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BEFORE THE

U.S. SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

SUBCOMMITTEE ON SURFACE TRANSPORTATION AND

MERCHANT MARINE INFRASTRUCTURE, SAFETY, AND SECURITY

HEARING ON IMPROVING THE PERFORMANCE

OF OUR TRANSPORTATION NETWORK

JANUARY 29, 2015

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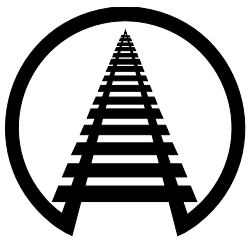
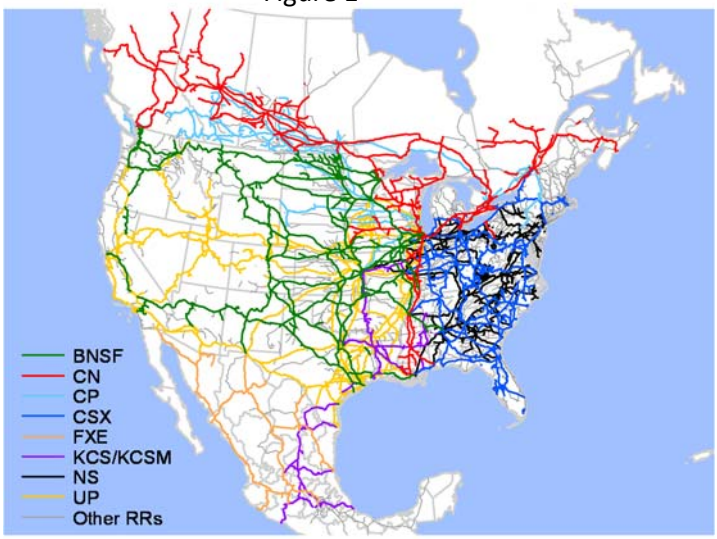


On behalf of Union Pacific Railroad (UP) and the Association of American Railroads (AAR), thank you for the opportunity to appear before you today to discuss ways to improve the performance of America's freight transportation network.

Union Pacific, like the other Class I freight railroads that operate in the United States, relies on its own funds, not taxpayer funds, to pay for its infrastructure, and the rail industry provides a critical link in the global supply chain. UP's 10,000 customers depend on us to deliver their products in a safe, reliable, and environmentally responsible manner. Serving 23 states over 32,000 miles in the western two-thirds of the country, we are proud to be part of a 140,000-mile U.S. freight rail network that is part of an integrated North American rail network that provides the world's safest, most productive, and most cost-effective freight rail service. Union Pacific and other freight railroads work hard every day to help keep our nation moving on the right track.

Figure 1

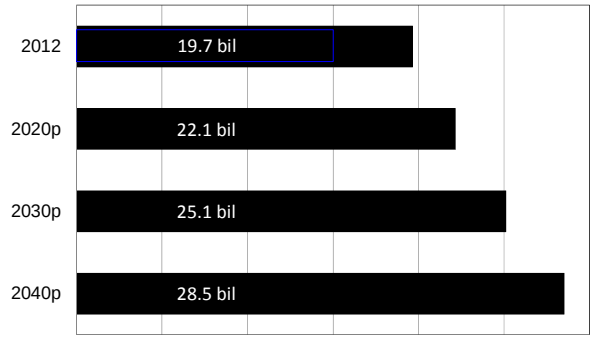


There is a tremendous amount of strength and flexibility in our nation's freight transportation systems — more so, in fact, than in any other country. It's also clear, however, that our nation faces significant challenges in maintaining the freight-moving capability we have today and improving it to meet the even greater needs of tomorrow. Indeed, as America's economy and population grow, the need to move more freight will grow too. Forecasts vary — for its part, the Federal Highway Administration recently projected that total U.S. freight

shipments will rise from an estimated 19.7 billion tons in 2012 to 28.5 billion tons in 2040, a 45 percent increase (see Figure 2) — but it's clear that, as a nation, we need to prepare now.

Union Pacific and America's other freight railroads are trying to do just that. Through massive, record private investments in infrastructure and equipment, the development and implementation of innovative technologies, and operational enhancements, we are working to help make sure that railroad performance meets our customers' current and future needs.

Figure 2: Demand For Freight Transportation
(billions of tons transported in U.S.)



p - projected Source: FHWA Office of Freight Management and Operations, Freight Analysis Framework version 3.5

Policymakers, including members of this committee, can help or hinder railroads in this effort. I respectfully suggest that you and other policymakers, when thinking about freight railroads, should keep foremost in mind the need for railroads to be able to earn enough to maintain their existing networks and create the substantial new capacity that will be needed to transport the additional freight our economy will generate in the years ahead. You should ensure that rail-related regulation and legislation do not hinder railroads' ability to serve their customers as efficiently as possible. And you should work to make sure that railroad safety oversight is fact-based, rather than based on perceptions that upon closer inspection may not be well founded.

At Union Pacific, our goal is to provide service to our customers that is as safe, efficient, and cost effective as possible. I know that other railroads share these goals. Below I will address some of the actions we think policymakers should take — and, just as importantly, steps policymakers should refrain from taking — to help make this happen. Taking these steps would

serve the public good by providing our nation's producers and consumers with a stronger, more capable transportation option.

Railroads Are the Transportation Backbone of America

The public benefits associated with freight rail suggest that it is in the public interest for policymakers to enact policies that result in as much freight as possible moving by rail:

- America's freight railroads are privately owned and operate almost exclusively on infrastructure that they own, build, maintain, and pay for themselves. When railroads reinvest in their networks — which they've been doing in record amounts in recent years — it means taxpayers don't have to.
- Railroads are, on average, four times more fuel efficient than trucks. That means that moving freight by rail helps our environment by reducing energy consumption, pollution, and greenhouse gases.
- Because a single train can carry the freight of several hundred trucks — enough to replace a 12-mile long convoy of trucks on the highways — railroads cut highway gridlock and reduce the high costs of highway construction and maintenance.
- Thanks to competitive rail rates — 42 percent lower, on average, in 2013 than in 1980[1]— freight railroads save consumers billions of dollars every year, making U.S. goods more competitive here and abroad and improving our standard of living.
- Railroads are safe and getting safer. Recent years have been the safest in rail history. Preliminary data suggest that 2014 saw the lowest train accident rate in history.
- America's freight railroads sustain 1.2 million jobs, including 180,000 high-paying jobs in the freight rail industry itself. Millions of other Americans work in industries that are more competitive in the global economy thanks to the affordability and productivity of America's freight railroads.

Of course, no one, and certainly not railroads, disputes that motor carriers (and other freight transportation modes, for that matter) are indispensable to our economy and quality of life, and will remain so long into the future. But because of the enormous cost involved in building new highways, as well as environmental and land use concerns, it is highly unlikely that sufficient highway capacity can be built to handle expected future growth in freight transportation demand.

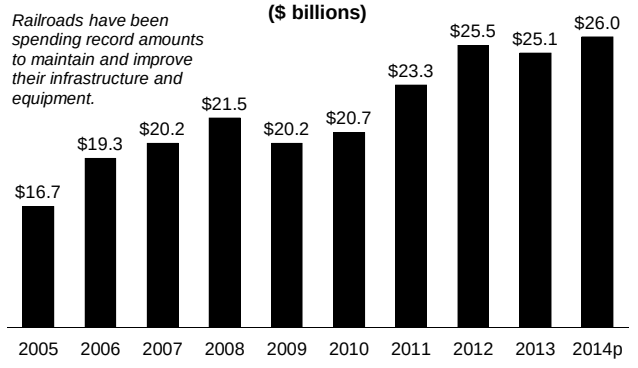
[1] Based on inflation-adjusted revenue per ton-mile.

Fortunately, freight rail represents a viable and socially beneficial complement to highway freight movement. This does not mean we should stop building highways or that we should no longer recognize the importance of trucks and highways, but it does mean that policymakers should be doubly aware of the role railroads can play in providing the freight transportation our nation needs.

Investing for the Future

As noted above, as America's economy and population grow, the need to move more freight will grow too. All transportation modes have key roles to play. But whereas trucks, airlines, and barges operate mainly on highways, airways, and waterways that are publicly funded, Union Pacific and America's other freight railroads are privately owned and operate overwhelmingly on infrastructure that they own, build, maintain, and pay for themselves.[2] From 1980 to 2014, U.S. freight railroads spent $575 billion — of their own funds, not government funds — on capital expenditures and maintenance expenses related to 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, freight railroads have been spending more than ever before — including an estimated $26 billion in 2014 and, most likely, even more in 2015 — back into a rail network that keeps our economy moving (see Figure 3).

Figure 3: U.S. Freight Railroad Spending on Infrastructure & Equipment*



p - projected *Capital spending + maintenance expenses. Data are for Class I RRs. Source: AAR

[2] A few small railroads are owned by port authorities, economic development agencies, or other governmental entities. The Alaska Railroad is owned by the state of Alaska.

One of the reasons railroads reinvest so much is that railroading is among the most capital-intensive of all industries. The average U.S. manufacturer spends about 3 percent of its revenue on capital expenditures. The comparable figure for Union Pacific and other U.S. freight railroads is around 18 percent, or about six times more. As members of this committee are well aware, building and maintaining an infrastructure network is very expensive whether done with public or private funds.

Because U.S. freight railroads are overwhelmingly privately owned and must finance the vast majority of their infrastructure spending themselves, these investments are accompanied by substantial financial risk. Back in 2006, the Government Accountability Office correctly noted that, "Rail investment involves private companies taking a substantial risk which becomes a fixed cost on their balance sheets, one on which they are accountable to stockholders and for which they must make capital charges year in and year out for the life of the investment. A railroad contemplating such an investment must be confident that the market demand for that infrastructure will hold up for 30 to 50 years. This is in sharp contrast to other modes such as highway infrastructure, which is paid for largely by public funds."[3]

Accordingly, at Union Pacific, as at other railroads, capacity investments must pass appropriate internal railroad investment hurdles. That means that investments will be made only if they are expected to generate an adequate return over a long period of time. For this reason, adequate rail earnings — again, over the long term — are critical for capacity investment. As the Congressional Budget Office (CBO) noted, also in 2006, "As demand increases, the railroads' ability to generate profits from which to finance new investments will be critical.

[3] Government Accountability Office, *Freight Railroads: Industry Health Has Improved, but Concerns About Competition and Capacity Should Be Addressed*, October 2006, p. 56.

Profits are key to increasing capacity because they provide both the incentives and the means to make new investments."[4]

The GAO's and CBO's comments are just as valid today as they were when first made. If Union Pacific or any other railroad is not financially sustainable over the long term, it will not be able to make capacity investments to maintain its existing network in a condition to meet reasonable transportation demand, or make additional investments in the replacement or expansion of infrastructure required by growing demand.

Major freight railroads face additional constraints because they are either publicly traded or are subsidiaries of publicly traded companies. As such, they must provide their shareholders a return commensurate with what those shareholders could obtain in other markets with comparable risk. I spend a considerable amount of my time interacting with members of the investment community, and I can tell you that they are well aware that no law or regulation can force investors to provide resources to an industry whose returns are lower than what the investors can obtain elsewhere. If railroads are viewed as returning less to shareholders, for whatever reason, than comparable alternatives, then capital will flee the rail industry or will only be available at much higher costs than we see today, as evidenced by the cost of capital to the rail industry in the recent past when our financial performance was much less robust. The capital markets will have it no other way.

These points — that railroads must be able to earn sufficient revenue that we can invest in and grow our networks, and that, as public companies, we must provide our shareholders with a return that will entice them to invest their money with us — are foundational. The ability to invest in our networks allows us to improve safety, provide the levels of service that our

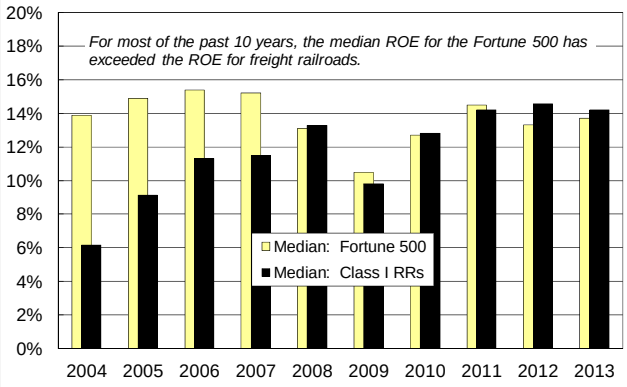
[4] Congressional Budget Office, *Freight Rail Transportation: Long-Term Issues*, January 2006, p. 11.

customers demand, and create the efficiencies we need to help ensure that our economy is competitive in global markets.

Now, it is true that freight railroad financial performance in recent years has been much improved compared to earlier years. I'm proud that, at Union Pacific, we announced last week that 2014 saw record operating revenue and operating income. But statements about railroads' "record profits" often ignore the fact that, until recently, rail profitability was generally relatively poor. Thus, an improvement from earlier years may be a "record," yet may still be only about average compared with the earnings achieved by most of the other industries against which railroads compete for capital.

Just one example to illustrate this point: return on equity (ROE) is a well-known measure of profitability. It reveals how much profit a company generates with the money shareholders have invested. Figure 4 shows that the ROE for the rail industry has much improved over the past few years, but is still only about average compared to the Fortune 500.

Figure 4: Return on Equity - RRs vs. the Fortune 500

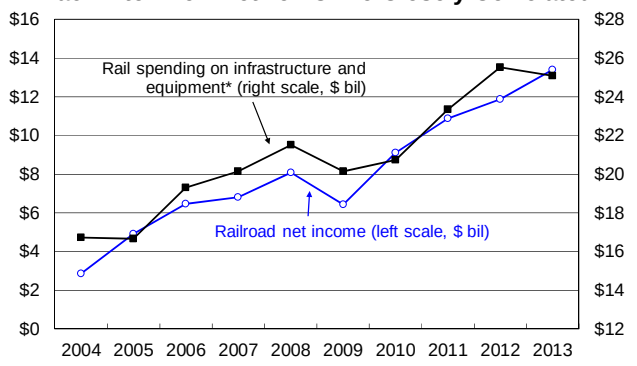


Source: Fortune 500, various years

Make no mistake, Union Pacific is encouraged by our improvements in our financial condition in recent years, and by the rail industry's overall progress. At Union Pacific, we will continue to work very hard every day to see that those improvements continue so that we can return more value to our shareholders. But it would be a tremendous mistake for policymakers to view these improvements as a reason to cap rail earnings through price controls, artificial competitive constraints, or by other means. This would cause capital to flee the industry and severely harm railroads' ability to reinvest in their networks. Figure 5 shows that, as rail

industry profitability has risen in recent years, so has our spending back into our networks. You can't have one without the other. Indeed, if the American freight railroad industry is to fully deliver its potential benefits to the economy, its current financial performance should only be regarded as one step along the path toward sustainability, not as a final destination.

Figure 5: Railroad Profitability and Reinvestments Back Into Their Networks Are Closely Correlated



*Capital spending plus maintenance expenses. Data are for Class I railroads. Source: AAR

At a time when the pressure to reduce government spending on just about everything — including transportation infrastructure — is enormous, it makes no sense to enact public policies that would discourage private investments in rail infrastructure that would boost our economy and enhance our competitiveness. Improvements in rail profitability reflect the fact that the current system of rail regulation is working. After all, long-term sustainability through higher earnings is precisely what Congress meant for railroads to achieve when it passed the Staggers Act in 1980.

The Need for Efficiency

America's freight railroads, along with their Canadian counterparts, are the most productive and efficient in the world, and their productivity has skyrocketed since the Staggers Act instituted a system of balanced regulation in 1980. Today, U.S. railroads generate approximately double the freight volume they had in 1980, but they use far fewer miles of track, employees, locomotives, and gallons of fuel. These efficiency gains have largely been passed on to rail customers in the form of lower average rates — as mentioned earlier, down an average of 42 percent from 1980 through 2013 in inflation-adjusted terms.

Future rail efficiency gains will require continued significant expenditures on infrastructure and equipment (including large amounts of new capacity) and innovative new technologies, but they will also require appropriate public policies.

For example, the need for efficiency helps explain why railroads strongly oppose efforts to reverse existing policy under which the STB must first find that a railroad serving a terminal area is engaged in anti-competitive conduct before the STB can order the railroad to "switch," or interchange, traffic to another railroad when such an interchange is not necessary for freight delivery. Adding an interchange to a movement that is currently handled in single-line service adds substantial time, complexity, and costs to that movement. Over the years, railroads have invested tens of billions of dollars and enormous effort into concentrating traffic onto routes that are the most efficient for rail customers as a whole; part of this effort has been the development of very efficient and streamlined terminal switching. The result? Sharply higher productivity, reliability, and asset utilization, and lower freight rates for most rail customers. Forced reciprocal switching would destroy these terminal efficiencies, compromise the service improvements they have created for rail customers, and raise rail costs. The added switching activity that would be required, the increased possibility of service failures caused by that new switching activity, and the complex operations that would be required to bring about the new interchanges would disrupt rail traffic patterns, produce congestion in rail yards, and undermine efficient service to customers.[5]

Likewise, one of the major reasons why railroads oppose changes in existing "bottleneck" policy at the STB is the sharply negative effect such changes would have on the

[5] For more on reciprocal switching, see https://www.aar.org/BackgroundPapers/Reject%20Calls%20For%20Mandatory%20Reciprocal%20Switching.pdf.

efficiency of rail operations.[6] Requiring "bottleneck" service on demand could substantially change the physical routing of rail cars, forcing railroads to use routes and connecting points chosen by shippers, rather than by the railroads themselves. If bottleneck policy were reversed, efficiency and predictability would be lost, with potentially negative effects on rail safety as well. Rail traffic could by forced through little-used and physically inadequate connections and rail lines. Railroads would have to make costly new investments to support the new routings (at the expense of investments in more deserving areas), yet shippers could change their minds about those routes on a whim.

Changes to existing terminal switching and bottleneck policies would introduce an enormous amount of uncertainty into the rail system. Over the years, we've been working extremely hard to *remove* uncertainty from the rail system, because it detracts so much from the provision of reliable and cost effective service. Adding more can't possibly help railroads improve the performance of their networks, especially as railroads face increasing capacity constraints due to higher volumes associated with economic growth and changing shipping patterns.

The need for efficiency also helps explain why railroads oppose a variety of other proposals that have been proffered in recent years, including (but not limited to) forcing railroads to prioritize certain types of traffic over other types, the imposition of speed limits on certain types of traffic that are not necessary from a safety standpoint, and local bans on the transport of certain commodities in certain areas. When considering these and similar proposals,

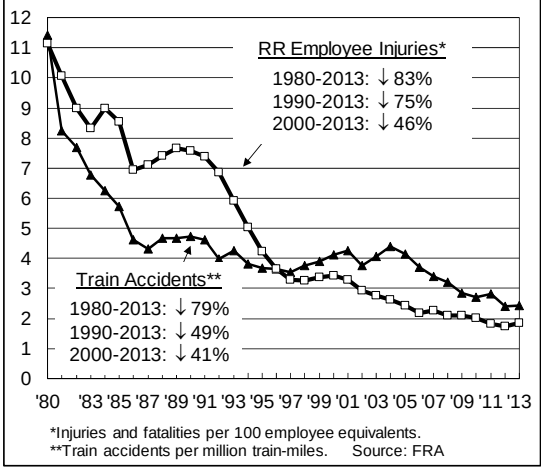
[6] In "bottleneck" situations, one railroad can move freight from an origin to an intermediate point, and from that intermediate point on to a final destination, and at least one other railroad can also move the freight from that intermediate point to the final destination. For a more detailed explanation of the bottleneck issue, see: https://www.aar.org/BackgroundPapers/Bottleneck%20Policy%20-%20Dont%20Fix%20What%20Isnt%20Broken.pdf.

policymakers should take great care in weighing the supposed benefits of the proposals with the substantial harm they would cause to railroad efficiency and, consequently, to our nation's economic well-being. It's also crucial that policymakers remember that railroads are integrated and interconnected networks: what happens in one location could easily have ramifications in locations hundreds or even thousands of miles away.

Fact-Based Safety Regulation

For our nation's railroads, including Union Pacific, pursuing safe operations is not an option, it's an imperative. We have an obligation to operate safely for the benefit of our employees, our customers, and the communities we serve. The rail industry's strong and pervasive commitment to safety is reflected in its excellent safety record. In fact, as Figure 6 shows, recent years have been the safest in history for railroads. Preliminary data indicate that railroads had the lowest train accident rate in history in 2014.

Figure 6:
Rail Accident & Injury Rates Have Plunged



*Injuries and fatalities per 100 employee equivalents.
**Train accidents per million train-miles. Source: FRA

Virtually every aspect of rail operations is subject to strict safety oversight by the Federal Railroad Administration (FRA). Among many other areas, railroads are subject to FRA regulation regarding track and equipment inspections; employee certification; allowable operating speeds; and the capabilities and performance of signaling systems. Hundreds of FRA personnel perform regular inspections of rail facilities and operations throughout the country, and in many states, FRA safety inspectors are supplemented by state safety inspectors.

It makes no financial sense to operate an unsafe railroad, so even if the FRA did not exist, I submit to you that railroads would have very strong incentives to operate safely. That said, railroads agree that some level of rail safety regulation is necessary — reasonable people can disagree over what that level should be — if for no other reason than to instill public confidence in the safety of railroads. But I also submit that, whatever the level, it is critical that rail safety oversight should be well grounded in evidence-based, scientific understanding, rather than in unsubstantiated claims or perceptions.

Two-Person Crews

The current debate over the number of crew members inside a freight train's locomotive cab is a case in point. Legislation has been proposed that would mandate that all over-the-road freight trains must operate with a certified locomotive engineer and a certified conductor in the locomotive cab. Railroads respectfully, but strongly, oppose this legislation.

Existing FRA regulations do not mandate minimum crew staffing requirements. Some non-Class I railroads have long operated with just one person in the locomotive cab, and thousands of Amtrak and commuter passenger trains, carrying hundreds of thousands of passengers, operate every day with just one person in the locomotive cab. On Union Pacific and other Class I railroads, the subject of crew size has typically been addressed as part of the collective bargaining process with rail labor. For Class I railroads, industry practice to date has been to have two-person crews (and in a few areas three-person crews) for over-the-road mainline operations. That said, it is important for Class I railroads to retain the flexibility to seek agreement with labor, at the appropriate time, to operate over-the-road mainline trains with one crew member.

The major reason offered by proponents of a two-person crew mandate is that it would enhance rail safety. Yet no one — not the FRA, not sponsors of the legislation in Congress, not rail labor — can point to hard data that support this contention. In fact, an AAR review of the FRA train accident database going back many years can find no evidence that trains with one-person crews have accidents at a higher rate than trains with two-person crews. Put another way, there is no demonstrated correlation between the number of crew members in the cab and train safety. The FRA itself, after its own review, stated in 2009 that it found no "factual evidence to support the prohibition against one-person operations."[7]

Railroads believe that the forthcoming implementation of positive train control (PTC) potentially presents an opportunity to move to one-person crews with no degradation of safety. PTC describes technologies designed to automatically stop a train before certain accidents caused by human error occur. Specifically, the Rail Safety Improvement Act of 2008 (RSIA) mandates that railroads' PTC systems must be designed to prevent train-to-train collisions, derailments caused by excessive speed, unauthorized incursions by trains onto sections of track where maintenance activities are taking place, and the movement of a train through a track switch left in the wrong position.[8]

When fully operational, railroads' PTC systems will be able to determine the precise location, direction, and speed of trains; warn train operators of certain potential problems; and take immediate action if the operator does not respond to the warning provided by the PTC system. For example, if a train operator fails to begin stopping a train before a stop signal or slowing down for a speed-restricted area, the PTC system would apply the brakes automatically

[7] From a 2009 FRA letter rejecting a rail labor request to prohibit one-person crews.

[8] In this context, a switch is equipment that controls the path of trains where two sets of track diverge.

before the train passed the stop signal or entered the speed-restricted area.[9] As such, PTC advances rail safety through the use of advanced technology, while at the same time eliminating any need for "a second set of eyes" in locomotive cabs.

Neither Union Pacific nor other Class I railroads seek the ability to impose one-person crews unilaterally or haphazardly. Rather, we seek the flexibility to continue to work with rail labor under the existing collective bargaining framework to identify when the presence of PTC allows a reduction in the number of crewmembers in a locomotive cab without jeopardizing rail safety. It is very clear to me, as it is to my industry colleagues, that it is in no one's best interest — certainly not a railroad's — to take steps that degrade safety.

Safety Performance Standards

Moving beyond one particular safety-related issue, I respectfully suggest that it's time to consider a change in the broad focus of rail safety oversight.

There are two general approaches to workplace safety regulation. The first, so-called "design-based standards," is the method most commonly used by the FRA. Design-based standards specify the precise characteristics of workplace facilities, equipment, and processes a firm must use in the manufacture and delivery of its product or service. For example, the FRA regulation mandating the interval between certain types of locomotive inspections is a design-based standard.

"Performance-based standards," on the other hand, define the desired result rather than mandating the precise characteristics that a workplace must exhibit. The point of a performance-based goal is to focus attention and effort on the outcome, not the method.

[9] For more detail on PTC, see the June 19, 2013 testimony of Edward Hamberger, President and CEO of the Association of American Railroads, to the Senate Commerce Committee.

Some of the old regulations would be replaced under a performance standard regime. That said, risk-based performance standards are a reform, not an abandonment, of safety regulation. Railroads would remain accountable. Except in emergencies or after continued failure to meet targets, the FRA would no longer specify how a railroad would achieve its safety goals. Instead, the FRA would oversee and validate the goal-setting process, ensure that the measures and data used are accurate, and impose any necessary sanctions. The use of performance standards would recognize that railroads and their employees are in the best position to know how to improve safety and reduce the costs of injuries and accidents.

There is little evidence that rigid design-based standards have a positive impact on railroad safety. They are, however, very costly for both railroads and the FRA to administer and maintain. They also tend to impede innovation because they "lock in" existing designs, technology, and ways of thinking. Reliance on a performance-based approach would allow the FRA the best opportunity to ensure the attainment of desired safety rates at lower cost for the FRA as well as for railroads.

Performance standards have been encouraged elsewhere in the U.S. government. For example, the 1990 Amendments to the Clean Air Act directed electric utilities to limit their emissions of sulfur dioxide and nitrogen oxide, but did not tell the utilities how to meet those standards. In the area of meat and poultry inspection, scientific practices for identifying and reducing microbial contamination have partly displaced strict regulations that prescribe in detail how food safety objectives are to be achieved. The National Highway Traffic Safety Administration (NHTSA) sets and enforces safety performance standards for motor vehicles and equipment, and the Pipeline and Hazardous Materials Safety Administration (PHMSA) has

developed and issued regulations that address risk analysis and integrity management programs for pipeline operators that largely utilize a performance standard process.

Capacity Enhancement Through Permitting Reform

Under existing law, state and local regulations (other than local health and safety regulations) that unreasonably interfere with freight rail operations are preempted by federal regulations. These federal regulations protect the public interest while recognizing that freight railroads form an integrated, national network that requires a uniform basic set of rules to operate effectively.

Nevertheless, rail expansion projects often face vocal opposition from members of affected local communities or even larger, more sophisticated special interest groups from around the country. In many cases, railroads face a classic "not-in-my-backyard" problem, even for projects for which the benefits to a locality or region far outweigh the drawbacks. This means that the amount of time and energy it takes to get projects from the drawing board to construction and completion is growing longer every day.

In the face of local opposition, railroads try to work with the local community to find a mutually satisfactory arrangement, and these efforts are usually successful. When agreement is not reached, however, projects can face lawsuits, seemingly interminable delays, and sharply higher costs.

A number of major rail intermodal terminal projects that yield tremendous gains for the overall logistical system, for example, have been and continue to be unduly delayed. Just one of the many examples involves the modernization and expansion of an intermodal terminal UP has been planning for years in San Joaquin County, California. UP participated in reviews of projected environmental benefits and less favorable impacts of the project in a process following California's Environmental Quality Act (CEQA) guidelines with the county. CEQA is the California statute that is very similar to the National Environmental Policy Act (NEPA), requiring transparency and public participation in certain projects. Unlike NEPA, CEQA requires mitigation of environmental impacts. UP and the county, with input from other agencies, identified suitable mitigation of the unfavorable impacts. However, even though the county has been a proponent of the project and UP has now obtained its permit, delays resulting from various agencies' lack of resources or outright challenges have stalled UP's progress and ultimately required UP to postpone its investment in this facility.

Some of the ways that policymakers can streamline rail-related environmental permitting include:

- *Extend environmental review provisions of MAP-21 to railroads.* MAP-21 contains a number of provisions to facilitate the construction of transportation projects, such as timelines, but the relevant statute is written in a way that excludes rail projects.
- *The U.S. Department of Transportation (DOT) should have a single, uniform set of categorical exclusions.* A uniform set of categorical exclusions for all DOT agencies would lead to better coordination of project review.
- *Extend highway exemption in Section 106 of the National Historic Preservation Act to railroads*. In 2005, the DOT generally exempted federal agencies from the Section 106 requirement of having to take into account the effects of their undertakings on the interstate highway system. This exemption should be extended to rail rights-of-way.

Railroads are not asking policymakers to allow railroads to wantonly harm the environment. They do want policymakers to help improve the movement of freight by taking

steps to shorten the time it takes for reviews of rail expansion projects in ways that do not adversely affect the quality of those reviews.

Extending the Statutory Deadline for Positive Train Control

I spoke earlier in this testimony about the potential for positive train control to help ensure that a train will be able to be safely operated with one person in the locomotive cab. Before that day comes, however, railroads must finish developing and installing PTC systems on their networks.

Frank Lonegro from CSX provided testimony to the full Senate Commerce Committee yesterday on PTC. I won't repeat everything he said here. For the purposes of this testimony, I simply want to reiterate his point about the need to extend the existing December 31, 2015 statutory deadline regarding PTC implementation.

As Mr. Lonegro stated, freight railroads have been working tirelessly, and spending tremendous amounts of money, to meet the PTC mandate. As of the end of 2014, UP has invested more than $1.5 billion on PTC, and we expect to spend close to $400 million this year. Our current estimate for the total cost of PTC on our railroad is approximately $2 billion.

Despite these huge expenditures, PTC's complexity means that more time is needed so that a logical plan for sequencing PTC's implementation can be instituted. Under the existing statute, however, there are no provisions that allow for a phased roll out, including comprehensive testing, of the technology. That's an extremely risky approach. In the technology world, major technology projects typically involve "beta versions" or their equivalent in which the technology is introduced in a deliberate fashion so that the inevitable bugs are identified and addressed. We need that for PTC. Adjusting the implementation deadline would

more accurately reflect railroads' tremendous efforts to design, install, and properly test this incredibly complex technology.

The freight railroad industry is fully committed to PTC, but it must be done correctly and we must make absolutely certain that the system will work as it should. That's simply not possible by the end of this year.

Conclusion

America today is connected by the best freight rail system in the world. Looking ahead, our nation cannot prosper in an increasingly competitive global marketplace if we do not maintain our best-in-the-world freight rail system.

That's why we cannot afford to be complacent. To be viable and effective, especially in the face of projected increases in freight transportation demand over the next 20 years, railroads must be able to both maintain their existing infrastructure and equipment and build the substantial new capacity required to handle the additional traffic they will be called upon to haul. They must be allowed to find the most efficient ways possible to meet their customers' needs. And they must use the best possible techniques and processes to ensure that rail safety continues to improve.

I'm sure I speak for the other freight railroads when I say that we will continue to work with you, other policymakers, our employees, our customers, and others to ensure that America's freight railroads retain their best-in-world status.