation's air traffic departs or arrives at one of these three airports, delays experienced here have a significant ripple effect across the nation.

Enabling true high speed rail in the Northeast Corridor would likely eliminate – or at a minimum reduce - the need for short haul flights meaning that the daily shuttles between Boston, New York and Washington would dramatically decrease in frequency or stop altogether. This means that those slots currently

being used for the shuttle could be used for longer, more profitable flights throughout the U.S. This would be a positive for both travelers and the airline industry because it will reduce delays in the system.

The other big advantage that the Northeast Corridor has is that Amtrak owns nearly all of the rights of way along the corridor. No other corridor in the U.S. can make that claim.

But there are some significant hurdles that must be overcome. There are issues with tight curves in many sections of the existing track which are an impediment to achieving top speeds. The Acela Express is capable of reaching a top speed of 150 mile per hour (mph) but averages only 70 mph. In order for top speeds to be achieved, rail lines need to be straightened and appropriate accommodations made with the freight rail companies and other commuter rail lines that share the existing tracks. Seven different freight railroads currently operate on portions of the Northeast Corridor. Ownership of the track is fragmented with Amtrak, the Connecticut Department of Transportation, Metro-North Railroad, the Commonwealth of Massachusetts and CSX each owning various segments. Ideally, true high speed rail would be established with dedicated tracks to be used solely for high speed rail. However, that would increase build-out costs dramatically.

While there are incremental improvements we must make to our current rail system, in the end we must do much more. If all we wind up with is upgrading our existing 19<sup>th</sup> century rail technology, while our economic competitors forge ahead with 21<sup>st</sup> century rail systems, then we will not have succeeded in creating the kind of transformational change President Obama, Members of Congress, and so many others have envisioned.

States across the country are ready and willing to commit resources to this effort, but will need an ongoing and significant federal commitment. A true high-speed rail network will have a dramatic effect on reducing carbon emissions and we should be exploring ways to fund it through such funding sources such as gas taxes, VMT fees, tolling and congestion pricing, ticket surcharges and a National Infrastructure Bank.

Making significant investments in the Northeast Corridor to achieve true high speed rail must be our number one priority. No other corridor in the country has the population density and ridership as well as the economic wherewithal to result in successful and likely profitable, high speed rail line. The reduction in congestion in our airspace as well as in emissions from taking more cars off the road are important benefits that must not be ignored. The travel time savings in reducing the time to get from Washington to New York to Boston will also greatly enhance our economic productivity. We must embrace a

bold vision for mobility in the 21<sup>st</sup> Century and high speed rail must be a vital part of that new vision. The Northeast Corridor will demonstrate the value of these investments to our entire nation.

Let's seize this moment.

Thank you, Chairman Mica, Ranking Member Rahall, and Members of the Committee. I welcome your questions.

Committee on Transportation and Infrastructure  
Northeast Corridor High-Speed Rail  
Testimony  
Of  
Robert A. Scardelletti, International President  
Transportation Communications Union/IAM

Chairman Mica, Ranking Member Rahall and members of the Committee on Transportation and Infrastructure:

Our union represents over 50,000 members. Approximately 35,000 of which work together with 120,000 other railroad workers represented by the International Association of Machinists, Brotherhood of Locomotive Engineers and Trainmen, United Transportation Union, National Conference of Firemen and Oilers, Brotherhood of Railroad Signalmen, International Brotherhood of Electrical Workers, Sheet Metal Workers International Association, American Train Dispatchers Association, Brotherhood of Maintenance of Way Employes, Transport Workers Union of America and UNITE HERE, in both freight and passenger rail, as well as on various commuter lines throughout the United States. TCU is the largest union on Amtrak representing six (6) different crafts. I appreciate the opportunity to appear before your Committee today to address the issue of "Northeast Corridor High-Speed Rail".

As I have testified before, TCU and rail labor have long supported high-speed rail in the Northeast Corridor throughout the United States. We supported the passage of the Passenger Rail and Investment and Improvement Act of 2008 and the American Recovery and Reinvestment Act, and we strongly advocated provisions in the bill to provide badly needed investment in our transportation infrastructure. This historic investment was a good first step in helping to reverse years of neglect and under investment in our transportation infrastructure. We applaud those who are responsible for this unprecedented commitment to high-speed rail in those two bills. However, it must be recognized that a viable intercity passenger rail system that includes high-speed rail can only be achieved through annual appropriations by Congress.

Amtrak is by law America's national rail carrier and the only current provider of high-speed rail, through its Acela Express service. Amtrak and its dedicated workforce will celebrate 40 years of service in May after being established by Congress to provide a national rail passenger service to the citizens of the United States. At the time Congress chartered Amtrak, the Northeast Corridor was in a bad state of repair and the equipment was old and dilapidated. Over the years Amtrak has partnered with the Northeastern states on numerous rail development and improvement initiatives to create one of the best transportation experiences in the United States.

Ten years ago last December, Amtrak launched Acela Express—the nation's first and most advanced high-speed rail service. After working out the kinks and tweaking the system, Acela Express has become a popular alternative to regional flights and automobiles traveling the busy Northeast Corridor.

Amtrak stands apart as a Carrier because it has an established national network which includes an extensive reservation system, existing rolling stock, statutory relationships with the freight railroads, as well as physical infrastructure that could be leveraged to support future improvements and growth to its high-speed rail service.

Most importantly, Amtrak has a dedicated and experienced workforce that will be critical in rolling out and operating future high-speed passenger rail service. Amtrak already has experienced ticket agents, baggage handlers, carmen, on-board service workers, supervisors, machinists, electricians, train dispatchers, signalmen, maintenance of way workers, sheet-metal workers, firemen and oilers, and engineers and conductors, all of whom are vital to running a high-speed rail service. Amtrak, with its skilled and unionized shopcraft employees, should be the first choice to operate and maintain all new high speed rail service and equipment.

But there are those in Congress who oppose funding for Amtrak and then complain that Amtrak is not providing good service and should be discontinued. In fact, just last week, the Republican Study Committee unveiled a proposal to eliminate all funding for Amtrak and \$2.5 billion for intercity and high-speed rail grants. If our country is committed to providing a **world-class high-speed** rail system in the Northeast Corridor and elsewhere, then it needs to provide Amtrak and high-speed rail a dedicated long-term, guaranteed funding source.

The government should expand on Amtrak's success, and embrace its vision for a more ambitious high-speed train that would travel up the Northeast Corridor at speeds of up to 220 miles per hour, significantly cutting the trip times from Washington to Boston. Amtrak's plan, which was unveiled this past fall, would mark a major step forward in building the Northeast Corridor for the future. However, this plan would take a major commitment by the United States Government over the next 25 years to build the system, including new track, tunnels, bridges and stations. Such a new high-speed rail system would create thousands of new jobs.

These jobs, under the rail laws of the United States, will be good paying jobs with benefits. In other words, the kind of middle class jobs the country needs. There will be more than enough people seeking these jobs, and most of these people will be highly qualified and experienced individuals who will meet the challenge of building and operating a high-speed rail system in our country.

Aside from the jobs this service will create it will also be a much needed travel alternative for the traveling public. New high-speed trains would divert riders from highways and air travel, reducing both congestion and our dependence on foreign oil.

Congress should reject any attempts to privatize the Northeast Corridor. We have always recognized that the private sector does play an important role in both the financing and operation of our transportation system. Private sector airlines, bus companies and highway construction firms, to name a few, provide vital services and provide hundreds of thousands of good-paying, high-quality union jobs.

But we know from experience that passenger rail is better left to the public sector. This is because of the unique safety and security concerns as well as the capital-intensive nature of

building and maintaining the infrastructure and the equipment needed to operate high-speed passenger rail service. We have always maintained, and history bears this out, that intercity passenger rail belongs in the public sector.

To achieve quality high-speed passenger rail significant ongoing investment must be made in rolling stock, signaling equipment, stations, tracks and employee training. These comprehensive and complex investments require entities that are either operated by government or subsidized and regulated.

Amtrak was created out of the 1970 bankruptcy of the Penn Central Railroad – at that time the largest corporate failure in US history. Congress established two separate corporations out of the Penn Central collapse – Conrail to take over freight service and Amtrak to provide intercity national passenger rail service in acknowledgement that railroads all across the United States were hemorrhaging money on passenger rail. Amtrak was a great idea then and continues to be today.

Last year we witnessed the problems and delays that a large private operator like Keolis Rail Services America had in assembling an experienced and trained workforce necessary to safely operate a railroad such as Virginia Rail Express (VRE). Additionally, as reported in the Washington Post, we watched VRE's on-time performance plummet in July 2010, when trains on the Manassas and Fredericksburg lines were on schedule only 63 percent of the time after VRE took over from Amtrak. Congress should do everything possible to avoid another such calamity on the busy Northeast Corridor.

We are specifically opposed to any legislation that would require the Department of Transportation to issue a Request for Proposals (RFP) for high-speed rail routes between Washington, D.C., New York City and Boston. Amtrak already operates several routes on this corridor, including its highly successful Acela Express service. While this service can and should be expanded, we do not understand how the public will benefit by allowing a private operator to take over one of the most successful routes in Amtrak's system.

It is unfortunate Amtrak could not be part of this hearing today to brief the Committee on its plan for the future of the Northeast Corridor and their NextGen High-Speed Rail service. We know from Amtrak's studies that the principal markets for high speed rail are those emerging "mega-regions" which face growing capacity, environmental, and energy challenges. Among them are California, Texas, Florida, and the Midwest, all of which will grow in the coming years. America's population is expected to grow by about 49% between 2000 and 2050 and the recent census figures show that we added nearly 30 million people over this past decade alone. This growth will be heavily concentrated in urban centers, and this pattern of burgeoning urbanization is going to create a demand for transportation capacity in all of these regions. Half a century ago, in anticipation of the population growth of the last fifty years, we invested in the Interstate Highway system and in airports; now those systems are at capacity, and it's time for us to begin the next round of transportation capacity investment for the century ahead.

Today, the Northeast mega-region is the “land of opportunity” for investment in high speed rail for a number of reasons. Congestion in the region’s highways and airports has already reached epic levels, and a couple of statistics will illustrate the scale of the problem:

- Congestion at LaGuardia and Newark Liberty alone cost the regional economy about \$2.6 billion in FY 2008 (Partnership for New York).
- If congestion at these two airports is not addressed, the cost to the regional economy for the 2008-2025 period alone will be about \$79 billion.
- The annual cost of highway congestion in the 13 largest urban areas of the Northeast is more than \$18 billion (TTI).
- The Federal Highway Administration reported that the Northeastern states (including Delaware, Maryland and the District of Columbia) spent a total of more \$41 billion on highways in 2007 – about twenty percent of the total national investment in highways for that year.

Between 1990 and 2007, the average commuter in the five major metro areas on the NEC (Washington, New York, Boston, Philadelphia and Baltimore) experienced a 60% rise in traffic delays, while the total hours of congestion increased by 24%.

Given the need for transportation alternatives, the real question is not ‘can we afford to invest in high speed rail in the Northeast Corridor’ – but rather, “can we afford not to?”

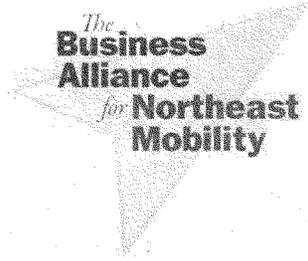
First of all, Amtrak does a much better job of recovering its costs than either of the principal competing transportation modes. From ticket revenues alone, Amtrak recovered 76% of its FY 2010 operating costs; when you include the revenues derived from food and beverage sales, real estate rental, commuter rail operations, and other sources, Amtrak recovered 84% of its total operating costs. Acela service did even better; it covered all of its operating costs and in addition, it generated revenues that were equal to about 41% of the total cost of operating the service. By contrast, air travelers paid about 57% of the FAA’s operating costs in 2010, and the highway system generated less than 60% of its total cost—the remainder was assumed by state and federal taxpayers.

Cost recovery is only part of the story. Amtrak’s NextGen High Speed Rail vision would, if implemented, generate a whole range of additional benefits, including travel time and safety cost savings, energy savings, productivity improvements, and congestion mitigation on the highway and airport systems. Once these are factored in, the net benefit is more than double the projected cost—and there’s still room for a century of growth, because the 2040 service level is only a quarter of the system’s designed capacity. As noted, while public investment will be a vital component of the plan, the cash flows anticipated will be sufficient to service some of Amtrak’s debt, allowing the company to explore various debt financing options, such as Railroad Rehabilitation and Improvement Financing or other financial instruments. The projected cash flow estimates are based on conservative ridership estimates, and Amtrak can possibly leverage private sector funding opportunities, perhaps through some form of a public-private partnership, to fund some construction and development costs.

The Northeast is a land of real opportunity for passenger rail service of every kind. It includes some of the most productive and densely populated cities in the U.S., with a diverse range of high-tech, high-growth industries and businesses—and the best projections suggest that regional population and economic growth will continue.

I believe that Amtrak has the solution to this problem with its NextGen high-speed rail system. We can bring the nation the transportation capacity of a six lane highway on a two track right of way, and we can improve on what Amtrak already offers—trip-time competitive transportation between the largest cities in the Northeast.

Today, Amtrak is carrying more people between New York and Washington than all of the airlines put together. The people who built this railroad planned for a century of growth, and the railroad delivered on their vision. But that century is up, and the system is operating at the outer limits of its capacity. The time to plan for the coming decades is now upon us, and I would urge the Chairman and the Committee to consider Amtrak's proposal—for it represents a real opportunity to create a valuable legacy for the generations to come, and a priceless asset for America.



**TESTIMONY OF**

**PETRA TODOROVICH  
DIRECTOR, AMERICA 2050  
REGIONAL PLAN ASSOCIATION**

ON BEHALF OF

**THE BUSINESS ALLIANCE FOR NORTHEAST MOBILITY**

REGARDING

**THE FUTURE OF HIGH-SPEED RAIL IN THE NORTHEAST CORRIDOR**

BEFORE THE

**COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
UNITED STATES HOUSE OF REPRESENTATIVES**

January 27, 2011  
Field Hearing on

*HIGH-SPEED RAIL IN THE NORTHEAST CORRIDOR*

Chairman Mica and Members of the Committee,

Thank you for the opportunity to appear before you today to discuss the future of high-speed rail in the Northeast Corridor. I am speaking on behalf of the Business Alliance for Northeast Mobility, a coalition of over 30 leading business and civic groups from Boston to Washington, DC, which came together in 2006 to support federal appropriations for making improvements to Amtrak's Northeast Corridor because of its indispensable role in the Northeast Megaregion's economy. I am here to inform the Committee of the Business Alliance's strong support for bringing the Northeast Corridor to a state of good repair and exploring dedicated high-speed rail service in the corridor in order to boost economic growth in the region.

The Northeast Corridor moves approximately three-quarters of a million people per day to their jobs or among the major downtown business hubs of the Northeast Megaregion. These movements are critical to the Northeast's \$2.6 trillion economy, which accounts for roughly one-fifth of the U.S. GDP. Imagine if 750,000 additional daily passengers were suddenly added to Interstate-95 and the Northeast's major airports (already the most congested in the nation). Our transportation networks would come to a standstill, as they regularly do already, because of their inadequate capacity and failure to meet existing demand.

In 2008, the Business Alliance strongly supported the passage of PRIIA, the Passenger Rail Investment Improvement Act, which provided a dependable rail authorization for Amtrak and created the High-Speed Intercity Passenger Rail Program, through which high-speed rail funding was appropriated in the stimulus bill and the Fiscal Year 2010 budget.

Unfortunately, we have only begun to chip away at the \$8.7 billion backlog in deferred maintenance that has accumulated on the Corridor, due to inadequate federal funding. As a coalition, our top priority has been to secure funding to bring the Corridor to a state of good repair, which we see as a federal responsibility, stemming from the federal government's creation of Amtrak and the direct impact of the Northeast Corridor on the economy of twelve states and the nation's global economic competitiveness.

While the immediate and urgent challenge is to maintain the Corridor's existing rail infrastructure, the Alliance is also looking ahead to the improvements 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 Northeast Corridor to significantly reduce trip times and substantially increase capacity, convenience and reliability, while dramatically enhancing the global competitiveness of the Northeast.

The recent Amtrak and Penn Design Visions for dedicated high-speed rail in the Northeast Corridor have shown the feasibility of building world class high-speed rail here, slashing trip times to less than two hours from New York to Boston and New York to Washington, while providing up to 12 trains per hour. The costs of these improvements are estimated at \$5 billion annually or approximately \$117 billion over the next 30 years.

Upon completion, the Amtrak plan estimates a \$900 million annual operating surplus with revenues from fares, food, and other services outweighing total operation and maintenance costs. It also envisions an interoperable system in which new high-speed lines interconnect at key points with existing Northeast Corridor operations facilitating a comprehensive service plan. Such a plan will enable all communities in the megaregion to have access to the new service and benefit from this public/private investment.

The Northeast Corridor has the population density, concentrations of employment, connections to rail transit networks, and proven demand between city pairs to justify this investment.

For example, in the five largest metropolitan regions along the Northeast Corridor alone, almost 19 million people *work* within 25 miles of a major train station. More than 34 million people in these five regions *live* within 25 miles of a major train station. One-third of the inhabitants of major metropolitan areas in the Northeast are within walking distance of a rail transit station with connecting service to intercity rail stations on the Northeast Corridor. These figures of population and employment density around rail in the Northeast dwarf those of every other megaregion in the nation. Further, as these high-speed lines are built, it will reinforce private sector investment and development in these existing employment nodes, insuring that population and job growth can occur in a way that will reduce our dependency on foreign oil.

But it is critical that we get started in building these plans, while we still have the momentum of a new national commitment to high-speed rail in America. Unfortunately, the mainline Northeast Corridor was largely excluded from major capitol grants awarded in the first two rounds of high-speed rail grants in 2010 because we lacked an up-to-date Environmental Impact Statement for the corridor. A year later, this EIS has not begun.

In December, the Business Alliance sent a letter to Transportation Secretary Ray LaHood, asking for his leadership to expedite the corridor-wide EIS process and we met recently with his staff to discuss the details. We are anxiously awaiting the start of the EIS process, which should consider all of the major proposals for meeting the capacity and travel needs on the Corridor for future generations – including the Northeast Corridor Master Plan completed through the cooperation of twelve states and the District of Columbia in 2010, Amtrak's Next Generation Vision, and the PennDesign plan.

Once scoped, we ask for the help of the Committee in looking into ways that the Northeast Corridor EIS process can be tiered and shortened so we do not waste another two or more years waiting for its completion to start construction.

Finally, we do believe the private sector has an important role to play beyond the traditional engineering and construction contracts placed by public agencies in delivering large capital projects such as East Side Access bringing Long Island Rail Road commuter service to this location where we meet today, and we would like to meet with you, Mr. Chair, and the Committee members, to discuss specific proposals for public private partnerships in the Northeast Corridor.

However, the necessary precursor to private investment and implementation is agreement on the vision. And for this, we ask you for your leadership. We ask for your support of a bold vision for the Northeast Corridor. And we ask for you to work with the Northeast states and Amtrak and the business community to agree on a practical strategy for accommodating the 21st century transportation needs of the Northeast and national economy.

**LIST OF BUSINESS ALLIANCE FOR NORTHEAST MOBILITY MEMBERS**

1000 Friends of Connecticut  
A Better City  
AECOM  
American Institute of Architects, New York Chapter  
The Boston Foundation  
The Business Council of Fairfield County  
The Business Council of New York State  
The BWI Business Partnership, Inc.  
Capitol Region Council of Governments  
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Central Philadelphia Development Corporation  
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Chesapeake Crescent Initiative  
Connecticut Economic Resources Center (CERC)  
Connecticut Technology Council  
Delaware State Chamber of Commerce  
General Contractors Association of New York  
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Metro Hartford Alliance  
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Philadelphia Convention and Visitors Bureau  
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Regional Plan Association  
Select Greater Philadelphia  
Stamford Urban Redevelopment Commission  
Staten Island Chamber of Commerce  
TranSystems  
Washington, D.C. Convention & Tourism Corporation

Transit/Rail  
 Global  
 Special Report

## High Speed Rail Projects: Large, Varied and Complex

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**Related Research**

- *Rating Criteria for Infrastructure and Project Finance* (September 2009)
- *Large Projects, Giant Risks? Lessons Learned - Suez Canal to Boston's Big Dig* (May 2009)
- *Rating Criteria for Availability-Based Infrastructure Projects* (March 2010)
- *Global Infrastructure & Project Finance Outlook 2010* (March 2010)

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**Summary**

Many major rail projects have been launched or announced on various continents over the years. Although rail projects are not new in the history of project finance, this sector is experiencing a worldwide resurgence with the development of high speed rail (HSR) and airport express links. Fitch Ratings expects the strong development of HSR links to continue where it began (mainly in Asia and western Europe), and to expand into new countries and continents. Even the US, with its car-centric culture, is seeking to significantly expand its investment in rail due to its attractiveness to policy-makers over other transport modes environmentally, economically and politically.

Various governments and rail infrastructure managers (RIM) have procured or plan to procure projects through public-private partnerships (PPPs) under a variety of contractual schemes, including traditional concessions or private finance initiative (PFI)-type contracts.

This report provides an overview of the rail sector and considers the rationale for private sector involvement. Supported by real life examples, it describes the key risks that Fitch sees with rail infrastructure projects.

While the focus of this report is primarily on HSR, many of the considerations and risks also apply to traditional passenger and commuter as well as freight rail. The scope of the report is limited to the provision of rail infrastructure, which includes the substructure, the superstructure, the stations, signalling and communications. Operation of rail services and the provision and financing of rolling stock are only considered in brief.

The scope of rail projects can vary considerably from simple delivery of a part of the infrastructure (eg the tracks), to the delivery of the full infrastructure, including all civil works and structures, and train operating services. The highly capital intensive nature of rail infrastructure and the characteristics of the industry has meant that while governments have sought to procure rail projects in partnership with private companies, they continue to play a significant role. The failure of a large number of projects procured in this manner has resulted in perceptions regarding the incompatibility of PPP procurement methods with rail projects, which may not necessarily hold true. Fitch believes there are three key areas of risks to which rail infrastructure projects are particularly exposed:

**1. Politics, Policy, Public Framework:**

Large rail projects imply a high degree of (multi-faceted) public sector involvement. The lengthy decision-making processes increase risk of deviations in the scope of the project. Governments with efficient planning and authorisation processes would be viewed as positive. Reliance on the public sector to execute or deliver their commitments (eg smooth integration of the project within the wider network and access to stations) is also considered important.

Rail projects are often high profile. This exposes them to "political entrepreneur syndrome" where the public authorities overestimate the benefits of the project to get it approved for the purpose of political gain. Nevertheless, gaining public acceptance will be key to the success of the project.

Governments involved in incumbent train operating companies (TOCs) may also distort the way negotiations would be conducted with project companies in charge of the infrastructure.

The transparent allocation of functions and roles and clear and enforceable legislation in pricing policies (eg track access charges) would be a credit positive. In contrast, a tradition of state intervention at the cost of rail sector companies would be viewed as a credit negative. Projects implemented in emerging countries with inexperienced administrations may be subject to rating caps.

### 2. Complexity:

Rail projects tend to involve a higher degree of complexity than other transport infrastructure. They feature long and complex gestation and construction periods (between 10 and 15 years), which expose them to deviations in scope as well as completion risk and, consequently, financial risk.

The conditioning phase (from land acquisition to contract design) is particularly critical. Route design will drive land acquisition costs and expenditure for mitigation of externalities (expropriation, noise protection etc.), which can make up a large share of total costs and can vary significantly.

Rail projects are also significantly more capital and technology intensive than projects in other transport sectors. HSR links involve proven technologies, but with greater exposure to systems integration and civil structures (tunnels and viaducts).

Unlike toll roads and airports, rail infrastructure rarely has standalone facilities (railroads with no physical connection to other rail networks) or fully integrated projects (bundling both infrastructure and train operations). They are exposed to a wide range of technical and functional interface risk, including: rolling stock, traffic regulation systems, stations and other train networks. These interfaces create risks and need to be carefully assessed and managed.

Fitch would expect detailed reports from independent technical advisors (TA) to be provided for such projects.

### 3. Demand:

Revenue structures are varied and range from availability-based projects to pure greenfield developments with full traffic risk. The degree of exposure to demand risk for rail is also more dispersed compared to airports (usually mostly exposed to passenger throughput), and toll roads (availability-based, shadow toll or real toll). As such the relative importance of demand risk can vary considerably and have a major impact on the credit.

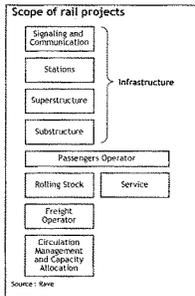
The project scope can also affect demand risk. Integrated projects have greater control on commercial strategy and access to the end user and are therefore less likely to be exposed to demand risk than their standalone counterparts.

Only a few rail projects can support full traffic risk. It is Fitch's opinion that rail passenger forecasts can be more unreliable than those provided in other transportation sub-sectors, including toll roads. Historically, the agency has observed that the assessment of rail demand has displayed a significant optimism bias, particularly for greenfield projects.

Fitch considers that the attractiveness of rail over other transport modes both to policy-makers and the public, point to favourable long-term prospects for HSR links (collectively) in terms of traffic.

**In this Section**

- Scope of rail projects
- Capital intensity and cost structure
- Industry characteristics weigh on risk profile



**Overview of Rail Projects**

**Scope of Rail Projects**

The scope of projects can vary considerably and range from a simple delivery of a part of the infrastructure (eg the rail tracks), to the delivery of all-in service (full infrastructure, including civil works and structures and train operating services). This is in sharp contrast to toll roads or airports projects, where the scope of the service is generally standard (construction or refurbishment of a road or an airport with comprehensively defined service requirements).

**Scope of Rail Projects**

Project focus	Examples
Rolling stock only	Not covered by this research report
Infrastructure only	Perpignan-Figueras (FR-SP), Tours-Bordeaux <sup>1</sup> (FR)
<ul style="list-style-type: none"> <li>• Substructure (civil engineering, structures)</li> <li>• Superstructure (tracks, equipment, power supply, signalling)</li> </ul>	HSL Zuid (NL), Lisbon-Oporto (PT) <sup>2</sup>
<ul style="list-style-type: none"> <li>• Communication</li> <li>• Stations</li> </ul>	GSM-R (FR)
Full service projects	Eurotunnel (FR-UK), Gautrain (RSA), Arlanda (SV), Taiwan High Speed Rail (TW)

Source: Fitch

**Integrated or Segregated Network Set-ups**

Rail projects are also different to projects in other transportation sectors in the degree of segregation of the facility from the existing network. A piece of rail infrastructure can be fully integrated with the wider network (eg high speed tracks in France or Germany) or totally segregated (eg high speed tracks in Japan or Spain, as well as some airport to city centre links).

**Rolling Stock and Train Operation Set-up**

Although this report does not address these two aspects in depth, it is noteworthy that some infrastructure projects can and do include the service and provision of rolling stock (Eurotunnel, Taiwan HSR, Arlanda Express, Gautrain, etc).

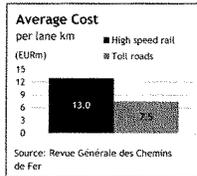
**Capital Intensity and Cost Structure**

**High Speed Rail are often XXL Projects**

Rail projects are usually more capital intensive than most other transport segments – both in total cost and cost per kilometre.

Total construction costs usually exceed EUR1bn or USD1.5bn, driven primarily by the long distance nature of rail infrastructure. As such, the cost of assets contributes to a much larger share of the overall cost of the service. Naturally, financing such large amounts of capital can prove difficult, particularly when the financial markets, arguably the natural home for long-dated and stable infrastructure assets, are less keen to accept or accommodate construction risk. Bank financing can be more difficult as even large syndicates may have limited underwriting capacity collectively.

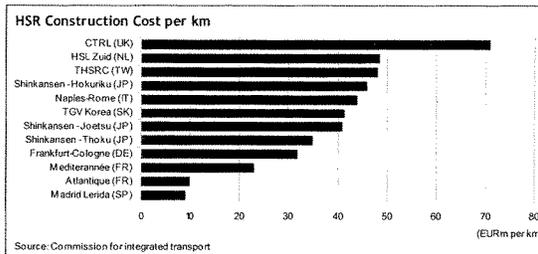
The cost structure (or cost per kilometre) for HSR can also vary significantly compared to other HSR projects and projects in other transport sectors. The cost per kilometre for the UK Channel Tunnel Rail Link (CTRL, between London and the Channel Tunnel), for example, was 7.6 times as much per kilometre as the Spanish high speed line between Madrid and Lérida, which opened at almost exactly the same time as the first phase of CTRL. For CTRL, the cost of land and complex



<sup>1</sup> Tours-Bordeaux, also called Sud Europe Atlantique (SEA) is a major project, > EUR5bn initially

<sup>2</sup> RAVE, the Portuguese procurement entity, has in fact included the substructure and superstructure, but excluded the signalling and communication, which will be another PPP

project management and structures contributed the most to the higher cost compared to its peer. Professional staff costs, associated with project management, planning, design and legal issues, constituted more than 25% of CTRL's total costs, compared to just 2% to 3% for Madrid-Lerida. Compared to road projects, historical evidence suggests that the average cost per kilometre for greenfield high speed lines (HSL) is approximately twice as much.



Factors influencing the cost of rail projects primarily include the following.

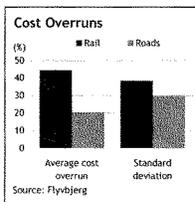
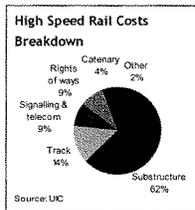
- Land acquisition.
- Structures: Evidence suggests that construction of routes through tunnels or over viaducts is four to six times more expensive per kilometre than construction over flat land. Tunnels in particular are difficult to cost, as they can be subject to geological issues during boring works (as experienced by Eurotunnel and Perpignan-Figueras).
- Stations: Evidence suggests that these are expected to cost between 6% and 8% the total cost of the line.
- Interoperability: The line may be required to accommodate access to a variety of rolling stock types.
- Passenger/Freight: The flexibility to run heavy freight trains on high speed lines considerably increases the cost of construction.

**Greater Exposure to Cost Overruns and Delays**

The high capital intensity and variability in cost structure of large and complex rail projects exposes them more to cost overruns and subsequent delays compared to less complex rail projects and projects in other transport sectors, all things being equal.

A study carried out by Bent Flyvbjerg illustrated how rail projects tend to incur higher cost overruns on average than road projects. A European Investment Bank ex-post appraisal shows that much of the overrun is concentrated in a smaller number of projects that are larger and more expensive, with an average cost overrun of 30%. This is caused by the tendency for stakeholders to underestimate the budget at the planning stage in order to obtain public approval. By the time the true costs are realised, the all important decisions have been made and the project has reached the point-of-no-return. In recent cases, however, schemes financed with project finance techniques (eg HSL Zuid, Perpignan-Figueras and Arlanda Express), showed much better budget control.

Many events and factors can cause delays for complex and large projects. Fitch has observed that this is particularly true for rail projects, despite most of them being



traditionally procured. The EIB reported that out of its 16 projects, only a quarter had posted a delay of less than one year. As a matter of fact, some recent rail projects procured through PPP schemes have been delivered without delay (eg Perpignan-Figueras and HSL Zuid). It is very important that the project contracts benefit from a clear definition of what constitutes a delay and assign clear responsibilities to contracted parties in the event of such delays.

Fitch would expect independent TA reports to estimate whether the construction budget is realistic and the extent of prudence required (depending on the thoroughness and reliability of the TA). The agency will also typically conduct its own benchmarking analysis with other rail projects, including projects not implemented with project finance techniques.

It is important to note that the assessment of cost overruns often also includes costs that would not fall on the project company. Moreover, data on cost overruns is typically relative to the initial estimates and not the cost at financial close.

#### Industry Characteristics Weigh on Risk Profile

##### *Construction Costs*

A specific feature of the rail sector is that, given the volume of works involved, only a few global players are able to compete for the large engineering and procurement contract (EPC) tenders. This reduced competitive environment exposes rail projects to, among others, higher costs, weaker contractual protections and greater difficulty in finding a replacement counterparty for a failing supplier at an acceptable price. Major construction companies themselves usually subcontract some of the works to cut costs or for resource reasons, thus further exposing the projects to the credit risk of the subcontractors – especially if such subcontracts are not back-to-back.

##### *Size and Governance*

Large and complex rail projects typically involve larger consortia, making effective governance and ensuring the alignment of members' interests more difficult. An example of this is Eurotunnel, where companies common to both the project's sponsors and contractors exercised their power at the cost of retail investors.

#### Rail Projects and Project Finance: Dangerous Liaisons?

##### The Rationale for Private Involvement in Rail Projects

Although rail projects are not new in the history of project finance (most rail networks in developed countries were procured and financed as concessions in the 19th century), this sector is experiencing a worldwide resurgence with the development of HSR and airport express links. The rationale for private sector involvement in rail projects is primarily the same as for any other project – to promote the use of private sector funding and expertise and improve allocation of risk for the cost-effective and efficient delivery of a project.

Globally, particularly over the past century, rail projects have rarely been commercially self-supporting. This is primarily a result of several factors, including the significant upfront investment, the difficulty in developing stable, predictable and sizable patronage and the economic challenges in passing the true cost of usage to the direct user. Over the years, governments have pursued varied strategies to procure quality rail services at the lowest cost and have developed public policies that seek to make public transportation accessible and affordable. This goal has at best only been partially fulfilled under both public and public-private approaches.

PPP have arguably been more effective in expediting the initial delivery of service. Although the delivery has not necessarily been on time or on budget, the delays and costs have usually been lower compared to pure public sector procurement. Moreover, PPP has also been effective in insulating the public sector from these

#### **In this Section**

- The rationale for private involvement in rail projects
- Very few rail projects have proven successful

risks<sup>3</sup>. On the other hand, targets set at inception have repeatedly been ambitious and, in some cases, unachievable. Recurring themes include unachievable cost savings and efficiencies and unrealistic revenue (fare and availability) arrangements.

The strategy in Europe of segmenting the components of rail service into basic infrastructure on the one hand and rolling stock and rail operations on the other (except in the UK, where the latter two functions are also separated), and devising tailored compensation schemes, has had more success as it has allowed the scope of the concession and management of costs to be more narrowly defined. However, even these schemes have proven less than ideal as the special-purpose companies associated with these concessions have been left exposed to inadequate revenues and higher-than-expected cost profiles. Fitch expects that these strategies will be further developed in the coming years, with potentially sounder business and financial arrangements, better defined risk allocation and increased governmental sharing of risks that cannot be completely controlled by the private sector.

#### Very Few Rail PPPs Have Proven Successful

Over the years, various governments have pursued both PPP and traditional public methods of rail service procurement. Neither approach has been wholly successful in enabling the governments to meet their initial objectives. This has resulted in significant commentary about PPP schemes being an incompatible method for procuring rail projects. The reasons often stated do not necessarily hold true.

- Firstly, existing (often state-owned) RIMs perform fairly satisfactorily. This is debatable. Even in countries where this may hold true, performing RIMs may still benefit from implementing PPP schemes to better share risks, improve value for money or implement innovative solutions.
- Secondly, market players are by nature monopolistic and therefore make private sector participation more difficult. This argument too is debatable since monopolistic sectors can and do utilise PPP structures – as demonstrated in the toll road or airport sectors – where the concessionaire takes on the role of service provider but within a concession contract that is governed by a legislatively approved framework.
- Thirdly, rail is often loss-making and so does not incentivise a private partner to invest in rail infrastructure facilities. On the contrary, loss-making sectors (ie in need of public subsidies) can smoothly accommodate PPP arrangements, as evidenced by social infrastructure projects such as schools and hospitals, which are often procured on fully availability based payments received from public authorities that are not necessarily tied to economic performance.
- Fourthly, unlike roads, airports or ports, rail is an integrated transport mode, with vertically integrated companies running both the infrastructure and the train operations benefiting from a strong economic advantage. Although this has been the dominant model in many countries for decades indeed, there is a growing appeal for vertical separation. RIMs (be they state-owned or private concessionaires) can be separated from train operating companies (TOCs), as witnessed in most European countries (UK, Sweden, Germany, France, etc.) under pressure from the European Commission. This call for vertical separation is justified by a more efficient and competitive use of the infrastructure element if several operators can use it (open access), with the only limitations to this being the capacity and safety constraints.
- Fifthly, the sheer scale and complexity of rail projects inevitably results in completion delays, thus discouraging private participation. Projects that benefit from a clear definition of what constitutes a delay and that have contractual

<sup>3</sup> There are other and more valid arguments questioning the use of PPP for large rail projects. Fitch has addressed some of these arguments for six major infrastructure projects in its special report, "Large Projects, Giant Risks?" published in May 2009

protections in place with clear assignment of responsibilities to contracted parties in the event of such delays are likely to significantly reduce their exposure to completion risk. Recent examples of rail PPP projects that have been delivered without delay include Perpignan-Figueras and HSL Zuid.

- Finally, large and complex rail projects are more capital intensive than other types of transportation projects and financing such large amounts of capital can prove difficult. Some countries have responded to this challenge by dissecting the project into several smaller segments (eg the Portuguese High Speed Programme), with greater emphasis on managing the resulting increase in interface risks.

None of the above arguments actually prevent rail projects from being compatible with PPPs. Nevertheless, a number of PPP procured rail projects in the past have either failed or experienced significant problems. The table below highlights the key problems faced by two landmark projects (Eurotunnel and Taiwan HSR) and other less ambitious projects (HSL Zuid, HS1 and Perpignan-Figueras).

#### Landmark HSR projects

Project	Difficulties encountered
Eurotunnel	Delays, cost overruns, overestimation of traffic and inadequate risk sharing resulted in the project operating on the verge of bankruptcy for years, before defaulting on its debt and undergoing restructuring in 2007
Taiwan HSR	Operations commenced after a year's delay. Reported traffic in the first year of operations was 32% below projections and traffic to-date remains significantly below initial forecasts
HSL Zuid	Operation was delayed due to an upgrade of the European Train Control System (ETCS) required by the government
High Speed 1 (CTRL)	The line between London and the Channel Tunnel was also initially procured as a PPP and failed on the back of over-estimated demand, before finally being transformed into a fully government-guaranteed scheme. The UK government is currently planning to sell the line back to the private sector under new ownership
Perpignan-Figueras	The line between France and Spain was delivered on time but Spanish authorities have yet to deliver the connection with the Spanish network

Source: Fitch

Most, if not all, of the problems encountered by rail projects in the past can be categorised into three main risk areas, namely (i) politics, policy and public framework, (ii) complexity and (iii) demand. These are addressed in more detail in the following sections. Whilst the risks are not materially different to what Fitch might observe in other transport infrastructure segments, the key difference is likely to be the relative importance of these risk factors.

**In this Section**

- Lengthy decision processes increase risk of scope deviations
- Failure to execute/interference by public sector
- Highly visible projects are exposed to "political entrepreneur syndrome"
- Public and market acceptance
- Government involvement in incumbent train operating companies
- Quality of legal and institutional framework is critical

**Scope Deviation**

According to an EIB ex-post appraisal, 50% (eight out of 16) of rail projects had deviated in scope: The appraisal report notes that "Of the 16 in-depth review projects, eight were substantially in conformity with the original project scope and eight were not. Among other things, projects had to be modified on account of environmental objections and government intervention. Moreover, project designs were either incomplete or were adapted by promoters to better reflect technical requirements and safety concerns. These are of course all legitimate reasons for the modification of a project, but it is also an indication of weak project preparation on the part of the promoters concerned."

**Politics, Policy, Public Framework**

Public authorities are often heavily involved in rail economics, both at the decision-making and at financing stages. This increases the various facets of political risk from completion risk to mere counterparty risk in availability-based projects.

Rail projects also often involve strong capital support from public authorities by way of upfront grants (in money or in kind) or subordinated debt, since without this support the project's revenue base would be insufficient to achieve the expected risk-adjusted rate of return on capital. This may alleviate the gearing ratio, with grants sometimes being included in the equity of the project.

**Lengthy Decision Processes Increase Risk of Scope Deviations**

Project financiers know that infrastructure projects have to undergo a lengthy process of appraisal, approval and planning. The projects need to be appraised to assess the need and justification for public funding. The benefits to and the impact on the public also needs to be analysed. Technical and environmental studies need to be carried out as part of the planning exercise before approval is granted.

Planning of rail projects can typically span between six and 8 years, after which construction can last another six to eight years. Due to the long gestation process, the project financiers will need to be particularly aware of changes in scope (eg change of route, of technical features or responsibilities of project company) and the operational environment (political as well as economic). For instance, at the time of the feasibility studies for the Channel Tunnel (Eurotunnel) in the early 1980s, low-cost carriers were not a threat. More than 10 years later, when operation started in 1994, they had become an ominous reality.

**Failure to Execute/Interference by Public Sector**

The scale and complexity of rail projects also requires the need for significant upfront investment. This, together with the need for governments to consider policies that seek to make public transportation accessible and affordable, has generally resulted in a high degree of public sector involvement compared to other types of transportation projects.

Rail projects may also rely more on the public sector's ability to deliver their commitments than projects in other transport sectors. Of particular importance to rail projects is the smooth integration of the project within the wider network and access to stations (urban transport connections, road and parking facilities, etc).

**Perpignan-Figueras: Missing Connection to the Wider Network**

On Perpignan Figueras (mostly a 44km tunnel under the Pyrenees at the France-Spain border), the Spanish government failed in adding the extension between Barcelona and Figueras, resulting in the concession being left with no connection to the wider Spanish HSR network and hence access to its traffic. The Spanish authorities have consequently agreed to compensate the project company for the lost revenues. Strong commitment of the Spanish authorities to the success of the project was and remains a key driver in its credit quality.

Route design is a major challenge for all infrastructure projects. For HSR, it is particularly relevant because of the constraints in terms of gradient, curves and sensitivity to geological stability (see below *Technical Intensity*), which imply that HSR has less flexibility than road or conventional rail to accommodate for changes of route. Any such changes proposed by the authorities could have material consequences for the project in costs and delays.

Highly Visible Projects are Exposed to "Political Entrepreneur Syndrome"  
 Large infrastructure projects are often considered public goods<sup>4</sup>. The development of a rail line or network is likely to be viewed positively by the electorate as it is considered to promote economic development and mobility of the population concerned. As a result, politicians and policy-makers are incentivised to facilitate the delivery of the project, aligning its interests with those of the concessionaire and their lenders. Fitch sees this as a credit positive but is also wary of "political entrepreneur syndrome", where public sector officials have a tendency to overestimate the actual socio-economic benefits of the facility to get the project approved and take credit for the approval from the electorate. By the time the true costs are realised, the all important decisions have been made and the project has reached a point-of-no-return. Such infrastructure projects can, therefore, be a double-edged sword.

Fitch will consider whether there is a real political commitment backing the project, reaching a broad enough consensus so that the project maintains public support after a potential change in government. The essentiality of the project (which enhances the rationale for sustained political support) is also assessed through the socio-economic rate of return<sup>5</sup>.

#### Public and Market Acceptance

The economic benefits of rail infrastructure projects may not be enjoyed equally by the public. For example, local populations residing close to the tracks but further from the stations may benefit from limited upside (eg access to the network), whilst still being exposed to the downside (eg noise and environmental issues). Such imbalances may be difficult to mitigate.

Large infrastructure projects (particularly rail projects) (re)shape the territories they are serving or going through. For example, land and nearby areas on which the rail tracks and supporting infrastructure will be placed need to be acquired and cleared. Rail projects also often involve longstanding building sites (with interference of local traffic, noise issues, environmental threats, right of way challenges, etc).

Their considerable footprint on the environment and the economic fabric frequently expose rail infrastructure projects to public opposition (eg the Lyons-Turin route through the Italian alpine valley of Susa). Such opposition can have various implications (eg delay the formal authorisation process and complicate the land expropriation programme), which can result in increased costs and delay in the implementation of the project. Ensuring public acceptance before commissioning the private sector to undertake such highly visible and expensive infrastructure projects is therefore crucial, both from the authorities' and sponsors' perspective.

Large projects such as HSR must be popular and also gain support from the wider marketplace, sometimes including retail investors, to attract sources of funding beyond the usual circles of project finance investors.

#### Government Involvement in Incumbent Train Operating Companies

Many governments have a direct or indirect vested interest in incumbent train operating companies for historical reasons. This may distort the way negotiations would be conducted with project companies in charge of the infrastructure. Indeed, the government could be both principal (as non-independent regulator) and agent (as owner of a TOC) in the matrix of responsibilities for the railway system. There is

<sup>4</sup> Public goods are defined by the fact that their usage by an additional user does not reduce the benefit of existing users

<sup>5</sup> Socio-economic rate of return is the investment's rate of return, including the external effects of the projects (converted in monetary sums) such as safety (saved lives), environment (pollution), employment, etc

a risk that this apparent conflict could be detrimental to the infrastructure company when it comes to setting track access charges and/or allocating the costs of safety enhancements, for example.

Furthermore, trade unions, which have traditionally been strong in the rail sector due to their historical dominance by state-owned monopolies, can have a significant impact on the terms on which the private sector may be encouraged to participate.

**Quality of Legal and Institutional Framework is Critical**

The quality of the legal and institutional framework (eg legislation, dispute resolution process, etc) is pivotal to Fitch's credit analysis of all PPP projects. Rail projects are particularly exposed to this aspect, as the public sector retains a higher degree of involvement and control than in most other transport modes.

When assessing the legal risks in a rail project, Fitch would consider how the following functions in a rail system are allocated.

- Strategic: setting objectives of rail transport policies.
- Tactical: planning (setting quantity, quality, possibly fare levels, etc).
- Operational: construction risk, industrial risk (cost of production, etc).

Regulations in respect of pricing policies (eg track access charges) as well as health and safety are also seen as being important. Clear and enforceable legislation in this respect would be viewed as a credit positive. In contrast, ambiguous allocation of functions and roles and a history of state interventionism at the costs of rail sector companies (eg non-compensated public service obligations) would be viewed as a credit negative.

Fitch will consider the extent to which the legal and Institutional framework is supportive to the project company in achieving its objectives – see *"Rating Criteria for Infrastructure and Project Finance"*, published on 29 September 2009 and *"Rating Criteria for Availability-Based Infrastructure Projects"*, published on 29 March 2010.

**Complexity: Manageable but Riskier Than in Other Modes**

**Long and Complex Completion Phase**

Rail projects often involve long and complex gestation periods, usually spanning 15 years from the moment the public authorities submit the project to public debate. Concession or PPP tenders with project companies come at a later stage and completion of the project from this point typically takes a further six to eight years.

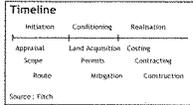
Planning and construction consists of several phases, including route design, land acquisition, civil engineering, rail equipment procurement, signalling and communication. Civil works often make up a very large proportion of the whole project's costs, depending on the route and the number of structures.

In large rail projects, three phases have to be discerned. Ideally sequential, in practice they often overlap.

1. **Initiation** (from conception to decision). This phase covers the socio-economic and operational appraisals, route planning and environmental and safety studies and can take several years. In most cases, the project company is usually not involved at this preliminary stage. Where a project company is involved, for instance if a concession contract has been signed before all key decisions have been made (eg Eurotunnel), Fitch would view this situation as highly risky as it would expose the project to radical changes in the scope of the project forward in future. Moreover, there is a risk that unforeseen events or issues at the start of the process materialise during the course of the project's development and are not encapsulated in the terms of the contract, potentially leading to

**In this Section**

- Long and complex completion phase
- Technical intensity: proven technologies, but complex integration
- Lifecycle costs: little statistical track record



substantial cost overruns or, in the worst case, abandonment. How such risks are managed, the experience of the public authorities and the project stakeholders, and the legislative framework will, in Fitch's view, be critical.

2. **Conditioning.** This phase is critical and often embeds a number of risks. It primarily consists of land acquisition, diversion of existing utilities, soil treatment, archaeology, permit procurement, damage compensation, adapting local authority zoning plans, risk assessment, call for tenders, contract design and the set-up of a public project management unit. The project company would typically start being involved at this stage and, depending on the individual case, would be more or less involved in managing the abovementioned items.

Land acquisition may be implemented by the procuring entity or by the project company. The latter may benefit from being in charge to have better control over the access to the sites required to conduct the construction works, but may be left exposed to associated disputes, cost overruns and delays.

The costs associated with this phase can be highly uncertain and make up a significant share of total construction costs (more than one third for HS1 in the UK). This is particularly true for projects that require access to urban areas where the cost of land, interface risks with other networks (roads, tunnels and utilities) and public opposition (and therefore delays) are likely to be higher.

Where new projects utilise the available capacity for approaches to city centres on the existing conventional network, construction costs can be significantly reduced because of the lesser need for tunnelling or acquisition of expensive urban land. In France, Germany and Italy, for example, it has been possible to use existing routes in this way to gain access to key termini. In Spain and Japan, on the other hand, the poor quality of the existing traditional rail networks and the use of a different gauge of tracks in particular, necessitated the construction of new routes into city centres, which increased the total cost of construction.

3. **Realisation.** This phase is by nature the responsibility of the project company. It covers, among others, cost estimation, contract management, project supervision, project control and cost control.

#### Technical Intensity: Proven Technologies, but Complex Integration

The use of untested technologies (signalling, traffic control, etc) is likely to be viewed as a credit negative by Fitch. However, projects that have been recently announced or implemented generally involve established technologies. Nevertheless, various aspects of rail infrastructure increase the technical intensity of constructing such projects. These include:

##### *More Structures Required; Exposure to Ground Conditions*

Compared to roads, railways require lower surface gradients due to their higher speed and wheel-track interface. The topography of the land on which the rail line will be built will therefore be important and also determine the need for additional structures, such as tunnels and viaducts. The greater the need for such additional structures, the greater the impact on the overall construction budget and the level of risks associated with the completion phase. The risks associated with the operational phase can also increase significantly as such additional structures need to be maintained to ensure the smooth running of the rail line.

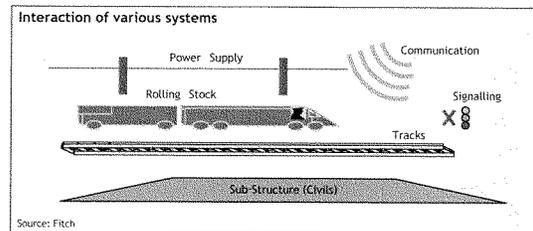
As with all construction projects demanding structures, railways can suffer from unforeseen ground conditions. This type of risk can be increased by the nature of railways as the weight and speed of the trains may exert additional pressure on the tracks and the sub-structure. The extent of the risk will depend on what tests have been carried out prior to the award of the contract and where the liability for the risks associated with unforeseen ground conditions lies once the contracts are let.

Geometry of the tracks is also particularly important for high speed railways. The tracks must be well aligned and stable to ensure normal operational conditions and the required safety level. While toll roads can absorb a deviation of the surface line in the magnitude of centimetre(s), HSR cannot tolerate more than a few millimetres.

The use of experienced contractors and comprehensive construction contracts can significantly mitigate the above risks and Fitch will give due consideration to such mitigating factors as part of its analysis.

#### *Interaction of a Variety of (High Tech) Systems*

The interaction of trains with other trains, junctions, stations, level crossings, switches and crossings means that the signalling systems need to be more complex, the operations and timetables more detailed. This can increase the risk of delays through conflicts and the maintenance and renewal requirements.



#### *Safety: Pass Through or Adjustments?*

Rail regulators or agencies place a great deal of emphasis on safety and these objectives are often met through technological improvements. Fitch considers it important for the project to be well protected against changes in safety requirements that would entail additional unexpected expenditure as well as potential disruptions. For example, HSL Zuid benefited from contractual government compensation mechanisms when its upgrade of the ETCS systems led to a material delay in the commencement of operations. Fitch will consider the contractual provisions in place to mitigate indirect costs due to changes in safety requirements or technological upgrades, and the potential implications of such costs on the rail operations (eg reliability, efficiency and staff costs).

#### *Major Interfaces: Technical and Functional*

Whilst new systems can be designed, tested and installed to very high standards, frequently problems occur when they interface with other systems. Interfaces can be necessary (eg connections with other parts of the rail system) but may have undesired effects (eg electric and electronic interference and interference with other transport mode networks). UK's HS1, which was built in a rather dense area and is connected to the wider rail network (regional trains can use the tracks alongside Eurostar), for example, features 13 interfaces with other networks on only 110km of track. Fitch will consider both the technical and functional interfaces when analysing rail projects.

#### *Technical Interfaces*

The physical interference with trains at track and catenary levels and the electromagnetic interference (EMI) exposes rail infrastructure to other risks.

Railways are easiest to maintain when assets are of a similar age or condition. Mixed ages can cause variation in asset condition (wear and tear), maintenance and renewal regimes and overall performance.

These risks are likely to be higher for rail projects with narrowly defined scopes or “open access” features, where different parts of the equipment (eg signalling and communications, rolling stock, etc) are designed or operated by different parties, exposing the infrastructure not only to the risks of incompatible technical design specifications but also to third-party performance (see functional interfaces).

HSR infrastructure that is fully integrated with the wider network (eg France or Germany) may benefit from lower construction costs (by using parts of the existing network) compared to their segregated counterparts (eg Japan or Spain) but are also generally more exposed to network, equipment or system interface risks with other parts of that network.

Fitch will consider how the project company is protected from these risks in the project’s contractual documentation.

*Functional Interfaces and Networks Effects*

Rail projects that are more broadly defined – ie there is no functional separation of infrastructure/train service (eg Eurotunnel, Taiwan HSR, Arlanda Express, Gautrain, etc) – are exposed to fewer functional interfaces. Functional separation (frequent in many countries and a legal requirement in the European Union) mechanically creates an interface between the RIM and the TOCs. In such cases, the strategic and tactical traffic management (allocation of paths, management of timetables, ad-hoc decisions in case of incidents) generally rests with a public authority. RIMs are much more constrained in their planning of capacity use. This operational rigidity is more comparable to airports than toll roads.

Railway operation is linear. Train routes are often quite long and the network is subject to a high degree of interdependence as trains cannot easily cross or overtake each other. Changes or disruptions to one part of the network can therefore affect other parts further up the line.

Unlike toll roads (which can have several access points) or hub airports (which are connected to a large number of origins and destinations), rail networks are not as granular. Upstream and downstream capacity is critical, making the facility highly dependent on the stretches to which it is connected.

Fitch would consider how such exposure to performance of other networks or the decisions of another manager is taken into account (eg presence of “landscape” clauses and compensations, or the strength of the relevant regulatory framework).

*Lifecycle Costs: Little Statistical Track Record*

The complexity and uniqueness of rail projects, combined with a lack of historical data given very few lines have been operating for longer than 25 to 30 years, makes it difficult to estimate the lifecycle costs with a comfortable degree of certainty.

Lifecycle costs are highly likely to be driven by the wear and tear caused by the interaction of interfaces (eg wheel/track, train/systems, infrastructure/operating service, etc). The risk of penalties, be that from loss of availability, possessions, or condition, is of key concern to the lenders – particularly since the maintenance methods are more complicated than other transport infrastructure. While toll roads are maintained by lane closures, safety-sensitive rail projects generally cannot divert traffic from one lane to another. Maintenance is usually carried out at night during closed traffic times.

Changes in the train timetables, volume or speed of traffic, or age or type of trains (passenger or freight), can also result in varying degrees of track and other structural (eg catenary) wear and tear. This can have a significant impact on the amount and frequency of the RIM’s maintenance and renewal costs.

Fitch will therefore pay attention to the rail project’s maintenance and renewal programme, particularly for brownfield projects, and consider whether any of the

**In this Section**

- Revenue structures are varied and key to demand risk
- Demand forecast: "Traffic/Tariff" combination hard to size
- Long-term trend seems favourable to high speed rail links

above risks that result in an increase to the timing and amount of lifecycle costs is appropriately mitigated (eg passed through, provisioned through reserves) or remunerated through the project's revenue structure.

**Demand: Too Much of a Risk?**
**Revenue Structures are Varied and Key to Demand Risk**

Pricing for the use of the infrastructure can range from a purely performance and availability-based payment mechanism, to one that is fully exposed to traffic. The latter pricing structure is clearly more exposed to demand risk and therefore commands greater sensitivity analysis of the project's revenues to this risk.

**Availability-Based Revenue Structures**

The RIM is remunerated solely on the basis for making the infrastructure available to the TOCs. Where the infrastructure is unavailable for reasons primarily attributable to the RIM, this would result in revenue abatement by the government or concession granting authority by way of payment deductions or penalties.

Such revenue structures are usually put in place when governments believe that project companies may not be best suited to absorb any traffic risk. The public authority typically retains all control over capacity allocation. HSL Zuid, the prospective Portuguese HSL and French BPL or CNM<sup>3</sup> are a few examples, which implement such revenue structures.

Although availability-based projects are not directly exposed to traffic risk and appear less risky, they may be exposed indirectly, as changes in traffic volumes could lead to higher wear and tear of the rail infrastructure and/or lower quality of service. Availability-based projects also remain exposed to a series of event risks (eg strikes, flooding, contamination, disruptions to power supply, soil settlement or movement beyond specified tolerances). Such indirect traffic and event risks may also trigger under-performance and in turn trigger the application of penalties. It is important that the project is well protected from such consequential risks.

A clear framework setting out the availability criteria, performance measures (speed, safety, comfort, response time in failure, etc), definitions of attributable and non-attributable events and their implications on the size of applicable penalties is viewed positively by Fitch.

**Demand-Based Revenue Structures**

There are two main families of demand-based revenue structures, depending on the scope of the project.

For integrated projects (where the project company combines infrastructure and train operation services), the source of revenue comes directly from travellers and is determined by passenger throughput and yield. The exposure and volatility of revenues to volume risk can be mitigated by various arrangements, including a volume and tariff banding mechanism and public subsidies to TOCs or users.

Integrated projects enable the project company to better control its revenues due to its direct commercial relationship with the end user. Fitch's financial analysis of the project in this case would factor in the dual characteristics of an infrastructure facility provider (high debt, high EBITDA generation capacity) and a service provider (full command of its commercial strategy and exposure to demand swings).

For "infrastructure only" projects, revenues are usually in the form of track access charges (TACs) paid by one or several TOCs. TACs can be calculated according to a wide range of schemes. The common methods include the following.

<sup>3</sup> BPL : Bretagne Pays de Loire (Le Mans to Rennes) CNM : Contournement Nimes Montpellier (bypass of Nimes and Montpellier urban areas)

1. **Booked capacity:** Similar to an offtake agreement, the TOC enters into a contract with the RIM to use future available capacity on the network. An example of such a TAC mechanism is the minimum usage charge, which Eurotunnel had contracted with the French and British rail authorities.

Fitch considers this method of determining TACs to bring a high degree of visibility to the RIM's business. Coupled with an agreement with a highly rated TOC and included as part of the security package, such a mechanism would be regarded as highly positive by Fitch.

2. **Actual throughput:** This can be measured in a number of ways, including:
  - o the number of trains – simple but may introduce volume bias as TOCs can introduce higher capacity (longer or duplex) trains;
  - o the weight and length of trains – better reflects the facility wear and tear;
  - o the train capacity (eg number of seats irrespective of the load factor) – neutralises the choices of train types (single or duplex); or
  - o the number of passengers transported – exposes the RIM to traffic swings.
3. **A combination of capacity and a percentage of TOCs' turnover:** This mirrors the system used in airport sub-concessions (leases with retail facilities) and exposes the RIM to both the upside and downside risks of the TOC's commercial strategy.

The TAC system can offer relative protection against commercial risk, but also deprives the RIM from actual command of the commercial strategy, as it does not have access to the end user (traveller).

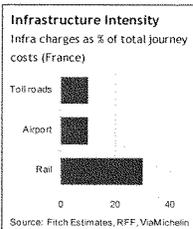
Counterparty risk in respect of TOCs can be a material issue; however, this can be partially or totally mitigated. In the conventional rail network in the UK, for example, the Department for Transport underpins this risk to a significant extent for the benefit of the RIM (Network Rail).

The amount of TACs payable by the TOCs can be a function of many variables and typically relate to the type of slot requested, type of service, type of rolling stock, service offered and type of traction. Charges vary from less than EUR1 per train kilometre (Sweden) to about EUR15 per train kilometre for new high speed lines in France. The charges may constitute as little as 1% to as much as 50% of total revenue of the train service. These variations become particularly problematic where one operator runs over a number of infrastructure providers (notably for international services, but also in the case of several small adjacent concessions). Moreover, if one infrastructure provider reduces its charges towards the optimal marginal cost level, other infrastructure operators can also capture the benefit of this reduction.

#### *Tariff (Price) Settlements*

Once the revenue mechanism for a rail project has been determined, demand risk will be driven by the tariff mechanism in place. Fitch will consider the following.

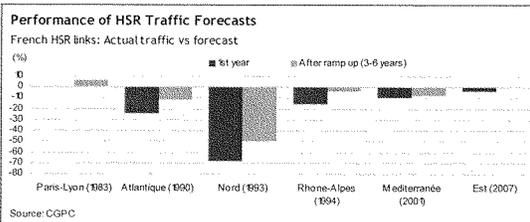
- The degree (and features) of tariff flexibility will have an effect on the credit. This includes the tariff indexation, the scope for future adjustments to the tariff schedule and the ability to vary tariffs according to trains' origin and destination, congestion on the line and time of day.
- The visibility of the framework and the track record of the authority in charge of regulating the arrangements.
- Volatility of charging structure (eg seat capacity + pax + weight). A balanced mix of building blocks is a credit positive, as it reduces the exposure to one particular element, which could be biased by cyclical or structural changes.
- The existence of rebalancing mechanisms or re-openers (in the case of



regulated businesses).

**Demand Forecast: "Traffic/Tariff" Combination Hard to Size**

In Fitch's opinion, rail passenger forecasts tend to be less reliable than forecasts for other transport modes. Eurotunnel (Eurostar train passengers totalled only 45% of the forecast for the opening year), Taiwan HSR (actual traffic after one year was 32% of forecast) and Arlanda Express (2005 traffic around 60% of the forecast) are some examples of PPP projects that suffered from an overestimation of traffic. Rail projects procured on a traditional basis have also suffered a similar fate. The French experience is interesting in this respect. Of the six major lines constructed in the course of the past 25 years, only the first experienced actual traffic above forecasts. Actual traffic for the remainder fell short by around 0 to 10% after ramp-up. The Nord line (Paris to Channel Tunnel, opened in 1993) was heavily affected by dependency on downstream capacity (delays in the operational commencement of the Channel Tunnel in 1994 and subsequent delays in the construction of the H51 in 2007).



Fitch's opinion on the reliability of rail passenger forecasts is also supported by independent studies. The chart to the left shows that actual traffic for 84% of a sample of rail projects (including, but not limited to, high speed) deviated from initial forecasts by more than 20% after one year; this compares less favourably to the 44% for roads. 90% of rail projects that experienced such deviations were on the side of overestimation, while roads were more or less equally distributed.

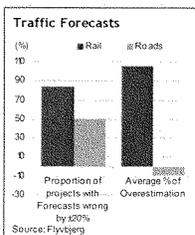
In Fitch's view, such poor performance relative to initial expectations can be explained by various factors, including optimism bias on the part of grantors and private bidders, the characteristics of the rail infrastructure industry and the methodology of forecasting.

*Optimism Bias*

Fitch discussed the risks of "political entrepreneur syndrome", where grantors have the tendency to overestimate the benefits of rail projects for political, economic or individual strategic gain. Private bidders also suffer from similar optimism bias. In many cases of concession tenders, the selection criteria will take into account the level of public subsidies requested by the private parties – the lower the request, the better the perception of the quality of the bid. As a result, in cases where there is high competitive pressure, bidders are often tempted to inflate traffic (and hence revenue) forecasts to raise the profitability of the concession and reduce the amount of grants needed to win the bid. This phenomenon is commonly referred to as the "winner malediction".

*Specific Competitive Features*

Fitch believes that the characteristics of the rail infrastructure industry also have a part to play in the frequently observed traffic shortfalls.



#### High Speed Rail vs. Air Travel

High speed rail is a natural competitor to air carriers. In some regions or countries, many airlines have historically faced little pressure to contain their costs. In France, in particular, high domestic air fares, which have been sustainable as a result of limited competition, probably have increased the demand for high speed rail travel. Where low-cost airlines have started competing against high speed trains – for example on the Paris-Cologne route and some routes in Japan – they have taken some significant market share from rail. In the UK, as a result of the historical development of low-cost airlines, a high speed rail line linking London to major cities in the north of the country would probably face more intense price competition from airlines than high speed rail lines in most European countries.

- The industry has monopolistic features, with usually only a few TOCs operating or potentially applying for a given rail route. The granularity of rail services also exposes projects to large variations in traffic.
- The industry suffers from asymmetric information – the RIMs usually have very little command over the TOC's commercial strategy and the parameters of actual demand (eg load factors of trains, price-mix of tickets, etc).
- Railways are long-term investments and relatively inflexible whereas the factors that influence demand are frequently variable over the shorter term.
- The infrastructure charges as a percentage of total journey costs are much larger for rail than for airports or toll roads due to the highly capital intensive nature of the former. In France, for example, infrastructure charges represent about 30% of the total journey costs (ticket price), compared to an average of 10% for toll roads and airports. A slight increase in the RIM's infrastructure charges can therefore have a much greater impact on the ticket price for the end user (even relative to other pricing signals such as increases in fuel costs), resulting in greater elasticity of passenger traffic compared to initial forecasts.

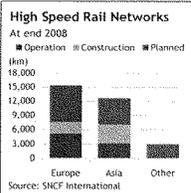
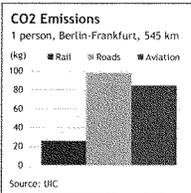
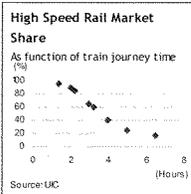
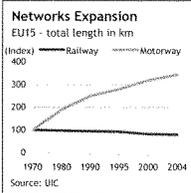
#### *Methodology of Forecast is Similar; Accuracy is Lower*

The methodology used to forecast rail traffic generally follows the same principles as for other transport modes. The corridor demand that the railway is expected to serve is typically determined as a function of several factors, including distance and journey times, value of time, market share capture rates and the type of route.

- Distance and journey times will be influenced by a combination of the speed of trains, distance between major urban centres and location of stations and airports.
- Value of time is critical to assess the potential demand for the rail service in the intermodal competition. Although it could be argued that value of time is highly correlated to GDP per capita, empirical data suggests that value of time can be very different in countries with equivalent standards of living (eg French economic appraisals place twice as much value to time savings as German ones).
- Market share will depend on competition from cars and two-wheelers over short distances (less than 300km). Over long distances (greater than 600km), the main competitor for (high speed) rail is air, and Fitch believes that the presence of low cost airlines continues to pose a serious challenge to rail operators.
- The type of transport route (eg point-to-point radial from dominant urban centre, or "fish backbone") heavily drives the confidence interval for the traffic forecast. Radial traffic (converging to a major urban centre) is much easier to predict than transversal (between two secondary destinations).

Other factors that are much more difficult to anticipate and that can add to the uncertainty associated with rail passenger forecasts include: the type of link, the target client base, network effects and population distribution.

- The type of link can be HSR, conventional, airport rail link, freight line, etc. Freight tends to be more complex and volatile than passenger rail transport.



- The target client base can include tourists, commuters, airport users or industrial companies, each with their own demand dynamics.
- Network effects include reliance on performance of connecting networks (upstream and downstream segments) and the operators of those networks.
- Pricing policy could be outside the control of the infrastructure manager. Of particular importance are the (i) intensity of competition among operators, and (ii) the strategies of operators (yield management with focus on price of tickets sold could lower the volume). It is noteworthy that TACs typically represent between 25% and 40% of a high speed ticket value (airport charges represent approximately 10% of a flight ticket).
- Rail – conventional and high speed – is better at serving markets where demand is located around key nodes. HSR can serve a higher proportion of the potential market in areas with densely populated cities (eg most European and Asian regions) than in regions where most of the urban population lives in lightly populated suburbs (eg North American regions). Similarly, demand is easier to forecast for countries with large populations in linear corridors (eg Taiwan and Italy) where a relatively high proportion of the population can be served by the line, than for countries with more dispersed populations (eg Germany). The distance between major destinations also plays a strong role as it will affect modal competition (road below 300km, air above 600km).

Long-Term Trend Seems Favourable to High Speed Rail Links

When assessing a transport infrastructure project, Fitch tries to form a view not only on the long-term prospects of the facility itself, but also on the mode of transport in general.

Fewer new rail projects have been procured in the past, regardless of the method of procurement, compared to road projects. The chart *Network Expansion* in the margin illustrates the situation in the European Union (as with 15 member states). Whilst road networks expanded by 250% between 1970 and 2004, rail networks in many developed countries overall actually contracted. The increased capacity from new lines (mostly high speed links) has been insufficient to offset the reduction in capacity from the decommissioning of some of the existing railways. However, Fitch expects this to change. The attractiveness of rail over other transport modes to policy-makers environmentally, economically and politically is expected to narrow the network expansion gap between rail and road modes of transport.

From a demand perspective, the comparative advantage of rail over road is also appreciated and understood by the public in general.

- Speed (door-to-door) and timeliness plays a major role through the value of time element. Below a three-hour journey (approximately 800km), evidence suggests that HSR captures a very high market share compared to air travel (see chart “*High Speed Rail Market Share*”).
- Comfort and quality of service offering better work or leisure opportunities (eg Wifi or play areas) are also seen as attractive.
- Climate awareness and air pollution considerably favour the “greener” high-speed rail – at least given the current technologies used for aircraft and cars (see chart “*CO<sub>2</sub> Emissions*”).
- The importance placed on land take in countries or regions where density is high or environmental issues are sensitive also favours rail. Evidence suggests that the number of passengers transported per hour per metre of infrastructure is considerably higher for rail than for car (45 times on average).

Countries that have already implemented HSR have shown a boost in rail usage (France +42% between 1995 and 2006, Spain +33% over the same period).

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**Northeast Corridor Infrastructure and Operations Advisory Commission**

**A Report of the Northeast Corridor Infrastructure and Operations Commission  
to the  
Committee on Transportation and Infrastructure  
U.S. House of Representatives**

**Congressional Field Hearing:  
Developing True High-Speed Rail to the Northeast Corridor  
New York, New York  
January 27, 2011**

The Northeast Corridor Infrastructure and Operations Advisory Commission (Commission) is pleased to submit to the House Committee on Transportation and Infrastructure this report which briefly summarizes the program and organizational work currently underway to fulfill the Commission's broad mandate to advise the Congress on the future of the Northeast Corridor.

The Commission applauds the Committee and Congress for its foresight in recognizing the unique characteristics and opportunities of the Northeast Corridor (NEC) when creating the Commission "to promote mutual cooperation and planning pertaining to the rail operations and related activities of the Northeast Corridor" by setting comprehensive goals and making specific recommendations to Congress that will result in achieving expanded and improved intercity, commuter and freight rail services. The Commission welcomes the opportunities and understands challenges facing the NEC and is fully committed to addressing them in meeting the mandate from Congress.

**The Commission's Statutory Responsibilities**

Congress provided for the creation of the Commission in Section 212 of the Passenger Rail Investment and Improvement Act of 2008 (Division B of P.L. 110-432).

In specifying the Commission's membership and mandate, Congress acknowledged the Northeast Corridor's multiple rail users, vibrant services, and the urgent need to develop cooperative planning processes for its future use, funding and cost-sharing of rail services. It also recognized the importance of balancing short-term and long-term services and capacity improvements capable of supporting improved intercity, commuter and freight services. Finally, the Commission's mission acknowledges the role of the Northeast Corridor as a transportation and economic corridor that can help address highway and airport congestion; increase the economic development of the Northeast Corridor; and help the nation and northeast region address energy security and environmental goals.

A brief description of the Commission's four membership categories (Amtrak, U.S. Department of Transportation, Northeast Corridor states, and freight rail users of the Northeast Corridor); and the congressionally mandated role and responsibility of the Commission is attached. The Commission is to report to Congress on the goals within one year of enactment, and annually on the development of recommendations and the cost-access formula.

### **The Commission's Work Plan and Collaborative Approach**

The Commission is committed to acting promptly and efficiently to develop challenging, and achievable goals and recommendations for the Northeast's Corridor future services, a cost-revenue-compensation allocation formula, and related funding and financial options. The Commission will need fact-based information and alternatives analysis for a service development plan that includes a range of service options, including next generation high speed passenger rail options. It will also need the related preliminary environmental impact analyses, including the impacts of improved and new intercity passenger rail services on the northeast region's transportation system and economy.

Work Program: A Commission Working Group has drafted a preliminary work plan that outlines for each congressional mandate a set of objectives, approaches, and key deliverables including tasks, team members and completion dates. Consistent with available resources, the preliminary work plan envisions a report on the NEC goals by mid-2011. The Working Group also outlines a proposed work flow that captures how the discrete pieces – goals, service development plans/environmental analyses, cost-allocation, and economic analyses – relate to each other, and how they can be managed within the Commission's flexible organizational structure.

The Commission recognizes the heavy demands already placed upon its members, their internal staff resources, and federal and state budgets. It is committed to using existing data and analyses where they are appropriate to the Commission's need for objective and timely analyses. In addition, the Commission is also identifying the type and level of skills and expertise that it will need to manage and carryout its mission. This may include Commission staff as well as access to external technical, planning, legal, institutional and financial expertise. Therefore, the Commission anticipates that its work plan will require continued federal financial support beyond the initial appropriation. The Commission members fully expect to continue their participation and support of the Commission's activities.

Corridor Data and Analysis Needs: A key piece of updated analysis that is central to the Commission's work is the development and assessment of an updated service development plan and related preliminary environmental impact analysis for the Northeast Corridor as a whole. One pending source of that information is the multi-state planning proposal for the Northeast Corridor selected by the Federal Railroad Administration last fall.

As submitted by the 11 northeast states, the proposal envisions the development of a corridor-wide, corridor-level service development plan and alternatives analysis for a range of improved rail services, including next generation high speed express services, and the related Programmatic Environmental Impact Statement. This work will complete the planning and environmental documents required to support future federal and state capital investment decisions for the next generation Northeast Corridor. The proposed multi-state study would define the specific steps necessary to plan and implement a better integrated, more efficient and higher capacity regional transportation network with improved intercity passenger rail as a core component of the system. It is intended to evaluate a range of improved services for intercity, commuter rail and freight operations, and a fully or partially dedicated new high speed rail right-of-way to support a preferred high speed rail vision for the Northeast Corridor.

The states have proposed that the multi-state service development plan and environmental analysis is coordinated with the Commission's goals and planning guidance, and that the multi-state planning effort serves as a source of data and analysis for the Commission. The Commission looks forward to coordinating its efforts with the FRA-led multi-state corridor planning process.

#### **Current and Ongoing Activities of the Commission**

The Commission is now established and operational, and has outlined an initial work plan that is consistent with the mandate specified by Congress.

The Commission has met twice – on September 27, 2010 and December 2, 2010, and is scheduled to meet again on March 23, 2011 in Wilmington Delaware. During this initial period, the Commission:

- heard from U.S. Transportation Secretary LaHood and Transportation & Infrastructure Committee Chairman Mica;
- held initial discussions on its scope and mission;
- discussed members top priorities for the Northeast Corridor including a transformative vision, collaborative governance, and state of good repair;
- received presentations on two discrete high speed rail visions for the Northeast Corridor, and a briefing on the Corridor's transportation and economic potential;
- elected officers and an executive committee; and
- adopted a charter, organizational structure and by-laws.

The Commission is currently in the final stages of recruiting an executive director to manage the myriad management and analysis tasks that the Commission must undertake to fulfill the mission set forth by Congress. The Commission anticipates that the executive director will be in place prior to its scheduled March meeting.

The Commission also discussed its overall work plan and timeframe, and created two committees to advance its work. A Committee on Principles and Goals (headed by Therese McMillan, Deputy Administrator, Federal Transit Administration) is creating the framework for more detailed action to meet the goals and recommendation. An Administration and Planning Committee (headed by Toby Fauver, Deputy Secretary for Local and Area Transportation, Pennsylvania Department of Transportation) is addressing more immediate tactical issues, such as coordinating work by Commission members and other staff and experts; outreach to the array of affected stakeholders; and determining the expert qualifications, skill sets and related resources that the Commission will require to carry out its work in a professional, objective and timely manner consistent with the statutory requirements.

As a result of significant delays in forming the Commission due to limited resources and other constraints, the initial reporting deadlines for goals and cost-allocation formulas were not met. The Commission wrote to the congressional committees last fall alerting them to the delay in developing the standardized cost-allocation formula by October 2010 as specified in statute, and reported on steps being taken to develop the proposed formula and implementation timetable (copy attached).

**Northeast Corridor Infrastructure and Operations Advisory Commission****Membership, Roles and Responsibilities  
Excerpts from Section 212, Passenger Rail Investment and Improvement Act of 2008,  
Division B of P.L. 110-432**

The Commission has a four-part membership with voting members from Amtrak, the U.S. Department of Transportation (USDOT), and the District of Columbia and states directly served by the Northeast Corridor Mainstem. Current non-voting members represent the freight carriers using the Northeast Corridor. The Commission is directed to consult with other entities as appropriate.

Congress laid out a very specific mandate and timeframe for the Commission. It is to develop:

- A statement of goals concerning the future of the Northeast Corridor rail infrastructure and operations based on expanded and improved services for all users, including improvements in safety and reliability; reduced travel times; increased frequencies; and enhanced intermodal connections to address airport and highway congestion, reduce transportation energy consumption, improve air quality, and increase economic development of the Northeast Corridor region.
- Recommendations to Congress in very specific areas for achieving the goals, including short and long-term capital investment needs beyond state-of-good-repair, future funding requirements, operational improvements for intercity, commuter and freight rail services, opportunities for non-rail uses of the Northeast Corridor, as well as dispatching, safety and security, equipment design, marketing, future capacity requirements, and potential funding and financing mechanisms for projects of corridor-wide significance; and
- A standardized formula (within two years of PRIIA) for determining and allocating costs, revenues and compensation among the multiple rail users of the Northeast Corridor and its branch lines that ensures no cross-subsidization, and a timetable for implementation within six years of PRIIA enactment.

The Commission is to report to Congress on the goals within one year of enactment, and annually on the development of recommendations and the cost-access formula.

**NEC Infrastructure and Operations Advisory Commission  
January 2011**

**Representing Amtrak**

Albrecht "Al" Engel, P.E. (*Executive Committee*)  
Vice President, High Speed Rail  
Amtrak

Joseph McHugh  
Vice President, Government Affairs and  
Corporate Communications  
Amtrak

Stephen Gardner (*2<sup>nd</sup> Vice-chair, Executive Committee*)  
Vice President, Policy and Development  
Amtrak

Drew Galloway  
Assistant Vice President, Policy and  
Development, Eastern Division  
Amtrak

**Representing the U.S. Department of Transportation**

Roy Kienitz (*1<sup>st</sup> Vice-chair, Executive Committee*)  
Under Secretary for Policy  
Office of the Secretary  
U.S. Department of Transportation

Christopher Bertram  
Assistant Secretary for Budget and Programs  
and Chief Financial Officer  
Office of the Secretary  
U.S. Department of Transportation

Joseph Szabo (*Executive Committee*)  
Administrator  
Federal Railroad Administration  
U.S. Department of Transportation

Karen Rae  
Deputy Administrator  
Federal Railroad Administration  
U.S. Department of Transportation

**Representing the U.S. Department of Transportation (cont.)**

Therese McMillan  
Deputy Administrator  
Federal Transit Administration  
U.S. Department of Transportation

**Representing the Northeast Corridor States and the District of Columbia**

James Redeker  
Bureau Chief of Public Transportation  
Connecticut Department of Transportation

Carolann Wicks (*Chair, Executive Committee*)  
Secretary of Transportation  
Delaware Department of Transportation

Scott Kubly  
Associate Director  
Progressive Transportation Services  
Administration  
District Department of Transportation

Simon Taylor  
Chief of Staff  
Maryland Transit Administration

Jeffrey B. Mullan (*Executive Committee*)  
Secretary of Transportation and Chief Operating  
Officer  
Massachusetts Department of Transportation

James Weinstein  
Executive Director  
New Jersey Transit

Stanley Gee  
Acting Commissioner  
New York Department of Transportation

Toby Fauver  
Deputy Secretary for Local and Area  
Transportation  
Pennsylvania Department of Transportation

Stephen Devine  
Chief of Intermodal Planning  
Rhode Island Department of Transportation

**Non-voting Members: Freight Railroads  
using the Northeast Corridor**

Jonathan Broder  
General Counsel  
Consolidated Rail Corporation (Conrail)

Steve Potter  
Vice President, Network Operations  
CSX Corporation (CSX)

Darrell Wilson  
Assistant Vice President, Government Relations  
Norfolk Southern Corporation (NS)

David Monroe  
Partner, GKG Law  
Representing Providence and Worcester  
Railroad Company (P&W)

**Letter from Carolann Wicks on behalf of the Northeast Corridor  
Commission to Members of Congress and the Chair of the Surface  
Transportation Board on November 29, 2010**

Below is the list of recipients of the letter (which is attached below):

Chairman Daniel R. Elliott III  
Surface Transportation Board  
395 E Street, SW  
Washington, DC 20423

Senator Daniel Inouye  
Chairman, Committee of Appropriations  
United States Senate  
U.S. Capitol - S128  
Washington, DC 20510

Senator Thad Cochran  
Ranking Member, Committee on  
Appropriations  
United States Senate  
U.S. Capitol - S146  
Washington, DC 20510

Senator John D. Rockefeller, IV  
Chairman, Committee of Commerce,  
Science and Transportation  
United States Senate  
254 Russell Senate Office Building  
Washington, DC 20510

Senator Kay Baily Hutchinson  
Ranking Member, Committee on Commerce,  
Science and Transportation  
United States Senate  
560 Dirksen Senate Office Building  
Washington, DC 20510

Representative David Obey  
Chairman, Committee on Appropriations  
U.S. House of Representatives  
U.S. Capitol - H-218  
Washington, DC 20515

Representative Jerry Lewis  
Ranking Member, House Committee on  
Appropriations  
U.S. House of Representatives  
1016 Longworth House Office Building  
Washington, DC 20515

Representative James P. Oberstar  
Chairman, Committee on Transportation and  
Infrastructure  
U.S. House of Representative  
2165 Rayburn House Office Building  
Washington, DC 20515

Representative John L. Mica  
Ranking Member, Committee on  
Transportation and infrastructure  
U.S. House of Representatives  
2163 Rayburn House Office Building  
Washington, DC 20515

Senator Patty Murray  
Chairman, Subcommittee on Transportation,  
Housing and Urban Development and  
Related Agencies, Committee on  
Appropriations  
United States Senate  
S-133 Dirksen Senate Office Building  
Washington, DC 20510



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**  
 800 BAY ROAD  
 P.O. BOX 778  
 DOVER, DELAWARE 19903

CAROLANN WICKS, P.E.  
 SECRETARY

November 29, 2010

Representative John L. Mica  
 Ranking Member, Committee on Transportation and Infrastructure  
 U.S. House of Representatives  
 2163 Rayburn House Office Building  
 Washington, DC 20515

Dear Representative Mica:

Section 212 of The Passenger Rail Investment and Improvement Act of 2008 (Public Law 110-432, attached), establishes the Northeast Corridor (NEC) Infrastructure and Operations Advisory Commission and requires the commission to develop a formula for allocating costs, revenues and compensation for commuter operations that use Amtrak Northeast Corridor facilities and services by October 16, 2010. Additionally, the Act requires the commission to develop a timetable for implementing such a formula before the end of 2014 and transmission of this timetable to the Surface Transportation Board (STB). Section 212 also includes guidelines for developing the formula, such as "no cross subsidization" of services and requires the commission to petition the STB to determine and enforce appropriate compensation amounts for such commuter services in the event commission members cannot reach agreement.

This letter is to inform you that the commission has not yet developed the formula or timetable as required under the Act because the formation of the commission was significantly delayed due to limited resources and other constraints. The first meeting of the commission was recently held on September 27, 2010 and our next meeting is scheduled for December 2, 2010.

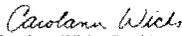
Nonetheless, commission members are already beginning to work on this important responsibility. Amtrak is currently preparing a report documenting their current cost allocation methodology and, as the commission continues to organize and set its agenda, we will create a process and timetable for discussing alternative methodologies and potential refinements to this existing allocation process. With this and other information, the commission will set forth to develop an appropriate formula, including a proposed timetable for implementation that is agreeable to all commission members. In coming months, we will further specify our expected schedule for this work and have set an initial target of substantially completing this formula by the spring of 2012.

We appreciate your patience and understanding as the NEC Commission endeavors to address this highly complicated issue in a deliberate manner. Working together, we are confident



that the Commission members, including the Northeast states, the U.S. Department of Transportation and Amtrak, can develop a consensus solution to this challenge and create a strong foundation for growth and improvement for the Northeast Corridor and region.

Sincerely,

  
Carolann Wicks, President  
NEC and Operations Advisory Commission

Attachment  
cc: Members of the commission

**Testimony of Tony Collins,**

**CEO of Virgin Rail Group**

**House Committee on Transportation and Infrastructure**

**Hearing on “Developing True High-Speed Rail for the**

**Northeast Corridor: Stop Sitting on our Federal Assets”**

**January 27, 2011**

Chairman Mica and other Members of this distinguished Committee, thank you for the opportunity to submit written testimony for this important hearing. On behalf of Virgin Rail Group (VRG), I greatly appreciate the chance to share with the Committee our experience delivering a commercially successful and reliable consumer-focused high-speed rail service to the West Coast of the United Kingdom.

While the US’s Northeast Corridor no doubt presents unique challenges for high-speed rail, so too did the West Coast mainline in the United Kingdom. It is my hope that our experience linking six of the UK’s largest cities with a dependable high-speed rail service that continues to stimulate ridership, while receiving very high approval rating from satisfied customers, will be instructive to the Committee.

VRG was one of the first private-sector train companies in Britain to be awarded a rail franchise and is now the only long-distance operator to have continued in the UK since 1997.

The West Coast Mainline franchise was let for 15 years and serves London and major British cities - Birmingham, Manchester, Liverpool, Edinburgh and Glasgow - as well as other destinations in England, Scotland and Wales. The longest journey on the route is 400 miles from London to Glasgow (with journey times of four hours 20 minutes). Most journeys are around two hours or less.

The vision of VRG – led by Sir Richard Branson and owner of the train operator branded as Virgin Trains – was to transform Britain’s railways from a declining industry into a popular form of travel that would compete with airlines and the car. This vision has resulted in the route becoming the fastest-growing in Britain, with double the number of customers in the last six years and it has trebled its customer revenue since 1997, paying premiums to Government. It is also the most popular long-distance route, with 90% of customers satisfied or very satisfied with their journey.

This submission sets out the key achievements and challenges experienced in turning the franchise into the fastest-growing and most popular long-distance route in Britain, replacing large numbers of domestic air services with affordable, efficient rail travel.

### **Challenges of the early years**

At the start of the franchise, there was widespread opposition to privatisation and the official political Opposition party had threatened to renationalise the railways if elected to Government. Against this background, the Virgin brand was a key symbol of private sector entrepreneurial skill that would transform rail, following a decade of decline.

VRG won the West Coast franchise on the back of a commitment to introduce a fleet of high speed tilting trains and a partnership with Railtrack – the infrastructure company - to upgrade the entire West Coast Main Line. This work was long overdue and followed two failed attempts by the Government-funded British Rail to modernise the London to Glasgow route, because of a lack of public sector funding and commitment.

VRG inherited a fleet of ageing electric locomotives and coaches, some dating back to the 1970s. Despite a cosmetic refurbishment of coaches to improve the journey experience for customers - it was clear that the existing fleet was not fit for purpose for a railway approaching the 21<sup>st</sup> century. The performance of the fleet was unreliable, but the new trains could not be delivered until 2002. At the same time, the rail industry in general was suffering from very poor punctuality and safety fears following a number of fatal accidents.

During this period, VRG worked closely with Alstom, the manufacturer of the tilting Pendolino train, to commission the fleet of 53 Pendolinos into public service alongside a diminishing fleet of ageing trains.

In addition, the infrastructure of the UK's busiest main line badly needed a major upgrade with no significant work having taken place since the original electrification schemes of the late 1960s and early 1970s.

Although sceptics predicted that VRG would not be able to deliver the new fleet of revolutionary trains, the full Pendolino service started in September 2004, heralded by a record breaking run from Euston to Manchester of under two hours, attended by the then Prime Minister Tony Blair and attracting widespread positive publicity.

The new timetable doubled the number of services between Euston and Manchester with 125mph tilt introduced between the two cities and reducing average journey times from 2h 41 to 2h 17

The new service quickly captured the public imagination and in 2005 18 million customers used Virgin Trains' services, rapidly changing perceptions of train travel and eroding the domestic air market.

### **Why the new 'tilting' trains made such a difference**

The new fleet of 125mph trains transformed public perception of rail travel, but importantly also brought a radical change to reliability, safety, journey time, frequency and comfort.

The 'tilt' system, allowing an 8 degree tilt as trains travelled round the many curves on the West Coast route, was designed to allow the train to maintain consistently high speeds.

This was the first time the tilt system had been used successfully in the UK, as previous attempts had proved unreliable. However, a close partnership between Virgin and Alstom, the manufacturer of the Pendolino train, ensured a smooth introduction of the new fleet.

The trains were the first in the UK to offer environmentally-friendly braking capable of returning power to the national power supply and the trains also have on-board electricity meters to help drivers use efficient driving techniques.

All seats have electronic seat reservation display and the trains are fitted with exterior and interior customer information screens and CCTV in each coach.

The quality of the trains has been instrumental in achieving the growth and service improvement that we have seen in recent years.

#### **Continuing the growth**

The West Coast Main Line continued to grow markedly as comfort and reliability became bywords of the route.

Air services between Liverpool and London were withdrawn as airlines were unable to compete with the new train service. On the Manchester-London route, rail's share of the rail:air market grew quickly, from 30% in 2004 to 80% by 2008, and several airlines reduced services or withdrew from the route. This has since grown to 85%. On Glasgow-London, Virgin Trains has increased share of rail air market from 7% in 2007 to 20% in 2010, leading to a leading airline withdrawing from the route in March 2011.

In December 2008, another improved timetable was introduced – the Virgin High Frequency timetable – which created the most frequent long-distance services in Europe. Trains every 20 minutes, seven days a week, linked London with Birmingham and Manchester, England's second and third largest cities.

The conclusion of the £9bn (\$14.4bn) infrastructure upgrade of the West Coast Main Line enabled a more frequent timetable with improved journey times across the Virgin Trains network. The latest timetable led to almost double the number of trains services running – 333 - compared to 175 at the start of the franchise. This meant faster schedules, and the introduction of a 'clockface' timetable, with trains operating at the same minutes past each hour throughout the week, including weekends, which had never been attempted on a long-distance route.

- Birmingham - London (120 miles) from 1 hr 40 – 1hr 22
- Manchester – London (185 miles) “ 2hrs 30 – 2hrs 05
- Liverpool – London (195 miles) “ 2hrs 45 – 2hrs 07
- Glasgow - London (400 miles) “ 5hrs 23 – 4hrs 43

Virgin's strong relationship with train manufacturer Alstom has been a major factor in our vastly improved performance, now frequently running at over 90% punctuality - the most improved train operator year on year.

#### **Massive vote of confidence from customers**

Annual journey numbers have now soared to 28.2m in 2010 - more than twice as many as at the start of the franchise. Although this is starting to bring capacity issues at certain times, we are working with the Government to add two new carriages to each train, adding almost 25% more seats.

Overall customer satisfaction continues to be high at 90% while value for money, traditionally a difficult area for operators, is at 63% - both figures higher than any other long distance franchised operators

Passenger revenue on West Coast has more than trebled during the franchise from £250m (\$400m) pa to £780m (\$1.25bn) pa. This has come during a time when many operators have struggled to grow customer numbers during the economic decline of recent years.

In the last two years for instance, Virgin's growth has continued at some 25%, against a national figure for long-distance rail of just 5%. The growth has meant that Virgin is now able to make premium payments to the Government, and create a franchise that will attract highly competitive bids when it is re-let in 2012.

#### **Delivering what we promised**

As well as the promise to cut West Coast journey times, Virgin Trains has transformed many elements of rail travel in response to changing customer expectations. In addition to having passenger satisfaction of 90%, Virgin Trains is also recognised in awards for business travel, group travel and customer service.

Virgin Trains also promised to lead change in rail industry and has delivered the following pioneering developments:

- First operator to provide internet ticket provider and first fast-ticket machines
- First operator to provide complimentary hot meals to first class customers
- First advanced ticket scheme offering heavily discounted travel
- First operator to double the number of car parking spaces
- First operator to regenerate electricity through braking
- First operator to test biofuel

#### **Lessons learned**

This was the world's most ambitious rail privatisation and took place against a recent history of low investment, poor performance and public anger at the standard of rail travel. Creating a change in culture, and increasing public confidence in rail, was challenging, and it is crucial that partnerships work well from the start.

Difficulties surrounding our infrastructure provider – Railtrack – created significant delays in upgrading the line and it is crucial that the operator and infrastructure provider work closely together to understand the opportunities and risks from the start.

A strong consortium, with each partner showing strong credentials and experience, is important in ensuring a smooth start to win public confidence in the early days.

Although engineering solutions are clearly very important, the planning of services should be based on developing new markets, directly responsive to customer demand, and not pander to timetable planners or engineers.

A high-speed network should integrate with existing and future networks to maximise customer numbers. This has now happened in the UK, but was not done at the beginning. Planning the customer journey needs to involve the full end-to-end experience, including the ticketing and onward journeys, to make it as easy as possible for the passenger

It is important that an output specification is laid down, not an input specification. This enables more innovation and flexibility in meeting the needs to customers, which will change over time.

Marketing and promotion are vital to raise awareness of the service as achieving increased customer numbers does not happen by accident or luck. Virgin Trains quickly identified several different passenger markets to develop, such as business, leisure, commuters, holiday makers, each requiring a different product offering.

During the build phase, a very tight project management system is required, with very clear roles and responsibilities, such as risk allocation.

### **Conclusion**

Mr. Chairman, let me conclude by again thanking you for this opportunity to submit written testimony on our experience delivering high-speed rail service to the UK's West Coast route that is not dissimilar to the US's Northeast Corridor. As I said at the outset, rail corridors anywhere in the world present unique challenges and an approach that simply seeks to rigidly prescribe one proven model without appropriate customising is not recommended. But, we believe Virgin Trains' experience in a sufficiently similar corridor such as the UK's West Coast may be instructive by analogy and can inform the debate in the US.

In summary, the VRG experience in the UK continues to show that entrepreneurship, private sector business discipline and an unflinching focus on customer experience and reliability can work in tandem to produce a high-speed rail link between large cities that is commercially viable, proves initial doubters wrong and delivers a service that consumers welcome in ridership numbers that exceed virtually all initial expectations.

If Virgin Rail Group can be of assistance to the Committee in any way, it would be our pleasure to do so.