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HIGH-SPEED RAIL IN THE UNITED STATES: OPPORTUNITIES AND CHALLENGES

(111–69)

HEARING

BEFORE THE

SUBCOMMITTEE ON

RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

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U.S. House of Representatives
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Washington, DC 20515

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October 9, 2009

SUMMARY OF SUBJECT MATTER

TO: Members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials

FROM: Subcommittee on Railroads, Pipelines, and Hazardous Materials Staff

SUBJECT: Hearing on "High-Speed Rail in the United States: Opportunities and Challenges"

PURPOSE OF HEARING

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will meet on Wednesday, October 14, 2009, at 2:00 p.m., in room 2167 of the Rayburn House Office Building to receive testimony on the opportunities and challenges of developing high-speed rail in the United States.

BACKGROUND

Over the last 50 years, the United States has planned and built a national Interstate highway system that transformed the nation. The Federal-Aid Highway Act of 1956 (P.L. 84-627) provided Federal investment that launched the development of our nation's first Interstate System. Despite continued Federal investment since that time, significant economic and demographic growth has brought many parts of our national transportation system to capacity. Today, many segments of the Interstate System handle volumes of traffic that exceed their design standards and have reached or exceeded their useful design life. It is critical that this existing infrastructure be rebuilt and maintained. However, competitive and convenient alternatives, such as passenger rail, must also be expanded.

The discrepancy in historical Federal investment between highways, aviation, and intercity passenger rail is staggering. Between 1958 and 2008, nearly $1.3 trillion has been invested in our nation's highways and over $473 billion in aviation.[1] Federal investment in passenger rail began in 1971 with the creation of the National Railroad Passenger Corporation (Amtrak). Between 1971 and 2008, only $53 billion dollars have been invested in passenger rail.[2]

While the current economic climate has reduced highway and air travel, future projections show that intercity travel will increase and mobility will be constrained by existing transportation capacity limitations.[3] The DOT estimates that by 2035 significant congestion will be experienced on several intercity highways of urban areas.[4] The costs of congestion have already increased more than 50 percent from the previous decade.[5] In 2007, traffic congestion cost $87.2 billion in our nation's urban areas, including 4.2 billion hours of delay and 2.8 billion gallons of wasted fuel.[6] The Federal Aviation Administration forecasts that the U.S. commercial aviation industry will carry one billion passengers by 2021, increasing from approximately 741 million in 2008, further adding to traffic congestion.[7]

One major deficiency in our national transportation system is the absence of high-speed rail. High-speed rail offers a safe, efficient, and convenient passenger transportation alternative that promotes economic competitiveness and environmental quality.[8] Despite wide recognition that high-speed rail can significantly reduce congestion on highways and airways, decrease our dependence on foreign oil, and reduce greenhouse emissions, the United States offers no high-speed passenger rail service unlike other major industrialized nations. Moreover, the United States invests only a fraction of what European and Asian countries have invested in the development of high-speed rail operations.

Forty-five years ago, Japan became the first nation to develop a high-speed rail operation. Since the inception of its network in 1964, Japan has developed a high-speed rail network of 1,360 miles with trains reaching speeds of up to 188 miles per hour.[9] In fiscal year (FY) 2006, ridership reached 300 million.[10] In 1981, France first developed high-speed rail lines in a network that now spans 1,180 miles with trains reaching speeds of 199 miles per hour.[11] In FY 2007, ridership reached 100 million.[12] In 1992, Spain launched its high-speed rail system and has continued to expand its network over 981 miles with trains reaching speeds of 186 miles per hour.[13] In 2007, ridership reached nine million.

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[1] U.S. Department of Transportation (DOT), *Historical Federal Investment in Transportation* (2009).
[2] *Id.*
[3] Government Accountability Office (GAO), *High Speed Passenger Rail: Future Development Will Depend on Addressing Financial and Other Challenges and Establishing a Clear Federal Role* (March 2009) at 1.
[4] *Id.*
[5] Texas Transportation Institute, *Urban Mobility Report 2009* (July 2009) at 1.
[6] *Id.*
[7] *DOT, FAA Aerospace Forecast Fiscal Years 2009-2025* (2009) at 5.
[8] *Id.* The average intercity passenger train produces significantly less emissions than other forms of transportation.
[9] GAO, *supra* note 3 at 86.
[10] *Id.*
[11] *Id.*, at 84.
[12] *Id.*
[13] *Id.*, at 87.

Most recently, China has announced a plan to expand its high-speed rail network to 16,000 miles by the year 2020.[14] In 2009, China invested $50 billion in its new high-speed passenger rail system.[15] By 2020, it is expected that China will have invested $300 billion in the project.[16]

The United States has only one rail line that can currently support high-speed rail, Amtrak's Acela service between Washington, D.C. and Boston, Massachusetts; however, operational and infrastructure obstacles prevent the line from running at authorized speeds.[17] In 1970, Congress created Amtrak, charging it with providing nationwide passenger rail services. Today, Amtrak operates a rail network across 46 states, serving more than 500 destinations on 21,000 miles of routes across the United States.[18] In its sixth straight year of increased ridership, Amtrak served around 78,000 passengers per day on it 300 trains, totaling more than 28.7 million passengers nationwide during FY 2008.[19] However, Amtrak service is limited; it does not always offer a service that is competitive with other travel modes and does not reach many highly traveled corridors. Expanding passenger rail service is a way to address concerns over-congestion and our dependence on foreign oil, rising gas prices, and greenhouse gas emissions.

Investment in a high-speed rail system will also yield important economic benefits. Since the recession began in December 2007, the unemployment rate has doubled to 9.8 percent representing an increase from 7.6 million to 15.1 million unemployed persons.[20] Since this time, employment in manufacturing has fallen by 2.1 million.[21] According to the Bureau of Labor Statistics, since 1998, the U.S. has lost more than 5.9 million manufacturing jobs.[22]

The current economic, environmental, and transportation challenges facing our nation require continued efforts to expand and invest in high-speed rail services. Development and maintenance of a reliable and effective nationwide high-speed system requires significant investment. According to an estimate developed by the National Surface Transportation Policy and Revenue Study Commission, the total capital cost estimate of re-establishing the national intercity passenger rail network by 2050 is approximately $357.2 billion or $8.1 billion annually.[23] This estimate incorporates only limited cost assumptions for new high-speed rail corridors.

LEGISLATION

The establishment of a national high-speed rail system poses many unique opportunities as well as challenges to the United States. The President and Congress have recognized that the development of a comprehensive high-speed rail network requires long-term planning and investment. To this end, recent legislation has provided funding for high-speed rail.

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[14] Bill Powell, *China's Amazing New Bullet Train*, CNN Money (August 6, 2009).
[15] *Id.*
[16] *Id.*
[17] The Acela is capable of achieving speeds of up to 135 m.p.h. between Washington, D.C. and New York and 150 m.p.h. between New York and Boston. However, Amtrak averages 82 m.p.h. between Washington, D.C. and New York and 66 m.p.h. between New York and Boston due to congestion, track, and other infrastructure conditions.
[18] Amtrak, *National Fact Sheet: FY 2008* (February 2009).
[19] *Id.*
[20] Bureau of Labor Statistics, *The Employment Situation – September 2009* (October 2, 2009).
[21] *Id.*
[22] Bureau of Labor Statistics, *Current Employment Statistics Survey* (October 7, 2009).
[23] National Surface Transportation Policy and Revenue Study Commission, *Vision for the Future, U.S. Intercity Passenger Rail Network Through 2050* (December 2007) at 36.

I. Passenger Rail Investment and Improvement Act (P.L. 110-432)

On October 16, 2008, the Passenger Rail Investment and Improvement Act (P.L. 110-432) (PRIIA) was signed into law. PRIIA authorized a total of $13.06 billion over five years to support Amtrak's ongoing capital and operating needs, help bring the Northeast Corridor to a state-of-good-repair, and encourage the development of new and improved intercity passenger rail service through an 80-20 Federal/State matching grant programs.

1. Amtrak

Of the $13.06 billion, PRIIA authorized $5.315 billion (an average of $1.063 billion per year) to Amtrak for capital grants and $2.949 billion (an average of $589.8 million per year) for operating grants. These capital grants will help bring the Northeast Corridor to a state-of-good-repair, and allow Amtrak to procure new rolling stock, rehabilitate existing bridges, and make additional capital improvements on its entire network. In addition, the operating grants authorized under the bill will help Amtrak pay salaries, health costs, overtime pay, fuel costs, facilities, and train maintenance and operations. These operating grants will also ensure that Amtrak can meet its obligations under its recently negotiated labor contract.

2. Section 301: Capital Assistance For Intercity Passenger Rail Service

Section 301 authorized $1.9 billion (average $380 million per year) for a new State Capital Grant program for intercity passenger rail projects. This program includes $325 million for "congestion grants" to Amtrak and the States for high-priority rail corridors to increase capacity along certain lines to reduce congestion and facilitate ridership. The Federal share of the grants cannot exceed 80 percent of project costs.

3. Section 501: High-Speed Rail Corridor Development

PRIAA also authorizes $1.5 billion ($300 million per year) for grants to States and/or Amtrak to finance the construction of, and equipment for, 11 authorized high-speed rail corridors. The Federal share of the grants cannot exceed 80 percent of the project costs. The Secretary of Transportation awards these grants on a competitive basis for projects based on grant criteria including economic performance and expected ridership outlined in section 501. Ten of the 11 high-speed rail corridors have been designated by the Secretary of Transportation as follows:

- **California Corridor**: The California Corridor runs from Sacramento to San Diego, California, to Las Vegas, Nevada. The Corridor travels south from Sacramento to Stockton, where it branches into two lines, one running west to the Bay Area (San Francisco, Oakland, and San Jose) before running south to Los Angeles. The second line runs south from Stockton through the Central Valley cities of Fresno and Bakersfield to Los Angeles. From Los Angeles, the line runs south to San Diego, and then east to Las Vegas, Nevada. There is also a line that connects the Bay Area to some point north of Fresno.

- **Pacific Northwest Corridor**: The Pacific Northwest Corridor runs from Vancouver, British Columbia, to Eugene, Oregon. The Corridor travels south from Vancouver to the

- **South Central Corridor**: The South Central Corridor runs from San Antonio, Texas, to Tulsa, Oklahoma, and Little Rock, Arkansas. The Corridor begins in San Antonio traveling north to Austin and then branches into two separate lines at Dallas/Ft. Worth, Texas. One line runs north to Oklahoma City and Tulsa, Oklahoma. The second line runs from Dallas/Ft. Worth through Texarkana, Texas, to Little Rock.

- **Gulf Coast Corridor**: The Gulf Coast Corridor runs from Houston, Texas, to Atlanta, Georgia. The Corridor travels east through Baton Rouge, Louisiana, to New Orleans, Louisiana, Biloxi, Mississippi, and finally Mobile, Alabama. A line runs north from New Orleans to Meridian, Mississippi, before veering northeast to Birmingham, Alabama, and Atlanta.

- **Chicago Hub Network**: The Chicago Hub is a hub-spoke model that runs out of Chicago, Illinois. One line runs north to Milwaukee, Wisconsin, before veering northwest to Minneapolis/St. Paul, Minnesota. A second line runs south from Chicago to Springfield, Illinois, and St. Louis, Missouri, before veering west to Kansas City, Missouri. A third line runs south to Indianapolis, Indiana, where it branches into two lines, one running south to Louisville, Kentucky, and another running to Cincinnati, Ohio. A fourth line runs east from Chicago to Toledo and Cleveland, Ohio. That line then runs south to Columbus, Ohio, before joining the third line at Cincinnati, Ohio. Finally, a fifth line runs east from Chicago to Kalamazoo and Detroit, Michigan.

- **Florida Corridor**: The Florida Corridor runs from Miami to Tampa, Florida. The Corridor travels north from Miami through West Broward and West Palm Beach before turning southwest at Orlando to Lakeland and Tampa.

- **Southeast Corridor**: The Southeast Corridor runs from Washington, DC, to Jacksonville, Florida. The Corridor travels south from Washington, DC, through Richmond, Virginia, to Raleigh, North Carolina. At Richmond, a branch line runs east to Hampton Roads, Virginia. At Raleigh, North Carolina, the line branches into two lines. One line runs west through Durham and Greensboro, North Carolina, then veers south to Charlotte, North Carolina, before running through Greenville, South Carolina, to Atlanta, Georgia, where it runs east through Macon, Georgia, then south to Jacksonville, Florida. The second line runs south from Raleigh to Columbia, South Carolina, Savannah, Georgia, and Jacksonville.

- **Keystone Corridor**: The Keystone Corridor runs from Philadelphia, Pennsylvania, east through Harrisburg to Pittsburgh, Pennsylvania.

- **Empire Corridor**: The Empire Corridor runs north from New York, New York, to Albany before running west through Utica, Syracuse, and Rochester, to Buffalo, New York.

- **Northeast Corridor**: Although the Northeast Corridor main line is not a "designated high-speed rail corridor", it is eligible for intercity passenger rail funding under the American Recovery and Reinvestment Act of 2009 (P.L. 111-5) (Recovery Act).

- **Northern New England Corridor**: The Northern New England Corridor has two lines. One line runs north from Boston, Massachusetts, to Montreal, Canada. The second line runs from Boston, Massachusetts, to Portland and Auburn, Maine.

4. Section 502: Additional High-Speed Rail Projects

Section 502 directs the Secretary of Transportation to issue a request for proposals for projects for the financing, design, construction, and operation of 11 federally-designated high-speed rail corridors. Proposals need to meet certain financial, labor, and planning criteria, as well as a detailed description to account for any impacts on existing passenger, commuter, and freight rail traffic to be considered. Upon receipt of qualifying proposals, the Secretary is directed to form a Commission of local stakeholders to study the submissions. The Secretary is required to issue a report to the Congress on the Commission's findings and recommendations.

II. American Recovery and Reinvestment Act of 2009 (P.L. 111-5)

Signed on February 17, 2009, the Recovery Act provides $64.1 billion of infrastructure investment, of which $9.3 billion is dedicated for passenger rail. This includes $8 billion in grants to States for development of intercity passenger and high-speed rail, in accordance with sections 301 and 501 of PRIIA. Funds are available through September 30, 2012. The remaining $1.3 billion was provided to Amtrak for capital and safety/security improvements. Those funds are available through September 30, 2010.

Following enactment of the Recovery Act, the President released FY 2010 budget outline that proposed additional funding for each of the next five years for the advancement and development of high-speed rail throughout the United States.

On April 16, 2009, the President released a strategic plan for a new vision for high-speed intercity passenger rail to help reduce dependence on cars and planes and encourage economic development of a "clean, energy-efficient option for travelers."[24] The plan, which was developed in accordance with the Recovery Act, proposes a long-term strategy intended to build an efficient, high-speed passenger rail network of 100- to 600-mile intercity corridors, as one element of a modernized transportation system. In the near term, the proposal laid the foundation for that network by investing in intercity rail infrastructure, equipment, and intermodal connections, beginning with an $8 billion "down payment" provided under the Recovery Act, and continuing with a longer-term high-speed rail program. According to the plan, the near-term investment strategy seeks to: (1) advance new express high-speed corridor services (operating speeds above 150 mph on primarily dedicated track) in select corridors of 200-600 miles; (2) develop emerging and regional high-speed corridor services (operating speeds up to 90-110 mph and 110-150 mph respectively, on shared and dedicated track) in corridors of 100-500 miles; and (3) upgrade reliability and service on conventional intercity rail services (operating speeds up to 79-90 mph).

[24] DOT, *President Obama, Vice President Biden, Secretary LaHood Call for U.S. High-Speed Passenger Trains* (April 16, 2009).

On June 23, 2009, the Federal Railroad Administration (FRA) issued High-Speed Intercity Passenger Rail Interim Program Guidance and Application Forms, which was also required by the Recovery Act.[25] FRA's interim guidance was designed to build on President Obama's "Vision for High-Speed Rail" by outlining the application requirements for obtaining funding for high-speed rail projects made available through the Recovery Act and the DOT Appropriations Acts of FY 2008 and FY 2009.

To accommodate the expected variety of applicant goals and stages of project development, the FRA designed four funding tracks under which applications can be submitted by States (or Amtrak).

- Track 1 provides for intercity passenger rail projects to improve existing services that are "ready-to-go" and can be completed within two years of award.[26] Track 1 projects are funded by the Recovery Act.

- Track 2 is for projects aimed at the development of "new High-Speed Rail corridors and Intercity Passenger Rail services." In addition, Track 2 is available for substantial upgrades to existing corridor services for projects eligible under PRIIA Section 501 (High-Speed Rail Corridor Development) and Section 301 (Intercity Passenger Rail Corridor Capital Assistance).[27] They are longer-term projects that must be completed by September 17, 2017. Track 2 projects are funded by Recovery Act.

- Track 3 is reserved for planning activities for the development of future high-speed rail projects.[28] Track 3 projects are funded through DOT FY 2008 and 2009 appropriations which require a 50 percent non-Federal match. The planning activities must be completed within two years.

- Track 4 is designed for high-speed rail projects that are eligible for Track 1 funding, but where the applicants are providing a 50 percent non-Federal match of financing.[29] The projects must be completed within five years of obligation. Track 4 projects are funded by FY 2009 Appropriations.

Pre-applications for high-speed rail projects for all tracks were due to the FRA on July 10, 2009. The FRA received 278 pre-applications for $103 billion in projects. Final applications for Tracks 1, 3, and 4 projects were due on August 24, 2009. FRA received 214 applications from 34 states totaling $7 billion for these corridor projects.[30] Final applications for Track 2 projects were due on October 2, 2009. FRA received 45 applications from 24 states for approximately $50 billion to advance these high-speed rail corridor programs.[31] On October 6, 2009, the FRA announced that awards will be made in the winter of 2009/2010 and "selections will be merit-based and will reflect President Obama's vision to remake America's transportation landscape."[32]

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[25] *High-Speed Intercity Passenger Rail ("HSIPR") Program*, 74 Fed. Reg. 29,900 (June 23, 2009).
[26] *Id.*, at 29904.
[27] *Id.*
[28] *Id.*
[29] *Id.*
[30] FRA, Statement of Federal Railroad Administration Administrator Joseph Szabo, (October 6, 2009).
[31] *Id.*
[32] *Id.*

III. Surface Transportation Authorization Act

The Surface Transportation Authorization Act (STAA), a bill that will reauthorize the Federal highway, transit, and highway safety programs for the next six years, provides $50 billion to develop the 11 authorized high-speed rail corridors linking major metropolitan regions throughout the United States. The STAA will create a long-term investment program for developing high-speed rail nationwide, which will advance the President's agenda and vision. Greater consideration will be given to projects that encourage intermodal connectivity; create new jobs; promote energy efficiency, environmental, and other public benefits; and leverage contributions from state and private sources. In addition, FRA will conduct an evaluation of the proposals' impact on the preservation or expansion of domestic manufacturing capabilities as well as new or expanded business opportunities in the United States.

The STAA also makes high-speed rail development projects eligible for financing through the National Infrastructure Bank, and creates a research, development, and demonstration program for high-speed rail technologies. This new program generates an opportunity to create jobs through the establishment of high-speed rail locomotive and car manufacturing facilities in the United States. Finally, the STAA provides funding for high-speed rail corridor planning activities, including environmental work.

WITNESSES

Mr. Robert Baugh
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AFL-CIO

The Honorable Frank Busalacchi
Secretary, Wisconsin Department of Transportation and
Chair, States for Passenger Rail Coalition

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On behalf of American Association of State Highway and Transportation Officials

The Honorable Joseph C. Szabo
Administrator
Federal Railroad Administration
U.S. Department of Transportation

Ms. Petra Todorovich
Director
America 2050

HEARING ON HIGH-SPEED RAIL IN THE UNITED STATES: OPPORTUNITIES AND CHALLENGES

Wednesday, October 14, 2009,

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The Subcommittee met, pursuant to call, at 2:00 p.m., in Room 2167, Rayburn House Office Building, the Honorable Corrine Brown [Chairwoman of the Subcommittee] presiding.

Ms. BROWN. Will the Subcommittee on Railroads, Pipelines, and Hazardous Materials come to order?

This is a wonderful time; we have standing room only.

The Subcommittee is meeting today to hear testimony on high-speed rail in the United States. The dream of high-speed rail in America is finally coming true. In 2007, this Subcommittee held a hearing to listen to the experiences of international operators and other countries in developing high-speed rail. Their advice was to invest, get a high-speed rail line operational, and once everyone saw it working they would want it for themselves. In other words, build it and they will come.

The American Recovery and Reinvestment Act of 2009 laid the foundation. It included $8 billion for high-speed rail and $1.3 billion for Amtrak. The Fiscal Year 2010 Appropriations bill that passed the House included an additional $4 billion, and the surface transportation bill being developed by this Committee includes another $50 billion for development of high-speed rail corridors over the next six years.

Since enactment of the Recovery Act, interest in high-speed rail has been phenomenal. The Federal Railroad Administration has received numerous applications from the States for development of high-speed and intercity passenger rail projects. These include 45 applications from 24 States totaling $50 billion. They also received 214 applications from 34 States totaling $7 billion for corridor planning and small projects.

I would just like to caution the Federal Railroad Administration that you choose two to three systems that will truly work. If you spend the money around in too many systems, the money will not work the way it is supposed to, and I don't want to see bridges to nowhere when it comes to high-speed rail. We really want a system that works.

These numerous requests clearly indicate a very strong and growing interest in high-speed rail in the United States. They also make clear that the Federal Government needs to invest in high-speed rail in order to make the President and this Congress' vision a reality, and we need to find a dedicated source of funding to do it. The private sector, including international operators, and foreign governments like Spain, Japan, and China aren't going to help us if they don't see a true commitment from the Federal Government to make high-speed rail a priority.

Beijing will spend $50 billion on high-speed rail this year alone, and the central government plans to spend another $250 billion over the next decade. By 2020, China will have laid nearly 16,000 miles of high-speed track capable of carrying the fastest trains in the world. So far, the construction of the Beijing-Shanghai high-speed route alone has created about 110,000 jobs and is playing an enormous role in China's economic recovery.

I know that the U.S. faces major challenges that aren't faced by China's central government, but it shows that one of our main international competitors is making high-speed rail a key component of their economic development and recovery.

We need to give credit where credit is due, and I want to personally thank President Obama for his vision, and Vice President Biden for his longstanding commitment to rail in the U.S. For eight years we battled the Bush Administration's zeroing out funding for rail, and it is a refreshing change to have real leadership in the White House that supports rail.

Finally, I believe that one great opportunity that will come from this new funding will be the ability to establish a domestic manufacturing base for high-speed rail right here in the United States. Since 1998, the U.S. has lost nearly six million manufacturing jobs. We should seize this opportunity and find ways to incentivize production right here in America. We can work on replacing many of the manufacturing jobs that have disappeared in this Country with well paying jobs building new locomotive and passenger railcars to be used in America and sold to other countries throughout the world.

With sustained funding for high-speed rail and a strong commitment from the Federal Government, our State partners, and other stakeholders, I am convinced that the United States can once again build passenger rail rolling stock that will be the envy of the world.

With that, I welcome today's panelists and thank you for joining us. I am looking forward to hearing and the testimony.

Before I yield Mr. Shuster, I ask Members to be given 14 days to revise and extend their remarks, and to permit the submission of additional statements and materials for Members and witnesses. Without objection, so ordered.

I yield to Mr. Shuster for his opening statement.

Mr. SHUSTER. Thank you very much.

As the Chairwoman pointed out, we have a standing room only crowd here today, which is obviously an indication of the importance and the great interest that there is in this town and this Country with high-speed rail.

I also want to welcome my colleague from Ohio and good friend, Mr. Tiberi. Thanks for being here to introduce one of our panelists. I also welcome everybody else that is here today.

Since the passage of the Rail Investment and Improvement Act was signed into law a year ago Friday, high-speed rail has emerged as a central issue on the transportation planning of this Country and, in consensus, high-speed rail should be a part of the national transportation strategy. It is a long time coming, but with the support of the Administration and strong bipartisan agreement in Congress and this Committee, the stage is finally set for high-speed rail in the United States.

Still, there are may questions about just how high-speed rail is going to be implemented in the United States. DOT and FRA control the dispersal of huge amounts of money. I would like to learn more about how they are planning to distribute the $8 billion that was appropriated for high-speed rail in the stimulus. It cannot be overstated how important these decisions will be in the future of high-speed rail. If the funds are spread too thinly among the $57 billion worth of applications, as the Chair alluded to the award, in too many different places, I fear that they may end up failing to focus on developing a few key high-speed lines that will improve the value of this initiative, leading not more investment.

The second point I would like to make is that I believe we should be looking for projects that leverage non-Federal funds. We need to make sure the private sector is involved, along with commitments from States and local governments, in order to fully leverage Federal investment. I am interested in hearing how the FRA is planning and evaluating the funding sources for projects that are being considered for grants, and I look forward to hearing from the witnesses on how they see private partnerships working in the context of high-speed rail.

The final point I would like to make is that we need to ensure that high-speed rail does not have a negative impact on the national freight rail network. Our freight rail system is the best in the world. Some of the plans that have emerged from high-speed rail involve running faster trains on track that is currently used for freight operations. We need to ensure that we have explored any possible detrimental impacts to freight operations posed by trains running faster than the current 79 miles per hour, the top speed, on hosted tracks.

Again, I am very pleased with the progress we have made in a very short time, but we have already reached a critical juncture for high-speed rail in the United States and we must ensure that this large stimulus investment generates real results. We can't afford to misstep. We are already falling behind the rest of the world in developing high-speed systems. China is spending $300 billion to develop 8,000 miles of new high-speed track by 2020. That is enough rail to go from here to Los Angeles three times over. Amazingly, the Chinese budget for high-speed rail in 2009 is $50 billion.

We must continue to work together to keep momentum going. I want to thank all of you again for being here.

I am going to have to excuse myself; I am going back to Pennsylvania. It is Senior Night at Hollidaysburg High School. My son is a senior player on the soccer team, so I have to be there. And since

I haven't been getting many headlines in the paper and he has been on the sports page weekly in the headlines, I figure I ought to keep the perception people think that their Congressman is a soccer player. So I have to head up to Pennsylvania. So I am very sorry I have to leave, but duty calls in Pennsylvania, so thank you very much.

I yield back.

Ms. BROWN. Congresswoman Napolitano?

Mrs. NAPOLITANO. Thank you, Madam Chair, and thank you for holding this very critical meeting, especially for the State of California.

We, of course, are in the throws of evaluating high-speed rail in California, which was bonded and approved by California voters recently. In my area, the high-speed rail would go through quite a few portions of my district. There would be two tracks that would have to be going through, the Los Angeles-San Diego corridor, there would be an NSF line with a stop in Norwalk, where I reside; and in the Alameda corridor, East Corridor, the New Pacific Line with a stop in the City of Pomona.

There are concerns that I have about high-speed rail. First of all, that the State does not divert any funds that are already committed to mass public transit in the State of California going to the high-speed rail. We have discussed these in many hearings and meetings in California with some of the proponents and some of the councils of government who have concerns over this.

High-speed rail cannot work without a good transit system in place, and it is expensive. I still am for mass transit; I will continue to fight for being able to move masses that go to work and seniors. I have no—how would I say?—axe to grind with the high-speed rail, love to see it, and I am sure I will be working on that with our leadership in California, how to work collaboratively with our councils of government and with our city so that this can become a reality.

My concern is for the local communities and their safety impact and noise impact, the road congestion impact, and, of course, the issue of eminent domain, which, in California—I don't know about other States—is a dirty word. You don't talk eminent domain. This is something that people will not allow, will not tolerate. And, of course, the impact on freight and regional passenger rail, the high-speed rail will take away from the current freight and regional passenger rail corridors because it will need a dedicated rail and may go alongside the current system.

Would this take goods movement and put it on a highway that is already congested? Will the railroads cooperate in high-speed rail projects? Those are all concerns that have been brought to me by my residents and also concerns of mine.

So, with that, thank you, Madam Chair. I yield back.

Ms. BROWN. I yield to the Ranking Member and my colleague from Florida, Mr. Mica.

Mr. MICA. Thank you and thank you for conducting this hearing on high-speed rail and its future in the United States. I think this is a very timely hearing. We are on the verge, hopefully, of entering the era of high-speed rail. The United States is a third world country when it comes to high-speed transportation systems. I was

pleased to work with my colleagues in passing the first rail passenger reauthorization in 11 years, which we did the last few months of the Bush Administration, and the President then signed the legislation that not only included reforms and reauthorization for Amtrak, but rail safety, also a strong provision to promote high-speed rail.

Was pleased when the Obama Administration came forward and the President himself injected himself—it wasn't any Member of Congress—but committed to a substantial investment, $8 billion, which we now have available. We do have a slight delay in awarding of those grants and, in a way, I am pleased that all three now are going to be, I think, awarded at once, rather than dribble this and drabble this thing out. But it is important that that money be expended on what I consider true high-speed rail. I don't want this high-speed rail effort hijacked and we cannot take people's money and spend it and not give them what others take for granted in Europe and Asia as far as high-speed rail.

Right now, some of the average speeds—I have a little clip here. Put that clip up here. This will just take a second. This is high-speed rail. This is a TGV train in France and it is going 186 miles per hour. That is high-speed. Ms. Brown just said she has been on it. I was on high-speed rail in Spain, and in Spain the AVE service routinely travels at 186 miles per hour, and the Shinkansen bullet train in Japan, 164 miles per hour.

I will just put up the little photograph for contrast. Where is my little contrast? Okay, this is Acela. Now, put your tray tables in an upright position.

[Laughter.]

Mr. MICA. Secure your seatbelts. You are going to go forward at 83 miles an hour. This is not high-speed rail. Spending $10 billion and getting it up to 89 miles an hour is not high-speed service. So I don't want funds hijacked.

I think we also have to look at the corridors in the United States that deserve service. First of all, Amtrak, the only corridor it owns in the United States, it owns about 98 percent of it, from Washington to New York and then on to Boston, what, 400-some miles? That is the only corridor that they own, 24, 25,000 miles, whatever. The balance of what Amtrak runs service on is freight rail.

These systems are very expensive. Eight billion sounds like a lot. Mr. Oberstar and I committed to $50 billion authorization in the next surface transportation bill. Still sounds like a lot, but listen to this. In Japan, the Shinkansen high speed system is being expanded by 400 miles with a total estimated cost of $40 billion. In Spain, a country about the size of Oregon, the government is committed to a national high-speed rail network that will cost $140 billion. So it takes big money to do these projects.

The benefits in the northeast corridor are immense, and I am telling you that I will raise the roof on the Capitol Building if we do not develop high-speed rail in the northeast corridor. Not only will it serve some of the densest population in the United States; it will help us with our aviation delays. Eighty-three percent of the chronically delayed flights in the United States emanated from New York and that airspace, the northeast airspace. So we have to have a concerted effort not to fool people and say we are putting

in high-speed rail; we have to have real high-speed service that travels at last competitively; 150 used to be the standard, now you are looking at 160, 180 around the world.

So I wanted to come today and make that statement. And if you know me and you know Ms. Brown, we are rather tenacious and we will get it done. So I urge labor, I urge people who have money to invest to work with us. We do need to leverage money. There is no need to put all Federal cash out; we can take a small amount of money, you will hear, and leverage it; $1 of Federal money and we can match it with $8 of private sector investment if we do this the right thing and get real high-speed service where we need it the most.

I am pleased to yield back the balance of my time.

Ms. BROWN. Thank you, Mr. Mica.

And now everybody can see what true bipartisanship is all about. Mr. Perry?

Mr. PERRY. Thank you. I would really like to echo a lot of the concerns and the hopes that have been raised.

High-speed rail is really a game changer for this Country. We have been watching as we lose competitive advantage globally, and certainly part of that has been because of an under-investment in infrastructure; our inability to move items, but also to move people; increased lost time from work and other things. This is a chance for us to look for those game changers through the high-speed rail system, and we are not going to get that many bites at this. So while we all have, certainly, our own parochial interests in this, I am very interested in seeing this thing pass through southern Virginia.

What is most important is that we match the dollars to regional and national priorities; that we are looking at ways to put the most investments, the most dollars into the areas of greatest need, whether that is of congestion or areas of the Country that we can open up. So certainly the corridor stretching from Charlotte, and maybe even Atlanta, up to D.C. is of great interest. I think there has been increasing cooperation between States, which is encouraging, so that we can build on some of the lessons that have been learned and other things.

Right now, in this economic crisis, you can look around the world and see countries that are focused on where they were 20 years and those that are focused on where they could be 20 years from now. We have heard some of the staggering numbers of investments that other countries are making in high-speed rail and related infrastructure investments. We are not matching that. At a time that we have already seen manufacturing and other jobs go overseas, this is a chance, this is a moment for us to really reinvent our comparative advantage, and I think high-speed rail done right can be a component of that.

I think we are stewards of this moment. If we can figure out how to use these dollars effectively and efficiently, I think the American people will continue to support more work in this area. If we blow it, to be honest, that interest will not be there. So I hope we will take full advantage of this moment to make the most of this and really present some game changers on the competitive advantage side.

With that, I yield back.

Ms. BROWN. Thank you.

Mr. Cao?

Mr. CAO. Thank you, Madam Chair, for holding this important hearing today. I have to say that I am a very big supporter of the high-speed rail project and I believe that high-speed rail is part of the solution for modernizing transportation in the United States. Too many communities are on the verge of a level of connectivity that would bring together economic opportunity while at the same time reduce impacts on our environment.

This is especially the case in Louisiana, where we have been working on developing a rail system for decades. Local, State, and Federal officials, particularly between our major corridor of Baton Rouge and New Orleans, realize the economic significance a multi-State southern rail corridor would bring to our area. The proposed project of the southern corridor would extend from Houston, Texas through Baton Rouge, through New Orleans, to Atlanta, and I believe that this project will provide a huge economic boost to the region, as well as to the great city of New Orleans that I represent.

I was thoroughly disappointed when my State failed to file a track 2 application this past month. We worked very hard to secure the support for the project. We worked to get the municipal governments, as well as the parish governments, to support the rail project at a time when the State does not have the money to do so. But besides that particular fact, I hope that there will be future and continuous funding for the high-speed rail project because I believe in this development and I fully support the implementation, as well as the expansion, of other projects in areas that are in need of high-speed rail.

Thank you very much, Madam Chair.

Ms. BROWN. Ms. Markey?

Ms. MARKEY. Yes. Thank you, Madam Chair, for holding this important meeting. I also do believe that high-speed rail is an integral part of this Nation's future.

I have joined several of my House and Senate western colleagues in supporting a high-speed intercity passenger rail program grant application that would conduct a feasibility study for a high-speed rail corridor between El Paso, Texas, and Denver, Colorado. If you look at a map of the designated corridors, the intermountain west, which is growing rapidly—a lot of our population growth in this Country is in the west—but the intermountain west is completely left out of the high-speed rail system. And in a region with burgeoning development and population, a high-speed rail corridor would provide for both efficient and environmentally friendly transportation options as we continue to develop in this area.

Currently, going from El Paso to Denver, a traveler must first go either to Los Angeles or Chicago and change trains. The existing rail lines in the area—the California Zephyr, Sunset Limited, and Southwest Chief—could be connected by a north-south high-speed rail corridor.

High-speed rail in both the west and in other parts of the Country has great potential to spur both job creation and economic growth. I look forward to hearing from our witnesses today and fur-

ther discussing the potential that high-speed rail holds for the Nation.

Thank you again very much. I yield back, Madam Chair.

Ms. BROWN. Mr. Schauer.

Mr. SCHAUER. Thank you, Madam Chair. Thank you for holding this hearing. I was very pleased to have an opportunity to serve on this Subcommittee, primarily for the purpose of advancing high-speed rail as a national priority. I was also proud to support the American Recovery and Reinvestment Act that included an unprecedented investment in high-speed rail in this Country.

I represent the State of Michigan; in the State legislature worked on supporting Amtrak and passenger rail, and even supported the Midwest high-speed rail strategy. Fortunately, my State has been a leader and the Midwestern States, including Michigan, have submitted an aggressive application for high-speed rail stimulus dollars. My district, which is southern Michigan, includes two Amtrak lines, which both would be converted into high-speed rail lines; one is the Wolverine line, which goes from Ann Arbor on the eastern part of my district through Battle Creek on the western part of my district on the way to Chicago. The other is the Blue Water line that originates in Port Huron, goes through Battle Creek and Eaton County to, ultimately, Chicago.

This is a jobs issue for my State and for our Country. We will put people to work and spur economic activity. We will immediately put people to work through improving our tracks, our signaling, and our rail infrastructure. We will put people to work by building high-speed rail engines, cars, and, in Michigan, I hope we can at least build components for those. We will provide an economic boost to communities along those high-speed rail lines, like many, and some of which I have mentioned already in my testimony.

And this hasn't been said. Investing in high-speed rail sends all the right signals to knowledge-based workers in those knowledge-based jobs we are working hard to create, and to new technology knowledge-based companies that we are creating throughout the Country and we are creating in my district in Michigan. So I am very excited about the testimony we are about to hear and the steps we can take to invest in high-speed rail in this Country, and I yield back, Madam Chair. Thank you.

Ms. BROWN. Thank you.

Ms. Richardson, and then we will proceed. Ms. Richardson?

Ms. RICHARDSON. Thank you, Madam Chair. First of all, I would like to say, for those who are here present, that they should know that our Chairwoman, no one advocates harder and stronger on rail issues in this United States Congress than Chairwoman Brown, whether it is talking about stimulus or wherever it is. Even just with Secretary Napolitano she was advocating on this issue. So we should know that we are in good hands and she is helping us move forward into the future.

Let me say that the United States has fallen tragically behind in the development of high-speed rail. While we consider $8 billion was put in the stimulus and many of us were surprised and excited about it, as has been reported, it is alarming when you consider our other neighboring countries when you look at Europe. Just re-

cently this year, I had an opportunity in South America to ride on the high-speed rail, and it is really embarrassing to be an American citizen where we lack this basic form of transportation.

While we were excited and jumped up and down about $8 billion, when you consider, for example, China intends upon investing $730 billion—that is, again, $730 billion—by 2012, we have a much longer way to go.

High-speed rail will, yes, assist us; it will help us with travel; but it will also help us with jobs, as some of my colleagues have alluded to. But it will also help us with air quality, congestion relief on our roadways and in our skies, reducing greenhouse emissions, and it will, most importantly, enhance the mobility for people living.

Now, just on October 9, 2009, The Wall Street Journal had a report and it was listing information from the Brookings Institute talking about considering the Country's busiest air routes and a call for high-speed rail, and on that, the State that I am from, California, three key sections were listed in that top ten. Consider 6 million people fly between Los Angeles basin and San Francisco basin each year. This is something that we cannot wait; we must make the investment. I don't want to hear anything about a second stimulus; we need to put the money into our roads and our infrastructure and get people moving.

So I welcome the discussion today and I welcome us taking big steps forward.

Thank you, Madam Chairwoman.

Ms. BROWN. Thank you.

As I indicated, there is a lot of interest. Mr. Teague?

Mr. TEAGUE. Yes, thank you, Madam Chairwoman, for holding this meeting and letting me speak here. I just want to concur with everyone else here about how important I think it is that we have high-speed rail to remain competitive and also for our national security. But I especially would like to associate myself with the remarks made by Ms. Markey from Colorado, because I think it is terribly important that we have the rail service between El Paso through Las Cruces and Santa Fe, New Mexico to Denver.

As has happened so many times in the past with the interstate system and communication systems, I am scared that the intermountain region will be left out and not have much chance to participate. I think that it is very important not only that we have it for the Country, but especially for the intermountain region north out of El Paso.

Thank you.

Ms. BROWN. Thank you.

Now, the last one, Mr. McMahon.

Mr. MCMAHON. Thank you, Chairwoman Brown and Ranking Member Shuster. Thank you for holding this hearing on clearly what is to all of us an important issue. And, of course, to the Chairman of the overall Committee, Chairman Oberstar, thank you for your continued leadership in helping us get the infrastructure and transportation of America back to where we have to get it.

As many of you know, I represent Staten Island and Brooklyn, New York, and each week I travel by Amtrak back to my district from Washington. I consider myself lucky to be able to do that. Rail

is no doubt the fastest, most energy efficient, environmentally responsible way to travel between our larger cities; it takes cars off the roads and helps relieve air and traffic congestion. It is reliable and relatively comfortable. Amtrak has made great strides in upgrading the northeast corridor and other lines throughout the Country, but we are far, far behind the rest of the world when it comes to high-speed rail and it is time for that to change.

We need only to look to our competitors in Europe and Japan and in China to see the possibilities that high-speed rail can bring to our own economy and to the convenience of passenger travel in the United States. Think about it, we have the technology to make trains run at a speed of over 200 miles an hour. At that speed, it would take just over an hour to get from Washington, D.C. to the heart of New York City. Japan and Europe have had high-speed trains for decades, but we are now just starting to get in the game. China is in the process of building a train line, scheduled to be ready by 2013, that can travel between Beijing and Shanghai in less than four hours, even though the distance is almost 700 miles.

America does not need to settle for a second rate rail network. America deserves the best passenger rail network in the world, and we can do our part in Congress to make this a priority. Both the 2008 Passenger Rail Initiative and Improvement Act and the American Recovery and Reinvestment Act that we passed in February of this year made some strong down payments for high-speed rail. The $8 billion provided in the Recovery Act is a great start, but we to think much more strategically about the benefits of high-speed rail and what it can bring to the Nation as a whole and make our investments accordingly.

So I commend you, Chairwoman Brown and Chairman Oberstar, for your tireless advocacy to give our Country a truly first-class integrated high-speed rail transportation network. The proposed framework for the reauthorization of the surface T-bill will provide $50 billion for high-speed bill, which would help us catch up to where we should be. We look forward to working with you all under your leadership, Chairwoman Brown, and all of our colleagues to give America a top-notch high-speed rail system. Thank you.

Ms. BROWN. Before we go on, the Chair, Mr. Oberstar, of the full Committee, would like to make remarks.

Mr. OBERSTAR. Just briefly to compliment you, Chairwoman Brown, whom I call Ms. Amtrak. She led an unrelenting effort during the years when Amtrak was faced with bankruptcy budgets to keep Amtrak funding alive, did a Harry Truman style whistlestop tour on Amtrak trains to generate support for Amtrak, and her continuing efforts in the Committee as Chair of this Subcommittee are just extraordinary, and we are grateful to you. That is why we are at a point where we can have a hearing on high-speed rail on developments that will happen; not that may happen, but that will happen.

I also want to thank Mr. Mica, who has been a long-time strong advocate for high-speed rail, whether it was Maglev or TGV or Talgo technology. He has been a champion and he was a principle reason we are able to get the Amtrak authorization bill through to

signature by President Bush in the last Congress, for which I will always be mindful.

But just one thought. This is back to the future. Back to 75 years ago, when trains traveled faster moving passengers than they do today. We have to do better than that. That the Burlington Railroad—it wasn't called that in the time—but their Zephyr trains and the Chicago and Northwestern trains moved between the Twin Cities in Chicago at over a mile a minute. There were passenger trains steam powered that moved at 100 miles an hour. There was the Pioneer Zephyr that set a speed record between Chicago and Denver, 1,015 miles, in 13 hours and 5 minutes, 77 miles an hour.

The standard we are setting today is 79 miles an hour as the threshold. That is an ion ago; that is when I was born, for gosh sakes. We ought to do better. That is why we are here and I thank the witnesses and I thank the Members for their support.

Ms. BROWN. Thank you, Mr. Chairman.

Now, before we introduce the first panel, I want to thank Mr. Tiberi for being here at this hearing this afternoon. You want to introduce one of our witnesses.

Mr. TIBERI. Thank you, Chairwoman Brown and Chairman Oberstar, Mr. Mica, and Members of the Subcommittee for allowing me to testify before you today for the purposes of introducing Mr. Michael Pracht, President and CEO of US Railcar.

I applaud you for including Mr. Pracht as part of the hearing today. He has years of experience in the rail industry. In addition, his company represents the future of railcar manufacturing in the United States.

US Railcar is considering proposing to build a diesel multiple unit manufacturing facility in Gahanna, Ohio, in the heart of the congressional district that I represent. It would be the first of its kind in the United States and would represent an historic opportunity for the United States. The facility would bring new jobs to Ohio.

As Congress continues to discuss the opportunities and challenges of expanding passenger rail infrastructure, we must also discuss how to establish a railcar manufacturing base in our Country. I am proud of the work being done by Mr. Pracht and US Railcar to achieve this role, and thank you for giving me the opportunity, Madam Chair, for introducing Mr. Pracht before you today. Thank you.

Ms. BROWN. Thank you. Thank you for your patience. Now the first panel, please.

Thank you and thank you for your patience. I am pleased to introduce our first panel of witnesses. We are starting out with Mr. Joseph Szabo, who is the Administrator of the Federal Railroad Administration. We have Ms. Susan Fleming, Director of Government Accountability Office; Mr. Patrick Simmons, who is the Rail Division Director of the North Carolina Department of Transportation. He is testifying on behalf of the American Association of State Highway and Transportation Officials. And Secretary Busalacchi, Secretary of the Wisconsin Department of Transportation, on behalf of the States for Passenger Rail Coalition.

Welcome, and we will start with Mr. Szabo. Good seeing you again.

TESTIMONY OF THE HONORABLE JOSEPH C. SZABO, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION; SUSAN FLEMING, DIRECTOR, GOVERNMENT ACCOUNTABILITY OFFICE; THE HONORABLE FRANK BUSALACCHI, SECRETARY, WISCONSIN DEPARTMENT OF TRANSPORTATION AND CHAIR, STATES FOR PASSENGER RAIL COALITION; AND PATRICK SIMMONS, RAIL DIVISION DIRECTOR, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, ON BEHALF OF AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

Mr. SZABO. Good to see you. Chairwoman Brown, Ranking Member Shuster, and Members of the Subcommittee, I am honored to appear here today to discuss one of the most significant initiatives of the President, Vice President, and Secretary, the development of high-speed rail in America. This initiative builds upon the foundation laid last year by Congress in the Passenger Rail Investment and Improvement Act.

Our Federal investment in transportation over the last 60 years has been focused primarily on highways, aviation, and transit. Investment in high-speed rail is an opportunity to bring balance to our transportation network.

Many States have been engaged in planning for rail while they have waited for a Federal partner. When FRA took pre-applications from the States to gage interest in our rail program, we heard from 40 States and the District of Columbia with projects exceeding $103 billion, and interest was from every region of the Country.

Discussions of high-speed rail tend to begin with the fundamental question: What is high-speed rail? Is it peak speed, say, 200 miles per hour? We need to remember that we are about moving people, not just moving trains, so top speed is not necessarily the end-all. I prefer a more market-oriented definition, and that is rail service that cost-effectively provides trip times that are superior to auto or air in a given market. So making high-speed rail a reality, we need to be talking about a range of speed and investment options that each has their own sets of opportunities and challenges.

The President's vision is to invest in efficient high-speed passenger rail networks of 100 to 600 mile corridors that connect communities and regions across America. This aligns well with the DOT's strategic goals that ensure safe and efficient transportation choices, promote energy efficiency and environmental quality, build a foundation for economic competitiveness, and support interconnected livable communities. But while the potential for high-speed rail is great in achieving these goals, so are the challenges in delivering on that potential.

Challenge number one: sustainability and managing expectations. We are committed to making sure the $8 billion are spent wisely, on the very best projects that produce real results. The goal is to ensure the system's long-term viability. The challenge for all of us is to make sure that this program is sustainable for the long-term. The model I like to point to is development of the interstate highway system, a program that took over four decades to complete.

We have to manage expectations. Interest by the States in high-speed rail far exceeds the funds available today, just as it was in

the beginning of the interstate system. But public support for the interstate system didn't wane, because citizens could see early successes and knew that ultimately the interstate system would serve them too. Of all of our challenges, managing expectations may be the most important one for us to address.

Challenge number two is capability of the States. A handful of States have been engaged in railroad issues for many years. Fortunately, we have a couple at the table with us. But, unfortunately, the number of States with the strong and experienced rail staffs capable of implementing complex rail improvements are the exception rather than the rule. And that is why FRA has engaged the States early and often, and is committed to continuing that effort to enhance the ability of States to manage rail projects.

Freight railroad partnerships is another challenge. America's freight railroad system is the envy of the world. But while we build a world-class high-speed passenger rail system, we cannot do that at the expense of degrading our world-class freight rail system. FRA believes there are opportunities to develop partnerships between freight railroads and States to address common interests like requirements for positive train control and safety at highway-rail grade crossings.

Finally, we have safety. FRA's mission is, first and foremost, safety. If high-speed rail is to be successful, it must be safe. Ensuring the safety standards evolve as necessary is critical. FRA has recently made available for comment a draft High-Speed Passenger Rail Safety Strategy, which is appended to the testimony. This Strategy endeavors to achieve uniform safe rail passenger service, regardless of speed.

In conclusion, the FRA of two years from now will be a significantly different agency than what you see today. While safety will always be our most important mission, we will also be playing a leading role in making the investments that position our Country's transportation system for the future. I am incredibly proud to be at FRA today and to have the opportunity to lead the dedicated team through this transformation.

I look forward to a dialog with you on this exciting new initiative. Thank you.

Ms. BROWN. Thank you.

Secretary Busalacchi?

Mr. BUSALACCHI. Chairwoman Brown, Ranking Member Mica, Members of the Committee, my name is Frank Busalacchi. I am Secretary of the Wisconsin Department of Transportation and Chair of the States for Passenger Rail Coalition. I am here today representing the Coalition and appreciate the opportunity to share my views on achieving our national passenger rail vision.

The Passenger Rail Investment and Improvement Act of 2008 and the American Recovery and Reinvestment Act of 2009 provided a policy and funding basis for significant expansion of the Nation's passenger rail network. Through President Obama's Federal 2010 budget request and the action of the House and Senate Appropriation Committees, Congress has shown its commitment to passenger rail. States have seized this opportunity by submitting ARRA passenger rail applications that have far exceeded the $8 billion that

ARRA provided. But the challenge facing us all is to build the right projects, use the available funds wisely, and plan for the future.

When passed, PRIIA legislation employed the New Starts model for funding distribution. However, under that program, funding is competitive on a year-to-year basis and competition among the States for funding would be intense. It doesn't have to be this way.

I strongly urge Congress to adopt the interstate model to build the national passenger rail network. Many States want to develop their passenger rail networks and can support projects on an 80/20 Federal/State funding split, but they need that Federal share.

The Federal Government and the States need to think strategically about expanding the passenger rail network and to work toward a long-term vision. The reality is that States are in different phases of development. A phased approach allows States that are ready to go to construct their projects, while States who are not ready can work on their planning and environmental process with some confidence that they will be able to fund their projects in a later phase.

This issue should be addressed in the National Rail Plan that FRA is developing.

Whether you are building a home, school, or a rail network, you have to know when you begin your planning that you will have the capacity to pay for the project through completion.

The States for Passenger Rail Coalition has been consistent in pursuit of a Federal funding partner that can make a long-term commitment to passenger rail. In our view, elements of a funding policy include: recognition that passenger rail is a critical transportation element; provision of an 80/20 Federal/State funding program to plan, design, and implement passenger rail; provision of an ongoing source of Federal revenue; and establishment of program and funding policies similar to the highway program.

In the Coalition's view, the next surface transportation authorization bill must contain a multi-year authorization for passenger rail funding with a strong Federal partnership so more States can develop and deliver passenger rail service.

Because of the growing interest in passenger rail, States are in fact coordinating with each other now. For example, eight Midwest Governors and the Mayor of the City of Chicago recently signed a Memorandum of Understanding to create a steering group to align efforts as we develop our passenger rail network.

Recently, Wisconsin agreed to buy two Talgo train sets. These 14-car sets will largely be manufactured in Wisconsin, with only 30 percent of the manufacturing to take place in Spain. Wisconsin is investing $47 million in these train sets, with the goal of bringing manufacturing jobs back to the Midwest. To make this happen, train manufacturers need the reliable revenue stream that only a long-term Federal commitment will provide so they can justify their economic investments in plants and equipment.

Since most expanded and new service will run on privately owned freight tracks, capacity is a critical challenge for the States and the freight lines. Coalition States have been successful so far in working together with freight railroads, but fair negotiations with freight rail lines on capacity and other issues are growing and will need to be addressed.

We have all been frustrated with the pace of the surface transportation authorization bill, but its passage is critically important to the Nation if we want to define a policy that will allow the Nation to build a 21st century rail network. For that reason, I think it is imperative that we pass forward with the development of the National Rail Plan. We should not wait another six years to complete that task.

I also encourage the Subcommittee to take another look at the National Surface Transportation Policy and Revenue Study Commission's Passenger Rail Working Group report. It outlines a 50-year vision for what passenger rail could be in this Nation. A copy of the report is attached to my written testimony.

States are ready to be partners in the development and delivery of new passenger rail service in our Nation. We have proven that the partnership works in the highway and transit modes. There are many opportunities and challenges ahead, but I believe that through a solid Federal/State partnership we can maximize this golden opportunity to create a 21st century passenger rail network that will benefit the citizens of our Nation for decades to come.

Thank you.

Ms. FLEMING. Madam Chair, Ranking Member Mica, and Members of the Subcommittee, I am pleased to be here today to discuss funding for high-speed and other intercity passenger rail projects under the American Recovery and Reinvestment Act. The $8 billion provided by the Act for high-speed and other intercity passenger rail projects has focused more attention on and generated a great deal of anticipation about the possibility of developing high-speed rail in the United States.

My testimony has three parts: I will discuss some principles that could guide the effective use of these funds, some challenges that States will need to surmount in establishing high-speed and other intercity passenger rail service, and the nature of our ongoing work on Recovery Act high-speed rail projects.

First, several principles could guide the effective use of Recovery Act funds and any future investment in high-speed rail. These principles include establishing clear Federal objectives and stakeholder roles, clearly identifying expected outcomes, basing decisions on reliable ridership and other forecasts, and re-examining how intercity passenger rail service fits in with other Federal surface transportation programs. While each of these principles is important, the third principle will soon come into play as FRA decides which projects will receive initial Recovery Act funding.

As you know, FRA has received applications totaling almost $60 billion for $8 billion available in Recovery Act funds. Determining which, if any, high-speed rail project may eventually be economically viable will rest on the factors such as ridership potential, cost, and public benefits.

High-speed rail is more likely to attract riders in densely and highly populated corridors, especially where there is congestion on existing transportation modes and where it compares favorably to travel alternatives in terms of door-to-door trip times, price, frequency of service, reliability, and safety. Costs largely hinge on the availability of rail right-of-way, land use patterns, and a corridor's terrain.

To stay within financial or other constraints, project sponsors typically make tradeoffs between cost and service characteristics. We are pleased to note that FRA's notice of funding availability of high-speed rail projects generally asks applicants to address those factors.

I will now turn to my second point. Once FRA chooses projects for funding, project sponsors face several significant challenges. These include securing the significant up-front investment for construction costs; sustaining public, political, and financial support; and resolving outstanding liability issues.

We found that in other countries with high-speed intercity passenger rail systems, the central government generally funded the majority of up-front costs of high-speed rail lines. The $8 billion in Recovery Act funds represents a significant increase in Federal funds available to develop new or enhanced intercity passenger rail. This amount, however, represents only a small fraction of the estimated cost for starting or enhancing service on the federally authorized high-speed rail corridors.

Furthermore, the challenge of sustaining public and political support and stakeholder consensus is compounded by long project lead times, the diverse interests of numerous stakeholders, and the absence of an institutional framework for coordination and decision-making.

Finally, several State and industry stakeholders have told us that outstanding questions about liability coverage for passenger rail providers on freight railroad tracks is a major barrier to entry for service providers and for host railroads.

Moving on to my last topic-- our ongoing Recovery Act work on intercity passenger rail projects-- our work is focused on determining how States that have recently initiated passenger rail service have met these challenges, how the rail industry can accommodate this increased investment, and how FRA is planning to oversee the use of Recovery Act funds for intercity passenger rail service.

We are in the beginning stages of our work and plan to report on these issues early next spring. We would be pleased to discuss our work with you or your staff as we progress.

In conclusion, the infusion of up to $8 billion in Recovery Act funds is only a first step in developing potentially viable high-speed passenger rail projects. The principles we have identified can be applied to promote the effective investment of Recovery Act and future Federal funds for these projects. Surmounting these challenges will require Federal, State, and other stakeholder leadership to champion the development of economically viable high-speed rail corridors and have the political will to carry them out. They will also require clear, specific policies and delineations of expected outcomes and objective realistic analysis of ridership costs and other factors to determine the viability of projects and their transportation impact.

Madam Chair, this concludes my statement. I would be pleased to answer any questions you or Members of this Subcommittee may have.

Ms. BROWN. Thank you.

We are going to hear from Mr. Simmons, then we will have questioning after we have five votes.

So, Mr. Simmons, we are going to hear from you and then we will go to questions and answers when we get back.

Mr. SIMMONS. Thank you, Madam Chairman and Ranking Member Mica and Members of the Committee, for this opportunity to be here today. I represent the American Association of State Highway and Transportation Officials today. That is away from my daily job as directing a rail division at the State level. We interact there with freight and passenger interests; we manage safety programs; we conduct industry inspections; we partner with Class I railroads, Amtrak and short lines, to make economic development opportunities occur in our States around the Country. North Carolina is the lead State in developing the federally designated Southeast High-Speed Rail Corridor which we refer to as SEHSR.

Today, my boss, Gene Conti, Secretary Conti could not be with the Committee, so he asked me to stand in for him. Secretary Conti chairs the Standing Committee of rail transportation officials across the Country. Through AASHTO, we advocate for improved transportation policies and we share with one another; we provide each other with technical assistance.

This is my third time this year to appear before this Subcommittee. Each time we have had a valuable dialog, we have had constructive engagements on the issues, and it has really been a learning experience for me.

As I prepared testimony, I refreshed myself by looking at the vision for high-speed rail expressed by President Obama. There, he identified high-speed and intercity passenger rail, and we have interest across the Country in that. Of course, with the new express, the higher-end projects of 150 miles an hour and above, there are a number of emerging and regional corridors around the Country looking at top speeds of 90 to 110 miles an hour, and then there are projects that are looking to get into the game, States that do not have service or are looking to upgrade reliability for conventional operations.

That is really the last time I am going to mention speed itself, but I am going to refer to mobility and travel time.

The U.S., particularly FRA, has a tough job. I can't tell you how refreshed I am to have completed the task of submitting our application, and I know that my colleagues around the Country also put forward their best efforts. It will be tough for Administrator Szabo and his staff to judge these efforts. We are pleased, as States, to partner both with the States for Passenger Rail and through AASHTO to compliment the agency and the work that they are now doing.

Last week, in North Carolina, we had the announcement of another factory, one that we had invested a lot in as a State, and it closed, and that represented 1,000 jobs that went away. That hurts anywhere that happens, but clearly the main opportunity for the Reinvestment Act is to create jobs. We need that in our State; we need that in States across the Country; we need that across our Nation.

We also need to partner to make capacity investments. Prior to the downturn in the economy, passenger service across the Country

suffered from poor on-time performance. It did so because we didn't have the capacity in our national network. These investments and partnerships with the freight railroads can help ensure mobility for freight and passenger services. Now is the time to put people to work making meaningful, long-term infrastructure investments.

High-speed rail is a lead policy element; it will help guide our transportation future, but it challenges us also to consider energy, the environment, and land use in putting forward these projects. I challenge the Committee to also think a little more broadly, rather than a single project. A single project would be a lovely signature project for our Country, but it will not recover the Nation's economy, nor will it foster partnerships across the Country that will leverage mobility.

Our State DOTs are poised on an era of change. Our department is the second largest highway department in the Country, but we now need to build broader mobility options in transit and with rail. We will need to broaden our partnerships with the freight railroad companies to improve both passenger and freight throughput. That is important. PRIIA and ARRA are great starts. We know that we need to be transparent in progressing these initiatives, and we need to be prepared to make adjustments as we learn more as we go forward.

All elements of our society will be challenged to grow and to manage the capacity that we have with these opportunities. As States, we need a couple of tools. I want to echo some of what Secretary Busalacchi said about the need for investments in planning funds so that States can help design a national network that will serve our Country well into the future. In addition to the new authority that U.S. DOT has to issue letters of intent for projects to build over a period of time, States will need the program stability and contract authority to be able to deploy this scale of infrastructure improvements.

Thank you on behalf of AASHTO and State rail programs across the State for this opportunity today. States have risen to the challenge and have presented FRA with proposals for real mobility investments, real partnerships, real agreements with our freight railroads across the Country. States are ready to build today and we hope to have the opportunity soon.

Ms. BROWN. Thank you.

We are going to stand in informal recess while we go to vote. We have five votes, then we will start up. Thank you. We will have questions when we get back. Thank you.

[Recess.]

Ms. BROWN. Will the Committee please come back to order? I understand that Mr. Szabo has a plane at 5:30, so we want to start with you with the questioning, and I know my colleague, I saw him jotting down notes quickly when you were speaking on the question of high-speed and what constitutes high-speed. I know there is much discussion, but would you discuss with us what you all visualize as high-speed and what are some of the elements that you are using to make the decision?

I know I had the Secretary, less than a week ago, down in Florida, and he was saying it is on the Web site. Well, would you tell us some of the criteria? Because there is such excitement through-

out the Country. I have been to California, Texas, Florida, Tennessee, and all of the Committee Members. Everywhere I go there is such an interest and one of the things we have to make sure is that we put in a system that really works and the American people can see it.

Most American people—and we can ask this audience how many people have been on high-speed rail. Raise your hand, let's just see. See, this is such an unusual audience. Thank you.

Most people in this Country, when we talk about high-speed, don't know what we are talking about. So, with that, would you answer that question? We have other questions.

And if the other Members don't mind, we will ask him questions and then let him catch his plane. Is that okay with the Committee? Thank you.

Mr. SZABO. I think the first important point to note is that virtually all speeds are eligible under the grant guidance, and if you go back to my written testimony, in the Vision for High-Speed Rail in America that was released by the White House, there essentially are four areas that it talks about, which is conventional rail, which operates in that 79 to 90 mile an hour range; emerging high-speed rail, which are developing corridors of roughly 100 to 500 miles an hour in length, with top speeds of 90 to 110 miles an hour; and then high-speed regional rail, which, of course, is more frequent service between major and moderate population centers roughly 100 to 500 miles apart, with top speeds roughly in the range of 110 to 500; and then high-speed rail express, which is that service between major population centers more in the range of 200 to 600 miles apart, with very few stops, with top speeds in excess of 150 miles an hour.

I think it is real important to note, first off, that all of these speeds and all of these services are important. We talk quite a bit about the European model, and this is in fact the model that is used in Europe and Asia. Not every single train is going 200 miles an hour. It is important to understand how these pieces fit together depending on the market being served, and I like to compare it to our road and highway system, where you have local streets, you have county roads, you have State highways, you have U.S. highways, and then you have the interstate system; and all of them are very, very important components that fit together to make a comprehensive road and highway network. So what we need to ensure is that we build out a comprehensive passenger rail program.

It is also, I think, important to note that quite often your startup is going to be more meager, but will be an important incremental step into the ultimate build-out. For example, if you go back and look at what Spain did, they didn't start out at 200 miles an hour; they started out roughly about 110, 125 miles an hour, with about a half dozen trains a day, and the ridership grew. It was so successful that from there they were able to go up to whatever it is, roughly 20 trains a day at speeds of 200 miles an hour. So it is about what can you most cost-effectively achieve immediately to build the ridership base before you take that next step.

Certainly, I don't want to leave the impression that we are diminishing 150 mile or 200 mile an hour service. Certainly, that is a standard that we expect to be achieved and that we intend to

make happen. But, again, not every train everywhere will be running 200 miles an hour.

The other question that you asked, I think the second part to that, was the criteria that we will be using. As we went through the first round of applications, we put together panels; we gave them a strong orientation, one day of orientation to make sure that all members of the panel were on the same page, understood the criteria, that there was a consistency in how these projects were judged; and then we divided those panels up and, on a random basis, assigned to them applications to review. So nobody knew whose applications from where they were given, it was a lottery.

The approach will be, obviously, similar as we go now into the major corridors. I think we ended up with a dozen panels in the first go-round. Obviously, we won't need that many in this go-round, it will be a smaller handful. But they will be a little bit larger because they are going to need a higher level of technical expertise and we need to make sure that that technical expertise is available to those panels. Quite obviously, it is going to be a longer process, a much more intense process as they take a look at those markets that have the strongest value.

Ms. BROWN. So do you have an idea as to when you all are going to announce the initial rounds?

Mr. SZABO. We strategically chose to hold that. While the work has been done, it really comes back to the comments that you made, that Ranking Member Mica made, and other Members of the Committee about making sure this is done right. You know, it was painful to delay because we had given our word, and it is always very painful not to deliver on your word, particularly when you do have the ability to deliver on your word. But a three month delay or so. We are talking about the birth of a new program, so in the grander scheme of things, to make sure this is done right and that we look at all these applications holistically, to make sure that all the pieces fit together properly, a short three-, four-month delay is minuscule.

Ms. BROWN. Okay. All right, I am going to Mr. Mica.

Mr. MICA. Thank you. A couple of comments. I want to respect your time, but, Mr. Administrator, you heard me talk about the northeast corridor. As you know, that really is the only corridor that Amtrak owns. We have a couple of small pieces, but we have nothing as extensive as that heavily traveled corridor. I always consider one of our most important assets and I always joke about us sitting on our asset. The northeast corridor doesn't have a high-speed designation right now, but you have the ability to designate that and qualify it for some of these funds. What is your thought there?

Mr. SZABO. Well, I think the first and most important point to make is that that designation is not necessary in order to be the recipient of any of the ARRA high-speed grants.

Mr. MICA. So you are saying you can without. I don't want to get you into prioritizing, but certainly when you own that kind of an asset, when it is so critical to transportation and the entire northeast corridor, it would seem that it should be the top of the list. The problem is I heard our commissioner, who is sitting next to you, talk about having a plan. We have designated corridors, but

we really don't have a strategic passenger rail plan. Where would the northeast corridor, you think, fit into a future plan?

Mr. SZABO. Well, I think that is the key second part that I wanted to state. While it is not necessary to have the designation to receive the grants today, the important news is the designations will be better flushed out as we do move forward with our National Rail Plan. FRA is required to deliver to Congress a preliminary draft of a rail plan by this Friday, October 16th. We are on time to do so. In fact, your staff will be briefed on it, I believe, tomorrow.

Mr. MICA. That is on time and will be here?

Mr. SZABO. Yes, sir.

Mr. MICA. Okay. Good. Do you want to give us any preliminary, since it is only a day or two away and we may be gone Friday?

Mr. SZABO. You will get the briefing tomorrow, sir. But, no, that is where we will start flushing out these issues of the additional potential designations, you know, where are the best potential markets; how does it fit together with freight rail. The National Rail Plan is not strictly a passenger rail document; it will be a comprehensive rail document.

Mr. MICA. Well, the other thing you have heard today—well, first of all, $8 billion is a significant amount of money, but in the scheme of these larger investment projects and systems it is not a lot. Even with the $50 billion Mr. Oberstar and I have committed to try to get into the surface reauthorization, $50 billion won't cut it. But what will cut it is leveraging. How do you view leveraging? And we will hear from another panel that leveraging is possible; they do it with other infrastructure projects as much as eight to one, which would give you huge capacity, and you have huge revenues if it is a huge success.

Mr. SZABO. The good news is that the States have the flexibility to choose the provider of their choice. There is dialogue that is going on between the States and various private entities, and certainly we encourage that dialogue.

Mr. MICA. Well, I heard your analogy to the interstate system, and we do have other components in rail in place, but I think it would be beneficial, based on the fact that we really have no high-speed rail system, to have one or two successes not just at the 79 to 90 mile an hour or 90 to 110, but something that would be competitive with the rest of the world and also at least one model that we could show true high-speed service.

Mr. SZABO. Yes. Certainly, we are aware of the need to provide some very real, very tangible success.

Mr. MICA. Quite frankly, Ms. Brown, I can't speak for her, but we are not parochial about this. We are not campaigning for any site. You haven't heard us. We look in our district or our area, and we model pretty much. We are looking for a success for the Country. So we appreciate your efforts and look forward to working with you.

Yield back.

Ms. BROWN. True bipartisan.

Mr. Cohen.

Mr. COHEN. Thank you, Madam Chair. I am going to be quite parochial.

I am from Memphis. Memphis is the transportation hub of the Nation; largest cargo airline, highways, rail yards, Mississippi River. No high-speed rail. Last year, Marion Barry and I worked together and got a portion of a bill passed that would have a feasibility study for the South Central High-Speed Rail Corridor where you go from Little Rock to Memphis. It has been a year and the study has not commenced. Memphis is no closer to high-speed rail service, and it would be a very important thing. We have a hub airline there; people like to come in for that. They like to come and eat barbecue, sing the blues after they watch our football games, and things like that. Can I ask you can you give me any assurances that you are going to get that study commenced and started so we can foresee some high-speed rail?

Mr. SZABO. The good news is that we have requested those resources in the fiscal year 2010 budget request, and if that funding is provided we will in fact provide the study.

Mr. COHEN. For Memphis-Little Rock?

Mr. SZABO. Yes, sir.

Mr. COHEN. Have you ever heard of Alex Chilton? Have you ever heard of the Box Tops?

Mr. SZABO. Yes, I remember the Box Tops.

Mr. COHEN. Well, Alex was stretching me a little bit, but Alex was 18 and wrote that song, number one hit, number one hit, the Box Tops. Give me a ticket for an airplane; ain't got time to catch a fast train; my baby just wrote me a letter.

[Laughter.]

Mr. COHEN. We will write you a new song. Get us a fast train.

[Laughter.]

Mr. COHEN. Thank you.

I yield the remainder of my time.

Ms. BROWN. Mr. Oberstar, how are you going to top that?

Mr. COHEN. Top that.

Mr. OBERSTAR. I don't compose music or lyrics; we compose legislation. Sometimes lyrics can help you move things along. You have a good spirit going.

I know that, Mr. Szabo, you have a time limitation; you have to get underway. The question is the Buy America requirement going to create problems in the development as we move into the implementation phase? Have you evaluated the availability of railcar, locomotive, subassemblies, trucks? Rail is not a problem, most of it is in place, some may need upgrading; switches. Positive train controls are going to be necessary for these high-speed projects, especially where passenger rail must intersect with freight rail that is using the same track or the same corridor. What is your assessment of the availability of the parts, equipment, subassemblies, and other under the Buy America provisions?

Mr. SZABO. When, an absolute goal out of this whole process is to ensure that we reinvigorate domestic manufacturing. Are the Buy American provisions going to be a problem? Absolutely not because they are a requirement that are going to have to be met. We are going through right now the development of a strategy about how we can better bring together both the foreign and domestic manufacturers. The biggest thing that we need to ensure that we reinvigorate domestic manufacturing is knowing that there is going

to be a sustainable long-term program. You are not going to see the investment into plant and equipment if the businessman doesn't believe he is going to get an appropriate return on his investment. So, unfortunately, at this point, so many of the opportunities rest with foreign manufacturers. We need to bring the parties together to make sure that there are joint ventures; to make sure that if it a foreign manufacturer, that is more than just simply assembling the cars or locomotives in this Country, but that there actually is a downstream supply, you know, the suppliers involved, the domestic suppliers——

Mr. OBERSTAR. Well, you are on the right agenda here. I was going to say the right track, but that is stretching things. I am going to send you relevant pages of testimony from hearings I held in 1988 on Buy America in our highway and transit and Corps of Engineer programs. What we found in the course of that set of hearings was that the Federal Highway Administration was in full compliance, 100 percent compliance; every rebar, every I-beam, every guardrail, every fence post was steel made in America.

When we got to the transit program, we found that because of the abandonment of public transit by our fellow citizens from the 1920s through the early post-war era, track was pulled up, locomotives set off, passenger cars were sold to Central and South America. The manufacturing capability went offshore. The only major U.S. component manufacturer was Allied Signal, and they were bring subassemblies in from overseas and assembling them in the U.S. So it was a dismal picture. Not that Federal transit was avoiding the law; there just wasn't a market for those products, for the buses, for the passenger railcars, and for the locomotives appropriate for passenger rail service. Now there is.

Mr. SZABO. That is right.

Mr. OBERSTAR. We have a robust Federal transit program. There are manufacturers for light rail, commuter rail, intercity passenger rail. Bus manufacturers that left have been replaced by those who founded their American facilities and are producing American parts; some imported, but well below the threshold required.

I asked the question because there is some passenger railcar manufacturing capability in the United States, but certainly not sufficient to supply what we hope will be a robust outpouring of projects that you and the Secretary are going to have to decide on in the next month and a half or so, because I want you to pay attention to that. We have American railcar, we have Kawasaki that is located somewhere in the United States; we have Bombardier. Talgo has made a commitment with the governor of Wisconsin to locate a manufacturing facility in Wisconsin should they be awarded a portion of the stimulus to do the Chicago to Milwaukee to Madison to Minnesota segment. There are others.

But we had a problem in the current stimulus with the EPA program, where EPA and the State agencies did not think ahead and anticipate shortage of pumps, because we have a lack of pump and valve manufacturing capability in the United States. A good many of those products are produced in Canada. We had to work out exceptions. That delayed the implementation of the EPA portion of stimulus and many States, about 20 States, have nothing going, have no contracts underway.

So I don't want to see that happen. I want you to take a close look at that aspect of it and make sure that when you award these projects, there is going to be compliance and that is not going to be an impediment.

Mr. SZABO. Chairman, the good news is that the Secretary clearly shares your point of view and has made that message very clear to us, and we are in fact trying to get ahead of the curve on this. Again, we are just starting our strategy now on the format that we are going to use, but we are probably going to call some type of summit with the manufacturers and suppliers. And, again, the Secretary has made very clear that he expects a downstream benefit on this of all the suppliers that are providing carpeting for the railcars, leather for the seats, you know, light bulbs, whatever the components are.

Mr. OBERSTAR. That is very good and you tell the Secretary I sent my compliments. He started out well. He started his career in Congress here in this Committee.

Is one of the considerations in making these awards under stimulus going to be sustainability of the project?

Mr. SZABO. Absolutely.

Mr. OBERSTAR. And by that what do you mean?

Mr. SZABO. Well, obviously, that is exactly the type of criteria that we are going to be looking at and the type of merits that we will be judging the projects on. Again, we have to know that what we do here supports the long-term vision, and that is why the evaluation criteria that we will be using is not only the obvious, like the transportation benefits, the energy efficiency and livable communities, but then the applicants' track record of comparable projects, the thoroughness of their management plan, the reasonableness of their financial estimates, the quality of their planning process, a detailed review of their financial plan. Clearly, we understand that it has to be sustainable. Everything we are talking about doing is based on that long-term vision.

Mr. OBERSTAR. But also be careful about the legacy of the previous administration in the transit arena, and their cost-effectiveness index that was invented out of whole cloth for the purpose of denying, rather than affirming, transit projects. So don't get caught up and deterred by those invalid premises.

Mr. SZABO. We have spent a great deal of time studying the transit process to learn both from best examples as well as, perhaps, mistakes.

Mr. OBERSTAR. Are you going to—you have selected four tracks. Are you going to be making simultaneous awards or are you going to do track one, and then two, and then three, and then four? How are you going to sequence this process?

Mr. SZABO. We would anticipate at this time that it will be more comprehensive announcements, but it won't be sequenced; we will come out with comprehensive announcements.

Mr. OBERSTAR. Okay. There are lots of other questions I have, but those suffice for the moment. Thank you for tackling this assignment and getting it underway very expeditiously.

Mr. SZABO. We are enjoying the challenge.

Mr. OBERSTAR. Listen to Mr. Busalacchi, though, he will tell you a lot about how to do things right.

Ms. BROWN. I understand you only have about five more minutes.

Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Madam Chair.

Mr. Szabo, so glad to see you again. My questions are in regard to the efforts that California is making. I am sure you heard my comments before we recessed. But is there anything in your plan to require the rail authorities involved to mitigate not only the noise, the congestion, the safety impacts of the high-speed rail? That is question number one. And how do you plan to work with those communities or are you only going to work with the States?

Mr. SZABO. The key is the important news and the good news is that this essentially is what gets flushed out during the process and the development of the environmental impact statement, and that is the very reason why that document is required to be created, that you must go in and work with the communities and understand the effect upon them, the effects upon them on noise and analyzing various routes and understanding the effects, pros and cons, of each of those routes. So that is an important part of the process; it is something that Federal law requires. We require it and we review it.

Mrs. NAPOLITANO. You will be working with the communities themselves also?

Mr. SZABO. We won't be directly involved with the communities per se, but, again, we will be reviewing the work that the States do in developing their EIS and make sure that it is a document that is going to be legally supportable so there aren't suits from the communities.

Mrs. NAPOLITANO. Great. The fact that many of the railroads are opposed to local government taking the right-of-ways for the high-speed rail, in other words, to build that extra track for dedicated service, because it does hinder their freight movement and that is where their profitability is. So how do we address these concerns and how do we implement what Secretary LaHood informed me that Chicago and—I forget what other city he mentioned; it escapes me at my age—that are working at looking at the tri-methods that we need: goods movement, mass transit, and high-speed rail?

Mr. SZABO. First off, I think it is important that we keep in mind that the rail right-of-way in most cases is a privately owned asset by a private for-profit corporation that answers to a board of directors and to shareholders, so we have to understand that it truly is their property. However, I do think we have the opportunity—it really comes back to what I talked about in my testimony—to form partnerships, and it has to be partnerships that achieve win-win solutions. The worst thing we could do is to advance the President's agenda for high-speed rail to get passengers on trains at the expense of forcing freight off the rail and onto the highways and creating even worse congestion and pollution and use of fuel.

So we are going to have to find the careful balance. I think it will come in a couple places. First off, we will touch on this in the development of the National Rail Plan, but I also think probably more important than that, it will be a part of the work that FRA continues to do with the State DOTs to strengthen their level of expertise, their level of experience in negotiating these types of agree-

ments. You know, you tend to find less problems in those States where there is a mature relationship between the freight railroads and the rail bureau of the DOT, and it is a lot more challenging for a new State that is just venturing in and perhaps dealing with that freight carrier for the first time and doesn't understand all of the issues. They are pretty complex.

Mrs. NAPOLITANO. Right. But understand that in Los Angeles County, which is over 12 million people, there is no room left, no open land. So there will be a lot of need of rail separation, and the railroads will not support very much that financially; it is only about three percent. So that leaves the locals and the State and the county and others to come up with the funding. That is a big issue.

Mr. SZABO. Yes, it is, and it is one we have to continue to work through.

Mrs. NAPOLITANO. Thank you, sir.

I yield back.

Ms. BROWN. I have a couple of quick questions that I want to run by you before you leave. I understand you have only one minute so, let's see how we are going to do that.

[Laughter.]

Ms. BROWN. In the Passenger Rail Investment Improvement Act of October, 2008, Congress attempted to address the issue of how railroad labor laws would be applied to workers on passenger rail operations and infrastructure such as signalmen who benefit from grants issued to the States. Can you tell me how the FRA has interpreted the Act and how these labor laws will be applied?

Mr. SZABO. Yes, Madam Chair, we believe the law is very, very clear. The intent of Congress is very, very clear. In almost all circumstances, if you accept FRA funding for the purpose of pursuing high-speed or intercity passenger rail, you will be deemed a "railcarrier" under 49 U.S.C. 24405(b), and fall under all of those Federal laws that apply to railroads and rail workers, the Railroad Retirement Act, the Railway Labor Act, and any of these other applicable Federal laws. And certainly we intend to make that a part of our grant agreements, to just reinforce what the law already states.

Ms. BROWN. One last point, I note that you are not giving us a drop dead date, but we are going to adjourn in, I guess, some time before Christmas. Will you make your announcement before Christmas?

Mr. SZABO. No. I am fairly certain it will not come until after the first of the year. I would rather promise little and deliver much than make a promise I can't keep. So I think it is safe to say after the first of the year.

Ms. BROWN. Well, thank you very much, and I understand that maybe Mark Yachmetz will take your place. Thank you very much, Mr. Administrator. I just want you to know that there is, if you look around in the room, a lot of interest.

Mr. SZABO. Yes, there is.

Ms. BROWN. There is. You are a very popular person right now.

[Laughter.]

Ms. BROWN. Okay, we have some other questions for the other panelists.

The first question I want to ask you is I have heard, and I know you have, that there is a lot of discussion concerning planning grants, and that we didn't have enough in the pipeline. What is FRA doing to address those needs?

Mr. YACHMETZ. First off, you are correct. There was one of the oversights in the Recovery Act was planning was not an eligible expense, and so all we had was the $9 million in our fiscal year 2009 appropriation. We have been working with the appropriators to make sure that that oversight is addressed in the 2010 bill, and I believe both Houses have significantly increased the amounts of funds. I believe the House is at $50 million for 2010. We would actually like to see it a little bit higher.

Ms. BROWN. Okay, okay. Thank you.

Next question is for Mrs. Fleming. In your written testimony, you mentioned that outstanding questions on liability coverage for passenger rail providers and operators on freight rail tracks is a major barrier to inter-service providers for the host railroads. What recommendations do you have to minimize the barriers that liability issues may cause between State and host railroads in efforts to expand high-speed passenger rail? And that is really shaping up to not just high-speed, period, inter-city rail.

Ms. FLEMING. Right. Well, as you know, this is a huge, complex issue and negotiations can take many years. There is really no cookie cutter approach. What our work has found is that it really varies depending on the freight railroad and the commuter rail, the who owns the track, the speed of the trains, and when they would be running. So there are a lot of different nuances. But, we have found that it is in the mutual best interest for both the freight and other, the commuter rail or in this case it would be high-speed rail projects, to work together to resolve these.

While it takes a long time, they eventually do come up with a mutually beneficial agreement.

Ms. BROWN. What have we learned from other—you have done extensive studies on foreign high-speed rail systems. What can you report back to us about lessons learned as we develop? I mean, because we are at the baby stage.

Ms. FLEMING. Well, there are several. In the countries we visited-- which were Spain, France and Japan-- there was a commitment and a priority to develop high-speed rail. And that commitment, basically, started out as a financial commitment. So the majority of up front construction costs were paid by the central government, often without the expectation that its initial investment would be recouped.

This model basically, as well as an integrated intermodal approach, and taking the time to develop a vision and plan for high-speed rail, as well as with the goals and objectives, very much led to the successful development of high-speed rail.

A second lesson learned is that in many of these countries, the initial investment was to build a trunk line between two intercity pairs with dense populations, and an existing market of intercity travelers in other modes. These lines would be like Madrid to Seville and Tokyo to Osaka. These initial lines have proven to be very viable, so much so that the revenues have been sufficient to cover their operating costs, as well as some of the initial investments.

I think our last lesson would be that high-speed rail systems are reliable and safe, and are very often designed to be time and price competitive with other modes.

Ms. BROWN. Mr. Simmons, do you want to respond to that?

Mr. SIMMONS. Yes. One of the observations that we have of the development internationally of high-speed rail are several. First, they have been at it for decades, and so there is a well-developed industry to design and implement these services. A second point, which is often missed, is that particularly in Japan and some of the other places, that they fully developed their base railway system first, and then deployed the dedicated true high-speed lines.

I think we should learn from the lessons that we see from abroad, recognize it is going to take us a while to overcome a 40 or 50 year head start. I think we can make some constructive investments, and I will give you an example of one that we are working on.

And it is that today, our top service speed is 79 miles an hour, and we can't go faster until we make some improvements to the railroad, but primarily until positive train control is implemented. Then we will be able to hit top speeds of 90 to 110.

As we have designed our corridor, and I believe as other States have designed their corridors, they designed them for even higher speeds, but we need to wait on technology and policies to change. So that with our particular corridor, you will later be able to go faster on the same tracks within the same corridor, but with a different machine, an electrified locomotive.

So I think one should observe what is happening around the world, learn some of those lessons carefully, figure out how to apply them, learn from some of the technology that has been developed elsewhere that can help us here in America, and figure out how to do it in our mixed freight and passenger environment.

I think we have some good opportunities to do that.

Ms. BROWN. I have been on several of the systems, but I have never been on a high-speed system that interact with the freight. So I would like to know, are we looking at separate tracks? We certainly have to be looking at positive train controls.

One of the things that we have right here, every year we go on a trip on the train and we share, of course, with the freight, and it is kind of embarrassing that we are, we go on a two-hour trip and we get there four hours late, but we are sharing the track.

So these are some of the, I guess Mr. Yachmetz, you can respond to that. As we move forward, when we are really talking about high-speed rail, are we talking about separate tracks?

Mr. BUSALACCHI. Well, I think——

Ms. BROWN. Well, I mean, I would love to hear from all of you on that subject area.

Mr. BUSALACCHI. Well, let me just say, I think Pat was right on the mark in what he said.

Ms. BROWN. I can't hear you, Mr. Secretary.

Mr. BUSALACCHI. Yes, I did that. I thought I did that. Can you hear now?

Ms. BROWN. Yes, sir.

Mr. BUSALACCHI. Okay. What Pat said is absolutely true, but I think we have to be careful about high-speed rail versus the reg-

ular rail. I can speak for what we do in our State; we will deliver service on a host railroad. We work off of the freight track.

Now, is that a good situation for us? For us, it works and it works very, very well. The key is that our trains are 90 percent on time. We have a great working relationship with Amtrak. We have a terrific working relationship with Canadian Pacific. So in our particular situation, it does work.

We seem to get in this push and shove about high-speed versus the 100 or 110 mile per hour service. And I believe that, we need to walk, like Pat said. We need to walk first, and work our way into this before we really get into the true high speed.

The concern that I have, and it has been my main concern, is that we are spending a lot of money here, and the public is looking at all of us. We understand this stuff, all of us here. We know what is going on. But the average citizen, well, I am not so sure. And we have to make sure that when we spend these dollars on passenger rail, that we do it right.

This is going to be the key here, that we do it and we do it right. We need to listen to the experts, FRA. We need to listen to the AAR. And together, we need to work these situations out, Madam Chair. We can do it. I am not saying that we can't. The worst thing that can happen is that these trains are not on time. If we get into that situation where people are sitting at these stations and they are waiting and waiting and waiting, people are going to abandon these trains. They are going to go back to their cars. That is not what we need to do here.

And that is why Pat and I talk, coming out of the gate, we need to do it right.

Ms. BROWN. Well, if you listen to the testimony that I have had from the international people, one of the things at the top of the list is on time, capacity, on time, I mean, those are major factors. But we have got to throw ridership. I mean, because we cannot have a train and just, we have got to make sure the people are on the train.

And I guess we are talking about a combination. Maybe we are talking about two or three corridors that are high speed, and then we are talking about more speed. I mean, you look at some of the areas like in the Northeast Corridor, I mean, some people would like to see them going 200 miles an hour. Well, maybe that is not the best thing. Maybe the best thing is that we can improve some of those tracks and some of those bridges and some of those tunnels, and be able to go from Washington to New York in two hours. I mean, that might be a good thing.

Mr. Yachmetz?

Mr. YACHMETZ. Well, to the question that you raised about whether at some point we need to have the high speed on separate tracks, yes. At some point, there is. High speed, fast trains raise safety issues, reliability issues, capacity issues. And so at some point, there will be a need for either a separate track on the same right-of-way or an all new right-of-way.

And those decisions will be driven by, a lot of the analysis of how much freight traffic is on there right now; what is the terrain; what are the other issues that would affect these decisions. And I think that is part of the good planning that needs to be done coopera-

tively between the freight railroads, the States, the passenger railroads, and FRA.

And we have done this on some corridors already, and we will assist the States and other corridors in doing these plannings.

Ms. FLEMING. Madam Chair, may I add to that as well?

Ms. BROWN. Yes, please.

Ms. FLEMING. One of the things that we found that in order to be competitive with other modes that time is of the essence. In order to be time competitive, it is likely that high-speed rail would have to be on dedicated track.

Ms. BROWN. I didn't hear you.

Ms. FLEMING. Yes. It is likely that high-speed rail service would have to be on dedicated track, again, to be time competitive with air or highway.

And the other factor is I think that when you are talking about the alignment, you would want the alignment to be fairly straight, and you can achieve the higher speeds. So that is also likely to require purchasing rail right-of-way, which as you know can be very costly and problematic.

Ms. BROWN. Do you see, Ms. Fleming, that we are trying to compete with the air service? I don't necessarily even view it that way. I mean, I don't know what we are trying to do as we develop it, but maybe we are trying to not clog up some of the air space between here and there.

Ms. FLEMING. I think that gets to one of our points, which is that it is very important to really lay out a vision for the national high-speed program, particularly as it fits in with our whole transportation system. And it is going to be very important that we lay out the goals and objectives we are trying to achieve with our high-speed rail project. And then again, identify—and I am looking to FRA—to identify the expected outcomes, and then to put together some metrics so you can see what progress we are making toward achieving those goals.

So for us, that is the starting place for an endeavor of this magnitude.

Ms. BROWN. Mr. Simmons?

Mr. SIMMONS. Yes, Madam Chair, thank you.

I just wanted to say I would applaud your efforts to join with us to get beyond the embarrassment of the delayed train. It really is a signal that we don't have the capacity that we need to build, and it is more than embarrassment. It is a cost to our society, the cost of congestion is a true expense.

Now, we can get beyond that. We get beyond that through partnerships with the class one railroads to add the capacity that is necessary, to have the throughput and the network that can do that. And my personal definition of a partnership is when I am willing to reach in my pocket and you are willing to reach into your pocket and make an investment that we can both honor and feel good about and use.

And I know that there are those opportunities around the Country today.

Ms. BROWN. I think as we move forward, it is the vision that we need to work on together, and it has truly got to be a partnership between the Federal Government, the States and the local, and pri-

vate. So it is a marriage, and it is putting all of these stakeholders together.

Ms. Napolitano, you had additional questions?

Mrs. NAPOLITANO. Yes, ma'am. Thank you, Madam Chair.

And great interest in GAO's reported, GAO has reported extensively on foreign high-speed rail systems. And there are lessons that you have touched on. But is it true that most of those systems are built on government-owned land, so they can create additional track lines if necessary or be able to do all the things they need to do?

So I am not quite sure, and this is, I guess, for Mr. Yachmetz, is whether or not this is being part of the consideration of being able to help communities be able to work on.

Mr. YACHMETZ. If we are looking at very high speed, the equivalent of what you find in Europe or Japan, they have gone off and generally bought new right-of-way, or acquired new right-of-way under their country's laws to develop their systems.

If you look at the European model, the European model is basically new rights-of-way right until you get to the outskirts of town, and then shifting over to the historic rail routes into town. And the Japanese model was sort of building their system in what was then the suburbs, but is now the new center cities of many of the communities in Japan.

We see there being a mix. We see, as an example, California high-speed rail, most of its system would be acquired on new rights-of-way, but as an example, between San Jose into San Francisco, they would be sharing the current right-of-way with CalTrans. The services that are in, say, from here to Charlotte would, at least initially, be on existing freight railroads right-of-way except in a large part of North Carolina where the State actually continues to own and has always owned the rail line between Raleigh and Charlotte.

So we see this being a mixture, but getting back to it, and the answer that Mr. Szabo gave, a key element of this is the environmental process. And while our partner in doing the environmental reviews are the States, part of the environmental reviews do require the engagement of the communities and other interested groups in evaluating options and opportunities.

Mrs. NAPOLITANO. Ms. Fleming?

Ms. FLEMING. I would have to get back to you in terms of the countries that we visited, whether or not it was public land or not. But one of the things that we did hear time and time again was that one of the challenges they did face was having to try to make sure that the rail system was going to be connected with the other parts of the rail in the country. That was a big part of their vision was to make sure that they had connectivity.

So as Mark said, that it is very important to up front kind of figure out what your goals are and to make sure that you are going to build in that connectivity from city center to city center. So that is why many of the European countries decided to go with steel wheel and steel rail, rather than maglev in order to be able to do that.

But I can get back to you in terms of the public land and percentage that was in the three countries that we went to.

Mrs. NAPOLITANO. Would you? Because my understanding is in Southern California in the high-speed rail, BNSF is quite willing, but UP is very unwilling. So while we say that there is a great deal of support for it, unless the railroads play ball, it is not going to be an easy movement.

[Information follows:]

Question: In the countries GAO visited, was the land used for developing high speed rail public or private? And how did this affect the costs of the project(s)?

Answer:

We did not collect information that specifically delineated whether or what portion of the land used for high speed rail lines in Japan, Spain and France was public or private. However, in our discussions with foreign officials in these three countries, we gathered general information on this issue.

Japan

The central government owns the land and infrastructure for all new lines that are constructed. The land is acquired as needed by the central government for this purpose, and land acquisition costs are high in Japan. Japanese officials estimate that land acquisition costs average about 10 percent of total construction costs. Existing rights-of-way are used when possible, but to accommodate higher speeds, sharp curves and steep grades must be avoided, thus requiring additional land acquisition for new right-of-way when the needed alignment moves out of the existing right-of-way. We do not have data or information on what portion of the right-of-way used for the initial construction of the Shinkansen was existing rail right-of-way, was purchased, or was public land. In some cases, conventional passenger rail lines have been upgraded to what is known as "mini-Shinkansen" service that operate under 100 mph. This is more analogous to the "higher speed" approach being considered in many areas in the U.S., except that in Japan, the necessity of sharing track with freight trains is much less of an issue.

Spain

For the most part, tracks for the high speed lines are constructed parallel to existing conventional tracks for most of their distance. However, they are separated from the conventional track by a physical barrier. Right-of-way acquisition, where needed, is not difficult because the law in Spain concerning land acquisition is very strong. Once a public project is approved, the government has the right to expropriate the land, regardless of whether the current occupants want to move, as long as the government pays a fair market price for the property. In some cases government land is available free of charge for transport projects.

France

In France, some private land acquisition was needed where existing the right of way was not sufficient (not clear if or to what extent public land was used or available). Construction costs were reduced by using existing rail lines in urban areas (i.e., in and around Paris), eliminating the need to acquire land and build infrastructure. RFF--France's national intercity rail network infrastructure manager—is France's second largest property owner and is looking for ways to dispose of property no longer used for its railway business.

A comparative study that included both France and Spain, among other countries found that land costs are only expected to constitute around 5 percent of the cost of construction of high speed lines.

Ms. FLEMING. I think it can be a deal breaker.

Mrs. NAPOLITANO. Okay. The Administrator is gone, so maybe Mr. Yachmetz can answer it. Does the FRA have sufficient resources to handle all of the applications from all the States?

Mr. YACHMETZ. We will handle those, the applications, but the answer is no, we do not have the resources we need for a mature program. The Recovery Act did not include any new positions for any of the agencies implementing the programs, and in particular FRA. And also, one of the challenges of the Recovery Act is it provided us only the opportunity to take one-quarter of 1 percent to fund oversight, even though the legislation that came out of this Committee that was passed last year, the PRIIA, authorized one percent.

And so we are using those funds right now doing the application reviews, and if the situation isn't addressed, we are going to have a serious problem when it comes to oversight of project implementation.

Mrs. NAPOLITANO. Madam Chair, I would like to put that down for the record that they do need some additional assistance to be able to carry out what we have asked them to do.

The last question, and this is going along with the buy American and helping develop the manufacturing base in the U.S. We have so many areas that are so faced with economic downturn and high unemployment.

Is there a way that we can be able to entice, develop the building of some of those systems here in the U.S.?

Mr. BUSALACCHI. Well, let me just say something here.

I am sorry, Mark.

Mr. YACHMETZ. Go ahead.

Mr. BUSALACCHI. We purchased two train sets. I know that the Chairman talked a little bit about it, but we actually purchased two train sets for the——

Mrs. NAPOLITANO. Built in Spain.

Mr. BUSALACCHI. Well, that is what I am going to get to. For the Chicago-Milwaukee Corridor that is in operation, and we will have those sets in two years. Talgo has agreed, the wheels, the steel wheels and the shelves will be made in Spain, but the rest of the trains are going to be made in the United States, 70 percent, just to start with, Congresswoman. And that is going to increase. If we are successful in our grant, then we will also purchase two more train sets. But I believe that we have, coming out of the gate with Talgo, we have shown that we are willing to take this gamble and get these trains built here in the United States.

Mrs. NAPOLITANO. Right. But unless Congress commits a larger amount of money, $9 million is not going to do it.

Mr. BUSALACCHI. Well, you are absolutely right. I mean, there is no question about that. And I think in my speech I talked a little bit about it. But there has to be a long-term commitment here. You are absolutely right. I don't want anybody to think that $8 billion is chump change, because it is not. But in order to get manufacturers interested, whether it is Talgo or any of the other train manufacturers, there has to be this attitude that we are going to implement this program and we are going to go forward with dollars, with a commitment.

And then I believe people are going to come to the table, Congresswoman.

Mrs. NAPOLITANO. But if we are not even putting enough money in—well, I would say enough. You say it is not chump change. I agree with you. But if we are not putting in support for FRA to put additional people to just handle the applications, what are we looking at?

Mr. Yachmetz, can you respond to my question?

Mr. YACHMETZ. Yes. We are strongly committed to implementing the buy America provisions. We are. But beyond that, Secretary LaHood and Deputy Secretary Porcari are very committed to using this opportunity of standing up this program to rejuvenate our manufacturing base. And we are looking for opportunities to help that. I know we are committed.

We don't want to go through the it is made over there and assembled here type buy America. We want to make sure that the components and sub-components are also domestic manufacture. And so you will see that reflected in our grant agreements. But as the Secretary says, the key is going to be showing that there is a sustainable market that justifies continued domestic investment and with that we will see the rebirth of our domestic rail supply industry.

Mrs. NAPOLITANO. And also the inclusion of the automatic train control.

Mr. YACHMETZ. That is correct. One of the other points that I would make is that we have also requested, and the House has been generous so far in the 2010 appropriation for research and development in high-speed rail, and part of that is designed to help develop North American solutions to high-speed rail issues that could also help support a domestic manufacturing base.

Mrs. NAPOLITANO. Thank you, sir.

Thank you, Madam Chair. You have been very generous.

Ms. BROWN. Thank you.

I just want to be clear that I think there is not only a commitment in the Congress for rail passenger, but the commitment and the excitement throughout the Country, we cannot deny it. It is there. The Secretary talked about it, and I can tell you in traveling all over the Country, there is an excitement there.

And I think the Administrator mentioned how we have to manage—what is it he said?—he said we have to manage expectations. Well, I am expecting big things also.

So I think this is an exciting time to be involved in it, and I want to comment the Secretary of what you all have done in Wisconsin. You participated in our roundtable discussion wherein we had standing room only there, and we were talking about how we were going to put American people back to work because we have thousands of people out of jobs. They have skills. We need to maybe have a pilot program on how we can retrofit and put some of those people back to work. We had manufacturers that were interested. I mean, there is an interest there in what we can do to retrain and employ a lot of American people.

And so as we move forward, we will be looking for recommendations on what we could do in Congress and partner with these local communities.

Do you want to respond to that, and I will go into my last question.

Mr. Yachmetz. Well, let me just give you one example of excitement. There is a GS-12 person who works in my office normally on the RRIF Loan Program. And we had to bring in everybody to review applications, and she was on a team that was reviewing a set of the track one applications. Going home one night, she stepped off Metro and broke her ankle, spent the night in the emergency room, and was in the office at 7 a.m. the next morning working with her team reviewing applications. That is genuine excitement about where we are at with this program.

Ms. BROWN. Yes.

Mr. Secretary, your testimony on ongoing sources of Federal revenue to fund the high-speed rail program, it is important to have a dedicated funding source. What advantages of securing a dedicated funding source for high-speed rail have on a State's ability to develop a high-speed rail system? And I mean, I think that is one of the major problems that we have. We have a lot of interest in local, even though we say we have a lot of interest in the State system, they have not put up the money, and that is several States. So I know we will be reviewing that when we look at applications.

But Mr. Secretary, what do you say about the dedicated source?

Mr. BUSALACCHI. Well, you mean it is going to be critical. It is going to be critical to this program. As Ms. Fleming said the Europeans made a commitment, and they did.

Ms. BROWN. The central government.

Mr. BUSALACCHI. They did. That is exactly right.

Ms. BROWN. Yes.

Mr. BUSALACCHI. And the government made a commitment and that is how it got done. We look at these systems and we are always amazed. Well, a magic bunny didn't pull them out of a hat. I mean, it took a lot of will and it took a lot of money and a commitment. And Congressman Oberstar has been very supportive. As you know, I sat on the national commission. We made a recommendation. Our recommendation to Congress through the year 2050 is $357 billion that we need to invest in this Country in passenger rail.

Now, I know that is a big number, but in order to get this done, Madam Chair, we will have to make that commitment. We are certain of it. And if we do that, Mark will get all his people that he needs, and everybody will be happy, but we do have to commit to it.

Ms. FLEMING. May I answer that as well?

Ms. BROWN. Yes.

Ms. FLEMING. I just want to build on what he said. We have had some attempts in this Country, and they failed in large part due to their inability to sustain political and public support, as well as financial support, enough to carry the project through multiple political cycles, as well as the lengthy project development time line.

They also struggled and couldn't overcome the challenge with securing the up front investment needed to get these projects going. So absolutely, sustaining this commitment over the project time line will be critical at all levels, at the Federal, State, local and private sector.

Ms. BROWN. And Mr. Simmons?

Mr. SIMMONS. I would just echo that, and I am familiar with communities, particularly in our State, and our State level that are working towards setting up dedicated funds to provide the matching dollars. And it will take the leadership at the national level, the regional level, the local level to make the commitments and invest in the infrastructure that we need to build our communities.

Ms. BROWN. Okay. You all have been so gracious with your time. Any closing remarks that you would like to make, either one?

Mr. BUSALACCHI. Well, Madam Chair, I am going to suck up to you right now.

[Laughter.]

Mr. BUSALACCHI. I just want to say thank you. You have really been a breath of fresh air. I have been around, Pat's been around this. We have all been around passenger rail here for years. We remember the gloom and doom days where we couldn't get six people in a room to have a meeting. Now we have a meeting and it is standing room only. And it is because of people like you. Thank you.

Ms. BROWN. Thank you. And do you know that is true everywhere I go, all over the Country. I mean, it is just amazing the interest. I don't care what city, what State, what hamlet is, the interest is a packed house.

Anyone else? Thank you very much.

The last panel, they are mostly in order. Okay.

Thank you, first of all, for your patience. We are very excited, as you all know, about what is going on in transportation. It went longer than we anticipated, but thank you for being able to stick with us.

I would like to welcome the second panel of witnesses. Today, we have Mrs. Petra Todorovich, Director of America 2050. And we have Mr. Tom Carper, Chairman of Amtrak Board of Directors. Okay. We are almost in order. And Mr. Bob Scardelletti, President of the Transportation Communications International Union. Welcome.

And Mr. Michael Pracht, President and CEO of US Railcar; and Mr. Robert Baugh, Executive Director of the AFL-CIO Industrial Union Council; Mr. Nicolas Rubio, President of the Cintra US; and lastly but not least, my friend Ed Hamberger, President and CEO of the Association of American Railroads.

Let me remind witnesses that under our Committee rules, oral statements must be limited to five minutes, but the entire statement will appear in the record.

And we will start with Ms. Todorovich.

TESTIMONY OF PETRA TODOROVICH, DIRECTOR, AMERICA 2050; THOMAS CARPER, CHAIRMAN OF THE BOARD, NATIONAL RAILROAD PASSENGER CORPORATION, AMTRAK; NICOLAS RUBIO, PRESIDENT, CINTRA, US; ROBERT SCARDELLETTI, PRESIDENT TRANSPORTATION COMMUNICATIONS INTERNATIONAL UNION; MICHAEL P. PRACHT, PRESIDENT AND CEO, US RAILCAR, LLC; ROBERT BAUGH, EXECUTIVE DIRECTOR OF THE INDUSTRIAL UNION COUNCIL, AFL-CIO; AND EDWARD HAMBERGER, PRESIDENT, ASSOCIATION OF AMERICAN RAILROADS

Ms. TODOROVICH. Thank you Chairwoman Brown, Mrs. Napolitano and Members of the Committee. Thank you for inviting me to testify on the important and timely topic of high-speed rail.

I am Director of America 2050, a national urban planning initiative to develop an infrastructure and growth strategy for the United States. We are based at the Independent Regional Plan Association in New York.

America 2050 strongly supports the creation of a national network of high-speed rail corridors organized around the Nation's mega-regions. Mega-regions are networks of metropolitan areas like the Northeast, like the Florida mega-region, the Texas Triangle, Southern California, that are connected by travel patterns, economic links and large natural systems.

Spanning areas of roughly 300 to 600 miles across, mega-regions are the ideal size for high-speed rail networks, and have densities comparable to Asian and European countries with high-speed rail. Over 70 percent of America's population and jobs are concentrated in the 11 mega-regions that we have identified across the Country.

By the year 2050, American will grow by more than 140 million people, a greater number of people than we added from 1950 to 2000, during which we built the entire interstate highway system. Just as limited access highways made daily commutes within metropolitan regions possible, high-speed rail will open the possibility of daily commutes within mega-regions.

And high-speed rail stations, when located in city centers, will support the type of energy efficient land development patterns that will reduce carbon emissions and save households and businesses money on transportation and electricity bills.

However, going from virtually no high-speed rail system in America to a robust national network is not without its risks. Therefore, the Federal Government should proceed strategically and invest first in corridors that show the greatest promise for generating ridership that will offset long-term operating costs.

America 2050 offers one mechanism for assessing which potential high-speed rail corridors will have the greatest ridership demand in our recently released study, Where High-Speed Rail Works Best. We evaluated 27,000 possible pairs of cities of at least 50,000 people or more located between 100 and 500 miles from each other, against the following criteria.

We looked at population size, favoring cities with large populations in large metropolitan regions; distance between city pairs, with distances of 150 to 300 miles receiving the highest value; presence and size of local and regional rail transit networks to account for access to high-speed rail stations at the beginning and

end of the trip; economic productivity, measured by per capita GDP; auto congestion, measured by the Texas Transportation Institute's travel time index; and whether the city pairs were located within a mega-region to account for the benefits of connecting numerous metropolitan hubs.

By weighing these various criteria and calculating them in a formula, we produced a score and a ranking for all 27,000 city pairs. The list of the top 100 city pairs with the greatest potential for ridership demand is provided in my written testimony. The three mega-regions with the most high ranking city pairs were the Northeast, California, and the Midwest. But the presence of any city pair in the top 100 indicates a potential to support high-speed rail service in that corridor. Many on the ground factors will make the difference in whether ridership will materialize.

We think the most critical factors will be the integration of high-speed rail within existing local and regional transit networks, the location of stations within walkable dense environments with easy access to major destinations, and the existence of intercity travel markets as demonstrated by current auto or air travel patterns.

Our analysis did not take into account on the ground factors such as existing rail infrastructure, matching funds, local political support, preliminary engineering. We are confident that these are factors that the FRA will strongly consider, and they have access to that information through the grant applications.

Therefore, we intend for our ranking system to be considered as an additional factor for the FRA to consider, not the only factor. We hope the FRA will develop its own guidelines and methodology for comparing ridership demands across corridors and determining the quality of the financial plans submitted by rail applicants.

We hope our study will spur additional research and public discussion about what factors must be in place to create the conditions to maximize high-speed rail investment. Since releasing the report, we have already collected suggestions on additional criteria that would improve this analysis, such as looking at existing air travel patterns, and I am sure Members of this Committee may have suggestions as well.

In closing, I urge this Committee to think about ways to secure new long-term revenue sources for high-speed rail in America. High-speed rail needs a dedicated source of funding and a long-term commitment in order to succeed, similar to the process we put in place to build the interstate highway system.

Unfortunately, we no longer have the luxury of enjoying the excess capacity built into the infrastructure systems of the 20th century. That capacity is now used up. We must begin building the infrastructure of tomorrow today.

Thank you very much.

Ms. BROWN. Mr. Carper?

Mr. CARPER. Thank you, Madam Chairman and Congressman Napolitano for the invitation to testify here today on the opportunities and challenges of high-speed intercity passenger rail in America.

As the former Mayor of a small Illinois college town that was heavily dependent on Amtrak for its mobility needs, I know the opportunities rail networks offer to communities that wish to develop

a livable urban living structure and transportation solutions they need for survival and for growth. Amtrak is ideally positioned to address those needs.

We fully support the Administration's vision for high-speed rail and we have strong partnership with States, the Federal Railroad Administration, and freight railroads. We are positioning ourselves to aggressively be the intercity provider of choice.

I would like to talk a little bit about the expertise that underpins that strategy before I turn to a discussion of the challenges and opportunities.

First slide, please. I am going to continue, Madam Chair.

Ms. BROWN. Did you call for the slides?

Mr. CARPER. Yes, I did.

Ms. BROWN. Okay. I think they have it now.

Mr. CARPER. There we go. Okay.

First slide, please. These photos were taken on our Northeast Corridor, and illustrate something important. Amtrak is a high-speed rail provider. More than half of our daily trains exceed 100 miles an hour. It is a unique system that mixes high-speed Acela and regional trains with commuter and freight service to provide a broad range of public benefit.

Slide two. When people hear the term high-speed rail, this is what they have in mind: very fast trains running on brand new grade-separated straight-arrow rights-of-way. This is one of the very successful AVE services in Spain, which operates at 186 miles an hour.

Slide three. Here is a slightly different picture. This is the Northeast Corridor, and you can see an Amtrak Acela train on a bridge that was built in 1835, although it now carries 125 mile an hour trains. And here you see the difference between these two approaches. They designed the infrastructure to realize the potential of the equipment, and we designed the equipment to operate within the constraints of the infrastructure.

Slide four, please. Both have their merits. The development of high-speed service on the Northeast Corridor began in the early 1960s. Successful high-speed services of all kinds are built on incremental improvements, but whatever the approach, the constraining factors are the same: cost and environmental impact.

Slide five, please. Next slide. Here is a comparison of two complementary high-speed projects. On the left we have Amtrak's Harrisburg line, which underwent a round of incremental investment that culminated in the introduction of 110 mile an hour service in 2006. On the right, we see a brand new Madrid service high-speed line finished in 2007 and designed to carry trains at 186 miles an hour. This compares and highlights the importance of relating the investments to benefits. We want to make sure that we get as much return on our money as we can, and we want to do it in a timely manner.

Next slide, please. The Northeast Corridor has undergone several rounds of incremental improvements since 1976. On the right, you see the results in terms of the travel market we share with all the airlines. We have also invested in other corridors, putting positive train control systems on the Amtrak-owned Michigan line, and laying the groundwork for 110 mile an hour service on our St. Louis

to Chicago line. Amtrak wants more high-speed rail, but we always need to remember that the goal is a competitive trip time. Sometimes, that means raising speeds from 79 to 110; sometimes that means raising speeds from 110 to 150; and it also means the development of much higher speeds where we need to be competitive.

Next slide, please. This slide breaks out the funding programs from ARRA, which will finance the next round of development. These grant programs are a tremendous first step, but we definitely need help to develop long-term funding streams to support future needs. The High-speed Rail Initiative Chairman Oberstar proposed would be a potential source of funding, and we strongly support this program.

We have partnered with States to apply for ARRA funding. This slide highlights some of the major track projects. Some will be new service. We have also applied for funding to improve service and speed up trains on existing routes Projects to increase frequencies and install PTC will improve capacity and trip times. And equipment is a vital need, and we are working with vendors and the FRA and our State partners to develop specifications and funding plans for new equipment procurement.

Last slide. Amtrak will deliver. We must help our Nation retain its economic competitiveness and communities and transportation are a vital component of that. We are eager to develop a partnership that will make these projects possible, and look forward to working closely with the States and the FRA as we build the foundation for a generation of economic growth and prosperity.

Thank you, Madam Chairman.

Ms. BROWN. Leave that last slide up there. There seem to be a major part that is not connected. If you look at Florida, that little dot on there, it stops right there in Georgia and it doesn't go to Jacksonville to Orlando. This system was developed how long ago? Before I came to Congress. I mean, I know it was developed——

Mr. CARPER. The high-speed rail designations, Madam Chairman?

Ms. BROWN. Yes. We need to update it. You can't stop in Georgia and then pick up somewhere down there in Florida. It needs to be connected. It doesn't have to be high speed. I mean, several of the Members have pointed out places in this particular that are not connected.

Mr. CARPER. Duly noted, Madam Chairman.

[Laughter.]

Ms. BROWN. I understand that you have to leave. Listen, let me just ask you one quick question. I know it is dedicated sources of revenue, and we have been struggling with Amtrak, trying to move it forward and work out some of the problems. And I can say, from New York to D.C., I think we can do it in two and a half hours. And if we fix some of the tunnels and trains, we could do it maybe in two hours.

But from Boston to Washington it is eight hours. And so if other factors other than the conditions of the tracks, I mean, we are talking about developing high-speed on systems that are already developed. What do you think we need to do to move forward? What are some of the recommendations? In other words, we are starting out and the towns and communities are already developed, whether we

are talking about someone stopping in this area. I am 100 percent in favor of it, but we don't want to blow the whistle, or the train has to go through the communities. So we need to do some things in those communities so that we can have the rail going through.

Mr. CARPER. Well, first of all on the Northeast Corridor, I am not sure of the total time between Boston and Washington, D.C., but I think——

Ms. BROWN. I think it is eight hours. I tried to put somebody on the train and they wouldn't do it.

Mr. CARPER. I believe on the Acela service or even on the regional service, it is somewhat lower than that, but I will get back to you on that.

Let me simply say we can cut some trip time down on Northeast Corridor service, and I can provide you——

Ms. BROWN. You say we can or we can't?

Mr. CARPER. We can.

Ms. BROWN. Okay.

Mr. CARPER. We certainly can. If you go back to one of the comments that I made about with the amount of resources that are available, to cut 15 minutes off is perhaps a number that we could deal with. But to get down to something about half an hour off, it is in the range of multiple billions of dollars. And when you look in the incremental approach out in the other parts of the Country, the things that we can do to help accessibility in our stations and to bring some new service on line and to put some service in the Midwest, we could get many things done with that amount of money. And those are the things that we are balancing that will need to be balanced on how we allocate limited resources.

Ms. BROWN. I am not disagreeing with you. I just want to point out that, okay, fine, if we can only cut it down 15 minutes, but one of the complaints that I get is on time. So if we could, I mean, it doesn't matter if it is going to run in two hours and 15 minutes, but the fact is it is delayed by two hours going and coming.

Mr. CARPER. The Northeast Corridor is pretty much the only service that we have where we control our own destiny. We manage the railroad, transit and freight. In my part of the Country, in the Midwest and throughout the system, we work with our State partners and there are some good investments to be made that can ensure a much, much better on time performance by making some. And we have just lists and lists and lists, and I could name some in the Midwest that would be good investments for relatively small amounts of money that can help that on time performance.

And I agree with you 100 percent, if we are going to continue to attract new riders, and not only get them one time, but to have them continue to come back, we need to be able to arrive at the station and leave when we say, and arrive at the destination when we say. And we are working towards that and are putting good use of funds that were allocated to Amtrak at one point, $3 billion, to work on many of those things, Madam Chairman.

Ms. BROWN. I am sorry for the rest of the Members. He has to leave, I guess. He has to catch a train, and not a plane, I hope.

[Laughter.]

Ms. BROWN. Ms. Napolitano?

Mrs. NAPOLITANO. I really don't have very many questions on Amtrak other than just a comment, because part of it in California, there is Amtrak service. And I have had some complaints about it being late. It is not always on time. And I have visited their facility, their center, their routing center, if you want to call it that.

Mr. CARPER. Yes.

Mrs. NAPOLITANO. And I am very impressed. So how do we continue to move forward, and as you see on your own map, there is very little on the west side of the United States. There is hardly anything in the central. How do we connect all of those to be able to ensure that people have options for travel and be able to get where they need to go?

Mr. CARPER. Well, it is interesting that you bring that up, because one of the things that we are looking very seriously at at Amtrak is not only improving the system we have, but seeing where we can make incremental connectivity improvements throughout the Country. Bringing new service on line, as this Committee knows, much better than I, is a monumental task. But making the incremental investments in the system and looking for opportunities through the system that is in place, that the FRA will be rolling out here this winter, will be a start with that.

And I couldn't agree more with the comments that were made in the previous panel. Early success and measurable success will be very helpful in expanding that system. Again, it is important to understand where I come from. I come from a community that had no air service, no scheduled bus service, and was 250 miles with a State university from Chicago, Illinois. This was the mode of transportation for students.

We doubled the service in Illinois two years ago with tremendous success in ridership. It did not diminish the morning service. Now we have two round trips a day. We went for three decades with one round trip a day, and doubling that service was a monumental success. I have seen it work. I have seen economic development spurred by these incremental improvements. And this is at 79 miles an hour, with improved on time performance, better quality equipment, and increased frequency.

We can really add and be a tool in the economic development revival of my part of the Country and the rest of the Country. So I commend you for, again Madam Chairman, for what you have done. I was in the battle in the '90s as a Mayor trying to save our service.

Ms. BROWN. Thank you. And I do know that we talked during that time period because there was a move to cut out the services viewed as not profitable. And in your area and in many areas, the only kind of service that people have is the train service. If it wasn't for the train service, they don't have bus service. They don't have air service. They would not be connected at all.

And I tell people it is not just the trains. It is homeland security. We have to be able to move people.

Mr. CARPER. Madam Chairman, you are absolutely correct. And the Illinois Legislature recognized that and doubled the State investment to double that service, and the results have been extraordinary.

And part of that is the service that Secretary Busalacchi was talking about, because we do participate in the Hiawatha, the partnership agreement with the State of Wisconsin. We have seen it work first-hand, and I have seen it work on other corridors, other Amtrak corridors, and the incremental approach of improvement, without giving up the vision of higher speed and high-speed rail, is a good use of taxpayer dollars, I believe, and will show some immediate results.

Ms. BROWN. Last question. Under the dedicated source of revenue, having a dedicated source from the State, and you knowing that what you are getting from the Federal Government, how would that affect how you plan and how you all run a railroad as Chair of the Amtrak Board?

Mr. CARPER. Well, first and foremost, and I wish CEO Boardman were here today to be able to answer this, but from my perspective, one of the things we are trying to do with Amtrak is put together a management team and start laying the groundwork for well beyond my tenure on the Board into the future. And understandably, we need to do that.

It will allow us to plan and to rotate equipment in and out, and to do some planning and scheduled maintenance, rather than waiting and hoping for a funding mechanism. So to run any successful business or any concern, you need to have the resources to plan. And that will allow us to look into the future. And the payback, we believe and know from past experience, should be a good payback for the citizens of the United States.

Ms. BROWN. Thank you.

Mrs. NAPOLITANO. Well, thank you, Madam Chair. But lastly, so you won't be late wherever you need to go, but one of the things that when you were showing your slide in regard to the systems upgrading or the new systems in Europe versus the systems that you have, that you contend with on Amtrak, has there been concerted effort to look at what it would take to be able to upgrade to address those areas, to be able to utilize higher speed instead of just 100 or 110, but rather 180 or more, to be able then to truly be a high-speed rail?

Mr. CARPER. I don't want to speak out of turn here. I am certain I can bring you information on what it would take to upgrade the Northeast Corridor, which is right now the only corridor that we have control over. The other corridors would perhaps likely be more in line with what you saw on the slide.

So, and we would be happy to get that information to you.

Mrs. NAPOLITANO. I would love to be able to have that, Madam Chairs, because then you have an idea of what we are looking at for the future, and it is probably way beyond my time in Congress.

Thank you, Madam Chair.

Mr. CARPER. Thank you.

Ms. BROWN. Thank you. You are dismissed.

[Laughter.]

Mr. CARPER. Thank you, Madam Chair.

Ms. BROWN. If you all could just be patient with us. Mr. Rubio I think has a plane, and we are running late, so I know everybody has probably got somewhere to go, but if you could go next, please, and thank you, everybody else, for your patience.

Mr. RUBIO. Thank you, Mrs. Chair, and I will be more than happy to wait if I can help, and I will be more than happy to miss my plane if that helps in all this effort.

Thank you for this opportunity today. My name is Nicolas Rubio. I am the President of Cintra, US. Cintra is a transportation infrastructure developer. We have been in this business now for 50 years. In the United States, we are currently responsible for the development of three new construction projects in Texas, and we manage existing roadway assets in Illinois and Indiana. Combined, these five assets represent an investment value of over $11.6 billion, with an equity commitment of over $2.8 billion.

On a worldwide scale, our group manages major infrastructure assets including more than 1,900 miles of highways with a total investment of $29 billion. We also manage seven airports in the U.K, including London Heathrow Airport, tube lines, the lead private operator in the London Underground transportation system.

We have been in this business and we have been as well involved in the development of high-speed rail, with nearly 413 miles built of high-speed rail infrastructure very much in line with what you have seen in that slide.

Private involvement in the development of rail infrastructure is not new. In fact, as has been mentioned here, freight rail models are radically different in Europe than in the U.S., with much deeper involvement of the private sector and a clear advantage in efficiency and usage on this side of the Atlantic.

In its beginning, high-speed rail in Europe and Japan, as has been mentioned as well, was owned and developed through conventional delivery methods in which governments took the risk associated with the design, bid, construction, finance and maintenance aspects of the project. In most cases, the operation of the passenger service was adopted by government-owned operators as well.

Since the beginning of this decade, nevertheless, high-speed rail development in Europe has shifted away from this purely public model towards a partnership-based model that encourages private sector participation. While a multitude of ownership, development and operational alternatives could be considered, different European countries ended up opting for very similar P3 schemes to develop high-speed rail, following a model separating the provision, operation and maintenance of the infrastructure on one side, and the ownership of rolling stock and the provision of transportation services to final users on the other one.

Ultimately, the European Union has opted to introduce legislation ensuring that any rail operator will be able to provide transportation services in any European network.

Even with private funds, the development of this rail network requires strong public financial support. Many of the social benefits of high-speed rail transportation, like its impact in improving the environment, cannot be easily converted into actual project revenues.

Other modes of transportation take advantage of the availability of low cost infrastructure already built, which true global cost are not always being charged to users.

We are convinced that involving private infrastructure developers in its implementation is paramount to maximizing efficiency

in the provision of a high-speed rail network. This will not only provide access to new sources of funds, it will also reduce the overall cost, accelerate its implementation, and maximize the leverage of limited public funds. Public-private partnerships shift the financial risk of transportation projects to the private sector and away from the government or public taxpayer.

Through the early investment of private funds, we can anticipate much needed infrastructure, with significant impact in global economic development, as has been mentioned as well.

As recent examples in the U.S. demonstrate, the P3 model is unchallenged when looking to maximize output for taxpayer money invested. In Texas alone, our company is developing through three partnerships with the State, in Dallas, Fort Worth and Austin, more than $8 billion of congestion-relieving roadway projects with only $990 million taxpayer dollars utilized.

We were asked to come here, and one of the questions was, what do private developers need to see happen to bring them to the table for U.S. high-speed rail development. And there were many things said today. Susan Fleming mentioned that the advantage of high-speed is that it is reliable, safe and timely mode of transportation. And I will say those three factors are what the private sector would be looking for to invest here: reliability, safety of valuable investment, and timeliness.

Ultimately, the development of a high-speed rail network in the United States will face many challenges. But, with the desire and the commitment of both the public and private sector working together, I strongly believe that those challenges will be overcome to the benefit of the citizens we are all honored to serve.

Thank you very much.

Ms. BROWN. The one question I would ask to you is what is it, we talk a lot about the partnership is the State, the local, the Federal, but I think the private, in my opinion, could play an equal role. And what do you think are some of the things that we could do to leverage that, to encourage the investors to invest?

For example, I was talking to some investors, and one of the things that they indicated would be to see some tax credits. So what would you recommend to be some of the ways that we can entice that private investment? Because we do have limited dollars and we watch the system develop around the world, and transportation really is a commitment of the government. It is not going to pay for itself like you hear some of my colleagues talking. It doesn't pay for itself anywhere in the world.

Mr. RUBIO. Madam Chair, private investment in infrastructure is a long shot. It is a very long-term investment. I think there are three things that are needed. One is commitment from the public authority. The second one is alignment of the stakeholders that will bring reliability, credibility to the whole thing. And the third one I would say is realism. Try to develop projects that make economic sense.

Ms. BROWN. Thank you.

Ms. Napolitano, do you have a question?

Mrs. NAPOLITANO. Very quickly, and welcome, Mr. Rubio.

The systems you have in Texas, are they passenger, freight?

Mr. RUBIO. The three systems I have mentioned in Texas are highways. They are not rails. We do not run rail operations in the U.S. We run highway operations.

Mrs. NAPOLITANO. Highways, so that is truck traffic.

Mr. RUBIO. That is passenger and truck traffic. Those are managed lanes, basically adding capacity to existing highways and maintaining the whole capacity in the long term, and getting users of those managed lanes to pay for the use.

Mrs. NAPOLITANO. So they are tolled, toll lanes?

Mr. RUBIO. Only in managed lanes, only the additional capacity that is built is being tolled. The actual capacity has been maintained. It has been upgraded and it is not being tolled.

Mrs. NAPOLITANO. Okay. The partnerships you spoke of, can you give us a rough estimate of the percentage that each one has been able to help with, contribute, be part of?

Mr. RUBIO. Excuse me?

Mrs. NAPOLITANO. The percentages, your percentage into making it happen, the county, the State, the Fed?

Mr. RUBIO. Yes. I mentioned three projects, two of them in Dallas and Forth Worth, and another one in Austin. The global initial investment in those three projects is $6 billion in construction. On the long term, the maintenance investment will add another $3 billion on top of that. And all that needed a contribution from the State of $990 million. The rest is being paid through the tolls that are going to be collected in the coming 50 years, only for those users using the managed lanes.

Mrs. NAPOLITANO. And that is going to be feasible? Will it pay for itself?

Mr. RUBIO. I want to keep my job. I hope it will be feasible.

[Laughter.]

Mrs. NAPOLITANO. Well, the reason I ask is we had a freeway in California, 91, that was supposed to be profitable, and ended up not being profitable. So pardon me if I ask, because those are one of the things that we have found to be evident.

Now, just thank you, Madam Chair. That is it.

Ms. BROWN. Thank you.

And you are dismissed.

Mr. RUBIO. Thank you.

Ms. BROWN. OK, Mr. Scardelletti?

Mr. SCARDELLETTI. Thank you, Madam Chairman, Congresswoman Napolitano.

My name is Robert Scardelletti, and I am the International President of Transportation Communications/IAM. Our union, together with other rail unions, represent over 150,000 workers on America's freight, passenger and commuter lines.

TCU/IAM is the largest union on Amtrak, representing six crafts. All rail labor has long supported high-speed rail in the United States, which included the passage of the Passenger Rail and Investment and Improvement Act of 2008, PRIIA, and the American Recovery and Reinvestment Act, ARRA.

This historic commitment to intercity and high-speed rail will create and sustain thousands of good jobs. The passage of PRIIA and the appropriations in ARRA is a good start for what can be a great opportunity for high-speed rail in our Country. Labor protec-

tions and requirements to preserve existing collective bargaining agreements must be administered fairly and consistent with the law. Davis-Bacon prevailing wage requirements must fully apply to all covered construction work. Buy America requirements must be applied and strongly enforced.

Amtrak and its workforce must be fully utilized as the backbone of high-speed rail in America. Amtrak is by law America's national passenger rail carrier and the only current provider of high-speed rail through its Acela Express service in the Northeast Corridor.

Amtrak has an established national network which includes an extensive reservation system, existing rolling stock, statutory relationships with the freight railroads for trackage rights, and decades of demonstrated compliance with all Federal rail laws.

Amtrak has also partnered with States and local governments to provide passenger rail service for decades. Amtrak has a track record of adhering to various grant requirements imposed by the Federal Government. Most importantly, Amtrak has a dedicated and very experienced workforce.

Collective bargaining has existed with Amtrak since its creation in 1971. And current labor agreements are in place with all the companies' unions. High-speed rail is just that, railroad work. Amtrak should receive credit for complying with all railroad statutes and not be placed at a competitive disadvantage.

For example, Amtrak as a rail carrier has financial obligations to its employees through the Railroad Retirement Act. If another entity seeks to provide service, but does so with the intention of evading, for example, one law, the rail retirement law, that entity could artificially undercut Amtrak on a cost basis. Potential providers of service must not be allowed to evade the railroad statutes so that all applicants will be judged on a level playing field.

All rail labor supports a strong buy America requirement, as contained in both the Amtrak statute and ARRA. Almost all existing major high-speed rail equipment manufacturers are foreign. Buy America in this context must mean that even if the developer is foreign-owned, any equipment must be assembled entirely in the United States.

Amtrak, with its skilled and unionized shop craft employees, should be the first choice to repair and maintain all new high-speed rail equipment. Foreign companies should not be allowed to avoid the application of railroad statutes. Employee protections under law should be seen as a means of integrating the existing workforce into high-speed rail and expanding intercity service.

Existing collective bargaining agreements can assure that new operations have access to experienced and trained workers and, in the process, minimize labor uncertainty.

In summary, funding for Amtrak and its current services must not be cut. We call upon Congress and the Administration to fully fund Amtrak's capital and operating needs at its currently authorized level, and any new high-speed rail programs must be fully funded. We must be committed to the long haul.

Good labor policy and sound transportation policy are not inconsistent propositions. In fact, high-speed rail in this Country will succeed if workers are brought into the process and treated fairly. The benefits will be the best high-speed rail system in the world.

Thank you, Madam Chairman.

Ms. BROWN. Thank you.

Mr. Pracht?

We are going to have questions. We will just hear the rest of the testimony, if you don't mind.

Mr. Pracht?

Mr. PRACHT. Good afternoon, Madam Chairman, Members of this Subcommittee, and staff. My name is Mike Pracht. I am the President and CEO of US Railcar, a newly formed American-owned Ohio-based company with a business plan to resume manufacturing American-made passenger trains in the United States. It is a real privilege to be here. Thank you for this opportunity.

As an almost 30-year veteran of the rail transportation industry, I have never seen the level of excitement, support, and commitment for passenger rail that exists today in both Houses of Congress on both sides of the aisle, and with such determination put forth by the current Administration.

Prior to taking this position, I held several key positions at two of the world's leading rail transportation companies, Ansaldo from Italy and Siemens from Germany. Six months ago, I became involved with a group of investors from Columbus, Ohio led by Barry Fromm, an entrepreneur with a passion for trains, a desire to make a difference, and a vision for putting American passengers back on America's tracks. I would like to just take a minute and acknowledge Barry back there, for his leadership in this area.

Barry owns and runs and is the founder of a company called Value Recovery Group, which works at several levels of Federal, State, and local government in areas that include distressed asset management, brownfield and economic development, and energy management. Two of Barry's larger accounts include the U.S. Departments of Energy and Education.

Earlier this year, Barry acquired the assets of Colorado RailCar. This company, entrepreneurial in its own right, developed a modern version of a bygone self-propelled train set called the diesel multiple unit, or DMU. This product was originally developed by the Budd Company back in 1947. Like many other American innovations, DMUs went on to become a core component in the fleet pools of just about every modern industrialized nation around the world.

Unfortunately, as with the Budd Company and other iconic manufacturers like Pullman and St. Louis Car, Colorado RailCar fell victim to a market with insufficient investment, lack of priority, and missed opportunity.

The original Colorado RailCar DMU was developed in 2003 and is currently the only FRA-compliant DMU in production today. Ten of these units operate in daily revenue service in Florida, Oregon, and Alaska, each meeting and/or exceeding their customers' expectations.

I have traveled extensively in these last few months, welcomed by transportation agencies across the country with renewed interest in purchasing the US Railcar DMU. This assumes, of course, we can attract sufficient investment to secure our business plan. In so doing, we are not here seeking public subsidy for a private venture. Rather, we are encouraging continued public investment in

passenger rail and support for American manufacturing and American jobs.

We are willing to put our business plan to the competitive test with sufficient resolve and entrepreneurial spirit. However, we are concerned about doing so on an uneven playing field with deep-pocketed foreign suppliers, some of whom receive home government subsidies and others of whom practice predatory pricing.

It is important to note that there are currently no American-owned passenger rail car manufacturers in the United States. All existing rail cars are produced by foreign suppliers from Europe and Asia. These companies assemble locally, however typically import 40 percent of their content from abroad and export most, if not all, of their profits back home where they are then reinvested in foreign technology.

My company's investors are committed to reestablishing an American-owned company that engineers, designs, manufactures, and develops in America. We believe several elements will be prerequisite to the success of US Railcar and the country's renewed passenger rail initiative as a whole.

We encourage strong Federal leadership in the following five areas:

One, approval of the Ohio Rail Development Commission's TIGER application. US Railcar has joined with the Ohio RDC in a public-private partnership to produce and ultimately maintain trains at a new rail car manufacturing and maintenance facility to be established just outside of Columbus.

Two, support for the FRA's proposed 2010 High-speed Rail Research and Development Program. This important initiative will help new start and new entry American companies develop and advance the state of American technology to better compete with foreign suppliers.

Three, effective implementation of the PRIIA next-generation equipment pool that must include DMUs made in America by American-owned companies. This program will assure product standardization, adequate sources of domestic supply, and reduce much of the wasteful costs associated with the one-off vehicle procurements all too typical in the transit sector.

Four, consistent administration of PRIIA Buy America standards. Implementing these new Buy America standards with resolve will test our national commitment to establishing a new American rail car manufacturing industry.

Five, a sustained commitment and funding for high-speed intercity passenger rail. Perhaps the most critical in the mix, sufficient levels of capital cannot be attracted from the private sector without confidence in a sustainable and reliable market.

US Railcar applauds the leadership of this Committee and encourages the establishment of a dedicated funding source to assure continuity.

Thank you again for this opportunity to testify. I am happy to answer your questions, and I am really excited about these times.

Ms. BROWN. Thank you.

Mr. Baugh?

Mr. BAUGH. Chairwoman Brown and Member of the Committee, we thank you for the opportunity to testify here today. I am speak-

ing for the 10 million members of the AFL-CIO and the affiliates of the Industrial Union Council, which are the manufacturing unions of the AFL-CIO.

With high-speed rail, the Nation stands at the crossroads of opportunity for domestic investments in innovation, new technology and energy efficiency that will save jobs, create new jobs, and new industries, and revitalize American manufacturing.

However, while we can be certain that the rail lines will be built here, there is no guarantee that they and all the related technology will be made here. What is needed is an environmental economic development policy to guarantee that these investments are made in the United States and that they result in good, sustainable jobs.

It has been commented on this Committed earlier today the situation in this Country is dismal. We are at 10 percent unemployment. The real number is closer to 15 percent unemployment. We have lost jobs for 21 straight months. It is frankly a continuation of what has happened in the last decade of manufacturing. We lost 5 million manufacturing jobs. We saw 40,000 manufacturing facilities close in this Nation. And over 1 million of those jobs were professional technical jobs, engineers, designers, developers, people with the skills that give us the technical capacity as a Nation to make things.

These came with record trade deficits, $701 billion in 2007, of which it was driven by an $850 billion deficit in manufactured goods; $500 billion of that was in manufactured goods alone. The rest was oil. Even with record oil prices, the manufacturing deficit has been driving our record trade deficits.

We are looking at another record deficit this coming year with China, and China will account for 75 percent of the manufactured good deficit in our overall trade deficit. It is shocking, and we ought to be concerned about it.

The industrial Midwest and the State of Michigan, with real unemployment approaching 25 percent, sit at ground zero, surrounded by an army of dislocated, discouraged skilled workers, engineers, designers, scientists, and closed facilities. And they represent the best of our Nation's skills and technical capacity to create, innovate and manufacture the goods needed for a sustainable future. We have ignored the maxim: It matters where things are made.

It is time to change direction. Our Nation is stumbling towards an economic development policy, one that says we want auto. One that says we are making a new investment in energy policy. And now we have a manufacturing strategist for the Country, which is a first, Ron Bloom. It is a good thing. It is what our competitors internationally do. We have got to start acting like them as a Nation and think about the economic development policies of their country.

High-speed rail investments like the ones in new energy infrastructure must be designed to create the jobs here. This is the challenge. Three decades ago, we led the world in renewable energy technology. Today, we built last year a record 8,300 megawatts of wind turbines in this Nation. Less than half were made here.

These are technologies the rest of the world in the last three decades went ahead of us on. And it is exactly the same situation in

high-speed rail. And the challenge there may even be greater. The innovation, knowledge and experience of building and maintaining high-speed rail is embedded in the nations that have led the way, and we are far behind.

We have one firm, Maglev, that is dealing with the next generation of high-speed rail technology. We have some limited experience in the Northeast Corridor with high-speed rail. And these are examples of the broad range of technologies an advanced manufacturing economy like ours should be capable of delivering. But as has been noted here, the leading technologies in the world are in other countries that have been doing this for several decades.

The Industrial Union Council joined with our transportation labor brothers and sisters in support of a broad program of investment in our transportation infrastructure, and in particular in high-speed rail. The Recovery Act made an important statement about that with the inclusion of buy America, and this has been a very enlightening discussion here this afternoon.

We supported that. We worked very hard on it. But I think we have to recognize that is tactical move, not a strategic move. It doesn't do what we need to do. The challenge is to develop a high-speed rail industry, get the entire production system from the supply chain to engineering to R&D. That takes scale. That takes financial leverage. And that takes cooperation.

Right now, the money will be spent in many places around the Country. It doesn't give you the leverage to negotiate an entire production system from another country. And that is what you want to capture, not just a rail car assembly operation. We want to talk about the entire technology in the system.

And we have to be able to move and negotiate at scale to achieve those opportunities and have these things done here. It requires the ability to think in that larger context, to be able to say we want to do something about the Midwest, and target this idle capacity.

And within the macro context of this, the goal should be to leverage and encourage comparable systems and common design by seeking the best technology in the world. We have a set of recommendations, too, for Congress. We must make an aggressive, sustained commitment of the resources. We must link our R&D to actual job and employment opportunities in this Country, and we support the idea of an R&D network to support the high-speed rail industry.

We must enforce and strengthen buy America and other domestic investment provisions, including putting the waivers on the internet so people can see them and even compete on this. This is silly. We have the technology.

We have a series of other recommendations on how to strengthen those provisions. We believe we must enact other forms of investment criteria for making these products here. And finally, we think that the Congress needs to use its financial leverage here to encourage regional-national collaboration to achieve these set of goals, common design, systems comparability, attracting the world's best technology, mobilizing private capital, and establishing a domestic state of the art high-speed rail production system for the United States.

And finally, we would join with Brother Scardelletti in saying that we must actually obey our own labor laws in this Country to protect the interests of the workers that work in these industries. We look forward to working with this Committee to develop a high-speed rail system in this Country that is made in America.

Thank you.

Ms. BROWN. Mr. Hamberger?

Mr. HAMBERGER. Madam Chairwoman, Congresswoman Napolitano, on behalf of the members of the AAR, thank you for the opportunity to testify this evening on the opportunities and challenges flowing from expanded high-speed passenger rail in America.

Madam Chairwoman, you opened this hearing by praising the President for his leadership in this area, and that is certainly well deserved. But having worked with you and this Committee and having seen you run this hearing this afternoon, I believe I would be remiss for not making sure we get on the record that there has been leadership from Congress in this area.

Chairman Oberstar, your leadership here in this Subcommittee, Mr. Mica, Mr. Shuster and the entire Committee, successfully last year passed the Passenger Rail Improvement Act, the Passenger Rail Safety Improvement Act. And so thank you. I will just join Secretary Busalacchi in thanking you and the full Committee for that leadership in the past, and look forward to working with you in the future.

Let me start by saying that I want to emphasize that our Nation's privately owned freight railroads support development of passenger rail and our actions to date prove this fact. We are already successful partners with passenger rail across the Country. Outside of the Northeast Corridor, almost all Amtrak trains operate over tracks owned and maintained by freight railroads.

In addition, hundreds of millions of commuter trips each year occur on commuter rail systems that operate at least partially over tracks or rights-of-way owned by freight railroads.

As the FRA's recently released Vision for High-speed Rail in America points out, both freight and passenger railroads provide enormous public benefits to our Nation, including reduced traffic congestion, reduced fuel consumption, lower greenhouse gas emissions, and less pollution. Railroads, both passenger and freight, are the smart, sensible way to help solve America's 21st century transportation challenges. And that is why AAR is a member of OneRail, a new coalition that brings together both passenger and freight rail stakeholders, including labor and environmental representatives, to advance railroading nationwide. OneRail supports increased public and private investment in freight rail, and also supports State efforts to seek an ongoing dedicated funding source for intercity passenger rail expansion.

And one of the reasons that we were able to coalesce around these goals is jobs. One billion dollars of capital investment in the freight railroad industry conservatively produces 20,000 jobs in the economy. That is using Department of Commerce, Bureau of Employment Administration multiplier effects. So we believe that the money should be spent, and I want to emphasize that these are

jobs that stay within our borders. There is no way to in any way outsource those jobs.

All of us involved in this effort know that reshaping the Nation's passenger transportation system with expanded rail choices will bring significant challenges. Administrator Szabo said it best earlier this afternoon when he observed that America deserves the world's best passenger rail system, but not at the expense of impairing what is already the world's best freight passenger system.

Mr. Szabo understands that the economy depends on freight rail. The combination of safety, efficiency, environmental friendliness and affordability of our freight rail network is unmatched by any other freight rail system in the world, and provides a huge competitive advantage for America's farmers and manufacturers as they compete in the global economy.

Now, ideally, freight railroads and intercity passenger railroads would operate in completely separate worlds, but that is not practicable at this time. As a result, high-speed passenger rail will, in many cases, have to share tracks, or at least the right-of-way, with freight railroads. Clearly, each freight rail corridor is unique and is governed by its own circumstances, but I would like to highlight four general principles that we believe should apply in all circumstances of joint use.

First, safety must be the top priority. Railroads are an extremely safe way to move both people and freight, and everyone involved in railroading wants to make sure it stays that way.

Second, capacity concerns must be properly addressed. Increased demand for rail transport will require more capacity for both freight and passenger rail. Notwithstanding the recent downturn in the economy, freight rail will be asked to carry as much as 100 percent more freight by the year 2035.

Third, freight railroads should receive full compensation for use of their assets. It should be remembered that no comprehensive passenger rail system in the world operates today without significant government assistance. Once you, as policymakers, agree on the scope of passenger railroading in this Country, you must be willing to fund both operating and capital on a long-term basis.

Fourth, freight railroads must be adequately protected from liability risks that would not have resulted but for the added presence of passenger rail service to their networks.

These are critical challenges, but they are hardly insurmountable. Freight railroads are committed to working with Members of Congress, the Administration, the States and passenger interests to implement a strategy that will allow both freight and passenger rail to grow in the national interest.

Thank you for allowing me to be here today.

Ms. BROWN. Thank you.

I think I want to start with you.

If Mr. Oberstar was here, he would give us a history of the rail in the United States. So we are going to bypass that. But I want to know, I understand most of the rail is owned by freight. How does AAR plan to work with the State and high-speed rail operators to clarify issues of liability? I mean, that is a major one, and have you engaged the freight line? I know we have had some discussions.

Mr. HAMBERGER. With respect to liability, and that is why I, of course, mentioned it in our testimony, liability is one of the key issues. GAO has issued a report on that, I believe, earlier this year. We are not seeking legislation at this point. "To clarify" was already in the statute limiting liability at $200 million for a passenger rail accident. And I think that each of our members has been able to work out with their State and local partners the ability to address that issue.

I was talking earlier with the representatives from the States for Passenger Rail, and I believe we will be getting together and talking about it on a broader scale to see if there are other areas of agreement that can be reached. But primarily, it is a contract issue worked out between the host railroad and the passenger provider.

Ms. BROWN. How do you think that positive train control fits into this as we move forward?

Mr. HAMBERGER. Well, Congress, of course, mandated last year positive train control on all track that has passengers on it. I think, again, that is an area where the host railroad will have to sit down with Amtrak and with the commuter rail operators and try to allocate appropriately the cost of the PTC to be put there, because of course, Congress also mandated positive train control wherever toxic by inhalation hazardous materials, TIH, hazardous materials are transported. So that is a cost that would not be a passenger cost. So that kind of discussion I suspect will begin at some point in the not too distant future once we have the final rules out of the FRA.

Ms. BROWN. Who are the partners with the OneRail?

Mr. HAMBERGER. I will get that for you for the record. I don't want to miss anybody, but I know UTU is a member, States for Passenger Rail, the Natural Resources Defense Council, Amtrak, the NRP, the National Rail Passenger Association. So it is a pretty good group, APTA, American Public Transit Association.

Ms. BROWN. Is labor a part of that?

Mr. HAMBERGER. The only one right now is UTU, but thank you for asking because I am trying to get Mr. Scardelletti to join, and I think he would be a very valuable member if he were to sign up.

Ms. BROWN. We need all our representatives at the table.

Mr. HAMBERGER. Yes.

Ms. BROWN. Ms. Napolitano?

Mrs. NAPOLITANO. Thank you, Madam Chair.

And it is great to be able to listen to the dialogue from all the panelists.

And to Mr. Baugh, I have questioned some of the folks that are working on the high-speed rail in California whether they consider maglev. And they tell me it is prohibitive, yet I heard one of my Mayors, from Cerritos, say that in Europe, some of them were considering transferring from their current system to maglev.

Question: do you have any information on that?

Mr. BAUGH. All that I know is that it is the next generation of rail technology, and it is being used in Germany, and it is being used in China, and it is being used in Singapore. And it is a technology that is out there.

I would be happy to have the maglev people, I don't know if they are still here, but I would be happy to come and talk with you and share the information with you.

I think the point I was trying to make here is that there is a number of high-speed rail technologies out there and our point is that they are not here, with some minor exceptions, and that it should be in our interest to utilize our financial leverage from the investments we are going to make as a government and a Country to capture the best technologies in the world and have them made here.

This is no different, frankly, coming from manufacturing and having dealt with trade, this is no different than what is being done to us for the last decade by governments that actually have strategies around developing and targeting industries in their country. And that is all we are asking is we are going to spend the money, then let's do it here.

Mrs. NAPOLITANO. Well, my concern is that I am hearing that it is more expensive, yet if this is the future, then why are we not going parallel to finding what there is and how to work with it or how to implement it in the future, or build the systems so that in the future they may be incorporated?

Mr. BAUGH. Madam Chairman, Congresswoman Napolitano, I would beg off on this one to actually talk to the people who know more about the technologies than I. I think that is really the point.

Ms. BROWN. And let me just clear up my position, because I have made sure that I have not advocated one system or another. I don't think I should be in the position to tell the State or the Federal Government which system to use. I am sure when we negotiate and when we partner, we will get proposals. Every last one of those countries I have been to, they have proposals. They want to participate. They are ready to cut deals.

And so what is the best deal for the taxpayer? And I never want to put myself in the position because I like all of them. And what we have to do is get the one that is tailored to our system. I mean, whether it is the French or the English or the Italians or the Germans or—I have been in all the systems, and it is just so exciting to be able to go from one place to another, 300 miles in two hours and a half, or 200 miles in one hour and 15 minutes.

But keep in mind, all of those tracks in that system was invented for them. And so therefore, their freight is not running over those systems, not those high-speed systems, nowhere I have been. And so I don't know that we should be in the business of telling the government which system. I mean, that is going to be negotiated. It is going to be bid on and it is going to be the best deal for the taxpayers. And that has kind of been my position.

But I want to go back to Mr. Scardelletti.

Mrs. NAPOLITANO. Do I have two minutes left?

Ms. BROWN. Go ahead. Take all the time you like. I thought you were finished. I am sorry.

Mrs. NAPOLITANO. Oh, no.

[Laughter.]

Mrs. NAPOLITANO. Well, actually, Mr. Baugh, one of the things that was mentioned was the enforcement of trade agreement violations, and that, to me, is a great issue because in the past I know

they have been wanting to have the inspection of some of the rail cars south of the border, by technicians that we don't know whether they were trained to the level that our men and women are trained in the U.S., or required to have training. And have we done a good job of getting the State Department to go after the violations so that we are ensured that the cars that those operating, whether they are carrying hazardous material or not, are actually going safely through our communities, where there are high residential areas?

Mr. BAUGH. Congresswoman, I would defer to the people who have the expertise. I will get that question answered and get you the information back.

Mrs. NAPOLITANO. Thank you.

And I know that Mr. Hamberger, you knew I was going to talk to you, sir.

[Laughter.]

Mrs. NAPOLITANO. But I am very concerned about the Union Pacific in California not really coming to the table on working with the High-speed Rail Authority, and hopefully also with the Councils of Government through which the system is going to go through.

And I am wondering whether or not there are other options. What do they feel we need to do to be able to get them on board?

Mr. HAMBERGER. I am going to answer that question, but may I answer your last question first? Because it is a very important point. In fact, the Federal Railroad Administration, working with the AAR's Tank Car Committee did publish I believe about a year and a half ago now a new enhanced tank car safety standard for the hazardous materials and TIH materials.

Mrs. NAPOLITANO. And the placarding?

Mr. HAMBERGER. Yes. What there is, however, I understand, a hole in the regulatory structure. Our coal cars go through more testing than transit cars do. There is a bus testing facility in Altoona, Pennsylvania. I don't know how it got there. And the AAR runs the Technology Test Center in Pueblo, Colorado, where we test other new-designed cars. Nowhere are passenger rail cars tested, and I think that is something that this Committee might want to take a look at.

Getting to your second question. Union Pacific, I don't know exactly what specific issue you are talking about, but I do know that they run hundreds of passenger trains a week in California alone, probably thousands throughout their whole system every week.

Mrs. NAPOLITANO. Mostly through my District. Thank you.

Mr. HAMBERGER. These are passengers as well, and I know that the number of applications that came in for the high-speed rail grants, I am sure that they were part of any number of those as they came in.

I do know there is one line in California that we have talked about in the past that because of the volume of traffic and the physical characteristics of that right-of-way, there just is no more capacity. And so I think that it is not a reflection of their desire not to cooperate. It is just that in that particular case, the physical restrictions of the right-of-way preclude the passenger.

Mrs. NAPOLITANO. Which then my comment is, what are the options they would recommend? And that is one of the things, because as I mentioned before, L.A. County being 12 million, there is no more open land to be had unless you go to eminent domain, and that is going to be very hard for anybody to pass through.

So essentially if they are concerned about it, then we ought to have them tell the High-speed Rail Authority and the Councils of Government, OK, let's build up or let's utilize another ability to go with the freeways, build on the freeways. But they have to be partners, and they have to be able to ensure that where they are going to be affecting a lot of residents, especially through the Alameda Corridor East, that they assist in being able to help fund the grade separations, which are critical for fast movement of trains. And they tell me there are going to be four crossing that are going to be covered through funding hopefully with the high-speed rail in my area, which is wonderful, except what about the rest of them? And at one point, they said no, we are reneging a little bit; we are not going to cover them. And now I believe they are back on track, so to speak.

And we keep tags on these because this is a safety issue. It is an employee safety issue. It is a community and citizen issue, especially if they are going to be carrying hazardous material, toxics, et cetera.

So those are the things I would like to share and maybe later go into with you.

Mr. HAMBERGER. Absolutely. I have exhausted my knowledge of that particular line out there, but let me carry your message back. But on a broader issue, just of the grade crossings that is a shared—the railroads do pay some percentage.

Mrs. NAPOLITANO. Three.

Mr. HAMBERGER. Well, actually it is up to 10 percent if it is a, it is up to 10 percent, but it is 5 to 10 percent. And that is in the Code of Federal Regulations. But what is important is when we move the reauthorization bill, I would like to make sure that the Committee understands the importance of fully funding the Section 130 Grade Crossing Program that that program, notwithstanding the desire to skinny down the number of programs, that is one that I think deserves extra special attention to keeping alive.

And if I might go back to your question, Madam Chairwoman, I somehow missed the most important member of the OneRail Coalition, our Chairwoman Anne Canby of the STPP Program. So that would be another. I will get you the full list for the record.

Mrs. NAPOLITANO. Well, thank you. And if you would supply any of the answers to this, any of the witnesses who have information, to the full Subcommittee because I think all of us would be interested in it.

Mr. HAMBERGER. Absolutely.

Mrs. NAPOLITANO. And thank you very much, Madam Chairwoman, for being so patient and also for continuing to make sure that we get this information out in the open.

Ms. BROWN. Do you want to have a follow-up question?

Mrs. NAPOLITANO. No.

Ms. BROWN. Okay, I can go on then.

I have a question for both of my labor people here. Do you support a dedicated source of revenue funding for high-speed, as we do the reauthorization of, I don't know what we are going to call it this time, but as we do the reauthorization bill?

And also, you talked about technology. Do you think that the workers need additional training to ensure they can operate the new equipment and the new transportation infrastructure technology, so they can keep up with it as we move forward?

We have a very safe system, and one of the reasons why it is very safe is the workers are well trained. And a lot of times, we all want to talk about jobs, jobs, jobs. That is the key, but as we develop a system, we need to make sure we develop a safe system, and we need to have that built into the system.

So do you want to respond to that?

Mr. SCARDELLETTI. Yes, thank you.

As far as dedicated funding, of course. If there is not dedicated funding on a continued basis, then it will never work. It will just drop off the line somewhere.

Ms. BROWN. But with the new Administration?

Mr. SCARDELLETTI. Well, we are only having this hearing because there is a new Administration.

Ms. BROWN. Right, right.

Mr. SCARDELLETTI. I mean, it was only two years ago where Amtrak was proposed zero funding.

Ms. BROWN. Yes.

Mr. SCARDELLETTI. So that was going out of business.

Ms. BROWN. It was a fight every year.

Mr. SCARDELLETTI. Right, right.

Now, yes, of course, because of President Obama, Vice President Biden, and the Democrats taking control, Amtrak's on a top list.

Ms. BROWN. But the point that I am talking about, dedicated source, I am seeing just like when we built the highway system 50 years ago, we developed a formula. We had a system. We knew we were going to do it from gasoline tax.

So I am saying, do you think, and the others can respond to it, do we need a dedicated source of funding for high-speed rail?

Mr. SCARDELLETTI. Well, yes. If we had that, then we wouldn't be coming to Congress every year trying to get money. I mean, absolutely. That would be up to Congress as to how to figure that out, but that is what we need. That is what we have always needed for Amtrak. Amtrak basically operates at the whim of each Administration. Some are for it, some are against it, some are in the middle. That is why it is in the situation it is.

As far as the railroad industry, freight railroads and passenger have been implementing new systems forever. And the rail workers, all the crafts, or whatever is involved, adapt, are trained by the railroads and perform that work.

Right now on Amtrak, you have Bombardier Superliners, Amfleet, Acela. We do all that. All our crafts do that, and yes, they had to be trained, but it is not like you are training somebody to do something that is really that new because they have been working on cars their whole life, so they have that whole background. And if something new is brought in, we are 75 percent there, if not 80, ready to go, and it is just a matter of whatever the new things

are. We have adapted to all of them forever, since railroading began.

And all the complicated safety technology, centralized traffic control, all the electronics that enable, 100 trains to move through Penn Station, New York and Washington, mostly Penn Station, New York, where you have four or five commuter railroads all merging. That is all handled by rail workers.

Ms. BROWN. Well, I want to give you a shout out in the system. Are you familiar with the Beech Grove Station?

Mr. SCARDELLETTI. Yes.

Ms. BROWN. I visited the Beech Grove Station, and they have been trying to do away with it. And we were able to get additional funding to keep it open. And then when Amtrak had a major problem, you had those craftsmen there already trained. They was able to intervene, and now in the new planning, we are going to expand that system and we are going to fix it up. And that is the way it should be. We already own that property. We can upgrade that property and it could be a model hub to repair trains in the system.

Mr. SCARDELLETTI. You are 100 percent right. Beech Grove is way under-utilized. It could be a major part of Amtrak's existing and expansion. The same with Delaware, the Delaware shop. And we have people, rail workers.

Ms. BROWN. Yes, that is right. I mean, they are trained in the craft. I mean, I saw some of the work that they have done. If they had some more equipment like the paint shop, they could operate two teams at the same time. I mean, there is great potential there.

Mr. SCARDELLETTI. Right. At one time, we did everything.

Ms. BROWN. Yes.

Mr. SCARDELLETTI. We built everything there was to build on the railroad. We built it.

Ms. BROWN. Well, I talked to the guys who could fix everything. [Laughter.]

Mr. SCARDELLETTI. Yes.

Ms. BROWN. Yes, sir? Yes?

Mr. BAUGH. Madam Chair, I think the answer we would give is the same. To do this, to build a national infrastructure of this nature takes a commitment of funds over the long term, and we said that as part of our testimony. There is something very consistent, we have said, in all the climate testimony we have delivered, that as we look at these things, there has to be an aggressive long-term investment policy on the side of this Country to do these things.

And concurrent with that, the folks in the rail shops can do the maintenance, repair and do all this. In the manufacturing end of this thing, we need the same confidence that if we are introducing new technology that develops this equipment, right, to make these things, we have to train these workers as well to be able to do that. And again, it builds upon existing skills from the past, but we recognize that the technologies that we use in making things have changed and continue to change. And therefore, you constantly have to deal with the upgrade of the skills of your workforce.

And I am not just talking about the front line workers. I am talking about, as we talk about a high-speed rail system, we have to develop the engineering expertise. We have lots of engineering expertise. It is unemployed. It will require some specialty adaption to

move to higher speed rail, so that we can actually not only just work on this stuff, we can innovate, that we become an innovation leader as we learn and adapt to these new technologies.

So I think you have to think of training and education that runs the gamut from the people that are on the engineering side of the business, or the people who are actually down in the trenches maintaining the equipment, and upgrading it and modernizing it.

Ms. BROWN. And I think you gave a lengthy discussion about as we move forward with this, what we are trying to do in this area, I want us to keep in mind that what we are trying to do is to move people, goods and services so we can compete. That is what they are doing, so they can get their goods to services, so they can move their people around, so that you can live in maybe Orlando and work in Miami, so we can move people around the Country. That is what our competitors are already there, and that is where we have to get quickly so that we can compete.

Mr. BAUGH. I was in Japan a year ago this time. And I was working with somebody who commuted from a city 150 miles away and worked in Tokyo every day. That was our guide for what we were doing and looking at their technology. So we actually studied their trains and rode them and it was quite an experience.

Ms. BROWN. And we have those stories, too. I was in Spain and I was Mr. Oberstar and they went, we were in Barcelona, I went to Madrid, and they stopped in between, on the tour, and I went on to Madrid and spent the day. But it was the first of the new system and I did it in two hours and a half. I did 300 miles and it was just like we are sitting here.

So the technology there is—but, see, those are our competitors and we can't forget it, and we have to be able to get our people and goods and services and move them around where the jobs are. In many cases, we have jobs, but the people are not there. So we need to be able to get them where the jobs are.

And of course, I tell people the only real stimulus that works is transportation because we know for every billion dollars we invest in transportation, it generates 44,000 permanent jobs.

And part of the problem, and Mr. Oberstar, he has had hearings and follow-up on the stimulus dollars, and there is a direct correlation between the stimulus dollars not getting out and the fact is we still have that high unemployment.

And I suggest that the Administration have a report card in every area. We doing it in transportation, but in every single area we need that kind of commitment to follow through.

And I know I am getting off the subject a little bit. Did you want to respond? I am sorry. Yes?

Ms. TODOROVICH. Yes, Madam Chair.

I agree with the previous speakers that a sustained commitment by the Federal government and a dedicated revenue source is the surest way that we can built out a national system. But I do want to encourage us to think about all sources of revenue for high-speed rail, including one of the oldest public-private partnerships for transportation infrastructure, which is the relationship between transportation and real estate investment.

And I haven't been to Japan, but I understand that around the train stations, around the Shinkansen, you walk out and you are

in the middle of a department store or major retail center, and those are owned by the train companies. As we move forward, we must realize that these stations will create tremendous value, particularly if they are planned right with transit-oriented development and walkable communities, and people will want to be close to these services.

So let's provide an opportunity for the rail companies to capture some of that value that is created to help fund the transportation services.

Ms. BROWN. Or the private-public partnership, we don't have to run it. I mean, we could just run the train system.

Ms. TODOROVICH. Sure.

Ms. BROWN. But we could lease the property or help develop, or the taxes would pay for itself. I mean, we need to figure out how we can partner because everywhere that I have gone where the train station around it, those communities have developed whether it was from, you go from Paris to Lille. I mean, all of those little towns, everywhere you have a station, you have a development.

And we don't have to go that far. Even here, if you go to Crystal City, I mean, that is a city that was built up around that Metro stop. So that is true all over.

Ms. TODOROVICH. Absolutely.

Ms. BROWN. Yes, Ms. Napolitano?

Mrs. NAPOLITANO. Thank you, Madam Chair. There was one last question, and since you have been so kind, I thought I would continue to ask, and this is of Mr. Baugh and Mr. Scardelletti, and the young lady who just brought up the public-private partnerships.

But there are still some concerns that that brings up. Would you mind commenting on those? How it affects labor.

Mr. BAUGH. Well, certainly. Everything we have said, and I didn't go into detail because Mr. Scardelletti did, about the need to recognize existing labor law and to comply with it, and comply with all the requirements under the Federal labor laws. And we believe that public-private partnerships, when it involves the public dollar, is certainly required to live by those laws.

And I would be happy to provide our resolution on green jobs, where we discuss these matters that we just passed at our convention. But we remain on target with the idea that we want two things out of this. One, we want a greener economy. We want to do things more efficiently, more effectively. We want high-speed rail for these same reasons.

At the same time, we want to be sure we create good jobs. And this doesn't happen because we have good intentions. It actually happens because you have standards, and you live by them. That is our expectation, and that is what we believe is the idea, as Mr. Hamberger said, having all the stakeholders at the table to arrive at a conclusion about how we are going to get this done, and that people are treated decently in this process.

Mrs. NAPOLITANO. Mr. Scardelletti?

Ms. BROWN. I have one last question.

Mrs. NAPOLITANO. I don't know if he has an answer, if he wants to comment.

Mr. SCARDELLETTI. That is why in the bill, as the FRA Administrator Szabo said, if anybody gets any money, they get us. They get

the rail labor laws. They are going to get us. And what we bring is good middle class jobs.

And so as a result of this law that carries over our law, the railroad laws, you will be creating what you always say you wanted, the jobs we are losing every day that are almost impossible to recreate. This will recreate them.

Mrs. NAPOLITANO. And that leads also, Mr. Hamberger, to prior hearings where I have mentioned that the training that the railroads give the employees has to be training that is going to be able to keep them safe and keep our communities safe. And I think we have gone through that before.

So thank you, Madam Chair.

Ms. BROWN. One of the last questions.

Mr. Pracht, you mentioned that the DMU are operating in both Asia and Europe. Where are you operating now? You have operated, and at what speeds of the service, and do you have a lesson learned that you can share about those operations?

Mr. PRACHT. Yes, we are currently operating five trains a day in Florida.

Ms. BROWN. Where in Florida?

Mr. PRACHT. I am sorry?

Ms. BROWN. Where in Florida? I live in Florida.

Mr. PRACHT. Running between Miami and Fort Lauderdale on the Tri-Rail service, South Florida SFT.

Ms. BROWN. Oh, goodness.

Mr. PRACHT. Five trains.

Ms. BROWN. I rode on the train in August. There is nothing wrong with the train. There is just something wrong, we have to make sure we get the system off life support.

Mr. PRACHT. Yes, Madam Chairman.

Ms. BROWN. But the train is clean. I like the operation. I just rode on it, I rode the system to get the attention that we need the State as partners to make sure that that system is up and operational. And the Federal Government has told the State of Florida, you must run those trains and you must run at certain capacities.

Well, thank you, the train is fine.

Mr. PRACHT. Yes, I would just like to add a general comment. We have this groundswell of interest in high-speed rail, and it is significant and it is important. But let's not forget incrementalism. Let's not forget incremental rail. All of these nations around the world, and I have worked with many of them in my career, that have the high-speed rail networks, they didn't have this sort of hiatus back in the '20s and the '30s and all of a sudden and wind up with high-speed rail in 2009.

They got to high-speed rail, as Mr. Szabo said, through an incremental approach, similar to what we did with primary, secondary, and tertiary roads with the Interstate Highway Program.

I think in terms of jobs, bang for the buck, and acquainting Americans around the Country with high-speed rail or higher speed rail, so that we get public support, we have to not discount the incremental approach in many of these corridors.

You get outside the Northeast Corridor, and you talk to somebody in Wyoming about supporting trains, and there is no interest whatsoever because they don't know what a train is. If we begin

to run 79 mile an hour trains, 90 mile an hour trains, 110 mile an hour trains in places like Wyoming and the middle of the country in these population centers, and they see what modern trains are, not the long distance, 40 year old Amtrak equipment, but modern trains are, we will get a lot more support.

And building the trains to support those corridors around the country will create a lot more jobs.

Ms. BROWN. I am not going to disagree with you. And I just want to add that there is a population or a culture that is very interested in riding the trains. We just have to make it more convenient. I mean, there is an older generation that want to move, and they don't like the plane and they would, if it was possible, they would move around the Country if it was convenient.

And of course, we have seen the ridership go up with Amtrak, so there is a real interest in the service.

Mr. PRACHT. Absolutely.

Ms. BROWN. Let me just thank you all for your patience. It is almost 7:00 o'clock. We have been here all day, but this is, a great time to be involved in transportation.

And as we move forward, we are looking forward to additional comments, input, and moving our Country forward. I mean, as I say all the time, we are the caboose and we don't use cabooses anymore.

So thank you very much for your interest and your support.

[Whereupon, at 6:35 p.m. the Subcommittee was adjourned.]

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Statement Of
The Honorable Eddie Bernice Johnson

Subcommittee on Railroads, Pipelines, and Hazardous Materials

Hearing on: High-Speed Rail in the United States: Opportunities and Challenges

Wednesday, October 14, 2009
2:00 p.m.
2167 Rayburn House Office Building

- Thank you Chairwoman. I am pleased that the Committee is holding this important hearing on the opportunities for high speed rail in this county and the unique challenges we face.

- I would like to thank our witnesses here today for their attendance, and I look forward to hearing the testimony they have prepared.

- Since the Federal Aid Highway Administration Act of 1956, a disproportionate amount of federal funding has been allocated to our highway system when compared to aviation and in particular, passenger rail.

- Today, many segments of the highway system have reached capacity and cannot handle the volume demand of traffic that exceeds their design.

- Congestion is an increasing problem, which not only affects commuting and travel times, but air quality. The Dallas-Fort Worth area has been classified as non attainment for pollutant ozone, partially due to congestion, and officials are aggressively attempting to implement strategies to improve air quality.

- Our transportation investment has also reflected policy that has supported urban sprawl reliance on automobiles, and the flight from urban centers.

- However, mindsets are changing. More and more, American's are looking for alternative transportation methods as they consider more environmentally efficient modes of transportation, embrace public transit, and attempt to decrease their dependence on foreign oil and automobiles.

- The lack of high speed rail for intercity travel is sorely lacking in our transportation system, and I firmly believe high speed rail should be a priority for the transportation and infrastructure policy in our country.

- Future projections show that intercity travel will increase and our mobility will be severely restricted with our current transportation capacity.

- High speed rail offers a competitive alternative that is not only safe, but efficient and in-line with the evolving needs of our society, both in terms of convenience and its environmental impact.

- At this time, the United States is lagging behind other industrialized nations that have invested strongly in the development of high speed rail.

- Over 45 years ago, Japan became the first nation to develop a high speed rail.

- Today, in 2009, in the United States, Amtrak is the only option we have that can support high speed rail. We invest a fraction of what countries such as Spain and Japan invest.

- It is simply unacceptable to continue to disregard the unique benefits that high speed rail can provide in regards to economic competitiveness, especially in today's climate where mobility is a necessity.

- I am encouraged by recent legislative developments that have sought to end the funding and policy discrepancies we have in regards to high speed passenger rail.

- I also believe that we must develop alternatives to Amtrak as we look to high speed rail investment.

- While Amtrak is ideal in particular regions, for places such as Texas with large land mass and major cities spread out across the landscape, other high speed rail alternatives are vital.

- I believe a strong state leadership is essential to this expansion.

- The Passenger Rail Investment and Improvement Act has authorized funds to support Amtrak, but also authorized grants to States that may be rewarded on a competitive basis to fund the construction of the eleven high speed rail corridor developments.

- I am also pleased that the Recovery Act includes $8 billion in grants for high speed rail, and President Obama himself has made the investment in high speed rail a national priority.

- I know this process will bring challenges to not only the federal government but to our State partners. We must all keep our commitment to high rail insight and work with our local governments back home and with the various agencies to ease the growing pains we may encounter.

- Even in my state of Texas, know for connection to the oil and energy industries, there is growing demand for a high speed rail.

- Efforts began in early 1991 and today the effort continues to build the first-ever high-speed rail passenger system and multi-modal transportation corridor in Texas.

- The goals are the same as the intercity rail we are looking at today, to provide innovative solutions to our transportation problems by linking millions of people to airports, major cities, employment centers and facilitating our economic viability.

- I am also happy to have Cintra here today, located in Austin, TX, testifying on their efforts to expand high speed rail with a partnership-based model.

- I look forward to hearing the witness testimony today and tackling the obstacles we have developing high speed rail infrastructure.

- Thank you Chairwoman.

Congresswoman Laura Richardson
Statement at Subcommittee Railroads, Pipelines, and Hazardous Materials
Hearing on "High-Speed Rail in the United States: Opportunities and Challenges"
2167 Rayburn House Office Building
Wednesday, October 14, 2009
2:00 P.M.

Madam Chairwoman, I want to thank you for convening this hearing to discuss High-Speed Rail. I am thankful that this is an issue that is finally gaining the national attention and funding that it has long deserved.

The United States has fallen tragically behind in the development of High-Speed Rail. While the $8 billion in the stimulus along with an additional proposed $1 billion annually is a good start, this still pales in comparison to investments made around the world. For decades countries across Europe have created thousands of miles of high-speed rail track, and the Chinese have announced they plan

on spending $730 billion by 2012. Let me repeat that, $730 billion over the next few years.

The importance of a high-speed rail project for the economy of California cannot be overstated. The construction of a High-Speed rail corridor in California would bring economic development and create hundreds of thousands of new jobs. California is tied for the fourth highest unemployment rate of any State. Needless to say a project that would create 160,000 construction related jobs to plan, design and build the system in addition to 450,000 permanent jobs as a result of the economic growth the train system will bring will be a huge stimulus to the economy of California.

Additionally, once completed, the State would benefit from improvements in air quality, congestion relief on our roadways and in the skies, reduction in greenhouse gas emissions, and enhanced mobility for people living all across the State.

The citizens of California have recognized the importance of this project and have done their part by passing a measure that would authorize almost $10 billion in bonding authority of high-speed rail. California also plans on generating a significant portion of the funding from private sources, asking for a federal share of significantly less than half the cost of construction. The corridor is projected to generate an operating surplus, thus it would not need ongoing federal support once completed. However, with the projected cost at approximately $40 billion, significantly more federal funding is needed to complete this project even if California gets the entire amount it applied for under the Recovery Act.

I'd like to thank all our distinguished witnesses for appearing before us today and I look forward to hearing their statements.

Thank you, Madam Chairwoman

Robert C Baugh
Executive Director
AFL-CIO Industrial Union Council
815 16th Street NW
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Testimony of Robert C. Baugh
Executive Director, AFL-CIO Industrial Union Council
Before the U.S. House
Subcommittee on Railroads, Pipelines, & Hazardous Materials
October 14, 2009

Chairwoman Brown and Ranking Member Shuster, on behalf of the 10 million members of the AFL-CIO and the affiliates of the Industrial Union Council, I want to thank you and the members of the Subcommittee on Railroads, Pipelines, & Hazardous Materials for the opportunity to testify this afternoon on this important subject.

Addressing global climate change, protecting our environment and achieving energy independence are critical to the economic, environmental and security interests of the United States. America must lead a technological revolution in the way energy is generated and used with massive investments in new labor-enhancing technologies and energy efficiency. High speed rail is one of those revolutionary technologies that this nation needs but one in which we lag behind much of the world.

With high speed rail the nation stands at the crossroads of opportunity for domestic investments in innovation, new technology and energy efficiency that will save jobs, create new jobs and new industries and revitalize American manufacturing. Our transportation system can serve to reduce greenhouse gas emissions. Public transportation and high speed rail offer an excellent opportunity to move people and goods more efficiently while promoting good jobs. But, while we can be certain that the rail lines will be built here there is no guarantee that they and all the related technology will be made here. What is needed is a new industrial policy — an environmental economic development policy — to guarantee that these investments are made in the United States and that they result in good sustainable jobs, with employers who respect their contracts with their workers, and respect their workers' right to organize a union.

The Current Situation in Manufacturing

In the current recession the nation has lost jobs for more than 21 straight months. We have an official unemployment rate of nearly 10% that most economists acknowledge is actually closer to 15%. The nearly 2 million manufacturing jobs lost in this period only

adds to the devastation of the years prior to this downturn. Since 2001 the nation has witnessed the closure of 40,000 manufacturing facilities and the loss of more than 5 million manufacturing jobs of which approximately 1 million were professional/technical (design, engineering, R&D, etc.). The industrial Midwest and the state of Michigan, with real unemployment approaching 25%, sit at ground zero. Within their borders lies an army of dislocated and discouraged skilled autoworkers, machinists, steelworkers, industrial engineers, designers, scientists and closed facilities that represent the best of our nations' skills and technical capacity to create, innovate and manufacture the goods needed for a sustainable future.

These job losses through the decade have also been accompanied by a series of record trade deficits driven by manufactured goods deficits. For example, the 2006 and 2007 goods and services trade deficit of $ 756 billion and $701 billion were driven by goods deficits of more than $836 billion each of those years and, even with record oil prices, the non petroleum/manufactured goods deficits were more than $500 billion in every year. In the run up to the recession China accounted for well over half the manufactured goods deficit. In spite of the recession, the annual trade deficits with China continue to break records hitting $266 billion in 2008 and the 2009 deficit appears to be headed for another record with China now accounting for 75% of the manufactured goods deficit.

To our economic peril, the nation has ignored the economic maxim: it matters where things are made. We have seriously undermined damaged our technical capacity to innovate and to make things. The loss of these skilled workers, designers, engineers etc. means that the next innovation, the next best idea, the next process improvement, the next investment will be made in some other country not ours. The past decades massive loss of jobs, investment and technical capacity in manufacturing and wildly imbalanced trade must not be the precedent for the future. It is time to change direction.

An Environmental Economic Development Policy

Our nation is stumbling toward an industrial policy, an environmental economic development policy. We have decided we need an auto industry because it is the backbone of an advanced industrial economy. We made a down payment on a new energy policy in the Recovery Act and in the House passed climate legislation. And, we now have an individual appointed by the President, Ron Bloom, whose job it is to actually think about manufacturing policies and strategies for the nation. This is an important step forward because every single one of our competitors, from the European Union to China, has a manufacturing strategy and industrial policies to support that strategy. It is time for the United States to do the same and reinvigorate our manufacturing base. The development of a high speed across the U.S. offers such an opportunity.

High speed rail investments, like the ones in a sustainable energy infrastructure must be structured to create good jobs here in the United States. But, we have an uphill

battle to fight. Three decades ago, the United States led the world in renewable energy technology, but today too many of our energy investments create jobs in other countries. The United States is home to only two of the 10 largest solar photo-voltaic producers, one of the top 10 advanced battery manufacturers and two of the top 10 wind turbine producers. Last year, less than half of the record 8,300 megawatts of wind turbines installed in the United States were made in this country. In 2008, the United States ran an overall green trade deficit of $8.9 billion, including a deficit of $6.4 billion in the critical category of renewable energy. Our immediate goal must be to convert this trade deficit into a trade surplus.

The challenge may even be greater in high speed rail. This technology has been a fact of life for decades in Europe, Japan and more recently Singapore and China. The technological revolution spawned by these systems continues to evolve from rail to magnetic levitation. The innovation, knowledge, and experience of building and maintaining high speed rail equipments and systems is embedded in the nations that have developed and deployed the technology over the past thirty years. The limited domestic manufacturing experience is tied to the high speed rail system in the northeast. When it comes to the next generation of high speed rail, the U.S. has one firm, Maglev Inc. located in the Pittsburgh area, engaged with the development of this state of the art technology. This is only one example of a broad range of high speed rail technologies that an advanced manufacturing economy such as ours should have the capability of delivering but we have lacked the long term investments to fully develop this capacity. Our investments in high speed rail must begin with the goal of capturing the best technology in the world and have it all made here.

While we may have limited experience with high speed rail we do have some with Amtrak and its workforce in the northeast. In addition, Amtrack provides a national network with an extensive reservation system, existing rolling stock, statutory relationships with the freight railroads, a physical infrastructure that could be leveraged to support various high speed rail initiatives. Most importantly, Amtrak has a dedicated and experienced workforce that will be critical in rolling out and operating high peed passenger rail service. These employees are the best trained passenger rail workers in the nation, and are well positioned to implement a high-speed rail program.

Investing in the Future

The Industrial Union Council and the AFL-CIO joined with transportation labor in endorsing a broad agenda to rebuild and expand our national transportation system. One of our priorities was passage of a robust economic stimulus bill that made a down payment on a new energy policy for the nation including massive new investments in transportation. The legislation signed by the President provided an infusion of $48 billion for transportation in the stimulus legislation. The Federal Railroad Administration's (FRA) High Speed Rail Program has already been overwhelmed with an initial pre-application process yielding over $102 billion worth of requests from 40 states. The FRA will have to decide how best to allocate the $8 billion already appropriated for this program.

The Industrial Union Council is here today in support of these efforts and of this committee's interest in making additional long term investments in high speed rail. It is in the nation's interest to maximize the opportunities all these investments offer.

The Recovery Act made an important statement and step in the right direction by the inclusion of the Buy American language that honored existing trade agreements. For the Industrial Union Council, I would like to express our appreciation Chairman Oberstar and the members of this committee for their support of the Buy American provisions. It is amazing that in spite of the legality of laws that have been on the books for seventy years, compliance with WTO regulations and our treaty obligations, this action drew reckless and irresponsible charges of protectionism and trade wars.

Making certain that public dollars are invested and recycled in this economy is common sense public and economic development policy. This is exactly what every other nation does in developing industries and investing in their own countries to create and retain good jobs. To ensure that public investments result in the creation of good green jobs here in the United States we must use our domestic investment laws, strengthen them and begin to thinks and act as other nation states do.

Thinking and Investing Strategically

The use of Buy American laws was an important tactical move but it wasn't particularly strategic. The fact that the manufacturing situation has changed so dramatically over the past two decades and that that the best high speed rail technologies (as well as other mass transit technologies) are foreign suggests that Buy American laws alone is not enough to get the job done. Its application tends to be on a project-by-project basis and those are local and regional (within a state). In addition, the current system of distributing resources across the nation does not result in cooperation between states nor does it give a public body the financial leverage to negotiate at a scale.

Recent developments in Wisconsin and Los Angles offer an example of the limitations. Transportation officials there are to be commended for leveraging their financial resources and negotiating smartly with foreign firms to get a rail car assembly plants put in place as part of the deal. They went as far as their financial resources could take them to generate manufacturing jobs as a part of their rail investments. However, in the greater scheme of things, developing a real industry will require more than a set of scattered assembly plants. It means having the means to negotiate for all the technology and the full production system to both to generate jobs and to become fully engaged with technological innovation in the industry.

There is another reality with the current system. State economic development agencies will compete with one another for this work at a huge cost to the public purse unless directed otherwise. There is nothing in this legislation that demands/requires a

variety of forms of cooperation and collaboration between the states or regions. Funding must address the common design, regional collaboration and targeted industry development goals.

The challenge for American high speed rail is to develop an entire industry and new technologies i.e. the entire production system from the supply chain to the engineering and R&D. That takes scale, financial leverage and cooperation. These investments must be at scale (by design or via regional collaboration) to provide the negotiating power necessary to leverage both private capital and the best international technology to invest domestically. It requires the ability to think in a larger economic context ... to have the financial leverage to negotiate at scale and to target regions like the industrial Midwest and auto and steel industries to take advantage of the idled heavy industry capacity, and pool of skilled workers, designers and engineers. And, within in this macro context the goals should be to leverage/encourage comparable systems and common design while using the best technology in the world and having it made here.

Recommendations for Industry Development and Job Creation

Congress must make an aggressive sustained commitment of resources to fund the energy and environmental transition of our nation. We must fund new technology, energy efficiency and the research and development that enables industries such as the transportation and manufacturing sectors to transition while also assuring that these global energy price sensitive industries remain competitive. In addition, Congress must assure that R&D investments resulting in new products or technology must also lead to domestic investments that create good jobs. Currently, there are no requirements linking R&D investments to domestic employment opportunities. A useful role for the federal government would be to support industry development through a national research and development network and local incubators linked to transit systems, universities, vendors and suppliers to help reinvigorate the production supply chain.

Congress must enforce and strengthen Buy American and other domestic investment requirements for federal procurement and grants to states and local governments. This commitment includes tightening domestic content thresholds, requiring waiver transparency (place on the internet in real time), limiting available waivers, expanding product coverage to all manufactured goods and raw materials, prohibiting project segmentation and mandating common-sense standards for product substitutability.

Congress must enact other forms of investment criteria for public resources not covered by Buy American and related laws. For example, criteria used in earlier proposed climate legislation for the award of financial incentives to targeted manufacturers included: (1) use of domestically produced parts and components, (2) return of idle manufacturing capacity to productive service, and (3) location in states with the highest number of unemployed manufacturing workers.

Congress and the administration must adopt a manufacturing strategy that targets resources to revitalize our manufacturing base in the industrial heartland and utilizes the existing pool of skilled workers, engineering talent and idled capacity. The use of Buy American, related regulations and domestic investment criteria can be a powerful incentive for government and industry to be more strategic in the targeting of public investments but these tools need to become more strategic. Our energy and mass transit resources are currently spread so widely that it is difficult to maximize the potential impact of these investments. Currently there are no rules, guidance or incentives in place to ensure a more strategic approach. The federal government must use its own financial leverage to encourage regional and national collaboration to achieve the following goals: common designs, system comparability, attracting the world's best technology and using our combined financial resources to build new industries by leveraging private capital, international technology and establishing the entire production systems here.

Congress must assure that its investments have standards that lead to good jobs. It is critical that the FRA vigorously enforces the statutory requirements attached to high speed rail and other transportation investments, especially those designed to protect the jobs and rights of workers. Specifically, the FRA must ensure that any recipient of funding make certain that rail workers are covered under the appropriate rail and labor statutes. Davis-Bacon prevailing wage requirements must fully apply to all covered construction work. Labor protections for displaced workers and requirements to preserve existing collective bargaining agreements must be administered fairly and consistent with the law.

The AFL-CIO and the affiliates of the Industrial Union Council look forward to continuing to work with this committee in its efforts to build a high speed rail system for the nation that utilizes and builds upon America's manufacturing base.

TO: **Chairwoman Corrine Brown**
FROM: **Robert Baugh**
AFL-CIO Industrial Union Council
RE: **Question from October 14, 2009 High Speed Rail Hearing**
DATE: **November 3, 2009**

Thank you for the opportunity to testify on October 14, 2009 and for your questions regarding my testimony. The questions you asked and the answers follow. If I can be of further assistance please let me know.

Question 1

You state in your testimony that the United States, unlike other countries, has no manufacturing strategy or industrial policies and that we need those to guarantee that our investments are made in the United States and that they result in good sustainable jobs. Can you elaborate on that? Can you talk about the industrial policies of the other nations and what is contained in them and what we could do here in the United States?

Answer to question 1

There is a reason every other developed and advanced developing nation has a manufacturing strategy. Most governments see manufacturing as key to long-term growth, and they target investment in industries and technology. In contrast, over the past 20 years, the U.S. government abandoned strategy to market forces and left workers and communities hanging without a safety net.

One of the most important steps we can take is to acknowledge the failure of U.S. policy in this area and to begin the hard work of developing a national manufacturing strategy. Setting a goal by this committee to develop both a high speed rail system and a high speed rail production system a domestic high speed rail industry he creation of a Manufacturing Policy Director

Industrial Policy in the U.S.

The last major industrial policy action to target a specific sector in the U.S. came under the Reagan Administration with Sematech in the 1980's. In this case government investments were united with a consortium of industry and universities to engage in R&D and a concerted effort to save and expand investment in the semiconductor industry. It worked. Unfortunately, this was also the same Administration that canceled the other major industrial policy effort started under the Carter Administration, investments in renewable and other energy technology. At the time we led the world in wind turbine, solar, geothermal and biomass. Ironically, our public research was used by nations like Germany, Japan, and Brazil to back their industrial policies to target these technologies,

invest in them and build new industries. Now these nations' renewable technologies lead the world.

In the intervening years there has been nothing like Sematech or the energy technology investments. In fact, the National Academy of Sciences has been issuing reports for years that our technological and manufacturing leadership is in trouble. Over the past decade they have issued numerous reports identifying a crisis in a series of sectors and technologies such as metals, super alloys, composites, opto-photonic materials, ceramics, catalysts and machine tools. In spite of these warning the U.S. government has abandoned strategy to market forces that are driven by other financial concerns unrelated to the nations economic and national security.

The work of this subcommittee and the full committee can help shape a new manufacturing strategy for the nation.

Industrial Policy can cover a wide range of applications front labor, environmental and health and safety standards to tax, trade and investment policy. The following are examples of Industrial Policy related to industry and technology development and deployment. The key goal and requirements driving these policies must be to create good jobs, increase per capita income and to provide the goods/services they are intended to produce.

Domestic Industrial Policy: Examples of What the U.S Can Do

Making a decision to support a specific industry for development is a policy decision that brings into play other policies and policy tools in support of that decisions:

Industry Development: targeting specific industries for development e.g mass transit, high speed rail,

Organizational support: Sector consortia organization and development, government support for consortia development with explicit goal of domestic employment, support for supply chain development/organization (Manufacturing Extension Partnership)

Procurement Policy: broad application of appropriate domestic investment policies such as Buy American

Investment Policy: domestic investment criteria for grants, loans, and other investment programs. For example, 1)document the greatest use of domestically-sourced parts and components; 2) return to productive service existing idle manufacturing capacity; 3) are located in States with the greatest availability of unemployed manufacturing workers;

Labor and Contractor Standards: Construction related work will be created by prevailing wage laws; Manufacturing related work must be compensated in an amount that is equal to at least 100 percent of the State average manufacturing wage, plus health insurance benefits; Contractors and subcontractors must comply with existing federal

laws, including all applicable labor and affirmative action laws, the Occupational Safety and Health Act, environmental laws and anti-discrimination laws. Recipients of federal funding should be required to remain neutral in union organizing campaigns.

Modernization Assistance/ Industrial Conversion Assistance : financial assistance for retooling (tax/grants/loans), technical assistance (Manufacturing Extension Partnerships, universities), targeted assistance for renewal and conversion of brownfield industrial sites.

Research and Development Support: government sponsored/funded university and university/private sector partnerships, product commercialization ... investments for product commercialization must be linked to requirements for employment outcomes. Institute clawback provisions in grants for repayment of federal investments with interest for failure to perform i.e offshoring of commercial products funded by federal R&D.

Targeted geographic areas for development: proximity to needs/skills/industrial capacity, transport capability,

Tax Policy: investment tax credits, production tax credits, employment tax credits, R&D tax credits (w/ performance criteria for employment outcomes... U.S. should not be paying for offshore job creation)

Workforce Development: training and education linked to employment, partnerships with universities for science/engineering and other professional industry related education

Industrial Policy Practices Abroad

There is a pattern to the nature of the industrial policies practiced throughout the world. One part involves investments and the targeting of specific industries and technologies for development. The second part involves steps taken to protect these industries while they are in development and even as they achieve maturity.

Nations vary in their industrial policy practices. It is also important to recognize that the political and economic drivers behind other economies are not the same as our own. In most there is an explicit and implicit partnership between government and industry designed to capture employment and economic opportunity in their domestic economy. Here the assumption has become that the market will fix everything. As Alan Greenspan told Congress last year, that assumption has proved to be a false one.

The models of industrial policy we now compete against grew from the Post WWII era. The Constitutions the allies put in place Europe and Japan had key industrial policy components. One was legal recognition of trade unions and collective bargaining. This was part of a rebuilding effort that helped create new institutions within a social democracy. It was also a Keynesian economic model that recognized that workers utilizing these rights and acting in a free market would be able to raise their own wages and better working conditions. It worked better than anyone dreamed it would.

Europe

As these nations rebuilt there was also an explicit partnership between government and industry to help restore their nations industrial base for peacetime production. These countries made decisions to support and target key industries such as steelmaking, shipbuilding, automobile, chemicals and others.

Economist Pat Choate in his new book, Saving Capitalism, discusses industrial policy as it is practiced abroad. He notes that European nations like Germany are more discreet in their practices but they do support national priorities like automobile and machine tooling. Choate cites Airbus as a "glaring example" of industrial policy and investment at work: "Spain, France, and Germany subsidize the design, production and sale of aircraft not only to compete in international aviation but also as a means of retaining an active presence in dozens of related areas, including materials and advanced computers." He could have easily drawn a similar analogy to the development of high speed rail that is already competing for work in the U.S. market.

When the European Union expanded in the late 80's to include Portugal, Spain and Greece, there was a continent wide debate by the existing EU members over industrial policy. These countries were very poor with lower employment and educational standards. Thus the EU focus was directed toward maintaining high standards for wages, benefits, environment, safety and health and a range of other issues. They came to an agreement over a long term aggressive investment policy in the new member states (they too had to invest) and with benchmarks and requirements that these nations raise their standards to match the EU states. It worked. The jury is still out on the most recent much larger round of expansion of the EU. This has not had the same level of commitment seen in the earlier round.

The Asian Model: Targeting Industries, Technology and Exports

The Asian model that emerged over the past four decades was set by Japan. Through the Ministry of Industry and Technology (MITI) the Japanese government targeted specific industries for development and sought to rebuild their manufacturing base though an export led strategy. Auto, Steelmaking, shipbuilding and later electronics, consumer and computer based technologies were all targeted. The Japanese government invested in R&D efforts with industry to develop products that would be made in Japan. Profits, in many instances, came as a secondary concern in a drive to capture a dominant market shares. They also engaged in protection of their domestic markets so that foreign products could not gain a foothold. This goes on today

South Korea emulated the Japanese export driven model with similar government support, targeting of industries including steel production, shipbuilding, automobiles, electronics, etc.. They did it faster than the Japanese and now they lead the world in shipbuilding and home electronics production. The Chinese have taken the same model to an extreme. However, unlike Japan and Korea where private sector firms worked with the

government, in China it's state owned industries. Also, China has explicitly sought to attract international private capital with joint venture models but these often come with a hook. They also want the intellectual property, have 80% domestic content requirements and, as was recently seen in the 421 trade case on tires, companies may be required to export all their production.

In addition to the investment side policies that come with the intent of creating domestic employment opportunities, these countries all take steps to protect their markets and the industries and technologies they have developed. Dr. Peter Navarro of UC Irvine has detailed these practices in his "Benchmarking Foreign Advantages" chapter in a new book, Manufacturing a Better Future for America. These appear in a list at the end of this section.

China's Pillars: Targeting U.S. Industrial Sectors

China and other countries have adopted broad industrial and technology strategies aimed at building up their capacity in cutting edge technology areas across the manufacturing sector. Many of these policies include strong incentives designed to attract foreign investment in R&D and production in advanced technology areas, which encourages transfers of technology and production capacity offshore, including some of the design for civilian technologies with defense applications. The US-China Economic and Security Review Commission has helped document the practices of the Chinese government. The Chinese have identified 161 priority central industries with 30 to 50 targeted to become national champions – giant corporations with a size and reach comparable to GE and Microsoft.

It is clear one strategic element of China's development strategy is to build export platforms across manufacturing. Another is the designation of several industrial sectors, most notably the *electronics and telecommunications and automotive industries, as "pillar" industries,* that are strategically important and therefore deserving of government funding and assistance. Though not a "pillar" industry, aerospace also receives a great deal of Chinese government support. For example, the USCC has reported that China has made development of the semiconductor sector a national priority, and is fostering this development with government support for research and development, preferential tax treatment, and the use of the technology standard-setting process to favor its domestic firms.

China is no longer just playing catch-up with the United States and the other developed nations regarding basic manufacturing production and technologies. As the USCC has pointed out, China is developing and producing technology that "is increasing in sophistication at an unexpectedly fast pace. China has been able to leap frog in its technology development using technology and know-how obtained from foreign enterprises in ways other developing nations have not been able to replicate."

Protectionist and Mercantilist Trade Policies From Manufacturing a Better Future For America (pp109 and 113)

Protectionist Trade Policies	*Mercantilist Trade Policies*
Quotas and tariffs	Export Subsidies
Port-of-Entry Restrictions	Currency Manipulation
Inflated Customs Values	Counterfeiting and Piracy
Local Content Rules	Forced Technology Transfer
Import Licensing Restrictions	Lax Enviro and Health and Safety Regs
Technical Barriers	Unfair Labor Standards and Practices
Discriminatory Trade Policies	Entrustment or Direction
Corruption and Bribery	Export restrictions
	Mercantilist Driven Foreign Direct Invstmt

Comprehensive enforcement of trade law and trade agreements that recognize these protectionist and mercantilist practices is a critical component of an industrial policy.

Question 2

One area that I think is particularly troublesome to me is one in which you raise in your testimony: the lack of high-speed rail technology and a full production system in the United States. How would you recommend that we use our trade policy or agreements with foreign operators to help us with get some technology through technology transfer agreements or some other means to create that production capacity in the United States? Korea entered into some technology transfer agreements and now have a domestic production capacity for high-speed rail.

First, as a nation, we need to make it clear that we intend to have high speed raid production and R&D in the U.S. and that we are investing resources in that development. It is critical to send a message to the international community that we are serious. At the same time we want to make clear that we welcome their investments in the U.S economy to help build that production.

Sending signals of this nature is no different than in the early 1980's when the U.S. signaled the Japanese auto manufactures that if they intend to sell in this market they needed to invest in building productive capacity in this market. This signal from the Reagan Administration worked and led to Honda's first investments in Ohio and Toyota's in Tennessee. Trade agreements and trade law enforcement played an important role in expressing the seriousness of our efforts.

The Chinese have pursued technology with legal and extralegal means. One of their requirements for investment in China is technology transfer as well as seeking R&D investments. They have used their financial leverage (loans, land, joint investment, etc.) and market access as leverage to access new technology. The USSC has extensively documented their methods.

The U.S. needs to learn from the experiences of others. We have financial leverage from the large long term investments we are poised to make in high speed rail and mass transportation and we have the market in which that money will be spent. What he U.S. can and should do is use the financial leverage of the investments we intend to make to negotiate the rights to the technology and the production systems.

Question 3

You mention that some financial incentives were included in the climate change legislation for targeted manufacturers to help stimulate manufacturing in the United States. Can you describe those financial incentives and tell me whether you think that is something we should be considering in terms of the Surface Transportation Authorization Act.

A National Strategy

As our testimony indicated the Buy American language is a good tactical tool designed to encourage the use of domestic suppliers. But, this is not particularly strategic because it does not address concerns that the subcommittee has already identified such as comparable design and fully capturing new technology and the production system. There are two legitimate goals at work here: to build a high speed rail system and to have the system supplied by a domestic production system.

It would be useful to begin thinking about high speed rail production separately from construction, operation and maintenance. Construction, operation and maintenance are related to geographical proximity. The production system is not necessarily related to proximity. The current policy goal is to build a system but the funding process is not designed to address an industrial policy goal of getting the production system located in the U.S. These need to be brought into harmony.

Consider the negotiating position the U.S. would be in if we had a common design, a geographic target for the production, and the full weight of the investment behind negotiating the onshoring of technology and production system. This is how nations such as Japan, France, Germany and Italy thought about the development of a common high speed rail system. It was a straightforward industrial policy. They set out to assure they would build off their existing expertise and create more new jobs in developing the system. This is the way we need to begin thinking.

Regional Cooperation

The balkanized approach of individual states competing for their separate parts does not encourage cooperation between states. Each competes for their separate piece. No one is capable of winning an award large enough to provide the financial negotiating leverage to

seek a lion's share of the technology and production. We need a national negotiating strategy with the full force of our investments behind it. Regional cooperation would be a step forward to meeting the common goals.

Over the years some state economic development programs have used financial resources to drive regional cooperation within a state. They use grant programs to drive regional planning with the promise of real funding for good projects but no funding at all without broader cooperation. It works. Similar incentives need to be put in place nationally to achieve regional cooperation for the development of a high speed rail industry.

A cooperative effort could be one of two states competing to build their rail lines others could be cooperating to be the production center for the system. Both end up gaining good jobs and the federal investments are fully recycled in the economy. The industrial Midwest is well positioned to be the hub of high speed rail production with the skilled workforces, engineers, and idled industrial capacity. We need to build a national scale industry and that calls for cooperation between the federal government and regions of the country.

TESTIMONY

Before the United States House Committee on Transportation and Infrastructure Subcommittee on Railroads, Pipelines and Hazardous Materials

On High Speed Rail in the United States – Opportunities and Challenges

by
Frank J. Busalacchi
Secretary
Wisconsin Department of Transportation

Wednesday
October 14, 2009

Chairwoman Brown, Ranking Member Shuster and Members of the Committee, my name is Frank Busalacchi. I am Secretary of the Wisconsin Department of Transportation and Chair of the States for Passenger Rail Coalition (SPRC), a coalition of states that support passenger rail expansion. I am here today representing the Coalition and appreciate the opportunity to share with you my views on the key opportunities and challenges that we must address to achieve our national passenger rail service vision.

For several years I have worked with other states and a SAFETEA-LU-designated Commission to outline the need for passenger rail investment. Until recently, it appeared that our efforts were fruitless and our national public policy would barely support the continuation of our Amtrak service, much less new state passenger service. In that atmosphere the States for Passenger Rail Coalition (SPRC) was organized. Our membership grew to over 30 states that believe passenger rail is a critical transportation mode in which the nation needs to invest. These states believe the federal government has invested in highways, airports and transit for many decades and it is now time for passenger rail investment. The key focus of the SPRC was to demonstrate the need for a federal funding partner to support the states' efforts.

Over the past two years, we have made tremendous progress on moving the passenger rail vision forward. First, the National Surface Transportation Policy and Revenue Study Commission recommended that the national passenger rail network be expanded. The Commission recommended a 50-year vision that phased in service over decade-long increments and focused on intercity pairs within 500 miles of each other. Finally, the bipartisan Commission recommended a significant increase in the gas tax to support an annual investment of $5 billion annually in passenger rail. The Commission delivered its report to Congress in January 2008; the Commission's policy prescription supported the efforts of members who have long believed the nation's intercity passenger rail network must be expanded and funded by the federal government.

What followed was the adoption of major pieces of policy and funding legislation. The Passenger Rail Investment and Improvement Act (PRIIA) of 2008 and the American Recovery and Reinvestment Act (ARRA) of 2009 provided a policy and funding basis for significant expansion of the nation's passenger rail network. Through President Obama's federal fiscal year 2010 budget request and the action of the House and Senate Appropriations committees, Congress has shown its commitment to re-envision our passenger rail network. States have

seized upon these opportunities through their applications for ARRA passenger rail funds which far exceed the $8 billion that ARRA provided.

I am an optimist at heart, but we must address the issues of the moment. Opportunities and challenges represent two sides of the same coin. Right now, we have an unprecedented level of funding approved by Congress to take the first steps toward expanding our passenger rail network and achieving our passenger rail vision. But the other side of the funding opportunity coin – the challenge – is that we build the right projects, use the available funds wisely, and plan for the future. With that said, the remainder of my remarks will focus on the key challenges we face – and recommendations for your consideration.

Establishing the network – New Starts or Highway Model

Since the 1940s, this country has disinvested in passenger rail while countries in Europe and Asia have made passenger rail the centerpiece of their transportation systems. Instead, we invested in our interstate highway and aviation networks. Now, we have well-developed aviation and highway networks, albeit with challenges of their own, but our nation's rail network needs significant investment after a half century of disinvestment.

The model used to build the national interstate highway network was a partnership between the federal government and the states. The federal government assured funding – 100 percent for a period of time – and worked through an organized process with the states to assess which elements of the network should be built in which phases. Depending on how you calculate it, the entire interstate network took between 30 and 40 years to build.

The states have been at the center of this passenger rail renaissance, investing our state transportation funds in corridors that enhance existing Amtrak service and expand that service. Wisconsin has invested almost $7 million per year on operating costs associated with providing additional frequencies and capacity on the Hiawatha service between Milwaukee and Chicago. We share these costs with the state of Illinois, and this partnership has endured through changes in administrations in both states.

When Congress passed PRIIA, that legislation employed the New Starts model for funding distribution. States with significant matching funds would likely be eligible for federal funds, however funding is competitive on a year to year basis and competition among states for funding will be intense. ARRA funding was a wonderful shot in the arm for states with the

added benefit of a 100 percent federal share, but FRA has asked states about their ability to match these federal funds through the application process.

I would strongly urge Congress to adopt the interstate model to build the national passenger rail network. Many states want to develop their passenger rail networks; they will be able to support projects on an 80 percent federal and 20 percent state funding split, but they will need that federal share.

The federal government and the states need to think strategically about expanding the passenger rail network. We need to work towards a long-term vision. All states are at different phases of rail network development. A phased approach will allow states that are ready to go to start constructing their projects, while states that are not ready can work on their planning and environmental processes with some confidence that they will receive federal funds to build their projects in a later phase.

This issue should be addressed in the National Rail Plan. Soon, the FRA will report to Congress on a preliminary plan; it will be up to Congress to provide guidance to US DOT and FRA on which model – New Starts or Interstate – that Congress believes will best support their vision for the high speed passenger rail network implementation.

Assuring the funding – pay as you go or debt-financed

Whether you are building a home, a school, or a rail network, you have to know when you begin your planning that you will have the capacity to pay for the project through completion. The funding that is currently available – over $8 billion -- is a tremendous down payment, but without assurance of a long-term commitment on funding, the national passenger rail vision will not be achieved.

The States for Passenger Rail Coalition has been consistent in its advocacy for funding. We seek a federal funding partner that can make a long-term commitment to passenger rail funding. Elements of funding policy include:

- Recognition in federal transportation policy and funding that passenger rail is a critical transportation element of the national and state networks and should be part of our intermodal transportation network.
- Provision of an 80 percent federal/20 percent state funding program for states to plan, design and implement passenger rail.

- An ongoing source of federal revenue to fund the program – again, similar to the highway program.
- Establishment of program and funding policies similar to highway program, which provides efficient and effective grant distribution to the states.

To accomplish this, I would recommend that the next surface transportation authorization bill contain a multi-year authorization for passenger rail funding. The bill would also include funding for states to plan, design and construct their networks. Without a strong federal partnership, only a very few states will be able to develop and deliver passenger rail service. Finally, the authorization bill will need a revenue source that is adequate to pay for the network as we build it.

Establishing an equipment supply network – coordinated or piecemeal

With constrained funding over the past decades, it is not surprising that our passenger rail car fleet is old and in desperate need of replacement. Domestic passenger rail car manufacturers left the country during those decades of passenger rail disinvestment. Most train cars are from the previous century; we have been refurbishing these cars where we can, but the next generation of passenger trains along with establishing a domestic manufacturing sector is a big challenge, but also a big opportunity.

Recently, the state of Wisconsin entered into a contract to buy two Talgo train sets. The shells for these fourteen car train sets will be manufactured by Talgo in Spain, but all of the assembly and interior finishing will be done in the United States. My state is investing over $47 million in these train sets. Are there risks in this deal – certainly! But Governor Doyle sees the opportunity as well. We hope to bring manufacturing jobs back to the Midwest. We hope to show the riders of our Hiawatha service between Chicago and Milwaukee that the next generation of train cars is all about making the travel experience both pleasant and efficient.

Our country needs to attract train manufacturers; to make this happen, these manufacturers need a reliable revenue stream they can trust to make economic investments in plants and equipment. We need a coordinated national effort to assure that states are working together to assure that we get economies of scale in the pricing of train cars and interoperability of train cars. As a national network – the states need to coordinate with each other. Eight Midwest Governors and the city of Chicago[1] recently signed a Memorandum of Understanding to create a steering group to align the efforts of

[1] Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin and the City of Chicago

our states as we develop our passenger rail network. While cooperative efforts like these are important at the regional level, we need federal leadership on this issue.

Freight Capacity and On-time Performance

The most important performance measure for passenger rail is on-time performance. We all remember a couple years ago when on-time performance was a major problem for our passenger trains. Due in part to the recession and improvements on the network, on-time performance has improved, but continues to be a challenge. Nothing will turn riders away faster than late, undependable trains.

Since most of our expanded and new service will run on existing, privately owned freight rail tracks, capacity is a critical challenge for states and the freight rail lines. States must pay for capacity – but fair negotiations with freight rail lines will be critical to our success. The private freight rail owners must assure their shareholders that they will have adequate capacity to operate their business. At the same time, the public will want to be assured that states are using public dollars for the public benefit.

This will be a tremendous challenge for all stakeholders in the coming years. Federal and state governments cannot realize their passenger rail vision without access to freight lines. But, we must all be aware of the challenges we face in this area.

Administrative Challenges at the Federal Level

In a very short time, the Federal Railroad Administration has had to recreate itself and rethink its mission. It has had to move from being almost exclusively a regulatory organization to having the added responsibility of assuring that billions of dollars in federal grant funds will be spent wisely and efficiently. As mentioned earlier in this testimony, the FRA also has to develop the National Rail Plan.

I give the FRA high marks for its efforts to consult with stakeholders and work with the states. Administrator Szabo and his team are doing their very best and have been extraordinarily responsive to the states' needs and questions. But they need additional resources that should certainly be provided as this committee works on its reauthorization policy development. There are many approaches that can be adopted from the Federal Highway Administration – particularly on project streamlining. The States for Passenger Rail Coalition looks forward to

working on these issues with your subcommittee and the FRA to assure that they have the resources to help us deliver the program.

The Passenger Rail Working Group – a model for strategic vision and phased projects

As the subcommittee continues to develop and refine its reauthorization policy, I would ask that you consider the issues outlined in this testimony. We have all been frustrated with the pace of the surface transportation authorization bill; passage of this bill is critically important to the nation. As a state DOT Secretary, every mode is important – but we have this opportunity now to define the policy that will allow the nation to build its 21st century rail network. For that reason, I think it is important to press forward the development of the National Rail Plan so that this subcommittee can incorporate that policy framework into this authorization bill. We should not wait another six years to complete that task.

The National Surface Transportation Policy and Revenue Study Commission released its estimates of national needs for the passenger rail network as part of its January 2008 report. Based on the December 2007, Passenger Rail Working Group report, commissioned by the National Commission, the federal share of the network needs is estimated at approximately $5 to $6 billion per year.

I would encourage the subcommittee to reconsider the report developed by the Passenger Rail Working Group titled, *Vision for the future – U.S. intercity passenger rail network through 2050.* The report outlines a 50 year vision that includes the network build-out in three specific timeframes that include gross cost estimates. The maps were illustrative; what is needed now is for states to plan their intrastate and interstate networks and those plans – based on specific national criteria – can then be phased over time, beginning with the reauthorization timeframe. States can receive funding based on approval of the build out plan and on their own phase of the process; that is, whether the state is in the planning, design and environmental or construction phase. Acquisition of 'state of the art' train cars would be part of the build out costs.

The Executive Summary of the Passenger Rail Working Group 2007 report is attached to this testimony. I hope the subcommittee will consider this approach as it provides feedback to the FRA on the National Rail Plan and as you proceed with your work on the Surface Transportation Authorization Act.

States are ready to be partners in the development and delivery of new passenger rail service in our nation. We have proven that the partnership works in the highway and transit modes. There are many opportunities and challenges ahead, but I believe we can maximize this golden opportunity to create a 21st century passenger rail network that will benefit the citizens of our nation for decades to come.

Responses of Secretary Frank J. Busalacchi to the Questions of Chairwoman Brown as follow-up to Subcommittee on Railroads, Pipelines, and Hazardous Materials Hearing on High-Speed Rail in the United States: Opportunities and Challenges – October 14, 2009

Question 1: In your testimony, you state that an "ongoing source of federal revenue to fund the [high-speed rail] program" is important in a funding policy. What advantages of securing a dedicated funding source for high-speed rail have on a state's ability to develop a high-speed rail system?

Response: A dedicated source of funding is essential to the development of a national intercity passenger rail network. Multi-year funding accompanied by contract authority will allow states and the host freight railroads to undertake multi-year projects with the certainty that funding will be available on the first day and the last day of the project. Further, dedicated federal funding will leverage state, local and other sources of investment.

A long-term commitment to a federal funding partnership must be in place for states to make their investment decisions and advocate for these decisions to Governors and Legislatures. Finally, states must engage in long-term rail plans. Whether a state is just beginning to plan for passenger rail service or is ready to construct a new passenger rail corridor, a state must know that the federal source of revenue will be secure and ongoing, or the state will not be able to sustain the risk of making state investments.

Question 2: In your testimony, you state that all states are at a different phase of rail network development. What can Congress do to help the states that are further behind in planning for high-speed intercity passenger rail development?

Response: Congress can assist state planning by amending section 301 of the Passenger Rail Investment and Improvement Act (PRIIA -- PL 110-432) to authorize, each year of the six-year bill, $1 million for each state to develop and implement its rail planning function. Other key elements could include flexibility to use the funds for planning-related purposes and to pool funds with other states. These funds could also supplement existing funds for state level comprehensive transportation plans. The program should also include a discretionary program that focuses on four areas: coordination with non-motorized transportation -- pedestrian and bicycles; context sensitive design; social justice; and development of public benefit measures.

Prior to the reauthorization bill, it is critical that the Federal Railroad Administration and Amtrak have adequate funds to provide technical assistance to the states. These institutions' ability to offer states these services is critical as states are beginning their efforts to address their own states' needs.

Question 3: In your testimony, you mention that "we need a coordinated national effort to assure that states are working together to assure that we get economies of scale in the pricing of train cars and the interoperability of train cars." Can you please elaborate on what we need to do to achieve this?

Response: Section 305 of PRIIA charges Amtrak with initiating a broad-based committee, including states, to create a strategy to develop, finance and purchase a new generation of intercity passenger rail equipment. The age of Amtrak's fleet has far outlived its useful life and they will need to replace their train sets. From a state corridor perspective, we must assure that our train sets will be compatible and interoperable with Amtrak's fleet. This equipment committee's work is critically important because while the age of our nation's train fleet presents a challenge, it also presents an opportunity to assure that we work together with similar goals to replace the fleet.

Many states have requested funds for train equipment in their American Recovery and Reinvestment Act (ARRA) applications for Track 2 funds. Between these two developments, the Amtrak equipment committee and the ARRA applications for new fleet, the Committee may want to consider having a hearing on this issue to get everyone refocused on our goals and outcomes as we approach the reauthorization process. A hearing would also be an opportunity to highlight the link between this transportation issue and economic development.

Attracting rail manufacturers to produce train sets in the United States is another challenge and opportunity combined into one. As we move forward as a nation to purchase new train sets, there is a great opportunity address technological innovations, e.g. light-weight trains that use less fuel and the use of alternative fuels for train sets such as bio-diesel and fuel cells. Attracting train manufacturers and using suppliers who are innovative will create immediate jobs as well as employment throughout the rail supply chain.

Question 4: In your testimony, you state that "fair negotiations with freight rail lines will be critical" to the success of high-speed passenger rail to operate on-time privately owned freight tracks. Do you have any suggestions on what we need to do to ensure fair negotiations? In your experience, have you engaged freight rail owners yet in your planning for high speed rail?

Response: Fair negotiations with host railroads are a critical element in the success of a national intercity passenger rail network. Many corridor trains currently run on freight rail lines and much of the short term passenger rail service increases envisioned by states will most likely occur on freight rail lines. The states-freight rail relationship, I believe, is overall sound, but there are some variations in negotiations between certain freight railroads and certain states. In the case of Wisconsin, our negotiations with Canadian Pacific Rail are proceeding so that we could submit a Track 2 ARRA application for the Milwaukee to Madison corridor.

There are areas that should continue to be watched as the states continue negotiations with freight railroads for capacity on their freight lines. First, the states and host railroads must work collaboratively to measure the public benefits of public sector investment in privately-owned freight rail lines. States must be able to go to the public and show that the public is receiving benefits for the investment. Second, states and freight railroads need to work together on the implementation of Positive Train Control (PTC). PTC is a complex undertaking for the freight railroads but should yield safety and capacity benefits. Finally, the issue of liability must be addressed, which is a cost to freight rail lines as more passenger trains operate on those lines. Ultimately, if states and freight rail lines can address these

issues in a productive and collaborative manner, Congress may need to do little on this issue. If issues arise, Congress may need to consider an approach to conflict resolution between the parties. My best sense is that it is too soon to call for that.

Question 5: What level of support or commitment do states need from the FRA for building, operating and maintaining intercity passenger rail systems?

Response: FRA continues to do all that it can to work with the states. As I indicated at the hearing, FRA staff worked diligently to take on a significantly larger program with limited additional resources in terms of staff and travel. As we move forward, Congress may want to consider providing more resources to FRA to implement a much larger and complex program. In addition, as we work through the application of NEPA, preliminary engineering and construction, to the rail program, it may be appropriate for FRA to cross utilize staff from the Federal Highway Administration (FHWA) who have been working to administer these programs for highways for over 50 years.

Question 6: What is your perspective on challenges associated with the environmental reviews, or with any issues involved in moving projects from design to operation within the mandated timeframes?

Response: ARRA program interim guidance requires that Tier 1 NEPA documentation be completed before FRA can provide funding for Track 2 projects. Only a handful of states have completed Tier 1 NEPA documentation for an entire corridor. Many financially strapped states do not have funds to secure Tier 1 environmental documentation needed to qualify for Track 2 ARRA corridor projects; as such, these corridor projects will be abandoned regardless of their economic viability, local and stakeholder support and transportation benefits to the nation.

The tension on this issue is most certainly due to the quick timeframe for application guidance and submission and the lack of a substantive rail program prior to ARRA. This issue continues to be under consideration by FRA and it is not clear what will be resolved prior to the announcement of ARRA grants.

Generally, states need support in getting their preliminary engineering and NEPA clearance completed. The cost of completing this process can be prohibitive for states; access to federal funds for planning and NEPA would help the states complete the first steps of developing their rail projects.

Question 7: What is your perspective on the equipment needs of states moving forward? Specifically, what barriers or challenges exist in providing rolling stock and other equipment to states?

Response: Some of these issues are addressed in my response to question three, but I would add one additional perspective. Some states have limited experience with equipment procurement, such as a rail cars and locomotives; other states may have more experience if they have responsibility for bus, ferry and light rail purchases. Adding to limited experience in some states, there are limited manufacturers worldwide who make rail cars and locomotives so even securing expert advice in these matters is difficult. Rail car investment has been so limited over the past decades, but for the Acela equipment (Amtrak) and again, some light rail equipment purchases. Finally, some states are prohibited

from making these types of procurements. For these reasons, and the issues identified in response 3, there is a good deal to be gained for coordinating Amtrak and state equipment purchases to address these deficiencies in rail equipment expertise and procurement options.

Question 8: What are your views on the preliminary National Rail Plan?

Response: I was involved in FRA's initial efforts to think through the elements of the preliminary plan. The plan they created in October 2009 essentially sets the stage for the issues and stakeholders that will need to be addressed in a final plan; it offers no specific recommendations. For that reason, I think there remains much to be done and unfortunately, little time to accomplish the work.

In my testimony, I highlighted a report prepared for the National Surface Transportation Policy and Revenue Study Commission titled: *Vision for the Future: U.S. intercity passenger rail network through 2050.* This report took a long time frame – almost 50 years – and outlined illustrative examples of where rail could work including speeds, frequencies and costs. I think the National Rail Plan must include a long term vision of the passenger and freight rail network – since it must address both issues. FRA has a tall order to complete such a plan in the next year, but it is critical work to accomplish prior to the completion of the next surface transportation reauthorization bill.

It may be appropriate for FRA to consider an executive committee of stakeholders who could be tasked for providing in-depth oversight of the development of the plan and to provide guidance to the agency when issues arise.

TESTIMONY

OF

THOMAS C. CARPER
CHAIRMAN, BOARD OF DIRECTORS
NATIONAL RAILROAD PASSENGER CORPORATION
60 MASSACHUSETTS AVENUE, NE
WASHINGTON, DC 20002

BEFORE THE

SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS

OF THE

HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

WEDNESDAY, OCTOBER 14, 2009
2:00 P.M.

2167 RAYBURN HOUSE OFFICE BUILDING

(Slide 0)

Thank you, Madam Chair, for the invitation to testify today on the opportunities and challenges of high speed intercity passenger rail in America. As the former mayor of a small Illinois college town that was heavily dependent on Amtrak for its mobility needs, I know the opportunities rail networks offer to communities that wish to develop the livable urban structure and transportation solutions they need for growth. Amtrak is ideally positioned to address those needs.

I would like to recognize our colleagues here at the table, particularly Administrator Szabo. We fully support the Administration's vision for high-speed rail, and we have strong partnerships with the states, the Federal Railroad Administration and the freight railroads. We are positioning ourselves aggressively to be the intercity provider of choice, and I would like to talk a bit about the expertise that underpins that strategy before I turn to a discussion of the challenges and opportunities.

(Slide 1)

These photos were taken on our Northeast Corridor, and illustrate something important – Amtrak *is* a high speed rail provider. More than half of our daily trains exceed 100mph. Our system is the successful product of decades of development aimed at accelerating service on existing right-of-way. It is a unique system that mixes high speed *Acela* and Regional trains with commuter and freight service to provide a broad range of public benefits.

(Slide 2)

When people use the term "high-speed rail," this is what they have in mind: very fast trains running on brand-new, grade-separated, arrow-straight rights of way. This is one of the very successful AVE services in Spain, which operate at 186 mph.

(Slide 3)

Here's a slightly different picture. This is the NEC, and you can see an Amtrak *Acela* train on a bridge built in 1835, although it now carries 125 mph trains. Here you see the difference between these two approaches: they design the infrastructure to realize the potential of the equipment, we design the equipment to operate within the constraints of the infrastructure.

(Slide 4)

Both have their merits. Development of high speed service on the NEC began in the early 1960s, shortly after the Japanese inaugurated their first "bullet train." Successful high speed services of all kinds are built on incremental improvements, but whatever the approach, the constraining factors are the same – cost and environmental impact.

(Slide 5)

Here's a comparison of two contemporary high speed projects. On the left, we have Amtrak's Harrisburg line, which underwent a round of incremental investment and improvement that culminated with the introduction of 110 mph service in 2006. On the right, we see the brand new Madrid to Valladolid high speed line, finished in 2007 and

designed to carry trains at 186 mph. This comparison highlights the importance of relating the investment to benefits – we want to make sure we get as much return as we can for our money – and we want to do it in a timely manner.

(Slide 6)

The NEC has undergone several rounds of incremental improvement since 1976. On the right, you see the results in terms of the travel market we share with all of the airlines. We have also invested in other corridors – putting in a PTC system on the Amtrak-owned Michigan line, and laying the groundwork for 110 mph service on our St. Louis to Chicago line. Amtrak wants more high-speed rail, but we always need to remember that the goal is a competitive trip time. Sometimes, that means raising speeds from 79mph to 110mph; sometimes, it means raising speeds from 110mph to 150 mph – and it can also mean the development of much higher speeds, where we need them to be competitive.

(Slide 7)

This slide breaks out the funding programs from ARRA, which will finance the next round of development. These grant programs are a tremendous first step, but we will definitely need to develop long-term funding streams to support future needs. The High-Speed Rail Initiative Chairman Oberstar proposed would be a potential source of funding, and we strongly support this program.

(Slide 8)

We have partnered with the states to apply for ARRA funding; this slide highlights some of the major Track 2 projects. Some will be new services. We have also applied for funding to improve service and speed up trains on existing routes. Projects to increase frequencies and install PTC will improve capacity and trip times. Equipment is a vital need, and we are working with vendors, the FRA, and our state partners to develop specifications and funding plans for new equipment procurement.

(Slide 9)

Amtrak will deliver. We must help our nation retain its economic competitiveness, and communities and transportation are vital components of that. We are eager to develop the partnerships that will make these projects possible, and I look forward to working closely with the states and the FRA as we build the foundation for a generation of economic growth and prosperity.

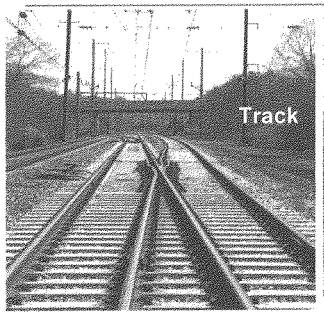
The Opportunities and Challenges of High-Speed Rail

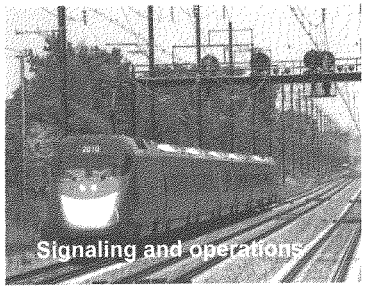
Tom Carper

October 14, 2009

AMTRAK

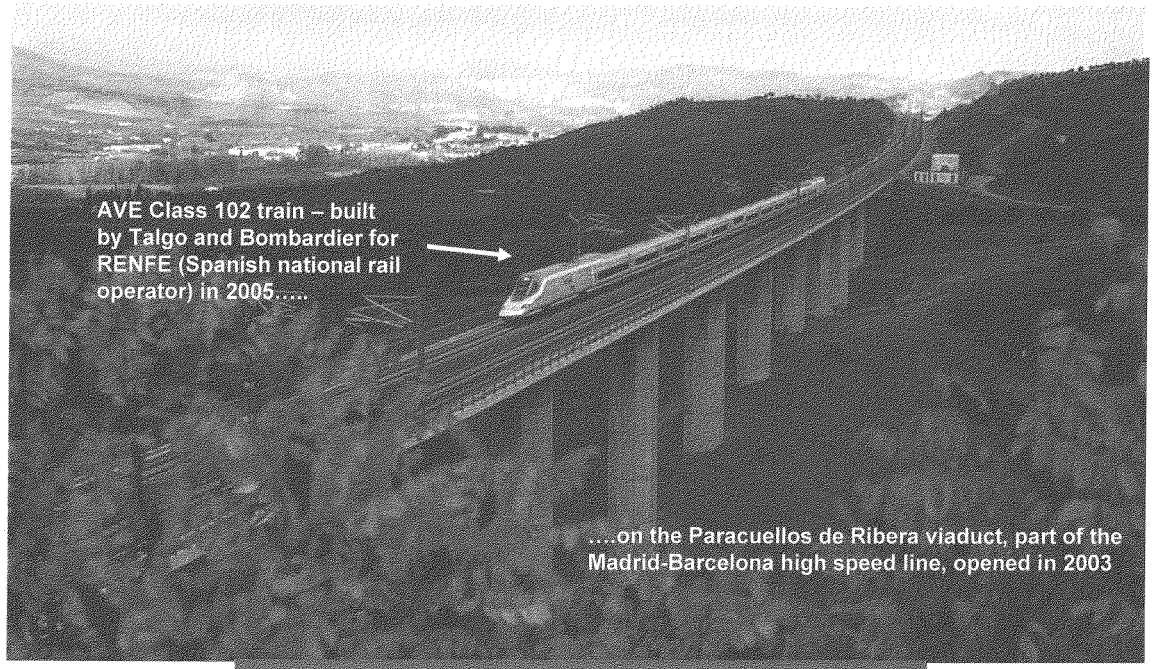
High-speed rail is a big part of what we do





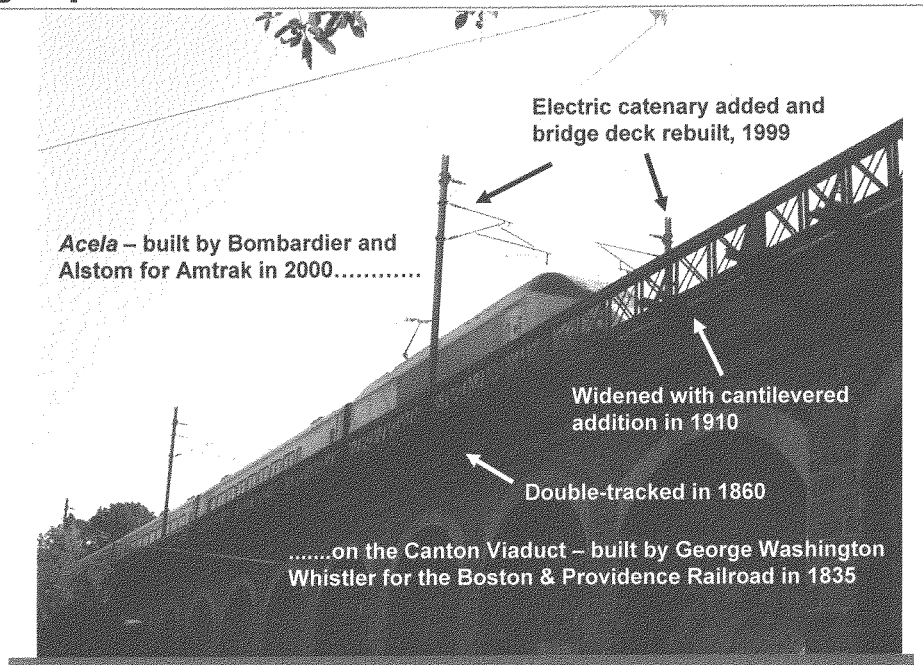
- More than *half* of Amtrak's daily trains operate at or above 100 mph
- High speed (110+ mph) operation is supported by
  - Almost 40% of Amtrak T&E crew hours
  - More than half of Amtrak's Mechanical Department force (2,162 of 4,239)
- Amtrak maintains almost a thousand miles of track for 100+ mph service
  - This would stretch from DC to Chicago and most of the way back

High-Speed Rail in Europe



Infrastructure designed to realize the potential of the equipment

High-Speed Rail in America



Equipment designed to operate within the constraints imposed by the infrastructure

Different approaches to High-Speed Rail

"The Big Bang"

- Dedicated ROW
- High capital cost
- Extensive land use and community impact issues
- Takes years (sometimes decades) to realize, BUT:
  - Delivers very high speeds
  - Builds large market share

"Incremental Improvement"

- Improve speeds and trip times on existing ROW
- Limit capital costs and impacts
- Produces a string of small trip time improvements
  - Over time, these accumulate
  - Can begin quickly
  - Build ridership and market share as you go

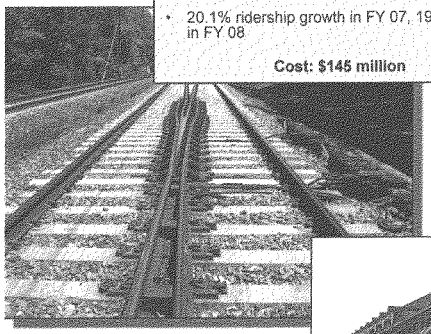
We have the expertise to make both approaches work here – so let's take a look at them

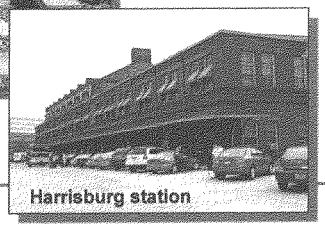
It isn't just about speed.....

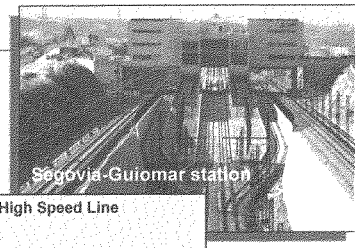
Amtrak Keystone Corridor

- 104 mile line (Philadelphia-Harrisburg)
- Right of way dates in places to the 1830s, periodically improved and electrified in the 1930s
- In 2006, Amtrak restored existing electrification, improved track and signals for 110 mph service, reconfigured switches and crossovers
- 10 intermediate stops
- Harrisburg-Philly trip cut from 2 hours to 1:45
- Carried 1,183,821 riders in FY 08
- 20.1% ridership growth in FY 07, 19.8% growth in FY 08

Cost: $145 million



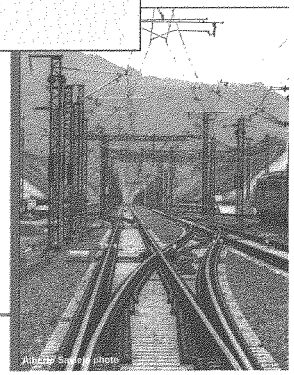




Madrid-Valladolid High Speed Line

- 111 mile line
- Brand new line with minimal curvature, opened for service in Dec, 2007
- Constructed a dedicated ROW for 186 mph service; included a 28 km tunnel
- 1 intermediate stop
- Time cut from 1:30 to 55 minutes
- Carried 825,043 riders in 2008

Cost: $5.9 billion

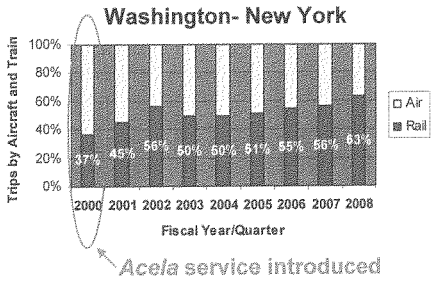


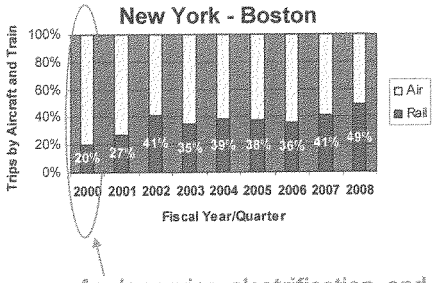
AMTRAK

How well does an incremental approach work?

- Northeast Corridor services are a product of incremental development:
  - ~100 mph in 1976 (on a good day)
  - 125 mph in 1980s on South End
  - 135-150 mph in 2000
- Market share is a product of trip time – but also frequency, convenience, comfort and reliability

- Incremental development has delivered speed and trip time improvements elsewhere – and can continue to do so
  - PTC will soon allow 110 mph on Amtrak's Michigan line
  - Rest of Detroit-Chicago line would be an excellent opportunity for similar improvements
  - Chicago-St. Louis line another opportunity for 110 mph service





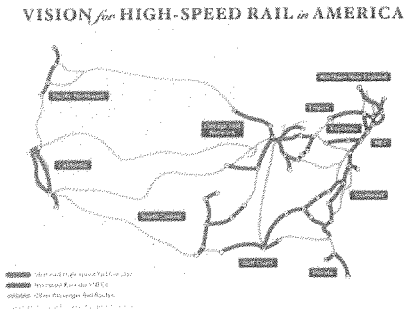
American Recovery and Reinvestment Act (ARRA)

- Discretionary Rail Grants - $8B (HSR, Intercity, congestion)
  - Available through Sep 30, 2012
- Amtrak - $1.3B
  - $850M for capital investment (infrastructure and equipment)
  - $450M capital security grants
- State Transportation Plan funds - $27.5B
  - Highway formula funding – now eligible for rail transportation projects
- Grants to be administered by the FRA
  - 3 track* program
    - Track 1 (Design and Construction)
    - Track 2 (Programs)
    - Track 3 (Planning)

*There is a fourth track, but it uses money from the FY 09 appropriation, rather than ARRA funds

Some opportunities – Track Two Projects

- Inaugurate service on the Florida East Coast Railway (Jacksonville to Miami)
- Accelerate service on the Keystone Corridor to 125 mph
- Establish Chicago-Iowa City passenger service
- Chicago-St. Louis corridor – increased frequencies, PTC, 2nd main
- Englewood Flyover (CREATE)
- Madison-Milwaukee corridor service (110 mph)



Bringing it all to fruition

- Mobility is a vital component of economic competitiveness
- At long last, we have the framework and funding that will allow us to invest
  - Need strong state partnerships
  - Local and regional participation will be vital
  - Freight railroad partners will
- The benefits are tremendous
  - Economic competitiveness
  - Development and growth
  - Community livability and quality of life

We will need strong partnerships to realize our goals – but this is the opportunity of a lifetime

NATIONAL RAILROAD PASSENGER CORPORATION
60 Massachusetts Avenue, NE, Washington, DC 20002

AMTRAK

November 10, 2009

Honorable Corrine Brown
Chairwoman
Subcommittee on Railroads, Pipelines,
And Hazardous Materials
Committee on Transportation and Infrastructure
Washington, DC 20515

Dear Chairwoman Brown:

Per your letter of October 19, enclosed are responses to Questions for the Record as a result of the hearing on October 14.

Please feel free to contact me at 202-906-3875 if Amtrak can be of further assistance to you.

Sincerely,

Patrick C. Edmond

Patrick Edmond
Senior Director
Government Affairs - House

Enclosure

Subcommittee on Railroads, Pipelines, and Hazardous Materials
Hearing on
High-Speed Rail in the United States: Opportunities and Challenges
October 14, 2009

Responses to Witness Questions from Chairwoman Brown

Question 1:
Given Amtrak's long history of financial and management challenges, how can it demonstrate that it has the capacity to operate any of the high-speed rail corridors (other than the Northeast Corridor) in an efficient, cost-effective manner?

Answer:
PRIIA and ARRA address the principal causes of the financial and management challenges that Amtrak has faced in the past: chronic underfunding and inconsistent and unrealistic statutory mandates (e.g., the requirement, repealed by PRIIA, that Amtrak operate a national rail network without any federal operating support). The changes Amtrak has made since its near bankruptcy seven years ago, and the funding Amtrak has received to advance the process of restoring its infrastructure and equipment assets to a state of good repair, have made Amtrak an efficient and cost-effective provider of passenger rail services. As an indication of this progress, Amtrak's farebox recovery –the percentage of operating costs covered by passenger revenues – is higher than the reported farebox recovery of all other North American operators of regularly scheduled intercity or commuter passenger rail service.

Question 2:
What are the challenges Amtrak faces if it is chosen to be the operator in any of the high-speed rail corridors? Equipment availability? Operating agreements with freight railroad owners? Crew or station availability? Hiring and training capacity?

Answer:
The primary challenges in reaching agreements for new services with freight railroad infrastructure owners are likely to be (1) obtaining agreement on high speed rail operations on shared passenger/freight rights of way, and (2) ensuring reliable, on-time passenger operations. These issues are discussed below.

Amtrak has demonstrated success with its hiring and training practices for train crews, on board operations, and station support. In preparation of launching its new Acela High-Speed service, Amtrak trained 800 operating and service support employees. The training components ranged from new intricate technology for Conductors and Locomotive Engineers to new service concepts for the On-Board service crews. The service was initiated with qualified employees in every craft. Amtrak has many examples of implementing new services and equipment types throughout its history – Auto Train Service; Superliner II equipment for long distance routes; Viewliners; and Talgo service in the Pacific Northwest. All of these services required employees to be hired and trained on time in order to meet the implementation schedule.

Amtrak has reduced overtime cost and crew availability by implementing a hiring/training oversight team comprised of representatives from Crew Management, Operating Practices, Human Resources, Operations and Employee Development. This group ensures adequate staffing levels are met for a national passenger train operations. Amtrak is experienced in increasing and/or reducing consists and staffing levels in order to meet ridership demands and service requirements.

Currently, Amtrak has the capacity to hire train 110 Locomotive Engineers, 225 Assistant Conductors, and 300 On-Board Service employees annually. This capacity can be augmented by proper staffing and training space if required.

Mechanical recently hired 160 skilled employees at our Beech Grove and Bear facilities to accommodate the return to service of 96 pieces of equipment under ARRA Funding. Amtrak has the ability to properly staff mechanical employees or outsource mechanical operations to maintain equipment for High-Speed Rail Service.

Follow-up question:
How would Amtrak address those challenges?

Answer:
See response above.

Question 3:
How would Amtrak's operations on any of these corridors reduce Amtrak's level of service on its existing routes or direct Amtrak's capital from its current capital backlog?

Answer:
As long as the development of these high speed corridors is fully funded, including planning, operations, and capital investments, from additional local, state, federal, or other sources above the authorized amounts needed to fund Amtrak's current system, we do not believe operating these corridors will have a negative impact on existing routes nor divert capital funding from reducing Amtrak's existing capital backlog. In fact, Amtrak's operation of high speed corridors should significantly benefit our existing system, through increased revenue and ridership, enhanced connectivity to existing Amtrak routes, and increased capacity, provided that the development and operation of these corridors isn't financed by reducing the funding needed to run the existing Amtrak system.

Question 4:
How does Amtrak view the costs and benefits of investing in incremental improvements to increase on-time performance and reliability of either existing or proposed service versus the benefits and costs of building brand new rights of way dedicated to passenger service?

Answer:
With respect to high-speed rail development specifically, we believe this requires a case-by-case evaluation of the individual characteristics of each corridor, including the number of passenger trains, number of freight trains, relative speed difference between the trains, terrain, train size and weight, and other factors-there is no one-size-fits-all rule; a dedicated passenger track is one option to consider on a case-by-case basis.

Question 5:
Most of Amtrak's existing routes have less than stellar on-time performance largely due to traffic congestion. To be attractive to new riders, what will Amtrak do to reach a very high level of on-time performance?

Answer:
Although freight congestion is an issue on many Amtrak routes, Amtrak's experience is that management practices by host railroads are often an even more important factor. This experience was confirmed in a September 2008 report by the USDOT Inspector General,[1] which found that improper host dispatching is a key cause of poor Amtrak On-Time Performance ("OTP"). The IG found that substantial OTP improvements are possible through host management focus.

Amtrak's experience on routes with poor OTP has shown that improvements should be pursued in the following order. Amtrak has formalized this approach as a "Performance Improvement Program" or "PIP":

1. *Operating improvements* (e.g., host railroads provide preference to Amtrak trains as required by 49 U.S.C. sec 24308(c))
2. *Maintenance improvements* (e.g., host railroad improve track maintenance to reduce slow orders; Amtrak improve car and locomotive reliability to reduce en-route failures)
3. *Capacity improvements*, which are to be pursued only if Operating and Maintenance improvements are insufficient to achieve the desired OTP. Public funding (e.g., through PRIIA Section 302 Congestion Grants) will often be critical to implementing this step.

To improve OTP, Amtrak will work collaboratively with host railroads through PIP's to identify operating, maintenance, and capacity improvement needs. Where PIP's demonstrate a need for capacity

[1] US Department of Transportation, Office of Inspector General. "Root Causes of Amtrak Train Delays." Issued September 8, 2008.

investments, Amtrak will work with host railroads and states to identify funding, such as through PRIIA Section 302 Congestion Grants.

Amtrak strongly advocates that any such Federally-funded investments in host railroad infrastructure require an enforceable host railroad commitment to deliver specific public benefits in return for public investments. The service outcomes must include number of passenger train trips, scheduled trip time, and maximum delay minutes per trip. Amtrak has observed that funding agreements without such provisions often result in projects that do not yield the anticipated benefits to passenger service. In particular, lack of an enforceable commitment often results in poor OTP despite public investments. Amtrak will work closely with states receiving Federal funds to ensure that their funding agreements with hosts contain these critical provisions.

On routes where host railroad, state, and Amtrak collaboration does not sufficiently improve OTP, PRIIA Section 213 contains provisions for the Surface Transportation Board to investigate poor intercity passenger rail performance. Amtrak will cooperate fully with such investigations, and will initiate investigations if/where appropriate.

Question 6:
You mention the differences between the AVE services in Spain and service or infrastructure on the Northeast Corridor: They design the infrastructure to realize the potential of the equipment. We design the equipment to operate within the constraints of the infrastructure. Do you believe that a long-term, dedicated high-speed rail investment program would enable us to upgrade infrastructure so that we can realize the potential of the equipment as Spain and other nations have?

Answer:
As noted in Amtrak's testimony at the hearing, the AVE services in Spain – which reach sustained speeds of 186 mph – and similar services in other nations, operate on brand-new, arrow-straight rights of way designed for and used primarily or exclusively by high speed rail services. Unfortunately, the Northeast Corridor (NEC), unlike many newer rail rights-of-way in Europe and Asia, was constructed more than a century ago and not designed to support high speeds (in excess of 110 mph). The NEC is also heavily utilized by commuter rail services, and by freight trains serving manufacturing and other facilities that are located along the NEC or that have no other rail connection to the national freight rail network.

Reducing curvature on the NEC, and adding additional high speed tracks to support substantially higher sustained speeds trip times, would require acquisition of land outside the boundaries of the existing right of way in densely populated urban areas, which would have significant community and environmental mitigation requirements. Conversion of the NEC into a dedicated high speed line is not a realistic alternative, given the importance of existing commuter and freight operations to regional economies and mobility.

While it certainly is possible to build new, dedicated, high speed rail lines on separate right-of-way, such an undertaking many not be a practical alternative along the NEC, the most densely populated corridor in the United States. The financial cost would be enormous, and there would be huge environmental,

community, and land use impacts associated with the need to acquire or condemn thousands of properties to create a new rail right-of-way through densely populated cities and suburbs.

Given that Amtrak already carries the majority (63%) of passengers traveling by air or rail between New York and Washington, and 49% of air/rail passengers between New York and Boston, the potential for diverting additional air travelers to rail would not likley justify the monetary and other costs associated with creating a new high speed rail line along the NEC. Investments in the existing, shared NEC rail infrastructure to increase speeds and reduce trip times, and acquisition of new equipment that can make optimal use of this improved, albeit imperfect, infrastructure, are likely to produce the greatest public benefits at the lowest cost.

New, dedicated right-of-ways for high speed rail, designed to fully realize the benefits of very high speed equipment, could be a prudent public investment in other corridors where lower intermediate population density and/or existing under-utilized right-of-ways would make it more feasible and must less expensive to build new high speed rail lines. This determination must be made on a case-by-case basis. Since the initial capital cost of creating a new rail right-of-way will generally be higher than the cost of incrementally improving existing rail infrastructure, the level of future funding provided for high speed rail improvements will be a significant factor in this determination.

The Honorable Michael E. McMahon
Responses to Questions
Railroads, Pipelines and Hazardous Materials Subcommittee
High-Speed Rail in the US: Opportunities and Challenges
October 14, 2009

Question 1:
I know the Amtrak Acela train was designed to travel at speeds as high as 130 mph – but in reality it travels at speeds less than 90 mph. Why is this the case? What can be done by Amtrak to increase the speeds along the Northeast Corridor?

Answer:
Actually, the Acela trains reach speeds of 150 mph on the Northeast Corridor (NEC) between Boston and New Haven, CT. At many additional locations on the Northeast Corridor the Acela trains routinely travel at operating speeds of 135 mph. It is true however, that in some areas speeds may be restricted to 90 mph or less, and the average speed may be less than 90 mph between designated city pairs. As an example, the current inability to "tilt" *Acela* on Metro-North territory effectively limits operating speeds between New York and New Haven, CT. Other contributing speed reduction factors include a right of way that was originally constructed 150 years ago. The existing alignments, and in some cases, significant curvatures that were created many years ago currently limit operating speeds because of the physical characteristics of the right of way. In addition, high speed trainsets do not occupy a dedicated high-speed passenger right-of-way. Overall, the NEC (including the Metro-North territory) hosts approximately 2,400 trains a day, ranging from slow freights to the 150-mph Acela Express trains. The multiple traffic types with varying speeds, including freight and commuter, and the numerous intermediate stops contribute to the complexity of increased speed.

Current plans to accommodate higher speeds include:

- New tracks and new alignments
- The use of constant tension catenary
- Curve modifications to allow for higher speeds
- Replacement of movable bridges with high level bridges
- Continued implementation of Positive Train Control (PTC)
- Construction of dedicated high speed tracks where feasible
- Continued use of improved tilt technology (6" to 9") on the High Speed Trainsets

More detail on plans to increase NEC speeds can be found in the October 16, 2009 report, "An Interim Assessment of Achieving Improved Trip Times on the Northeast Corridor," prepared by Amtrak under Section 212(d) of PRIIA, which Amtrak submitted to the Transportation and Infrastructure Committee and can also be found on Amtrak's website (www.amtrak.com).

Question 2:
Is there anything that Congress can do to expedite the investments or regulatory approvals necessary to improve train speeds on the Northeast Corridor?

Answer:
The most important thing Congress can do to expedite investments and improvements on the Northeast Corridor, and other intercity and potential high speed rail routes, would be to provide sufficient, sustained and predictable funding for investments in intercity passenger rail and Amtrak's infrastructure and equipment.

One of the major issues that has contributed to the underfunding of Northeast Corridor infrastructure, and impeded efforts to increase speeds, is reliance on the Federal annual appropriations process to provide needed, long-term investment. Major capital investment typically requires a multi-year commitment of funds, and such commitments cannot be routinely entered into when the level of funding from one year to the next is uncertain. In Amtrak's view, continued reliance on annual appropriations to fund the Northeast Corridor capital program will continue to frustrate efforts to achieve a state of good repair and meet capacity and trip time goals for the corridor. Adequate levels of stable, multi-year funding will significantly improve passenger rail service and facilitate development of new and expanded high-speed corridors that link to an existing high-speed network.

Additionally, the scope, duration and cost of environmental analysis required prior to construction of infrastructure improvements on the Northeast Corridor, and other high speed rail corridors, will have a major impact on how quickly the environmental, mobility and other benefits of high speed rail can be realized. Given the lack of federal funding for high speed rail service until this year, there is relatively little precedent and few established processes for addressing environmental requirements associated with intercity and high speed rail investments when compared to highways and other modes. To accomplish this work now will require new state and federal investment in short order designed to fund the environmental process and related studies. Amtrak is working with its federal and state partners to ensure that environmental requirements associated with high speed rail services on the Northeast Corridor and elsewhere are addressed in a timely, cost-efficient and appropriately thorough manner that meets applicable statutory requirements and regulations.

If it becomes apparent that legislative action or clarification regarding applicable requirements is necessary or desirable, Amtrak will communicate this information to the Committee.

Question 3:
There are many trains around the world that travel at speeds approaching if not exceeding 200 mph – the TGV in France, the Bullet Train in Japan, and the train that connects Beijing and Tianjian in China. Are we aiming our sights too low in the country in terms of train speed? Why are we not seeking to build trains in this country that rival the speeds of those of our European and Asian competitors?

Answer:
The extent to which the United States develops a high speed rail system will depend primarily upon the level of sustained funding that is made available for this purpose. The countries identified in the question have made significant, sustained investments in high speed rail over a period of many years (almost 50

years in the case of Japan). They have also adopted policies that recognize the public benefits of high speed rail and the costs of over-reliance on other modes, such as requiring automobile users to bear, through taxes and tolls, the full direct and indirect costs associated with their travel, and encouraging the replacement of short distance airline flights by high speed rail service. The barriers to this type of service in the United States are primarily of a policy and political nature, not a technical one.

See also response to Question 6 from Chairwoman Brown.

Question 4:
What would be the cost of building the infrastructure to support a 200 mph train line for a distance between NYC and DC, or between Los Angeles and San Francisco?

Answer:
There are many variables that need to be evaluated to support a 200 mph train line between New York City and Washington, DC, or between Los Angeles and San Francisco. Among these are:

- Type and cost of next generation equipment
- Green Field new alignment for dedicated high speed tracks (little open rural land) approach vs. use of existing rights of way
- Constant Tension Catenary required to support higher train speeds
- Signal modifications including PTC
- Alignments through urbanized areas
- Tunnel and station capacity issues, i.e., in New York City and Baltimore
- Routing the line to serve intermediate urban areas adds to cost and complexity
- Current backlog of projects and normalized replacement of existing components required to support and sustain operational reliability

Recent world wide construction examples:

- TGV-style lines in rural areas preferred by European countries cost approximately $20-25 million per mile per track in open country

- Other recent examples of high-speed construction reported by UIC (International Union of Railways):

    - TGV Est, France, Paris-Strasbourg: 200 miles, $4.8 billion, $24 million per mile, mostly rural

    - France-Spain link, Figueres-Perpignan: 28 miles, $1.3 billion, $46 million per mile

- Taiwan, Taipei-Kaohsiung: 215 miles, $9 billion, $42 million per mile, less rural than in France

Costs to construct similar systems in the United States on the NEC would be significantly higher due to our environmental processes, the congested urbanized environment along our Northeast Corridor and cost for property acquisition. The California High Speed Rail Authority projects that a high-speed rail line linking Anaheim, Los Angeles, and San Francisco will have a construction cost of $33 to $34 billion (2008 dollars).[1]

[1] See California High-Speed Authority, California High-Speed Rail Project: Program Summary Report *July 10, 2009* (http://www.cahighspeedrail.ca.gov/images/chsr/20091008153856_CHSRAProgramSummaryReportJuly2009.pdf).

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Testimony

Before the Subcommittee on Railroads, Pipelines, and Hazardous Materials, Committee on Transportation and Infrastructure, House of Representatives

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HIGH SPEED PASSENGER RAIL

Developing Viable High Speed Rail Projects under the Recovery Act and Beyond

Statement of Susan A. Fleming, Director
Physical Infrastructure Issues

GAO
Accountability * Integrity * Reliability

GAO-10-162T

Madam Chairwoman, Ranking Member Shuster, and Members of the Subcommittee:

I am pleased to be here today to discuss funding for high speed and other intercity passenger rail projects under the American Recovery and Reinvestment Act of 2009 (the Recovery Act). The $8 billion that the Recovery Act provided for these projects has attracted great attention from states and others who look to develop or improve intercity passenger rail service across the country. Proponents see these projects as serving an important transportation role, by moving people quickly and safely, reducing highway and airport congestion, and being environmentally friendly. While we have found that the potential benefits of high speed and intercity passenger rail projects are many, these projects—both here and abroad—are costly, take years to develop and build, and require substantial up-front public investment as well as potentially long-term operating subsidies.[1] My statement today focuses on (1) some principles that could guide the effective use of these Recovery Act funds, (2) some challenges that states face in establishing high speed and other intercity passenger rail service, and (3) the nature of our ongoing work on Recovery Act high speed rail projects. My testimony is based on our recent report and testimony on high speed rail and our ongoing work.[2]

Summary

Several principles could guide the effective use of the Recovery Act funds and any future federal investments in high speed and other intercity passenger rail. These principles include establishing clear federal objectives and stakeholder roles, clearly identifying expected outcomes, basing decisions on reliable ridership and other forecasts, and reexamining how intercity passenger rail service fits in with other federal surface transportation programs. In addition, determining which, if any, high speed rail projects may eventually be economically viable will depend on an accurate determination of such factors as ridership potential, costs, and public benefits. These projects also face many challenges, such as securing the significant up-front investment for construction costs;

[1]GAO, *High Speed Passenger Rail: Future Development Will Depend on Addressing Financial and Other Challenges and Establishing a Clear Federal Role*, GAO-09-317 (Washington, D.C.: Mar. 19, 2009).

[2]GAO-09-317 and GAO, *High Speed Passenger Rail: Effectively Using Recovery Act Funds for High Speed Rail Projects*, GAO-09-786T (Washington, D.C.: June 23, 2009). We conducted our work for these products in accordance with generally accepted government auditing standards.

sustaining public, political, and financial support; and resolving outstanding liability issues. Our ongoing work in this area will focus on determining how states that have recently initiated passenger rail service have met these challenges, how the rail industry can accommodate this increased investment, and how the Federal Railroad Administration (FRA) is planning to oversee the use of Recovery Act funds for intercity passenger rail service.

Principles for the Effective Use of Recovery Act Funds for Intercity Passenger Rail Service

As policymakers decide how to allocate current Recovery Act funds and any possible future federal investments in high speed and other intercity passenger rail projects, several principles could guide the effective use of those funds. In our recent report and in 2005,[3] we concluded that there is a need to

1. clearly establish federal objectives and clear roles for all stakeholders (federal, regional, state, and local governments and freight, commuter, and passenger railroads);
2. clearly identify expected outcomes;
3. base decisions on reliable ridership and other forecasts to determine the viability of high speed rail projects; and
4. include high speed rail in a reexamination of other federal surface transportation programs to clarify federal goals and roles, link funding to needs and performance, and reduce modal stovepipes that hinder the financing of transportation improvements with the greatest potential for improving mobility.

While each of these principles is important, the third principle will soon come into play as FRA decides which projects will receive initial Recovery Act funding. FRA has received applications totaling $57 billion for its $8 billion in available Recovery Act funds. The factors affecting the economic viability of high speed rail projects—meaning whether total social benefits offset or justify total social costs—include the level of expected ridership, costs, and public benefits (i.e., the benefits to nonriders and the nation as a whole from such things as reduced congestion and pollution), which

[3]GAO-09-317 and GAO, *21st Century Challenges: Reexamining the Base of the Federal Government*, GAO-05-325SP (Washington, D.C.: February 2005).

depend on a project's corridor and service characteristics. High speed rail is more likely to attract riders in densely and highly populated corridors, especially where existing transportation facilities, such as highways or airports, are congested. Characteristics of the proposed service are also a key consideration because high speed rail is more likely to attract riders where it compares favorably with travel alternatives in terms of trip times, frequency of service, reliability, safety, and price. Costs largely hinge on the availability of rail right-of-way and a corridor's terrain. To stay within financial or other constraints, project sponsors typically make trade-offs between cost and service characteristics. We are pleased to note that FRA's notice of funding availability for high speed and other intercity rail projects generally asks applicants to address these factors.

Challenges Facing High Speed and Other Intercity Passenger Rail Projects

Once FRA chooses projects for funding, project sponsors face several challenges. These include securing the significant up-front investment for construction costs; sustaining public, political, and financial support; and resolving outstanding liability issues. We found that in other countries with high speed intercity passenger rail systems (France, Japan, and Spain), the central government generally funded the majority of the up-front costs of high speed rail lines.[4] The $8 billion in Recovery Act funds for high speed rail (and other intercity passenger rail) lines represents a significant increase in federal funds available to develop new or enhanced intercity passenger rail service. This $8 billion, however, represents only a small fraction of the estimated costs for starting or enhancing service on the nation's 11 federally authorized high speed rail corridors. For example, a portion of one such corridor, from San Francisco to Los Angeles, which already has about $9 billion in state bonding authority, is estimated to cost about $33 billion.[5]

Federal funds for high speed rail in the past (like Recovery Act funds) have been derived from general revenues, not trust funds or other dedicated funding sources. This makes ongoing capital support for high speed rail projects challenging, because such projects compete for funding with other national priorities, such as health care, national defense, and support for ailing industries. States face similar challenges as they develop these systems over a decade or more, and as they look to provide

[4]GAO-09-317.

[5]The corridor would extend from Sacramento and San Francisco through Los Angeles to San Diego.

operating support for the rail lines. The potential problem could be compounded when service extends across state boundaries and each state must provide operating support. Finally, several state and industry stakeholders have told us that outstanding questions about liability coverage for passenger rail providers operating on freight railroads' tracks is a major barrier to entry for service providers and for host railroads.[6]

GAO's Ongoing Recovery Act Work on Intercity Passenger Rail Projects

To further help Congress understand how Recovery Act funds for high speed and intercity passenger rail service can be used effectively, we are addressing the following three questions:

1. How have states that have recently initiated intercity passenger rail service overcome the challenges to establishing service?
2. How can the rail industry accommodate the increased investment in intercity passenger rail?
3. How FRA is positioning itself to implement and oversee current and any future federal investments in intercity passenger rail?

To carry out this work, we have identified states that have initiated new intercity passenger rail service and states that have expanded existing service since 1995, including "higher-speed" rail service. Intercity passenger rail service in those states has a mix of characteristics, including infrastructure and equipment ownership, capital investment levels, levels of state involvement, and multistate operating agreements. We are also meeting with FRA, freight railroads, Amtrak, possible domestic and foreign operators of intercity passenger rail service, passenger rail equipment manufacturers, and other possible rail industry stakeholders. We are in the beginning stages of our work and plan to report on these issues early next spring. We would be pleased to discuss our work with you as we progress.

[6]Some freight railroads are concerned that an accident involving a passenger train on their tracks could involve potentially substantial liability claims, even if the freight railroad was not at fault. We reported that such liability is capped at $200 million per accident or incident for passenger claims; however, this cap has not been tested in court. See GAO, *Commuter Rail: Many Factors Influence Liability and Indemnity Provisions, and Options Exist to Facilitate Negotiations*, GAO-09-282 (Washington, D.C.: Feb. 24, 2009); and *Commuter Rail: Information and Guidance Could Help Facilitate Commuter and Freight Rail Access Negotiations*, GAO-04-240 (Washington, D.C.: Jan. 9, 2004).

In conclusion, the infusion of up to $8 billion in Recovery Act funds is only a first step in developing potentially viable high speed or other intercity passenger rail projects. The principles we have identified can be applied to promote the effective investment of Recovery Act and any future federal funds for these projects. Surmounting these challenges will require federal, state, and other stakeholder leadership to champion, and commitment to carry out, the development of any new or improved intercity passenger rail service. It will also require (1) clear, specific policies and delineations of expected outcomes and (2) objective, realistic analyses of ridership, costs, and other factors to determine the viability of projects and to maximize their transportation impact and other public benefits.

Madam Chairwoman, this concludes my prepared remarks. I would be pleased to answer any questions that you or other members of the subcommittee may have at this time.

GAO Contact and Staff Acknowledgments

For additional information about this testimony, please contact Susan Fleming at (202) 512-2834 or flemings@gao.gov. Contact points for our Offices of Congressional Relations and Public Relations can be found on the last page of this statement. Heather Chartier, Greg Hanna, James Ratzenberger, and Caitlin Tobin made key contributions to this statement.

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Questions Submitted by Chairwoman Corinne Brown,
Subcommittee on Railroads, Pipelines and Hazardous Materials
Committee on Transportation and Infrastructure
U.S. House of Representatives
October 14, 2009, High Speed Rail Hearing
Responses from Susan Fleming
Director, Physical Infrastructure Issues
U.S. Government Accountability Office

1. *In your written testimony, you mention that "outstanding questions on liability coverage for passenger rail providers operating on freight railroads' tracks is a major barrier to entry for service providers and for host railroads." What recommendation do you have to minimize the barriers that liability issues may cause between states and host railroads in efforts to expand high speed passenger rail?*

Liability for accidents involving passengers on freight railroad infrastructure is a significant concern for stakeholders. Because the host freight railroad can be sued for accidents involving passenger trains when the host railroad is not at fault, freight railroads do not want passenger service on their tracks unless they are protected from liability arising from such accidents. Freight railroads have stated that they do not want to "bet the company" on a large lawsuit for service that is not their core business.

We believe that the $200 million cap in the Amtrak Reform and Accountability Act of 1997 applies to commuter railroad operators, Amtrak and non-Amtrak intercity passenger rail providers. However, the cap does not apply to claims made by parties who are not passengers (this could include bystanders or homeowners near an accident site) and the cap has not been tested in federal court. This issue has made freight railroads and others very cautious, resulting in high levels of insurance coverage and insurance costs for passenger service.

That said, freight railroads and passenger operators have reached agreement on liability arrangements. For example, we recently reviewed 33 operating agreements negotiated between large freight and commuter railroads—all of which contained some form of liability arrangement for passenger operations.[1]

2. *Do you foresee problems with liability and indemnity agreements between the operators of high speed passenger rail and the freight railroads? What can we learn from the issues that have been raised in agreements with freight railroads and commuter passenger rail?*

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[1]GAO, *Commuter Rail: Many Factors Influence Liability and Indemnity Provisions, and Options Exist to Facilitate Negotiations*, GAO-09-282 (Washington, D.C.: Feb. 24, 2009).

Obtaining liability protection can cause delays in initiating passenger rail service. For example, a California official told us that California is prohibited by state law from fully indemnifying a third party, such as an intercity passenger rail operator. Freight railroads generally want the commuter rail agency to assume all the risks associated with the presence of commuter rail service. As a result, freight railroads require commuter railroads to procure a certain level of insurance to guarantee they can pay any damages. This coverage can range from $75 million to $500 million. The costs of providing that level of insurance have stalled negotiations to start commuter rail service.

Several factors affect negotiations over liability coverage, including freight traffic density on the route, the physical characteristics of the railroad infrastructure, and the level of freight service. Although each negotiation is situation specific, both freight and commuter railroads identified some common actions that both parties can take to facilitate a successful negotiated settlement such as understanding each other's position, identifying and using incentives to leverage cooperation, securing adequate and flexible funding, and establishing good communication between parties.

3. *What are the most important lessons learned from GAO's previous work on high speed rail?*

Developing high speed passenger rail service in the United States is possible, but it is certainly not easy. We have found four factors necessary to establish and sustain high speed passenger rail service in the United States. First, sustained federal, state, local and private sector leadership and commitment will be needed in order to establish and sustain high speed passenger rail service. Establishing high speed passenger rail service could take a decade or more, depending on what is envisioned, and commitment—both leadership and financial—must be sustained throughout this period. Second, a strategic vision should be developed for high speed rail, including its role in the nation's transportation system, should be developed that clearly identifies potential objectives and goals, and the roles of federal and other stakeholders. Third, in relation to the strategic vision, the Department of Transportation needs to clearly identify the expected outcomes expected from the development of high speed rail projects and define the performance measures that show whether these outcomes are being achieved. Finally, reliable ridership and cost forecasts are critical in determining whether a high speed rail in a particular corridor is potentially viable. We believe that it would be useful for the Federal Railroad Administration to provide guidance to stakeholders that, at the least, would provide a framework for developing reasonable estimates.

4. *We understand that GAO has reported extensively on foreign high speed rail systems. Can you please elaborate on what lessons we can learn from other countries you have studied? In terms of operating systems or how they fund their systems?*

The countries we visited have taken steps to ensure that their high speed rail lines are safe, reliable, and time- and price-competitive with other transportation modes. For example, these countries have implemented policies that increase the costs of other modes, such as highway tolls and gasoline taxes, which contribute to the relative competitiveness of rail. For example, Japan heavily tolls highway travel between Tokyo

and Osaka, with trips costing over $200 each way in tolls and fuel costs. As a result, the trip is more expensive by car than it would be by train. This situation is far different from what exists in the United States, where, for example, a comparable journey between Los Angeles and San Francisco would only cost $4 in tolls and $25 to $40 in fuel costs. Next, the national government made a significant and sustained financial investment in high speed rail. In France, Spain, and Japan, the central governments generally funded the majority of the up-front construction costs of high speed rail projects—often without expecting to recoup their investment. This model, coupled with an intermodal perspective and a national vision and goals, are key factors that have contributed to the successful development of high speed rail systems in Europe and Asia.

Another lesson we can learn from other countries is that they initially focused on building one trunk line between two cities with very high populations and densities and an existing market of intercity travelers who used other transportation modes. These corridors demonstrated the level of demand necessary to justify the initial and ongoing investment in high speed passenger rail service. These lines, which include the Paris-Lyon, Tokyo-Osaka, and Madrid-Seville routes, which were partly built to relieve congestion on parallel conventional passenger rail routes and have been the most viable, because rail revenues have been sufficient to cover ongoing operating costs and to recoup at least some of the initial investment costs.

5. Despite *numerous attempts to bring high speed rail to the United States, it is only gaining traction today. What can we learn from these past attempts and failures of bringing high speed rail to the United States?*

Although high speed passenger rail programs existed prior to the Recovery Act, no national plan, with no stable and significant funding, has guided the development of high speed passenger rail in the national transportation system. Meanwhile, competing transportation modes, such as automobile and bus travel, cost less and have long standing institutional frameworks for investment. Historically, high speed rail proposals were not created through a structured federal transportation planning process, but were initiated by varying groups of project sponsors that have included states, Amtrak, federal agencies, and private companies. Because these proposals were developed in the absence of an established institutional framework, they have had more difficulty attracting funding and garnering political and public support.

In addition to project sponsors, high speed rail projects involve numerous stakeholders and jurisdictions, given that projects can span hundreds of miles and sometimes cross several states. These factors make reaching consensus on routes and other project decisions difficult. Some high speed rail proposals have failed in part for lack of the sustained public and political support needed to carry a project through multiple political cycles and a lengthy development timeline, and to cover the high up-front costs for the projects. Initiatives in Texas and Florida both failed to overcome these challenges; however, states currently operating intercity passenger rail service such as California, North Carolina and Wisconsin have met and overcome those challenges.

6. *What lessons can be learned about funding commuter rail systems that can be applied to federal investments in high speed rail?*

Stable, committed funding for initial capital costs is important to starting service. The New Starts programs results in full funding grant agreements that can provide assurances to state and local governments and host freight railroads that service will be started. Federal funding for intercity passenger rail service and New Starts comes from general revenues and is subject to competition with other federal funding priorities such as national defense and health care. Starting service is subject to many variables including settling access costs, liability arrangements, the impact of the proposed service schedule on the host railroad's current freight service, the adequacy of the rail infrastructure, plans for increased service or for accommodating any future increase in freight traffic. Because Amtrak has a statutory right of access at incremental cost to existing freight rail infrastructure, any non-Amtrak operator would have to negotiate for access to freight railroad infrastructure, which may increase its operating costs relative to Amtrak's costs.

7. *What lessons can be learned about funding commuter rail systems that we can apply to the funding and federal investments we are making in a high speed passenger rail system?*

Please see the response to question 6.

8. *Do you have any suggested changes/additions to the rail title of the Surface Transportation Authorization Act of 2009, in particular the high speed rail sections?*

Overall, the high speed rail sections have some of the features that GAO has recommended for similar federal investments, including criteria-based competition for limited federal funds and prioritization based on objective criteria. These features, if followed when the Federal Railroad Administration invests in intercity passenger rail projects, will increase assurance that federal investments will go to projects with the highest public benefits. To further increase that assurance, the act could include some requirements to measure the impact of the investments.

STATEMENT OF

EDWARD R. HAMBERGER
PRESIDENT & CHIEF EXECUTIVE OFFICER
ASSOCIATION OF AMERICAN RAILROADS

BEFORE THE

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

HEARING ON HIGH-SPEED RAIL IN THE UNITED STATES: OPPORTUNITIES AND CHALLENGES

OCTOBER 14, 2009

Association of American Railroads
425 Third Street SW
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Introduction

On behalf of the members of the Association of American Railroads (AAR), thank you for the opportunity to testify on the opportunities and challenges inherent in expanding high-speed passenger rail in America. AAR members account for approximately 75 percent of U.S. freight rail mileage, 92 percent of freight rail employees, and 95 percent of freight rail revenue. Amtrak and several commuter passenger railroads are also members of the AAR. The AAR is presenting this testimony on behalf of its freight railroad members only.

It's important to note at the outset that our nation's privately-owned freight railroads want passenger railroads to succeed, and freight railroads are already successful partners with passenger railroads all across the country. Amtrak owns approximately 730 route-miles, primarily in the Northeast Corridor bounded by Boston and Washington. Nearly all of the remaining 97 percent of Amtrak's 22,000-mile system consists of tracks owned and maintained by freight railroads. Freight carriers also furnish other essential services to Amtrak, including train dispatching, emergency repairs, station maintenance, and, in some cases, police protection and communications capabilities. In addition, hundreds of millions of commuter trips each year occur on commuter rail systems that operate at least partially over tracks or right-of-way owned by freight railroads.

Partnering with Freight Railroads to Implement the Vision of Expanded High-Speed Rail

AAR and its member railroads applaud those who recognize the importance of rail to America's future. As the Federal Railroad Administration's recently released *Vision for High-speed Rail in America* points out, both freight and passenger railroads confer enormous public benefits to our nation, including reduced traffic congestion, reduced fuel use, lower greenhouse gas emissions, and less pollution. More freight and passenger railroading means more

transportation options, more interconnected communities, greater transportation efficiency, and the potential for enhanced economic development and redevelopment. Railroads are the smart, sensible way to help solve America's 21st-century transportation challenges.

We share that belief with other members of OneRail, a new coalition to advance railroading nationwide. OneRail brings passenger and freight rail stakeholders — as well as environmental interests — together for the first time. In addition to the AAR, members include the American Public Transportation Association, Amtrak, the American Short Line & Regional Railroad Association, Building America's Future[1], the National Association of Railroad Passengers, the Natural Resources Defense Council, the Railway Supply Institute, States for Passenger Rail Coalition, the Surface Transportation Policy Partnership, and the United Transportation Union.

In addition to supporting policies and programs that expand public and private investment in freight rail mobility, OneRail's objectives include expanding and strengthening America's passenger rail network by encouraging the development of commuter and intercity passenger train options for all Americans, and supporting state efforts to seek an ongoing, dedicated funding source for intercity passenger rail expansion, including designing federal-state partnership and cost sharing agreements similar to those that built America's federal-aid highways and transit systems.

All of us involved in this effort know that reshaping the nation's passenger transportation system with expanded rail choices will bring significant challenges. One of the most important of these challenges is finding the most effective way for freight and passenger railroads to

[1] An infrastructure initiative organized by Pennsylvania Governor Edward Rendell, California Governor Arnold Schwarzenegger, and New York City Mayor Michael Bloomberg.

partner in a way that provides the passenger rail service that America wants and needs, but without operationally or financially burdening our nation's freight rail system.

Today, whenever Americans grow something, eat something, mine something, make something, turn on a light, or get dressed, freight railroads were probably involved somewhere along the line. The combination of safety, efficiency, capacity and affordability of our freight railroads is unmatched by any other freight rail system in the world and provides a huge competitive advantage for America's consumers and producers in the global economy.

Thus, for high-speed passenger rail expansion to proceed, all parties — policymakers, railroads, and others — must understand that America's economic health and global competitiveness would suffer greatly if the integration of freight service with expanding passenger service is not planned and implemented to ensure the ongoing success of both services. We're gratified that policymakers recognize this point. As the *FRA Vision* notes, expansion of high-speed rail must be accomplished in a way that avoids diversion "from the core operating and maintenance responsibilities" of the freight railroads.

As noted above, through their ownership of the vast majority of the rights-of-way over which expanded intercity passenger rail will take place, freight railroads provide the literal foundation for passenger rail. That's why great care must be taken to ensure that there is enough capacity for current and future freight and passenger rail service, and that partnerships between host freight railroads and high-speed rail operators protect the business needs and address the responsibilities of both parties.

Ideally, freight railroads and intercity passenger railroads would operate in completely separate worlds. Separate corridors would enable faster, safer, and more reliable passenger service, while eliminating or greatly reducing the operational, capacity, engineering, legal, and

other impediments that can hinder the ability of freight railroads to successfully accommodate passenger trains on non-separated corridors.

However, freight railroads recognize that because of the expense involved and other reasons, it will be challenging in many instances for passenger rail operators to acquire their own completely separate rights-of-way. As a result, higher-speed passenger rail will, in many cases, have to share tracks, or at least rights-of-way, with freight railroads where such dual use can be accommodated. Indeed, the *FRA Vision* contemplates that other than express high-speed rail (speeds of at least 150 mph), intercity passenger rail operations will involve at least some shared track.

Clearly, each potential high-speed rail corridor is unique and governed by its own circumstances. Potential variables include traffic volume, types of traffic carried, geography, number of grade crossings, length of hauls, and many more. As such, agreements that grant access to privately-owned freight rail networks must be negotiated on a voluntary, case-by-case basis and must address site-specific safety, operational, compensation and legal issues. In that vein, a number of general principles should apply.

First, safety must be the top priority. Railroads are an extremely safe way to move both people and freight — and everyone involved in railroading wants to keep it that way.

That's why safety considerations must be paramount when determining whether freight and passenger trains can share the same track or corridor. If specific conditions allow it, such shared usage may be possible with passenger trains traveling up to 90 miles per hour. At higher speeds, passenger trains should be expected to operate on separate tracks from freight railroads. That's the safest option, and it's how it's done in much of the world. Safety also requires that higher-speed passenger rail corridors be "sealed" — *i.e.*, no highway-rail grade crossings.

Second, capacity concerns must be properly addressed. Over the coming decades, population and economic growth will mean sharply higher demand for freight transportation. Advancing high-speed rail at the expense of freight rail's ability to handle these growing freight volumes would be counterproductive. After all, if passenger rail impedes freight rail and forces freight that otherwise would move by rail onto the highway, the primary reasons for having passenger rail in the first place — enhanced mobility, reduced congestion, environmental benefits, etc. — would be compromised.

Thus, new infrastructure design and construction related to expanded passenger rail must fully protect freight railroads' ability to serve their existing customers (both freight and passenger) and accommodate future new freight customers on and adjacent to their lines.

Third, freight railroads should receive full compensation for the use of their assets. To the extent that high-speed passenger rail operations use freight railroad assets and property, they must provide the host railroad with a reasonable return on its investment.[2] An important related consideration is the fact that operating high-speed passenger rail trains at speeds greater than existing freight or passenger operations will require significantly higher maintenance costs and enhanced track infrastructure. Passenger railroads should be prepared to fully compensate the host railroad for these additional and ongoing costs. Otherwise, freight railroads would be in the inequitable position of having to subsidize passenger operations.

It should be remembered that no comprehensive passenger rail system in the world operates today without significant government assistance. Once policymakers in the Administration, Congress, and the various states agree on the nature and scope of passenger

[2] This should include recouping the very significant costs associated with participating and providing information and studies necessary to develop any high-speed rail project proposal.

railroading in this country, they must be willing to commit public funds on a long-term basis commensurate with that determination.

Fourth, freight railroads must be adequately protected from liability that would not have resulted but for the added presence of passenger rail service. It is almost inevitable that some accidents will occur on railroads, despite railroads' best efforts to prevent them. An accident involving passenger trains — which are generally far lighter than freight trains, often travel at much higher speeds, and, most importantly, have passengers on board — is far more likely to involve significant casualties than an accident involving only freight trains. Passenger operations also bring more people onto railroad property, resulting in a corresponding increase in risk. These potentially ruinous risks make freight railroads extremely reluctant to allow passenger trains on their tracks without adequate protection from liability.

The International Experience with High-Speed Rail

The vision for high-speed rail is a worthy one and there are many outstanding systems around the world that have high ridership and provide remarkable passenger service. However, many of the systems cited to exemplify future high-speed rail system in the United States are run on their own dedicated track at speeds of 170 mph and higher.

Additionally, many of these systems receive ongoing government subsidies for years to reach a point of operating "in the black" — while some continue to operate "in the red" with an ongoing need for direct government subsidies to cover operations, maintenance, additional capacity, and legacy costs.

In April 2008, Amtrak's Office of Inspector General reported that most European countries spend a much higher level of funding for passenger rail operations than the United

States.[3] These examples are relevant to this debate, because these passenger trains often run at speeds which approach or exceed some of the high-speed thresholds contemplated here.

Specifically, the Amtrak report referenced a study by European-based BSL Management Consultants that showed that over 10 years Germany, France, Spain, Denmark, Austria and the United Kingdom spent some $42 billion annually to operate and maintain passenger railroads. The largest operations and maintenance costs belonged to Germany, which needed approximately $12 billion in annual subsidies for capital investments. That number rises to almost $24 billion annually when the costs of staff, pension, and debt service numbers are included.

No two countries' rail systems are identical. However, we can and should look elsewhere to see what we can learn. The record clearly suggests that success has a price. High-speed rail requires sustained high levels of taxpayer subsidies to remain viable in the countries where it has been operational for long periods of time.

Conclusion

To reiterate, freight railroads want passenger railroads to succeed, they work cooperatively with passenger railroads to help make this happen, and they support government efforts to grow passenger rail in ways that complement freight rail growth.

At the same time, America's economic health and global competitiveness depends critically on having a healthy freight rail system. Expanding passenger rail on corridors owned by freight railroads will require a partnership between freight and passenger railroads that finds the right balance and protects the business needs and responsibilities of both parties. Freight railroads are committed to working with government officials, passenger rail stakeholders, and others to ensure a winning result for all parties involved.

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[3] "Public Funding Levels of European Passenger Railroads," Evaluation Report E-08-02, Amtrak Office of Inspector General, April 22, 2008.

Subcommittee on Railroads, Pipelines and Hazardous Materials
Hearing on High-Speed Rail in the United States: Opportunities and Challenges
Hearing Date: October 14, 2009
Questions for the Record

(1) What is AAR's position on establishing a dedicated guaranteed funding source for intercity and high-speed rail?

The Association of American Railroads is a founding member of the OneRail Coalition and subscribes to its core principles. Among these, OneRail supports state efforts to seek an ongoing, dedicated funding source for intercity passenger rail expansion, including a federal-state partnership and cost sharing agreements similar to the partnerships that built the nation's federal-aid highways and transit systems.

(2) How can AAR and its members work with the federal government, states and passenger rail providers to expand passenger service on freight railroad tracks?

AAR member railroads are already very much engaged with the federal government, states and Amtrak to expand passenger service on freight railroad tracks, evidenced by the dozens of partnerships that have been formed to advance grant applications for both new and improved passenger rail service. For example, within the last few months, there were some 45 applications from 24 states totaling approximately $50 billion to advance high-speed rail corridor programs (Track 2 applications). There were another 214 applications from 34 states totaling $7 billion for corridor planning and smaller projects (Track 1, 3 & 4 applications). A prerequisite placed on the states by the FRA for these grant applications was a requirement to obtain agreements with both the host railroad and passenger rail provider – which in the majority of cases involves an AAR member railroad and Amtrak.

Already, freight railroads currently provide the majority of the right of way and infrastructure necessary to accommodate more than 315 Amtrak passenger trains per day over 43 routes, carrying an average of 78,500 passengers per day. Improved intercity passenger rail service offers great promise to our nation in many ways, but the starting point for discussion must be a common understanding of what it requires in new or existing rail infrastructure. At lower speeds, track generally can be shared between freight and passenger lines if the following interests are responsibly and fairly addressed: safety; capacity; compensation; and liability. At higher speeds, tracks should be separated and dedicated, as they are in the overwhelming majority of high speed rail systems around the world.

To make higher speed passenger rail work in this country, first and foremost will be maintaining the health of the freight railroad industry which provides the literal foundation for intercity passenger rail mobility.

Today, high speed rail is constrained by the capacity of rail lines and by freight traffic. Nonetheless, in several areas, sufficient land exists within and immediately

adjacent to the freight rail right of way to accommodate the addition of more freight and passenger tracks. In other areas of the country, the volume of freight traffic may be so great that a separate high speed passenger corridor makes more sense for both parties. Clearly each high speed rail origin-destination pair is unique and governed by its own circumstances. Consequently, generalizations are difficult to make about when, where and how freight rail and high speed passenger rail can share the same right of way or infrastructure successfully over a long term without adversely affecting the interests of either party. As such, each specific project must be treated on a case-by-case basis.

(3) We understand that most proposals for high-speed rail systems will involve the use of rights-of-way and infrastructure owned operated by freight railroads. How does the AAR plan to work with states and other high-speed rail operators to clarify issues of liability? Have you engaged FRA on this topic?

Host railroads must be protected from increased liability risks associated with high speed passenger rail service. Host freight railroads need to be fully protected against any and all liability that would not have resulted but for the added presence of high speed passenger rail service. For the freight railroads to take on any liability that arises from passenger rail operation on their lines would amount to an unwarranted subsidy of passenger rail. As such, liability coverage is a critical element of any host railroad agreement forged with the states for the purposes of new and improved intercity passenger rail service. The AAR filed comments with the FRA on June 5, 2009 (Docket No. FRA-2009-0045) addressing numerous issues concerning intercity passenger rail, among them liability coverage.

In its interim guidance issued on June 23, 2009 on High-Speed Intercity Passenger Rail, the Federal Railroad Administration recognized the importance of resolving liability coverage. That guidance states: "As a condition of receiving a grant under this program for a project that uses rights-of-way owned by a railroad, the grant recipient shall have in place a written agreement between the grant recipient and the railroad regarding such use and ownership, including any compensation for such use; assurances regarding the adequacy of infrastructure capacity to accommodate both existing and future freight and passenger operations; an assurance by the railroad that collective bargaining agreements with the railroad's employees (including terms regulating the contracting of work) will remain in full force and effect according to their terms for work performed by the railroad on the railroad transportation corridor; and an assurance that the grant recipient complies with liability requirements consistent with 49 U.S.C. 28103."

US Railcar, LLC

Statement of

Michael Pracht
President and Chief Executive Officer
US Railcar LLC

before the

Committee on Transportation & Infrastructure
Subcommittee on Railroads, Pipelines, & Hazardous Materials
United States House of Representatives

High-Speed Rail in the United States: Opportunities and Challenges

October 14, 2009

Good afternoon. Chairman Brown and Members of the Subcommittee, my name is Michael Pracht. I am President and CEO of US Railcar, based in Columbus, Ohio. I am delighted to be invited to testify here today. As a 27-year veteran in the passenger rail industry, I have never seen this level of excitement and commitment by our national and state leaders for supporting passenger rail.

Prior to joining US Railcar, I previously held key leadership positions with Pittsburgh based Union Switch & Signal, the Italian passenger railcar company AnsaldoBreda and the German based Siemens Transportation. Six months ago, I joined a group of investors led by Barry Fromm of Columbus – true visionaries who intend to revive and reestablish American owned, American designed, American engineered and American manufactured passenger railcar manufacturing in the United States.

In my testimony I will offer background on US Railcar's formation and describe the opportunities we see in a new market for U.S.-built passenger rail equipment. I will also outline the challenges we face and the need for a strong federal partner to assure not only the success of passenger rail in the United States, but the success of new manufacturing ventures such as ours.

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For US Railcar, that federal leadership means:

- Approval by the U.S. Department of Transportation of the Ohio Rail Development Commission's application for an $8.73 million TIGER grant to support construction of a proposed new railcar manufacturing and heavy maintenance facility in Ohio.

- Funding for high-speed rail research and development to enhance passenger rail equipment performance.

- Effective administration of the Passenger Rail Investment and Improvement Act (PRIIA) Section 305 Next Generation Corridor Train Equipment pool.

- Fair implementation of the Buy America provisions enacted in PRIIA to nurture domestic passenger railcar industry manufacturing and growth.

- Assured federal capital flows for intercity and high-speed passenger rail investments that translate into steady and predictable orders for passenger rail equipment.

Formation of US Railcar

In January 2009 a small group of private investors led by Barry Fromm, chairman of the Value Recovery Group, Inc.[1] ("VRG") of Columbus, Ohio acquired the assets, including the intellectual property (manufacturing documentation, engineering drawings, software, patents, test plans) along with existing inventory, tooling, fixtures, jigs, and equipment from the former Fort Lupton, Colorado based, Colorado Railcar Company. The former Colorado Railcar Company engineered and manufactured the first and only Federal Railroad Administration (FRA) compliant, self-propelled Diesel Multiple Unit (DMU) passenger rail car in the American market since the departure in the 1980s of the Budd Company. The Budd Company was the last U.S. passenger rail car builder in this county. The Budd Company made the "RDC" cars (rail-diesel cars), similar in functionality to the DMUs developed by the Colorado Railcar Company (and now US Railcar).

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[1] Value Recovery Group, the parent company to US Railcar is based in Columbus, Ohio and Washington DC. The various Value Recovery business lines have several common features and purposes, the first being of service to public agencies in various disciplines, distressed asset management and recovery, claims management, brownfield and economic development, energy program management services and now passenger railcar manufacturing, all with a goal of increasing the value of underperforming assets.

DMUs contain propulsion engines and passenger seating in one railcar, unlike an independent locomotive that hauls coach cars. The cars easily travel in both directions and offer greater flexibility and efficiencies, significantly lowering operating costs. Our new company, US Railcar, plans to recommence passenger railcar manufacturing production, ideally in the State of Ohio and using suppliers from across the Midwest and around the nation, to meet the needs of an emerging new market.

The original Colorado Railcar platform was developed in 2002 and later enhanced in conjunction with the Central Florida Regional Transit Authority and development grants from FRA. Since 2006, ten DMU railcar units have been built, sold and placed into revenue service with commuter and intercity rail operating agencies in South Florida, Portland, Oregon, and Alaska.[2]

DMU Platform Advantages and Opportunities

The new DMUs that US Railcar plans to build in the heartland of America offer substantial innovation and potential:

- The US Railcar DMU is the only FRA-compliant DMU meeting 49 CFR Part 238 passenger rail equipment safety standards. Unlike any other DMU design globally, the US Railcar DMUs already meet all FRA safety standards, enabling immediate operation on the general railroad system. This safety compliance means that regional commuter and intercity passenger rail authorities can offer start-up or expanded service over the existing freight rail network, subject to agreement with host railroads. Other than a locomotive-hauled FRA compliant consist, the only other service option would be to negotiate temporal-separation agreements with freight railroad facility owners to enable operation of non-compliant DMU equipment during the day and freight service at night. Such temporal-separation agreements have proven difficult to accomplish, compromise freight capacity and are suitable only for corridors with low-density freight service.

- DMUs can offer significant operational flexibility. When transporting between 300 intercity to 500 regional commuter passengers per trainset, DMUs offer greater operating flexibility and lower operating costs, with substantial environmental and energy efficiency advantages. Using high-horsepower locomotives hauling multiple

[2] See http://www.usrailcar.com/tiger/usrailcarpictures.pdf , http://www.youtube.com/watch?v=Z76WdoKZhj0, and http://www.usrailcar.com/tiger/usrailcar_video.htm for images and video of the DMU in service.

coaches with similar carrying capacity, and a cab car at the other end of the train, wastes fuel and increases carbon footprint. US Railcar DMUs will seat up to 94 passengers per car for commuter rail applications and 65 for intercity service (including space for galley and rest facilities). US Railcar also produces a bi-level DMU with twice this seating capacity. DMUs typically run in married pairs, and are capable of coupling multiple married pairs providing even greater operational savings and significant operating flexibility compared with locomotive-hauled consists. DMUs are easily coupled/uncoupled enabling single and multiple car consists "right-sized" to meet fluctuating daily, weekly and regional demand thereby avoiding wasted fuel moving empty seats in the larger and less flexible loco-hauled consists.

- DMUs can offer greater environmental and energy benefits. DMUs emit less noise and pollution when compared to a traditional locomotive. Operational flexibility results in lower environmental impact, reducing the carbon footprint and energy consumption per passenger.

- DMUs allow for smaller stations/platforms, maintenance facilities and yards, saving operating authorities and ultimately passengers millions. Inclusion of propulsion in the DMU passenger car itself eliminates the need for an additional 70 foot long locomotive and a trailing cab car, saving platform space needed to board passengers and reducing the land and additional construction costs required for station development.

The market for the US Railcar DMU is emerging quickly and includes new start-up services, existing regional commuter lines and intercity passenger rail corridors seeking more modern (fuel efficient/greener) rolling stock (i.e. railcars) to support growing ridership and increasing demand for alternative transportation. Secondary markets include replacement of aging locomotive-hauled push/pull fleets whose midlife overhaul and/or in-kind replacement cost exceeds comparable return-on-investment (ROI) projections established and proven for DMUs in after-market customer trials.

While we are still in the early stages of our business approach, US Railcar believes that for the right applications, DMU pricing can be less expensive compared to locomotive-hauled options. A number of States and operating authorities have recognized the potential advantages of DMUs.

As an example of our strategic business planning, since we are located in Ohio, we have discussed with ODOT the potential for utilization of DMUs to begin starter service in the proposed 3C (Columbus, Cleveland & Cincinnati) corridor. Additionally, other Midwest corridors (including starter routes for the Midwest Regional Rail Initiative) in Illinois, Indiana,

Missouri, Michigan, Pennsylvania and Wisconsin and other states, together with new high-speed and intercity passenger rail corridors across the country, offer exciting opportunities for US Railcar.

DMUs are not a new or high-risk technology; DMUs in both Asia and Europe have proved an important part of a balanced transportation plan. Application of FRA-compliant DMUs will help passenger operating authorities across the United States ensure that high speed and intercity rail transportation remains cost-competitive, while improving long-term efficiency and reliability. We are optimistic about the future opportunities for passenger rail in the United States. The American public is becoming increasingly aware that from a financial, environmental and strategic long-term national planning perspective passenger rail make sense. And it is now a necessity as part of a balanced national transportation policy.

A New Domestic Passenger Railcar Manufacturing Industry Must Support the Nation's New High-Speed and Intercity Passenger Rail (HSIPR) Initiative

US Railcar applauds the commitment of the President, the Congress and this Committee in promoting high-speed and intercity passenger rail development. We endorse the $50 billion funding allocation included in the Committee's surface authorization legislation. I personally have been an advocate for many years for advancing higher-speed intercity passenger rail corridors and the creation of a more balanced intermodal (road, rail, air) national transportation system. As other witnesses have testified and the Committee recognizes, as the U.S. population continues to grow it is impractical simply to continue to expand highways, roads and bridges –it is cost prohibitive and environmentally unsound. A more balanced approach is essential.

At a time when America is looking to create more jobs, reduce its dependence on foreign oil and become more carbon efficient, high speed rail can make a significant contribution quickly and cost effectively. The opportunity to once again manufacture railcars in the United States is timely.

With our nation's new commitment to high-speed rail, however, established foreign competitors with their huge marketing budgets are begin to position themselves to aggressively compete for upcoming passenger car contracts--funded largely by U.S. taxpayers.

A number of operating agencies around the country have indicated strong interest in the US Railcar DMU platform assuming that the company can receive the necessary support to be brought back to market in the next twelve months before alternative foreign (European/Asian) equipment decisions are forced by lack of competing American options.

It is important to note that there are currently no longer any other American-owned passenger railcar builders in existence in the United States. Legendary U.S. manufacturers such as St. Louis Car, Pullman Standard and the Budd Company succumbed long ago.

Today, all transit and passenger railcars currently sold in the United States are provided by foreign companies from France, Germany, Italy, Japan, Korea, Spain, the Czech Republic and Switzerland. While such companies have valued U.S. workers and local assembly, their railcars are only partially produced in the United States (typically 60 percent with the other 40 percent imported and their profits exported back to their home countries. From a transportation and manufacturing security position, as well as from the standpoint of American leadership, reestablishing our domestic passenger railcar industry should be an important national priority. US Railcar's passenger cars and DMUs will be made in America with U.S. content, and our very name, US Railcar, LLC, pronounces that we are an American company. Design, engineering, research & development, sales, service, customer support and after-market care will be managed and accomplished in the United States.

Federal Leadership is Essential to Success

Passenger rail revival in the United States creates an historic opportunity to establish an entirely new industry that will bring back crucial manufacturing jobs and help keep American dollars in America at a critical time in our history. But we face substantial challenges that require strong federal leadership and vision. Important steps include:

A. Approval by USDOT of the TIGER Application by the Ohio Rail Development Commission (ORDC) to establish a new railcar manufacturing and maintenance facility.

On September 15, 2009, ORDC, an independent commission within the Ohio Department of Transportation, applied for $8.73 million from USDOTs Transportation Investment Generating Economic Recovery (TIGER) Program to facilitate a public-private partnership to produce and ultimately maintain DMU passenger railcars in a new manufacturing and maintenance facility in Gahanna, Ohio.

US Railcar is thrilled to be a partner in this application. We are gratified by the support of ORDC, ODOT, Governor Strickland[3] and a number of Members of Congress.[4]

[3] http://www.usrailcar.com/tiger/governor_support_ltrs.pdf

[4] http://www.usrailcar.com/tiger/support_ltrs.htm

Approval of ORDC's TIGER grant request would enable US Railcar to build the new capital facilities necessary for our firm to compete. Total project fixed asset costs for the proposed manufacturing and maintenance facility are estimated at $14.5 million. Of this amount, the State of Ohio has committed up to $3.638 million,[5] or a 25 percent share. US Railcar will commit $2.282 million, or 15 percent, for total non-federal cost sharing of 40 percent of total project costs. These commitments do not include substantial investments US Railcar has made to acquire the former Colorado Railcar intellectual property and equipment, assemble working capital and move an entirely new manufacturing and production initiative forward.

The proposal includes the construction of a 100,000 sq. ft. passenger railcar manufacturing facility on 13 acres in the City of Gahanna, outside of Columbus Ohio. The proposed project will employ up to 162 workers within the first three years and up to 200 workers within the first five years after completion of the construction of the manufacturing facility. A shovel ready site has been chosen and work can commence soon after award.

The new US Railcar facility will also help establish new intra- and interstate supply chains and international trade lanes that will benefit many other businesses. Many of these suppliers that have suffered tremendously from the dramatic slowdown in the automotive industry. This vast network of auto suppliers which represents all facets of motor vehicle production, including plastics, metals, instrument control and lighting may, in many cases, potentially be the same suppliers used by US Railcar. We believe that leading motor vehicle manufacturers in America would support the additional work to ensure their supplier base remains strong. There is also a market in Canada and Mexico for FRA compliant passenger railcars like the ones that will be produced by US Railcar. Initial market studies show strong potential export opportunities helping to balance the U.S. trade deficit with our nearest national neighbors.

We see a unique opportunity to leverage private, state, and federal funding, to reestablish a proven product/technology, and bring new business opportunities in the passenger rail business. Our proposed s public-private partnership helps create the railcar which allows ideal travel choices to create employment opportunities and economic development in a safe, productive, energy efficient and environmentally sensitive manner that enhances our cities and towns throughout the Midwest and around the Nation. The expansion of passenger rail and commencement of the US Railcar project will create immediate jobs, spur economic development via a new supplier base, and resurrect a bygone American industry, while supporting a more sustainable and balanced national transportation plan. This opportunity allows Ohio to build upon the State's large automotive and rail parts-supplier bases, utilize the

[5] A copy of the State's commitment for up to $3.6 million can be found at: http://www.usrailcar.com/tiger/state_support.pdf.

existing trained American workforce, and procure U.S.-made raw materials and equipment from manufacturers across the Midwest. US Railcar is now in discussions with some of the Midwest's top-notched engineering schools regarding partnership opportunities as we look to produce the next generation of passenger railcars.

B. Federal R&D Funding Must Support New High-Speed Rail Passenger Railcar Equipment Development.

Initial production versions of the US Railcar DMU are capable of operation at speeds of up to 90 mph, depending on track conditions, with full FRA Part 238 compliance. Future upgrades to increase speeds to 110 mph and 125 mph, including enhancements to the carbody, suspension and powertrain, will require additional engineering investment. Development costs to ensure compliance with EPA Tier 4 regulations will also require substantial capital commitments.

The proposed FRA high-speed rail research and development program being considered in FY 2010 THUD appropriations can help meet these challenges. This new R&D initiative included within the larger HSIPR grant program may be funded in FY 2010 at $30 million as proposed by the House, or $50 million as the Senate has proposed. R&D grants administered by FRA, similar to the previous Next Generation High Speed Rail program, and could potentially help address key issues in adapting current passenger rail equipment platforms to unique higher-speed operating challenges. US Railcar looks forward to competing for and participating in this new high-speed rail R&D program should funding be appropriated.

C. The PRIIA Section 305 Next Generation Corridor Train Equipment Pool Must be Implemented Effectively.

PRIIA Section 305 tasks Amtrak will be establishing a Next Generation Train Equipment Pool Committee to "design, develop specifications for, and procure standardized next-generation corridor equipment."

US Railcar supports this important standardization effort. It is incumbent on all passenger rail industry participants to learn from the transit sector and avoid expensive, wasteful "one-off" custom procurements with every authority requiring different technical specifications for essentially the same vehicle product. New manufacturing organizations such as US Railcar cannot afford to develop different platform capabilities for each and every operating agency equipment procurement.

In addition to savings on capital procurements, taking advantage of and leveraging common platforms would also provide substantial operating and maintenance cost savings

similar to those demonstrated/achieved by Southwest Airlines with their emphasis on the Boeing 737 airframe.

A challenge facing the Pool Committee is to ensure that all perspectives are heard as standard specifications for various equipment types including DMUs are developed. As a related matter, FRA's examination through the Railroad Safety Advisory Committee of alternative approaches to Part 238 compliance merits full and comprehensive discussion. US Railcar looks forward to participating in the Pool Committee and to a new and equitable passenger rail equipment procurement process that captures the economies we can and should achieve.

D. PRIIA Buy America Standards Must be Administered Fairly.

PRIIA implemented new Section 24405 Buy America grant conditions applicable to both intercity passenger rail service corridor capital assistance and the high-speed rail corridor program. In place of the corresponding Amtrak Buy America standard which requires procurement of "manufactured articles, material and supplies manufactured in the U.S. ***substantially from*** articles, material, and supplies mined, produced or manufactured in the U.S." PRIIA requires that grants be made for a project **"only if the steel, iron, and manufactured goods used in the project are produced in the United States."**

Section 24405 provides for waiver of this requirement pursuant to certain exceptions but requires notice and comment on proposed waivers and a report to Congress on any waivers that may be granted.

Implementation of these new PRIIA Buy America standards as Congress intended poses a true test of our commitment to establishing a new domestic passenger rail car production manufacturing capability. To create U.S. jobs for U.S. workers producing U.S. trains for service in the U.S. and keep business returns here, it is essential that the new PRIIA Buy America standards be administered evenly and fairly.

E. HSIPR Requires Sustained and Dedicated Funding.

Railcar manufacturers require a predictable stream of customer orders to attract the substantial capital needed for equipment development, engineering and manufacturing. Such demand must be sustainable and reliable.

Operating agencies can only generate steady demand for new equipment if they in turn receive dependable and secure capital funding. President Obama has called the $8 billion federal investment in high-speed and intercity passenger rail a "down-payment" on our mobility future. But without continuing federal leadership and enactment of a reliable funding source for intercity

passenger service development our collective vision for high-speed rail in the United States cannot be realized.

US Railcar stands shoulder to shoulder with every stakeholder in our emerging industry in asking this Committee and the Congress to enact, as part of the surface transportation authorization or other legislation, a new dedicated funding source for high-speed and intercity rail development. That will enable our firm and other industry participants to attract the long-term investment capital we need to produce the new equipment Americans want to ride. We appreciate the Committee's leadership in moving this funding commitment forward and commend the Committee's inclusion of a $50 billion authorization for high-speed rail in the pending surface transportation authorization legislation. We are ready to work with you to assure a dedicated funding stream to support this authorization and achieve a more balanced surface transportation investment program that will benefit us all.

Conclusion

In order for high speed rail and ultimately passenger railcar manufacturing to succeed in the United States, there must be real demand, a reliable market and a steady stream of vehicle orders. The old names of great American railcar passenger production – St. Louis Car, Pullman Standard, Budd, and others – disappeared a generation ago because demand ended with shifting transportation investment priorities. The commitment of President Obama and the Congress for $8 billion to high-speed and intercity passenger rail is a promising start to ensure this demand, but it must be more than a down payment. The United States must develop a more balanced national transportation plan for the country.

We believe US Railcar is at the forefront of a new drive to help create a revitalized U.S. passenger railcar industry, with cleaner, quieter, more energy efficient equipment which will be accepted by the American public. Passenger rail revival in the United States and our plans to establish DMU manufacturing facilities in Ohio creates an historic opportunity to establish an entirely reborn/new industry that will create new industrial jobs and help to ensure American investment dollars are invested in American owned enterprises at this critical time in our nation's history.

Thank you for this opportunity to testify. I would be pleased to answer any questions you may have.

US Railcar, LLC

FOR IMMEDIATE RELEASE: October 14, 2009

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US Railcar President and CEO Michael P. Pracht Testifies Before House Subcommittee On High-Speed Rail in the United States: Opportunities and Challenges

On Wednesday, October 14, 2009, Ohio-based US Railcar President and CEO Michael P. Pracht testified before the House Transportation & Infrastructure Subcommittee on Railroads, Pipelines, and Hazardous Materials chaired by Congresswoman Corrine Brown (D-FL). Mr. Pracht urged the Subcommittee and the Congress to build on the $8 billion "down payment" for high-speed and intercity passenger rail development approved in the American Recovery and Reinvestment Act last spring, and continue the strong federal leadership essential to the success of high-speed rail in the United States.

In his testimony, Mr. Pracht emphasized the need to support American manufacturing and American jobs as part of the nation's commitment to improved rail passenger service.

Mr. Pracht described how, in January 2009, a small group of private investors led by Barry Fromm, chairman of Value Recovery Group, Inc. ("VRG") of Columbus, Ohio acquired the assets of Colorado Railcar Manufacturing which produced self-propelled Diesel Multiple Unit (DMU) passenger railcars with ten units operating in revenue service today. US Railcar plans to resume manufacturing these American-made passenger railcars in the United States.

Mr. Pracht stressed the advantages of the US Railcar DMU platform, noting that unlike other DMUs operating elsewhere in the world, the US Railcar DMU is the only design that fully complies with Federal Railroad Administration equipment safety standards. The US Railcar DMU also offers operational flexibility for use in both regional commuter service and intercity passenger rail applications, plus environmental and energy benefits compared with traditional locomotive-hauled consists resulting from matching equipment capacity to service requirements. US Railcar plans to manufacture these new DMUs in both single-level and bi-level versions.

Mr. Pracht asked the Subcommittee to support the Ohio Rail Development Commission's application for federal grant funding to develop a railcar manufacturing faculty in Gahanna, Ohio; stressed the need for federal high-speed rail research and development and passenger railcar equipment standardization; and urged consistent enforcement of Buy America standards. Mr. Pracht also emphasized the importance of a sustained, dedicated federal funding source to support high-speed and intercity passenger rail development in the United States and to enable a steady stream of vehicle orders.

The US Railcar DMU is uniquely suited for commuter, regional and intercity rail passenger service, making this American-made DMU an ideal solution for both mature and emerging passenger rail agencies around the country.

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Michael P. Pracht, is a 30 year veteran in the rail industry with extensive past management experience at two of the world's leading rail transportation companies, Siemens and Ansaldo.

For more information about US Railcar and the DMU please check our website at www.usrailcar.com or contact us at 614-246-9465.

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Subcommittee on Railroads, Pipelines, and Hazardous Materials
Hearing on
High-Speed Rail in the United States: Opportunities and Challenges
October 14, 2009

Responses of Michael P. Pracht, President & CEO, US Railcar, LLC to Questions from Chairwoman Brown

You mention in your written testimony that the Federal government should assure Federal capital flows for intercity and high-speed passenger rail that translate into steady and predictable orders for passenger rail equipment. I believe that if the Federal government doesn't step up to the plate with a more robust, long-term level of investment in passenger rail that the private sector won't take us seriously. I believe they need to see a real commitment from the United States for high-speed rail before they start really investing. Would you agree with that assessment, and if so do you believe that Congress should consider including in the Surface Transportation Authorization Act a long-term guaranteed funding program for high-speed rail? How about the other panelists? What are your views on that?

We agree and strongly support the inclusion by Congress in the next Surface Transportation Authorization of a dedicated, guaranteed funding source for high-speed and intercity passenger rail development. As I stated in my testimony on behalf of US Railcar, passenger rail equipment suppliers will be attracted to this new emerging market only if there is real demand for the products and services they provide. This will require a reliable source of funding similar to current FTA programs for transit and commuter rail with multi-year commitments that are not dependent on fluctuating and uncertain appropriations.

America's interstate highway and aviation systems are the best the world because our vision was backed by a national commitment with dedicated funding. The President has provided a similar vision for intercity and high speed passenger rail backed with an $8 billion down payment that must now be sustained by the Congress. The pending Surface Transportation Authorization provides an appropriate opportunity to establish the dedicated funding necessary to bring America's passenger rail up to par with the rest of the industrialized world, meet our growing mobility needs, reduce carbon footprint, increase energy independence and create new manufacturing and technology jobs across the country.

We look forward to working with you, other Members of this Subcommittee and the Congress to seize this opportunity and, with sufficient determination, to succeed.

Does the industry have the capacity to meet projected demands for rolling stock to meet projected demands from States?

Industry capacity will grow along with market demand. American suppliers that are attracted to this emerging intercity passenger rail market will make sufficient investments in plant, equipment and technology to satisfy delivery requirements, create jobs and stimulate the economy. Foreign suppliers can also meet projected demand. Based on past experience, such suppliers will do so with only local assembly keeping higher-level knowledge-based jobs offshore and reinvesting profits in foreign technology back in home countries.

**Follow-up: What is the best approach for states seeking to purchase or refurbish rolling stock?*

For new equipment procurement, we believe that standardization is the only way to lower cost, shorten delivery cycles and assure reliable high-quality products and technology. Rolling stock procured around the world is typically far more standardized than that procured by our own transit agencies for urban and suburban applications often plagued by delays, cost overruns, and startup performance problems. Legislation that creates dedicated funding for investments in intercity and high-speed passenger rail must also require standardized product platforms. Passenger railcars from the past were all built to standardized designs often produced by multiple suppliers.

The Section PRIIA Section 305 next generation equipment pool mandate represents an outstanding opportunity to advance standardized designs for state procurement of new high-speed rail equipment.

Would standardization of design specifications and regulations for passenger rolling stock help generate investment by the manufacturing industry?

Yes, as noted in response to the previous question we believe that equipment design standardization is essential to our collective success. A good historical example applicable to our challenge today would be the PCC street car developed in the 1930s. The presidents of several large street railway companies convened a national conference to discuss the future of the industry. The purpose of the meeting was twofold; first to stop increasing loss of passengers to automobiles and buses; and second, to design a modern, comfortable, fast trolley that could be used as a standard in any city around the country competing favorably with the other transportation modes of the day. The new trolley became known as the President's Conference Committee or PCC car. Nearly 5,000 units were built between the 1930s and 1950s and proved so successful they were licensed and manufactured around the world where hundreds are still in service today.

You mention that DMUs are operating in both Asia and Europe? Where are they operating now and what is the speed of that service? Do you have any lessons learned that you can share about those operations?

DMUs operate in virtually every industrialized nation and in several modes of transportation that include urban, suburban, regional commuter and intercity high-speed rail. Speeds range from 50 mph in urban/suburban service to 125 mph in intercity corridors.

DMUs were developed around the world to provide greater service flexibility in lower density corridors (and during off-peak service). Primary advantages of DMUs in such applications include reduced operating cost and greater service flexibility. DMUs are also quieter, more environmentally friendly and consume less fuel than locomotives in comparable service.

Lesson learned is to use the right size rolling stock in the right application. Lack of available DMUs in America has resulted in broader use of locomotives in many "oversized" applications that waste fuel, increase operating costs and emit unnecessary pollution.

United States House of Representatives
Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials

October 14, 2009
Room 2167
Rayburn House Office Buiding
Washington DC

Written Testimony of Nicolas Rubio

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Madame Chairman, members of the Committee, thank you for allowing me to join you today. My name is Nicolas Rubio and I am the President of Cintra US. In the United States, we are proud to call Austin, Texas home to our corporate headquarters and our families.

Cintra is one of the leading private-sector transportation infrastructure companies in the world. In the United States, we are currently responsible for the development of three new construction projects in Texas and we manage existing roadway assets in Illinois (Chicago Skyway) and Indiana (Indiana Toll Road). Combined, these five assets represent an investment value of over $11.6 billion with an equity commitment of over $2.8 billion.

On a wider scale, Cintra and its parent company Ferrovial, own and manage major infrastructure assets, including more than 1,900 miles of highways worldwide, representing a total global investment in traffic congestion improvements of more than $29 billion. We also manage London Heathrow Airport and several other major airports in the United Kingdom, and Tubelines, the lead private operator of the London Underground transportation system, which successfully manages the three main subway lines in London through a 15 year contract representing an investment of some 20 billion dollars. Our group has been deeply involved as well in the development of high speed rail, with nearly 430 miles built of high speed rail infrastructure representing more than 3 billion dollars of construction projects.

In total, we have been in the business of developing transportation infrastructure now for more than 40 years.

We have been asked to describe our experience and opinions that may be applicable to development of a high speed rail network in the United States.

Private involvement in the development of rail infrastructure is not new. In fact, freight rail models are radically different in Europe and the US, with much deeper involvement of the private sector and a clear advantage in efficiency on this side of the Atlantic. In its beginnings, High Speed Rail in Europe and Japan was owned and developed through conventional delivery methods, in which governments took the risks associated with the design, bid, construction, finance, and maintenance aspects of the project. In most cases, the operation of the passenger service was adopted by government owned operators as well.

Important technical and strategic decisions had to be taken, as the new infrastructure could not be contemplated as a simple expansion of the existing one, but rather as a radically different mode of transportation. The most important one was whether or not the new network would be accessible for both passenger and freight traffic. In order to achieve higher speeds, the new tracks were to be exclusively dedicated to passenger traffic. There is nevertheless a good portion of the High Speed network that is being developed to accommodate both types of traffic.

Since the beginning of this decade, high speed rail development has shifted away from this purely-public model towards a partnership-based model that encourages private sector participation. This shift has allowed the high speed rail process to access additional funding sources, reduced project costs through design innovations, shortened implementation schedules, and more effectively allocated risks among the parties involved. When financing projects of this scale, the ability of the private sector to contribute alternative capital sources can accelerate a project that could otherwise be delayed through many governmental budget cycles.

While a multitude of ownership, development and operation alternatives could be considered, different European countries ended up opting for very similar P3 structures to develop high speed rail, following a model placing the government in a regulatory role while separating the provision, operation and maintenance of the infrastructure on one side, and the ownership of rolling stock and the provision of transportation services to final users on the other one. Ultimately, the European Union has opted to introduce legislation ensuring that any rail operator will be able to provide transportation services in any European network. Governments in France, the Netherlands, Portugal or Spain are procuring rail infrastructure through long term P3 contracts, creating a network where any European rail operator can drive.

Even with private funds, the development of this rail network requires strong public financial support, as the cases of France, Spain, the Netherlands, Portugal or Japan have shown. Many of the social benefits of high speed rail transportation –like its impact in improving the environment- cannot be easily converted into actual project revenues. Other modes of transportation (road, air) take advantage of the availability of low cost infrastructure already built which true global costs (including environmental impact) are not always being charged to users. Independently of how beneficial High Speed Rail may be to the public interest, if its operators have to pay in full for the new infrastructure, they will never be in a fair position to compete.

A very interesting example is the international line Perpignan – Figueres (linking Spanish and French high speed rail networks), where a substantial portion of the developer's revenues is linked to ridership. In other cases (Portugal), the bulk of the developer's revenues are linked to ensuring the availability of the infrastructure, with almost no relation to actual ridership levels.

Members of the Committee, when looking at the different options for the investment on transportation infrastructure, the OECD concluded in a study carried out in 2007 that the primary consideration should be efficiency, referring to ensuring that projects are carried out when the social benefits of doing so, calculated over the lifetime of the asset, exceed the costs, and that they are built in the way that provides the greatest outputs for money spent.

We are convinced that involving private infrastructure developers in its implementation is paramount to maximizing efficiency in the provision of a high speed rail network. This will not only provide access to new sources of funds, it will also reduce the overall cost, accelerate its implementation, and maximize the leverage of limited public funds. Public-private partnerships shift the financial risk of transportation projects to the private sector and away from the government or public taxpayer. State and federal law, transportation agency oversight, and contract provisions ensure that the public's interests are well protected. Through the early investment of private funds, we can anticipate (in some cases by decades) much needed infrastructure. The development of this new infrastructure has a significant impact in global economic development (creating jobs and improving the efficiency of businesses in the region).

As recent examples in the US demonstrate, the P3 model is unchallenged when looking to maximize output for tax payer money spent. In Texas alone, our company is developing through three partnerships with the state, in Dallas, Fort Worth and Austin, more than $8 billion of congestion relieving roadway projects, with only $990 million tax payer dollars utilized. According to the AGC and FHWA every billion invested in infrastructure generates approximately 24,000 jobs in the region.

A very important strategic decision when deciding which P3 model to use is the level of ridership risk that will be transferred to the private developer or in other words, who will be responsible for paying the project debt in the worst case scenario. One of the main advantages of this model is the balance in the alignment of interests it produces: a developer taking substantial ridership risk (what we call the traffic risk model) will focus on early delivery and quality of service (to anticipate and maximize its revenue), will take a long term focus and will assume the financial risk of the project (normally in this model the amount of private equity to be remunerated at the end of the concession term –"skin in the game" – is higher and the debt has no recourse to the government or tax payers through higher tolls); while a developer not taking ridership risk (what we call availability model) will invest lower equity levels, seeing the bulk of its revenues associated to collateral businesses (construction, maintenance), and taking a shorter term focus and all financial risk of the project will fall on the government and tax payers.

The private sector will expect that the appropriate legislative and institutional framework, including technical standards and specifications, will be in place before engaging in the procurement. The public authority, with legal capacity to engage in P3s, needs to manage the project from inception to completion. The designation of a lead authority for high speed rail is complex as many of the corridors include connections to destinations across multiple states and would require multiple-agency participation and collaboration. Unless effectively addressed, this issue has the potential to create technical, legal and institutional impediments that will delay the process. Important technical decisions have to be taken with a country-wide perspective, such as technical specifications ensuring smooth operation of rolling stock, especially regarding safety of operations (signaling being one of the key technical decisions affecting both operations and line capacity).

Also, there should be an early and constant dialogue between the government, other stakeholders and the private sector to define the objectives and contractual structure of a high speed rail P3. The designated public authority will need to have the political will to lead and ensure a transparent process is conducted. An early dialogue with all stakeholders will allow the government to understand the stakeholders' expectations, identify political constraints, and identify potential project risks. If any significant issues arise, they should be resolved promptly, and at the latest, these issues must be resolved before competitive proposals are due.

For the private sector to be attracted to provide innovative development of high speed rail, the government must create the appropriate framework that will ensure the credibility and certainty that are needed to invest in these complex projects. In order to entice competition within the private sector, the public sector must properly segment the construction, allocate the risks, and incentivize innovation, efficiencies and commitment amongst all stakeholders.

If the public sector decides to transfer revenue risk to the private sector, it needs to be allocated properly. Without a reliable revenue stream backed with a level of government support, obtaining project financing from the private sector will be impossible.

The United States is now in the position to utilize the lessons learned in other counties in their implementation of high speed rail. This hindsight will prove invaluable in generating the best value in terms of financial investment and addition transportation infrastructure for the public. The private sector can take risks and provide capital on many components of the development including design, construction, finance, operations and maintenance of the infrastructure as well as manage the operation of the actual transport services, similar to the methodology used to provide air services in airports today. Conversely, the public sector must

take the lead in areas such as gaining stakeholder support, project coordination and outlining the legal framework.

Ultimately the development of a high speed rail network in the United States will face many challenges. But, with the desire and the commitment of both the public and private sector working together, I strongly believe that those challenges will be overcome to the benefit of the citizens we are all honored to serve.

I would be happy to answer any questions you may have.

Thank you Madame Chairman and members of the Committee.

SUBMITTED BY:

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Written Testimony of

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Congressional Hearing Before

Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials

In the Matter of

"High Speed Rail in the United States: Opportunities and Challenges"

October 14, 2009
2:00 p.m.
Rayburn House Office Building Room 2167

Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines, and Hazardous Materials

"High Speed Rail in the United States: Opportunities and Challenges"

Testimony

Of

Robert A. Scardelletti, International President
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Madame Chairwoman Brown, Ranking Member Schuster and members of the Subcommittee on Railroads, Pipelines, and Hazardous Materials:

My name is Robert A. Scardelletti and I am the International President of the Transportation Communications Union/IAM (TCU). Our union represents over 50,000 members who work primarily in the railroad industry together with over 120,000 other railroad workers represented by the other rail labor unions, 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) crafts under the Railway Labor Act. I appreciate the opportunity to appear before your Committee today to address the issue of "High Speed Rail in the United States: Opportunities and Challenges."

TCU and rail labor have long supported high speed rail in the United States, which included the passage of the Passenger Rail and Investment and Improvement Act of 2008 (PRIIA) and the American Recovery and Reinvestment Act (ARRA), and specifically provisions in the bill providing for significant investment in our transportation infrastructure. This historic commitment to intercity and high speed rail will create and sustain thousands of good jobs while making a down payment on reversing years of neglect and underinvestment in our transportation infrastructure. We applaud those who are responsible for this unprecedented commitment to high speed rail in the PRIIA and the ARRA. 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.

The passage of PRIIA and the appropriations included in the ARRA was a good start for what can be a great opportunity for high speed rail in our country. The most significant challenge, however, is to ensure that these initiatives are implemented correctly. As was seen in the Federal Railroad Administration's High Speed Rail Program many states and other entities are making application for high speed rail funding. The FRA had over $50 billion worth of requests from more than 30 states. The FRA will be challenged in how best to award the $8 billion that has been appropriated.

It is imperative that the FRA vigorously enforces the statutory requirements attached to high speed rail funding, particularly those designed to protect the jobs and rights of workers. And I should note that these statutory requirements were first included in the PRIIA and I want to thank the Committee for its work and support for these protections. Specifically, the FRA must ensure that any recipient of funding make certain that rail workers are covered under the appropriate rail and labor statutes. Labor protections for displaced workers and requirements to preserve existing collective bargaining agreements must be administered fairly and consistent with the law. Davis-Bacon prevailing wage requirements must fully apply to all covered construction work. Buy America requirements must be applied and strongly enforced.

Amtrak and its workforce must be fully utilized as the backbone of high speed rail in America. Amtrak is by law America's national passenger rail carrier and the only current provider of high speed rail, through its Acela Express service in the Northeast Corridor. The carrier has an established national network which includes an extensive reservation system, existing rolling stock, statutory relationships with the freight railroads for trackage rights, as well as physical infrastructure that could be leveraged to support various high speed rail initiatives and decades of demonstrated compliance with all federal rail laws including Railroad Retirement, the Railway Labor Act and the railroad safety laws. Amtrak has also partnered with states and local governments to provide passenger rail service for decades. Amtrak understands and has a track record of adhering to the various grant requirements imposed by the federal government and specifically included for the funds provided for high speed rail.

Most importantly, Amtrak has a dedicated and experienced workforce that will be critical in rolling out and operating high speed passenger rail service. Experienced ticket agents, baggage handlers, Carmen, on-board service workers, supervisors, machinists, sheet metal workers, electricians, boilermakers, signalmen, train dispatchers, maintenance of way workers, firemen and oilers, engineers and conductors are all employed by the company and are vital to run a passenger rail system. These employees have delivered Amtrak service to a growing national ridership, are the best trained passenger rail workers in the nation and are well positioned to implement a high speed rail program throughout the nation. Amtrak's employees did this despite years of inadequate funding, an uncertain future, and at a time when the Executive Branch leadership wanted to dismantle the company or break it up through privatization. With recent passage of multi-year Amtrak reauthorization legislation and the election of a President with a vision for an expanded role for passenger rail service, these employees are well positioned to implement the aggressive agenda and meet the challenges presented by the implementation of high speed rail.

Utilizing Amtrak for high speed rail service will best assure stable labor relations. It is well established that Amtrak is a carrier covered under the Railway Labor Act, the Railroad Retirement Act, the Railroad Unemployment Insurance Act and other applicable rail and labor statues. Collective bargaining has existed at the carrier since its creation and current labor agreements are in place with all the company's unions. While TCU and other rail unions have experienced challenging negotiations with Amtrak over the years, the company does understand its obligations under the various rail statutes and the inherent costs associated with those obligations.

In addition, any new money that is authorized or appropriated by Congress must also carry these same protections. High speed rail is just that, railroad work, and the workers engaged in providing high speed rail service must be covered by all of the railroad statutes, including but not limited to the Railway Labor Act, Railroad Retirement, and railroad safety laws. One of the challenges that Congress faces going forward with high speed rail is to ensure that applicants are required to adhere to the specific requirements in the ARRA, which must be continued in any future bill.

Any applicant seeking to provide high speed rail under an ARRA grant or any other similar grant must be able and willing to comply with the explicit mandates. Amtrak should receive credit for doing so and not be

placed at a competitive disadvantage. For example, Amtrak, as a rail carrier, has financial obligations to its employees through the Railroad Retirement Act. If another entity seeks to provide service but does so with the intention of evading the railroad retirement system, that entity could artificially undercut Amtrak on a cost basis. Congress must ensure that potential providers of service are not allowed to evade the requirements so that all applicants will be judged on a level playing field.

Specifically, 49 U.S.C. 24405(b) directs that a person who conducts rail operations over rail infrastructure constructed or improved with funding provided in or in part by a grant shall be considered a rail carrier as defined in Section 10102(5) for purposes of statutes that use the definition, including, but not limited to the Railroad Retirement Act, the Railway Labor Act, and the Railroad Unemployment Insurance Act. Section 10102(5) in turn defines a rail carrier as a person providing common carrier railroad transportation for compensation. Finally, Section 10102(6) states that the term "railroad" includes a switch, spur, track, terminal, terminal facility and a freight depot, yard, and ground, used or necessary for transportation. Taken together, these definitions describe a rail carrier as an entity that conducts operations and undertakes a variety of rail activities necessary to provide railroad transportation. With this in mind, Congress must ensure that these various statutory definitions are adhered to by any entity seeking high speed rail grants and that they are continued in any future high speed rail bills.

All of rail labor urges Congress to continue a strong Buy America requirement such as are contained in both the Amtrak statute and the ARRA. A strong transportation system is dependent on a strong domestic manufacturing base that can produce raw materials and finished products including train equipment necessary for high speed rail.

Because there has not been a U.S. market for high speed rail, almost all of the existing major high speed rail equipment manufacturers are foreign. Buy America in this context must mean that, even if the developer is foreign owned any equipment must be assembled entirely in the United States. Furthermore, Amtrak with its skilled and unionized shopcraft employees should be the first choice to repair and maintain all new high speed equipment. Foreign companies should not be allowed to avoid the application of railroad statutes, such as railroad retirement, by tying repair and maintenance of equipment to its manufacture, and then using non-

railroad workers for both functions. We have already seen instances of this occurring, and if permitted to continue, it would lead to layoffs in the current Amtrak mechanical workforce.

Finally, strong labor protections must be applicable to any high speed rail program. For instance, 49 U.S.C. 24405(c)(2) requires applicants to comply with the protective arrangements established in Section 504 of the Railroad Revitalization and Regulatory Reform Act of 1976 with respect to employees affected by a project financed in whole or in part with grants under this program. In addition, Section 24405(d) established detailed procedures for the preservation of jobs and collective bargaining agreements if an entity that receives money under this program replaces current intercity passenger rail services provided by Amtrak. As a general comment, the purpose of these protections is not simply to provide financial assistance to displaced workers, though that may indeed be necessary. Instead, employee protections should be seen as a means of integrating the existing workforce into high speed rail and expanded intercity service. Furthermore, existing collective bargaining agreements can assure that new operations have access to experienced and trained workers, and in the process, minimize labor uncertainty.

As Congress and the administration focus on high speed rail, I feel compelled to make two observations; 1) funding for Amtrak and its current services must not be cut. This would be the absolute worse thing that could be done; therefore, we call on Congress and the administration to fully fund Amtrak's capital and operating needs at the currently authorized level. 2) Any new high speed rail programs cannot be treated in the manner that Amtrak has had to suffer through since its inception. All passenger rail transportation must be fully funded in order for our country to reap the benefits that are available from high speed rail. We must be committed to the long haul, including full federal funding each and every year for all of Amtrak including new high speed rail programs, if we are truly going to have a national transportation policy that includes all modes of transportation.

In conclusion, good labor policy and sound transportation policy are not inconsistent propositions, and in fact, high speed rail in this country will only succeed if workers are brought into the process and treated fairly. The statutory framework and requirements for the ARRA high speed rail program makes this objective easier and if followed faithfully as we go

forward the United States will meet the challenges and have the opportunity to be rewarded with the benefits of the best high speed rail system in the world.

Thank you for the opportunity to address the Committee today.

Robert A. Scardelletti, President, Transportation Communications International Union

Responses to Questions from Chairwoman Brown

Subcommittee on Railroads, Pipelines, and Hazardous Materials
Hearing on
High-Speed Rail in the United States: Opportunities and Challenges
October 14, 2009

(Q) Given the Federal government's (and the States') interest in moving high-speed rail forward, do you believe there is a need for more training of workers to ensure they can operate new equipment or work with new transportation infrastructure technologies?

(A) There is always a need for more and better training of workers in the railroad industry. This industry continually develops new and improved technology which the employees must be trained to operate. There would be no difference where high-speed rail is concerned. The employees have throughout history learned and adapted to the new technologies and with training they will do the same thing in the high-speed rail era.

(Q) Given projected needs of states stemming from stimulus projects, is there capacity to meet the labor resources necessary for building and operating new high-speed rail systems?

(A) If properly implemented a new high-speed rail system will 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 that President Obama's stimulus plan envisions. 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.

(Q) You mention that we should be committed to "the long haul, including full Federal funding each and every year" for Amtrak and high-speed rail programs. Do you believe that the new Surface Transportation Authorization Act should include a dedicated, long-

term, guaranteed funding source for high-speed rail? How about the other panelists? What are your views on that?

(A) One needs only to look at the history of Amtrak to answer this question. Amtrak was established to provide national rail passenger service to the citizens of the United States. Yet, every year it has been a struggle to have Congress appropriate enough money for Amtrak to barely survive. There are those in Congress who oppose funding for Amtrak and then complain that Amtrak is not providing good service and should be discontinued. If our country is truly committed to providing a world-class transportation system in the United States then not only should high-speed rail have a dedicated funding source, but Amtrak should also have a dedicated, long-term, guaranteed funding source.

WRITTEN STATEMENT OF PATRICK B. SIMMONS

Rail Division Director

North Carolina Department of Transportation

On Behalf of the

American Association of State Highway and Transportation
Officials' Standing Committee on Rail Transportation

before the

U. S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials

Hearing on

High Speed Rail: Opportunities and Challenges

October 14, 2009

Written Statement of Patrick B. Simmons, U. S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials
Hearing on High Speed Rail: Opportunities and Challenges

Mr. Chairman, my name is Patrick B. Simmons. I serve as Director of the Rail Division at the North Carolina Department of Transportation. My responsibilities include development and management of passenger operations and facilities, improving highway-railroad crossing safety, conducting industry safety inspections, railroad engineering and design, development of planning and environmental documents, rail corridor preservation and economic development. Our State partners with Class I and shortline railroads through grants and tax credits to improve safety and capacity as well as to make other rail infrastructure investments. North Carolina is the lead State in developing the federally-designated Southeast High Speed Rail Corridor or SEHSR.

Today I am here on behalf of North Carolina Department of Transportation Secretary Eugene A. Conti, Jr. who also serves as Chairman of the American Association of State Highway and Transportation Officials' Standing Committee on Rail Transportation.

I thank the Committee Chair and the members for your leadership in bringing this important transportation opportunity to the nation and for scheduling today's hearing to learn more about the challenges and opportunities of this new day.

The American Association of State Highway and Transportation Officials advocates transportation-related policies and provides technical services to support States in their efforts to efficiently and safely move people and goods.

The Standing Committee on Rail Transportation (SCORT) reviews and recommends transportation legislation; exchanges technical information and policy positions on railroad matters; evaluates and suggests revisions to Federal regulations; reaches a common viewpoint of the States on rail policies and problems; gathers information and investigates railroad concerns; provides technical expertise and management training for State railroad connected agencies; provides public information on rail transportation matters; cooperates and coordinates activities with transportation users and the railroad industry; takes a forward-looking view of and disseminates rail progress; and encourages research necessary to reach these goals.

We have just completed our annual national meeting, this year hosted by the Oklahoma Department of Transportation. Much of my testimony will reflect our discussions there. Participating in this year's SCORT annual meeting were representatives from 32 States, the Class I railroads, Amtrak, labor, equipment manufacturers, professional engineering firms, and industry associations, the Federal Railroad Administration, General Accounting Office and others. Our conference theme was "Rail Transportation: Partnering to Achieve the Vision."

To achieve the vision of deploying a national network of high speed rail, both our opportunities and our challenges are great. While the theme of our meeting was "partnerships," a topic addressed at every session was "What is the capacity of fill in name of affiliation to undertake this important work and complete it within budget and on-time?

Over the past 10 years, the States have spearheaded the effort to develop and fund a national intercity passenger rail system. States around the country have planned, financed, and delivered successful intercity passenger rail service as well as to led development of high speed rail programs. Collectively, through the American Association of State Highway and Transportation Officials

**Written Statement of Patrick B. Simmons, U. S. House of Representatives
Committee on Transportation and Infrastructure
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Hearing on High Speed Rail: Opportunities and Challenges**

(AASHTO) and the States for Passenger Rail Coalition the States have urged the federal government to support the creation of an integrated, fully funded, intercity passenger rail system and to incorporate passenger rail as an essential element of the nation's surface transportation system.

At the same time, States have expanded their working relationships with freight railroads, Class 1s and Short lines, to make numerous investments in safety and freight rail projects that generate both private and public benefits.

A series of actions in the past two years, advocated and supported by the States, signal a new and solid consensus within the federal government. Both Congress and the Executive Branch have acted decisively to support development of intercity and high speed passenger rail systems to meet the mobility needs of the 21st Century.

Amtrak has been reauthorized and adequately funded. The Passenger Rail Investment and Improvement Act of 2008 (PRIIA) was enacted authorizing $1.9 billion over five years for grants to States for intercity passenger rail. On February 17, 2009, $8 billion was authorized for intercity passenger rail as part of The American Recovery and Reinvestment Act (ARRA).

Now before the Congress are the federal fiscal year 2010 appropriations bills that would invest a further $1.2 to $4 billion to continue implementation of intercity and high speed rail projects. Congressman Oberstar's surface transportation authorization bill proposes $50 billion over 6 years, a capital grant program for short line railroads, and improvements in the RRIF program.

Nationally, USDOT has designated 10 corridors as suitable for high speed rail development. Fourteen States now contract with Amtrak for corridor service delivery, and just last week Administrator Szabo announced that 24 States had submitted corridor development plans for ARRA funding.

It is important to note that the ARRA funding provided for intercity and high speed rail development, and States have worked diligently to develop and deploy the services that best fit their mobility needs.

Clearly, rail transportation, both passenger and freight, is entering a new era, an era in which States must partner with multiple interests to be successful.

The largest opportunity and challenges before us are the raison d'être for the American Recovery and Reinvestment Act: to preserve and create jobs and promote economic recovery, to invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits.

Job Creation

The White House Council of Economic Advisors has reported that for every $92,000 of government investment a job-year is created. As States completed their applications for ARRA funding they analyzed and projected the number of jobs that would be created from this series of investments. Job creation is primarily expected in four sectors of the economy: professional services to complete final

project designs and environmental work; construction and materials supply; equipment design and manufacturing, and; operation of the new train services.

Clearly a down economy is the best time to build new network capacity, with a latent work force available and with a minimum of operational conflicts.

Departments of Transportation

The single largest challenge before us is to "right-size" the effort. To accommodate the immediate 6000% increase in available high speed rail funds will mean that State DOTs must broaden their highway-dominate project delivery structure to include rail projects. Program and project managers will be tasked with similar responsibilities, but must now succeed within a different culture and with less than familiar partners. Many State DOTs work with railroads today but not with this scale of opportunity.

Just as our Federal Railroad Administration has been challenged by this opportunity to both grow in scale and add new mechanisms for program and project development and delivery, so too will our State DOTs be challenged.

Some State DOTs have well-established working relationships with the Class I railroads while others will need a support base of peer-to-peer and technical assistance. For example, not all DOTs have in place published design standards for conducting railroad work.

The Executive Committee of AASHTO has recognized the need to transform into truly multi-modal organizations and to integrate project delivery. Clearly information sharing, a program of technical assistance as well as a new program to provide planning assistance to State DOTs will be necessary to develop a national network.

If the long-range National Rail Plan is to closely incorporate and be consistent with State Rail Plans, financial assistance as well as promulgation of standards and guidelines will be necessary to prepare a coherent, interrelated national plan.

Mutually Beneficial Investments

While both PRIIA and ARRA envision a program of investments that is mutually beneficial to freight and passenger interests, there is no consistent and acknowledged method to assess public and private benefits, an essential prerequisite to entering into timely and equitable cost-sharing arrangements. Having a clear means to assess benefits and make provisions for cost-sharing will be challenging with the diverse interests and perspectives of our freight industry, and with the financial condition of many of our States.

Collaborative partners and a balanced mix of public grants, tax credit incentives and private contributions will be required to build rail network capacity that enables compatible and reliable operation for passenger, freight and intermodal rail services.

Environmental Documentation

With the focus on streamlined program delivery and timely implementation of the ARRA projects there is a need for clarity and consistency among the State DOTs and the Federal Railroad

Written Statement of Patrick B. Simmons, U. S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials
Hearing on High Speed Rail: Opportunities and Challenges

Administration concerning application of the National Environmental Policy Act (NEPA) and other requirements. Challenges are certain to arise as we seek the appropriate balance in sometimes conflicting priorities.

Next Generation Corridor Train Equipment Pool.
PRIIA authorized Amtrak to establish a Next Generation Corridor Equipment Pool committee, comprised of representatives of Amtrak, the Federal Railroad Administration, host freight railroad companies, passenger railroad equipment manufacturers, interested States, and, as appropriate, other passenger railroad operators. The purpose of the Committee is to design, develop specifications for, and procure standardized next-generation corridor equipment.

While America is eager to deploy more intercity and high speed passenger rail services, new passenger equipment and locomotives are essential. Domestic manufactures are keen to enter the market, and foreign manufacturers are ready to deliver service-proven designs. However the issue of manufacturing capacity and "right-sizing" the industry also applies to this market segment.

The Federal Railroad Administration is re-looking its approach to crash worthiness and new rulemaking, followed by development and testing will precede manufacturing.

While pooled equipment purchases are envisioned, such a pool will not likely to serve all corridors equally well. For example, differing equipment is necessary to service differing operating speeds, passenger capacities and operating environments. Again, States have led development of service models that meet their mobility needs, so one size does not fit all circumstances.

State have well-defined procurement requirements, but most are not authorized for pooled financing nor procurement awards.

Manufacturers can not merely gear up for a 1-time development and delivery opportunity. It will take a sustained investment in corridors and equipment for America to realize the full benefits of a rejuvenated capability. Being able to fill an order book for deliveries sequenced over multiple years will give us the best opportunity to right-size the industry.

Today I have touched on some of the broad areas of opportunity and identified some of the challenges before us. I look forward to learning more from the other testimony presented.

Collectively the States have a multi-faceted interpretation of the Vision to deploy high speed rail and we look forward to working with the Congress and other partners to implement this new national program. As Departments of Transportation we stand ready to build.

Written Statement of Patrick B. Simmons, U. S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials
Hearing on High Speed Rail: Opportunities and Challenges

Supplemental Information Sheet

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States for Passenger Rail Coalition web site: www.s4prc.org
AASHTO SCORT web site: http://freight.transportation.org/rail_index.html

Administrative Resolution AR-1-09

Title: Commendation of Federal Railroad Administration's Partnership and Hard Work with State Departments of Transportation for the American Recovery and Reinvestment Act of 2009 (ARRA)

WHEREAS, The American Recovery and Reinvestment Act of 2009 is an unprecedented effort to jumpstart our economy, create or save millions of jobs, and put a down payment on addressing long-neglected challenges so our country can thrive in the 21st Century; and

WHEREAS, The American Recovery and Reinvestment Act of 2009's purpose is to preserve and create jobs and promote economic recovery; and

WHEREAS, The American Recovery and Reinvestment Act of 2009 is to assist those most impacted by the recession; and

WHEREAS, The American Recovery and Reinvestment Act of 2009 is to invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits; and

WHEREAS, The American Recovery and Reinvestment Act of 2009 is to stabilize state and local government budgets to minimize and avoid reductions in essential services; and

WHEREAS, The American Recovery and Reinvestment Act of 2009 provided **$8,000,000,000 to states for the development of high speed intercity passenger rail in America; and**

WHEREAS, The American Recovery and Reinvestment Act of 2009 **gave the states and its partners in the rail industry the opportunity to demonstrate it can deliver rail projects and create and support jobs in a timely manner; and**

WHEREAS, The American Recovery and Reinvestment Act of 2009 gave the Federal **Railroad** Administration the opportunity to demonstrate the important role it plays with its strong partnerships with State Departments of Transportation; and

WHEREAS, The American Recovery and Reinvestment Act of 2009 was an important opportunity for the states and **rail** industry to demonstrate the value of investment in **passenger rail** transportation in this economic atmosphere; and

WHEREAS, The American Recovery and Reinvestment Act of 2009 called upon the Federal **Railroad** Administration and State Departments of Transportation to build upon its partnership and work together in order to meet the requirements of the ARRA; and

WHEREAS, State Departments of Transportation needed to rely on its partnership with the Federal **Railroad** Administration to complete project applications **and have them approved and implemented** in an expedited manner in order to get people in the **rail** industry to work as quickly as possible; and

NOW, THEREFORE, BE IT RESOLVED, That the American Association of State Highway and Transportation Officials' Board of Directors' extends its gratitude to the Federal **Railroad** Administration in **helping to overcome obstacles and provide guidance and critical national leadership to implement the President's Vision for High Speed Rail in America and as this new program has been developed and has evolved; over a short period of time; so that** projects **eligible for** funding through the **High Speed Intercity Passenger Rail (HSIPR) Program of the** American Recovery and Reinvestment Act of 2009, could be **approved** and people in the **rail** industry could get to work; and

BE IT FURTHER RESOLVED, That the American Association of State Highway and Transportation Officials' Board of Directors' extends its gratitude to the Federal **Railroad** Administration, to Administrator **Joseph Szabo** and to **Deputy Administrator Karen Rae** and to the highly dedicated staff in the Headquarters Office for their personal leadership and support so that projects **eligible for funding** through the **HSIPR** American Recovery and Reinvestment Act of 2009 can be realized.

APPROVED BY THE AASHTO BOARD OF DIRECTORS – May 18, 2009

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEV PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 2, 2009

Representative Corrine Brown, Chairwoman
Subcommittee on Railroads, Pipelines, and Hazardous Materials
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, D.C. 20001

Re: High Speed Rail in the United States: Opportunities and Challenges

Dear Representative Brown:

Thank you again for the opportunity to provide testimony on behalf of the Standing Committee on Rail Transportation (SCORT) of the American Association of State Highway and Transportation Officials (AASHTO). This testimony was provided during the hearing held October 14, 2009

On October 19th you requested that I respond to additional questions on behalf of AASHTO and in response to my written testimony. Please find my responses attached.

Should you have additional questions or need further information, please contact me at 919.733.7245 extension 263 or via email at pbsimmons@ncdot.gov.

Sincerely,

/s/

Patrick B. Simmons, Director

attachment:

cc: Secretary Eugene A. Conti, North Carolina Department of Transportation
John Horsley, Leo Penne and Shayne Gill, AASHTO

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Subcommittee on Railroads, Pipelines, and Hazardous Materials
Hearing on
High Speed Rail in the United States: Opportunities and Challenges
October 14, 2009

Response to follow-up questions from Chairwoman Brown
to
Patrick B. Simmons representing the
American Association of State Highway and Transportation Officials
Standing Committee on Rail Programs

1) Please provide AASHTO's views on a dedicated funding source for high-speed rail.

The AASHTO Board of Directors adopted the following slate of rail legislative recommendations at their October 2008 meeting. The recommendations are at http://www.transportation.org/sites/policy_docs/docs/v.pdf

2) In your testimony, you mention that there is a need for "clarity and consistency" among the FRA and State Departments of Transportation regarding the application of environmental documentation including the NEPA (National Environmental Policy Act) requirement. Can you elaborate on this statement?

Among our member states there is perhaps some misunderstanding about just how FRA will apply NEPA in deploying high speed rail. While I believe FRA has been very clear in their guidance, and they have extended deadlines for complying with NEPA during the grant applications for American Recovery and Reinvestment Act of 2009 funding, the tenor of discussion among our member states during our annual meeting in September was one of frustration and confusion. Some States felt that NEPA was being applied differently among the modes.

I believe there is a need for more dialogue and discussion of this issue between FRA and the States. If there is in fact a difference and application of NEPA, then an effort ought to be made to review the issue and provide for consistent application.

3) In your testimony, you state that some States that do not have well-established working relationships with Class I railroads will need a "support base of peer-to-peer and technical assistance." Can you please elaborate on this statement?

Today there are some 14 States that contract with Amtrak for operation of service. Not all of these States also have access or construction experience with their host railroads. Staffing of rail programs within our States varies for a single designated point of contact to programs with scores of employees dedicated to rail.

Thus, to implement a national program of rail infrastructure investment with significant funding flowing from the federal government through States to Class I railroads, we should recognize that many States will need planning, technical assistance, and an opportunity for peer-to-peer exchanges of information. SCORT's most recent effort has been to publish guidelines for developing State Rail Plans, which has been incorporated into the FRA's national rail plan update effort. SCORT also has recommended the AASHTO Executive Committee call upon the Congress to appropriate planning and technical assistance funds as FRA deploys PRIIA and ARRA.

4) Can you please explain what you mean, or what you might suggest, by your testimony that "there is no consistent and acknowledged method to assess public and private benefits—an essential prerequisite to entering into timely and equitable cost-sharing arrangements" between freight and passenger interests?

There is neither formula nor prescribed method to assess, for example, shared capacity benefits for investments made to a host railroad. Typically each host railroad has its own approach and assumptions which often are based on a closely-held internal assessment.

Several important initiatives are underway which will enlighten the industry and perhaps lead to development of such standards. Within PRIIA Congress authorized...the Federal Railroad Administration and Amtrak shall jointly, in consultation with the Surface Transportation Board, (and others)...to develop new or improve existing metrics and minimum standards for measuring the performance and service quality of intercity passenger train operations, including cost recovery, on time performance and minutes of delay, ridership, on-board services, stations, facilities, equipment, and other services....

The Congress encouraged Amtrak to include such performance standards and metrics into host railroad contract and authorized the Surface Transportation Board to develop methods for allocating costs, to determine where capital and or congestion grants are warranted, and to mediate trackage and or use of rights of way.

Section 9002 of P.L. 109-59 authorized a new program of Capital Grants for Rail Line Relocations. Under the program the Secretary is to task States to describe the public and private benefits associated with a project and the Secretary would then consider the feasibility of seeking financial contributions commensurate with the benefits.

Through ARRA guidance, FRA requires a rigorous analysis of benefits and costs of proposed projects, with a focus on the transportation service and output measures that are fundamental to estimating other public benefits where a project is anticipated to result in significant joint benefits for multiple railroad operators (e.g., intercity passenger rail, rail freight, and commuter rail) in a congested corridor, with proportional cost sharing among the operators.

The Transportation Research Board of the National Academies of Science, though National Cooperative Highway Research Panel 8-64, has nearly completed a report entitled "Best Practices for Shared Passenger and Freight Corridors."

Clearly the state of the art is being developed and being enriched through consultation and analysis. As the public engages with the private sector there is a need for more effective tools which can be applied to a wide variety of circumstances is order to fairly assess mutual benefits and cost-sharing. Both public and private partners need to feel confident in what they get for their money.

Based on North Carolina's experience both the state and host railroad work together most effectively when the relationship is govern by a negotiated operating agreement. Such an agreement includes specific tasks, costs, payments and timing of a set of projects. The agreement can be contingent on the availability of funds. As funds become available a set of projects are undertaken that result in reduced travel time or increased frequency upon completion of the projects. An operating agreement provides longer-term guidance for both the state and the host railroad.

Statement of
Joseph C. Szabo
Federal Railroad Administrator
Before The
Subcommittee on Railroads, Pipelines and Hazardous Materials
Committee on Transportation and Infrastructure
United States House of Representatives
October 14, 2009

Chairwoman Brown, Ranking Member Shuster and members of the Subcommittee: I am honored to appear before you today to discuss one of the most significant new initiatives of President Obama, Vice President Biden, and Secretary of Transportation LaHood – the development of high-speed rail transportation in America, which builds upon the solid foundation laid by Congress last year in the Passenger Rail Investment and Improvement Act of 2008 (PRIIA). In this statement I will touch on the opportunities and challenges we, the Administration, the Congress and a diverse group of stakeholders, face in creating a sustainable program to improve intercity passenger mobility in the United States and what FRA is doing today to make the vision for high-speed rail a reality.

Discussions of high-speed rail tend to begin with the fundamental question: "What is high-speed rail?" Some prefer to define high-speed by peak speed –say 200 miles-per-hour (mph). Some will say high-speed is average speed or trip time. The Federal Railroad Administration (FRA), in its 1997 report "High-Speed Ground Transportation for America" used a more market oriented definition – that is service that can cost effectively be the preferred option for intercity travel in a specific transportation market. Using that definition, high-speed rail is service that is superior from a time-competitive stand point than air and/or auto on a door-to-door basis. In other words, if I leave my home in Chicago and travel to a meeting in St. Louis and the total trip time by rail is better than flying or driving, then that rail service is high-speed. What that means is that the peak speeds and average speeds of high-speed rail are not one set number but can and should vary by the market served. The speeds needed to effectively serve the Los Angeles to San Francisco market, a distance of 450 miles is different from the speeds

needed to effectively serve the market between Washington, D.C. and Richmond, VA., a distance of 90 miles.

In the Administration's *Vision for High-Speed Rail in America* we used four definitions for the multiple types of intercity passenger rail that we will see in the future:

- Conventional Rail – Traditional intercity passenger rail services of more than 100 miles with peak speeds in the 79 mph to 90 mph range.
- Emerging High-Speed Rail – Developing corridors of 100-500 miles in length with top speeds in the 90-110 mph range
- High-Speed Rail-Regional – Relatively frequent service between major and moderate population centers 100-500 miles apart with top speeds in the 110-150 mph range
- High-Speed Rail –Express with frequent service between major population centers 200-600 miles apart with few intermediate stops and top speeds in excess of 150 mph.

Thus, in discussing how we make high-speed rail a reality we need to be talking about a range of technologies and a range of investment options that each have their own sets of opportunities and challenges.

That is not to say that high-speed rail is preferable in all situations to air and/or auto. Indeed each has and will have an important place in the transportation system of our future. High-speed rail will only be successful as part of an integrated, intermodal transportation system that includes effective connections to our transit, highway and aviation systems.

High-Speed Rail – the Opportunities

President Obama proposes to help address the Nation's transportation challenges by investing in an efficient, high-speed passenger rail network of 100-600 mile intercity

corridors that connect communities across America. The vision for high-speed rail aligns well with the Department's strategic goals:

- Ensure safe and efficient transportation choices. Promote the safest possible movement of goods and people, and optimize the use of existing and new transportation infrastructure.
- Promote energy efficiency and environmental quality. Reinforce efforts to foster energy independence and renewable energy, and reduce pollutants and greenhouse gas emissions.
- Build a foundation for economic competiveness. Lay the groundwork for near-term and ongoing economic growth by facilitating efficient movement of people and goods, while renewing critical domestic manufacturing and supply industries. This strengthening of domestic manufacturing is particularly critical today as evidenced by the severe atrophy affecting the U.S. rail supply industry. A long-term market for railroad equipment, infrastructure and supplies will help rebuild this once proud part of the American economy.
- Support interconnected livable communities. Improve quality of life in local communities by promoting affordable, convenient, and sustainable housing, energy, and transportation options.

I wish to offer one of many possible examples where these opportunities come together. FRA has been working with the California High-Speed Rail Authority since 2001 on the planning and environmental review of California's State-wide high-speed rail initiative. The Final Environmental Impact Statement/Report for the California High-Speed Rail Program has been completed and is available for review[1]. This document is one of the most comprehensive environmental analyses of a new transportation system ever undertaken and helps crystallize the opportunities offered by the development of high-speed rail. Among the benefits of high-speed rail investment when compared to alternatives for meeting the identified travel demand are:

[1] Available on the CAHSR website at CAHighSpeed Rail.ca.gov

Transportation Investment Requirements Avoided

- 2,970 lane-miles of highway construction no longer needed.
- Five runways and 90 gates at airports

Annual Energy/oil consumption saved

- 6 – 12 million barrels per day

Annual Air Pollution avoided

- 3.4 – 5.5 million tons of carbon emissions
- 730 tons of PM10
- 1,095 tons of PM2.5
- 3,650 tons of NOx
- 2,190 tons of TOG

Employment

- 168,000 job-years during construction
- 450,000 permanent jobs created from economic effect.

Access to Service

- Major cities in California will be served through downtown intermodal terminals, integrated in the city and region's public transportation systems.

California happens to be the most recent EIS that FRA has completed on high-speed rail and is used as an illustrative example and should not be construed as an indication we favor one project over another. Such benefits can be realized from proposed high-speed rail projects across the country.

High-Speed Rail – the Challenges

While the potential for high-speed rail is great, so too are the challenges we face in delivering on that potential. FRA sees a number of pressing challenges in developing a successful high-speed rail program:

Safety

FRA's first and foremost mission is Safety. If high-speed rail is to be successful, it must be safe. Newton's second law of motion, that force equals mass times acceleration (f=ma) has significant implications for the safety of high-speed rail. When things go wrong at high speed, a derailment as an example, the repercussions can be very significant. Many point to the strong safety record of foreign systems operating primarily on purpose-built infrastructure to draw a conclusion that high-speed rail is inherently safe. That is just not the case. Safety comes from superior design, superior manufacturing, superior operating practices, superior maintenance and above all superior vigilance. At FRA, we call this a strong safety culture. This will be particularly needed in the U.S. where, in most instances, high-speed rail will not begin operations on dedicated right-of-way and infrastructure. Instead, most proposed systems will involve the use of rights-of-way and perhaps infrastructure owned and operated by America's freight railroads. The co-location of high-speed rail and freight operations raises significant safety issues, not the least of which is determining what point high-speed passenger rail operations need to be separated from freight rail and the nature of that separation. Ultimately this will likely not be a "one size fits all" type determination but reflect such issues as volume of freight and passenger traffic, train, infrastructure condition, etc.

Capability of the States

A handful of States have been actively engaged in railroad issues for many years. As an example, if you go on the North Carolina DOT website you will see a rail bureau with 60 positions. Unfortunately, States with a strong and experienced rail-oriented institutional structure capable of undertaking the planning, developing the complex relationships, and implementing a complex rail improvement program are the exception rather than the rule. This is understandable. Up until just recently, the Federal role in passenger rail investment was overwhelmingly a bi-polar relationship between FRA and Amtrak. Until enactment of the Passenger Rail Investment and Improvement Act last October, there was no statutory role for States in the planning and implementation of intercity passenger rail except for the occasional one-off grant contained in FRA's annual appropriation. Until

February of this year, there was no real funding to go with this authorization. There is now a significant and pressing need to help the States develop and maintain the internal staff resources and capabilities to oversee the management of planning and program implementation of high-speed rail and to be effective negotiators and partners with the various stakeholders that will be essential to successful implementation. Over time, States have developed such resources for the highway and transit programs but rail is sufficiently different that it will take time and effort for many States to develop these skills for rail.

The Status of Planning

The Recovery Act has provided a stark contrast between the established highway and transit programs and the new high-speed rail initiative. States have a well established pipeline of highway and transit projects that have undergone years of planning, design and environmental review. Thus, when the opportunities were offered by the Recovery Act for additional funding, the States were able to turn to a list of highway and transit projects. While some States had undertaken planning and had some projects that could begin in the short-term, most States had not undertaken the development of a detailed service development plan with the accompanying service, or Tier 1 documentation required by the National Environmental Policy Act (NEPA) for the larger development of a high-speed rail corridor. Again this is understandable. While the surface transportation legislation has over the last several decades provided States and regions funding for planning, this planning has been primarily focused on those programs – highway and transit – that offered the potential of a Federal funding partner at the end of the planning process. The States that are better prepared today are those that decided that improved passenger rail was so important to meeting the State's future mobility needs that they invested substantial State funding in the planning for these new services. The challenge we face with the advent of the high-speed rail program is that there are many States playing catch-up. How can we bring them up to the point that they have a realistic high-speed program plan and implementation strategy so that they too can have the pipeline of rail projects like they have for other forms of transportation?

Freight Railroad Partnerships

America's freight railroad system is the envy of the world. The Obama Administration is committed to building a world class high-speed intercity passenger rail system but we will not do that at the expense of degrading our world class freight rail system. Until just a couple of years ago, America's freight railroads were hauling record levels of freight traffic on a system substantially smaller than half a century ago. In a number of critical areas, bottlenecks in rail infrastructure were creating congestion in freight movements. And, as this Subcommittee is well aware, the ability of Amtrak to maintain an on-time reliable service over this intensely used freight system left much to be desired. On a rail infrastructure designed primarily for freight train movements, fast passenger trains can use up more capacity than if those trains were replaced by freight trains. The challenge that we face is how to develop the infrastructure that permits emerging high-speed rail and freight rail to not only co-exist but to find the synergy to keep both world class. This will require a new level of partnerships between the freight railroads and the State promoters of high-speed rail. Several States have recognized the growing benefits that accrue from investment in privately-owned rights-of-way and infrastructure. For many States used to solely investing in publicly owned infrastructure, however, the shift to investing public funds in privately-owned assets may be a new and challenging experience.

The Intellectual Infrastructure

Once the rail industry was a major driving force of the U.S. economy. It employed thousands of planners, engineers and other experts in railroad engineering and sciences. After World War II, as the railroads first slipped into the financial abyss of the 1960s and 1970s and then went through a recovery period by slimming down, the demand for engineers and planners with rail expertise plummeted. A substantial percentage of the experienced people in these professions are approaching retirement. A major challenge that we face today at the advent of the new high-speed rail program is rebuilding this intellectual infrastructure in such diverse areas as track design, signal engineering, track-train dynamics, etc. This will require a new partnership among the Federal and State DOTs, the larger rail industry and the academic community.

Sustainability and Managing Expectations

There have been many efforts to promote development of high-speed rail over the years. Indeed, one of the entities that were merged in 1967 to form the Federal Railroad Administration was the Office of High-Speed Ground Transportation that had been established in the Department of Commerce. To date, however, with a very few notable exceptions, these efforts have not been successful. Secretary LaHood and I believe that if we spend the $8 billion in Recovery Act funds really well on terrific projects that produce real results but the program meets the fate of the previous efforts and does not continue, then we have not been successful. The challenge for us – the Administration and the Congress – is to find a way to make this program sustainable. The model I like to point to is the model developed by President Eisenhower and the Congress of the mid-1950s that led to the successful development of the National System of Interstate and Defense highways – a program that took over four decades to complete.

An integral part of developing a sustainable program will be managing expectations. The interest by the States in the high-speed program far exceeds the funds available today, or next year or over the next five years. But this was true of the Interstate Highway program at its beginning as well. The public support for the program did not wane, in part because our citizens could both see early successes and they knew that eventually the Interstate system would serve them as well. Of all of our challenges, this may be the most important to address.

What FRA is Doing to Make High-Speed Rail a Reality

This past June I had the opportunity to meet with the Subcommittee and review FRA's progress in implementing the Recovery Act including the "standing up" of the high-speed rail program. At that time I was able to report that we had met the deadlines set in the Recovery Act and published the Obama Administration's *Vision for High-Speed Rail in America* (April 2009) and *High-Speed Intercity Passenger Rail (HSIPR) Program Notice*

of Funding Availability, Issuance of Interim Program Guidance (June 2009). Both documents are available on FRA's website: www.FRA.DOT.GOV.

On August 24, we received applications for projects that are "ready to go", including some projects for preliminary engineering and environmental review, and would be funded from the funds made available under the Recovery Act; projects for high-speed intercity passenger rail planning funded from FRA's FY 2009 appropriation; and projects for capital improvements funded from FRA's FY 2009 appropriation. There were a total of 214 applications received, representing projects proposed in 34 States and totaling approximately $7 billion. Those projects have been through a very intense period of first level reviews by staff of FRA along with volunteers from the Federal Transit Administration (FTA) and the Research and Innovative Technology Administration (RIITA) to whom we are grateful for their help. The results of these reviews are presently being evaluated at the senior leadership levels of FRA and the Department.

On September 16 we received expressions of interest for private sector participation in the development of high-speed intercity passenger service pursuant to a notice FRA published last December to implement the provisions of Section 502 of the PRIIA. These applications are currently under review, consistent with the statutory requirement that initial reviews be completed by the Department by mid-November.

On October 2, we received applications for what will amount to commitments to develop specific high-speed rail corridors. Our preliminary analysis shows that we received 45 applications representing 24 States totaling approximately $50 billion. FRA is currently undertaking a triage of these applications to eliminate duplicates and ineligible applicants and projects. Our preliminary review shows that the numbers presented above should be close to the final. Detailed review of applications by panels of FRA staff and volunteers from other modes of the Department will begin in earnest next week.

Our overriding goal in evaluating these applications is the development of a sustainable and truly national high-speed intercity passenger rail investment program. Due to the

overwhelming response, our need to assure coordination among the various FRA programs and between the FRA programs and the Tiger Grant program being managed in the Secretary's immediate office, we will be announcing all awards this winter. Our selections will be merit based and reflect President Obama's vision to remake America's transportation landscape.

FRA is also moving forward to addressing the other challenges important to developing a sustainable high-speed intercity passenger rail investment program.

Safety: FRA has recently made available for comment a draft High-Speed Passenger Rail Safety Strategy which is appended to this testimony. The goal of this strategy is to lay out how FRA will: establish safety standards and program guidance for high-speed rail; apply a system safety approach to address safety concerns on specific rail lines; and, ensure that railroads involved in passenger train operations can effectively and efficiently manage train emergencies. This strategy endeavors to achieve uniformly safe rail passenger service, regardless of speed.

Capability of the States: FRA is lucky to have someone like Karen Rae, who has had a long and distinguished career in transportation program management in several States, to play a leadership role in the design of the new high-speed program. Under her leadership we have engaged the States early and often and have committed to a continuing effort on the part of FRA in developing and enhancing the ability of the States to get involved in high-speed rail. Attached to my statement are two unsolicited statements concerning FRA's outreach activities. I would take particular note of the statement from the chair of the Capitol Corridor (CA) Joint Power Authority that says "We know of no other federal agency that has asked its customers (the states and intercity passenger rail agencies) for comments, suggestions and even criticisms on the HSIPR Program funding applications and award criteria BEFORE (emphasis in original) any awards were made or applications received. This is an excellent example of how government should work ...."

Status of Planning: FRA has on our website a "how to" manual for the development of service development or transportation investment plans. This is based upon FRA's previous experience in the planning of specific corridors in which all interested parties came to the table to work cooperatively in indentifying investment needs. While FRA cannot and should not plan every corridor, we are a resource to facilitate the development of processes that can lead to successful completion of corridor wide service development plan and related environmental documents.

Freight Railroads: Freight railroads will be key to the successful development of high-speed intercity passenger rail in many corridors. Indeed, FRA's grant guidance requires that applications demonstrate the stakeholders' commitments, including that of the host railroad/infrastructure owner, to advance the high-speed intercity passenger rail program. FRA believes that there are opportunities to develop constructive partnerships between the freight railroads and States that can address areas of common interest including statutory requirements for positive train control and the safety at highway rail grade crossings. By placing a premium on such cooperative relationships FRA believes that we can facilitate their development. We also see our safety and research activities as complementary parts of this effort.

Intellectual Infrastructure: FRA is very concerned that this Nation has the people that can deliver on a successful high-speed rail program for the foreseeable future. As part of the President's FY 2010 budget request, FRA proposed that 1% of the high-speed intercity passenger rail funds be available for research. Our first and highest priority for the use of these funds is the establishment of the Rail Cooperative Research Program (RCRP) at the Transportation Research Board of the National Academy of Sciences. The RCRP was authorized in PRIIA as a necessary counterpart to the National Cooperative Highway Research Program (NCHRP) and the Transit Cooperative Research Program (TCRP). These programs have helped these modes of transportation develop the corps of trained professionals they rely on. We are also exploring other opportunities of using research, including the use of University Transportation Centers managed by RITA to help in this effort.

FRA's short term needs

As I said in a hearing before you this past June, FRA's financial assistance staff today is sized for that earlier, quieter era. Even though the PRIIA added a number of responsibilities in the areas of passenger rail and financial assistance to FRA, that Act did not authorize an expansion of FRA's financial assistance staff. That they have produced high quality products in response to the aggressive schedule in the Recovery Act, is a testament to knowledge, skill and dedication of that small staff. Having said that, we cannot successfully manage the high-speed rail program envisioned by the President and implement the provisions of PRIIA and undertake our other new and expanded financial assistance functions contained in other recent Acts with the present levels of staff and other resources. The President's FY 2010 budget begins to address FRA's financial assistance staff and resource needs. I urge members of this Committee to support this request. I will also note that successful implementation of the Recovery Act including oversight of the expenditure of $8 billion, will require that the amount of these funds available for use by the Secretary in project oversight be consistent with the 1% authorized in 49 U.S.C. 24403(b)(1) and not the one quarter of one percent authorized in the Recovery Act.

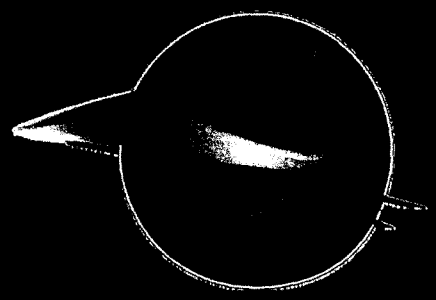
Conclusion

The FRA of two years from now will be a significantly different agency than you see today. Safety will always be our most important mission, but we will also be playing a leading role in making the investments that position this country's transportation system for the future. I am incredibly proud to be at FRA today and have an opportunity to lead the dedicated team at FRA through this transformation.

#

High-Speed Passenger Rail

Safety Strategy



Discussion Draft for Public Outreach

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Introduction

The History of High-Speed Rail

Fostering the development of high-speed rail (HSR) and other intercity passenger service in the United States has been an important part of the work of the Federal Railroad Administration (FRA) since its creation in 1967. During the 1980s and 1990s, FRA played a central role in managing and facilitating the growth of high-speed service on the Northeast Corridor. Acting in response to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), FRA began the formal process of designating HSR corridors for future development and providing limited funding for corridor improvements primarily directed at safety. With the passage of the American Recovery and Reinvestment Act of 2009, which provides $8 billion in capital assistance for HSR corridors and intercity passenger rail service, and following President Obama's announcement of a strategic plan for high-speed rail (*"Vision for High-Speed Rail in America"*), FRA now takes on the important work of helping to make high-speed rail a reality in markets across the Nation.

Although the focus of this Strategy is developing HSR service on new corridors, inevitably this strategy needs to consider implications for other intercity passenger service, commuter rail service, and regional rail projects that seek to provide transit-like service on rail lines shared with conventional passenger or freight trains. Further, any HSR operation will include track segments where only conventional speeds are possible. Flexibility provided for the first time in connection with HSR may also be relevant to service at conventional speeds. Accordingly, other forms of passenger rail service are referenced to the extent necessary to attain consistency and clarity.

On June 17, 2009, FRA's Administrator issued a notice of funding availability and interim program guidance for the HSR and Intercity Passenger Rail Program (74 FR 29899; June 23, 2009). The guidance identified transportation safety and safety planning as evaluation criteria for merit consideration of proposed projects and programs. This High-Speed Passenger Rail Safety Strategy describes how FRA will provide specificity and additional safety guidance for the development of HSR systems.

Safety and High-Speed Rail Going Forward

The hallmark of world-class, high-speed rail is safety. FRA believes that railroads conducting HSR operations in the United States can provide service as safe as, or safer than, any HSR operation being conducted elsewhere. FRA also believes that the expansion of HSR in America will yield safety benefits for those that choose to use the service instead of driving the same distance via roads and highways. Data published by the National Safety Council shows that, based on miles traveled, personal motor vehicle travel is 12 to 20 times more likely to result in a fatality than passenger rail travel.

In anticipation of such service, and to promote public safety, FRA has developed this Strategy, which includes: (1) establishing safety standards and program guidance for HSR,

(2) applying a system safety approach to address safety concerns on specific rail lines, and (3) ensuring that railroads involved in passenger train operations can effectively and efficiently manage train emergencies. This Strategy endeavors to achieve uniformly safe rail passenger service, regardless of speed. Since the severity of collisions and derailments increases with speed, safety performance targets for preventive measures are tiered to become more stringent as speed increases.

Current FRA regulations include Tier I equipment safety standards for passenger trains operating at speeds of up to 125 mph. FRA established additional standards (Tier II) for high-speed trains that operate up to 150 mph. These Tier II requirements address crashworthiness, crash energy management, vehicle suspension systems, brake systems, train configurations and other elements critical for high-speed train sets. The Tier II standards only impact the Amtrak Acela Service on the Northeast Corridor because Acela is currently the only Tier II application operating in the United States. Existing FRA track safety standards are comprehensive and specify track geometry and cant deficiency for FRA Classes 1 through 9 at speeds up to 200 mph. The track standards include requirements for Class 6 track (110 mph) and above for remote monitoring of car body acceleration and truck hunting, and equipment qualification on actual routes. Appendix A provides a representation of current requirements and open issues related to track safety standards.

FRA is currently reviewing European and worldwide equipment standards and developing guidance for high-speed trains operating at up to 220 mph. FRA is also exploring improvements and expansions to vehicle and track safety standards through rulemaking. Currently, the agency is advancing rules that amend the Passenger Equipment Safety Standards and Track Safety Standards for high-speed train operations and train operations at high cant deficiencies to promote the safe interaction of rail vehicles with the track over which they operate. The rulemaking would revise the safety limits for these operations and the processes to qualify them, and account for a range of vehicle types. Although this rulemaking would substantially change FRA's regulations governing the safety of high-speed and high cant deficiency train operations, a number of the changes would codify FRA decisions affecting such operations made under current approval and waiver processes. It would therefore reduce some existing regulatory burdens while safely facilitating the broader introduction of high-speed operations and enabling lower speed train operations to gain efficiencies through operation on curved track at higher cant deficiencies.

FRA will continue to promote safety and facilitate the introduction of new HSR operations. President Obama proposes to help address our new transportation challenges by investing in an efficient HSR network of 100- to 600-mile intercity corridors that connect communities across America. This vision builds on successful highway and aviation development models with a 21st century solution that focuses on a clean, energy-efficient option (even today's modest intercity passenger rail system consumes one-third less energy per passenger-mile than automobiles). FRA expects that each HSR operation will be

appropriately tailored to its operating environment. The High-Speed Rail Strategic Plan divides potential operations into four categories or generic descriptions:

- HSR – Express. Frequent express service between major population centers 200–600 miles apart, with few intermediate stops. Top speeds of at least 150 mph on completely grade-separated, dedicated rights-of-way (with the possible exception of some shared track in terminal areas). Intended to relieve air and highway capacity constraints.
- HSR – Regional. Relatively frequent service between major and moderate population centers 100–500 miles apart, with some intermediate stops. Top speeds of 110–150 mph, grade-separated, with some dedicated and some shared track (using positive train control (PTC) technology). Intended to relieve highway and, to some extent, air capacity constraints.
- Emerging HSR. Developing corridors of 100–500 miles, with strong potential for future HSR Regional and/or Express service. Top speeds of up to 80–110 mph on primarily shared track (eventually using PTC technology), with advanced grade crossing protection or separation. Intended to develop the passenger rail market and provide some relief to other modes.
- Conventional Rail. Traditional intercity passenger rail services of more than 100 miles with as little as 1 to as many as 7–12 daily frequencies; may or may not have strong potential for future high-speed rail service. Top speeds of up to 79 mph generally on shared track. Intended to provide travel options and to develop the passenger rail market for further development in the future.

Proposed Strategy

FRA currently administers a comprehensive set of safety standards for conventional and high-speed service. The standards include requirements for track, equipment, operating rules and practices, signals and train control, communications, emergency preparedness, certification of locomotive engineers and control of alcohol and drug use, among others. As HSR service expands, portions of those standards will require updating and augmenting. Going forward, FRA will also incorporate lessons learned from the work that has been underway on high-speed corridors since the enactment of ISTEA. This Strategy provides a framework for documenting lessons learned and integrating the necessary actions, and seeks to achieve the following purposes:

- Support a very high level of safety for new passenger rail service.
- Focus on safety results and flexibility to meet service needs while achieving those results.
- Ensure alignment between safety requirements and passenger rail funding policies.

To ensure adequate safety for HSR, FRA intends to utilize appropriate safety standards and to apply system safety program techniques to enhance safety while meeting transportation objectives.

FRA expects a significant increase in the number of HSR operations. Each HSR operation will operate in a different environment, and each will have different needs based on that environment. As a result, FRA anticipates a variety of proposed HSR operations that will consist of a combination of different types of equipment, different degrees of isolation from known hazards, and different safeguards. To maintain safety, FRA will need to have minimum safety standards or guidelines that apply clearly to a variety of operating environments, and a reliable method to assess the safety of a new operating environment. To allow FRA to more easily facilitate the evaluation and application of standards to specific operations, it will be helpful to group substantially similar operations together when possible. The four categories of HSR listed above can be used as a starting point for grouping similar operations. Additional factors that will be used to group similar operations include:

- The presence or absence of freight traffic, the volume of freight traffic, and the nature of freight operations (e.g., overhead vs. local switching).
- The degree to which passenger equipment used on the corridor(s) is of similar construction.
- The degree of isolation of the passenger system from other hazards (e.g., incursions of motor vehicles due to proximity of roads and bridges, the degree of security that can be established on the right-of-way, and the presence of natural hazards such as seismic events or high water).

Through this strategy, FRA proposes to define categories or "tiers" of rail passenger service tied to maximum operating speeds and the aforementioned factors. Safety requirements and guidance would then be matched to that structure. Appendix B provides a visual representation of how that might be accomplished.

1. Prevention

FRA already has a long history administering an extensive set of regulations designed to prevent accidents and injuries. These regulations address track, equipment, railroad operating rules and practices, qualification and certification of locomotive engineers, control of alcohol and drug use, and other subject matters. Forthcoming regulations will address bridge safety and medical fitness for duty of safety-critical employees among other topics. However, there are specific additional refinements and actions that need to be taken to address the needs of HSR service.

a. Vehicle Track Interaction

The Track Safety Standards (49 CFR Part 213) specify requirements for nine classes of track based on maximum allowable speed. The standards for higher speeds focus on vehicle-track interaction, as well as track geometry, rail integrity and appropriate inspection practices. The Passenger Equipment Safety Standards (49 CFR Part 238) contain complementary requirements for qualification of high-speed passenger equipment. Based upon results of research and recommendations of the Railroad Safety Advisory Committee (RSAC), FRA is finalizing a proposed rule that would establish updated vehicle-track interaction safety standards, largely unifying the requirements in a single part of the Code of Federal Regulations and making it easier to qualify new equipment. The proposal would revise existing limits for vehicle response to track perturbations and add new limits where necessary. The proposal accounts for a range of vehicle types that are currently in use and may likely be used on future high-speed or high cant deficiency rail operations (or both) and provides safety assurance for train operations in all classes of track. The proposal is supported by the results of simulation studies designed to identify track geometry irregularities associated with unsafe wheel forces and acceleration, thorough reviews of vehicle qualification and revenue service test data, and consideration of international practices.

High-speed track safety standards are based on the principle that, to ensure safety, the interaction of the vehicles and the track over which they operate must be considered within a systems approach that provides for specific limits for vehicle response to track perturbation. From the outset, FRA strove to develop revisions that would serve as practical standards with sound physical and mathematical bases, account for a range of vehicle types that are currently used and may likely be used on future high-speed or high cant deficiency rail operations (or both), provide safety assurance for train operations in all classes of track, would not present an undue burden on operators, and would be verifiable by field measurements.

The proposed standards are based on safety principles that apply to trains of all speeds and cant deficiencies. For trains operating at higher speeds with greater cant deficiencies, the safety risk is increased. Accordingly, the application of the same safety principles to trains operating at higher speeds with greater cant deficiency will result in more stringent standards. FRA's proposal addresses the following key areas:

- Revise—
  - Qualification requirements for high-speed or high cant deficiency operations, or both.
  - Acceleration and wheel force safety limits.
  - Inspection, monitoring, and maintenance requirements.
  - Track geometry limits for high-speed operations.

- Establish—
  - Necessary safety limits for wheel profile and truck equalization.
  - Consistent requirements for high cant deficiency operations covering all track classes.
  - Additional track geometry requirements for cant deficiencies greater than 5 inches.

- Resolve and reconcile inconsistencies between the Track Safety Standards and Passenger Equipment Safety Standards, and between the lower- and higher-speed Track Safety Standards.

Through the close examination of these issues, the RSAC Task Force developed proposals intended to result in improved public safety while reducing the burden on the railroad industry where possible.

Although the RSAC Task Force stopped short of revising standards for Class 9 track, believing at the time that the need for such standards was questionable, FRA has subsequently identified the continued need for benchmark standards addressing the highest speeds likely to be achieved by the most forward-looking potential HSR projects. FRA will include those benchmark standards in its forthcoming Notice of Proposed Rulemaking (NPRM) to revise the Track Safety Standards, with the understanding that the final suitability of track standards for HSR Express will be determined only through examination of the entire operating concept, including the subject equipment, track and other system attributes.

FRA will issue proposed and final rules on vehicle-track interaction and other key safety issues related to track and structures as soon as possible.

b. Positive Train Control

The Rail Safety Improvement Act of 2008 (RSIA)[1] reauthorizes and enhances FRA's safety programs. Notably, from an intercity passenger rail development perspective, the RSIA requires implementation of PTC[2] systems on every main line over which intercity rail passenger or commuter rail passenger service is regularly provided. Each Class I railroad carrier and each regularly scheduled intercity or commuter railroad must install PTC systems by December 31, 2015, governing operations on: (1) its main line over which intercity rail passenger or commuter rail passenger service is regularly provided, (2) its main line over which hazardous materials that are poisonous- or toxic-by-inhalation are transported, and (3) such other tracks as the Secretary designates by regulation or order. Addressing the practical requirements of this provision remains a financial challenge for passenger rail operators; however, it has always been understood that HSR requires very competent train control as an integral element of system planning and execution.

With help from the RSAC, FRA has prepared a proposed rule that will implement the RSIA PTC requirement.[3] Although PTC requirements are specified to support intercity and commuter passenger train service in all speed ranges, the proposed rule will address high-speed service (described as any service operating at speeds greater than 90 mph) in specific speed bands, with increased system capability required as operating speeds increase.

In anticipation of high-speed service—and to ensure public safety—FRA is proposing tiered requirements for PTC systems. The performance thresholds are intended to increase safety performance targets as the maximum speed limits increase to compensate for increased risks, including the potential frequency and adverse consequences of a collision or derailment. These requirements are cumulative as speeds increase. At speeds of 60 mph and above, the system would need to incorporate the safety-critical functions of a block signal system with fouling circuits and broken rail detection. For territories where operating speeds are greater than 90 mph, the PTC system must also be shown to be fail-safe (although comment will be solicited regarding the characteristics of onboard freight PTC equipment for Emerging HSR), and "perimeter protection" must be established to keep unauthorized movements (e.g., trains, unsecured rolling stock) off the railroad. The consequences of a collision or derailment for railroads operating above 125 mph is even greater. In addition to meeting the requirements under the previous two categories, such railroads exceeding 125 mph must also provide an additional safety analysis supporting the sufficiency of the PTC technology to support a level of safety comparable to similar transportation service and must include analyses demonstrating that opportunities for incursion into the right-of-way (e.g., vandalism, motor vehicles deviating from adjacent

[1] Public Law No. 110-432, Division A, enacted Oct. 16, 2008.

[2] "Positive Train control" means a system designed to prevent collisions between trains, overspeed derailments (derailments caused when a train exceeds speed limits), incursions into established work zone limits (i.e., for roadway workers maintaining track), and the movement of a train through an improperly positioned switch.

[3] 74 FR 35950; July 21, 2009.

roadways) have been addressed through prevention and/or detection and warning. *See also* 49 CFR § 213.361 (Right-of-way plans for Class 8-9 track), discussed below. At speeds that exceed 150 mph, PTC functionalities would be described within an overall plan subject to FRA approval.

FRA will finalize standards for PTC systems by the end of October 2009.

c. Grade Crossing Safety

Highway-rail grade crossings pose inherent hazards to train operations, as they do to motor vehicles. Accordingly, existing FRA regulations require that train operations at greater than 110 mph be supported by plans designed to physically restrain motor vehicles from becoming a derailment hazard, and above 125 mph, no at-grade crossings are permitted (49 CFR § 213.347).

There have been demonstrated successes in deploying "sealed corridor" technology on designated HSR corridors. The most mature of these corridors is on the North Carolina Railroad, the route of intercity passenger service sponsored by the North Carolina Department of Transportation. DOT grants and State funding have been used to eliminate unneeded crossings, channelize intersections, install four-quadrant gates, and demonstrate additional risk-reduction strategies. Work accomplished by North Carolina and States such as Illinois and Michigan charts the future direction for other HSR corridors, and data derived from quiet zones employing Supplementary Safety Measures supports that direction.

The Sealed Corridor Study. FRA's Office of Research and Development (R&D) tasked the Research and Innovative Technology Administration's (RITA) John A. Volpe National Transportation Systems Center (Volpe Center) to document the further success of the Sealed Corridor project through Phases I, II and III. The Sealed Corridor is the section of the designated Southeast High-Speed Rail Corridor that runs through North Carolina. The Sealed Corridor project improved or consolidated every highway-rail grade crossing, public and private, along the Charlotte-to-Raleigh rail route in North Carolina. The initial assessment of this HSR corridor as mandated by Congress was published in 2001. In 2008, FRA updated its assessment, comparing the results from a partial Phase I implementation to the results of completing Phases I, II and III. The research on the Sealed Corridor assesses the progress made at the 189 crossings that have been treated with improved warning devices or closed between Charlotte and Raleigh from March 1995 through September 2004.

Two approaches are used to describe benefits in terms of "lives saved": (1) Fatal crash analysis to derive lives saved, and (2) prediction of lives saved based on the reduction of risk at the treated crossings. Both methods estimate that over 10 lives would be saved as a result of the 189 improvements implemented through December 2004. Analysis also shows that the resulting reduction in accidents, due to the crossing improvements, is sustainable through the year 2010, when anticipated exposure and train speeds along the

corridor will be increased. In order to estimate future incident reduction rates and to estimate that the reduction result was sustainable, the Modified U.S. DOT Accident Prediction Formula was used to ensure that increases in train and vehicle exposure over time were considered in the analysis.

The resulting analysis estimated that the fatality rate resulting from full implementation of the entire sealed corridor would be half of the estimated fatality rate if no implementation was executed and speed increased to 110 mph.

Supplementary Safety Measures (SSMs). To maintain grade crossing safety when permitting quiet zones, Federal regulations require adding SSMs to the highway-rail grade crossings within the quiet zones. SSMs are deterrents; they are additional treatments that can be applied to grade crossings that will reduce the number of grade crossing violations. If adequate measures are taken to promote safety, high-speed rail operations, like quiet zones, will not compromise safety.

Proposed Policy. New high-speed rail operations will require enhanced grade crossing safety standards to maintain or enhance the level of safety demonstrated by conventional speed operations. To address the greater risks associated with higher train speeds, FRA has developed four safety principles: (1) eliminate all redundant or unnecessary crossings together with any crossings that cannot be made safe due to crossing geometry or proximity of complex highway intersections, (2) install the most sophisticated traffic control/warning devices compatible with the location (e.g., median barriers, special signage (possible active advanced warning), four-quadrant gates) where train-operating speeds are between 80 and 110 mph, (3) protect rail movement with full width barriers capable of absorbing the impact of highway vehicles where train-operating speeds are between 111 and 125 mph, and (4) eliminate or grade-separate all crossings where trains travel at speeds above 125 mph. In addition to aligning with the Track Safety Standards as referenced above, these principles are supported by FRA's Sealed Corridor Study, the School Street Study, and an equitable review of the effectiveness of SSMs required for quiet zones. Both the studies and the implementation of SSM for quiet zones address limited operational characteristics. FRA will be conducting further studies to confirm the effectiveness of these principles in additional operating environments.

Available technology may provide additional opportunities for risk reduction on high-speed corridors. For instance, Amtrak's Incremental Train Control System in Michigan provides a mechanism for each train to establish communication with each successive crossing to verify the health of the warning system and to verify that the crossing gates have descended. If a negative response or no response is received, the train experiences an enforcement that significantly reduces the speed prior to its arrival on the crossing. This system offers the additional advantage of providing a "pre-start" capability that compensates for increased train speed without needing to greatly extend train detection circuits.

On Amtrak's Northeast Corridor, four-quadrant gate installations with presence detection communicate with the cab signal system and cause a penalty brake application for the

approaching train if a motor vehicle is detected on the crossing following the descent of the gates. This technology is plausible on the Northeast Corridor because of the relatively small number of crossings involved, the predominance of passenger traffic, and heavy rail traffic that supported the necessary investment.

The technology deployed in Michigan and on the Northeast Corridor offers significant advantages as well as challenges. On lines carrying long, heavy freight trains, care must be taken to ensure that the locomotive engineer remains in control of the train and that temporary obstructions do not lead to reactive braking that could cause undesirable in-train forces. Communications-based train control technology of the kind likely to be employed on Emerging HSR corridors could be arranged to meet these needs, but because most freight locomotives are used over extensive portions of the national rail system, interoperability would be a major concern.

FRA will provide draft guidance to supplement existing regulations with respect to highway-rail grade crossings on HSR lines, elicit stakeholder comment and provide final guidance for use in funding HSR projects. FRA will also review the success of safety enhancements on designated HSR corridors in Illinois, Michigan and Pennsylvania in connection with the Sealed Corridor Study and provide a report of the findings for use by those planning the details of HSR systems.

d. Maintenance-of-Way Safety Management

FRA has given significant attention to Roadway Worker Protection, appropriately emphasizing the importance of providing for on-track safety for those inspecting and maintaining track and structures. The other aspect of this safety interface is ensuring that track is not disturbed ahead of train movements, that heavy on-track maintenance equipment is routed away from and kept clear of live tracks except when authorized to be there, and that maintenance equipment such as cranes that have the potential to foul live tracks during maintenance activities do not do so while trains are passing.

This issue is an important one on any railroad and, accordingly, is addressed in the operating and maintenance rules of the respective railroads. However, in HSR territory, the issue is even more important. For the present, safety systems such as PTC will not be sufficiently capable in most cases to address this type of hazard. Maintenance-of-way (MOW) equipment generally does not reliably shunt signal systems, and for the present, signal track circuits will be used by PTC to detect track occupancy and to stop trains short of equipment obstructing the track ahead. None of the railroads' current plans include equipping MOW equipment with PTC, although one freight railroad is utilizing a Hi-Rail Limits Compliance System for inspection vehicles that will be able to interface with PTC. Clearly, in developing PTC architectures for entirely new, dedicated HSR systems, attention should be given to identifying work equipment and personnel as "targets" to be protected by the PTC system.

The presence of MOW equipment either occupying the wrong track or fouling an adjacent track has been the cause of serious accidents in the past. If HSR is to be a success, more rigorous and effective means will be required to separate train operations from MOW activities. In corridors where there is dedicated passenger service, track maintenance will likely be scheduled during times in which no trains are operating, which will enhance safety.

FRA will develop guidelines for MOW safety management, which will be considered in reviewing system safety programs.

e. Right-of-Way Safety

Section 213.361 of the Track Safety Standards requires that, for Class 8 and 9 track (speeds exceeding 125 mph), the track owner must submit for approval a "right-of-way plan" for the prevention of—

(a) Vandalism

(b) Launching of objects from overhead bridges or structures into the path of trains

(c) Intrusion of vehicles from adjacent rights of way.

Although these requirements are fundamentally sound, they also apply at lesser speeds. Further, even at Class 8 and 9 speeds, questions will arise regarding what undertakings are fully responsive and appropriate. In addition, the existing provision does not refer to all relevant threats from outside the operating envelope.

Many HSR lines may be constructed in common corridors with freight or conventional passenger operations. Maintaining appropriate separation of the two forms of rail service will be critical, particularly where there is the potential for a freight train or its cargo to foul the high-speed track(s) or for a highway-rail grade crossing collision to cause a secondary impact between the high-speed train and other rail equipment. A variety of strategies can be brought to bear to mitigate these risks, all of which should be documented in a Right-of-Way (ROW) Safety Plan.

With the congestion in cities and the challenges associated with condemning property to build new rail lines, it is inevitable that some new railroads will share rights-of-way with interstate highways. For example, an HSR operation plans to share the Interstate 15 corridor from Victorville, California, to Las Vegas, Nevada, with train speeds up to 150 mph. As FRA works with this potential applicant for a waiver of passenger equipment structural standards, the agency has noted that there is little information available on how to safely integrate a highway system with a railroad system on the same right-of-way. The main issue is intrusion of highway vehicles on the railroad. (The issue is relevant beyond HSR as the New Mexico Rail Runner Express (Rail Runner) commuter rail operation between Albuquerque and Santa Fe, New Mexico uses the median of Interstate 25. The standards

used for application of guardrails or other intrusion protection for Rail Runner are the same standards that the Federal Highway Administration uses when there is nothing in the median. In other words, there are no special provisions for a highway/railroad shared corridor. Rail Runner started service to Santa Fe in December 2008, and has already had some incidents. For instance, an automobile recently ended up on the tracks when the driver lost control while trying to avoid hitting a coyote.)

There is also a related issue involving highway overpasses. Even if all grade crossings are eliminated, there is still the risk of a car or truck falling from an overpass and landing on the track. The European railroads use intrusion detection nets and other devices on their HSR lines to protect their rights-of-way at overpasses. These strategies will be studied and evaluated.

Other issues involving external impacts on the operating environment include seismic events, high winds, high water and landslides. These conditions are of greater or lesser interest depending upon site-specific factors and should be addressed expressly in an expanded right-of-way safety plan for each HSR system.

FRA will develop vehicle intrusion standards and standards for sharing rail/rail and highway/rail corridors for incorporation into regulations and/or funding guidance. FRA will detail additional hazards that must be evaluated and mitigated based on corridor-specific risks.

f. Real-Time System Monitoring

A variety of technologies are now available to monitor the health and performance of the railroad operating system in real time. Examples include onboard sensors, wayside detection devices and autonomous track geometry systems. These technologies should be evaluated for suitability in light of total residual risk as determined in system safety program planning.

FRA will develop an evaluation method to prompt thorough hazard analysis and mitigation planning for HSR systems.

2. Mitigation

a. Structural Standards

In the creation of an HSR network in the United States, it must be recognized that there are real differences between the American rail system and those found in other countries with HSR. Specifically, in the major countries that have pioneered HSR, the rail systems have traditionally been devoted primarily to passenger rail. As such, there are also three major characteristics that have made it easier to implement HSR systems in these countries.

First, there have been fewer freight trains to deal with. Second, the freight trains (and particularly the motive power) are considerably smaller and lighter in weight than North American freight trains. Third, these rail systems do not have as many grade crossing issues: they have fewer highway-rail grade crossings (level crossings), the crossings are used by lighter trucks than those prevalent in the United States, and the respective populations have shown greater compliance with warning systems than is typically experienced in the United States.

Despite the differences noted above, FRA is in a good position to implement a sound safety regime for an HSR system. It is nevertheless important to recognize that while the North American freight network is the envy of the world, the fact that this network will also be the home of Emerging HSR and potentially more aggressive forms of HSR means that safety concerns will only increase if no action is taken to mitigate this risk.

This potential will be significantly reduced as PTC is deployed. To be sure, the need for reasonably crashworthy rolling stock remains an issue where local switching occurs, where multiple track operations create the potential for secondary collisions, where the potential for on-track maintenance vehicles to occupy live tracks exists, where MOW safety management cannot be fully guaranteed, and where highway-rail crossings remain that might be fouled by large trucks posing the potential for a derailment (with or without a secondary collision).

The Passenger Equipment Safety Standards presently describe only two tiers of equipment. Tier I equipment is equipment expected to be used in conventional passenger service, as well as HSR to 125 mph, on the general freight system. Tier II equipment is also designed for the general freight system, with speeds up to 150 mph. Many have noted that these standards are not aligned with service needs for higher-speed operations and for operations outside the freight network. Indeed, when FRA has been challenged to offer options for HSR Express in the past, the agency has recognized the appropriateness of considering the type of equipment as an element in the larger operating system (see, e.g., notice of proposed rule of particular applicability for Florida Overland eXpress (FOX), 62 FR 65478, Dec. 12, 1997). That approach is characterized by the importation of the entire system in which the equipment operates for use in a wholly separate system, and not simply permitting noncompliant equipment to operate in a typical North American railroad setting. Unfortunately, the inability of successive HSR Express projects to find stable funding has arrested development of a consistent approach to this challenge.

Since that timeframe, significant advances have occurred in numerical modeling, engineering design experience and fabrication techniques. Such advances currently allow for significantly enhanced engineering analyses to be conducted with the potential application to comprehensive performance standards that directly address mitigation of prevalent scenarios of concern for different types of operating environments. The key metrics of success of such standards are a minimum safe closing speed for which an impact can occur where no intrusion into the occupied volume is allowed, and the forces that crew

members and passengers are subjected to are minimized to survivable levels.

Europe and Asia have embraced the use of hybrid performance and prescriptive standards for commuter railroads, intercity travel, and high-speed rail. International systems make use of complimentary risk reduction measures including advanced signal systems to provide for a high degree of collision avoidance with minimum levels of crashworthiness performance. FRA is currently assessing the gaps in performance associated with several international passenger safety standards, advances in domestic specifications for new car procurements, and explanations for why such gaps exist—such as significant differences in the operational environment and use of advanced collision avoidance technologies.

The present national commitment to high-speed rail brings with it a new opportunity to create greater predictability in how FRA will approach these issues. In order to identify opportunities for more closely tailored safety standards, FRA proposes to explore the possibility of describing a new tiered series of standards for the entire operating system, *including equipment*, in lieu of the current two-tiered structure that focuses on equipment only. These tiers could categorize methods of operation in conjunction with safety improvements such as separation of passenger and freight traffic and advanced train control systems. In the meantime, operating authorities and car builders that wish to use alternatively designed equipment that cannot meet the current crashworthiness standards will likely have to make use of the waiver process, but the structure for assessing equivalency of safety can be used as the means for removing the risk and uncertainty that such organizations otherwise would experience.

New tiered standards, or technical benchmarks to be used in lieu of standards, would describe a range of operating environments and, for each such environments, would specify—

- Basic end strength and crash energy management performance in longitudinal encounters.
- Other structural characteristics (eg., side strength, roof strength as a function of vehicle weight).
- Fixture securement.
- Acceptable occupant accelerations and restraint strategies based on expected vehicle performance.

In order for this effort to be successful, FRA needs to complete its work on passenger car end strength as applied to conventional North American equipment designed for use on the general freight rail system. This amendment to the Passenger Equipment Safety Standards will complete the structural benchmarks against which other options can be evaluated. Based on an RSAC proposal and an FRA adaptation designed to provide greater design flexibility, FRA published a proposed rule on end strength on August 1, 2007 (72 FR

42016). The RSAC has made recommendations for a final rule that FRA will issue before the end of 2009.

FRA will finalize the pending cab end strength rule and then will define additional options for compliance with tiered passenger car safety standards.

b. Cab Car Forward

New standards or guidelines could also address circumstances under which the use of passenger-occupied lead units may or may not be acceptable. FRA's regulations for Tier II operations, which covers passenger trains that operate up to 150 mph, requires that the power cars at the ends of the train exclude passengers. This is the current arrangement of the Acela trainset on the Northeast Corridor. One HSR operation that will be constructed on a dedicated right-of-way has proposed a 150 mph service with passenger seating in the power cars (cab cars). Another HSR operation has proposed a 220 mph service and has also included passenger seating in the power cars (cab cars).

FRA will conduct further research into the relationship between occupied power cars and the number of injuries and fatalities that might occur in a collision or derailment as part of this review.

c. Fuel Tank Integrity

Finally, some HSR projects may make use of diesel multiple-unit (DMU) rail cars. FRA's current fuel tank standards are derived from freight standards (49 CFR § 238.223), and arguments have been advanced that a more flexible approach should be taken for tanks positioned in such a way as to be better protected.

FRA will complete research into adaptation of fuel tank safety standards for self-powered diesel DMU rail cars and propose tailored standards if warranted.

3. Emergency Management

All public transportation services rely on emergency preparedness and response to limit the adverse effects of accidents and other emergencies. In 1998, FRA issued a final rule on Passenger Train Emergency Preparedness (49 CFR Part 239), the declared purpose of which is to reduce the magnitude and severity of casualties in railroad operations by ensuring that railroads involved in passenger train operations can effectively and efficiently manage passenger train emergencies. Part 239 prescribes standards for the preparation, adoption and implementation of emergency preparedness plans. Since that time, the RSAC and the American Public Transportation Association's Passenger Rail Equipment Safety Standards task force have generated a series of proposed and final

standards and recommended practices to ensure that appropriate emergency systems and procedures are in place.[4]

FRA will publish a second NPRM based on RSAC recommendations concerning refinement of requirements for onboard emergency systems and finalize the rulemaking as soon as possible.

4. System Safety Programs

System safety programs (SSPs) seek to integrate the process of identifying safety needs and managing them over time. One key to success is effective hazard identification, which focuses attention on opportunities for risk reduction in the particular circumstances of the specific passenger railroad.

Working with the RSAC, FRA is drafting a proposed rule that will require each HSR, intercity, and commuter passenger railroad, together with any other railroads engaged in joint operations, to develop and implement a documented SSP. Host railroads, contract operators, shared track/corridor operators, and others who provide safety sensitive services to the operating railroads shall have defined roles in the passenger railroad SSP. The purpose of an SSP is to improve railroad safety through a structured, proactive program developed and implemented by passenger railroad operators. The program described in this section can support continuous safety improvement for passengers, employees and the public at large. The SSP can also support development of a strong safety culture and requires processes and procedures to identify and manage hazards inherent to the passenger railroad. The proposal would require the SSP to:

- Be defined and documented through a written System Safety Program Plan that meets the standards set forth in this section and is approved by FRA.
- Include hazard management processes designed to proactively identify, assess and mitigate hazards before accidents occur.
- Be fully implemented by the passenger railroad.
- Be audited for compliance by the passenger railroad and FRA or FRA's designee.

Generally, the SSP can be used in conjunction with minimum safety standards to increase safety. Certain operations that are sufficiently isolated and present peculiar operation-related safety concerns may rely more heavily on a tailored system safety approach, particularly if a substantially similar operation exists and has operated safely. For example, in the late 1990s, FOX planned to utilize the French TGV ("train à grande vitesse" or "high-speed train") system in Florida. FRA's NPRM for FOX included a heavy reliance on SSP planning and management.

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[4] *See*, e.g., 73 FR 6370, Feb. 1, 2008 (Passenger Train Emergency Systems; Emergency Communication, Emergency Egress, and Rescue Access; Final Rule).

FRA will propose to require that scheduled passenger operations establish and maintain SSPs and will include FRA review and approval of management decisions for HSR systems where it is necessary to determine an appropriate level of safety.

Next Steps

In short, FRA believes that a modern HSR rail system that is safe both for riders and communities across the country, operating with an appropriate safety regime coupled with rigorous oversight, can become a reality.

More specifically, FRA will address prevention, mitigation, emergency management, and system safety integration through the steps set forth above. FRA will structure a new tiered approach to passenger operations, taking into account maximum operating speeds as well as right-of-way characteristics, safety technology, planning requirements, and the presence or absence of less-compatible rail traffic (i.e., passenger equipment built to different standards or freight operations). As these actions are being completed, FRA will continue to respond to specific passenger rail projects by identifying the information and analysis required to evaluate and act on petitions for rules of particular applicability and waivers required to facilitate the introduction of innovative HSR service.

Appendix A: Current Requirements and Open Issues

	80-110	111-125	126-150/160[1]	151-200+
Track	Class 5, 6[2]	Class 7	Class 8	Class 9
Passenger equipment	Tier I		Tier II	[Guidance needed]
Passenger-occupied vehicle leading	Permitted		Prohibited by 238.403(f)	[Guidance needed]
Signal and train control[3]	PTC – vitality and perimeter protection required above 90 mph		PTC – incursion strategy integrated	PTC – system safety plan integrated[4]
Highway-rail grade crossings	[Guidance needed]	Barrier systems required under 213.247	Prohibited per 213.347	
MOW safety management	[Guidance needed]	[Guidance needed]	[Guidance needed]	[Guidance needed]
ROW incursion prevention / detection	[Guidance needed]	[Guidance needed]	Required 236.361	Required 236.361
System safety program	[Guidance needed]	[Guidance needed]	Subpart G, Part 238[4]	[Guidance needed]

1/ The Track Safety Standards presently allow speeds to 160 mph for Class 8 track.
2/ The present track standards treat Class 6 speeds as the lower end of high-speed track. Cant deficiency qualification is easier at higher speeds than at lower speeds because of formalized procedures in place for high-speed track. This is under review.
3/ PTC NPRM forthcoming.

Appendix B: Potential Tier Structure for Passenger Systems

Tier	0	IA	IB	IC	II	III	IV	V
Description	Regional rail	Conventional	Emerging HSR	HSR Regional	HSR Mixed Operations	HSR Mixed Passenger	HSR Dedicated	HSR Express
Max. Speed mph	0-65	0-79	80-110	111-125	126-150	0-150	0-150	0-200/220
Other traffic on same track	None (or temporally separated)	Mixed passenger and freight	Mixed passenger and freight	Mixed passenger and freight	Mixed passenger and freight	Conventional passenger only	None	None
Track class	- Class 4	- Class 4	- Class 5/6	- Class 7	- Class 8	- Class 8	- Class 8	- Class 9
Signals, train control	Traffic control	PTC	PTC; vital and perimeter protection above 90	PTC; vital and perimeter protection above 90	Per IC and ROW safety strategy integrated			
Public highway-rail grade crossings	Automated warning; supplementary measures where warranted	Automated warning; supplementary measures where warranted	Sealed corridor; evaluate need for presence detection and PTC feedback	Barriers above 110, see 213.247 Presence detection tied to PTC above 110	See IC None above 125	See IC None above 125	None at any speed	None at any speed
Private highway-rail grade crossings	Automated warning or locked gate	Automated warning or locked gate	Automated warning or locked gate and dispatch control over entry	None or as above	None above 125	None above 125	None at any speed	None at any speed
ROW safety plan	System Safety Program / Collision Hazard Analysis				SSP/CHA and specific approval process for new service similar to 236.361			
MOW safety management plan	Address within SSP framework; no separate approval required				Separate plan approval; integrate with SSP/CHA			

Tier	0	IA	IB	IC	II	III	IV	V
Description	Regional rail	Conventional	Emerging HSR	HSR Regional	HSR Mixed Operations	HSR Mixed Passenger	HSR Dedicated	HSR Express
Max. Speed mph	0-65	0-79	80-110	111-125	126-150	0-150	0-150	0-200/220
Equipment	CEM – end frame strength dynamic test	Present Tier I plus Cab End Frame Strength, or equivalent safety (including option for alternative to buff strength)			Present Tier II (including option for alternative to buff strength)	See Tier IA-C	Define	Define
Occupied car forward	OK	OK			Prohibited	Up to 125 mph only	OK	Prohibited
On-board emergency systems	Per Parts 238 and 239 (including glazing, emergency egress and rescue access, lighting, signage, etc.)							
System Safety Programs	Required; Review is for completeness; Audits for follow through				Integrate Subpart G, Part 238	Required, FRA reviews management decisions and may disapprove		

NOTE: Table does not clearly distinguish common corridor issues. This would be handled through ROW Safety Plan reviews.

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September 22, 2009

SEP 29 2009

Mr. Joseph Szabo
Administrator
Federal Railroad Administration
1200 New Jersey Avenue, SE MS-20
Washington, DC 20590

Re: Commendation on FRA High Speed/Intercity Passenger Rail Program Outreach

Dear Administrator Szabo:

On behalf of the Capitol Corridor Joint Powers Authority (CCJPA) and the six members agencies along our 170-mile long intercity passenger rail corridor, I wish to commend you and especially your staff for the unprecedented outreach effort made by FRA following the enactment of federal 'Stimulus' legislation providing, for the first time, a comprehensive federal capital funding for the High Speed/Intercity Passenger Rail (HSIPR) Program.

We know of no other federal agency that has asked its customers (the states and intercity passenger rail agencies) for comments, suggestions and even criticisms on the HSIPR Program funding applications and award criteria BEFORE any awards were made or applications received.

This is an excellent example of how government should work, and we would be remiss if we did not recognize this outreach program and commend you for implementing it. The enormous amount of up front time spent by your staff, particularly Karen Rae, Paul Nissenbaum and David Valenstein, should not go unrecognized. Under your leadership and the diligent work of the FRA staff, you have set a new and most welcomed standard to reach out to the people you serve.

Regardless of the success or failure of our applications, this outreach process is what all federal agencies should be doing to involve their customer-clients. FRA did this outreach in advance of implementing the program which made it a particularly useful exercise. We are confident that this outreach and corresponding involvement will prove to be of value to FRA in the near term and will serve as a foundation for the success of this program in the longer term.

Again, our commendation for a job well done by FRA.

Sincerely,

Jim Holmes

Jim Holmes,
Chair

cc: CCJPA Board of Directors
Bill Bronte, California Department of Transportation, Division of Rail

Questions for the Record
to
Joseph C. Szabo
Federal Railroad Administrator
from the
Subcommittee on Railroads, Pipelines and Hazardous Materials
Committee on Transportation and Infrastructure
United States House of Representatives
from the hearing on
High-Speed Rail in the United States: Opportunities and Challenges
October 14, 2009

1. What conditions does the Department plan to attach to grants for acquisition, construction, and improvement of rail lines for High-Speed Rail/Intercity Passenger Rail operations?

   Answer: First, I wish to state that the responses to your questions that follow do not reflect the Federal Railroad Administration's (FRA) review of any specific application for financial assistance presently pending before this agency.

   The U.S. Department of Transportation has a significant degree of discretion in deciding the terms of such grants: "...the Secretary shall require that a grant under this section be subject to the terms, conditions, requirements and provisions the Secretary decides are necessary or appropriate for the purposes of this section..." (49 U.S.C. 24402(a) (2)). The FRA has not yet completed the draft grant documents for the High-Speed Intercity Passenger Rail (HSIPR) grants. However, FRA does anticipate that these grant documents will be based upon grant agreements FRA has previously used and include the normal conditions found in all Federal programs relating to oversight, accounting, non-discrimination, equal employment opportunity and other normal requirements of doing business with Federal Government. We also expect that the grant documents will require compliance with all the specific statutory and regulatory requirements related to the subject programs. Finally, we anticipate that the grant documents will clearly establish project expectations and milestones.

2. The PRIIA expressly requires that High-Speed Rail and Intercity Passenger Rail grants be conditioned by employee protective conditions derived from the so-called 4R Act. What protective conditions will the department attach to PRIIA/ARRA grants?

   Answer: FRA anticipates that grant documents will clearly state the grant recipient's required obligations under section 24405(c) of Title 49 U.S.C. that require the protective arrangements established under section 504 of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. 836) apply to projects funded by FRA under this program. These protections were articulated

in a letter from the Secretary of Labor to the Secretary of Transportation dated July 6, 1976 and include, a displacement allowance, a dismissal allowance, fringe benefits, moving benefits, home sale benefits, priority of employment or reemployment, and training rights, and a separation allowance. This requirement was highlighted for applicants in FRA's HSIPR interim guidance in Appendix 3.4.4.

3. The FRA interim guidance refers to the need for consultation with stakeholders and agreements with stakeholders. Does the department recognize railroad workers and their representatives as stakeholders who must be consulted and who should be a party to necessary agreements?

   Answer: The Department believes that railroad workers are important stakeholders in the larger rail industry and will be essential to the successful implementation of the new HSIPR program. The purpose of the consultation and agreements with stakeholders referenced in our grant guidance is for us to determine whether a railroad will work with the State to implement the proposal. It is FRA's expectation that any commitment by a railroad owning infrastructure or a railroad providing rail operations would be entirely consistent with those railroads' collective bargaining agreements with the railroads' employees and their representatives. In terms of grant applications, that is the appropriate forum for discussions involving the employees and their representatives. On the larger policy issues affecting the more general development of the program, FRA is engaging all stakeholders, including employees and their representatives, through an extensive program of outreach in consultations about how the program should be structured.

4. There appears to be confusion among some applicants for High-Speed Rail/Intercity Passenger Rail grants under the ARRA and PRIIA regarding the consequences of use of such grants for acquisition and/or improvement of a line when commuter railroad transportation is provided on the line. Although Section 24405(f) bars grants for commuter rail transportation, certain applications have said that commuter railroads would use acquired/improved lines along with intercity/high speed passenger railroads that would be the formal recipients or indirect recipients of High-Speed Rail/Intercity Passenger Rail grants to States. A commuter railroad in that situation would be a person that conducts rail operations over rail infrastructure constructed or improved with funding provided by a High Speed Rail/Intercity Passenger Rail grant. Would the Department please clarify the duties and obligations for commuter railroads and their operators and their coverage by federal railroad laws, then commuter rail transportation is conducted on lines acquired and/or improved using High Speed Rail/Intercity Passenger rail grants?

   Answer: I believe that every railroad operating on the general system of railroad transportation should comply with all of the railroad laws of the United States.

Funding under the High-Speed Intercity Passenger Rail Program is limited to intercity passenger rail and high speed passenger rail projects and is not available for commuter rail passenger transportation (see 49 U.S.C. § 24405(f)), nor are commuter rail authorities eligible applicants under the program. However the authorizing statutes contemplate that commuter rail operations may indirectly benefit from the high speed rail service projects that are approved for funding. In considering high speed rail projects that may have an incidental benefit to commuter rail passenger operations, FRA will first look to whether this is a project whose primary purpose is the advancement of high-speed intercity passenger rail service or one that should be pursing funding under another program. FRA will also consider whether projects incorporate equitable financial participation by all stakeholders, including potentially commuter rail authorities.

You have noted ARRA and PRIIA require that if an entity takes grant money under PRIIA to construct or improve rail infrastructure for high speed or intercity rail passenger operations, then that entity and any rail operator operating on behalf of that entity is considered to be a "rail carrier" under subsection 24405(b) and is thus subject to certain important Federal railroad statutes. While subsection 24405(e) provides that the rest of section 24405, including subsection (b) does not apply to a commuter rail authority that happens to also operate over the same line, I would note most commuter rail operations are already subject to the Federal railroad laws, and I believe that over the long run commuter authorities are better off if they do not create structures that attempt to avoid the applicability of these important laws.

As stated earlier, FRA has significant discretion in determining the conditions under which we will provide financial assistance. It is my intent to use that discretion in the development of any grant agreement to assure that the recipients of FRA funding meet both the letter and spirit of the various statutory requirements, including section 24405. Moreover, the entity receiving funds from FRA will not be able to lease, sell or otherwise transfer assets acquired with FRA funds without the specific approval of the Federal Railroad Administrator. It would be my intention as Administrator to require any proposal for such a transfer of ownership or use of the facility acquired with PRIIA funds to demonstrate how the proposing and receiving entities would continue to comply with the various statutory requirements including section 24405.

Questions from Chairwoman Brown

1. How is FRA evaluating applications for Recovery grant funding?

   Answer: FRA published program guidance in the Federal Register on June 17, 2009 which is providing the foundation for our review of applications. Section 5

of that program guidance provides a detailed discussion of application review criteria. With regard to the logistics of application review, FRA's financial assistance team is sized for a different era with a much smaller program. To address this, everyone on FRA's financial assistance staff, even those who normally never deal with passenger issues, such as RRIF program financial analysts, participate in this review drawing upon their own area of expertise.

In addition to the expertise of the financial staff, we have also brought in volunteers from our other headquarters offices and FRA Office of Safety staff from the field to lend their subject matter expertise and experience to the evaluation process. We have also had significant help from volunteers from the Federal Transit Administration and the Volpe National Transportation Systems Center of the Research and Innovative Technology Administration. Such measures are helping FRA meet the short-term challenge of creating a new program but are not desirable for the long haul.

2. I am hearing from a lot of States regarding the need for high-speed rail corridor planning grants. What is FRA doing to address those needs?

   Answer: FRA also believes that there is a significant need for planning grants if we are to establish a sustainable HSIPR program. Planning was not an eligible use of Recovery Act funds and the only planning funds available to FRA are $9 million made available in the FY 2009 Appropriation. The President's FY 2010 budget request proposes expanding the amount of funds available for planning

3. We understand that you issued a statement indicating the awards will be given this "winter". Can you elaborate further on when you anticipate making these awards?

   Answer: I anticipate making grant decisions early in the second quarter of FY 2010.

4. Once the grants are awarded, how does FRA plan to oversee project implementation?

   Answer: Grant documentation will establish project specific expectations of schedule, scope and budget with appropriate milestones to monitor progress. FRA is establishing electronic systems to receive reports from the applicants on a regular basis. FRA hopes then to use expert engineering and architectural firms to actually undertake site inspections of work, review invoices for reasonableness and other functions necessary to provide appropriate levels of oversight and minimize risk to the Federal Government. The Recovery Act permits FRA to retain only one quarter of one percent of funds for project implementation and oversight, though DOT has since recommended to Congress this rate be increased to at least 1 percent.

5. Does FRA have any recommendations as to what kind of measures should be used to ensure compliance and accountability for recovery act investments? Does FRA have any concerns that the States who have applied for funding will be able to support the high-speed passenger rail operations in the future? Will FRA have any role in ensuring this occurs?

   Answer: The Recovery Act and the Passenger Rail Investment and Improvement Act of 2008 both place a high-priority on mitigating risk through holding grant recipients responsible for compliance and accountability to assure that projects are undertaken consistent with applicable law and completed within scope, on time and on budget. Our grant documents will incorporate appropriate milestones and other requirements to assure this takes place.

   Without addressing any specific applicant, there are States with a solid record in supporting public transportation needs, including intercity passenger rail service and those that do not have such established records. The burden will be on the latter to demonstrate that they will have the ability to support the improved passenger service in the future. FRA will require State commitments to assure the use of the improvements for their intended purpose, including providing a workable strategy that addresses any need for operating assistance A clear policy of the Administration is not to fund operating expenses. If a system is expected to operate at loss in the future, States and project sponsors must demonstrate the ability to fund this cost.

6. Will FRA establish consequences for any State recipient who fails to meet grant requirements?

   Answer: Yes. The consequences could range from a stop in the flow of federal funds until the grant requirements are met to, in the most extreme case, a refund of Federal investment.

7. In your testimony you mention that most proposed high-speed rail systems will involve the use of rights-of-way and infrastructure owned or operated by freight railroads. How does FRA plan to clarify the liability issue between freight and passenger rail as we move forward with high-speed rail on freight-owned infrastructure? Has FRA engaged the freight railroads on this topic? If so, what has been the outcome of this dialogue?

   Answer: The limit on liability contained in 49 U.S.C. 28103 has served Amtrak and the freight railroads well over the last 10 years. FRA does not propose any changes to this provision at this time.

8. How does FRA plan to oversee compliance with Buy America requirements?

   Answer: Secretary LaHood and I see a great opportunity in using the HSIPR program to stimulate a rebirth of the domestic rail supply industry. We strongly

believe that the Buy America requirements are minimum requirements. One consideration we will use in exercising our discretion whether to award grant funds is the extent that an applicant commits to exceeding those minimum requirements. FRA will include the applicable Buy America statutory requirements as conditions in any grant documents. FRA will then get reports and documentation on compliance from grant recipients.

9. Does FRA have the staff and resources to oversee the $8 billion in Recovery Act funds for the high-speed rail projects? What does it need to administer a high-speed rail program on the level provided in the Surface Transportation Authorization Act of 2009? Can you suggest any improvements/additions to that legislation?

   Answer: The President's FY 2010 budget request begins to address these needs and FRA is very appreciative of the House of Representatives' support for this portion of the President's request. FRA is developing a workforce plan for staffing an organization consistent with the Agency's expanded financial assistance mission.

10. In your testimony, you indicate that some States are further along than others in terms of developing a high-speed rail program? What can FRA do – or what can Congress do – to help these other States develop realistic high-speed rail program plans? How important is finding a dedicated source of funding for high-speed rail to achieve this?

    Answer: As discussed earlier, serious detailed planning will be key to a sustainable high speed intercity passenger rail program on a national level and in each of the States. FRA is prepared to help States in this process. We have model plans and planning procedures on our website. We have and will continue to offer to provide input and critique their planning process. But more important than that is having the in-house expertise needed to address rail issues, from reviewing plans to negotiating with railroads. Some States have very robust programs. North Carolina DOT's webpage shows a Rail Bureau with 60 people. Other States' rail programs, by contrast, have very limited rail expertise, particularly when compared to their highway and transit expertise. If they want to be serious about rail investments, this will need to change. A sustainable multi-year funded HSIPR program would help make this happen.

11. In your testimony, you discuss FRA's guidance requirement that applications demonstrate stakeholders' commitments – including that the host railroad/infrastructure owner – to advance the high-speed rail program. What will be done if a host railroad does not support high-speed rail traffic on its track?

    Answer: As I said in my testimony, we are not proposing to create a world class high-speed intercity passenger rail system at the expense of our world class freight rail system. I am convinced that there are win-win opportunities for

freight railroads and States advocating expanded intercity passenger rail and high-speed service. I believe that cooperative planning efforts that engage the freight railroads in developing the passenger rail investments plans can address most of these concerns. As a last resort, the Surface Transportation Board's authority under 49 U.S.C. 24308 could help address this issue.

12. Despite numerous attempts to bring high-speed rail to the United States, in is only gaining traction today? What can we learn from past attempts – and failures—of bringing high-speed rail to the United States?

    Answer: The key shortcoming of past efforts has been their failure at creating a rational and sustainable program. If we want to see the States get serious about true intermodal planning that incorporates rail, if we want to see the freight railroads get serious about a partnership using their assets to develop high-speed rail, and if we want to see private sector funding flow to high-speed rail investments, we need to show that we have a sustainable program. By that I mean a program, much like the Interstate Highway program, that lasts over 40 years, through all types of shifts in economic and political fortunes.

Questions from Congressman DeFazio

1. Administrator Szabo, it has been brought to my attention that FRA is requiring States to have completed a service NEPA in order to apply for Track 2 Recovery Act funds. I understand the desire of the FRA to have assurances from States that they've done the preliminary environmental work in order to anticipate any NEPA issues that might exist within the corridor. However, many States have never completed a service NEPA but can show similar environmental work through rail plans and capacity studies. Will FRA accept those types of comparable documents in lieu of a service NEPA?

   Answer: The Recovery Act did not amend or lessen in any way the Department's obligations under the National Environmental Policy Act (NEPA) and related laws, regulations and orders and section 1609 of the Recovery Act speaks directly to the applicability of NEPA to Recovery Act funded projects. FRA will work with the States to address the requirements of NEPA in as timely a manner as possible. However, we must fulfill the NEPA requirements before committing to any major program of improvements.

Questions from Congressman McMahon

1. I know the Amtrak Acela train was designed to travel at speeds as high as 130 mph – but in reality it travels at speeds less than 90 mph. Why is this the

case? What can be done by Amtrak to increase the speeds along the Northeast Corridor?

Answer: Acela operates at peak speeds of 150 mph in southwestern Massachusetts and Rhode Island and at peak speeds of 135 mph in other locations in the Northeast Corridor. The average speed between New York City and Washington is about 80 mph. This reflects time consumed in station stops as well as sections of track where, because the track and infrastructure is not engineered for high speeds, trains operate at substantially less than their peak speeds. Amtrak is tasked by section 212 of PRIIA of reporting to Congress on the improvements necessary to reduce the Washington to New York City trip times to two hours 15 minutes. Such a schedule would have an average speed of just less than 100 mph, including station stops.

2. Is there anything that Congress can do to expedite the investments or regulatory approvals necessary to improve train speeds on the Northeast Corridor line?

Answer: Defining the role for Amtrak and the Northeast Corridor as part of the high-speed program would facilitate this. Amtrak is not an eligible applicant for capital improvements under section 301 of PRIIA, although individual states may apply for funds to invest in Amtrak owned-infrastructure on the NEC and elsewhere. Also, Northeast Corridor is not an eligible activity under section 501. The other important action by Congress would be to send a strong message to the Northeast Corridor States to come together and work jointly on intercity passenger rail service on the NEC.

3. There are many trains around the world that travel at speeds approaching if not exceeding 200 mph – the TGV in France, the Bullet Train in Japan, and the train that connects Beijing and Tianjin in China. Are we aiming our sights too low in the country in terms of train speed? Why are we not seeking to build trains in this country that rival the speeds of those of our European and Asian competitors?

Answer: We do not see high-speed rail as a competition for the fastest train. Indeed, I think that one can easily lose in a discussion about the speed of trains that high-speed rail is not about moving trains but about moving people to meet market demands. Different average speeds and perhaps different technologies are needed to serve the San Francisco to Los Angeles market, a distance of 450 miles, than are needed to serve Washington, D.C. to Richmond, VA a distance of 90 miles. FRA views an important performance standard for high-speed rail is that it serves its passengers travel needs well. Moreover, it is possible to take an incremental approach by making initial improvements to raise speeds to 110 mph, for example, which in the future can provide a foundation for even higher speeds. It is also important to consider that making incremental improvements may be more cost effective

than attempting to wholly replicate the high end services found in other nations (which also have rail systems composed of trains capable of various top speeds).

4. What would be the cost of building the infrastructure to support a 200 mph train line for a distance between NYC and DC, or between Los Angeles and San Francisco?

Answer: The estimated cost of Phase I of the California High-Speed Rail Project, which would provide service with a peak speed of 220 mph over the 450 miles between San Francisco and Los Angeles, is about $40 billion, including equipment. There are no recent estimates of the cost of such a system between NYC and DC. While the distance is almost exactly half that between San Francisco and Los Angeles, the Northeast Corridor is more developed which will drive up costs to establish an alignment that can accommodate those speeds.

Questions for the Record for Joe Szabo, FRA Administrator
From Rep. John Mica, Republican Leader
Committee on Transportation & Infrastructure
Subcommittee on Railroads, Pipelines and Hazardous Materials
Hearing on High-Speed Rail – October 14, 2009

Last year's Passenger Rail Investment and Improvement Act (PRIIA) established two state-managed rail passenger programs, the "Capital Investment Grants to Support Intercity Passenger Rail Service" and the "High-Speed Rail Corridor Program". These programs received $8 billion in appropriations in the American Recovery and Reinvestment Act (ARRA).

1) Are State departments of transportation ready to manage a high-speed rail program of more than $50 billion over the next 6 years?

Answer: The States are at different stages of readiness in their ability to implement the new high-speed intercity passenger rail grant program. Comparatively few are ready to manage the program. FRA sees as a major challenge in the coming years the need to help States develop the capacity to implement rail capital investments.

2) How will you determine who the lead project sponsor is on multi-state rail corridors?

Answer: The primary responsibility for determining the relative roles and responsibilities among the States involved in multi-State corridors rests with the States themselves. Corridors that involve States that cannot resolve these issues will be at a disadvantage in this discretionary grant program.

3) As the application process for ARRA funds has progressed, have you seen any states scale back or even withdraw their initial proposals? What are the reasons for this? Have states started to take a harder look at the ongoing financial commitment required by high-speed rail, and do you think this could be a factor?

Answer: When FRA solicited initial expressions of interest for the high-speed rail program, FRA received responses from 40 States plus the District of Columbia totaling approximately $103 billion. FRA actually received applications from 37 States plus the District of Columbia for a total of approximately $57 billion. While FRA is not aware of the reasons behind all of this difference, some of it may be attributed to States recognizing that, while they have meritorious project concepts, many are at such an early stage of planning that there would be little chance to implement the projects within the time frames allowed in ARRA. It should be recognized that under the relatively mature highway and transit programs, States have been undertaking planning, environmental reviews, and design of projects for decades using funding provided, at least in part, by FHWA and FTA. Similar Federal funding for planning high-speed rail projects has generally not been available before now. Thus, there is not the high-speed intercity passenger rail project pipeline today similar to the project pipelines that exist for the other programs. The $8 billion in ARRA funds is significantly oversubscribed by applications for eligible projects and is a strong indication of the interest in high-speed intercity passenger rail investment. FRA did make the willingness of States to commit to any needed operating expenses

as an evaluation factor in reviewing applications. We are not aware of any specific instance in which an initial expression of interest was not followed by an application for that reason.

4) What level of environmental documentation is necessary to satisfy the Track 2 requirements? Are you concerned that the change in NEPA documentation requirements from the FRA's interim guidance for Recovery Act grants to the August guidance will reduce the number of State applications?

Answer: FRA is requiring under Track 2 that applications reflect the completion of a service development plan and service NEPA clearance, the latter analogous to programmatic EIS or Tier 1 EIS. This has been a consistent requirement of FRA's interim guidance and reflects FRA's statutory obligation under the National Environmental Policy Act of 1969.

5) I understand that some people are in favor comingling freight and passenger traffic at speeds over 90 mph. Has FRA studied this issue? Please describe the safety concerns that operating in mixed traffic raises.

Answer: America's only high-speed service, Amtrak's operations in the Northeast Corridor which operate safely at peak speeds between 135 mph and 150 mph, does so in a mixed rail operating environment involving high-speed service, commuter service and freight service. Operating different kinds of trains at different speeds clearly adds to the complexity of the railroad environment and the challenges of assuring safe operation. But, as with so much else regarding the development of high-speed rail service in the U.S., the safety issue must be evaluated and understood in the context of individual situations. Among the factors to be considered is the volume of freight and passenger service, equipment type, topography, and commodities shipped. FRA has and will continue to exercise its safety jurisdictional responsibilities to address the additional complexities presented by mixed traffic operations at higher speeds.

6) Your testimony states that FRA does not define high-speed rail by a particular average or top speed, but that it is superior from a time-competitive standpoint than air and/or auto on a door-to-door basis. Under this definition, do you consider Amtrak's *Acela* service on the Northeast Corridor to be high-speed rail?

Answer: Amtrak's service on the Northeast Corridor between Washington and New York City carries approximately 60% of the combined air/rail transportation market. Between New York City and Boston, Amtrak carries approximately 50%. In intermediate markets, the rail percentage is even greater. Thus, using a market-based definition, this service is high-speed.

7) PRIIA defined high-speed rail as "intercity passenger rail service that is reasonably expected to reach speeds of at least 110 miles per hour". This is a fairly low bar, compared to average speeds well above 150 mph in Europe and Asia. Will FRA require a higher speed service in some high-speed rail corridors in order to meet the air and auto competitiveness threshold?

Answer: As discussed above, FRA prefers to look to services that serve specific transportation markets well, and not some arbitrary peak or average speed. Thus, in certain markets, FRA believes trip times that reflect speeds comparable to those high-speed services in Europe or Asia may be necessary. But to be clear, it is the States that are tasked with developing their proposals to serve their transportation markets and they will determine the speeds at which they propose to operate.

8) How much weight and consideration does FRA give to the amount of non-Federal financing of intercity and high-speed rail projects when the agency evaluates applications for ARRA funding?

Answer: High-speed rail will not become a reality in the U.S. if it must rely solely on Federal funding. While ARRA provides for Federal funding up to 100 percent of the costs, the Department will seek to maximize the impact of the available funds. The extent to which State applications include non-Federal funding will be a significant factor to be considered by the Department's decision-makers, along with other factors. No specific weight has been assigned to this or any other factor, however.

9) What has FRA done to encourage partnerships with private sector infrastructure financing firms when developing intercity and high-speed rail projects?

Answer: In the new paradigm created in the PRIIA grant programs, it is primarily the State's responsibility to assemble the partnerships necessary to implement intercity and high-speed projects. FRA places a premium on projects that can expand the impact of Federal funding by attracting non-Federal funds, regardless of the source. The fact that the high-speed intercity passenger rail program is discretionary provides a significant incentive to States to seek additional sources of funding. FRA has also made progress on the implementation of section 502 of PRIIA to solicit interest from private companies to participate in the development of high-speed rail. We expect to continue to implement this section with interested States after the initial allocation of ARRA funding is announced.

Written Testimony of Petra Todorovich to the U.S. House of Representatives Committee on Transportation and Infrastructure Subcommittee on Railroads, Pipelines, and Hazardous Materials

October 14, 2009

Chairwoman Brown and members of the Committee, thank you for inviting me to testify on this important and timely topic.

I am director of America 2050, a national initiative to promote a growth strategy and infrastructure plan for America in the 21st century in response to the challenges of population growth, climate change, energy independence and the need for robust and sustainable economic growth.

America 2050 strongly supports the creation of a national network of high-speed rail corridors organized around the nation's megaregions. Megaregions are networks of metropolitan areas—like the Northeast, the Florida Megaregion, the Texas Triangle—that are connected by overlapping commuting patterns, business travel, and manufacturing supply chains and supported by large natural systems, like watersheds and forests. Spanning areas of roughly 300-600 miles across, megaregions are the ideal size for high-speed rail networks and have densities comparable to Asian and European countries with successful high-speed rail programs. Over 70 percent of America's population and jobs are concentrated in the 11 megaregions we have identified. (See Figure 1.)

The strongest case for high-speed rail is economic. America must provide capacity in its infrastructure systems for future economic growth (beyond the current recession) or else our competitors will quickly pass us by. Our initial $8 billion investment in high-speed rail pales in comparison to our largest competitor, China, which is investing roughly $300 billion in a national high-speed network. And we are not sitting on our laurels because our current surface and air transportation systems meet the current or future needs of our population and economy. In fact, the opposite is true. They are outmoded, congested, and in disrepair. We have no meaningful plan to maintain current systems and accommodate future growth.

From 2000-2050, the U.S. Census Bureau forecasts that America will grow by 158 million people, reaching a total population of 439 million. That's more than the 120 million people that America added from 1950 to 2000, during the rapid growth years following World War II and in which time America built the entire Interstate Highway System. But America has outgrown the Interstate system and can no longer support the costs of automobile-dependent growth patterns on households, the environment, and the

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global implications of our dependence on foreign oil.

High-speed rail can help meet the mobility needs of a global, knowledge-based economy, while shifting more passengers from short-haul air flights and long auto trips to electric-powered rail (which provides the opportunity to draw from renewable energy sources.) Increased mobility within the megaregions can foster greater economic synergies among adjacent metro areas, more face-to-face meetings, interactions, and transactions, with greater energy efficiency. Rail's ability to connect center city to center city supports activities in dense, walkable communities, and will work best when integrated with regional and local transit networks, providing connecting services to the origin and destination of intercity trips.

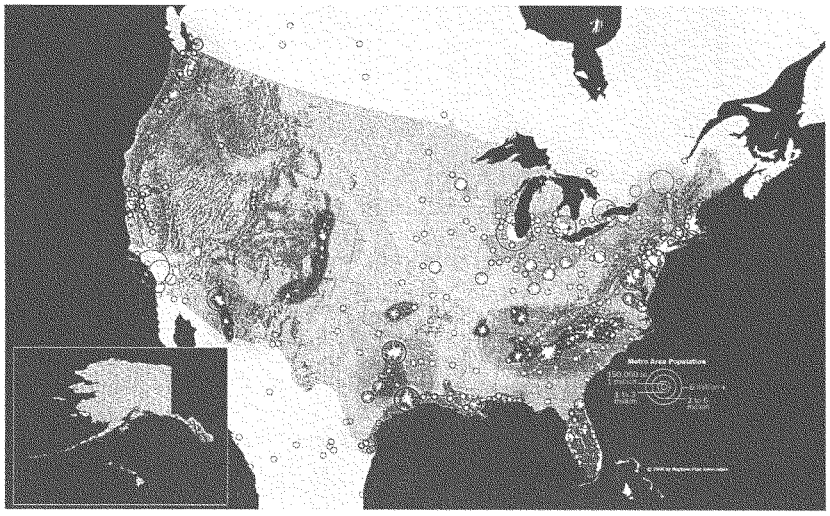

Figure 1: America's Emerging Megaregions Source: Regional Plan Association

However, going from virtually no high-speed rail in America to a robust national network is not without its risks. As the GAO recently observed, each of these high-speed rail systems will cost tens of billions of dollars in upfront costs to build the infrastructure before a single passenger pays a fare.[1] Therefore, the federal government should proceed strategically and invest first in corridors that show the greatest promise for generating ridership that will offset long-term operating costs. America 2050 recently released a report, "Where High-Speed Rail Works Best," which ranks 27,000 city pairs in the nation on their potential for ridership demand. This report is summarized below and can be downloaded in its entirety at: http://www.america2050.org/2009/09/where-high-speed-rail-works-best.html.

Where High-Speed Rail Works Best

Defining the corridors in America that are most appropriate for high-speed rail service is critical to the long-term success of the federal government's high-speed rail program. America 2050 offers one mechanism for assessing which potential high-speed

rail corridors will have the greatest ridership demand based on population size, economic activity, transit connections, existing travel markets and urban spatial form and density. We evaluated 27,000 city pairs in the nation to create an index of city pairs with the greatest demand for high-speed rail service. We provide a list below of the top 100 city pairs, which are primarily concentrated in the Northeast, California, and the Midwest.

Our ranking system should be considered as an *additional factor* for the FRA to consider as it makes its decisions about where to grant high-speed rail funding, *not the only factor*. We support the criteria that the FRA is using to evaluate different corridors, pertaining to transportation benefits, economic benefits, project readiness, organizational capacity, project engineering, environmental studies, and financial plans. However, we wrote this report because we felt the FRA should also develop metrics to compare the scale of these benefits across regions. Specifically, the FRA should develop a mechanism for judging which corridors across the nation have the greatest potential ridership demand for high-speed rail. The $8 billion appropriated for high-speed rail in the ARRA legislation[2] is only a small fraction of what will be necessary to fully construct an American high-speed rail network. To maintain public support for a continued federal commitment to high-speed rail, the initial investments must be viewed as a success.

Although there are many promising projects in smaller travel markets that should be part of a fully constructed network, these will be better positioned for success if the initial $8 billion are invested in projects that can achieve the greatest travel benefits for the largest numbers in the shortest period of time.

For this to be true, they need to fund projects in corridors with the appropriate density, economic activity, and existing travel markets to support strong ridership on these new services. Investing in corridors with the maximum potential to support ridership reduces risk, increasing the probability of success and long term public support.

Determining Potential Market Demand for High-Speed Rail

Given the long lead time and inherent risk in high-speed rail investments, it is essential that the FRA select corridors where the conditions exist to support strong passenger demand for high-speed services. In addition to the FRA's criteria described above, America 2050 has developed a ranking system based on an index of six criteria to judge the extent of demand for high-speed rail between any two city pairs. Each city pair consists of two cities, each with a population of at least 50,000 that are separated by a distance of 100 to 500 miles. These criteria were weighted and then calculated into an index that scored the city pairs. The largest index score represented the best potential market for high-speed rail. The criteria and the results of the index are described below.

The city pairs were evaluated on the basis of the following criteria:

- **City and metropolitan area population, favoring cities with larger populations in large metropolitan areas.**
- **Distance between city pairs, confined to distances between 100-500 miles, with distances between 150 - 300 miles receiving the highest value.**
- **Metropolitan regions with existing transit systems including regional rail, commuter rail and local transit networks.**
- **Metropolitan GDP, awarding value based on the combined per-capita GDP.**
- **Metropolitan regions with high levels of auto congestion as measured by the**

Texas Transportation Institute's Travel Time Index.

- **Metropolitan regions that are located within a megaregion.**

Criterion 1: Metropolitan Population Size

To ensure sufficient travel demand for high-speed rail service, it is best to locate stations in major metropolitan areas. There are 21 metro regions in the nation with a population of at least 2.5 million; all are located within one of the 11 emerging megaregions across the country. The index also weighted whether the city was the primary city of a metropolitan region and the size of that city. The Northeast megaregion alone contains four of the top ten most populous metro regions in the nation – New York, Philadelphia, Washington, D.C., and Boston. The Midwest and Texas Triangle megaregions each contain two metro areas in the top ten.

Criterion 2: Distance

The competitive advantage of high-speed rail over other modes of travel is maximized at distances between 100 to 500 miles. Distances below 100 miles are better suited for auto and commuter rail networks whereas distances greater than 500 miles are more efficiently travelled by air. There are significant barriers to air travel causing it to be inefficient at short distances. These barriers include accessing airports located outside the metropolitan core, onerous security processes, long check-in times, and airport delays and congestion. These time barriers to air travel result in significant time advantages to efficient rail service. This time advantage drops off sharply at distances beyond 500 miles when the superior in-flight speed of air travel overwhelms the initial time costs of travelling to and checking in at the airport. This index weighted the distance criteria such that it peaked between 150 and 300 miles.

Criterion 3: Transit Connections

Two additional competitive advantages of rail over air are rail's ability to bring passengers directly into the city center and attract riders through connecting local and regional transit networks, which act as feeder services. High-speed rail systems will attract greater numbers of riders if they begin and end in central locations within the metro region and tie seamlessly into existing commuter rail and transit systems. These commuter and local transit systems support intercity ridership by offering passengers options to transfer to final destinations. Without access to transit systems, intercity passengers are dependant on autos to begin or end their trip, significantly decreasing rail's competitive advantage. The presence and use of transit and regional rail systems within a metropolitan region also may indicate a willingness of the people in that region to leave their cars at home and the land use patterns that support that choice—making use of high-speed rail a more likely option. (Our analysis could be improved by also factoring in the existence and extent of bus transit, for which we were not able to collect sufficient data in time for this study.)

Criterion 4: Economic Productivity

High-speed rail systems depend heavily on business travel to sustain ridership and

business travel is highest in places with more productive economies. Studies also show that travel increases with increased income, whether for business, personal, or leisure travel.[3] [4] Gross Domestic Product (GDP) per capita is the broadest measure that is associated with both economic productivity and personal income.

Criterion 5: Congestion

The goal of congestion reduction, both at airports and on highways, is one motivation for building high-speed rail systems. Metropolitan congestion increases intercity auto travel time making rail a more attractive option. The Texas Transportation Institute (TTI) congestion index for metropolitan areas was used to select metro areas with high rates of auto congestion.

While relieving auto congestion is a major potential benefit, high-speed rail systems tend to compete more with short-haul air travel than intercity auto trips and have the potential to decongest some of the nation's most congested airports. Although not included in the rankings, airports with high levels of congestion may indicate high volumes of intercity passenger travel originating or ending in that city—though the effect of airlines hubs on congestion must be discounted.

Criterion 6: Megaregion

The final criterion included in the index takes into account urban form and population density, by determining whether a city is located in a megaregion. Megaregions are networks of metropolitan regions with shared economies, infrastructure and natural resource systems, stretching over distances of roughly 300 miles - 600 miles in length. High-speed rail systems work best as part of a network with multiple connections, as has been shown in European and Asian megaregions. Cities that are located in one of the eleven megaregions are more likely to be part of a network of interconnected cities with the appropriate density to support high-speed rail systems, rather than an isolated city pair. Most of these megaregions have population densities similar to European countries with successful high-speed rail systems. The most densely populated megaregion is the Northeast, which approaches densities found in Japan and other Asian countries, followed by Southern Florida.[5]

Results

The six criteria described above were used to create an index that ranked 27,000 city pairs on their suitability, based on potential market demand, to act as origin and destination nodes of one leg of a high-speed rail corridor.[6] The top 100 pairs in the index are shown below. The top city pairs identified were primarily concentrated in the Northeast, California, and the Midwest.

Top 100 City Pairs

Rank	Corridor	Score	Rank	Corridor	Score
1	New York-Washington	100.00	51	Columbus-New York	85.11
2	Philadelphia-Washington	98.24	52	New York-Richmond	85.08
3	Boston-New York	97.22	53	Baltimore-Cleveland	84.98
4	Baltimore-New York	96.83	54	Austin-Houston	84.95
5	Los Angeles-San Francisco	96.43	55	Bridgeport-Washington	84.58
6	Boston-Philadelphia	96.05	55	Houston-San Antonio	84.58
7	Los Angeles-San Diego	94.92	57	Baltimore-Charlotte	84.46
8	Los Angeles-San Jose	94.19	58	Ann Arbor-Chicago	84.41
9	Boston-Washington	92.79	58	Buffalo-Philadelphia	84.41
10	Dallas-Houston	91.37	60	New York-Worcester	84.35
11	Chicago-Detroit	91.09	61	Manchester-Philadelphia	84.30
12	Baltimore-Boston	90.39	62	Durham-Washington	84.24
13	Chicago-Columbus	89.42	62	Washington-Winston-Salem	84.24
14	Chicago-Saint Louis	89.25	64	Chicago-Pittsburgh	84.23
15	Los Angeles-Phoenix	89.03	65	Chicago-Madison	84.20
16	Chicago-Cleveland	88.71	66	Baltimore-Detroit	84.12
17	Charlotte-Washington	88.43	67	Philadelphia-Rochester	84.08
18	San Diego-San Francisco	88.39	68	Baltimore-Pittsburgh	84.02
19	Columbus-Washington	88.32	68	Rochester-Washington	84.02
20	Cleveland-Washington	88.21	70	Dallas-San Antonio	83.96
21	New York-Pittsburgh	88.13	71	New York-Raleigh	83.91
22	Phoenix-San Diego	88.03	72	Philadelphia-Richmond	83.91
23	Las Vegas-Los Angeles	87.97	73	Los Angeles-Salinas	83.85
24	Detroit-New York	87.79	74	Chicago-Lansing	83.69
25	Chicago-Minneapolis	87.47	75	Baltimore-Columbus	83.67
26	Detroit-Washington	87.33	76	Riverside-San Francisco	83.62
27	Cleveland-New York	87.27	77	Las Vegas-San Diego	83.52
28	Philadelphia-Pittsburgh	87.25	78	Chicago-Fort Wayne	83.44
29	Portland-Seattle	87.23	79	Durham-Philadelphia	83.37
30	Pittsburgh-Washington	87.19	80	Atlanta-Charlotte	83.35
31	Los Angeles-Sacramento	86.69	80	Chicago-Dayton	83.35
32	New York-Providence	86.58	82	Erie-New York	83.33
32	Raleigh-Washington	86.58	83	Chicago-Green Bay	83.30
34	Detroit-Philadelphia	86.36	83	Philadelphia-Virginia Beach	83.30
35	Chicago-Louisville	86.30	85	Buffalo-Washington	83.24
36	Hartford-Philadelphia	86.25	85	Virginia Beach-Washington	83.24
37	San Diego-San Jose	86.14	87	Houston-New Orleans	83.19
38	Hartford-Washington	86.13	88	Philadelphia-Worcester	83.18
39	Chicago-Cincinnati	86.02	89	New York-Springfield	83.15
40	Cleveland-Philadelphia	85.99	90	Greensboro-Washington	83.13
41	Charlotte-Philadelphia	85.78	91	Baltimore-Hartford	83.02
42	Philadelphia-Raleigh	85.60	92	Providence-Washington	82.95
43	Buffalo-New York	85.58	93	New Haven-Philadelphia	82.90
43	New York-Virginia Beach	85.58	94	Allentown-Washington	82.90
45	Austin-Dallas	85.52	95	New Haven-Washington	82.85
46	Manchester-New York	85.47	96	Chicago-Grand Rapids	82.84
47	Philadelphia-Providence	85.41	97	Chicago-Peoria	82.82
48	Bridgeport-Philadelphia	85.36	98	Fayetteville-Washington	82.74
49	Columbus-Philadelphia	85.31	98	Los Angeles-Modesto	82.74
50	New York-Rochester	85.24	98	Miami-Tampa	82.74

It is no surprise that the nation's four largest cities (New York, Los Angeles, Chicago, and Houston) are all represented near the top of the list as part of city pairs with potential demand for high-speed rail. These are the places that not only contain a critical mass of population to support these systems, but also a large percentage of the nation's economic productivity, existing travel markets, and metropolitan congestion.

The New York to Washington, D.C. market was the top pair of the 27,000 pairs analyzed.[7] In many ways this city pair typifies the ideal corridor for high-speed rail and shares similar attributes with successful existing corridors around the word. Population density in the Northeast megaregion is higher than anywhere else in the nation, is higher than almost anywhere in Europe, and is similar to densities in Japan. Both cities have extensive transit and regional rail systems to complement intercity rail traffic. Both cities have productive economies and have an extensive existing travel market. And the two cities are separated by just over 200 miles with two major cities in between, Philadelphia and Baltimore. This corridor shares many of the characteristics with the most successful (in term of ridership) high-speed rail corridor in the world, Tokyo to Osaka, which is similar in distance, density, existence of supportive transit systems, and major intermediate cities, Nagoya and Kyoto.

Although one Texas city pair made it into the top ten in the index (Dallas-Houston), the other major connections in the Texas Triangle are further down on the list (Austin-Dallas: 45th; Austin-Houston: 54th; Houston-San Antonio: 56th: Dallas-San Antonio: 70th). These corridors tended to be ranked lower than the city pairs in California (six California city pairs were ranked in the top 25) and the Midwest (with city pairs including Chicago, Detroit, Columbus, Cleveland, and Pittsburgh), which all appeared multiple times in the top 50 pairs. Although these Texas corridors scored well in overall population, length of corridor, and economic activity, the lack of (or limited) existing local and regional transit systems in these cities reduced their overall rankings.

The only Florida pair to make the top 100, Miami-Tampa, included two large metros (at least 2.5 million), but cities of only moderate in size (300-400K). This hurt their ranking in relation to cities like New York, Chicago, and Los Angeles and reflected the methodology (below), which used city population in addition to metro region population to account for how much of the region's population is centrally located rather than sprawled out in suburbs and exurbs. Next, although both cities have transit systems, they are small relative to many of the other cities that appear above them in the rankings. The per capita GDP of the metro areas are 46K for Miami and 42K for Tampa, which placed them in the middle of the pack. The criterion for auto congestion was toward the top of the city pairs (particularly for Miami) but still behind many of the city pairs above them on the list including most of the California cities, New York and Chicago.

City pairs with at least one city with local transit and commuter rail systems tended to populate the top 100 city pairs. Corridors which included two such cities including New York, Washington, Philadelphia, Los Angeles, and San Francisco all can be found in the top 10.

How to Interpret America 2050's Ranking

It is important to note that America 2050's ranking and analysis above did not take into account on-the-ground factors, such as the condition of existing rail infrastructure, local support, or preliminary engineering of rail plans. We are confident that these are factors the FRA will strongly consider in their evaluation process. We also lack access to the information in the hundreds of high-speed rail grant applications that have been submitted by states across the nation.

We believe that the presence of any city pair in the top 100 pairs of our ranking indicates a potential to support high-speed rail service in that corridor. Many more on-the-ground factors will make the difference in whether ridership will materialize. Most critical will be the integration of high-speed rail services within existing local and regional transit networks, the location of stations within walkable, dense environments with easy access to major destinations, and the existence of intercity travel markets between the points which the new high-speed rail connection will serve.

Our ranking and analysis demonstrate one mechanism of comparing ridership demand across corridors in the nation. We hope this will spur additional studies and conversations about what factors must be in place to create the conditions to maximize high-speed rail investment. Since releasing the report, we have already collected suggestions on additional criteria that would improve this analysis in a second round, such as by evaluating:

- Corridors that connect to Canadian and Mexican cities, like Vancouver, Montreal, Toronto, and Tijuana.
- Existing air travel between city pairs.
- The benefits of connecting multiple cities with strong ridership demand along a corridor or in a network.
- Population density around proposed high-speed rail stations.
- Numbers of tourists and visitors that may use high-speed rail, particularly in regions with high numbers of visitors, like Orlando and Las Vegas.
- The presence of other forms of public transportation in addition to fixed rail transit.

In conclusion, we strongly support the federal government's new high-speed rail program and offer this analysis as another factor for the FRA to consider as it makes decisions about where to invest first.

Ultimately, America must invest at higher levels that the $8 billion provided in ARRA, and must secure a new long-term revenue source for high-speed rail America.

To ensure the long-term success of this program, we must increase understanding about where high-speed rail works best in the United States. We believe it is in corridors of roughly 100 – 500 miles in length, with growing populations, economies, and the presence of regional and local transit networks that can provide connections for intercity passengers. America's 11 emerging megaregions – networks of metropolitan regions connected by linked economies, travel patterns, and shared environmental resources – are among the prime areas suited for intercity rail investment.

Technical Appendix

This technical appendix defines the terms and equation used in this analysis.

In this study, evaluation criteria were applied to city pairs to analyze potential high-speed rail corridors. However, before doing so, these "city pairs" were created using a geographic information system. First, we selected every incorporated place in the nation with a population of at least 50,000. This process yielded approximately 600 cities and towns. From these 600 places, city pairs were created by connecting each one of the cities to every other city located between 100 and 500 miles from the originating city. This yielded approximately 27,000 city pairs across the nation on which the analysis was based.

Twelve variables were used in the creation of the index across six categories: metropolitan size, distance, transit connections, economic vitality, and congestion. These variables were weighted and then summed into an index that scored the city pairs. An explanation of each variable with its associated value and the equation used to create this index follows.

The scores for the 27,000 city pairs ranked in this index ranged from 3.9 to 44.9. The scores listed beside the city pair in the table in the text of this document represent that city pair's scores as a percentage of the top score.

Transit Variables:

Commuter Rail

Is there a commuter rail system in the metropolitan area?

Yes----------1
No----------0

Syntax in equation:
CR = Commuter Rail Starting City
CR_1 = Commuter Rail Ending City

Light Rail

Is there a light rail system in the city?

Yes----------1
No----------0

Syntax in equation:
LR = Light Rail Starting City
LR_1 = Light Rail Ending City

Light Rail System Route Miles

If a light rail system exists, how many route miles are there in the system?

0----------0
>0 -15----------0.5
15-30----------1
>30----------1.5

Syntax in equation:
S_LR_Len_I = Starting City Light Rail System Mileage
E_LR_len_I = Ending City Light Rail System Mileage

Heavy Rail Transit
Is there a heavy rail transit system in the city?
Yes----------1
No----------0

Syntax in Equation:
HRT = Heavy Rail Transit Starting City
HRT_1 = Heavy Rail Transit Ending City

Heavy Rail Transit System Route Miles
If a heavy rail transit system exists, how many route miles are there in the system?
0----------0
>0 -25----------0.5
25-100----------1
>100----------3

Syntax in equation:
S_HR_Len_I = Starting City Heavy Rail Transit System Mileage
E_HR_Len_I = Ending City Heavy Rail Transit System Mileage

Population Variables

Metropolitan Area Population
What is the population of the metropolitan area in which the city is located?
Under 250,000----------0
250,000 – 1,000,000-------1
1,000,000 – 2,500,000-----2
More than 2,500,000-------3

Syntax in Equation:
Met_Pop = Metro population Starting City
Met_Pop_1 = Metro population Ending City

Largest City in Metro Area
Is the city the largest city in the metro region? Note: This variable is heavily weighted in the equation to select for the primary city in metro region for HSR location.
Yes---------- ----1
No----------0

Syntax in Equation:
Metro_Main = Largest city in Metro Area Starting City
Metro_Ma_1 = Largest city in Metro Area Ending City

City Population

What is the population of the city?

Under 100,000----------0
100,000 – 500,000----------1
500,000 – 1,500,000--------2
More than 1,500,000--------3

Syntax in Equation:
City_pop = City Population Starting City
City_pop_1 = City Population Ending City

Location Variable

In Megaregion

Is the city located in a megaregion?

Yes----------1
No----------0

Syntax in Equation:
Mega = In Megaregion Starting City
Mega_1 = In Megaregion Ending City

Distance Variable

Corridor Length

What is the distance between city pairs?
For lengths < 150 miles the value is obtained by ((length/100) +1); for lengths 150 – 300 miles the value plateaus at 2.5; for lengths 300 - 350 values is obtained by (((500-length)/100) +0.5); for lengths > 350 miles (500-length/100).

The value begins at 2 for corridor lengths of 100 miles, increases linearly and peaks at 2.5 for corridor lengths between 150 – 300 miles, decreases linearly to 2 at lengths of 350, then decreases to 1.5 and continues decreasing linearly to a value of 0 for lengths of 500 miles.

100----------2
150 – 300 ----------2.5
350----------2
400----------1
500----------0

Syntax in Equation:
C_Length = Corridor Length

Economic Variable

Metro GDP

What is the combined geometric mean of the two metro areas that make up the city pair? The geometric mean of the two metro regions' per capita GDP was created by taking the square root of the product of the per capita GDP of the starting metro area and the per capita GDP of the ending metro area.

< 20,000----------0

20,000 - 30----------0.5
30,000 - 40----------1
40,000 - 50----------1.5
50,000 - 60----------2
> 60,000----------2.5

Syntax for Equation:
C_GDP_Cap = Geometric mean of GDP of the two metro regions

Congestion Variable

TTI Index
What is the combined Texas Transportation Institute's Travel Time Index (TTI) for of the two cities that make up the city pair? TTI ranges from 1 to 1.5. The combined index was created by subtracting 1 from the TTI from each city and multiplying their sum by 2.5. This resulted is a value for this variable that is a continuous scale between 0 and 2.275.

Note: Not all metro areas have TTI indices. Cities not specifically identified with a TTI were given the TTI for their class of metro region, either "small" (150,000-500,000 = 1.09), "medium" (500,000 – 1,000,000 = 1.16), or "large" (1,000,000 = 1.23) metro region.

Syntax for
TTI_IND = Combined TTI index of two cities in city pair

Equation

[CR]+ 0.5*[LR]+ 0.5*[S_LR_Len_I]+ 0.5*[HRT]+ 0.5*[S_HR_Len_I] +[Met_Pop]+10* [Metro_Main] + [City_pop] + [Mega] + [CR_1] + 0.5*[LR_1]+ 0.5* [E_LR_Len_I] + 0.5*[HRT_1]+0.5* [E_HR_Len_I]+ [Met_Pop_1]+10* [Metro_Ma_1]+ [City_pop_1] + [Mega_1]+ [C_Length] + [C_GDP_Scal]+ [TTI_Ind]

Starting City [Does city have of Commuter rail (0,1) + 0.5 times does the city have light rail (0,1) + 0.5 times length of light rail system (0, 0.5, 1, 1.5) + 0.5 times does the city have heavy rail transit (0,1) + 0.5 times length of heavy rail transit system (0, 0.5, 1, 3) + What is metropolitan population in which the city is in (0,1,2,3) + ten times is the city the largest city in its metro region (0,1) + what is the city population (0,1,2,3) Is the city in a megaregion (0,1)] + **Ending City** [Does city have of Commuter rail (0,1) + 0.5 times does the city have light rail (0,1) + 0.5 times length of light rail system (0, 0.5, 1, 1.5) + 0.5 times does the city have heavy rail transit (0,1) + 0.5 times length of heavy rail transit system (0, 0.5, 1, 3) + What is metropolitan population in which the city is in (0,1,2,3) + ten times is the city the largest city in its metro region (0,1) + what is the city population (0,1,2,3) Is the city in a megaregion (0,1)] + **Corridor** [what is the length of the corridor (0-2.5) + what is the geometric mean of the GDPs of the two cities (0, 0.5, 1, 1.5, 2, 2.5) + combined TTI index of the two cities.

[1] U.S. Government Accountability Office, March 2009, "High-speed Passenger Rail: Future Development Will Depend on Addressing Financial and Other Challenges and Establishing a Clear Federal Role."

[2] An additional $5 billion over five years was proposed in the Obama administration's budget request; the House of Representatives recently raised this amount $4 billion in the first year alone, however in the Senate version of the bill it was reduced back down to $1.2 billion.

[3] Polzin, S. E., 2004, "Relationship Between Land Use, Urban Form And Vehicle Miles Of Travel: The State Of Knowledge And Implications For Transportation Planning," Tampa: University of South Florida, Florida Department of Transportation, Federal Highway Administration.

http://www.cutr.usf.edu/pubs/Trans-LU%20White%20Paper%20Final.pdf

[4] Ewing, R. and Cervero, R., 2001, "Travel and the Built Environment: A Synthesis." *Transportation Research Record 1780.* Washington, D.C.: Transportation Research Board, National Research Council. http://depts.washington.edu/trac/concurrency/lit_review/trr1780.pdf

[5] The densities of the major European countries range from 200 to 650 people per square mile (sq. mi.). France and Spain, two countries that have successfully deployed high speed rail networks have population densities of 300 and 200 per sq. mi. respectively. In the U.S. seven of the eleven megaregions have population densities in the 200 to 400 range with the Northeast as a notable outlier with a density of 800 per sq. mi. Although a comparison between international countries and domestic megaregions may not be an equal comparison, it does provide some evidence that high-speed rail networks at this density are viable. For a complete listing of densities of all eleven U.S. megaregions, see: Regional Plan Association, 2008, "America 2050: An Infrastructure Vision for 21st Century America." p. 11. http://www.america2050.org/2008/11/an-infrastrucutre-vision-for-2.html

[6] A complete description of the criteria and equation used to create this index is included in the technical appendix at the end of this report.

[7] This study only analyzed city pairs between 100 and 500 miles apart. However, city pairs either less than 100 miles or more than 500 miles could potentially be good candidates for high speed rail based on congestion levels between the cities and geographic constraints. For example, city pairs such as New York-Philadelphia and Chicago-Milwaukee are not included in this study because they are separated by only 90 miles, but rank second and seventh respectively in current intercity rail volume. Despite their omission, both of these city pairs are part of a larger network included in the first phase of the proposed plan discussed below.

Petra Todorovich
Director

November 2, 2009

The Honorable Corrine Brown
Chairwoman
Subcommittee on Railroads, Pipelines,
and Hazardous Materials
U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, D.C. 20515

Dear Chairwoman Brown:

Thank you for your further questions for the record of the hearing, "High-Speed Rail in the United States: Opportunities and Challenges." I have reproduced your questions and provided my responses below.

- Q: You mention the need to use electric-powered rail to draw from renewable energy sources. How can passenger/high-speed rail play a role in the climate change debate?
    - A: In addition to the ability of electrified passenger rail to draw its electricity from renewable sources, thus avoiding the use of imported motor fuel; high-speed rail can reinforce sustainable land development patterns by supporting more compact, walkable communities. By connecting passengers from center city to center city, passenger rail reinforces the primacy of center cities as the most efficient place to concentrate jobs, housing, and commercial activities. Concentrating activities in central places reduces the need for auto trips, again reducing our depending on foreign oil and curbing greenhouse gas emissions. High-speed rail can also serve the greatest number of intercity passengers on the smallest land area footprint – (think of the amount of space required by an airport to serve a similar number of passengers as high-speed rail or the number of parking spaces needed to accommodate the 206,000 regional and intercity rail passengers who arrive in Manhattan via Penn Station every day). And high-speed rail will work best when it connects to local and regional public transportation networks, reinforcing sustainable land patterns and transit-oriented development in the regions it serves. Finally, passenger trains are generally more energy efficient on a per-passenger basis than autos or airplanes for intercity trips. Though, the energy efficiency on a per passenger basis is dependent on the degree to which the trains are filled with passengers—one reason why we must

invest strategically in places that are likely to have the strongest ridership demand.

- Q: You state in your written testimony that the Federal government should proceed strategically and invest the $8 billion provided in the Recovery Act first in high-speed rail corridors that show the greatest promise for generating ridership that will offset long-term operating costs. You recommend that FRA should develop a mechanism for judging which corridors have the greatest potential ridership demand for high-speed rail. What mechanism should they use?

    - A: Our study, "Where High-Speed Rail Works Best," provides one mechanism for evaluating potential ridership. We hope the FRA will review the results of this study as they develop their own model of estimating ridership demand for passenger services nationwide. We are also updating our study to consider additional criteria that we believe will contribute to ridership demand and recommend that the FRA consider these criteria in its analysis. They include:

        - City and metropolitan area population.
        - Population and employment density around proposed station areas.
        - Distance of the corridor, favoring corridors of 90 - 600 miles in length. (Longer distances are more efficiently served by air travel and shorter distances are better served by local and regional transit or auto trips.)
        - Existence and extent of local and regional public transit systems connecting to proposed high-speed rail stations. Public transit ridership in regions with proposed HSR stations.
        - Per capita metropolitan GDP of regions connected by proposed HSR networks.
        - Existing intercity travel markets between cities in the proposed corridor, as measured by air and auto trips
        - Projected population growth in cities and regions of proposed services.
        - Estimated numbers of tourists and visitors that may use high-speed rail.
- Q: You discuss defining high-speed rail corridors. Historically, high-speed rail corridors have been designated by the Secretary. The creation of the eleven corridors stems back to the Intermodal Surface Transportation Efficiency Act of 1991 when a program was created to eliminate grade crossings on high-speed rail routes. Do you believe that the way in which a high–speed rail corridor is defined and designated is outdated, and if so how would you recommend defining corridors? Do you think this should be done in our high-speed rail corridor development program which is part of the Surface Transportation Authorization Act?

    - A: Much has changed in this country since 1991 when the federal high-speed rail corridors were first developed. It is time to update this map to reflect the federal goals for a national high-speed rail program and show corridors on the map that have the potential to meet these goals. The FRA took a step in this direction with the Preliminary National Rail Plan released in October 2009. Moving forward, the FRA should develop a set of clearly defined, broadly supported, goals for the federal high-speed rail program and criteria that measure each potential corridor's ability to meet those goals. For example, if the goal of the program is

to offset short-haul air flights at the nation's busiest airports, the map could reflect high-speed rail corridors that have the greatest potential to achieve this goal. However, we assume that the federal program will aim to meet multiple goals, thus suggesting an approach in which the FRA considers and weighs multiple criteria with expressed interest by states and regions to pursue and develop corridors.

- The FRA should also continuously update and keep current the map it includes in its 2009 Preliminary National Rail Plan on p 11 (Figure 4), which reflects high-speed/passenger rail planning efforts nationwide. Future versions of this map should reflect the FRA's three separate categories of high-speed rail: HSR Express; HSR Regional, and Emerging HSR. After the FRA finishes reviewing the first round of applications for the ARRA high-speed rail funding, they will be in a better position to update this map with the most recent information on planning efforts across the country.

- The high-speed rail corridor development program in the Surface Transportation Authorization Act is consistent with the approach recommended above, though it could go into greater detail calling on the Secretary to evaluate proposed corridors against stated goals for the national high-speed rail program.

- One additional suggestion for this Committee is to make every effort to appropriate adequate funding to the FRA to build staff capacity as it makes the transition from responsibilities that focused primarily on railroad safety to significant new planning and policy responsibilities.

Sincerely,

Petra Todorovich

SIEMENS Industry

October 13, 2009

Honorable Corrine Brown, Chairwoman
Subcommittee on Railroads, Pipelines, and Hazardous Materials
Committee on Transportation and Infrastructure
House of Representatives
Washington, DC 20515

Dear Chairwoman Brown:

I wanted to take this opportunity to inform you of the capabilities that Siemens has in the high-speed rail area as part of your hearing scheduled for October 14th on "High-Speed Rail in the United States: Opportunities and Challenges".

As you know, Siemens is a world-wide supplier of high speed rail equipment. Siemens trains, capable of over 220 miles per hour speeds, travel on routes in Germany, Spain, Russia, and China. Siemens also manufactures push/pull locomotives and accompanying coaches for the emerging high-speed rail corridors as well as Diesel Multiple Unit (DMU) and Electric Multiple Unit (EMU) train sets.

For the past 25 years, our manufacturing facility in Sacramento, California, has been producing light rail train sets for many cities across the United States. We employ over 600 workers at this site and are adding another 150 employees in the coming months. Additionally, solar energy powers 50% of the facility's needs through a 1 megawatt photovoltaic system, and we are about to add one more full megawatt of solar power. As the high speed market in the United States develops, Siemens plans to increase the capacity of the Sacramento site to produce all of the products that might be specified for purchase by the various corridors.

I want to reiterate that Siemens commits to produce any and all of the trains needed for high speed rail development in United States manufacturing facilities with United States workers. We will develop these production facilities as the demand dictates and will do so without any federal economic stimulus grants.

I ask you to make this letter part of the record for your hearing.

Best regards,

Oliver Hauck
President, Siemens Mobility Division
Siemens Industry, Inc.

CC:
Ranking Member Bill Shuster
Chairman James L. Oberstar
Ranking Member John L. Mica
Secretary of Transportation, Ray LaHood
Administrator, Federal Railroad Administration Joe Szabo

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