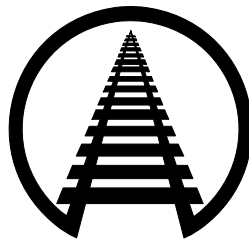


**TESTIMONY OF**  
**EDWARD R. HAMBERGER**  
**PRESIDENT & CHIEF EXECUTIVE OFFICER**  
**ASSOCIATION OF AMERICAN RAILROADS**



**BEFORE THE**  
**U.S. SENATE COMMITTEE ON COMMERCE, SCIENCE, AND**  
**TRANSPORTATION**  
  
**HEARING ON THE EXPANSION OF THE PANAMA CANAL**

**APRIL 10, 2013**

**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 about railroads and the expansion of the Panama Canal.

Freight railroads are an indispensable part of America's transportation system. Whenever Americans grow something, eat something, make something, turn on a light, export something, or import something, it's likely that railroads were involved somewhere along the line.

More than 560 freight railroads operate in the United States today — only Hawaii does not have at least one — over nearly 140,000 route-miles. In addition, every major U.S. port is served by at least one major railroad. Nearly all of America's freight railroads are privately owned and operated. Unlike trucks, barges, and airlines, the freight railroads operate almost exclusively on infrastructure that they own, build, maintain, and pay for themselves.

A healthy economy requires an efficient logistics system based on sufficient transportation infrastructure to meet growing demand. In my testimony below, I will discuss how freight railroads are positioning themselves to meet future transportation demand in this country, including transportation demand related directly or indirectly to the expansion of the Panama Canal.

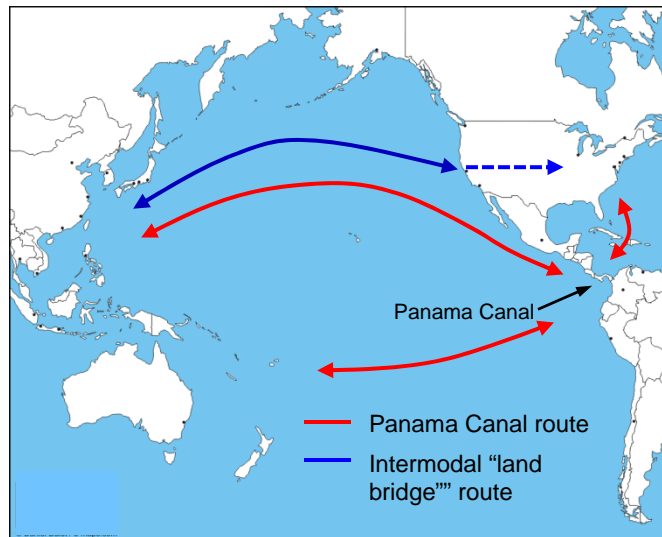
## **Overview of the Panama Canal Expansion**

As members of this committee know, the Panama Canal currently has two lock chambers, the dimensions of which limit the size of container ships that can traverse the canal. So-called "Panamax" ships, the largest ships that can currently use the canal, can carry a maximum of around 4,500 containers. However, a larger third lock chamber is under construction — with completion likely in 2015 — that will allow much larger ships to pass through. These larger

“post-Panamax” ships will be able to carry up to approximately 12,500 containers, or nearly three times the maximum number carried by existing ships that use the canal.

The big unknown is where ships carrying cargo that are bound for, or coming from, the eastern part of the United States will go. Today, a significant portion of the cargo from Asia destined for the eastern part of the United States is offloaded at West Coast ports (such as Los Angeles, Long Beach, Seattle, Tacoma, Vancouver, or Prince Rupert in British Columbia), and then transported inland on trucks, railroads, or, in some cases, rivers. Going the other way, cargo headed to Asia from the eastern part of the United States often travels via rail or truck to West Coast ports, where it is loaded onto ships heading west.

It is not uncommon for existing Panamax (or smaller) ships coming from Asia with cargo bound for the eastern United States, as well as ships with cargo



from the eastern United States heading to Asia, to go through the Panama Canal on an “all-water” route, rather than use the land bridge (via truck or rail) across the country described in the previous paragraph. Some observers believe that the huge capital costs of the newer vessels and other factors will cause these ships to remain primarily on routes to the West Coast. Many others, though, think that a post-Panamax ship is just as likely to find it cost effective to use the “all-water” route to or from the eastern United States. Of course, if an all-water route is to be used, the eastern ports must be able to handle the post-Panamax vessels, which is the rationale for the efforts by a number of ports on the East Coast, the Southeast, and the Gulf of Mexico to

dredge deeper channels, install new cranes, and/or build new dock capacity to accommodate post-Panamax ships. Meanwhile, ports on the West Coast are pursuing many of these same kinds of improvements to better position themselves as the preferred destination for ocean carriers even after the canal expansion is complete.

To summarize a very complicated issue, the interplay of many different factors will determine which ports and routes are used. These factors include the time sensitivity of the freight being carried, inventory carrying costs, the capital costs of the new vessels, fuel costs, time in transit, canal toll fees, port fees, inland transportation costs, the speed by which containers are able to be moved inland, environmental considerations, the efficiency of port operations, availability of warehouse space, and many other factors. Taken together, these factors will determine which ports offer shippers the best value for their money (resulting in higher traffic volumes and market share growth for those ports), and which ports lag behind, resulting in lower traffic volumes (or traffic volumes that increase less rapidly than they otherwise would) and lower market share.

Frankly, I don't know which ports will be the "winners" and which will be the "losers" of this competitive battle. I do know, though, that from the point of view of our nation's rail industry as a whole, it doesn't really matter. The fact is, whether the freight is coming into or leaving from Long Beach or Savannah or Miami or Houston or Seattle or Norfolk or any other major port, our nation's freight railroads are in a good position now, and are working diligently to be in an even better position in the future, to offer the safe, efficient, cost-effective service that their customers at ports and elsewhere want and need.

In a June 4, 2012 interview, in response to a question about the Panama Canal expansion, the CEO of Norfolk Southern said, "We are preparing and planning so that if the traffic comes in

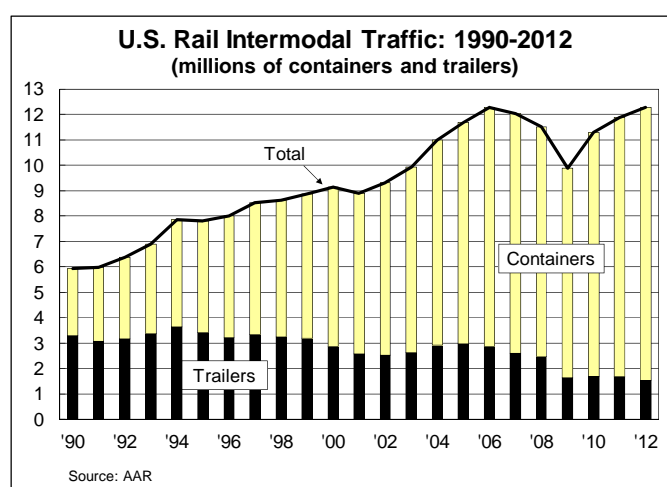
from the East and needs to move inland, we'll be there to handle it. If the traffic comes in from the West and comes to a western gateway with one of the western carriers, we'll be ready to handle it.”<sup>1</sup> He was speaking on behalf of his railroad, but his statement applies equally well to the rail industry as a whole. I'm confident that railroads will be “ready to handle it.”

## Overview of Rail Intermodal

Although other types of ships use the Panama Canal, container ships are the focus of the canal's expansion. When a container ship at a port is unloaded, the containers on it are moved inland through a variety of means. They might be loaded directly onto a truck and delivered to their final destination, especially if the final destination is relatively nearby. Or, containers might go by truck a short distance to a nearby rail yard, then loaded onto trains for movement inland. At some ports, containers are loaded at “on dock” terminals from the ship to railcars.<sup>2,3</sup>

In any case, when a container is moved by railroad, it becomes part of what's known as inland “intermodal” service.

Intermodal — the long-haul movement of shipping containers and truck trailers by rail, often combined with a (usually much shorter) truck movement at one or both ends — has



been growing rapidly for more than 25 years. U.S. rail intermodal volume was 3.1 million containers and trailers in 1980, rising to 5.9 million in 1990, 9.1 million in 2000, and a record 12.3 million in 2006. Intermodal volume fell sharply during the recession, but rebounded to 12.3

<sup>1</sup> “Q&A with Wick Moorman, CEO of Norfolk Southern,” *The Virginian-Pilot*, June 4, 2012.

<sup>2</sup> There are other possibilities as well. For example, cargo in a container might be transloaded into other larger containers and then moved inland, or it might be stored in a warehouse near the port for later shipment.

<sup>3</sup> The situations are reversed when containers arrive at port for export.

million units in 2012 — only 15,000 units shy of 2006’s record. Through the first three months of 2013, U.S. rail intermodal volume is well ahead of 2006’s record pace.

Intermodal is used to transport a huge variety of goods that Americans use every day, from greeting cards and furniture to frozen chickens and computers. In fact, just about everything you find on a retailer’s shelves might have traveled on an intermodal train. Intermodal is also used to transport large amounts of industrial and agricultural products like grain and auto parts. More than 50 percent of rail intermodal consists of imports or exports (reflecting railroads’ vital role in international trade), but a large and growing share of rail intermodal consists of purely domestic movements. Much of the increase in the domestic share of intermodal traffic consists of freight that used to move solely by truck but which has been converted to rail intermodal.



There are a number of reasons why rail intermodal has grown. Two of the most important are the huge investments in intermodal facilities that railroads have made (as discussed below) and the tremendous efforts railroads have made to improve their intermodal service. Railroads know that reliability is crucial to successful intermodal operations. That’s why they’ve put enormous effort into improving their intermodal service. Today, rail intermodal is far more efficient, reliable, and productive than it was even just a few years ago. In addition, because railroads, on average, are four times more fuel efficient than trucks, using rail saves fuel and fuel costs. Moreover, when rail intermodal is used, truck driver shortages are much less of a problem.

## The Development of the U.S. Rail Intermodal Network

Today's U.S. rail intermodal network is the most advanced and efficient such network in the world. It was developed over the past couple of decades by more fully utilizing existing rail network capacity and through tens of billions of dollars in investments in new infrastructure and equipment directly connected to intermodal operations. These investments include:

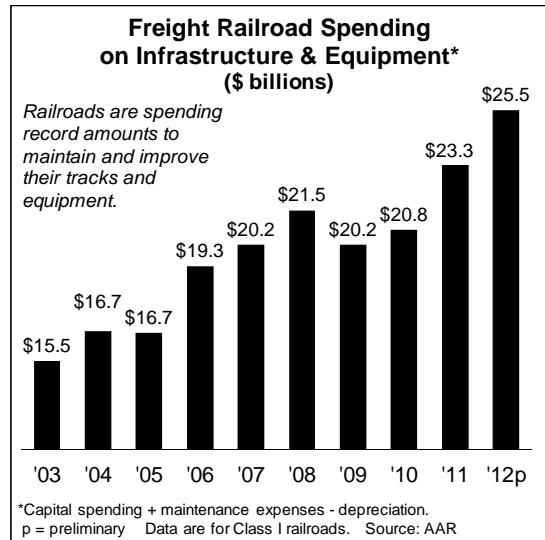
- New or expanded inland intermodal terminals to facilitate the transfer of containers and trailers between rail and truck;
- New near-dock intermodal terminals to facilitate the transfer of containers between ship and rail;
- Introducing a variety of new intermodal car types throughout the national intermodal network;
- Raising clearances along certain routes to accommodate the additional height required to operate doublestack trains;
- Adding track capacity and advanced signaling systems to accommodate faster, more frequent trains of all categories in the rail network; and
- Modernizing the locomotive fleet resulting in greater reliability for rail customers.

**A Modern Rail Intermodal Terminal**



These intermodal-specific investments are part of a much broader set of some \$525 billion in rail investments since 1980 — paid for with railroads' own funds, not government funds — on locomotives, freight cars, tracks, bridges, tunnels, and other infrastructure and equipment. That's more than 40 cents out of every revenue dollar. In recent years, despite the recession, America's freight railroads have been reinvesting more than ever before — including \$25.5 billion in 2012 and a similar amount projected for 2013 — back into a rail network that keeps our economy moving.

Intermodal is a key market segment for each of the major U.S. freight railroads, and each has devoted significant resources toward expanding their intermodal capabilities to keep supply chains fluid and effective. Just a few examples:



- Through its capital commitments, since 2000 **BNSF** has invested \$41.9 billion in the railroad. Later this year, and as part of its planned \$4.1 billion capital program for 2013, BNSF is scheduled to open its new \$250 million intermodal facility, Logistics Park Kansas City (LPKC). This 443-acre logistics park will be able to initially handle more than 500,000 units each year and 1.5 million units when it is fully built out. BNSF is also moving forward on its \$500 million Southern California International Gateway project (SCIG) near the Ports of Los Angeles and Long Beach. SCIG will allow containers to be loaded onto rail just four miles from the docks, rather than travelling 24 miles on local roads and the 710 freeway to downtown rail facilities. SCIG will allow 1.5 million more containers to move by more efficient and environmentally preferred rail through the Alameda Corridor each year. It will greatly improve the efficiency of cargo transfer from ports to customers and will eliminate millions of truck miles annually from local freeways in Southern California, all while utilizing state-of-the-art and environmentally preferred technology, including wide-span all-electric cranes, ultra-low emissions switching locomotives, and low-emission yard equipment.
- CSX**'s National Gateway is an \$850 million public-private partnership launched in 2008 to alleviate freight bottlenecks in the Midwest by creating a double-stack cleared corridor for intermodal rail shipments between the Midwest and mid-Atlantic ports. Phase One of the project, scheduled to be completed this spring, creates double-stack rail access between CSX's new intermodal terminal in Northwest Ohio and its terminal in Chambersburg, Pennsylvania. The entire project is scheduled to be completed in 2015, about the time the Panama Canal expansion is expected to be complete.
- Union Pacific** has invested over \$1.1 billion in recent years on intermodal terminals. Among these investments is the new Joliet Intermodal Terminal, opened in August of 2010. Joliet Intermodal Terminal is a state-of-art intermodal terminal which provides significant capacity in the important Chicago market with service to and from the major West Coast and Gulf Coast ports. Union Pacific is currently building a \$400 million intermodal and multi-purpose rail facility in Santa Teresa, New Mexico, on UP's 760-mile "Sunset Route" between Los Angeles and El Paso. Once completed in 2014, the facility will include 200 miles of track and 26 buildings for yard operations. The state-of-the-art facility will include fueling facilities, crew change buildings, an intermodal yard and an intermodal ramp with an annual lift capacity of up to 250,000 intermodal

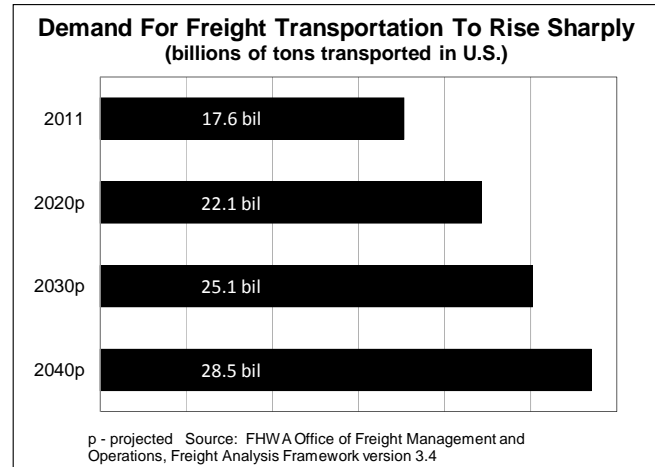


containers. Construction of this facility is part of UP's commitment to invest approximately \$3.6 billion in 2013 in capital investments across its 32,000-mile network.

- **Kansas City Southern's** Meridian Speedway rail corridor connecting Dallas, Texas, and Meridian, Mississippi, continues to grow in significance. It allows KCS to partner with other railroads to offer efficient, cost-effective intermodal service between the southeast and the southwest. KCS's international intermodal corridor connects central Mexico with the central, south central and southeastern regions of the United States. KCS expects to invest approximately 18 percent of revenue in 2013 on capital expenditures, including intermodal terminal expansion.
- In 2012, **Norfolk Southern** opened new intermodal facilities in Memphis and Birmingham, both part of the company's Crescent Corridor project. The Crescent Corridor is a 2,500-mile rail network serving more than 30 new intermodal lanes in the Northeast, Southeast, Texas and Mexico. NS recently announced plans to spend \$2 billion on capital improvements in 2013, including the expansion of its Bellevue, Ohio rail yards, construction of a new intermodal terminal in Charlotte, North Carolina (also part of the Crescent Corridor), and the completion of a new locomotive service facility in Conway, Pennsylvania.
- **Canadian National**, which operates more than 6,000 miles of railroad in the United States, plans to spend approximately \$1.9 billion in capital expenditures in 2013 across its North American network. Projects include construction of a new intermodal terminal in Joliet, Illinois; the acquisition of new locomotives and intermodal equipment; advanced information technology that will improve service and operating efficiency throughout the railroad's network; and transloading operations and distribution centers to transfer freight efficiently between rail and truck.
- **Canadian Pacific (CP)** also operates more than 6,000 miles in the United States. Its U.S. operations include four intermodal terminals, and it also serves the ports of New York and Philadelphia through operating agreements. The railroad is projecting capital expenditures of around \$1.1 billion in 2013, with significant amounts directed toward delivering seamless service at ports and the railroad's network of intermodal terminals.
- It's not just Class I railroads that are heavily involved in intermodal transportation and preparing for future growth. For example, **Florida East Coast Railway**, a regional railroad operating over more than 350 miles in Florida, recently announced a partnership with the ports of Miami and Port Everglades to build on-dock rail yards that will help to increase South Florida's intermodal traffic to about 20 percent of port volume, up from about 10 percent today. In conjunction with deepening of the ports, the partnership is aimed at positioning South Florida as a gateway for post-Panamax ships.

All of these investments, and many more like them, are aimed at helping to ensure that the U.S. freight rail network remains second to none in the world, and that railroads have the ability to move containers and other cargo to and from ports safely and efficiently.

Of course, as America’s economy grows, the need to move more people and goods will grow too, irrespective of what happens with the Panama Canal. Recent forecasts reported by the Federal Highway Administration (FHWA) found that total U.S. freight shipments will rise from an estimated 17.6 billion tons in 2011 to 28.5 billion tons in 2040 — a 62 percent increase.<sup>4</sup> Railroads are getting ready today to meet this challenge.



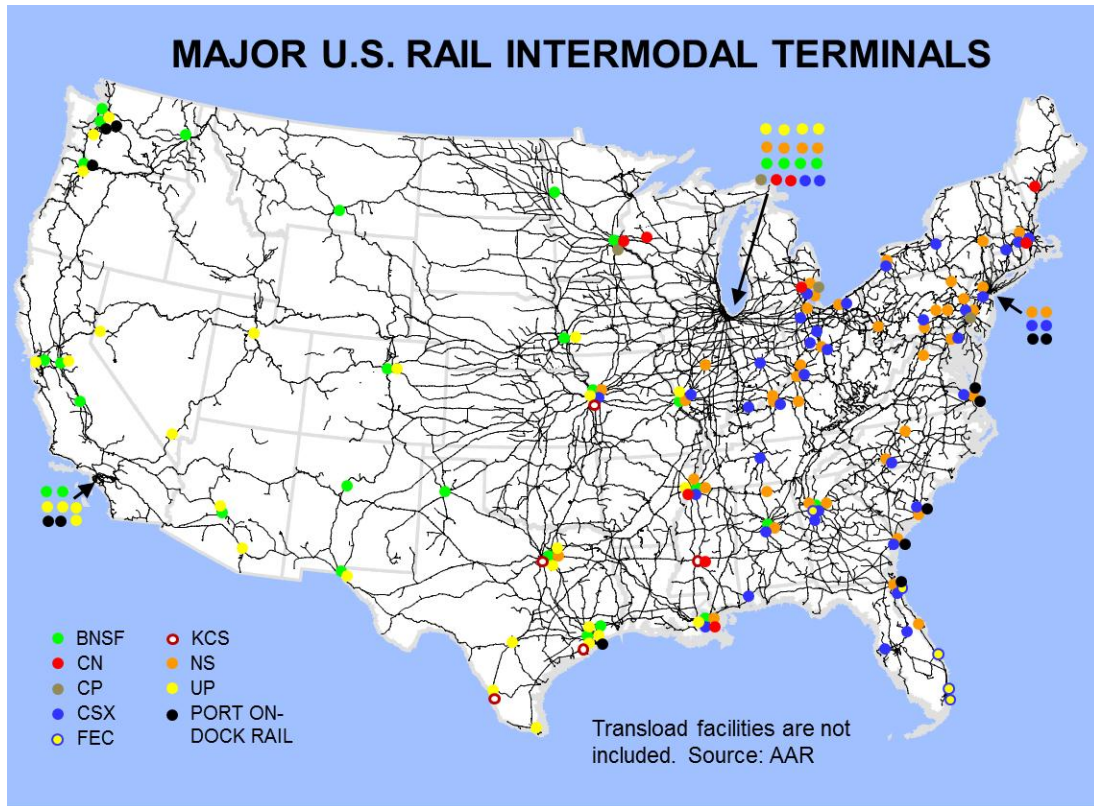
The map below shows most of the major intermodal terminals on the U.S. rail network. Many of these terminals did not exist five years ago. Their breadth and scope are a testament to the seriousness with which railroads treat their customers’ capacity and service needs. In that sense, the expansion of the Panama Canal is just one more in a long series of cases (crude oil is another recent example) in which railroads have stepped up to meet the challenge of providing safe, reliable, and cost-effective service to help their customers and the economy grow.

### **Railroads and Rail Intermodal as an Alternative to Overreliance on Highways**

No one, and certainly not railroads, disputes that motor carriers are absolutely indispensable to our economy and quality of life, and will remain so long into the future. That said, because of the enormous cost involved in building new highways, environmental and land use concerns, and other factors, it is highly unlikely that sufficient highway capacity can be built to handle expected future growth in freight transportation demand.

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<sup>4</sup> Federal Highway Administration, *Freight Analysis Framework*, version 3.4.



The United States currently has the world’s most highly developed highway network, built and maintained at enormous public cost over the years. According to data from the FHWA, in 2010 alone, states disbursed nearly \$95 billion just on capital outlays and maintenance for highways.<sup>5</sup> Adding in other expenses such as administration and planning, law enforcement, interest, and grants to local governments brings total disbursements for highways to \$146 billion in 2010. Even this huge level of spending, however, is widely considered inadequate to meet present-day, much less future, needs.<sup>6</sup>

Fortunately, freight rail in general, and intermodal rail specifically, represents a viable and socially beneficial alternative. Today, rail intermodal takes millions of trucks off our

<sup>5</sup> Federal Highway Administration, Highway Statistics 2010, Table SF-2.

<sup>6</sup> For example, the American Society of Civil Engineers, in its 2013 Report Card for America’s Infrastructure, said “While the conditions have improved in the near term, and Federal, state, and local capital investments increased to \$91 billion annually, that level of investment is insufficient and still projected to result in a decline in conditions and performance in the long term. Currently, the Federal Highway Administration estimates that \$170 billion in capital investment would be needed on an annual basis to significantly improve conditions and performance.”

highways each year, and its potential to play a much larger role in the future is enormous, both in traditional transcontinental markets and in new short- and middle-distance lanes. In the context of ports specifically, railroads offer tremendous potential in safely and efficiently moving freight to and from port facilities, thereby greatly enhancing overall transportation productivity. In addition, a significant portion of the merchandise that railroads transport in their carload business (as opposed to in intermodal containers or trailers) is directly truck competitive. Shippers choose to move this freight on railroads because they find that the value railroads offer, in terms of cost and service, is superior. Railroads recognize that they will have to continue to work hard to earn this business, which is why they are constantly searching for ways to further improve productivity, reduce costs for their customers, and enhance their service offerings.

This does not mean that we should stop building highways or that we should no longer recognize the importance of trucks and highways in meeting our nation's transportation needs, but it does mean that policymakers should be doubly aware of the role railroads play, and can play, in meeting freight transportation demand. As manufacturing has become more global and as supply chains have become longer and more complex, the railroads' intermodal service has come to play a critical role in making the supply chains of a wide variety of shippers efficient — particularly for those that depend on imported or exported materials and goods, including the goods that might be affected by the expansion of the Panama Canal.

## **Conclusion**

America's railroads move vast amounts of just about everything, connecting businesses with each other across the country and with markets overseas over a 140,000-mile network. They save their customers billions of dollars each year in shipping costs while reducing

pollution, energy consumption, and greenhouse gas emissions; relieving highway congestion; and enhancing safety.

Demand for freight transportation will surge in the years ahead due to population and economic growth. Railroads are the best way to meet this demand. Railroads are safe, save fuel, keep trucks off overcrowded highways, and reduce greenhouse gas and other emissions. And they do it while providing affordable, reliable transportation to America's manufacturers, farmers, energy producers, retailers, and consumers. Moreover, their tremendous flexibility, the vast scope of their networks, and their ability to invest for changing markets mean that they can respond quickly and effectively to new traffic patterns and new market challenges, such as those that could present themselves with the expansion of the Panama Canal.

Railroads are working hard to ensure that adequate capacity exists to meet our future freight transportation needs. Meanwhile, they look forward to continuing to work with members of this committee, others in Congress and the Obama administration, and other policymakers to find effective solutions to the transportation challenges we face.