Statement of
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Before The
Subcommittee on Railroads, Pipelines and Hazardous Materials
Committee on Transportation and Infrastructure
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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:

Transportation Investment requirements Avoided

[1] Available on the CAHSR website at CAHighSpeed Rail.ca.gov

- 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.

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