



**U.S. House of Representatives**  
**Committee on Transportation and Infrastructure**

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**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 Freight and Passenger Rail: Present and Future Roles, Performance, Benefits, and Needs

**PURPOSE OF HEARING**

The Subcommittee on Railroads, Pipelines, and Hazardous Materials is scheduled to meet on January 28, 2009, at 10:00 a.m. in 2167 Rayburn House Office Building to receive testimony on the roles of freight and passenger railroads in the U.S. economy; the impact of the current economic crisis on the railroad industry, its suppliers, and employees; the benefits of freight and passenger rail; and freight and passenger rail investment needs.

**BACKGROUND**

Railroads are the backbone of North America's transportation network. From the building of our nation's first railroad in 1828 – the 13-mile Baltimore & Ohio Railroad – throughout the next 180 years, railroads have played a central role in our nation's economic development.

Structurally, the U.S. railroad system is comprised of 140,810 miles of track, 562 common carrier freight railroads, and one national passenger railroad, Amtrak. Altogether these railroads employ more than 200,000 workers.

Under regulations prescribed by the Surface Transportation Board, all freight and passenger railroads are divided into three classes based on annual carrier operating revenues. Class I railroads are the largest railroads, with annual operating revenues of \$319.3 million or more. They account for 68 percent of the industry's mileage, 89 percent of its workforce, and 93 percent of its freight

revenue. The eight Class I railroads are Amtrak; BNSF Railway; CSX Transportation; Grand Trunk Corporation, which consists of the U.S. operations of Canadian National, including the former Grand Trunk Western, Illinois Central, and Wisconsin Central; Kansas City Southern; Norfolk Southern; the former Soo Line owned by Canadian Pacific; and Union Pacific.

Class II railroads, known as regional or short line railroads, are those with annual operating revenues of more than \$25.5 million but less than \$319.3 million. Class III railroads, known as local line-haul carriers, are those with annual operating revenues of \$25.5 million or less. In 2008, there were 30 Class II railroads and 320 Class III railroads in the U.S.

### Freight Rail Needs

In the United States, freight railroads account for more than 40 percent of all intercity freight volume – more than trucks, boats, barges, or planes. They move 70 percent of all automobiles produced in the United States, 30 percent of our nation's grain harvest, and 65 percent of the coal, which in turn provides more than one-half of our nation's electricity. According to the railroad association, the railroads move enough wheat to provide every person in the United States a fresh loaf of bread six days a week; enough lumber to build almost three houses every minute of every day; and enough concrete to build 45 miles of new highway every day.

Until the recent economic crisis, business for the freight railroads was booming. The U.S. Department of Transportation ("DOT") predicted that the demand for rail freight transportation—measured in tonnage—would increase 88 percent by 2035. Ton-miles of rail freight (one ton of freight moved one mile counts as one ton-mile) carried over the national rail system had doubled since 1980, and the density of train traffic—measured in ton-miles per mile of track—had tripled since 1980.

At the request of the National Surface Transportation Policy and Revenue Study Commission, the railroad association commissioned an assessment of the capacity of the nation's rail system to accommodate the estimated increase in rail freight traffic. *The National Rail Freight Infrastructure Capacity and Investment Study*, conducted by Cambridge Systematics, Inc., found the costs of improvements needed to accommodate rail freight demand in 2035 is estimated at \$148 billion (in 2007 dollars). The Class I freight railroads' share of this cost is projected to be \$135 billion while the short line and regional freight railroads' share is projected to be \$13 billion.

Prior to the economic crisis, the Class I railroads anticipated that they would be able to generate approximately \$96 billion of their \$135 billion share through increased earnings from revenue growth, higher volumes, and productivity improvements, while continuing to renew existing infrastructure and equipment, leaving a balance for the Class I freight railroads of \$39 billion or about \$1.4 billion per year to be funded from other sources. Without this investment, Cambridge Systematics estimates that 30 percent of the rail miles in primary rail corridors (the preponderance of rail freight traffic) will be operating above capacity by 2035, and another 25 percent will be operating near or at capacity.

The \$96 billion, however, had assumed that the railroads could continue increasing their investments in capital expansion. Due to the economic crisis, some railroads are cutting back on those investments. Rail volumes are sliding considerably. Just last week, the railroad association announced that carload freight totaled 267,063 cars, down 17.9 percent from 2008, with loadings

down 13.2 percent in the West and 24.4 percent in the East. Intermodal volume of 199,117 trailers or containers was off 13.7 percent from last year, with container volume falling 10.2 percent and trailer volume dipping 27 percent. Total volume was estimated at 28.3 billion ton-miles, off 16.8 percent from 2008. Grain shipments, for example, are down 31.4 percent compared to 2008; lumber products are down 38.1 percent; chemical shipments are down 20.6 percent; auto shipments are down 64.6 percent; and coal shipments are down 2.5 percent. Employment levels in the railroad industry are also down. According to payroll data from the Bureau of Labor Statistics ("BLS"), as of December 2008, the industry employed approximately 232,000 people – a decline of 4,000 jobs in less than two years. Further cuts are anticipated. In addition, unpublished tables from BLS suggest that the unemployment rate in the railroad industry increased from 2.7 percent in the fourth quarter of 2007 to 6.3 percent in the fourth quarter of 2008 (not seasonally adjusted).

The need, therefore, for a Federal partner may be even greater, but currently the only programs available to help freight railroads invest in capital improvements are the Rail Line Relocation and Improvement program, authorized in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users at \$350 million annually for each of fiscal years 2006 through 2009 for the purpose of providing financial assistance for local rail line relocation and improvement projects; the Railroad Safety Technology Grant program, authorized in the Rail Safety Improvement Act of 2008 at \$50 million annually for each of fiscal years 2009 through 2013 for assisting railroads in the deployment of positive train control and other safety technologies; the Railroad Safety Infrastructure Improvement Grant program, authorized in the Rail Safety Improvement Act of 2008 at \$5 million annually for each of fiscal years 2010 through 2013 for the purpose of making safety improvements to railroad infrastructure; and a program authorized in the Energy Independence and Security Act of 2007 at \$50 million annually for each of fiscal years 2008 through 2011 for making capital grants to Class II and Class III railroads for infrastructure improvements. Additionally, funding is available through the Railroad Rehabilitation and Improvement Financing program, which provides direct loans and loan guarantees up to \$35 billion to finance rail infrastructure improvements. However, Congress has provided little funding for the grant programs. The only funding that has been provided is \$20 million for the Rail Line Relocation and Improvement program in 2008. [It is important to note that some rail projects have been funded through the highway program.]

### Passenger Rail Needs

During fiscal year 2008, Amtrak served more than 28.7 million passengers, representing the sixth straight fiscal year of record ridership. With concerns still high on dependence on foreign oil and greenhouse gas emissions, Amtrak and the States are looking for opportunities to expand service.

The Passenger Rail Working Group for the National Surface Transportation Policy and Revenue Study Commission reported in 2007 that the total capital cost estimate for re-establishing the national intercity passenger rail network between now and 2050 was \$357.2 billion (in 2007 dollars), for an annualized cost of \$8.1 billion, about \$5 billion of which the States would request from the Federal Government. These funds would be used to bring existing service to a state-of-good-repair, upgrade existing service where demand is greatest, and add new service where environmental and engineering work are complete, including the Midwest Regional Rail Initiative and the California high-speed rail corridor.

Investment in passenger rail service can have significant economic development benefits for communities, states, and the nation. An economic impact analysis of the 3,000-mile Midwest Regional Rail System proposed by nine Midwestern states (Indiana, Illinois, Iowa, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin) identified 58,000 new permanent jobs, \$1.1 billion in increased household income, and \$4.9 billion in increased property values around 102 stations served by the system.

These benefits can be significant for individual communities. Enhanced passenger rail service in Milwaukee, Wisconsin could generate up to 3,075 permanent jobs, \$56 million in annual household income, and \$227 million in increased property values around the downtown station. St. Louis, Missouri could expect an increase of up to 2,800 jobs, \$57 million in household income, and \$250 million in property value increases.

The State of California is anticipating a considerable boost to its economy as well, resulting from the planning, designing, and building of its high-speed passenger rail system. Estimates predict that nearly 160,000 construction-related jobs and an additional 450,000 permanent jobs are expected to be created by 2035 as a result of the economic growth the train system will bring to the state. This will result in the generation of more than \$1 billion in annual revenue surplus in the state.

H.R. 2095, the Passenger Rail Investment and Improvement Act (Public Law 110-432), which was enacted at the end of the 110<sup>th</sup> Congress, authorizes a total of \$13.06 billion over five years to 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 program. The Act also provides \$1.5 billion for the development of high-speed rail corridors, in addition to the \$30 million authorized annually through fiscal year 2013 for eligible high-speed rail corridor planning activities (see Section 26101 of Title 49, U.S. Code, as amended by Public Law 110-432). The expansion of the intercity passenger rail network presents an opportunity for new market participants to offer intercity passenger rail service. Private operators play a robust role in the U.S. transportation industry. The Alternative Passenger Rail Service Pilot Program, authorized in the Act, and Section 502, which requires the Secretary to issue a request for proposals for projects for the financing, design, construction, operation, and maintenance of a high-speed intercity passenger rail system, will provide an opportunity for private sector participants to bid on select Amtrak routes, which in turn could provide savings to U.S. taxpayers.

The draft American Recovery and Reinvestment Act of 2009 provides \$800 million to Amtrak and \$300 million to States for intercity passenger rail grants (and waives the State matching requirement).

#### Some of the Benefits of Rail

The demand for transportation is pressing the capacity of the nation's transportation systems, especially its critical highway and rail freight transportation infrastructure. On the highway system, vehicle-miles of travel grew by 96 percent between 1980 and 2005, while lane miles of road increased by only 5.7 percent. The result has been increasing highway congestion that the DOT has described as "chronic."

According to the Texas Transportation Institute's 2007 Urban Mobility Study, traffic congestion in the nation's 437 urban areas continues to increase. As congestion increases, the cost it

imposes on our economy and on motorists also increases. In 2005, traffic congestion cost urban motorists \$78.2 billion, compared to \$73.1 billion in 2004, and just \$14.9 billion in 1982. This level of congestion equates to an average annual cost per traveler of about \$710 in 2005, up from \$680 in 2004, and \$260 in 1982. The hours of delay and gallons of fuel consumed due to congestion are the elements that are easiest to estimate. The effect of uncertain or longer delivery times, missed meetings, business relocations, and other congestion impacts are not included in this estimate.

Congestion has also increased in the air. In 2007, U.S. airlines set an annual record by carrying 769.4 million scheduled domestic and international passengers. The Federal Aviation Administration ("FAA") forecasts that, from 2008 through 2021, aviation passenger traffic will increase by 49 percent, to 1.16 billion passengers annually. The FAA predicts that, absent any changes to the aviation system, delays will increase by 62 percent by 2014.

According to the Commission on the Future of the U.S. Aerospace Industry, estimates of the cost of aviation delays to the U.S. economy range from \$9 billion in 2000 to more than \$30 billion annually by 2015. Without improvement, the combined economic cost of delays from 2000-2012 will total an estimated \$170 billion.

Moving freight by rail can reduce congestion and save Americans hundreds of dollars and time in the car, according to the Federal Highway Administration's Congestion Relief Index, a study of traffic congestion in 82 major urban areas.

The study estimates that if just 25% of freight volume is shifted from trucks to rail, by 2026, each American commuter could save, on average, \$985 -- and 41 hours of time in their car -- a year. The railroad association estimates that one single rail intermodal train can remove 280 trucks off the roads, or the equivalent of 1,100 autos. Amtrak removes another eight million cars from the road annually and eliminates the need for 50,000 fully loaded airplanes each year. Development of high-speed rail corridors could further reduce congestion. In California, for example, the current trip time by car between Los Angeles and San Francisco is between six and seven hours. By air, including all time spent on the ground, the same trip takes at least 3.5 hours. Once completed, California's high-speed rail project is expected to make that trip in two hours and 38 minutes.

In addition to easing highway congestion, shifting freight and passengers from trucks and cars to rail has substantial environmental and energy benefits. Freight trains are at least four times more fuel efficient than trucks, and can move one ton of freight 436 miles on a single gallon of fuel. According to the Congestion Relief Index, since modern freight locomotives emit less nitrogen oxide and particulate matter than trucks, shifting 25 percent of freight volume from trucks to trains would decrease air pollutant emissions by 920,500 tons. To reduce emissions even further, railroads are deploying innovative hybrid and "gen-set" locomotives that reduce emissions as much as 90 percent, especially in rail yards.

Like freight rail, passenger rail has substantial environmental and energy benefits. The Sightline Institute (formerly Northwest Environment Watch) estimates that the average intercity passenger train produces two-thirds less carbon dioxide greenhouse gas emissions per passenger-mile than a car or truck and half the greenhouse emissions of an airplane. The intercity passenger rail mode also generates fewer emissions of other pollutants than other modes. For example, intercity passenger rail service improvements planned for by North Carolina and Virginia between Charlotte and Washington, DC will provide a net reduction of 531,000 pounds of nitrogen oxide per

year as a result of auto diversion to rail. Electrified high-speed rail systems also have the potential to be powered with zero greenhouse gas emissions. In fact, the California High Speed Rail Authority is currently undertaking a study of how to power the system with zero greenhouse gas emissions by utilizing its surrounding energy resources such as wind and thermal solar power.

The Oak Ridge National Laboratory, which produces the annual Transportation Energy Data Book for the Department of Energy, further found that intercity passenger rail consumes 17 percent less energy per passenger mile than airlines and 21 percent less energy per passenger mile than automobiles. These energy savings can be significant in some corridors. For example, the intercity passenger rail service improvements planned for by the States of North Carolina and Virginia between Charlotte and Washington, DC will provide a net reduction of 9.7 million gallons of fuel per year. Nationally, a shift to alternative transportation modes can have a significant impact on energy usage. To illustrate, a 10 percent modal shift from surface transportation to transit would save the equivalent of all the oil we import from Saudi Arabia in a year – 550 million barrels.

Shifting freight and passengers from roads to railways can also have a positive impact on safety. Rail is one of the safest modes of travel. In 2007, there were 2,647 train accidents, resulting in eight fatalities and 293 injuries. In addition, there were 2,752 train accidents at highway-rail grade crossings, resulting in 335 fatalities and 1,048 injuries. In comparison, in 2007, there were more than six million police-reported motor vehicle traffic crashes, resulting in 41,059 fatalities and nearly 2.5 million injuries. With respect to hazardous materials shipments, rail is the second safest mode of transport (water transportation of hazardous materials is the safest). In 2007, there were 748 rail incidents involving hazardous materials, resulting in no fatalities and 54 injuries. This compares to 16,887 incidents involving truck transportation of hazardous materials, resulting in 10 fatalities and 155 injuries, and 1,552 incidents involving air transportation of hazardous materials, resulting in no fatalities and eight injuries.

#### EXPECTED WITNESSES

Mr. Joseph Boardman  
President and CEO  
National Railroad Passenger Corporation (Amtrak)

Mr. Peter Buffa  
Chairman  
Orange Co. Transportation Authority (CA)

Ms. Anne Canby  
President  
Surface Transportation Policy Project

Mr. Lance R. Grenzeback  
Principal  
Cambridge Systematics, Inc.

Mr. Donald Griffin

Director of Strategic Coordination and Research  
Brotherhood of Maintenance of Way Employes Division  
International Brotherhood of Teamsters

Mr. Norman Jester  
Vice President, Business Development and Political Affairs  
Herzog Contracting Corporation

Mr. Will Kempton  
Chief Executive Officer  
CalTrans  
On Behalf of the States for Passenger Rail Coalition

Mr. Phillip Longman  
Schwartz Senior Fellow; Research Director, Next Social Contract Initiative  
New America Foundation

Mr. Thomas Simpson  
Executive Director  
Railway Supply Institute

Mr. James Stern  
National Legislative Director  
United Transportation Union

Mr. James Young  
Chairman, President, and CEO of Union Pacific Corporation  
and  
Chairman of the Association of American Railroads

Mr. Rick Webb  
Chief Executive Officer  
Watco Companies, Inc.  
On behalf of the American Short Line and Regional Railroad Association

Mr. Ed Wolfe  
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