

**BUILDING A 21ST-CENTURY INFRASTRUCTURE FOR  
AMERICA: THE STATE OF RAILROAD, PIPELINE,  
AND HAZARDOUS MATERIALS SAFETY REGULA-  
TION AND OPPORTUNITIES FOR REFORM**

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(115-11)

**HEARING**

BEFORE THE

SUBCOMMITTEE ON RAILROADS, PIPELINES,  
AND HAZARDOUS MATERIALS

OF THE

COMMITTEE ON  
TRANSPORTATION AND  
INFRASTRUCTURE

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

APRIL 26, 2017

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Committee on Transportation and Infrastructure  
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Washington DC 20515

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April 21, 2017

**SUMMARY OF SUBJECT MATTER**

TO: Members, Subcommittee on Railroads, Pipelines, and Hazardous Materials  
FROM: Staff, Subcommittee on Railroads, Pipelines, and Hazardous Materials  
RE: Subcommittee Hearing on “Building a 21<sup>st</sup> Century Infrastructure for America: The State of Railroad, Pipeline, and Hazardous Materials Safety Regulation and Opportunities for Reform”

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**PURPOSE**

The Subcommittee on Railroads, Pipelines, and Hazardous Materials, will meet on Wednesday, April 26, 2017, at 10:00 a.m., in 2167 Rayburn House Office Building, to hold a hearing on “Building a 21<sup>st</sup> Century Infrastructure for America: The State of Railroad, Pipeline, and Hazardous Materials Safety Regulation and Opportunities for Reform”. The Subcommittee will hear testimony from a Class I railroad;<sup>1</sup> the association representing short line and regional railroads; representatives of the natural gas and hazardous liquid pipeline industries; an industry association representing shippers and transporters of hazardous materials; and a representative of rail labor.

**BACKGROUND**

The safe and efficient movement of people and goods is the top priority for Congress and all transportation stakeholders. Rail, pipeline, and hazardous material transportation safety are overseen by the Federal Railroad Administration (FRA) and the Pipeline and Hazardous Materials Safety Administration (PHMSA).

FRA was created by the *Department of Transportation Act of 1966* (P.L. 89-670). However, rail safety regulation began nearly a century earlier when statutes governing specific aspects of railroad equipment were enacted and regulatory authority was vested in the Interstate Commerce Commission. Today, FRA has jurisdiction over all freight, commuter, and intercity passenger rail transportation. FRA promulgates regulations, notices safety advisories, and issues emergency orders to ensure, among other things, the safety of rail infrastructure, equipment, railroad employees and passengers, and communities through which railroads travel. FRA

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<sup>1</sup> U.S. Class I railroads are line haul freight carriers with operating revenues of \$453 million or more in 2016; the operating threshold is adjusted annually for inflation by the Surface Transportation Board (STB). There are currently seven Class I railroads operating in the United States.

currently employs approximately 365 rail inspectors and has an operating budget of \$199 million and an additional \$50 million for rail safety grants.

PHMSA was created by the *Norman Y. Mineta Research and Special Programs Improvement Act of 2004* (P.L. 108-426). Previously, the Department of Transportation's (DOT's) Research and Special Programs Administration handled pipeline and hazardous materials safety. PHMSA has jurisdiction over the transportation of hazardous materials, regardless of mode, and oversees the safety of the Nation's 2.6 million miles of gas and hazardous liquid pipelines, which account for the transportation of 64 percent of the energy commodities consumed in the United States.

PHMSA currently has about 100 federal pipeline safety inspectors, supplemented by approximately 300 state pipeline safety inspectors. In fiscal year 2016, the hazardous materials safety program received \$55.6 million from general revenues, and about \$28 million in hazmat registration fees paid by shippers and transporters used to issue emergency preparedness grants to states. The pipeline safety program was funded at \$146.6 million, of which \$124.5 million was derived from the Pipeline Safety Fund, funded by user fees on pipeline operators, and \$22.1 million was derived from the Oil Spill Liability Trust Fund.

#### **Railroad Safety Regulation and Safety Trends**

Since 1980, the rate of freight train accidents and incidents per million train-miles has fallen 88.2 percent, and the rate of intercity and commuter rail passenger accidents and incidents per million passenger train-miles has declined 61 percent. Railroad employee on-duty fatalities, injuries, and illnesses have declined 91.7 percent. The freight railroads attribute their safety improvements in part to the *Staggers Rail Act of 1980* (*Staggers*), which partially deregulated the industry and restored the industry to financial health. Since *Staggers* was enacted, the freight railroads have invested \$600 billion in their systems. Rail labor also attributes lower accident and incident rates and the decline in railroad employee on-duty fatalities to increased safety regulation.

FRA's general regulatory authority under 49 USC §20103 directs the agency, as necessary, to regulate and issue orders for every area of railroad safety. FRA has used the authority to issue regulations prescribing specific intervals for inspection of track, locomotives, rolling stock, and brakes, as well as standards for train inspections. There are comprehensive track gauge and safety appliance standards; operating rules; workplace safety regulations; locomotive and freight car safety standards; hours of service regulations; and signal systems rules, among others.

Railroad safety regulations have grown significantly since 2000. A number of the regulations are the result of Congressional mandates enacted after serious rail accidents often upon the recommendation of the National Transportation Safety Board (NTSB). For example, Congress mandated the installation of Positive Train Control (PTC) systems<sup>2</sup> on certain railroad

<sup>2</sup> PTC technologies automatically stop or slow a train before certain accidents caused by human error occur, including train-to-train collisions, derailments caused by excessive speed, and movement of a train through a track switch left in the wrong position. The deadline for PTC implementation has been extended to December 31, 2018.

lines following a deadly train collision in the Chatsworth district of Los Angeles, California, and a number of train derailments in South Carolina and Texas that caused the release of hazardous material, although PTC had been on the NTSB's most wanted list of safety improvements since 1990. In other instances, FRA has acted on its own initiative or upon petition by a regulated entity. For example, FRA and PHMSA jointly issued regulations to address safety concerns associated with the transportation of crude oil by train, following crashes in North Dakota, Alabama, and Virginia, and a catastrophic accident in Lac Megantic, Quebec, in which 47 people were killed when a runaway train derailed in the center of town.

FRA's approach to regulation of the rail industry has most often been to prescribe how a particular goal must be met rather than setting out the desired outcome and giving the industry the flexibility to determine how to reach the goal. However, FRA implemented the bridge management program mandated by Congress in 2008 as a performance-based rule that gave the railroads a significant amount of compliance flexibility in developing their bridge management programs. One of the issues the hearing will explore is the use of performance-based and prescriptive regulations.

The *Passenger Rail Reform and Investment Act of 2015* enacted as part of the *Fixing America's Surface Transportation Act of 2015* (FAST Act), contained provisions to improve freight and passenger rail safety. The FAST Act includes several provisions to improve safety at highway-rail grade crossings, and emphasizes the safety of intercity passenger and commuter rail operations.

#### **Pipeline Safety Regulation and Safety Trends**

Over the past 10 years, the total number of pipeline incidents has increased from 611 in 2007, resulting in 15 fatalities and 46 injuries, to 635 in 2016, resulting in 17 fatalities and 82 injuries. The number of serious incidents – those resulting in a fatality or injury requiring in-patient hospitalization – fell from 42 in 2007 to 37 in 2016 but the number of injuries and fatalities resulting from the incidents rose.

PHMSA's general regulatory authority (49 USC §60102) directs the agency to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities by improving the regulatory and enforcement authority of the Secretary of Transportation; to issue minimum standards for pipeline transportation and pipeline facilities; requires the standards to be practicable, designed to meet the need for gas pipeline safety, or safety transporting hazardous liquids, and protecting the environment, and directs PHMSA to consider, based on a risk assessment, a standard's benefits and costs.

PHMSA's regulatory framework promotes pipeline safety through exclusive federal authority for regulation of interstate pipelines and facilities. States may impose additional standards for intrastate pipelines and facilities if they are compatible with the minimum federal standards. PHMSA's pipeline safety functions include developing, issuing, and enforcing regulations for the safe transportation of natural gas (including associated liquefied natural gas

facilities), and hazardous liquids by pipeline. In fulfilling its mission, PHMSA has employed a mix of performance-based and prescriptive regulations.

The pipeline safety program was most recently reauthorized for four years by the *Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016* (PIPES Act) (P.L. 114-183). The PIPES Act sets minimum federal safety standards for underground gas storage facilities, as a result of the 2016 methane leak in Aliso Canyon, California, establishes revised safety standards for liquefied natural gas facilities, and increases inspection requirements for certain underwater oil pipelines. The PIPES Act also focuses on making PHMSA a more data-driven regulator that works closely with states and stakeholders to achieve common safety goals, as well as to ensure that PHMSA is completing its required mandates from the *Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011* (P.L. 112-90).

PHMSA has failed to implement the *Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011* Act, which contained a number of Congressional safety mandates stemming from the July 2010 Enbridge crude oil spill in Kalamazoo, Michigan, and the September 2010 PG&E natural gas explosion in San Bruno, California.

Like railroad safety regulations, pipeline safety regulations have grown significantly since 2000, often in reaction to pipeline accidents.

#### **Hazardous Materials Transportation Safety Regulations and Safety Trends**

According to the Bureau of Transportation Statistics, the rate per million tons of hazardous materials incidents<sup>3</sup> involving rail, highway, waterway, and air transportation has declined by 20.6 percent since 2002. The rate of fatalities and injuries has risen 5.4 percent over the same period.

The regulation of hazardous materials dates to the enactment of *The Hazardous Materials Transportation Act* in 1975. PHMSA has the authority to determine what materials are to be considered “hazardous” and subject to regulation. Hazardous material regulations apply to any person who transports, ships, causes to be transported or shipped, or who is involved in any way with the manufacture or testing of hazardous materials packaging or containers. Since 1997, hazardous materials regulations, with certain exceptions, have applied to intrastate transportation. In general, state and local laws and rules regarding most aspects of hazardous materials transportation must be substantively the same as federal law or they are preempted.

The hazardous materials safety program was most recently reauthorized for five years as part of the FAST Act. The FAST Act includes a number of provisions to enhance safety, with a significant focus on the transportation of flammable liquids, including crude oil, by rail. The Act also requires Class I railroads to generate real-time emergency response information; requires PHMSA to withdraw a rulemaking on wetlines; and accelerates the administrative process for the review and approval or disapproval of special permits and approvals.

<sup>3</sup> Reportable incidents include fatalities, injuries, reportable releases of a hazardous material, and certain other incidents, including the shutdown of a major transportation artery.

In 2016, PHMSA reorganized the agency to more effectively manage its dual responsibilities for hazmat transportation and pipeline safety, base its regulations on data and analytics, and become a more efficient regulator. However, the Subcommittee remains concerned about PHMSA's backlog of uncompleted Congressional mandates.

**WITNESS LIST**

Ms. Linda B. Darr  
President  
American Short Line and Regional Railroad Association

Mr. Roger Nober  
Executive Vice President, Law and Corporate Affairs  
BNSF Railway

Mr. Paul Rankin  
President  
Reusable Industrial Packaging Association  
On behalf of the Interested Parties for Hazardous Materials Transportation

Mr. Robin Rorick  
Group Director of Midstream and Industry Operations  
American Petroleum Institute

Mr. Donald J. Santa, Jr.  
President and Chief Executive Officer  
Interstate Natural Gas Association of America

Mr. John Tolman  
Vice President and National Legislative Representative  
Brotherhood of Locomotive Engineers and Trainmen

**BUILDING A 21ST-CENTURY INFRASTRUCTURE FOR AMERICA: THE STATE OF RAILROAD, PIPELINE, AND HAZARDOUS MATERIALS SAFETY REGULATION AND OPPORTUNITIES FOR REFORM**

WEDNESDAY, APRIL 26, 2017

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

The subcommittee met, pursuant to notice, at 10:05 a.m. in room 2167 Rayburn House Office Building, Hon. Jeff Denham (Chairman of the subcommittee) presiding.

Mr. DENHAM. Good morning. The committee will come to order.

Today we meet to take stock of the landscape for safety regulation across all of the industries under the committee's jurisdiction, and consider opportunities for reform.

Much has been accomplished on rail, pipeline, and hazardous materials safety, most recently through the Fixing America's Surface Transportation, or the FAST Act, and the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016, or the PIPES Act. I am proud that we have consistently worked on a bipartisan basis, and I want to thank Chairman Shuster and Ranking Members DeFazio and Capuano for their work on these bills.

Safety is our top priority, and will continue to be so. But the breadth of regulation has grown significantly in recent years. And so we are here to ask stakeholders about the impact and burden of regulation on their businesses, and ways to ease the burden without compromising safety.

Are these the—[lifts volumes from table and reads:] “2016 Regulations and Codes.” We are very focused on safety, but this has more than doubled in the last—how many years? Since 2000. So, quite a bit more compliance here. Again, safety is our number-one priority. But we also want to make sure that, as we move forward, we are doing so in a way that allows all of you to conduct business appropriately.

In 2004, when the Pipeline and Hazardous Materials Safety Administration, PHMSA, was created, the number of pages of this CFR governing pipeline and hazardous material had increased over 200 pages. Regardless, we are adding more regulations without considering the cumulative burden on industry. And all of the industries represented here today are facing growing regulations, not

just from the DOT, but from other agencies, such as the Department of Labor, as well.

Today's hearing is an opportunity for our stakeholders to tell us what is working, what is not, and what needs to be modified in terms of regulatory process. Are regulations based on sound science? Is guidance being used appropriately? Are the appropriate rulemaking processes being followed? Can performance-based regulations be more effective than command-and-control regulations in achieving safety goals while imposing less of a burden on industry? These are just some of the issues I hope that we will explore today.

I am also interested in hearing from our witnesses about how the agencies are implementing the FAST and PIPES Acts, and whether they are following congressional intent. PHMSA has still not implemented congressional directives from 2011, something we have expressed concern about over the past few years.

So I want to hear from each of our witnesses, and thank each of them for being here today.

I now call on Mr. Capuano for any comments that he may have.

Mr. CAPUANO. Thank you, Mr. Chairman. Great introduction. Let's get to the hearing.

Mr. DENHAM. I now call on the chairman of the full committee, Mr. Shuster.

Mr. SHUSTER. That is why I love Capuano.

[Laughter.]

Mr. DENHAM. I now call on—are you going?

Mr. SHUSTER. Yes, I am going.

[Laughter.]

Mr. SHUSTER. Capuano doesn't love me that much, because I talk more than he does. Would the chairman recognize me?

Mr. DENHAM. The chairman of the full committee, Mr. Shuster, is recognized.

Mr. SHUSTER. I appreciate that. I am really glad we are having this hearing today, and everybody has heard the President of the United States talk about doing a big infrastructure bill. I feel confident we are going to do a big infrastructure bill. It will cover more than just the modes that we deal with here in the committee.

It will deal with—I think broadband will be in there, and the electric grid, the power grid will be part of it, plus many other things.

As I have told people, you know, he just dropped the MOAB, the mother of all bombs, on Afghanistan. Well, I think this is going to be the MOAB of bills, the mother of all bills. I think it is going to be a big bill, I think it is something that we can find common ground across the aisle with our counterparts, because when you talk about the infrastructure of this country, everybody knows we need to invest.

And again, I feel very confident we are going to be able to do something with our Democratic colleagues and, more importantly, I think even with our Senators over there, Republicans and Democrats, if we get them going in the right direction.

And when we talk about the infrastructure bill, two of the two industries that I talk to—and I have talked to the President and some of his folks—it doesn't require Federal dollars for the railroad industry and the pipeline industry. They are already spending bil-

lions of dollars on their own infrastructure. I know last year, I believe, the number was \$30 billion the railroad industry spent. And if we allow the railroad industry to keep more of their profits, I am confident that that \$30 billion will grow, and they will rebuild—continue to rebuild their infrastructure.

The same with the pipeline industry. In Pennsylvania we have two pipeline projects, one a \$3 billion pipeline project, one a \$1 billion project. The \$3 billion pipeline project is being held up because FERC and the Corps of Engineers can't agree on where to permit it to build it, and it is just ridiculous, when you see this thing is going to be safe—pipelines are the safest mode to move hazardous materials. So we have to make sure that we move forward.

And I am confident that the—you know, the mistakes happen out there, things happen, but moving by pipes is extremely safe, as well as the railroad industry is incredibly safe.

My dear friend who has departed us, Jim Oberstar, and we had this big hearing one day on rail safety, and he was questioning whether the railroads are safe enough, and I was saying they were, and he talked about when he was a young man he jumped off the back of a railcar. He was working for the railroad up in Minnesota. He jumped off the back of a railcar, slipped, and he said, "My head missed the rails by inches. I could have split my head open and been killed."

Well, they happened to call the vote at the time, so I walked down the hall and the entire rail industry was there to greet me. And they said, "If he would have jumped off that and we knew it, we'd have had to fire him," because you have to hold both the rails going down the steps the back of a railcar.

So, you know, the railroad industry is committed to safety. Any time you meet with them you got to go through a safety briefing. And again, I know the pipeline industry, I know the folks in the hazardous material business are really—that is the number-one priority. For your industries I know it is, and it is for this committee. So we want to make sure that we are working together to reduce the regulatory burden.

It is crazy, when you look at those things and how they have grown over the past 15, 16 years. And it has gotten safer. And not necessarily because of those regulations. You know, again, if we could get these things done faster, smarter, let people keep more of their money, it is going to benefit everybody, it is going to benefit the economy as we move forward.

And, with that, I will say sorry, Mr. Capuano, for taking up so much time, but I am ready to go. Thank you very much, Chairman.

Mr. DENHAM. I now call on the ranking member of the full committee, Mr. DeFazio, for a brief opening statement.

Mr. DEFAZIO. Thank you, Mr. Chairman. I will have an opening statement, because I think this merits a lot of discussion and scrutiny by this committee.

And, I mean, there are a few examples out there: the Enbridge Pipeline, which leaked for quite a period of time, 1 million gallons of tar sands, mostly unrecoverable, in the river, because simple leak detection was not effective; the gas explosion in San Bruno, California, killed eight people because of problems with the pipe and the pipeline itself.

And, as someone mentioned, PHMSA, a pretty much dysfunctional agency, has yet to implement rules from our 2011 bill. So, before we start messing around with the things that are pending, we ought to actually see what they produce and then review what their products are.

And then, finally, one that is of extraordinary concern to me, is lithium batteries on airplanes. We just had another lithium battery incident. Luckily, it was not in the hold of an airplane. Otherwise, we would have seen dead people. It was Sunday night, a Union Pacific train. The car was removed from the train when it started smoking. Later there was an explosion inside. And it contained cargo of small lithium batteries. If that happened in the hull of an airplane, it would come down and people would die.

We have the example of UPS flight 6 near Dubai, which created a giant crater. Twenty-seven minutes, forty-five seconds. That is how much time between when the fire alarm went off on the cargo plane until the plane cratered into the ground. I think there is a visual of that. The manifest said there were no hazardous materials on board. In fact, there were three shipments of lithium batteries that had quite a variety of cells inside.

Two minutes after the flight—fire warning, the flight leveled off. It had already started to burn through the flight controls. Four minutes, the cockpit was full of smoke. Five minutes, the smoke was so thick the crew had a hard time seeing their instruments. Nine minutes, the captain was unconscious or dead, first officer couldn't see the controls inches in front of him. And 28 minutes later, the plane cratered into the ground with the pilots deceased. Luckily, they did not crash into a large, inhabited area.

The International Civil Aviation Organization, which is not known for taking a tough stance on things, finally, after the manufacturers of Airbus and Boeing came out and said there is no way to repress these fires on board an airplane, they adopted some very minimal standards regarding the charging of the batteries and that, and also that they should not be on passenger aircraft.

The industry says that ICAO standard is a really bad idea. We should put them on passenger aircraft, and we shouldn't restrict them on airplanes. You know, it only takes one half-charged lithium battery, the size of a water bottle, in a pack of eight to take down an airplane. So the fact that the DOT was working on adopting the very minimalist ICAO standards, and that has been stayed by the Trump administration, which said it would not stay regulations which are critical to health and safety—I don't know what is critical to health and safety if airliners falling out of the sky isn't critical, both to the people on board and the people on the ground underneath.

There are times when regulation becomes absurd and over-regulated. But other times regulation is absolutely essential in the public interest. And now the passenger airlines in the United States have said, voluntarily, they won't carry lithium batteries.

But given the insufficient labeling requirements, we are not sure whether they are or are not in the carriers. And secondly, it is voluntary. So maybe one of the low-budget airlines will say, "Hey, no one else is carrying them. The industry will pay us a premium to

move these things around. We will put them on board. Nothing to worry about.”

So, you know, let’s not be cavalier about this and aggrandize the places where we have over-regulated with places where we need to regulate for the critical national safety and health interests of the people of the United States of America.

With that, I look forward to the hearing.

Thank you, Mr. Chairman.

Mr. DENHAM. Thank you. I would now like to welcome our panel of witnesses.

First, Ms. Linda Darr, president, American Short Line and Regional Railroad Association.

Mr. Roger Nober, executive vice president, law and corporate affairs for BNSF Railway.

Mr. Paul Rankin, president, Reusable Industrial Packaging Association, on behalf of the Interested Parties for Hazardous Materials Transportation.

Mr. Robin Rorick, group director of midstream and industry operations for American Petroleum Institute.

Mr. Donald Santa, Jr., president and chief executive officer, Interstate Natural Gas Association of America.

And Mr. John Tolman, vice president and national legislative representative for the Brotherhood of Locomotive Engineers and Trainmen.

I ask unanimous consent that our witnesses’ full statements be included in the record.

Without objection, so ordered.

Since your written testimony has been made part of the record, the committee requests that you limit your summary to 5 minutes.

Ms. Darr, you may proceed.

**TESTIMONY OF LINDA BAUER DARR, PRESIDENT, AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION; ROGER NOBER, EXECUTIVE VICE PRESIDENT, LAW AND CORPORATE AFFAIRS, AND CHIEF LEGAL OFFICER, BNSF RAILWAY; PAUL W. RANKIN, PRESIDENT, REUSABLE INDUSTRIAL PACKAGING ASSOCIATION, ON BEHALF OF THE INTERESTED PARTIES FOR HAZARDOUS MATERIALS TRANSPORTATION; ROBIN RORICK, GROUP DIRECTOR OF MIDSTREAM AND INDUSTRY OPERATIONS, AMERICAN PETROLEUM INSTITUTE; DONALD F. SANTA, JR., PRESIDENT AND CHIEF EXECUTIVE OFFICER, INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA; AND JOHN TOLMAN, VICE PRESIDENT AND NATIONAL LEGISLATIVE REPRESENTATIVE, BROTHERHOOD OF LOCOMOTIVE ENGINEERS AND TRAINMEN**

Ms. DARR. Thank you, Chairman Denham and Ranking Member Capuano and members of the committee. I am Linda Darr, president of the American Short Line and Regional Railroad Association, representing the Nation’s 600 class II and class III railroads. Together, short line railroads operate approximately 50,000 miles of track, or nearly one-third of the national railroad network. Thirty members of this subcommittee’s thirty-two members have at least one short line operating in your district.

There are three important differences between short lines and the large, class I railroads. First, short lines are small businesses. Our combined annual revenues are less than the annual revenues of any one of the four large class I railroads. The average short line employs 30 people or less.

Second, most short lines operate track headed for abandonment under previous class I owners. These marginal lines receive little or no capital investment, resulting in significant deferred maintenance. Consequently, short lines must invest over 25 percent of their annual revenues in rehabilitation, making us one of the Nation's most capital-intensive industries.

Third, short line operating characteristics are far different than those of the class I's. Short lines are generally operating in a much smaller geographic area. These shorter distances, combined with slower speeds and shorter trains, produce more predictable work schedules and more routine patterns of interchange and delivery.

These three characteristics—our size, our capital needs, and our operating requirements—shape our view of the safety regulations that impact our businesses. We need regulations that are more efficient, more goal-oriented, less reliant on a one-size-fits-all mindset, and much more focused on costs and benefits.

We understand the need to make railroading as safe as possible, and we understand that Government has an obligation to step in when necessary. But Government also has an obligation to step in responsibly. Too often Government regulation forces companies to spend huge sums of money and solutions that don't solve much.

Most damaging are the one-size-fits-all regulations that provide no basis for the presumed benefits and that ignore our unique operating characteristics. I cite four examples in my written testimony, but let me briefly describe one of those.

The part 243 minimum training standard rules. The proposed rule imposes an enormous paperwork burden on short line railroads, with no corresponding safety benefit. The rule was drafted pursuant to the Rail Safety Improvement Act, but we believe that, ultimately, the FRA's interpretation goes far beyond anything contemplated by the statute.

If I might be permitted the use of a prop here, they told me to drop it on the table for extra emphasis, so I will do that.

Following the proposed rule, we hired a safety professional to produce a template manual that met all the requirements of the rule for just 1 of the 26 crafts, or job assignments, on the railroad. So this is the manual that was produced. This notebook would have to be duplicated 26 times to cover all of the crafts in our industry for our small businesses.

We gave this book to the FRA, and we asked them to comment on and approve it as a template that could be used by all the short lines. It took FRA 3 years to reply: a good indication of the complexity and the time-consuming nature of this directive. We believe this regulation should be repealed, and the underlying statutory requirement revised.

Let me conclude with an anecdote that symbolizes the importance of safety for our industry. Before joining the short line association, I represented the trucking industry for just about 17 years. When we had big meetings, they were usually kicked off with a

pledge to the flag, or sometimes even a prayer. In the short line industry, we start each and every meeting, big or small, with a safety briefing. It is a central focus of what we do. It reflects our commitment to safety, and it is an effort to make us safer today than we were the day before.

With the help of Congress, we stood up the Short Line Safety Institute to help us drive a sustainable, strong safety culture throughout our industry, and to carry forward that commitment to safety. You are undertaking an important task. If you make regulations more efficient, more goal oriented, and more focused on benefits and costs, you will have done our industry and the public a great service, and we are deeply appreciative of that effort. Thank you.

Mr. DENHAM. Thank you, Ms. Darr.

Mr. Nober, you may proceed.

Mr. NOBER. Good morning, Chairman Denham, Chairman Shuster, subcommittee Ranking Member Capuano, and Ranking Member DeFazio. Thanks for the opportunity to testify before you this morning on behalf of BNSF Railway. And I have to say it is always a privilege to be able to be back before this subcommittee and this committee to be able to talk about this topic in particular: safety, regulatory matters, and ways to improve the regulatory process, a subject which I spent much of my 25 years in transportation policy focusing on.

At the outset, I would like to commend this committee for its work during the last Congress to enact a significant amount of legislation that is beneficial to railroads. And in this Congress we look forward to again working closely with this committee on a proactive agenda, including updating and improving regulation, and ensuring that transportation infrastructure policy, as Chairman Shuster mentioned earlier, treats railroads equitably.

Transportation issues and this committee have always been bipartisan and solution-oriented, and we think the subject of today's hearing lends itself to those two important characteristics.

Today's topic of safety regulation improvement is difficult, but it is important. BNSF has been discussing it with policymakers for years.

And with BNSF, growth is at the core of our business model. And, like many businesses around the country, we look to Congress and the administration to promote policies that help grow the economy, so that we can grow with our customers. Now, our ability to grow and earn adequate revenues and reinvest in the company is directly related to the topic of today's hearing: safety. Reinvestment is the foundation of the railroad safety record that you and we have come to expect, and operating safely and reliably is at the core of our ability to attract new business.

Now, the laws of physics that make railroads the most efficient mode of surface transportation also make railroads the most unforgiving. This risk has been significantly contained through the years through large capital investment in our track, structures, equipment, and road bed, and implementing innovative technologies and processes. Today we have an incredibly safe railroading environment. These technologies, as well as the effectiveness of our annual maintenance and ongoing employee training and rules compliance

programs, have driven train incidents and employee safety records to historic lows.

Now, we have not yet achieved our safety vision. Incidents and accidents still do occur. However, we believe that they are outliers. Operating safely every day on every move is now our normative outcome and our expectation.

Now, turning to today's hearing, at BNSF we believe that technology is a key to our next level of safety improvement. BNSF believes it is important for regulators and regulation to catch up with and encourage technological innovation. This will promote a virtual cycle of continued investment in the development of technologies, allowing railroads to advance safety, while also potentially achieving more productivity. This is a commonsense approach that is supported by recent Executive orders, and also those issued in previous administrations, and it has been consistent across time.

Altering existing rules to keep up with changes in technology or operations has not been easy. And I am fond of saying in railroading you are never far from history. And well-meaning safety regulators can be extremely risk-averse in their approach to reviewing or changing regulations, especially those that have been long in place, even in an increasingly technologically transformed work environment.

An improved approach to regulatory oversight would empower the regulators to embrace innovation and technology-enabled advancements in safety, rather than make them more difficult.

As I have discussed in my written testimony, there are many areas where technology and innovation run into historical regulation. Rail systems are generally regulated with time and mileage-based manual inspection regimes, testing, and overhaul activities. But today, signal systems, grade crossing equipment, railcars, brakes, and locomotives have microprocessor technologies that monitor and report actual asset health on a real-time basis.

There is still a role for visual inspections, but regulators need to recognize the enhanced safety value of automated inspections and diagnostics. Similarly, our investment in wayside technology has improved our track inspection technology.

Electronic recordkeeping and communications rules are ripe for updating, with railroad technology and digital communication able to drive safer and more efficient outcomes. There are also a variety of track and ballast regulations which should be revisited to allow compliance through inspection technologies and appropriate standards to bring this area of regulation up to date, as well.

Now, improving administrative processes is critically important. The FRA has a regulatory waiver process that can be improved. And to the extent that railroads request waivers to demonstrate technology, regulators should view them as opportunities to create common understanding about rail operations, similar to pilot programs.

Waivers should be speedy, cooperative, and transparent, and can be a precursor to moving rail safety regulation to a performance-based regulation, where safety outcomes, rather than activities, are incentivized.

Finally, we believe regulators should curtail the practice of regulating through non-APA regulations like guidances, emergency orders, and safety advisories.

In conclusion, regulatory innovation does not happen overnight, and it is especially difficult in a long-lived industry like railroads, where there have been more than 100 years of how it has always been done. But there are many railroad-related regulations that call for review which could be done cooperatively, if we could just get started. And this committee can play an important role in their implementation.

I look forward to your questions.

Mr. DENHAM. Thank you, Mr. Nober.

Mr. Rankin, you may proceed.

Mr. RANKIN. Chairman Denham, Chairman Shuster, Ranking Member Capuano, and Ranking Member DeFazio, thank you very much for giving us the opportunity to talk here today. I am Paul Rankin. I serve as chair of the Interested Parties group, which is a volunteer coalition of 46 organizations that share a deep and abiding interest in legislative and regulatory issues related to the safety and security of hazardous materials transportation, both domestically and internationally.

At the outset, I want to make clear to the subcommittee that members of the Interested Parties are deeply committed to ensuring the safe and secure transportation of hazmat in both domestic and international transportation. Safety is of paramount concern to the industry, and our exemplary record in this area and support for reasonable and effective regulation underscore this goal.

We support a robust, efficient, and centralized hazmat transportation regulatory program that is located within the Department of Transportation, specifically PHMSA, and which has clear, cross-modal, and international authorities.

The Interested Parties do support reasonable Federal regulation in the field of hazardous materials transportation. As I am sure the members of the committee know, the transportation of hazardous materials in domestic and international commerce is essentially prohibited, unless authorized by a regulation, special permit, or approval. As such, reasonable regulation is needed to ensure the safe and uninterrupted—I will get that, soon—flow of these materials and commerce.

In line with our desire for reasonable Federal regulation is the support for preemption authority, the purpose of which is to promote safety by ensuring, to the extent practicable, that a patchwork of State and/or local regulations do not impede interstate commerce, or encourage communities to export transportation risks to their neighbors.

Because hazardous materials may only be transported if appropriately authorized, regulatory flexibility is needed for such activities as authorizing one-time movements of hazardous materials and facilitating the emergence of new and innovative technologies. Special permits and approvals are the regulatory mechanisms that PHMSA uses for these purposes. We are grateful for the attention that Congress and this committee, in particular, has given to addressing delays in the special permits and review process.

And, although PHMSA has made appropriate and significant progress in recent years to streamline the special permits program, including a recent rulemaking incorporating some special permits older than 10 years into the hazardous materials regulations, we believe more can and should be done to improve this program.

Specifically, we recommend PHMSA regularly review all special permits of general applicability, and publish annually a special permit rulemaking that incorporates those deemed to be safe into the hazardous materials regulations.

Turning to international affairs for a moment, international trade in hazardous materials is a global and significant business. To ensure these commodity movements are safe, the Secretary of DOT has delegated authority to PHMSA to represent the United States in various international regulatory forums, including the U.N. Subcommittee of Experts on the Transport of Dangerous Goods, which the U.S. presently chairs.

The Interested Parties encourage Congress and this committee to continue its strong support for DOT's international work. More specifically, we want you to know that we believe it is important that a PHMSA representative serve as an ICAO panel member, and lead the Dangerous Goods Panel delegation to ICAO.

In terms of enforcement issues, although MAP-21 contained a provision directing PHMSA to develop uniform performance standards for inspectors and investigators, the Interested Parties believe PHMSA can and should do a great deal more to improve this program. The Interested Parties suggest the creation of an online consultation program patterned on similar programs offered or overseen by, among other agencies, the Occupational Safety and Health Administration.

We envision such a program being offered to small and mid-sized businesses throughout the United States, and we think this kind of a program will do much to ensure safety across the board.

Turning to a general regulatory reform matter, the IPs support adoption of administrative reforms for PHMSA like those enacted by Congress in the FAST Act, applicable to the Federal Motor Carrier Safety Administration. Such reforms would include inclusion of a regulatory impact analysis for each proposed and final rule that considers the effect of the rule on different segments of industry, and utilizes the best available science, and requiring that all significant rules be initiated with an advanced notice of proposed rulemaking or, alternately, a negotiated rulemaking.

Thank you very much, Mr. Chairman.

Mr. DENHAM. Thank you, Mr. Rankin.

Mr. Rorick, you may proceed.

Mr. RORICK. Good morning, Chairman Denham, Chairman Shuster, Ranking Member Capuano, and members of the subcommittee. Thank you for inviting me to speak today. With over 625 members, the American Petroleum Institute is a national trade association representing all facets of the oil and natural gas industry. As group director of API midstream and industry operations, I am responsible for all energy infrastructure issues, including storage, rail, pipelines, marine, and all of the modes of oil and natural gas transportation.

The United States is leading the world in the production, refining, and processing of oil and natural gas, and at the same time in the reduction of carbon emissions, which are at the lowest levels in almost 25 years. In less than a decade, we have transitioned from an era of energy scarcity and dependence to one of energy abundance and security. This energy renaissance has helped the U.S.—has helped U.S. families save on their energy bills, created greater job opportunities for American workers, bolstered U.S. manufacturing, strengthened our economy, and helped to enhance our national security interests domestically and abroad.

An energy infrastructure system that keeps pace with growing production demand is essential. Yet, despite having a robust system, a recent ICF study found that the U.S. will need up to \$1.3 trillion in energy investment—energy infrastructure investment through 2035 to keep pace with supply and demand. This investment, on average, will support up to 1 million jobs, and add up to \$100 billion to GDP, annually.

Safety is our industry's core value. Since 1924, API has been the leader in developing voluntary consensus, internationally recognized industry standards that promote safety and reliability. This program is accredited by the American National Standards Institute, or ANSI, the same organization that accredits similar programs at several national laboratories.

Today, API has more than 600 recommended practices that are used by the industry throughout the world. These were developed with technical experts from Government, academia, industry, and the public, and are referenced more than 430 times in Federal and State regulations, covering multiple Government agencies, including the Pipeline and Hazardous Materials Safety Administration.

In our experience, performance-based standards which provide adaptable frameworks for conformance enable the industry to significantly advance safety by addressing issues such as technology, management systems, best practices, and training in an efficient manner.

As an example, our recently completed recommended practice 1173 helps pipeline operating companies establish a culture of safety through the development of the pipeline safety management system.

Beyond our work on standards, API remains committed to regulatory structures that promote safety, environmental protection, and responsible operations. We continually look for ways to collaborate with regulators to cooperatively address challenges in the industry. We strongly support the adoption of a performance-based regulatory model which gives operators flexibility in implementing comprehensive programs to effectively address risks associated with a facility or company's unique operations.

However, we are concerned that recent regulatory action by PHMSA, including the natural gas transmission and gathering lines rule, the hazardous liquid pipelines rule, and the underground natural gas storage facilities rule are too prescriptive in their approach. We strongly encourage PHMSA to modify these pending rulemakings to ensure that any actions taken to advance safe operations are based on the most current information and utilize the latest technologies and techniques.

Certainty and consistency in a regulatory process is of critical importance to oil and natural gas operators, especially when it comes to the development of energy infrastructure projects. Oil and natural gas operators typically look at 10- to 20-year planning horizons, based upon individual analyses and contractual agreements with customers. The impacts of large regulatory and policy swings, particularly those that are poorly designed, can create a chilling effect throughout the industry that stifles growth and ultimately negatively affects consumers throughout the Nation.

We appreciate Congress' recent efforts on the passage of the FAST Act, and the President's recent Executive orders on infrastructure streamlining and regulatory reform. Efforts like these recognize the need for infrastructure, but also advance safety, and are good for the industry, its workers, and the people who depend on the products we produce.

I would like to suggest several actions that can be taken in the near term to ensure investment in critical energy infrastructure continues to keep pace with our country's energy needs and demands.

First, we strongly urge the President and the Senate to reestablish a quorum at FERC. Until a quorum is established, the review and permitting of natural gas infrastructure projects cannot occur, preventing critical infrastructure projects from advancing.

Second, we urge the President to move forward with appointing leadership at agencies like PHMSA that have a key regulatory role over energy infrastructure.

And finally, we urge Congress to hold Federal agencies and States accountable to fulfill their obligations and timelines under the established permitting processes.

Let me close by reiterating that API and the oil and natural gas industry are committed to delivering 100 percent of its products to their destinations without incident. We look forward to continuing our work with Congress and the administration to ensure that we build and maintain an energy infrastructure system that continues to advance safety, and allows American families and businesses to take full advantage of our Nation's energy renaissance.

Thank you for having me today, and I look forward to answering any questions you may have.

Mr. DENHAM. Thank you, Mr. Rorick.

Mr. Santa?

Mr. SANTA. Good morning, Chairman Denham, Ranking Member Capuano, members of the subcommittee. My name is Donald Santa, and I am president and CEO of the Interstate Natural Gas Association of America, or INGAA. Our members, interstate natural gas pipelines, transport the vast majority of the natural gas consumed in the United States through an approximately 200,000-mile network of transmission pipelines.

These transmission pipelines are analogous to the Interstate Highway System. In other words, they are large-capacity transportation systems spanning multiple States or regions.

My remarks are focused on the rulemaking process at the Pipeline and Hazardous Materials Safety Administration. We all want PHMSA to be an effective regulator, and that includes the ability to promulgate important regulations on a timely basis. It also in-

cludes the ability to rescind legacy regulations that more recent rules have rendered redundant.

Stakeholder dialogue is especially important when the subject of the rulemaking is a complex technical topic such as pipeline safety regulation. New rules should leverage stakeholder knowledge and expertise to facilitate the deployment of new technologies that may be more effective, more efficient, and less disruptive than older technologies that may be endorsed by existing regulations.

The PHMSA rulemaking process has become unusually protracted. The case in point is the proposed natural gas transmission and gathering rule to implement the mandates in the 2011 pipeline safety law.

This delay is the cumulative result of three flaws in the rule-making process. The first is the failure to embrace consensus-building as an early step in developing the proposed rule. The second is the agency's choice to address too much in a single rulemaking. The third is the pre-filing process used by the White House Office of Management and Budget, which compounded the consequences of PHMSA's choices.

The natural gas transmission and gathering rule is a gigantic proposal that assembles what could be 16 separate rules into 1 rulemaking, some of which were in response to congressional mandates and NTSB recommendations. Many of these initiatives could have been and still could be implemented individually or in small groups in a comparatively short time, and thus complete many of the unfulfilled congressional mandates. We suggest that PHMSA avoid these catch-all rules in the future.

INGAA suspects that PHMSA bundled these initiatives into a single mega-rule out of concern that it would not succeed in getting OMB approval for the full array of separate rules needed to implement applicable mandates and recommendations.

The OMB pre-filing negotiation is an unnecessary added layer of review since the APA notice and comment process provides ample opportunity to vet the merits of a proposed rule and its associated cost-benefit analysis. Without its creation, the use of the OMB pre-filing process expanded during the prior administration. We urge the new administration to scale back the OMB pre-filing obligation.

Another opportunity for improvement concerns PHMSA's recent use of interim final rule authority. While an IFR may be appropriate in some cases, it produced a flawed underground gas storage rule. The underground gas storage IFR includes clear mistakes that could have been identified and easily fixed, had the normal notice and comment procedure been used. Instead, those mistakes now are part of a rule that took effect 30 days after publication.

PHMSA's regulations also provide for something called a direct final rule, which can be an alternative to an IFR when PHMSA adopts a standard developed under a consensus process. With a direct final rule there is front-end buy-in and communication with the stakeholders. A rule is issued with a proviso that will become final, unless there is a significant objection.

The Pipeline Safety Act requires that a safety standard be practicable and designed to meet gas pipeline safety needs and protect the environment. Achieving this balance requires PHMSA to consider outside input. Yet PHMSA recently seems to avoid seeking

this input in the formative stages of its rulemaking initiatives. This is unfortunate, especially because PHMSA has the means to do so, via the Gas Pipeline Advisory Committee.

In conclusion, let me emphasize that INGAA continues to support PHMSA's completion of the rulemakings to implement the various statutory mandates for new regulations. We suggest that the end results of PHMSA's rulemakings can be improved with better stakeholder outreach and involvement, and with internal improvements to the regulatory process.

The pitfalls that have undermined the pending natural gas transmission and gathering rule and the underground gas storage IFR hopefully can be avoided in future rulemakings. We also suggest that it is not too late to apply the lessons learned to the development of final rules in these two proceedings. It is important for natural gas pipeline operators to have the certainty that will come with finalizing these regulations.

Thank you once again for the opportunity to testify today.

Mr. DENHAM. Mr. Tolman?

Mr. TOLMAN. Good morning, Chairman Denham, Ranking Member Capuano, Chairman Shuster, and Ranking Member DeFazio. As you said, my name is John Tolman. I am a vice president and national legislative rep for the Brotherhood of Locomotive Engineers and Trainmen, a division of the Rail Conference. I am also a locomotive engineer, and I have been in the industry for 45 years.

In the last 20 years I have been working on safety issues. I have seen firsthand problems that we encounter when our Nation's railroads and other infrastructure are not properly maintained. Safety is the number-one issue of the railroad industry. It is also the number-one issue for the unions, across the board.

According to FRA study data covering the periods of January 2016 to January 2017, accidents in the rail industry cost nearly \$300 million. Included in this number are 1,500 derailments, 10 collisions, 70 other types of incidents, and 48 injuries. The railroads could do much better in the area of human factors by ensuring that advances in technology are implemented with deliberate speed, and not used as a justification for downsizing the workforce.

If the issue of fatigue on the Nation's railroad is not addressed in the near future in a serious and fundamental way, catastrophic accidents will not cease. Technologies such as PTC [Positive Train Control] alone will not solve the problems. PTC will do much to make rail operations safer, but it is not and will not—is not designed to prevent all collisions. Crews on freight trains work at random times and are on call 24/7. A two-person crew provides a level of safety that doesn't need a study to prove it is safer than a single-person staff. It is just common sense.

One can't reduce the fatigue discussion and problem to one single sleep disorder, sleep apnea. Sleep apnea does not begin to explain the causes of fatigue in the rail industry. And that means that a sleep apnea program cannot deliver the silver bullet for solving challenges posed by fatigue.

Another issue that we are dealing with presently is at least one of the four largest class I railroads is now posing a concept they refer to as "super pool," where train and engine crews could be ex-

pected to know territorial physical characteristics of up to 1,500 miles of railroad. This is drastically increasing safety risks.

There is also the issue of rail carriers' repeated resistance to regulations that would govern the installation of electronic-controlled pneumatic brakes. Conventional brakes have been in use today for over 150 years. They work. But clearly, there's newer and better technology available that can slow and stop trains up to 70 percent faster, and make it easier and more efficient to stop trains quicker and safer in the event of an emergency.

The history of the railroad industry demonstrates clearly that you can't deregulate your way to improve infrastructure. When I entered the railroad 45 years ago, one of the first things I was told is that every safety law, regulation, and operating rule was written after some major accident. In my experience, that has proven true. The only reason we have automatic couplers, power brake systems, signals, and train control is because Congress enacted laws, and this very Congress right here enacted laws to require that the railroads implement those safety appliances.

Every such effort was fought tooth and nail by the industry, which employed the very same arguments they make today: "We strongly reject the notion that regulatory review should be predicated upon a simple mathematic cost-benefit analysis." Such a narrow view reduces lives and limbs of rail workers and members of the public to merely the cost of doing business.

I have worked with the chairman of this committee for many years, and many congressional members on this committee. I know that you all have great intentions, and want to get things done. So let's work together, let's get the transportation system into the 21st century. Let's put thousands of people back to work. Let's increase the gas tax for infrastructure investment. And let's build the transportation infrastructure that is better and safer than our forefathers created. Thank you very much.

Mr. DENHAM. Thank you, Mr. Tolman, and thank you to each of our witnesses for your opening statements.

The first question I have—obviously, we have had concerns about the implementation of a variety of different pieces of legislation. But specifically, the FAST Act and the PIPES Act, I would like to hear from each of you on how you think that implementation process is going, whether or not it is—we are behind schedule, ahead of schedule, whether they are following the true intent of law.

Ms. Darr, I would start with you. Just open, frank opinions on—

Ms. DARR. Yes. We are OK. We are OK with it. We think that things are going apace. We don't want to make any suggestions or comments at this time.

Mr. DENHAM. Thank you. Mr. Nober?

Mr. NOBER. We would say that there are a number of different parts of it that would affect us. The STB has completed their implementation of the FAST Act. I think we would like to see some of the permitting reforms move faster and be more widely implemented with respect to more modes. And that cuts across different industries.

And obviously, the FRA is taking on a number of the different FAST Act provisions, and we think it is trending in the right direction there.

Mr. DENHAM. Thank you. Mr. Rankin?

Mr. RANKIN. Thank you, Mr. Chairman. Generally speaking, the Interested Parties are pleased with the way the FAST Act is being implemented. I did mention both in my written and oral testimony that we believe some improvements can be made, specifically with the special permits and approval process. This is crucial for us in the long run and, frankly, crucial for many, many members of industry.

We do believe improvements can be made. But, generally speaking, things are moving forward well.

Mr. DENHAM. Thank you. Mr. Rorick?

Mr. RORICK. With regard to the PIPES Act, we were a little disappointed—quite disappointed that it has been moving as slowly as it has. There is still a number of the 2011 mandates with PHMSA that are still outstanding that we feel should move forward.

The FAST Act is doing better. I think there are still a number of pieces in the FAST Act, like title 41, that need to be worked out, specifically. But we have a more positive opinion of the way the FAST Act is being implemented.

Mr. DENHAM. Thank you. Mr. Santa?

Mr. SANTA. We are much more familiar with the PIPES Act. As I mentioned in my testimony and oral statement, we think that the process that PHMSA has used has been somewhat flawed, and I think is one of the reasons why we have seen so little progress, in terms of the promulgation of the rules to implement those mandates.

As Mr. Rorick noted in his testimony, we think that it takes an overly prescriptive approach that is not consistent with a lot of the performance-based initiatives that PHMSA has used, for example, on integrity management. Nonetheless, we do support promulgation of those rules to implement the mandates that came out of the Congress.

Mr. DENHAM. Thank you. Mr. Tolman?

Mr. TOLMAN. One of the issues that we are concerned about is inward-facing cameras. We don't believe that that adds anything to safety in the industry. We have been—the Brotherhood of Locomotive Engineers has been around for over 150 years, and we don't see that adding anything, any safety. In fact, fatigue being the number-one issue, this only increases fatigue through stress of having a camera on you 24/7.

Mr. DENHAM. Thank you. And I would also ask each of you what you think the most effective approach to regulation is, performance-based regulations or prescriptive-based regulations. And when are each of those more appropriate than others?

Ms. Darr?

Ms. DARR. I think, you know, when I speak on behalf of my industry, I think of small businesses, and I think of prescriptions like the one to my right. And, you know, you think about railroads that have as few as eight employees. And when the Government starts to get very prescriptive, and the result is 26 manuals like this for

8 people that wear many hats to digest and go forward and implement and to be held accountable to, performance-based is best.

I think the people on the ground know their industry, they know the tasks, and they feel a commitment already to safety. They want everybody to get home safe at night, and so they are going to do the right thing, and they know what the right thing to do is.

Mr. DENHAM. Thank you.

Mr. Nober?

Mr. NOBER. Well, at BNSF and in the rail industry I think we strongly believe that, ultimately, performance-based regulations mirror the way that we operate our companies, which is assuring a safe outcome.

You know, a good example of that would be, for example, the PTC statute that Congress passed. While we disagree with the statute, it ultimately was a performance measure, right? It said you can't operate a train without a working PTC system. And how we meet it ought really to have been left to the industry to figure out.

Now I will say that performance-based measures can be challenging to come up with what the right performance measures are. I will say that there are places where standards can be helpful, particularly on things like equipment, like the tank car rule, for example, where a Federal standard actually is helpful, particularly when you are looking at different commodities and interstate transportation.

But, by and large, we think, for safety performance overall, that performance-based regulations should be the way that we measure things.

Mr. DENHAM. Thank you. Mr. Rankin?

Mr. RANKIN. Congressman Denham, back in 1990 the Department of Transportation adopted a rulemaking, HM-181, which was, in fact, performance-oriented in nature. And, indeed, performance standards are the way we feel things ought to be addressed generally, across the board. There are certainly some prescriptive requirements that are required. But, generally speaking, performance standards are the way to go, specifically in my area of expertise, packaging, for example. All testing is performance-based.

So, we certainly believe that is the way to go, and the IPs have supported that over the years.

Mr. DENHAM. Thank you.

Mr. Rorick?

Mr. RORICK. As Mr. Rankin indicated, there is a time for prescriptive-based regulations. However, generally, as an industry, we believe performance-based regulations are much more effective, particularly with regards to safety. They are more comprehensive, they are more flexible. Prescriptive-based regulations tend to be very inflexible, and oftentimes they create, effectively, what is a ceiling, where companies try to meet that ceiling, meet the regulation, and then stop. Whereas, performance-based regulations create a floor where companies meet the floor, then develop programs that go above and beyond that.

The other thing that we see is, as new technologies come out, prescriptive-based standards tend to restrict, as Mr. Santa indicated, and you are stuck using older technologies, whereas perform-

ance-based, you are constantly reviewing your programs and then adding new technologies into new techniques, wherever they are available.

So—and then the last thing I will mention about performance-based standards, too, as I mentioned in my testimony, that it accounts for the flexibility to meet the needs of a unique facility, unique company. So it doesn't assume that a one-size-fits-all—and you can make sure that you are looking at the appropriate risk factors that you need to address, and not spreading yourself looking at things that are low-risk and low-probability issues.

Mr. DENHAM. Thank you.

Mr. Santa?

Mr. SANTA. We also support performance-based as the approach. I think that the integrity management rules are a good example of that, and adopt very much an approach that encourages a sophisticated approach to risk management.

We also encourage regulations based on the standards that come out of the accredited standards development processes. These are very transparent processes. They include academics, industry, regulators, and what comes out of them, we think, provides the basis for getting through the rulemaking process in a very efficient manner.

Mr. DENHAM. Thank you.

Mr. Tolman?

Mr. TOLMAN. I guess, from our perspective, it depends on the rule. Notice and comment period in rulemaking is very helpful. In all cases, the bottom line is to make sure it is—we are working on safety-enhancing across the board.

Mr. DENHAM. Thank you.

Mr. Capuano?

Mr. CAPUANO. I am going to let Mr. DeFazio ask questions first.

Mr. DENHAM. Mr. DeFazio?

Mr. DEFazio. Thank you, Mr. Chairman. As might have been noted, I am particularly concerned about lithium batteries on aircraft. This is the photo that I spoke of, where the pilots, you know, attempted to make an emergency landing, but were overcome by smoke. And that is the result. Luckily, they didn't crash into a heavily populated area and kill hundreds of people on the ground.

As the manufacturers have said, these planes are incapable of withstanding fire, and there are no current suppression systems that work in the hold of an aircraft. Now, that particular aircraft was a 747 cargo.

So, Mr. Rankin, I am puzzled. I would say Administrator Dominguez at PHMSA was probably the first good Administrator in my recent experience, and it seemed to me she was trying to clean up a really incredibly dysfunctional agency, and actually implement and put forward rules from things that Congress ordered 6 years ago. That was big progress down at PHMSA.

But in your testimony you think we should take this dysfunctional agency that currently doesn't have a head, and we should put them on the ICAO board, which relates to aircraft and hazardous materials transport on aircraft, as opposed to the FAA, who are experts in aviation and aware of the fact that, when you are

flying at 40,000 feet and a fire that cannot be repressed is a really bad thing.

So, why do you think that PHMSA can do a better job than the FAA?

Mr. RANKIN. I appreciate the question and I appreciate your concerns, Congressman DeFazio.

The statement we made in our testimony and which, of course, we stand by, is that PHMSA should take the lead in this matter, and also should have the seat at ICAO. The reasons for this are several.

First, PHMSA is the recognized competent authority or lead agency for hazardous materials transportation, globally. So, in any respect, when any foreign government is interested in a movement into or out of the United States that deals with hazardous materials of any kind, PHMSA is the agency to which they go for expertise. And of course, as you know, an individual from PHMSA, Mr. Duane Pfund, currently chairs the U.N. Subcommittee of Experts on the Transport of Dangerous Goods, and is recognized as one of the leading authorities in hazmat transportation, globally.

Secondly, the air movements of hazardous materials are, generally speaking, multimodal in nature. Such movements usually involve transport to an airport, loading on a plane, transport by air, unloading—

Mr. DEFazio. OK. I have only got 2 minutes left, but, OK, you have given a couple of reasons. That is good. But I have got to say I still disagree, and I am hopeful that in the next FAA reauthorization we can correct this discrepancy. When we have something going in the hold of an airplane designated as hazardous we shouldn't give a dysfunctional bureaucracy the authority to be our lead at the International Civil Aviation Organization, about which they know nothing on these matters. So, in any case, thanks, but we do disagree on that.

One other question. Do you support, or does your association support the promulgation of the rule that would just make us internationally consistent with ICAO? Because elsewhere in your testimony you are talking about the need for international consistency.

Mr. RANKIN. In my capacity here today representing the Interested Parties, the organization has not taken a specific position on this.

Mr. DEFazio. OK.

Mr. RANKIN. I would be happy to determine that with the group—

Mr. DEFazio. OK.

Mr. RANKIN [continuing]. And get back to you in written form.

[The information follows:]

**INTERESTED PARTIES FOR HAZARDOUS MATERIALS TRANSPORTATION**

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May 16, 2017

Congressman Jeff Denham, Chairman  
Subcommittee on Railroads, Pipelines and  
Hazardous Materials  
Committee on Transportation and Infrastructure  
U.S. House of Representatives  
Washington, DC 20515

**Re: Follow-up to question on PHMSA as lead agency to ICAO DGP**

Dear Chairman Denham,

On behalf of the Interested Parties for Hazardous Materials Transportation (IP), I would like to thank you for providing our organization an opportunity to testify at the April 26, 2017 hearing, "Building a 21<sup>st</sup> Century Infrastructure for America: The State of the Railroad, Pipeline, and Hazardous Materials Safety Regulations and Opportunities for Reform."

This letter extends and clarifies remarks made in our written and oral testimony, as well as my response to a question posed by Congressman DeFazio regarding the IP's view that a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) should serve as an International Civil Aviation Organization (ICAO) Panel Member and lead the Dangerous Goods Panel (DGP) delegation to ICAO. We offer the following reasons to support our position.

1. **Statutory authority.** The Secretary of Transportation is statutorily directed in 49 U.S.C. §5120 to represent the United States in international forums "...that establish or recommend mandatory standards and requirements for transporting hazardous material in international commerce." The Secretary has discretion to delegate this authority to a Departmental Agency or Administration of her choice. Further, in 49 C.F.R. §1.97(b), the authority to carry out domestic hazardous material transportation responsibilities is delegated specifically to PHMSA. In addition, 49 C.F.R. §1.97(b)(2), directs PHMSA to participate with FAA on the ICAO DGP under the authority invested in the Secretary in 49 U.S.C. §5120.

Since legal authority is expressly delegated to the Secretary to represent the U.S. in all international forums related to the transport of dangerous/hazardous goods, and that PHMSA is the designated Agency for dealing with all hazardous materials transportation issues, it appears logical that the Agency that should lead a delegation to a multi-modal international forum dealing with dangerous goods, i.e. ICAO, would be PHMSA.

2. **Air transportation of hazardous materials is multi-modal.** The transportation of hazardous materials by air is necessarily multi-modal because packagings intended for air transport must first be collected and transported to an airport – most commonly by truck - where they are inspected and sorted for the air leg of their movement. After being unloaded from the plane, packagings must then be delivered to their destination. Additionally, fundamental aspects of packaging safety, such as package testing and marking, are governed by regulations promulgated by PHMSA. To ensure safety across all modes, it makes sense that the regulator responsible for developing regulations related to air transportation of hazardous materials packagings be a multi-modal hazardous materials specialist.

3. **Historical representation at ICAO.** For more than 30 years (i.e. 1979 to 2010), PHMSA and its predecessor agencies – the Materials Transportation Bureau (MTB) and Research and Special Programs

Administration (RSPA) - represented the United States on the ICAO Dangerous Goods Panel. During this period, a representative of the Federal Aviation Administration (FAA) always served in a professional advisory role to ensure the views of the U.S. aviation industry were fully and properly presented to the Panel.

4. **The Dangerous Goods Panel focuses primarily on hazardous materials transportation issues.** As its name implies, the work of the Dangerous Goods Panel is almost exclusively focused on issues related to the safe transportation of dangerous goods by air. The panel examines matters related to materials classification, package marking, labeling, etc. These issues fall squarely within the purview of the multi-modal specialists at PHMSA, who also handle such matters at the UN Sub-Committee of Experts on the Transport of Dangerous Goods. In the few cases where non-dangerous goods issues, such as air security, may be discussed, an FAA representative will always be in the U.S. delegation to comment and provide appropriate guidance.

5. **Domestic rulemaking and international harmonization.** PHMSA is recognized globally as the U.S. "competent authority" for issues related to dangerous goods transportation. Respect for U.S. leadership in this area is so great that representatives of the 27-member states that comprise the UNSCETDG elected a PHMSA representative to serve as Chair of the group. Model regulations developed by any international modal authority (e.g. ICAO, IMO) are normally discussed by UN Experts to ensure all final measures promote the cause of international regulatory uniformity when they are eventually adopted by participating national governments.

To this point, when model regulations make their way into a U.S. rulemaking following approval an international hazmat transportation forum, it is PHMSA that is tasked with the job of proposing and adopting these harmonizing regulations in the Hazardous Materials Regulations.

For all these reasons, the Interested Parties for Hazardous Materials Transportation urge the Subcommittee to take steps to ensure that a representative of the Pipeline and Hazardous Materials Safety Administration (PHMSA) will serve as an ICAO Panel Member and lead the U.S. Dangerous Goods Panel delegation to ICAO.

Thank you very much for this opportunity to present comments on this important matter.

Sincerely,



Paul W. Rankin, Chair  
Interested Parties for Hazardous Materials Transportation

Mr. DEFAZIO. OK, thank you.

Mr. Nober, your railroad has invested a tremendous amount of money in PTC, despite the fact that you had concerns about implementing nationwide PTC.

You know, a number of the other freight railroads have invested substantially, but they are not as far along as you are. Our commuter railroads, particularly New Jersey Transit and others, have been absolutely nonresponsive. They are pushing hard for a rollback. Would your railroad support a rollback saying, "Oh, just forget about it, we are not going to go operational, you don't need PTC"?

Mr. NOBER. Well, at BNSF, we are planning on having all of our physical assets in the ground and our system up and running by the end of 2018. We are taking advantage of some of the provisions in the FAST Act that you all passed to allow us to have testing and operation go on, and work out bugs beyond that.

So, at our railroad, we are planning on meeting the deadline and going forward. And, obviously, we are at the point in our implementation where bugs are almost on a one-off basis, right? Every month, we look at a very rigorous process for each train start. And then, if PTC worked, did it work properly the whole way through? If it failed, where in the sequence of events did it fail, and then sometimes ferreting out where in the system of systems the bug was.

So, I can speak for us that we believe in going forward. I know that the passenger railroads and others have had resource issues, and, you know, I can offer for ourselves that we will meet the deadline, and we are prepared to go forward.

Mr. DEFAZIO. OK. So you feel confident, despite the ongoing programming and other issues, that it will be a functional system, ultimately?

Mr. NOBER. We believe so. But there are still some big challenges to go.

For example, we are just now beginning interoperability. And we and UP, for example, have exchanged some locomotives, and are just beginning that process.

So if you take just within BNSF the various systems that have to go together, if now we have to do the same kind of process with another railroad, it is going to be a very manual and labor-intensive process to work out all these bugs. We believe that we will, we believe that it will work properly.

But again, if we are at 85 percent effective, or somewhere to that effect now, where we are in BNSF, that still means we run 1,500 trains a day. So 15 percent of those is a significant number of trains that are having issues. And so those are a lot of—in the colloquial, the scientific term—bugs to work out. But we will get there.

Mr. DEFAZIO. OK.

Mr. NOBER. I am confident that we will.

Mr. DEFAZIO. All right. Thank you.

Thank you, Mr. Chairman.

Mr. DENHAM. Thank you, Mr. DeFazio.

Mr. Duncan?

Mr. DUNCAN. Well, thank you, Mr. Chairman, and thank you for the great job you do chairing this subcommittee.

You know, I know that with only 4 percent of the world's population, we buy 22 percent of the world's goods. And I read recently that 58 percent of the people in this world have to get by on \$4 or less a day. The standard of living that we have in this country is phenomenal, and I have long been convinced that the average person doesn't really realize how important our freight rail system is to that standard of living, getting goods and services—getting goods to market to—much more quickly and efficiently and, therefore, cheaper than they would otherwise be.

And, you know, I am in my 29th year in Congress. I have served on four different committees, I have chaired many hearings, participated in hundreds of hearings. Almost all of those hearings have been to attack some agency or industry or problem.

So, when we have something that somebody has done really well, or some really good news, I think we should point that out. And I read in the—in our briefing memo it says since 1980 the rate of freight train accidents and incidents per million train miles has fallen 88.2 percent. Railroad employee on-duty fatalities, injuries, and illnesses have declined 91.7 percent.

The freight railroads attribute their safety improvements in part to the Staggers Rail Act of 1980, which partially deregulated the industry and restored the industry to financial health. Since Staggers was enacted, the freight railroads have invested \$600 billion in their systems. I think that needs to be commended.

I noticed in Mr. Nober's testimony he said that, by all the measures, recent years have been the safest in rail history. I think that—I think we need to point out something like that when it occurs.

I do have a couple of questions. Mr. Nober, I understand you are here because BNSF has been a leader in regard to some of the safety requirements, particularly on PTC. And Mr. DeFazio said he understood you had spent a tremendous amount on that. How much has BNSF invested or spent on PTC since we started with it?

Mr. NOBER. Well, we will expect, by the time we are finished putting all the assets in the ground, that our investment will be close to \$2 billion.

Mr. DUNCAN. \$2 billion?

Mr. NOBER. \$2 billion dollars. So—

Mr. DUNCAN. And that is—and that, you said, is going to be by the end of 2018?

Mr. NOBER. We should have the system up and operating. And as I perhaps didn't emphasize clearly enough to—Congressman DeFazio is now gone—that, you know, we will meet the deadline, and we oppose extending it.

Mr. DUNCAN. Ms. Darr, is there a significant difference between the safety record of the short line railroads in comparison to the big guys?

Ms. DARR. Thank you, Congressman. Last year was the safest year in short line railroad safety history. So I think that we are on a very positive trend, and I think it is a result of a number of the changes that our member railroads have made over the years, and their commitment to safety.

In addition, the—I want to mention the Short Line Safety Institute, that we appreciate the support of Congress in helping to fund that. And that is focused on going out and assessing every one of our member railroads when, you know, we can get to each one of them, and looking at the way that they have ingrained a safety culture in their workforce, and making sure that it is at a strong and sustainable level throughout the industry. So I think you will continue to see that trend upward.

Mr. NOBER. And, Congressman Duncan, if I could just add one thing.

Mr. DUNCAN. Yes.

Mr. NOBER. I mean it is obviously the policies set forth by this committee and the Congress 35 years ago to begin to allow deregulation that have allowed companies like BNSF to have the financial health to invest that kind of money, those kinds of assets, in safety systems that we are able to do. And so it is all part of an overall holistic approach to the rail industry, where we are able to earn adequate revenues. And, through deregulation, we are able to invest in the reliability and the safety systems that have allowed us to have best ever safety results.

Mr. DUNCAN. Well, that is an important point—important to point out, that deregulation, contrary to what some people say, doesn't always mean that something is going to be less safe. In your industry it became even more safe.

Ms. DARR, what about this training rule that we passed 9 years ago? Has that had an effect? What effect has that had on the short lines?

Ms. DARR. It has—we actually were so concerned about the rule after we started the initial implementation and tested it out that we, for the first time in our history, sued the Department of Transportation for overly burdensome rules.

So it has been a major focus of so many of our members. We have been trying to work with the Department to put off implementation of those rules, to make sure that the industry is prepared. We are in settlement talks with the Department of Transportation and trying to narrow down the focus of the rule. But it has taken a significant number of man-hours of our association and all of our members to try to get this tiger back in the cage. And it really, unfortunately, has diverted from a number of other safety priorities in the process.

So, it was a very unfortunate ruling for our industry.

Mr. DUNCAN. Thank you very much. My time has expired.

Mr. DENHAM. Thank you, Mr. Duncan.

Ms. Esty?

Ms. ESTY. Thank you, Mr. Chairman. I want to thank all of you for being here with us today.

My district is served by class I, short line, and passenger rail service in Connecticut. Connecticut is, by no means, one of the most active States for freight rail, but the industry provides well-paying jobs for my constituents, and I place a great deal of value on the economic opportunity it provides. And, in fact, we have a lot of communities who want to seek expansion of rail service in my district.

But ensuring the safety of crewmembers, of communities, and passengers is tremendously important. And that is why we are here today. There have been a number of both high-profile and smaller crashes in the Northeast in the last few years, a number of which have taken place in my district, including two freight rail incidents in the last year in New Milford and Brookfield, Connecticut, involving short line. And, obviously, the high-profile incident recently—multiple—at Penn Station. So we still have a ways to go.

I wanted to drill down a little bit on—more on the difference between performance standards and prescriptive, because I am hearing a great deal of discussion here about deregulation has led to these reductions. Yet, at the same time, Mr. Nober, you are talking about the importance of PTC and the importance of technology. If we have multiple technologies in, say, something like PTC, the interoperability, you are going to require some prescriptive efforts, or otherwise it is not going to be able to talk to each other.

So, I would like—maybe Mr. Nober, you can start with how can we best have innovation and safety, and recognize sometimes we are going to have to make specific decisions? Because without that we are not going to get the safety that the public needs and demands.

Mr. NOBER. Well, Congresswoman, I thank you for your question, and appreciate your concerns. And, as you said, there is a place for—in an industry like rail, with interoperability, with interchange, where cars go throughout the system, standards can be set that are uniform across the system, that can be a great help for a network like ours.

On the other hand, we do have a number of individual safety mandates that go to railroads, and I listed several of them in my testimony, everything from how you originate a train, to how you inspect track, to how you look at each individual car, to how you investigate wheels, that are done a prescriptive way: “You will look at how reflective the tape has to be on the side of cars,” or that are done based on time: “You will inspect this each and every time.” And railroading is quite diverse.

You have passenger rails, like you said, in the Northeast. In the West, where we operate, we can have trains that are 8,000 or 10,000 feet long going through very unpopulated areas, which would stand in stark contrast to a heavily populated area, like Connecticut. And the safety rules that should apply to those ought to be able to take into account the different environments in which they are operating.

So, when we talk about performance regs, it is to try to come up with a safety outcome that we are looking for—for example, in track or in inspections—that looks at how often—how well maintained are the cars, how often are they having problems, how often are derailments happening, as opposed to “You will inspect them every so often, regardless of what the needs are.”

And so, I do think that it is hard to do. There is no question about that. It is more difficult to measure and regulate on a performance basis than it is to regulate based on what we would call command and control, but activity-based, right? Because if you are a regulator—and, you know, I have run an administrative agency,

it is much easier for them to say, “We are going to ensure that you do X,” and if you do X, then they can say, “Hey, we have done our job.”

Ms. ESTY. Although I think part of it is you have all talked about how there has been improvement in safety with this combination of the regime we have right now, which is some performance-based and prescriptive. So you can understand concern on the part of Members of Congress who have lines running through their district of moving away from a system that has, in fact, been improving safety.

So that is—you are asking us to “trust us,” trust us—some of us recently were on a trip to India, a place where there is a lot of issues with rail safety. Many other parts of the world the market clearly does not work to provide safety. And you can understand why we have concerns with the “Just trust us” attitude, “We have a good culture,” because you look around the world, that is not what happens if the market alone determines. And, obviously, that improvement in safety record has been a combination of those two, and I think it is unwise to suggest that it really—that it could be without prescriptive, as well.

Mr. NOBER. Well, we would like to say at BNSF that we are very—we think the freight rail system in the United States, which is principally deregulated—not completely—is the safest and the best in the world. And when we look at the way we operate our system, safety and reliability are the two most important things we have. Because if we want to grow, if we want to draw freight from the highway and bring it on to rail, which should be a policy goal that all of us should share, then we have to be able to provide reliable and safe service for our customers. And the way we do that is through ensuring equipment integrity, it is through ensuring track integrity, and it is through ensuring that, you know, our people are able to go home safely every day.

There is probably no place on our railroad that we inspect at merely the FRA minimum. Now, the way we inspect it might be different, but we probably go beyond that in virtually every mile of our system. And in our heavily traveled, most, you know, core, dense routes, we go multiples beyond it. We do that because the importance of having one of our transcontinental mainlines operating and be able to provide the service that it provides is of paramount importance to us.

So, just 2 weeks ago, we had an incident. It didn’t involve our railroad. We had a grain elevator catch fire near Hereford, Texas, on our transcontinental mainline. And the fire and the resultant danger from the chance of explosion left that line out for about 20 hours. And we had over 100 trains delayed that were stopped because of that, because it was unsafe to go past it.

Obviously, safety is first. We would never put any of our crew or our people in harm’s way. But the consequence of an outage like that is tremendous for us, as well.

Ms. ESTY. Well, thank you, and I see my time has expired. But I would like to follow up with some further questions on some of these issues. Thank you very much.

Mr. DENHAM. Thank you, Ms. Esty.

Mr. Farenthold?

Mr. FARENTHOLD. Thank you, Chairman Denham. And I worry about Washington bureaucrats coming up with regulations from the top down, and like to see stuff actually come from the bottom up, or see industry and the public more involved.

Mr. Santa, in your testimony you talk a little bit about the Gas Pipeline Advisory Committee. Could you tell me a little bit more about how that works, and their involvement in the regulatory process?

Mr. SANTA. Yes, sir, Mr. Farenthold. The GPAC, or Gas Pipeline Advisory Committee, is created by statute. It is a Federal advisory committee. It has equal representation from industry, the public, and regulators from both the State and Federal level. The purpose of it is to provide input to PHMSA in connection with its rules and its processes. In some ways it effectively functions as a peer review group for what PHMSA proposes.

PHMSA is utilizing the GPAC to review the pending gas pipeline and gathering rule. We only wish that PHMSA had involved GPAC earlier in that process at the formative stages of coming up with that rule. And I think that probably would have produced a better rule. As a matter of fact, the GPAC was utilized in that manner in the development of the integrity management rule back in the early 2000s, and I think it produced a good result.

Mr. FARENTHOLD. All right, thank you.

Mr. Nober, you were talking about how you used new technologies for inspecting your track. I have actually seen some of those technologies demonstrated. And I hear this from a variety of folks in a variety of industries, that the regulations that are in place at the Federal level are not keeping up with technology.

So, in addition to your enhanced technological screening method with cameras and vibration sensors and things like that, you are still stuck with old regulations. Do you have any thoughts on how we could develop a process, when technology evolves, that we can get rid of or modify some of the existing regulations to take better advantage of the technology to create a safer environment at a lower cost?

Mr. NOBER. Well, Congressman, that is an excellent question. I would say the first step is to change the mindset of the regulators to be able to accept that technology can improve safety, and it is not in lieu of or a substitute for a safer method of doing things.

A good example would be track inspection. The FRA mandate for track inspection would be a visual inspection, so people in a high rail, riding and looking at it. And that certainly catches a number of kinds of defects, and is an important part of inspecting track, and we do that more than the FRA minimum in most parts of our system.

But beyond that, we have developed, first, geometry cars that have sensors that are able to look at and evaluate the inside of rail, and sense—are there any internal defects that could grow into the kind of problem, given the weight and the density and the mass of rail traffic that is on it, or broader defects that could create derailments?

Now, we have geometry cars that are able to do that. And we have now a manned geometry car. And people are in the geometry car. And if they spot a defect, they have to stop and mark it and

send somebody out immediately to be able to go and remedy it. And again, that is a laudable goal.

But we also have developed unmanned geometry cars. And the benefit of those is that they can go on the back of any train. And so, therefore, using an unmanned geometry car, we can inspect the rail much more often. But implementing those has been difficult, because the existing regs would require that we stop and get out and mark it, and immediately remedy any defect.

Mr. FARENTHOLD. It can be adequately marked with a GPS.

Mr. NOBER. And so we are still working through the GPS. It is not 100 percent settled yet. But we think more inspection will create a safer rail, and that we will then dispatch our maintenance of way people to go out and fix the problems that are found, because we are able to inspect things more.

So, rather than be a substitute for people, we think it will enhance safety. But the regulatory framework has to evolve to be able to allow and enhance that. And again, all of these are slightly different, they all have benefits, they all have downsides. We call it the swiss cheese approach. But if you layer all of these different safety systems together, overall you will catch more defects—

Mr. FARENTHOLD. All right, thank you. And I have one more question for Ms. Darr.

Now, Mr. Tolman is talking a lot about safety and fatigue and the necessity for a two-man crew. Is that different in the short line industry than it would be with the class I? And how would you see that affecting your industry, a two-man-crew rule?

Ms. DARR. Thank you for the question, Congressman. It is an excellent question. And I would say that it has a much more serious impact on short lines, because of the small staff. So when you are taking two men, you know, to operate a locomotive, then you are taking, conceivably, one of them away from some other critical operation of the railroad.

So we are very concerned about this, and we do find it ironic that, at the same time that DOT issued a regulation calling for two-man crew, they were also conducting a study, I believe, with Duke University to look at whether or not crew size even had an impact on rail safety to begin with. So it seems to us to be a classic example of putting the cart before the horse, and it was confusing, at best.

Mr. FARENTHOLD. All right. Well, I see my time has expired. Thank you very much.

Mr. NOBER. If I could just add that—

Mr. DENHAM. Thank you, Mr. Farenthold—

Mr. NOBER [continuing]. In addition, that—

Mr. DENHAM [continuing]. Mr. Capuano?

Mr. NOBER [continuing]. DOT was funding autonomous truck technology, as well, to have no drivers in it.

Mr. DENHAM. Mr. Capuano?

Mr. CAPUANO. Thank you, Mr. Chairman, and I want to thank the panel for being here and for your testimony.

But like a lot of these hearings, the truth is that not much of what you said I would disagree with. I am for effective, robust, clear, least-intrusive, safe, and reasonable regulations, and nothing more. But, then again, nothing less. So I am glad nobody said all

regulations are bad. You are right. We need some regulations. Where they should be? Fine.

Ms. DARR, a regulation that thick, you should have called me. I don't even know what is in there. I am hoping it is not just one big print.

[Laughter.]

Mr. CAPUANO. I mean that is not what we want. And, look, I am not afraid of regulations, but I am not in favor of over-regulation. And I agree that some regulators, to cover their own Administrator's back, they over-regulated. I couldn't agree more. But those are details. And, you know, most of us are here to work out the details.

And I think, as was pointed out, what we came up with with PTC was a pretty good compromise. It was like we want it. We gave the industry a period of time to do it, no one did it, and we kind of then required them to do it, but we did it in a way that says, "You guys figure it out, but you got to get it done." And it seems to be good.

I am really happy to hear that people are reasonably satisfied with the FAST Act. And actually, the comments about the PIPES Act, without details, I haven't been terribly thrilled with the implementation of the PIPES Act. And you want to criticize PHMSA? You go right ahead, because you got Peter DeFazio right after you, and me right after him. They have been a problem for a long time. I agree with what Peter said. We did have one good Administrator for a little while, she is gone, and we will see what happens.

So, all that being said, thus far I don't see a whole lot of controversy here. And, though I love seeing you guys, I am wondering what we are doing here. But that is OK.

But because these kinds of testimony tend to be generic, apple pie, and puppy dogs, you know, obviously, my ears are always attuned to what is floating around, and I have been hearing things like—that some bills coming out of certain areas—I really like the one that wants us to do advanced notices of proposed rulemakings. Advanced notices of proposed rulemakings? That seems a little redundant, to me. Why don't we have preadvanced notice of possibly, maybe, someday regulation that I might want to think about 10 years from now?

I mean, come on, that is ridiculous. It is just a way to kill whatever you don't like. I mean if the systematic problem is OMB, line up behind me. OMB has been a problem from day one. The process stinks. And I would be happy to kick them in the butt to get moving on it. What they do is nuts.

I got to be honest with you, 1982, I think it was, we had a train derailment in my home city, and that train derailment released chlorine gas. And nobody died, but a lot of people got sick, and a big evacuation. The fire department didn't know how to fight it, because there hadn't been any training then. They put the wrong stuff on it, and it caused problems.

Now I just presumed that every train carrying hazardous material would have emergency breathing apparatus on it, to be perfectly honest. And I found out not only is it not true, but the industry is fighting that. What are you, crazy? That is nuts.

Now, you might want to argue exactly which breathing apparatus—and I am not the guy to answer that question—but I can

tell you there are 1,000 guys I can find in my district who will tell you exactly which one you should have that is the safest. You have it once, you don't have to touch it again for a long time. It is not that big of an expense. Why would anybody fight having emergency breathing apparatus on a train that is carrying hazardous, deadly material? It makes no sense. And, to be perfectly honest, I am a little surprised to hear those kinds of things floating around.

But, in general, I like it. The whole thing about performance-based rulemaking. Fine, sounds good. Again, motherhood, apple pie. We are all for performance-based, and I am all for it. I think the PTC thing is an example of that. But I am also glad to hear that some of you said that there is occasion for prescriptive regulation.

And I think Mr. Tolman is right. I have only been on this committee for, I don't know, 15 years or so. Every single regulation that I have seen has come after not one, but a series of disasters. I have not yet seen a regulation that was done before a disaster happened. And, yes, when you do that, sometimes things get a little overboard, and we have to readjust. I am for that.

But I guess I don't really understand what the difference of performance-based regulation is. What is so big about it?

Mr. Tolman, can you tell me exactly? Why should I care whether it is performance-based or prescriptive, or alphabet soup?

Mr. TOLMAN. You know, Congressman, thank you. In my mind, I don't think it makes any difference, as long as we are advancing safety issues, truthfully.

You know, you mentioned emergency escape breathing apparatus. You know, if it wasn't for this committee, we wouldn't even be discussing. In 2005 we had a major accident, a Norfolk Southern, where a switch was left open in dark territory. And dark territory, in my mind, shouldn't even exist in the industry.

Never mind that, the family—Chris Seeling was a 28-year-old locomotive engineer who was operating the train. It was a—switch was left open, they went in and struck a chlorine tank at 2 o'clock in the morning. The conductor knew enough—he was trained enough, talking about part 243, the training program—he was trained enough that he went upwind. The engineer went downwind. He was not trained. They both walked into the emergency ward together, and Chris Seeling, 28 years old, succumbed to chlorine inhalation. So did nine other people that—in the factory right next door to that chlorine tank car passed, as well.

Two hundred yards away, two hundred yards away, there was an elementary school. Thank the dear God that this happened at 2 o'clock in the morning, and not 2 o'clock in the afternoon. Because none of this would be discussing emergency escape breathing apparatus.

The interesting thing that—you know, I have been doing this for a long time. I have investigated some major accidents throughout the United States. Rips your heart out to see one person or one injury. The carnage, when you go there—I did so many accidents that I felt like I was getting PTSD. I mean, honestly, I had to step away, and I don't do them any more.

But the passion for me is we need to prevent every single one of them, whether it is an investment in—the railroads, I applaud

them. PTC, they are spending billions of dollars. Why are they doing that? In 1968 the NTSB told the railroad industry they need to implement some form of PTC, some form of train separation technology. It took 49 years, and we are still discussing it.

If it wasn't for Congress, we wouldn't be moving in this direction. I have been an advocate to the railroad industry all my life. Let's work together. Let's work on these safety issues. Don't come to Congress. We can get them done together. We don't need to sit here and discuss all our safety issues when we know damn right well we should be doing them together.

Mr. CAPUANO. Thank you. My time is well over time. Thank you, Mr. Chairman.

Mr. DENHAM. Thank you, Mr. Capuano.

Mr. Rokita?

Mr. ROKITA. Oh, thank the chairman for organizing us today. I had a couple of questions, didn't know I was up next. Excuse me, let me find them here.

Mr. Nober, I am interested in your testimony here, I am going to quote from it right away and get your reaction to it, because I think those are some questions that were asked of you. You said in your testimony that signal systems, grade crossing equipment, railcars, brakes, and locomotives have now microprocessor technology applications that monitor and report actual asset health.

Regulations, nonetheless, still require visual inspections of these systems. And, while there is a role for visual inspections, regulations need to recognize the enhanced safety value of automated inspections and technical diagnostics, and build in appropriate operational flexibility. Can you further explain that?

Mr. NOBER. Sure. Our locomotives these days are mini data centers. They have any number of sophisticated data systems on them. And, in fact, one of the challenges we have is always finding a place to install new systems, like the PTC computers that go in there.

And what we do is we have wayside detectors that will see the impact of wheels. We have something called wheel impact load detectors that will basically test if a wheel is out of round at all. We have wayside detectors that will sense if there is any heat coming out of the bearings, so if the bearings have any issues. And so, all of these are automated ways of seeing if we have any of our operating systems out of order.

Mr. ROKITA. Yes.

Mr. NOBER. But we still have regulations that require us to visually inspect a locomotive every day, so we have five locomotives, and somebody has to go out and walk around them. We have to visually inspect trains after a certain number of miles. And in large land-area geography like we are, that can just take additional time to inspect an 8,000- or 10,000-foot train that we think adds very little value to what all of these redundant data systems are adding.

So we are not saying that you should never have an inspection at the beginning of a train. But we are saying that some of these en route or intermediate inspections that were done back when we had the daily locomotive inspection, which was required back in the steam days, on today's modern locomotives may not necessarily be the same and the right kind of test to do.

The brake inspections, I included an article from the Chicago Tribune from 35 years ago—

Mr. ROKITA. Yes, 1982.

Mr. NOBER [continuing]. To show how difficult it can be to change longstanding sort of historical inspection requirements.

And so, looking at what is the capability of modern equipment, what kinds of information is it giving, and what is the best way to evaluate that overall web of data, and then adjusting inspection requirements to meet that, we think is the best way to go forward.

Mr. ROKITA. I mean is there a mechanism—I have to get moving, because I only have 2 minutes left—

Mr. NOBER. OK.

Mr. ROKITA. Is there a mechanism where you can produce an alternate method of compliance, similar to what we might do in aviation, and say, “Look, we are going to do this, because we invested in all these sensors, so we are going to get rid of the intermediate inspections, visual inspections, throughout the day”?

Mr. NOBER. FRA has a waiver process, where we can go in and say, “Can you waive this requirement in this instance?”

And we have worked with the FRA, and been able to do that. We think the waiver process is slow.

Mr. ROKITA. Yes. How much does it cost to do a waiver process?

Mr. NOBER. It can depend. Sometimes they can ask for a lot of data, sometimes they can ask for relatively little. It is the time. It can take 9 months or more to get a waiver done.

Mr. ROKITA. All right, OK, thank you. Regarding non-Administrative Procedure Act guidance and Executive orders, such as informal actions by a regulator, what are your concerns with that?

Mr. NOBER. Well, first of all, if there is a formal rulemaking, where there is notice and comment—and the ranking member referred to that earlier—you can have a chance to put information in, you can refute the assumptions of the industry, you can put more information in that can then be used to evaluate and ultimately challenge.

If you have a guidance or an emergency order or a safety advisory, those are ones where the agency may consult the industry on it, or they may not. And, as a practical matter, for a company like BNSF, those are binding, because we—if we ever have an incident where the Federal Government has said, “Well, we think the proper inspection requirement, or the proper”—

Mr. ROKITA. So we are in an environment now, like in many agencies, where guidance, although it is supposed to have no legal effect, actually has legal effect.

Mr. NOBER. Yes, and—

Mr. ROKITA. It has procedural effect.

Mr. NOBER. It has procedural, and because of tort liability—

Mr. ROKITA. Yes.

Mr. NOBER [continuing]. If we go against the Government—

Mr. ROKITA. Do you have ideas to bifurcate that back to the way it was originally intended?

Mr. NOBER. Oh, absolutely, we—

Mr. ROKITA. OK. Could you give them to me, privately?

Mr. NOBER. Absolutely.

Mr. ROKITA. Thank you. And I have 5 seconds left for Mr. Rankin.

Mr. Rankin, when talking about making sure that PHMSA is properly regulating the transport of hazardous materials, what do you define as hazardous materials? Is it only products categorized as regulated by the U.N., or what about group 3, group 2, group 1?

Mr. RANKIN. Forty-nine CFR provides the guidance here. The United Nations is a model regulation. So, while they are effectively exactly the same, because the United States tends to adopt the U.N. model regulations into our own to ensure that international transport is unimpeded, we look to 49 CFR, and that can include classifications, and those classifications include packing groups 1, 2, and 3, for example.

So, not every hazardous material is listed. For example, acetone may be named, but if another type of material meets a criteria—flammability—it would be classed—class 9 in this case. So it is a very broad area, and each new material that comes on to the market has to be properly classified before it can be put into—

Mr. ROKITA. Is this good or bad?

Mr. RANKIN. This is very good.

Mr. ROKITA. Thank you.

Mr. DENHAM. Thank you, Mr. Rokita.

Mr. Lipinski?

Mr. LIPINSKI. Thank you, Mr. Chairman. The State of Illinois has 36 short line railroads, 2,600 miles of short line track, and it is 37 percent of the entire rail network in the State of Illinois. So many on this subcommittee from both sides of the aisle are cosponsors of a bill to make section 45(g), the Short Line Railroad Tax Credit, permanent. In fact, there are 158 cosponsors on the bill the last time that I checked.

The bill incentivizes additional investment in the critical short line freight railroad infrastructure. And so I wanted to ask Ms. Darr the impact that the short line tax credit has on railroad safety.

Ms. DARR. Thank you very much, Congressman Lipinski, and I want to just say that I know the—your constituents in Illinois appreciate your support of the small freight railroads in your State back home.

And 45(g) is enormously critical to short line railroads and, in particular, the safety of short line railroads. I think you know that the number-one cause of derailments in the railroad industry is broken track. And so, 45(g) allows for the rehabilitation of abandoned track that has been, you know, not maintained or poorly maintained, so we are able to bring that up to standard through 45(g).

The first time that 45(g) was put into effect was 2005. It was passed in 2004, but in 2005 it started to pay back to the railroad industry and allow us to invest. And since then we have seen \$4 billion worth of investment in rehabbing track. So that is, you know, 12 or 13 years, roughly. So it has certainly had a major impact. This year I believe we are up to 158 cosponsors in the House in an effort to try to make 45(g) permanent, and we are very hopeful that, through support of the BRACE Act [Building Rail Access

for Customers and the Economy Act], this year we will be able to do that.

Mr. LIPINSKI. Hopefully we will get that done this year.

Mr. Nober, I wanted to talk about the eManifest. I introduced a bill last Congress directing DOT to complete a MAP-21 mandate to develop voluntary standards for the use of electronic shipping papers, which we commonly call eManifest. The goal is to provide real-time information on the content of railcars in the event of an accident to better inform first responders, because—much easier to get that electronically than to have to go and get the paper manifest out of the locomotive.

The AskRail app, I was on hand in June of 2015 for the launch of that at the BNSF facility in my district.

I wanted to ask about the—first of all, how far along BNSF is and what you know about other railroads, in terms of having an eManifest available for first responders. And second, do you think that this should negate the requirement for hard copies of an eManifest to be carried in the locomotive, or will it still be necessary to have that hard copy, if this is fully implemented?

Mr. NOBER. Well, Congressman, again, we thank you for your help and leadership in that area. But, as you mentioned, BNSF did roll out our app for first responders. And it is available to first responders and State fusion centers. So we believe it is widely available now for our manifests, where it is needed.

I think the AAR has an app, as well. And I believe the other railroads all have them, although I can't swear to that. I know of some of them, but we can make sure we nail that down. But I believe all of the major class I railroads have an app. Certainly the four largest do.

In terms of electronic delivery of documents, we think that is an area where there is a lot of room for further changing some of the regulatory—Ms. Darr was pointing to a manual. We think having manuals be made electronic, electronic—mandatory directives coming in electronically, all of that could be more accurate and more timely in an electronic manner than it will be through requiring paper records.

So we think that that is an area, looking forward toward modernization and adopting technological solutions, that entire area of tracking and documents and manifests that are now paper have a lot of opportunity to be made electronic, and we would like to see this further go in that direction.

Mr. LIPINSKI. Well, I think we should continue to work towards greater safety in the use of the electronic availability of this type of information. So, Mr. Chairman, I think it is something good for this subcommittee to work on, going forward.

And, with that, I will yield back.

Mr. FASO [presiding]. Thank you. Mr. Lewis?

Mr. LEWIS. Thank you, Mr. Chairman. I want to go back a little bit over these special permits on Federal hazardous materials transportation right now. And I will start my questions with Mr. Nober, and then anybody else can answer, as well.

But as you know, the DOT can issue these variances, these special permits for hazardous materials regulations and the like, and—if this is consistent with the public interest. You have to keep

applying before it is codified into law or regulation. So I am just wondering that, while not all of these individual special permits for new technology and the like are appropriate for incorporating into a regulation, we are starting to get some duplication here and some added expense.

As I recall—and it was before I got here, but the MAP Act, MAP-21, directed PHMSA to review these special permits and determine which ones could be actually converted into a regulation, so you wouldn't have to keep applying every time there is a new technology that had already applied for a special permit in the past.

So, you know, would this help? Would the special permits or waivers, by making them permanent in regulation—obviously, would it streamline things, lower the cost? But would it also make certain that we had a consistent safety scheme, with regard to the transportation of hazardous materials?

Mr. NOBER. Well, Congressman, I would say, in general, we are for making individual waivers that have proven their worth on a temporary basis to be made permanent.

Now, on shipping hazardous materials on the railroad, packaging is really in the hands of our customers, so I probably will defer to the representatives of our customers who are here. And then, obviously, we have, for certain kinds of hazardous materials, key trains and for carrying TIH and PIH, various operational requirements. And so we will have requirements for, say, things like tank cars.

But I think the waivers you are referring to, I believe, are about packaging for individual matters, as opposed to the transportation routing. So I will defer to my colleagues.

Mr. LEWIS. Yes, go ahead.

Mr. RANKIN. Thank you for the question. The—I believe you are referring to a reference in MAP-21, when Congress directed PHMSA to conduct a general review of existing special permits that had been in effect for 10 years or longer, which they did. In fact, PHMSA issued a rulemaking incorporating some of them, I think about—

Mr. LEWIS. About 100 of them.

Mr. RANKIN. About 100, correct, into the hazardous materials regulations. But the review was only done once. And what we have suggested in our testimony is that this process becomes a regular annual activity. It is our view that special permits can live for—not forever, but certainly for a long, long time, and they are constantly reviewed and renewed every, well, 2 and then 4 years afterwards, generally.

We would suggest that after about 6 years of implementation for special permits, that PHMSA mandatorily take a look at these for incorporation into the hazardous materials regulations. If they would do that on an annualized basis, it would reduce the amount of work they have to do in the renewal process, and, secondly, we think it is much more efficient and realistic. And it certainly does not negatively affect safety. It is quite positive, in fact, in its impact on safety.

Mr. LEWIS. In fact, there was—yes, I think they found 96 could actually be adopted, but over 1,000 could not be adopted. So no one is suggesting that, if you have got a new technology that hasn't

been reviewed, that you can let an extant regulation handle that. So there would still be a role for special permits.

Mr. RANKIN. There still will always be a role for special permits, just because new technologies emerge all the time, new packagings emerge all the time. If the special permit is still in existence, the agency has, de facto, made a representation that the activity is a safe practice.

We are just suggesting that it be reviewed and, hopefully, more of them incorporated—

Mr. LEWIS. And we are talking about special permits that are applied to the same technologies in general, over and over again.

Mr. RANKIN. That is correct, yes. To the same process technology packaging. But in this case, let's just say packaging. If you are reviewing a packaging or new technology every 4 years, at some point you should put that into the hazardous material regulation. That is the—

Mr. LEWIS. Quickly, anyone else?

[No response.]

Mr. LEWIS. Thank you, Mr. Chairman. I yield back.

Mr. FASO. Mr. Smucker? Oh, I am sorry, Mr. Payne?

Mr. PAYNE. Thank you. I really think that Mr. Capuano really captured the sentiments of a lot of us.

And I would just like to ask, Mr. Tolman, in your testimony you highlighted just a few of the rail accidents that have happened over the last decade. We all know that the rail industry is very safe. And I see this as a good result of good balance struck between the railroads, labor, and Government.

In the last few years there have been several fatigue-related accidents on commuter rail lines in the New York-New Jersey region. Can you speak more about the Government's role in protecting train engineers and rail riders?

Mr. TOLMAN. Sure, thank you. You know, in those two accidents, both individuals were diagnosed with sleep apnea.

In the railroad industry, when you first start up, you know, you are 18, 20 years old. You are an astronaut, you are in the best shape of your life.

Mr. PAYNE. Right.

Mr. TOLMAN. And the railroad industry is extremely difficult and enduring regimen. You go to work 24/7, you are on call 24/7, except in passenger service. But that is where you start out. You typically would start out in the freight industry, which you are on call. You have no idea when you are going to get—go to work next.

So, therefore, then you get called in the middle of the night. You haven't—and what are you going to eat? Where do you eat? What do you do?

There are so many little issues that you deal with, whether it is whole body vibration because of excessive lateral motion or horizontal motion, you go—your body goes through major changes. And you know, unfortunately, the—as you come in an astronaut, now they want a person that is there 10, 15, 20 years, they want him to still be that astronaut, and that is impossible, with the schedule you keep, the distance you are traveling.

I mean, my God, when I mentioned the super pools, can you imagine trying to have the knowledge of 1,500 miles? That is every

physical characteristic along the right-of-way. When there is fog or a snow storm in front of you, it is extremely—it is so imperative to know exactly where you are at every single moment, so that no incident or accident happens.

Listen, we are professionals in the industry. We are the best professionals in the industry, across the board. From the signal maintainers to the maintenance of way workers, we are doing our best under extreme conditions. And you can't always be that astronaut. We are heartbroken that any type of incident ever happens in our career. And I will tell you. Every time we hear an incident, our heart aches, because you—something happened there. And what happened, God only knows, and we usually find out later.

I don't know if I answered your question.

Mr. PAYNE. No, that was—

Mr. TOLMAN. There is a lot—

Mr. PAYNE. Absolutely.

Mr. TOLMAN. There is a lot to it.

Mr. PAYNE. Thank you.

Mr. TOLMAN. Thank you, Congressman.

Mr. PAYNE. Let's see, Ms. Darr and Mr. Nober, the railroads, you know, are much safer than they were 40 years ago. The data proves that. No doubt this is due, in part, to the deregulation of the industry. But tragic accidents over the years have prompted Congress and the FRA to reassess industry practices.

While I am receptive to the arguments that regulations can sometimes be burdensome, I also know that regulations have saved lives. Despite what you might consider the present burdensome regulatory environment, many railroads, including BNSF, are as prosperous as they have ever been in decades. The railroads are prosperous, the railroads are safe. Why should we rock the boat?

Ms. DARR. Thank you, Congressman. I would just say, "Exactly."

Mr. NOBER. Well, Congressman, I would probably give a little longer answer, so if you will forgive that, and that is that, over time, we have been prosperous. And, as you have seen, our safety record has never been better. But, as we look to the future, it is important that we remain prosperous and we remain competitive with the other modes. And in order to remain prosperous and remain competitive, to be able to invest in our systems, invest in technology, and to grow, we need to be efficient, and we need to adopt the best available technologies, and we need to have regulation evolve with technology.

You see it in the trucking industry, where you can't read any media without seeing about the idea of autonomous cars and autonomous trucks. And at BNSF we are not talking about autonomous trains, but we are talking about some flexibility to look at automating particular manual safety functions, that has both the safety benefit and an efficiency benefit. And so that will free up the existing people we have to be finders, and from finders to fixers, and let the automated technologies that are better at finding continue to find. So it is certainly a balance.

And I just would like to mention one thing. Mr. Tolman was referring to super pools, which is, obviously, about BNSF. We are the railroad that has implemented those. And you know, I would say that we think, sort of bringing this all together, that technology is

helping—we agree that fatigue is a problem. And technology is helping these jobs improve to let these folks do a better job, and to reduce fatigue.

And we may have to agree to disagree with Mr. Tolman about the impact of some of these things but, you know, we believe that all these implications are making things safer and enabling rest.

Mr. PAYNE. And—

Mr. NOBER. But again, I mean, I have the greatest respect for my colleague, and you know, we may have a difference of opinion on that.

Mr. PAYNE. Thank you. And, Ms. Darr, I didn't—your answer was so quick, I didn't catch it. What was it?

Ms. DARR. I said exactly, and that was to agree with you. And it is also to demonstrate that short lines are also often short-worded.

[Laughter.]

Mr. PAYNE. Very clever. Thank you.

Mr. FASO. Mr. Babin, you are recognized for 5 minutes.

Dr. BABIN. Thank you, Mr. Chairman. I appreciate it. Wow, sorry. I would like to direct a couple of questions to Mr. Santa and Mr. Rorick.

Can you briefly discuss the consequences of delayed rulemakings on the regulated community and your members? And what are the costs and inefficiencies produced by delay?

Mr. Santa?

Mr. SANTA. Yes, Mr. Babin. Thank you for the question.

INGAA and its members are committed to a voluntary program of improving pipeline safety after the San Bruno tragedy. And a lot of those commitments parallel what is being addressed by PHMSA in the proposed rule. And while we are committed to that, I think there is apprehension on the part of some of our member companies to make the investment and incur the cost to do, for example, certain types of pipeline testing, where there is the risk that, when PHMSA comes back with its rule, it says, "Well, that is not quite up to the standard of the new rule. Therefore, you need to do it over."

And this is more than just cost. It is disruption of service, it is the risk of perhaps not recovering those costs in the rates of the pipeline. So I think that that is one of the inefficiencies and costs that results from this delay.

Dr. BABIN. Thank you.

Mr. Rorick?

Mr. RORICK. I think Mr. Santa captured it well. One of the things that our industry depends on—and a lot of industries depend on—is just consistency. And when—as I indicated in my testimony, these companies plan out 10, 20 years in advance multibillion-dollar projects. The expectation is that when they are investing in these projects, they are going to know what they need to do when they actually build the projects, that may take multiple years.

So, contrary to what many people may think, we are not an industry that is opposed to regulation. And, in fact, we support it, as Mr. Santa and I both attested. We supported the development of the liquid pipeline safety rule and the natural gas pipeline safety

rule. We did that because we need that consistency. That delay creates uncertainty, and it makes it difficult to move forward with investments.

Dr. BABIN. Yes. OK, thank you. And then one more, if I could direct it to you same two gentlemen, can you please discuss the benefits from robust stakeholder engagement at the outset of a rulemaking? What stakeholder and Government collaboration, if any, precedes commencement of a rulemaking, and does industry and other stakeholders expend any effort developing a consensus on safety standards before the commencement of a rulemaking?

Mr. SANTA. I think there are two good examples where collaboration has paid big benefits. One of them is, as I noted earlier, in the lead-up to the integrity management rule that was adopted by PHMSA in 2004 there was pretty extensive stakeholder engagement, both through the Gas Pipeline Advisory Committee and through other means. And I think that resulted in a very, very good rule.

The other one is, even though we have been critical of PHMSA and their process on the underground gas storage interim final rule, in fact I think that is a success story. Because what is happening there is that rule is predicated on the two recommended practices that were adopted in the API standards development process.

Those came out of—on behalf of INGAA, those pipeline safety commitments, voluntary commitments we made that, years before the rule came up, we were working through that standards development process. That has involved regulators, it has involved academia, other interested parties. Very transparent. And I think that provided the platform for PHMSA to move quite quickly to proposing a rule in an area where, quite frankly, it had no regulation prior to that.

Dr. BABIN. OK, thank you. And Mr. Rorick?

Mr. RORICK. And maybe just to add a little bit onto the standard-setting process, as a standard-setting organization we are accredited by ANSI, which means that there are strict guidelines that we have to follow. As part of that, as Mr. Santa indicated, it is an open process.

So, if you are an expert in the field, whether from academia, the public, Government, industry, you are allowed to participate in the development of that standard. And that collaboration is crucial because what you are doing is you are taking the experts in the field and developing something, oftentimes in advance of the regulation because we don't want to wait for the regulation to develop.

Mr. Santa talked about the two recommended practices for underground storage. We recently developed another one on developing pipeline safety management systems. And this is a standard that companies can use to make sure that, in all of their practices that they are implementing, whether it is for emergency response or underground storage or whatever, that there is a system where you are constantly reviewing what you are doing, to make sure you can improve it. And it is an ever-growing process.

It is a similar system that is used by the nuclear industry, by the airline industry, as well. PHMSA was an integral part, as well as NTSB, in the creation of that standard, and we have got a very

good product moving forward that we both—both regulator and industry—can agree upon.

Dr. BABIN. OK, and I think my time has expired. Thank you, Mr. Chairman. I yield back.

Mr. FASO. Thank you.

Mr. DeSaulnier?

Mr. DESAULNIER. Thank you, Mr. Chairman. I want to make my comments as somebody who represents an area in northern California that, measured by per capita or geography, has the highest areas of hazardous materials. We have five refineries in—between the county I represent and the neighboring one across the water in Suisun Bay. And, having been on regulatory boards at the local, regional, and State level, I think one of the things I get from this meeting is both an opportunity to celebrate the progress we have made, but also a cautionary tale that we get—continue to get it right.

So, first, Mr. Tolman, you mentioned human factors. And in so many industries the importance of human factors in safeties of culture—as I have experienced it in chemical refining plants, hospitals—we are learning so much more. I know in the national laboratories in northern California, they do a lot of studying on human factors in different fields. And one of the key things is making sure that the rank and file people have some input.

So could you talk about that input? And maybe, Mr. Nober, you could follow up. Particularly when it comes to new technologies. So we want to acknowledge that new technology can make it safer, but we also want to work when it comes to human factors, and not just drive costs down with an excuse that it is going to make it safer, but actually have a full understanding that it is going to make it safer, and it benefits the workers, as well.

Mr. TOLMAN. Yes. First of all, Mr. Nober had mentioned that there is technology out there that allows the carriers now to address fatigue in the industry. Well, it really doesn't address fatigue. There is no technology that addresses fatigue. Knowing when a person comes and goes to work is how you address fatigue. It is a commonsense issue.

You know, and the railroad industry moves more and more hazardous material throughout our Nation. And we usually don't get a regulation until they start moving a serious thing, or serious accident happens. And you know, in the near future—and currently there is some nuclear waste moving across the United States. And at the present time there is no regulation that protects the employees from any nuclear waste. And there is a very simple device, I think we are all familiar with it, it is a device that would measure any nuclear waste. I mean that is the common sense that we need to have in the industry if we are going to start moving these things.

You know, the emergency escape breathing apparatus, I mean, that is another practical safety issue. I mean, sure, we didn't have an accident in 10 years, but, you know, God forbid that that happened, you know, at 2 o'clock in the afternoon, instead of 2 o'clock in the morning. But never mind. I mean you can't forget the nine people that were in that factory. That destroyed that factory, it destroyed their lives.

I mean you constantly—technology is great, but it doesn't ever replace human interface, period.

Mr. DESAULNIER. Thank you. I am going to let you respond, Mr. Nober, but I want to make another point and you can respond to this, as well, because my time is limited. And then Mr. Rorick and Mr. Rankin.

So, short-term versus long-term investment and prescriptive versus performance-based. Eighteen years ago, in my local Government, when I was a county supervisor, we had two explosions, killed five of my constituents. A competing refinery lobbyist called me and said, "We do all long-term investment. Our competitors do not. They are getting a higher return after-tax profit in publicly traded companies. If you, as a regulator, don't bring them up to a higher standard, then we are going to have to come down to theirs."

That second incident was the largest in the history of the State, and resulted in a very large private right of action.

So, when we did a full facility audit, what came back was the auditor said it was the corporate culture that led to these deaths. So the struggle between long-term investment, short-term investment being successful in the marketplace, but also doing what is clearly the best thing in long-term investment—so that is my question, particularly Mr. Rorick and Mr. Nober. And if you could follow up—

Mr. NOBER. I would. First, I would just like to clarify that, and maybe I misspoke earlier—that we think that technology can help reduce exposure for employees and improve safety. And obviously, things like the long pool that we think—and perhaps disagree with Mr. Tolman—that can reduce fatigue. But fatigue is hard, because there are minimum requirements. But what people do in their off time, it is not something that we can control. And so it is something that has to happen holistically.

Now, you asked about how we bring a culture of safety. At BNSF—because, obviously, the human and human exposure and human choices are the single most important thing to us. And we have a philosophy and a program called Approaching Others. And what we do is we train everybody in our railroad, from the CEO on down, on how to ensure and feel enabled to approach others if you see somebody take an unsafe act, or bring themselves or put themselves in a situation where they are exposed to danger, to feel that you are empowered to go and talk to them and say, "Hey, you know, there is a safer way to do that."

And, you know, we really are proud of our Approaching Others—it has been going on for years—ensuring that people don't put themselves in harm's way is job one of improving safety. And technology can help reduce exposure by not having people put themselves in compromising positions.

And I will just say that, over time, in terms of your investment question, you know, we are a believer that a safe operation is the best and the most efficient and the most profitable operation. And so, our long-term improvements in safety are where we go—I can't imagine our company ever saying, "Hey, if you don't reduce safety standards or bring them up, we are going to have to reduce ours." We are about keeping our network, which is our business, oper-

ating efficiently and safely, and getting our people home safely every night. And I think Mr. Tolman and I agree on that.

Mr. TOLMAN. Congressman, if I may, just to—and I don't mean to go back and forth, but I just want to comment on the—of course you—we can't control people's off time. But the railroad industry can control scheduled work, calling times, mandatory attendance policies. Those are the things you can control. Window-calling times, et cetera.

I mean there are a lot of things, and these are the things that the rail labor and management should be sitting down, working together, and not pretending that fatigue doesn't exist in the industry. There are some—BNSF has had some great pilot programs, but we are beyond pilot programs. Enough pilot programs. We know by now that certain things address—can address fatigue in the industry. Let's get them working. Let's focus on them. These—this is what safety is about.

Mr. FASO. The gentleman's time is expired. If you have—Mr. Rorick, if you have additional comment to add, please do and we will add it to the record.

The gentleman from Pennsylvania?

Mr. SMUCKER. Thank you, Mr. Chairman.

I would like to follow up, Mr. Nober, to respond to prior questions in regards to the competitiveness of the rail industry compared to other modes. And I think you are correct that we will see changes in other modes that may—has potential to change that equation. And so new technology that will enable you to drive out efficiencies and have a more efficient operation, I think, will be important, going forward. At the same time, it appears those technologies can actually increase the safety.

So I just wanted to go back to your written testimony, where you note that BNSF intends to leverage PTC to develop the next generation of train operation. It is known as moving block. And so I would like to just hear a little more about that. Can you just give us some sense of how much moving block would have potential to increase your capacity in your company?

Mr. NOBER. Well, I will first do my best to explain it. And hopefully that—and then there is a lot of debate about how much of a capacity improvement.

But right now our line of road, if you will, our capacity, is constrained by many factors, but one of which is how far apart trains have to be to operate safely. And, as you know, we have blocks. They kind of segment the track into 4-mile segments, and only one train can be in a 4-mile segment at a time.

PTC, the opportunity we see with PTC, is that it will have a GPS, real-time knowledge of every train on the system, where it is at all times. And it is not just knowing where the trains are, but the key is we have an infinite number of combinations of trains. Some are longer, some are loads, some are empties. And the weight of a train, the mass, the speed, the terrain all affect how long it takes to stop.

And PTC is a system that has to learn that, right? That is the complexity of it. You have to know if it is a loaded, 8,000-foot coal train versus an empty set of intermodal going back and you are going up the Rocky Mountains versus, you know, in the Mississippi

River Valley. What does it take to stop them? PTC solves that, technologically.

And so, what that will allow us to do is, by a moving block, have a real-time ability to know how close together two trains can be to be able to stop and operate safely. And that will allow us to be more efficient on our existing tracks. And what we need is for help from the regulators to help us begin to—what we call next generation PTC, to be able to leverage that technology to be more efficient in the long run.

And, you know, we think that is a great opportunity. It is not going to be easy. It is going to take some time. But that is the benefit of PTC technology down the road.

Mr. SMUCKER. So can you expand on that? You say you will need help from Congress, as the regulators. What can we do to remove any disincentives that are in place to allow you to bring this new equipment into service?

Mr. NOBER. Well, I would say, at the beginning it is going to be—you know, the FRA can be slow, in terms of looking at new technology. A few years back we started experimenting with LNG locomotives, and just wanting to look to develop that. And it was, admittedly, a slow process.

Now, times and market changes have really kind of altered the equation on that some, but it was a new, promising technology that we wanted to look at. And being able to see some benefits to that, to be able to compensate for the amount of capital cost we would have to do when it would be an improvement, that was something that probably would have taken some nudging of the FRA.

And for moving block, that would be a change in the way the regulators look at the traditional notions of safety, and their mindset would have to be willing to look at—through the waiver process and through a cooperative technological advancement process, to be able to let us experiment and test new technology, and be able to move faster and encourage the development of that.

Mr. SMUCKER. And do you believe that this is industrywide? So, for instance, have other railroads like CSX—are they looking to adopt this technology, as well?

Mr. NOBER. I don't know that the other railroads—again, it would depend a little bit on their geography and their system and the types of traffic that they have. So I don't know if other railroads would see the opportunity in moving block that we necessarily would.

Mr. SMUCKER. All right, thank you.

Mr. NOBER. But I don't know that they wouldn't.

Mr. SMUCKER. All right, thank you. I yield back.

Mr. FASO. The gentleman from Texas.

Mr. WEBER. They saved the best for last. Mr. Rorick, does PHMSA ever come out on pipeline construction, not just in the permitting or in the—I guess the permitting phase. Do they come out and actually witness a pipeline going in?

Mr. RORICK. They are—they will come out periodically and check as the construction is taking place, to ensure that they are meeting the plans. When a pipeline is permitted, the plans have to be submitted to PHMSA. PHMSA then can give feedback to the pipeline

operator with any suggested changes. They will work that out between the operator and PHMSA.

And then, during the construction process, PHMSA can, in fact, come out, check the facility, and then, certainly during operations, they will come out and inspect the facility, as well.

Mr. WEBER. If there is an accident, a spill of some kind, do they come out? Do the same people come out and see what happened after the fact?

Mr. RORICK. They—well, there is—the—PHMSA will then investigate the release, and then take that information back, and then compare that to—

Mr. WEBER. But is it the same people? Do you get the sense that, you know, they are really paying attention, and they are wanting to be involved, start to finish?

Mr. RORICK. I can't speak as to whether it is the same people, but they definitely are paying attention, because they share the same objective we do, which is to reduce the spill. So—

Mr. WEBER. OK. Same way for the Federal Railroad Administration.

I guess, Ms. Darr, I will start with you. I understand that you all have a facility that tests locomotives and accidents and stuff like that. Is—do I remember that correctly? Or somebody does. It may have been Mr. Nober.

Mr. NOBER. Yes, we have—it is called the TTCI, and it is a research center that is in Pueblo, Colorado, that is a cooperative railroad-FRA facility where we have test tracks, and we test all sorts of things there.

Mr. WEBER. So they get to witness the accident before and after, and see how the regulations may or may not have affected or played a part?

Mr. NOBER. We are able to conduct real-time research, and even do crashes, test crashes.

Mr. WEBER. OK. Do they ever get involved in going to some of the factories for locomotive design, or do they just simply see all this after the fact?

Mr. NOBER. I don't know if the FRA is involved in locomotive design.

Mr. WEBER. OK. So once they have seen an accident, and seen a locomotive come apart, so to speak, I am just curious if they try to follow that through on the front end.

There are manufacturing facilities that build cars—

Mr. NOBER. They do.

Mr. WEBER. They do?

Mr. NOBER. They do—

Mr. WEBER. I am glad to know that there is—Trinity Industries in Texas, Navasota, Texas, that manufactures tank cars, for example.

Mr. NOBER. Right. And GE and Caterpillar manufacture locomotives.

Mr. WEBER. I had a meeting with them just the other day. Does the FRA regulators—do they ever go to the manufacturing facilities and watch when a car is being built, and see what the regulations do to that process?

Mr. NOBER. Absolutely.

Mr. WEBER. You are getting the nod from the learned few behind you.

Mr. NOBER. Yes, I am. Actually, I am cooperating with them.

[Laughter.]

Mr. WEBER. When you talk about these emergency escape breathing apparatuses, I am not familiar with that accident that occurred with the chlorine. I am very familiar with what chlorine does. Was the emergency breathing apparatuses—was that just for the engineers? What was the subject there? Or was it to have more available for people off the track?

Mr. NOBER. No, it was to have it in the cab of locomotives.

Mr. WEBER. Have it in the cab of locomotives.

Mr. TOLMAN. Mr. Congressman, if I can mention—

Mr. WEBER. Sure.

Mr. TOLMAN [continuing]. A little bit about that, in the Rail Safety Improvement Act passed in 2008, that was a mandate in the act. Today we have a guideline. We don't have—they haven't acted on the law just yet.

Mr. WEBER. OK.

Mr. TOLMAN. And it has happened. There isn't any emergency escape breathing apparatus, although BNSF does it in some of the tunnels. But however, it is not regulated or mandated in any way, shape, or form.

Mr. WEBER. I got you. So you could also say that about other hazardous chemicals that you—the trains carry, whether it is oil or gasoline or ammonia or anhydrous ammonia. The trains carry a lot of hazardous materials. Is that accurate?

Mr. NOBER. Correct. Overall, it is a small—I mean there are different categories of it. There is what you are referring to, anhydrous and chlorine are what we call poisonous, or toxic by inhalation.

Mr. WEBER. Yes.

Mr. NOBER. And so that is for BNSF, a very small percentage of what we carry. But things that are classified as hazardous is larger.

Mr. WEBER. Yes. Trains aren't—carriers aren't mandated to carry fire-fighting equipment. You would have a different foam to fight an oil or a gasoline or a diesel, or some kind of chemical, right?

Mr. NOBER. We preposition fire-fighting equipment throughout our system to be able to move it when we have an incident.

Mr. WEBER. Is that true about all the rail lines?

Mr. NOBER. I don't know if every class I railroad does that, but I believe they all do, to some extent. But we do, particularly in our crude network and our key train network.

Mr. WEBER. OK. Well, that is very interesting. Good to know. Thank you. I am going to yield back, because the hour is late.

Mr. FASO. Are there further questions from any members of the committee?

Seeing none, I would like to thank each of the witnesses for your testimony today. Your contribution to today's discussion has been very informative and helpful.

I ask unanimous consent that the record of today's hearing remain open until such time as our witnesses have provided answers

to any questions that may have been submitted to them in writing, and unanimous consent that the record remain open for 15 days for additional comments and information submitted by members or witnesses to be included in the record of today's hearing.

Without objection, so ordered.

If no other members have anything to add, the committee stands adjourned.

[Whereupon, at 12:15 p.m., the subcommittee was adjourned.]



American Short Line and  
Regional Railroad Association

TESTIMONY OF

**Linda Bauer Darr**

President

American Short Line and Regional Railroad Association

REGARDING

The impact of new and existing regulation on short line and regional railroad  
operations in United States

BEFORE THE

House Committee on Transportation and Infrastructure, Subcommittee on  
Railroads, Pipelines, and Hazardous Materials. Hearing titled: Building a 21<sup>st</sup>  
Century Infrastructure for America: The State of Railroad, Pipeline, and Hazardous  
Materials Safety Regulations and Opportunities for Reform.

Wednesday, April 26, 2017 | 10:00 AM  
2167 Rayburn House Office Building  
Washington, DC



American Short Line and  
Regional Railroad Association

Thank you Chairman Denham, Ranking Member Capuano and Members of the Committee. My name is Linda Darr and I am President of the American Short Line and Regional Railroad Association (ASLRRA). ASLRRA is a national trade organization representing the nation's 600 Class II and Class III railroads as well as 526 railroad suppliers and contractors that serve the railroad industry. Together short line railroads operate approximately 50,000 miles of track or nearly one third of the national railroad network. Short lines operate in 49 states and in 30 states they operate at least one quarter of the state's total rail network. Short lines are often called the first mile/last mile of the nation's railroad system and handle in origination or destination nearly one out of every four rail cars moving on the national system.

Thirty Members of this Subcommittee's 32 Members have at least one short line operating in your District and I know many of you are familiar with how and who we serve. For the benefit of those not as familiar with the short line industry let me comment briefly on three important differences between short lines and the large national railroads referred to as the Class I's.

First, short lines are small businesses. Our combined annual revenues are less than the annual revenues of any one of the nation's four large Class I railroads. The average short line employs 30 people or less and a significant number are run with less than a dozen employees. Those employees are cross trained so that on any given day they can be called upon to undertake a variety of tasks.

Second, the majority of short lines operate track that was headed for abandonment under previous Class I owners. These were the light density branch lines that could not make money under the cost structure of the big national carriers. They served small customers that shipped smaller volumes.

Because these were marginal or money losing lines they received little or no capital investment by their previous owners, resulting in significant deferred maintenance. To be successful short line owners must invest between 25 to 33 percent of their annual revenues in rehabilitating their infrastructure. This makes short line railroading one of the most capital intensive industries in the country.

Third, short line operating characteristics are far different than those of the Class I's. Short lines are generally operating in a much smaller geographic area than the Class I railroads. These shorter distances combined with slower speeds and shorter trains produce more predictable work schedules and more routine patterns of interchange and delivery. For the most part our employees begin and end their work day at home.

These three characteristics – our size, our capital needs and our operating requirements – shape our view of the safety regulations that impact our businesses. From our perspective we need regulations that are more efficient, more goal oriented, less reliant on a one size fits all mindset, and much more focused on costs and benefits. We hope your Committee will keep these requirements uppermost in mind as you consider how to improve the regulatory regime.

To be clear we understand the preeminent need to make railroading as safe as possible and we understand that government has an obligation to step in when necessary. But government also has an obligation to step in responsibly. Today that is not always the case. Too often government regulation

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forces companies to spend huge sums of money on solutions that don't solve much, or require operating practices that do nothing to improve operations.

Perhaps most damaging for the short line industry are the kind of one size fits all regulations that provides no basis for the presumed benefits of that compliance and that don't take into consideration our unique operating characteristics; smaller train sets, shorter distance, slower speeds and small staffs.

Let me briefly touch on four examples.

Training Rules – These proposed rules impose an enormous paperwork burden on short line railroads with no corresponding safety benefit. The proposed rule is pursuant to the Rail Safety Improvement Act of 2008 and we believe the FRA's interpretation of that requirement goes far beyond anything contemplated by the statute. In short, the proposed rule requires the creation of training manuals and reports far beyond the capability of the average short line railroad.

If I might be permitted the use of a prop here. Following the proposed rule, the Short Line Association hired a safety professional to produce a template manual that met all the requirements of the rule for just one of the 26 "crafts" or job assignments on the railroad. This is the manual. This notebook would have to be duplicated 26 times to cover all the crafts in our industry. In an effort to see if we could at least standardize this document so each short line would not have to produce its own 26 books, we gave this book to the FRA and asked them to comment on and approve it as a template that could be used by all short lines. It took FRA 3 years to reply. It is ironic indeed that the FRA with its hundreds of employees needs years to review and respond to a manual that it is asking a 10 to 30 person short line to produce in 26 different versions. The ASLRRRA believes that this regulation should be repealed and the underlying statutory requirement revised.

92-Day Locomotive Inspections – This 1980 regulation is a costly requirement that has virtually no impact on safety, in fact the 92 day inspection period was derived from locomotive manufacturer's maintenance recommendations. Inspecting a locomotive is a matter of maintenance not safety. Locomotive failures that could be found through this type of inspection, such as traction motor failures were the cause of .00035% of all main line track derailments for all railroads for the ten year period 2006 to 2016.

This regulation is a classic case of one size fits all. The number of miles a Class I railroad locomotive will travel in 92 days is significantly greater than a typical short line locomotive. On many short lines locomotives are not even used on a daily basis. Yet the cost and paperwork associated with the regulation are the same. For the short line the cost is even greater because sometimes FRA will say that the inspection must be completed where a pit allows the inspector to get under the locomotive. Short lines are not so equipped at most locations and must therefore take the locomotive out of service as it moves to the required facility. Equipment maintenance is an important part of running an efficient and reliable railroad but it should be done when and where it is required.

Mandatory Two Person Crews – This proposed regulation provides a solution to a non-existent problem. First there is no evidence of a safety benefit generated by a second crew member. In fact it is our understanding that the FRA is currently funding a study at Duke University examining whether there is

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even a correlation between crew size and safety. In our estimation, this seems to be putting the cart before the horse.

Second, as small businesses that serve small customers, the added cost of this mandate has a serious economic consequence. Perhaps most important, this unnecessary requirement diverts limited resources from infrastructure improvements which is the most recognized and reliable way to improve railroad safety.

It is ironic that at the same time the Administration is proposing to spend nearly \$4 billion to accelerate the acceptance of driverless cars on U.S. roads it seeks to increase the number of drivers in a locomotive.

Commodity Reregulation – In response to the Ex Parte 704 motion filed with the Surface Transportation Board, the Board is proposing to revoke class exemptions on certain commodities including stone, hydraulic cement, coke and various iron and steel products. One of the most important provisions of the Staggers Act was to exempt railroads from regulation when regulation is not necessary to protect shippers against abuses from market power. But it's important to note short lines face tremendous intermodal/intramodal competition. Geographic and product competition continue and truck transload operations provide strong competition for short distance traffic of the commodities targeted. The average length of haul is 105.9 miles for stone, 19 miles for coke, 75.1 miles for cement and 38.9 miles for iron and steel. These short distances expose this freight to intense truck competition. To regulate these commodities for short lines while leaving them unregulated for trucks would be a giant step backwards.

I have attached to my testimony our filing with the STB on this subject.

Let me conclude with an anecdote that in my mind gets to the core of the importance of safety for our industry. Before joining the short line association I represented the trucking industry for almost 17 years. When we had big meetings they were usually kicked off with a pledge to the flag, or sometimes even a prayer. In the short line industry we start every meeting, big or small with a safety briefing. It's a central focus of what we do. It reflects our commitment to safety and it is an effort to make us safer today than we were the day before. As a matter of fact, with the help of Congress, we stood up the short line Safety Institute with the same goal. We dedicate ourselves to running safe railroads and we work with FRA to help us achieve those goals. And we speak up when we see overreach that is not supportable or that runs contrary to those goals.

You are undertaking a very important task here. If you are able to make regulations more efficient, more goal oriented and more focused on benefits and costs, you will have done our industry a great service and we are deeply appreciative of your effort. I am very thankful for the opportunity to provide the short line industry's perspective on this subject.

**Linda Bauer Darr**

Wednesday, April 26, 2017 | 10:00 AM  
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**BEFORE THE  
SURFACE TRANSPORTATION BOARD  
WASHINGTON, D.C.**

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**STB Docket No. Ex Parte 704 (Sub-No. 1)**

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**NOTICE OF PROPOSED RULEMAKING**

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**REPLY OF THE  
AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION**

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**President Linda Bauer Darr  
American Short Line and Regional Railroad Association  
Suite 7020  
50 F Street, NW  
Washington, D.C. 20001-1564  
Telephone: (202) 628-4500  
Facsimile: (202) 628-6430  
E-mail: lbdarr@aslrra.org  
August 26, 2016**

**BEFORE THE  
SURFACE TRANSPORTATION BOARD**

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**STB DOCKET NO. EX PARTE 704 (Sub-No. 1)**

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**NOTICE OF PROPOSED RULEMAKING**

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**REPLY OF THE  
AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION**

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**Introduction and Interest of the American Short Line and Regional Railroad Association**

The American Short Line & Regional Railroad Association ("ASLRRRA" or "Association") is an international trade organization of approximately 1,030 members consisting of about 480 short line and regional small, locally-based railroads ("Small Railroads") in 49 states and approximately 550 suppliers and contractors. In a decision served March 23, 2016, the Surface Transportation Board ("STB" or "Board") issued a Notice of Proposed Rulemaking ("NPRM") in which it stated it is seeking public comment on its proposal to revoke existing class exemptions under 49 C.F.R. Part 1039 for (1) crushed or broken stone or rip rap; (2) hydraulic cement; (3) coke produced from coal; (4) primary iron or steel products; and (5) iron or steel scrap, wastes or tailings (collectively the "Exempt Commodities").

Pursuant to a decision served by the STB Office of Proceedings on May 6, 2016, setting the revised dates for filing Comments and Replies in the captioned proceeding, ASLRRRA filed Comments opposing the revocation of the in the NPRM on July 26, 2016. In its Comments, the Association opposed the STB's proposal in its entirety, particularly as the revocation of the exemptions would disproportionately harm Small Railroads.

**ASLRRRA July 26 Comments**

ASLRRRA submitted that, contrary to the assertions by the Board in its NPRM that changes in the transportation market warrant the application of the Interstate Commerce Act to the Exempt Commodities in order to carry out the federal government's rail transportation policy, the facts demonstrate that Small Railroads do not possess market power in any of the Exempt Commodity markets. Further, the STB's conclusion that waybill rate data for these commodities

shows substantial increase in revenue from potentially captive traffic is not only wrong, but is clearly misplaced insofar as Small Railroads are concerned.

ASLRRA stated that with respect to Small Railroads in particular, regulation of the Exempt Commodities is inconsistent with rail transportation policy. As has been the case for decades, Small Railroads provide a limited scope of service in the movement of the Exempt Commodities in terms of the average distance the commodities are transported and the total revenue derived from transportation of the Exempt Commodities. Further, Small Railroads do not exert any market power over the Exempt Commodities as they rarely even control the rates charged.

ASLRRA said that the STB's conclusion to revoke the exemptions for these commodities is flawed. The STB's stated rationales for this conclusion are:

- (1) There have been many changes in the railroad industry;
- (2) It received informal inquiries questioning the relevance or necessity for the exemptions (without identifying the number of such alleged inquiries, from whom, and when they occurred);
- (3) A record developed in comments and a hearing held in 2011 regarding the exemptions;
- (4) An alleged change in the dynamics of the transportation markets indicating that railroads exert a greater market power for each of the commodities causing a need to regulate them; and
- (5) The STB's waybill study that allegedly shows a substantial increase in revenue from "potentially captive" traffic – described as traffic with a revenue to variable cost ratio ("R/VC") of more than 180%.

Using these faulty rationales, the Board states that the exemptions involved in this proceeding must be revoked in order to "...restore shippers' access to the Board's regulatory oversight and processes." NPRM at 4. In actuality, the whole foundation of the decision to revoke the exemptions rests on the Board's review of the confidential waybill sample and its resultant calculation of the average R/VC ratios for the Exempt Commodities.

ASLRRA participated in Docket No. EP-704, *Review of Commodity, Boxcar, and TOFC/COFC Exemptions* (February 24, 2011 hearing), providing written and live testimony at the hearing held in that docket. The Association stated in that proceeding, *inter alia*, the

following points: (1) the exemptions are effective, having worked exactly as Congress intended; (2) the low number of revocation petitions demonstrate the exemptions are not being abused; (3) the exemptions are of critical importance to short line railroads and have worked as intended for traffic handled by small railroads; (4) the exempted commodities are subject to intense intra- and intermodal competition; (5) for short lines, the competition for traffic moving 500 miles or less is particularly susceptible to diversion to truck; (6) even for traffic moving for distances longer than 500 miles, small railroads have to compete with trucks, waterways, intermodal, and transload operations; and (7) short lines are inherently incapable of abusing market power.

As shown in the Comments filed by ASLRRRA on July 26, 2016, not one thing has changed for Small Railroads from the points raised in 2011. In fact, if anything, the competition for this traffic has increased exponentially, with more transloads being installed and larger trucks vying for this traffic.

While there have been changes in the rail industry in general, the operations of Small Railroads are virtually the same today as they were in 2011. As was the case when the exemptions were adopted, the Small Railroads still continue to provide the first and last mile of service, largely at the fringes of the National Rail Network. Furthermore, the market dynamics of Small Railroads remain the same. As the evidence in the Association survey shows, Small Railroads still face tremendous intermodal/intramodal competition, there still exists geographic and product competition, and transload operations provide very strong competition for their short-distance traffic. The statistics gathered from the ASLRRRA survey of its railroad members cited in the initial Comments, show that the average length of haul for the Exempt Commodities is 105.9 miles for stone; 19 miles for coke; 75.1 miles for cement; 38.9 miles for iron and steel; and 46.9 miles for iron and steel scrap. These short distances expose the freight to rampant truck competition.

Thus, despite the passage of many years, the dynamics of the Small Railroads have not significantly changed.

**Reply to Comments Filed by Supporters of Revocation**

ASLRRRA has reviewed the 12 Comments filed in this proceeding by parties who have said that the exemptions should be revoked as well as the Comments filed by the parties who

oppose revocation.<sup>1</sup> With some exceptions, each set of the Comments supporting revocation focused on the use by the STB of the average R/VC ratios and rely on stale evidence to support the Board's allegedly reasoned approach justifying the proposed revocations. ASLRRRA believes that other respondents and filings clearly demonstrate the shortcomings of the R/VC and evidentiary issues and therefore, the Association focuses the following part of its Reply on certain exception Comments.

Reply to Comments That Are Exceptions

Several exception Comments (1) do not address the issues or those (2) make unsupported conclusory statements about the state of competition in the rail industry and the alleged market power of railroads, (3) actually support the fact there is intermodal, intramodal, product, and geographic competition for the Exempt Commodities, and (4) many mention R/VC ratios only in passing.

For instance, the Comment filed by the United States Department of Transportation ("DOT") does not directly address the use of the data from the confidential waybill samples, R/VC ratios "indicating lack of competition" or "undue market power." DOT quotes its testimony from the February 2011 Hearing, saying, "... each exemption should be evaluated on its own merits, and that each evaluation should be based on a careful, case-by-case review." DOT Comment at 2. DOT goes on to suggest "...that the Board remain open to considering all available evidence, without placing undue reliance upon any single measure as a proxy for market conditions." DOT Comment at 2 (Emphasis added). What the STB has done in the NPRM is precisely the opposite of what DOT recommends – it has relied almost completely on data derived from the confidential waybill sample to reach its conclusions and ignored plain record from both the February 2011 Hearing and other evidence available to it during the nearly half-decade since that hearing. Clearly, the Board has not done a careful, case-by-case approach in this proceeding and has instead placed undue reliance on average R/VC ratios calculated from its study of the confidential waybill samples.

Examples of Comments that make unsupported conclusory statements about the state of competition in the rail industry and the alleged market power of railroads are those filed by the California Construction and Industrial Materials Association ("CalCIMA") and Graniterock. In

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<sup>1</sup> The Association of American Railroads and six of Class I railroads filed Comments and ASLRRRA adopts those Comments in this Reply.

its one-page Comment, CalCIMA makes the bold, unsupported assertion that "several" of its members are captive to one railroad and "pay excessive rates[.]" without a scintilla of evidence to substantiate these allegations. Graniterock makes similar unsupported assertions in its one-page Comment when it alleges there are delivery locations for its product with no viable alternatives to rail, offering no specifics as to such locations or the rates the consignee pays. Moreover, by its own admission, there is product competition from sources in Canada.

An example of Comments filed by the proponents that actually support the fact that there is intermodal, intramodal, product, and geographic competition for the Exempt Commodities is one filed by the Wisconsin Central Group ("WCG"). WCG admits it is addressing non-captive, truck competitive freight. WCG Comment at 1. It also admits there is inter- and intramodal competition for the products when it describes the shift of a major shipper from an all-rail Canadian National Railroad move to a truck/rail transload operation involving a Small Railroad and Union Pacific Railroad. WCG Comment at 5. WCG says that "[w]e have word of several other similar transloads in the offing...". WCG Comment at 5. By its own Comment, WCG has shown the traffic involved is non-captive and that there is effective intramodal and intermodal competition for the movement of its stakeholders' freight.

The Comment filed by the Freight Customer Alliance ("FRCA")<sup>2</sup> likewise does not directly address the appropriateness of the STB's use of average R/VC ratios as the primary basis for finding that the exemptions should be revoked. Rather, it argues generally that exemptions are a barrier to shippers seeking rate or service relief from the Board. In essence, it argues that the linkage between the jurisdictional threshold, effective competition, and unavailability of regulatory relief is deficient for several reasons. It states that all exemptions should be revoked, not just those in this proceeding, to allow the STB to provide oversight and remedies to all shippers, regardless of the existence of effective competition and lack of market dominance or market power.

FRCA's position is based on a clearly flawed premise and inconsistent with overall rail transportation policy as well as ignorant of existing avenues that to resolve service issues at the STB.

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<sup>2</sup> On its website, FRCA says it is the reinvention of Consumers United for Rail Equity and states it "...does not seek economic re-regulation of the railroads; rather, it seeks service options and fair prices that are not held to anticompetitive rates or service practices."

The Comment filed by Texas Crushed Stone Company ("TCSC") only mentions the subject of R/VC ratios once, in the context of what it alleges is an increase for all movements of crushed or broken stone or rip rap rather than what the R/VC ratio is for its own traffic. TCSC admits it is served by a Small Railroad that interchanges with two Class I carriers, thus allowing intermodal competition. TCSC Comment at 2. Much of its Comment is directed at what it perceives as problems with the business practices of one of the connecting Class I railroads. Re-regulation of crushed or broken stone or rip rap will not solve whatever problem it feels it faces with that Class I, as nothing it identified in the Comment constitutes an unreasonable practice, particularly when it has a competitive alternative to ship its products. ASLRRA's Comment, on the other hand, based on information extracted from the 2014 waybill sample, shows that the Small Railroad's average R/VC for crushed stone was 130.7%, which is not addressed.

Comments Focused on the Use of Average R/VC Ratios and Other Arguments

Generally, each of the Comments relying on the data derived from the confidential waybill sample and other rationale used by the STB in the NPRM raise the same arguments almost verbatim. Those arguments are (a) the confidential waybill samples show a steep rise in average R/VC ratios, thus evidencing market power by railroads; (b) there are "potentially captive shippers" with rates above 180% R/VC allegedly subject to massive rate increases; (c) consolidation in the rail industry has reduced rail competition; (d) regulatory burdens on railroads have been removed and therefore the exemptions should be revoked; and (e) the option to seek revocation to address a specific issue is impractical. The problem with all of these arguments is that items (a) through (c) do not apply to Small Railroads. With respect to (d), if the exemptions were revoked, the result would be the imposition of regulatory burdens on Small Railroads that have not been justified. Finally, nothing stated in support of argument (e) shows that a case-by-case approach is invalid.

Arguments Relying on R/VC Ratios

The reliance by the anti-exemption Commenters on the waybill data used by the STB in the NRPM is totally misplaced, particularly with respect to Small Railroads. Many shipments handled by Small Railroads do not appear in the waybill samples because the Small Railroads do not appear on the waybills or in the routings. As pointed out in the Verified Statement of Gerald Fauth, III, filed contemporaneously with the ASLRRA Comments, there are numerous problems with the STB's approach to determining to revoke the exemptions for these five commodities.

The confidential waybill sample that the STB uses contains relatively few records from Small Railroads and is largely relevant only to Class I railroads. Mr. Fauth sets forth this flaw in detail in his Verified Statement. *See*, Fauth V.S. at 7-8.

Determination of R/VC ratios depends in large measure on the STB Uniform Railroad Costing System ("URCS"). In a Position Paper unanimously adopted by the Railroad-Shipper Transportation Advisory Council ("RSTAC")<sup>3</sup> the RSTAC reported a number of problems with URCS, including the following:

- The Board has recognized that "the development of system-wide variable costs associated with a particular rail movement requires that any costing methodology incorporate many assumptions and generalizations about railroad operations." The problem as it relates to Class II and III carriers is that URCS contains no assumptions and generalizations about small railroads' operations. Without those assumptions, URCS is not useful as it relates to small railroads.
- URCS relies entirely on data obtained from the R-1 forms and other data filed with the STB by the Class I railroads. On high density Class I rail lines, the fixed costs of track maintenance, supervision, and communications and control can be spread over large amounts of traffic. As a result, average costs of operation over these lines may not be greatly in excess of variable costs and it is fairly easy to determine the costs of operation over any portion of the network.
- For light density rail lines of small railroads, fixed costs must be allocated to a much smaller amount of traffic and average total costs will be well in excess of variable costs. As a result of the small size and light densities typical of the small railroads, their fixed costs are generally the largest proportion of their total costs on a per carload basis.

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<sup>3</sup> RSTAC was established pursuant to the ICC Termination Act of 1995. Its 15 appointed members consist of senior officials representing government, shippers, and railroads who share a common goal to strengthen the national rail industry to improve service levels and foster mutually beneficial relationships between large railroads, small railroads, and shippers, across all commodity groups. RSTAC is charged to provide a private sector forum for the discussion of matters of concern to small rail shippers and small railroads and to provide advice on regulatory, policy, and legislative matters to the STB, the Secretary of Transportation, and Congress.

- Engineering time and motion analyses form the basis of the special study factors used in URCS. Some of those studies date back to the 1930's. In the decades since those studies were done, dramatic changes have occurred in the rail industry. Not least among those changes since 1980 is the emergence of hundreds of short line and regional railroads and a concentration of heavier cars and trains creating operating and maintenance factors unlike the conditions in the 1930's and unlike those experienced by any regional or short line. The engineering studies do not take into account those changes. In fact, URCS does not contain any of the operating characteristics of short line or regional railroads or their cost structures.
- There are several key general characteristics of small railroads that make them different from Class I railroads:
  - Their service territories are local or regional and their traffic densities are generally low.
  - Fixed costs are generally the largest proportion of their total costs.
  - They have lower shares of dominant rail commodities such as coal, motor vehicles, and intermodal, but a much higher concentration of non-captive, truck competitive general merchandise traffic.
  - The traffic and commodity mix varies from short line to short line.
  - They are often dependent upon a limited market and a traffic base that can be non-diversified.
  - They are mostly involved in the switching-intensive portions of rail trips, namely the "first and last miles" in serving customers.
  - Most traffic handled by short lines, however, originates within terminal areas or along light density lines where traffic volumes are much lower, train speeds are slower, and fixed costs are a much larger component of total costs.

*RSTAC Position Paper on the Uniform Rail Costing System, November 22, 2011.*<sup>4</sup>

The fact that URCS contains no assumptions and generalizations about Small Railroads renders URCS irrelevant to Small Railroads. Plus, the R-1 forms are not even required for Small

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<sup>4</sup> In its Comment, AAR describes in great detail all the problems and limitations with URCS. See, AAR Comment at 23-28.

Railroads and many Small Railroads do not even have systems or data to provide the data.

These problems with URCS result in flawed calculations of R/VC ratios, particularly for Small Railroads. The STB has recognized at least some of the problems by instituting a proceeding in EP 431 (Sub-No.4), *Review of the General Purpose Costing System*, Decision Served August 2, 2016, pursuant to which it proposes to eliminate the make-whole adjustment in URCS and make other adjustments to it as well. To permit reliance on URCS' framework in deciding the R/VC aspect of this proceeding, without resolution of these issues for Small Railroads, is widely unfair.

*Arguments Relying on "Potentially Captive" Shippers*

The STB and those parties who rely on a 180% average R/VC as a marker to assert that any average R/VC above 180% R/VC is a "potentially captive" shipper. However, even the Board recognizes in the NPRM that R/VC ratios at or above 180% cannot, standing alone, establish market power or abuse of market power. The use of 180% and reliance on it is entirely misplaced, as that standard is statutorily limited in its use. As noted above, this approach is in contravention of the language of the statute and also ignores the well-documented problems and limitations of R/VC as described above. Moreover, the issues of "captive shippers" are the subject of other proceedings and should not be a dispositive element of this proceeding on Exempt Commodities.

*Arguments Relying on Consolidation in the Rail Industry*

While it is true that there has been a dramatic consolidation in the Class I segment of the railroad industry, that same phenomenon has not occurred with Small Railroads. There are currently approximately 550 short line and regional railroads operating in 49 states. Many of those railroads have 10 or fewer employees and 147 of them generate annual revenues of \$2 million dollars or less. Small Railroads operate over approximately 43,131 miles of track, 38% of the nation's rail network. Their traffic base is largely general merchandise highly susceptible to diversion to other modes. The average route mile distance for Small Railroads is 91 and the median route mileage only 34. Traffic densities are light and fixed costs are high. Those statistics hardly bespeak of a consolidated industry. Thus, the arguments raised by some of the Comments supporting the revocation of these Exempt Commodities that consolidation of the rail industry removes the need for the exemptions are totally inapplicable to Small Railroads.

*Arguments Relying on Removal of Regulatory Burdens*

Imposition of regulatory oversight by the STB of the Exempt Commodities would be a burden on Small Railroads, an imposition not warranted by the facts concerning the transportation of these commodities by Small Railroads. The members of the Association are small businesses not staffed to handle litigation costs, filing requirements, and other regulatory burdens. Small Railroads would be expected to fulfill their common carrier obligations regarding these commodities, which means they would be required to spend scarce resources defending allegations, to the detriment of their operations. Similarly, they would be exposed to other regulatory oversight on compliance with the STB regulations, which would require them to expend time and money that is not always available addressing those issues.

While Class III carriers are exempt from some reporting and recordkeeping requirements, if these Exempt Commodities are reregulated, the approximately 480 short line and regional railroad members of ASLRRRA would still have to bear the cost of maintaining additional reports and records. For example, approximately 100 ASLRRRA members have 10 or fewer employees, all of whom typically perform multiple functions on their railroads. Additional burdens to address a spurious issue would either necessitate hiring or adding make-work duties to multi-tasking employees. Such requirements of Small Railroads would be costly both financially and operationally.

*Arguments that Seeking Revocation to Address a Specific Issue Is Impractical*

Some of the pro-revocation Comments argue that the ICC Termination Act of 1995, Pub. Law no. 104-88, § 102, 109 Stat. 803, 804 (1995)<sup>5</sup> ("ICCTA") removed the regulatory burdens on railroads that once served as a reason to grant the exemptions in the first place and that because those burdens are no longer in place, the exemptions should now be revoked. While it is true many regulatory burdens have been removed, the corollary is that the imposition of re-regulation of the Exempt Commodities would place new and potentially expensive costs on Small Railroads. With no discernable benefit to them or the shipping public, they could be forced to defend against rate reasonableness or service complaints, sucking up scarce resources that could otherwise be used to improve their infrastructure and expand their services.

**Reply to Specific Comments**


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<sup>5</sup> ASLRRRA has addressed argument (1) previously in this Reply and therefore will not repeat that here.

The following responses are directed at individual Comments that embody one or more of the arguments set forth above as constituting rationales for revoking the Exempt Commodities.

Rail Customer Coalition ("RRC"):

This large collection of trade associations argues that all of the proposed revocations be adopted because of railroad consolidation, rate trends that demonstrate an overall increase in market power, data from the public use waybill sample for all major commodity groups for 2014 (other than intermodal) showing a general shift towards higher R/VC ratios, a significant increase in R/VC ratios over the last two decades, a higher percentage of "potentially captive traffic" – defined as traffic with rates above 180% R/VC – for each of these Exempt Commodities, and removal of regulatory burdens on railroads.<sup>6</sup> It closes its Comment with the statement that the STB should provide a broad analysis of all commodity exemptions.

The problems of the analysis upon which RCC relies are many. As described above, the whole process of determining R/VC ratios is flawed and certainly inapplicable to Small Railroads. Second, the study on which RCC relies only examined Class I railroad rate data from the STB. The study erroneously states the data represent 100% of all rail shipments, but most Small Railroad shipments are not included in the Public Use Waybill Sample. Further, the analysis is also skewed because it includes commodities not involved in this proceeding.

AK Steel; Steel Manufacturers Association ("SMA") and American Iron and Steel Institute ("AISI"); and The Institute of Scrap Recycling Industries, Inc. ("ISRI"):

The Comments from all three of these entities support revocation of the exemptions concerning coke, steel, and scrap (with ISRI focusing on scrap). Their case is based on three basic arguments: (1) the burden of having to file tariffs was abolished by ICCTA; (2) railroads have greater market power because of "several" changes relating to the transportation of coke, steel, and scrap; (3) the calculation of the current average R/VC for coke is 248%, for steel 237%, and for scrap 230% and commodities with ratios that high should not be exempted from regulation; (4) petitions seeking partial revocation are impractical and time-consuming; (5) railroads are extraordinarily profitable; and (6) their members deserve access to the oversight of the STB.

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<sup>6</sup> Despite this argument in support of the revocation of the exemption on all the Exempt Commodities, it acknowledges that R/VC ratios are "...not a perfect metric" to determine market power. RRC Comment at 2.

Even if the argument about changes in the transportation of iron and steel necessitating the revocation of these exemptions may be true, as very little has changed regarding Small Railroads' service to shippers of coke, steel, and scrap. For example, the average length of haul for coke is 19 miles, cement 75.1 miles, iron and steel 38.09 miles, and scrap 46.97 miles. These mileage figures did not vary year-to-year over the three years reported.<sup>7</sup> The carload statistics gathered in the ASLRRRA member survey underscore the importance of these Exempt Commodities to Small Railroads. For the years 2013-2015, the carriers that responded to the survey handled a total of 1,026,268 carloads of these Exempt Commodities. They handled 86,754 carloads of coke (8.45% of their total carloads), 171,017 carloads of iron and steel (16.7% of their total carloads), and 239,850 scrap (23.3% of their total carloads). Revenues derived from the transportation of these Exempt Commodities are also vital to the Small Railroads. In response to the survey, the Small Railroads reported total operating revenues for the years 2013–2015 at \$1,186,515,100. The responding carriers earned 20.3% of their revenues from transporting coke, 7.5% from iron and steel, and 9.1% from scrap. Those percentages also did not vary over the three-year period.

These entities argue next that the Board's calculation of the "current" average R/VC ratios for coke, steel, and scrap are high; therefore, these Exempt Commodities should not be exempted from regulation. In response, ASLRRRA submits the following:

- First, as previously shown in ASLRRRA's Comment and in this Reply, the calculation done by the STB is fatally flawed and any reliance on it is without merit;
- Second, the confidential waybill sample that the STB used contains relatively few records from Small Railroads and is really relevant only to Class I railroads;
- Third, Mr. Fauth, the ASLRRRA expert witness, sets forth these flaws in detail in his Verified Statement filed simultaneously with its Comments;

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<sup>7</sup> As the STB says in footnote 12 on page 7 of the NPR, "Trucking becomes less viable when the length of haul exceeds 500 miles... [.]" Taking the Board at its word, the facts detailed in ASLRRRA Comments and in this Reply show that the average length of haul for these commodities remains truck (and barge) competitive since they are all substantially below 500 miles. Moreover, the fact that the average length of haul has not increased for Small Railroads is another indicium that they do not exert increased market power over shippers of these commodities.

- Fourth, the NPRM does not analyze the impact of the decision on Small Railroads at all and AK Steel and other anti-exemption Comments citing the R/VC calculation as support for removing the exemptions do not either;

These entities argue that petitions seeking partial revocation are impractical and time-consuming. Other than this conclusory-type statement, they do not elucidate why this is the case. The controlling statute not only provides shippers with the right to petition for revocation of existing exemptions but requires that the STB must expeditiously resolve them. The fact that only a few such petitions have been filed does not form a basis to determine that exemptions should be revoked on a wholesale basis. The DOT itself succinctly states the grant or revocation of an exemption should be determined on a case-by-case basis, and ASLRRRA agrees with that.

The argument that Exempt Commodity shippers deserve to have access falls woefully short of a rationale for re-regulating Exempt Commodities, given two facts. There is no cogent evidence in this record that justifies re-regulation. Additionally, Exempt Commodity shippers have multiple means of access to the STB and should take advantage of one or more of those if they have an issue.

Finally, these entities argue that "railroads are extraordinarily profitable." Without regard to whether this argument is even pertinent to the issue at hand, the fact is that Small Railroads are not "extraordinarily profitable." Unlike Class I railroads, Small Railroads are characterized by high fixed costs, short distances they transport freight, light traffic densities, intense competition from trucks, barges, intermodal, and transload operations, and lack of control over pricing.

As set forth in ASLRRRA's Comments and this Reply, the evidence adduced by the ASLRRRA shows that revoking the exemptions would have a devastating adverse effect on Small Railroads.

Portland Cement Association ("PCA"):

As this Association's name suggests, it supports the revocation of the exemption for hydraulic cement. Its principal arguments in support are that competition for the transportation of hydraulic cement has diminished; an increased average length of haul has decreased truck competition; rail mergers have reduced intramodal competition, and the increase in the R/VC ratios substantiates the revocation of the exemption on cement. The facts presented by ASLRRRA in its Comments show these arguments do not apply to Small Railroads. Their average length of

haul for cement is 75.1 miles, well within the 500-mile range within which the STB considers a commodity may be truck competitive and certainly well within the range of 100 to 125 miles that the Board says is truck-competitive. NPRM at 10. In short, this traffic is still predominantly short haul in nature, so the length of haul justification for exempting cement is still extant.

Trucks and barges remain strong competitors to transport cement. There is also intermodal competition among the railroads – both Class I and competing Small Railroads. Ninety-one of the responding railroads stated that trucks serve as the biggest competitive threat to their operations for the Exempt Commodities. That is the reality of the Small Railroad world, the reason they are often referred to as "feeder lines."

PCA's R/VC argument in support of revocation does not warrant that conclusion. The average 2014 R/VC for Small Railroads handling this commodity was 190.7%, only slightly above the jurisdictional threshold of 180%. This ratio hardly supports a finding that the average R/VC supports reinstating regulation of cement.

The American Forest and Paper Association ("AF&PA"):

AF&PA addresses commodities that are not even the subject of the NPRM; namely forest products and paper products and boxcars, insofar as the latter haul forest products. They argue that the exemptions for those products and boxcars need to be revoked. The major points raised in support of their position are largely the same as raised by other pro-regulation parties; namely, (1) the average R/VC ratios as calculated by the STB allegedly show "...an obvious increase of market railroad power..." regarding forest products; (2) there no longer is intramodal and intermodal competition; (3) today railroads are financially strong; (4) the regulatory burdens on railroads have been removed; and (5) the pricing policies demonstrate the market power of railroads.

ASLRRRA has previously replied to AF&FP's arguments (2), (3) and (4) in this Reply and will not repeat those facts but rather adopts them in response to the Comments of these associations.

Regarding the argument about the average R/VC ratios for forest products supporting re-regulation of forest products, ASLRRRA has two responses. First, the methodology AF&FP's expert witness used in calculating the R/VC ratios uses waybill samples for a vast range of commodities not involved in this proceeding and thereby grossly overstates the ratios and

distorts the record. Second, the consultant's study ignored Small Railroads in their entirety, leaving a major hole in the study. In that regard, the statistics related to Small Railroads' average R/VC ratio of for the largest STCC group, 26-311-17- Pulpboard or Fiberboard, shows that Class II and III railroads handle 57,840 carloads, which represents 20.24% of the total carloads handled and over \$242 million in revenue derived from handling those carloads (which is likely understated because of the waybill sample reporting problems involving Class II and III railroads). The average R/VC ratio for movements involving Class II and III railroads is 138.51%.

AF&PA also makes some sweeping allegations that lack any support in their comments. For example, it asserts that one-third of all forest products facilities and many paper mills across the country are captive to a single railroad without presenting any evidence to substantiate these allegations.

In summary, AF&PA offer no substantive arguments to revoke the exemptions it seeks. The economic study supporting its position is deeply flawed and includes commodities beyond even the scope of what it proposes to have reregulated, thus distorting the record and rendering its conclusions unreliable.

#### **Summary**

There is no basis under the law to regulate the Exempt Commodities. Regarding Small Railroads specifically, regulation of the Exempt Commodities would be completely inconsistent with rail transportation policy. Small Railroads provide a limited scope of service in the movement of the Exempt Commodities in terms of the average distance and revenue derived from their transportation. Small Railroads do not exert any market power over the Exempt Commodities since they rarely even control the rates charged.

ASLRRRA's Comments and this Reply respond in detail to each of the STBs proposed rationales and show that the STB's reliance on them to justify its conclusion to revoke the exemptions is simply wrong. Not one of these rationales applies to Small Railroads. The NPRM does not analyze the impact of the decision on Small Railroads at all. As set forth in these Comments, the evidence adduced by the ASLRRRA in its Comments shows that revoking the exemptions would have a devastating adverse effect on Small Railroads.

ASLRRRA agrees with the summation of Vice Chair Miller that the record in this proceeding is less than robust. Therefore, the Board should not have relied on it to make the

findings it did in this NPRM. The market dynamics of Small Railroads remain largely unchanged. They face tremendous intermodal/intramodal competition, there still exists geographic and product competition, and transload operations provide very strong competition for their short-distance traffic. The average length of haul for these commodities is 105.9 miles for stone; 19 miles for coke; 75.1 miles for cement; 38.9 miles for iron and steel; and 46.9 miles for iron and steel scrap. These short distances expose the freight to rampant truck competition. The STB's assertion that there is no effective competition for this traffic and that there is an undue concentration of market power in the rail industry is fatally flawed with respect to Small Railroads. Unlike Class I railroads, Small Railroads are characterized by high fixed costs, short distances they transport freight, light traffic densities, intense competition from trucks, barges, intermodal, and transload operations, and lack of control over pricing.

The NPRM did not perform any analysis to determine the impact of the proposed rules on Small Railroads. Nor is there any indication in this record that the STB notified the Small Business Administration Office of Advocacy of the proposed rules. ASLRRRA respectfully submits that both of these steps must be undertaken before any final rules are promulgated or face the possibility that a court would later reject any rules the STB adopts.

The record clearly does not support the premise that there is a lack of competition facing Small Railroads with respect to the Exempt Commodities, nor do they support an assertion that the Small Railroads exercise undue market power in the rail industry. All rationales used by the STB to revoke the exemptions are contradictory to the reality of operations of Small Railroads and the facts that were presented. ASLRRRA respectfully submits the STB dismiss the NPRM and not allow the regulation of these Exempt Commodities.

Respectfully submitted,

**American Short Line and Regional Railroad Association**



By Linda Bauer Darr, President  
American Short Line and Regional Railroad Association  
50 F Street N.W., Suite 7020  
Washington, D.C. 20001-1564  
Telephone: 202-585-3440  
Fax: 202-628-6430

**Testimony of Roger Nober**  
**Executive Vice President, Law and Corporate Affairs**  
**And Chief Legal Officer, BNSF Railway Company**  
Before the U.S. House Transportation and Infrastructure Committee's  
Railroads, Pipelines and Hazardous Materials Subcommittee  
"Building a 21st Century Infrastructure for America: The State of Railroad, Pipeline, and  
Hazardous Materials Safety Regulations and Opportunities for Reform"  
April 26, 2017

**Introduction**

Thank you Chairman Denham, Ranking Member Capuano and Members of the Subcommittee for the opportunity to submit testimony and appear before the Subcommittee on the subject of Building a 21<sup>st</sup> Century Infrastructure for America: The State of Railroad, Pipeline, and Hazardous Materials Safety Regulations and Opportunities for Reform. It is a privilege to be back before this Subcommittee to discuss with you the challenges and opportunities that may affect BNSF's outlook on safety and regulatory matters.

As BNSF looks to the rest of 2017 and beyond, we see a time of market change and uncertainty. As a freight railroad, our efforts to understand what may happen in the future are critical; we make long-term decisions and it is crucial to match our immense investments in capacity—manpower, track, equipment and facilities—with demand. If we underestimate demand and have too little capacity, then we can suffer service issues. If we overestimate demand and have too many assets, our returns suffer and our ability to continue to make strong investments could be jeopardized. Our ongoing ability to both provide excellent service and make these investments is important to our customers, and the economy.

At the outset, I would like to commend this Committee for its work during the last Congress to enact a significant amount of beneficial legislation related to railroads, including extending the Positive Train Control (PTC) implementation deadline, passing a range of railroad-related provisions in the Fixing America's Surface Transportation (FAST) Act, as well as reauthorizing the Surface Transportation Board (STB) for the first time since 1995. In this Congress, we look forward to working closely with the Committee on a proactive agenda that provides for updating and improving regulation, ensures that infrastructure investment decisions and transportation policy treats railroads equitably and allows railroads to expand their facilities to help grow both the economy and our volumes. And in this Congress, BNSF and the freight rail industry hope to continue to be a resource to the Committee as it addresses these important issues.

Given the purpose of the hearing, I will turn first to the overall state of safety in the railroad industry and then discuss how railroads are regulated and where we and other interested stakeholders see opportunities for improvement by removing obstacles to innovation and providing incentives to continue improving safety outcomes. My testimony today should be read in conjunction with earlier comments from the rail industry on these issues. Both BNSF and UP have testified on this issue recently and the Association of American Railroads (AAR) is actively engaged with Congress and the Administration on improving regulatory processes and outcomes.

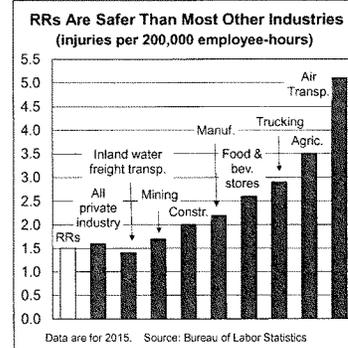
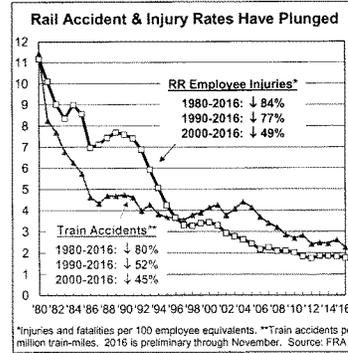
**Safety Overview**

The laws of physics that make railroads the most efficient mode of surface transportation also make railroading unforgiving. Through the targeted implementation of innovative technologies and processes in the years since the passage of the Staggers Act, this risk has been significantly contained to provide an incredibly safe railroading environment. The industry's most recent safety statistics demonstrate the trend of continuous safety improvement. Preliminary Federal Railroad Administration (FRA) data indicates that the train accident rate in 2016 was down 80 percent from 1980 and down 45 percent from 2000; the employee injury rate in 2016 was down 84 percent from 1980 and down 49 percent from 2000; and the grade crossing collision rate in 2016 was down 80 percent from 1980 and down 40 percent from 2000. By all of these measures, recent years have been the safest in rail history.

In 2016, reportable train incidents on BNSF were at historic lows, down 16.6 percent year-over-year, which reflects the impacts of our large capital programs and increased leverage from the implementation and data of our detector network to resolve issues before they become problems. These technologies, as well as the effectiveness of our annual maintenance, and on-going employee training and rules compliance programs have driven train incidents to historic lows.

At BNSF, our safety vision is a workplace free of injuries and incidents. We believe that we can achieve this goal, and our determined efforts to meet it are the reason safety continues to improve. But we have not yet achieved our vision; incidents and accidents do occur. However, we believe that they are outliers; operating safely every day is expected and is our normative behavior. We are committed to the work of continuous safety improvement, because derailments and other significant safety failures, which pose risks to employees and communities, are neither an acceptable cost of doing business, nor are they morally acceptable.

In the freight rail industry, safe operations supported by the industry's continuous safety improvements are not achieved simply through compliance with FRA regulations. Safe operations require a comprehensive risk based safety program, many elements of which go well beyond federal mandates. And perhaps most importantly, safe operations require earning adequate revenues for the significant reinvestment necessary to safely operate the freight rail network and serve customers.



**Railroad Regulation Review and Improvement**

It is well known to this Committee that, as one of the country's oldest industries, nearly every facet of the rail industry is governed by unique legal and regulatory schemes that have been developed over the last 130 years. Freight railroads' business interactions are governed by the Interstate Commerce Act, primarily under the auspices of the STB. Our employees receive Railroad Retirement benefits instead of Social Security. Labor negotiations with unions representing our employees are governed by the Railway Labor Act. Railroads do not have insurance-based Workman's Compensation; instead, we operate under a nearly 110-year old statute called the Federal Employee Liability Act (FELA), established long before Workman's Compensation. FELA is a tort-based system that requires employees to litigate injury claims against railroads under a comparative fault system. And most relevant to the hearing today, railroad operations are governed by the Federal Rail Safety Act and more than a century of activity-based regulation under which safety compliance can only be achieved by executing mandated step-by-step processes or activities that regulators inspect and enforce.

There are a multitude of internal and external incentives for railroads to operate safely, in addition to regulation, which is why railroads have well-developed risk management plans based increasingly on evolving technology applications. The recent Subcommittee roundtable on railroad technology touched on some of these applications, including PTC (with which the Committee is very familiar), a range of detector and inspection technologies for track and equipment, and the increasing technological sophistication of today's locomotives. The emerging application of "Big Data" analytics to rail safety data generated by these technologies further leverages their impact by giving us deeper insights into multiple potential factors that can cause safety failures.

At BNSF, we have implemented a significant number of new technologies by layering them on—in essence adding to—our requirements under existing regulations. However, in many cases, once advanced technologies are deployed and proven, continued compliance with existing regulations can create inefficiency by diverting resources, with little or no offsetting safety benefit. A more innovative approach to regulation would perpetuate a virtuous cycle of continued investment in the development of these technologies, allowing railroads to advance safety while also achieving more productivity. Given the railroad industry's baseline of excellent safety performance and the evolving role of technology in safe operations, we believe that it is time for the U.S. Department of Transportation (DOT) to re-envision regulation of the freight rail industry to permit more flexibility when technology allows it and to promote innovation.

This view of how to reimagine existing regulatory requirements is reinforced by a recently issued Executive Order (EO) 13777, entitled "Enforcing the Regulatory Reform Agenda." Under EO 13777, the DOT will be required to fully review railroad regulations, waivers, guidance and other documents, consistent with the EOs promulgated by President Clinton (EO 12866 of September 30, 1993 regarding regulatory planning and review) and President Obama (EO 13563 of January 18, 2011 regarding retrospective review). This will provide the opportunity to identify specific regulations that can be updated, or even eliminated, maintaining a commensurate level of safety.

Furthermore, another recently issued directive, EO 13771, entitled "Reducing Regulation and Controlling Regulatory Costs," effectively requires that any new rules can only be implemented if their benefits clearly outweigh costs in the comprehensive context of cumulative impact and effectiveness of existing regulations. This will require the FRA to consider the rail industry's extraordinary safety record in developing a more balanced regulatory approach that permits more technology-driven operating efficiency as well as more performance-based regulation as appropriate.

Altering existing rules to keep up with changes in technology or operations has not been easy. For example, in 1982 the FRA updated the Class 1A brake inspection standard by increasing the intermediate inspection interval requirement from 500 to 1,000 miles, a move reflecting already decades-old changes in rail operations, including the transition from steam to diesel locomotives in the early-to-mid-1900s. At the time, the *Chicago Tribune* ran a story about the impending change in an article titled "Ancient rail rules getting an update."<sup>1</sup> Fast forward to today, and notwithstanding the tremendous advances in locomotive design, brake and detection technology, railroads have been unsuccessful in having the brake inspection standard reflect modern train capabilities. There have been waivers from the underlying rule, but it has not been possible to update the existing regulation to a new model that combines the opportunity for visual inspection at origin and detector technology en route to identify exceptions or defects, thereby eliminating intermediate inspections (as is the case in Canada).

What was true in 1982 is even more true today—the regulatory process takes a great deal of time and analysis and with an uncertain result. Well-meaning safety regulators can be extremely risk averse in their approach to reviewing or changing regulations, especially those that have long been in place, even in an increasingly technology-transformed work environment. Therefore it is important to think about a new approach to regulatory oversight as a means to empower the regulator to embrace innovation and technology-empowered advances in safety. There are many examples of how existing regulations ignore the self-diagnostic and self-reporting aspects of new technologies and even equipment manufacturer specifications and warranties to require inflexible time-bound or mileage-based inspection, testing and overhaul activities. Signal systems, grade crossing equipment, rail cars, brakes and locomotives have microprocessor technology applications that monitor and report actual asset health. Regulations nonetheless still require visual inspections of these systems and, while there is a role for visual inspections, regulations need to recognize the enhanced safety value of automated inspections and technological diagnostics and build in appropriate operational flexibility.

There are other areas of opportunity for regulatory improvement worth noting. Electronic recordkeeping and communications rules are ripe for updating, with railroad technology and digital communication able to drive safer and more efficient outcomes. The electronic delivery of mandatory train orders and directives, which are appropriate today and certainly a logical adjacency in the era of PTC, exist alongside regulatorily-required paper directives, operations documents (like train lists) and voice-based transmission of orders (for employees to copy down by hand). For example, railroads have digitized the consist and hazmat operational information that they are required to provide to first responders and emergency response planners, yet crews

<sup>1</sup> David Young, "Ancient rail rules getting an update", *Chicago Tribune*, January 10, 1982, found at <http://archives.chicagotribune.com/1982/01/10/page/67/article/ancient-rail-rules-getting-an-update>.

are required to carry paper versions of all documents. The conversion to electronic recordkeeping on the railroad would be an important innovation that would provide a digital platform for a variety of purposes, including regulatory oversight.

Finally, technology innovations in the area of track inspection are making it possible to find potential defects much earlier than visible, time-bound human physical inspections allow. However, regulations actually discourage the use of continuous rail inspection technology that exponentially expand the detection of rail flaws; they require that, once a flaw or potential defect is found, the inspection vehicle must stop further inspection to allow for immediate remediation. If the inspection vehicle is unmanned and attached to a train consist stopping en route to mark a location is impractical. In reality, unless a defect poses an imminent risk, remediation can be done more effectively and efficiently as part of a more flexible rail maintenance and train operations plan from a later-deployed maintenance of way crew. The FRA has temporarily allowed this type of inspection through waivers, but its regulations should be updated to recognize the benefit of track inspection innovations in order to create an incentive to expand this inspection method. There are also a variety of track and ballast regulations which should be revisited to allow railroads to apply inspection technologies and use associated appropriate standards to bring this area of regulation up to date.

Collectively, deployment of these technologies is moving our railroad safety programs from reactive to predictive, and turning “finders” into “fixers.” Technology-based inspection can also reduce the safety exposures related to frequently putting people in, under and between equipment or out on the line of road to perform physical inspections to check for the same conditions. Across our workforce, these technologies make the work of our employees safer, and take advantage of the technical skills that our employees increasingly bring to the job.

While I have highlighted the need for a number of current waivers to be made permanent and incorporated into underlying regulation, properly implemented a temporary waiver process does have significant benefits. In addition to updating existing regulations, granting waivers can be an effective way in the short term to help make further regulatory evolution possible, particularly when new technology is being developed. However, as BNSF testified, in recent years the waiver process has become too lengthy, difficult and often results in conditions attached that make the waiver ineffective. Properly implemented waivers can be put in place more quickly on an interim or term basis. Frankly, the relatively contained rail line of road, rail yard and facility environment is one of the safest for demonstrating new technologies. To the extent that railroads need waivers to demonstrate technology, regulators should view them as opportunities to create common understanding about railroad operations, similar to a “pilot program.”

The speed, cooperation and transparency inherent in the waiver process and in providing more flexibility in underlying rules is an important element of regulatory transformation because it provides positive incentives for both the regulated and the regulator. It is a precursor to moving rail safety regulation toward performance-based regulation, where regulators are measuring success in safety outcomes and seeking out opportunities to advance automation and other technological innovation.

One of the best examples of how a technology mandate could have been more performance-based is found in the rules for implementation of PTC. As you may recall, the 2008 PTC mandate and the subsequent regulations as originally adopted by the FRA had a cost of approximately \$20 for every dollar of benefit. While Congress started down the path of a performance standard by identifying the types of incidents it wanted to see prevented—in other words, by identifying expected outcomes—the railroads should have been left to identify and implement the best means to achieve those goals. This would in part have included PTC, since in 2008 BNSF was already in the process of implementing a version of PTC called Electronic Train Management System (ETMS), but could have included other tools as well. If given more flexibility to leverage ETMS and other technologies, including those that could lend additional efficiencies to rail operations, the protections being sought could have been put in place in a more efficient and cost-effective manner, and we believe could have achieved better safety outcomes sooner. Going forward, regulatory oversight of the installation, testing and eventual complete implementation of PTC should focus not on monitoring and inspecting every aspect of equipment and technology but rather on the overall functionality and effectiveness of the final system to deliver the identified safety outcomes. That is ultimately what the mandate requires, what the regulators are accountable for, and as importantly, what the railroads want and need from PTC to run a safe and efficient operation.

Ultimately, PTC, combined with currently deployed and in-development safety and detector technologies and advanced data analytics will move railroad safety and efficiency to the next level. For example, BNSF intends to leverage the architecture of its PTC system to develop the next generation of train operations known as “moving block” to greatly increase capacity and efficiency. As we see it today, the approval process to bring new microprocessor-based equipment into service is too lengthy and the documentation is overly burdensome, and there is risk that the operation and evolution of the technologies themselves will be over-regulated. The regulatory mind-set needs to be transformed, consistent with the innovation taking place within the industry and elsewhere. This starts with taking steps towards improving existing regulations, partnering with industry on waivers and moving toward the development of performance-based regulations. Congress has a role in encouraging this and, ultimately, requiring it if necessary. Below are principles of regulatory improvements that we believe should guide the DOT and Congress:

- Regulations should be based on a demonstrated need, as reflected in current and complete data and sound science. They should have a well-defined and measurable objective, and be regularly evaluated as to their effectiveness in achieving it.
- All components of an agency’s decision-making should be transparent to the public and subject to meaningful analysis and comment before the rule is finalized.
- Non-prescriptive regulatory tools, like performance-based regulations, should be deployed wherever possible to align the interests of the regulator and the industry, and to foster and facilitate innovation to achieve well-defined policy goals.
- Regulations should provide benefits outweighing their costs, and the potential redundancies and general interplay with other existing regulations should be considered in every rulemaking.
- Use of “guidance” should be limited to appropriate situations and time periods.

While these comments are focused on the FRA, these principles can and should be adopted by all agencies with railroad oversight (e.g., STB, PHMSA, and OSHA).

### **Conclusion**

Regulatory innovation does not happen overnight, and it is especially difficult in a long-lived industry like railroads when there are more than 100 years of how “it has always been done.” But there are many, many railroad-related regulations that need to be reviewed and rewritten. Current regulations and enforcement effectively mandate particular actions and then levy fines for specific regulatory violations discovered through intermittent regulatory inspections of conditions that generally were neither factors in an incident nor compromised overall rail safety. There are exceptions to that, certainly, but as a modus operandi for oversight of an effectively safe industry, the regulatory paradigm focused on penalizing violations is not as efficient or effective as one that encourages ever-improving safety outcomes. Furthermore, in a technologically evolving Class I operating environment, a regulator will scarcely be able to keep up through regulation as we know it. Regulatory change is necessary, appropriate and the time is right. There will be a safety payoff, as well as a role, for all stakeholders involved in the safe operation of America’s freight rail industry.

Congress and the Administration “control the dial” on how much of the railroad industry’s potential safety and efficiency benefits we can ultimately deliver. We know that Congress and especially this Committee understand the role of railroads in the economy, and in each of your states, and we appreciate that we are able to remain engaged in dialogue with you about these issues and others related to freight movement in our nation.

## Interested Parties for Hazardous Materials Transportation

Testimony of  
Paul W. Rankin  
President, Reusable Industrial Packaging Association  
on behalf of  
Interested Parties for Hazardous Materials Transportation

“Building a 21<sup>st</sup> Century Infrastructure for America: The State of Railroad, Pipeline,  
and Hazardous Materials Safety Regulation and Opportunities for Reform”

Before the  
Subcommittee on Railroads, Pipelines, and Hazardous Materials of the  
Committee on Transportation and Infrastructure  
U.S. House of Representatives

on

April 26, 2017

Interested Parties for Hazardous Materials Transportation  
51 Monroe Street, Suite 812  
Rockville, Maryland 20850  
301.577.3786

Chairman Denham, Ranking Member DeFazio and members of the Subcommittee, thank you for the opportunity to provide the perspectives of the Interested Parties for Hazardous Materials Transportation<sup>1</sup> (Interested Parties) on issues related to regulatory reform.

I am Paul Rankin, and I serve as Chair of the Interested Parties group, which is a volunteer-run coalition of 46 organizations that share an interest in legislative and regulatory issues related to the safety and security of hazardous materials in domestic and international transportation.

Members of the Interested Parties strongly support a robust and efficient hazardous materials transportation regulatory program. Industry recognizes the benefits of a centralized regulatory agency within the Department of Transportation (DOT) that has cross-modal and international authorities. Safety is of paramount importance to industry and our exemplary record in this area and support for effective regulation underscore this goal.

The Pipeline and Hazardous Materials Safety Administration (PHMSA), and more specifically the Office of Hazardous Materials Safety (OHMS), has operated as the lead regulator for the multi-modal transportation of hazardous materials for decades. The Interested Parties believe the Agency has done an admirable job regulating the safe transportation of hazardous materials in both domestic and international transportation. Given that there are approximately 900,000 shipments of hazardous materials every day in the United States with very few incidents, the cross-modal safety record of the regulated industry is a testament to both the effectiveness of PHMSA's regulatory programs and the attentiveness to safety demonstrated by industry every single day.

This morning, I will discuss several key issues of importance to members of the Interested Parties.

1. The importance of reasonable federal regulation in the field of hazardous materials transportation. Unlike most commercial activities, which companies are free to engage in unless specifically proscribed by regulation, the transportation of hazardous materials is essentially prohibited unless authorized by a regulation, special permit or approval. This is true not only for domestic movements of hazardous materials, but also for international movements of regulated products. As such, reasonable regulation contributes positively to the flow of domestic and international commerce.

This is why the Interested Parties support reasonable federal regulation of hazmat transportation activities and a robust role for PHMSA in the development of international model regulations for the various modes.

2. Preemption. In line with our desire for reasonable federal regulation is our support for federal "preemption" authority, which is granted in Section 5125 of the Hazardous Materials Transportation Act

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<sup>1</sup> The following IP members have approved this testimony: Agricultural Retailers Association; American Chemistry Council; American Coatings Association; American Fuel and Petrochemical Manufacturers Association; American Pyrotechnics Association; American Short Line and Regional Railroad Association; American Trucking Associations; Association of HazMat Shippers; Council on the Safe Transportation of Hazardous Articles; The Fertilizer Institute; Gases and Welding Distributors Association; Industrial Packaging Alliance of North America; Industrial Steel Drum Institute; Institute of Makers of Explosives; International Liquid Terminals Association; International Vessel Operators Dangerous Goods Association; National Industrial Transportation League; National Private Truck Council; National Propane Gas Association; National Tank Truck Carriers; Petroleum Marketers Association of America; Radiopharmaceutical Shippers Conference; Reusable Industrial Packaging Association; Sporting Arms Ammunition Manufacturers Institute; Utility Solid Waste Activities Group.

(HMTA). The purpose of federal preemption is to promote safety by ensuring, to the extent practicable, that a patchwork of state and/or local regulations do not impede interstate commerce or encourage communities to export transportation risks to their neighbors. Imagine, for example, if the nation's approximately 89,000 local jurisdictions were authorized to regulate differently the delivery of a common hazardous material, such as gasoline. The situation would, of course, be untenable. The hazardous materials industry relies upon uniform regulation, both domestic and international, to ensure the safe, secure and efficient transportation of hazardous materials. Uniform regulation has the added benefit of promoting effective hazmat employee training, which is crucial because the safe transportation of hazardous materials begins with well-trained employees.

3. Programmatic Authority. Several federal agencies, including the Occupational Safety and Health Administration (OSHA) and the Department of Homeland Security (DHS), have an interest in hazardous materials transportation activities, but these agencies should be limited in their authority to regulate in this area. OSHA, for example, recently tried to exercise authority over container marking (labeling) but, after consultation with PHMSA, agreed through a Memorandum of Understanding, to recognize PHMSA's unique expertise and preeminent authority in this area. Similarly, DHS oversees a wide range of security issues related to the handling of hazardous materials, but works very closely with PHMSA on all hazmat transportation matters.

The Interested Parties strongly support what appears to be a growing recognition, at least at the federal agency level, of PHMSA's knowledge and authority on issues related to hazmat transportation. We urge members of the Subcommittee to ensure that PHMSA has the legislative authority it needs to fulfill its role as the preeminent regulator of hazardous materials transportation activities in the United States.

4. Special Permits and Approvals. Hazardous materials may only be transported if appropriately authorized. Regulatory flexibility is needed for such activities as authorizing one-time movements of hazardous materials and facilitating the emergence of new and innovative technologies or packagings. Special Permits and Approvals are the regulatory mechanisms that PHMSA uses for these purposes. PHMSA is authorized to grant "special permits" (SP), when no clear regulatory authority exists, and "approvals" (A), when required by regulation, to companies as well as federal agencies to transport certain hazardous materials (or articles). PHMSA processes thousands of SP and A requests annually.

We are grateful for the attention Congress, and this Committee in particular, has given to addressing delays in the processing of SPs and As, and to ensuring that PHMSA acted to incorporate certain Special Permits into the Hazardous Materials Regulations (HMR). PHMSA has made significant progress in streamlining and making more efficient the SP and A process. For example, in accordance with MAP-21, the Agency conducted a general review of existing Special Permits in effect for 10 years or longer and issued a rulemaking incorporating some of them into the Hazardous Materials Regulations. However, this review was done only once.

More can and should be done to improve this program. The Interested Parties recommend that Special Permits of general applicability which have been in force for 6 years (2 years for the initial approval and 4 years for a renewal period) be evaluated in advance of their expiration dates for incorporation into the Hazardous Materials Regulations. PHMSA should publish a Special Permit rulemaking annually that provides a list of Special Permits that have been evaluated and provides justification for either proposing

to incorporate each Special Permit into the HMR or reasons such a Special Permit is not suitable for incorporation.

Additionally, while we appreciate the work of this Committee to improve the timeliness of explosive classification approvals, we believe the explosives and fireworks classification system should be further evaluated to identify opportunities to eliminate redundant testing and permit reciprocity of approvals with other countries, where applicable.

5. International Affairs. The Secretary of DOT is authorized under Section 5120 of the HMTA to represent the United States at the various international forums that harmonize global standards for the safe and secure transport of hazardous materials, including the U.N. Sub-committee of Experts on the Transport of Dangerous Goods (UNSCETDG), the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO). The Secretary has delegated this authority to PHMSA.

Presently, the United States enjoys the privilege of having a PHMSA employee serve as Chair of the United Nations Sub-committee of Experts on the Transport of Dangerous Goods (UNSETDG). The Interested Parties both strongly support and encourage this level of commitment by DOT to representation at the UN and other international regulatory forums. Frankly, it would be difficult to overstate the value of U.S. leadership in these settings. International trade in hazardous materials, such as chemicals, is significant and historically represents a positive net trade balance for the United States. And U.S. expertise in international hazmat transportation matters is second to none.

Therefore, in addition to maintaining a leadership role at the U.N, the Interested Parties believe it is crucial that a PHMSA representative serve as an ICAO Panel member and lead the Dangerous Goods Panel delegation to ICAO. This properly reflects the fact that PHMSA is recognized globally as the "Competent Authority" (lead agency) for the U.S. on hazardous materials transportation issues.

6. Enforcement. The Interested Parties supported a provision in MAP – 21 that directed PHMSA to develop uniform performance standards for training hazardous materials inspectors and investigators. We believe more work needs to be done in this regard. PHMSA should take steps to exert greater control over their field enforcement offices to ensure greater uniformity in the inspection and enforcement processes. Steps to affect this would include improved training of its inspectors and revising its inspection and re-inspection criteria to focus on known safety problems with a material, packaging, or operating practice. Penalties should be commensurate with the potential safety consequences of the violations.

The Interested Parties also encourage the creation of an "On-site Consultation Program" patterned on other similar programs offered or overseen by, among other agencies, the Occupational Safety and Health Administration. We envision such a program being offered to small and mid-sized businesses throughout the United States. Consultation services would not be provided by PHMSA enforcement personnel and would not result in penalty or enforcement actions. Rather, the program would utilize state agency consultants or approved experts in the field.

7. PHMSA Office of Planning and Analytics. In recent months, PHMSA adopted a reorganization plan that included the creation of a new "Office of Planning and Analytics" (OPA). The Interested

Parties are concerned that the new office, while created with the best of intentions, is administratively confusing and will likely create operational inefficiencies because OPA's strategic planning and economic forecasting mandates overlap existing staff responsibilities in OHMS.

OPA is intended to serve two PHMSA offices – pipelines and hazardous materials safety – that are programmatically related, but separately authorized by Congress. As such, it is likely that OPA staff will regularly find themselves torn between conflicting operational mandates that require the use of staff resources on matters that are not necessarily in sync with the day-to-day needs of one or another of the two offices they serve.

In an effort to foster programmatic efficiency, the Interested Parties recommend that the administrative functions of OPA be redistributed to OHMS and OPS.

8. Incident Reporting. PHMSA's hazardous materials transportation safety program relies upon DOT Form F 5800.1, *Hazardous Materials Incident Report*, to gather basic information on incidents that occur during transportation, which meet specified criteria as required by Section 171.16 of the HMR. PHMSA uses the data and information reported to evaluate the effectiveness of the existing regulations and industry operating procedures; ascertain the need for regulatory changes; and, to identify major safety issues that should receive priority attention. This data is also used by both the government and industry to chart trends, identify acute transportation safety problems and training inadequacies, evaluate packaging performance and assess ways to reduce releases. Therefore, the integrity and the quality of the data and related information are extremely important.

The Interested Parties believe that the incident data now being collected on Form 5800.1 is not as comprehensive, consistent or robust as it could and should be to meet the laudable goals of the program. To this end, the Interested Parties urge PHMSA to revise the data collection form to eliminate inconsistencies, limit the opportunity for subjective and non-specific responses, and revise the descriptive portions of the Form to require a purely factual account of the incident. While PHMSA has completed some of this work already by automating the system, the Interested Parties recommend that many of the codes indicating the type of packaging that failed, how it failed, and the cause of failure be evaluated for specificity and relevance. In addition, the Interested Parties also encourage PHMSA to focus on the collection of essential incident data that can guide the development of future hazardous materials transportation practices that reduce or eliminate the risk of harming people, property or the environment.

9. General Regulatory Reform. The IPs support adoption of administrative reforms for PHMSA similar to those enacted by Congress in the FAST Act applicable to the Federal Motor Carrier Safety Administration. This would include:

- Each proposed and final rule must include a regulatory impact analysis that considers the effect of the rule on different segments of industry, uses the best available science to formulate estimates and findings, uses data representative of various types of shippers or carriers, and considers the effects on carriers of various sizes and types.
- All significant rules must begin with an advance notice of proposed rulemaking or a negotiated rulemaking before PHMSA issues a proposed rule.

- All guidance documents (including regulatory interpretations and statements of enforcement policy) issued by PHMSA must be dated and include the name and contact information of a person who can respond to questions on the guidance; the guidance must be posted on the PHMSA website for public availability. Within five years, PHMSA must incorporate the guidance into Title 49 CFR or reissue an updated version of the guidance. All current PHMSA guidance documents must be reviewed within one year to ensure they remain current and are publicly available.
- PHMSA must post a summary of all petitions for rulemaking, regulatory interpretation or clarification, on the agency's website. PHMSA must decide within 180 days of receipt of a petition whether to accept, deny or further review the petition, and must prioritize petitions based on their potential to reduce incidents, improve enforcement, and reduce unnecessary burdens.

Thank you very much for allowing me to present the views of the Interested Parties. I will gladly answer any questions at this time.

**U.S. House of Representatives  
Committee on Transportation and Infrastructure  
Subcommittee on Railroads, Pipelines and Hazardous Materials  
“Building a 21<sup>st</sup> Century Infrastructure for America: The State of Railroad, Pipeline, and Hazardous  
Materials Safety Regulations and Opportunities for Reform”**

**Testimony of Robin Rorick  
Group Director, Midstream and Industry Operations  
The American Petroleum Institute  
April 26, 2017**

Good morning Chairman Denham, Ranking Member Capuano, and Members of the subcommittee. Thank you for the opportunity to speak today about opportunities to improve the regulatory process to enhance the safe transport of oil and natural gas products while ensuring American families and workers have access to reliable and affordable energy through all available infrastructure.

The American Petroleum Institute (API) is the only national trade association representing all facets of the oil and natural gas industry, which supports 9.8 million jobs and 8 percent of the U.S. economy. API's more than 625 members include large integrated companies, as well as exploration and production, refining, marketing, pipeline, and marine businesses and service and supply firms. As Group Director of API Midstream and Industry Operations, I am responsible for all energy infrastructure issues, including those related to the gathering, processing, storage, and transportation of oil and natural gas.

The United States is leading the world both in the production and refining of oil and natural gas<sup>1</sup> and in the reduction of carbon emissions which are at their lowest levels in almost 25 years.<sup>2</sup> Carbon emissions from electricity generation have declined 17 percent since 2000 and are at their lowest level in nearly 30 years; more than 60 percent of the decrease in power generation-related CO2 emissions since 2005 was due to fuel switching to natural gas.<sup>3</sup> In less than a decade, we have transitioned from an era of energy scarcity and dependence to one of energy abundance and security. This energy renaissance has helped U.S. families save on their energy bills, created greater job opportunities for American workers, bolstered U.S. manufacturing, strengthened our economy, and helped to enhance our national security interests abroad.

Our energy infrastructure is a critical component of the oil and natural gas supply chain, consisting of terminals, underground storage facilities, pipelines, railcars, trucks, ships, and barges. Ensuring we have a robust energy infrastructure system that keeps pace with growing production and demand is essential to helping American families and businesses have reliable access to affordable energy. A recent study found that the U.S. will need up to \$1.3 trillion in energy infrastructure investment through 2035. This

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<sup>1</sup> <https://www.eia.gov/beta/international/>

<sup>2</sup> U.S. DOE, Energy Information Administration, Monthly Energy Review March 2017. Lowest since 1992.

<sup>3</sup> <http://energytomorrow.org/blog/2017/03/31/energy-and-declining-emissions>

investment, on average, will support up to 1 million jobs annually and add up to \$100 billion to GDP annually. Whether it is powering our nation's electricity grid, delivering natural gas to heat homes during harsh winters, or providing emergency fuel for first responders during natural disasters, this investment will ensure that these critical fuels are delivered when and where they are needed most.

Safety is our industry's core value and our operators are committed to enhancing the safety of our workers and protecting the community and environment. At API, we establish industry standards and disseminate best practices across the industry to ensure the highest level of safety and achieve our collective goal of operating with zero incidents. In fact, since 1924, API has been the leader in developing voluntary consensus, internationally-recognized, industry standards that promote safety and reliability. Our standards program is accredited by the American National Standards Institute (ANSI), the same organization that accredits similar programs at several national laboratories. In creating these industry consensus standards and recommended practices (RPs), API partners with the best and brightest technical experts from government, academia, and industry. This work supports the fulfillment of the National Technology Transfer and Advancement Act (NTTAA), which mandates that federal agencies use technical standards developed and adopted by voluntary consensus standards bodies, as opposed to using government-unique standards. Currently, API has more than 600 standards that are used globally by oil and gas operators. Here in the United States, these standards are referenced more than 430 times in federal regulations, covering multiple government agencies, including the Pipeline and Hazardous Materials Safety Administration (PHMSA). Additionally, API's standards are the most widely-cited petroleum industry standards by state regulators, with 240 API standards cited over 4,130 times in state-based regulations. Finally, API's standards are also the most widely cited standards by international regulators in the 14 major producing regions.

#### THE IMPORTANCE OF SCIENCE AND PERFORMANCE-BASED STANDARDS

In order to ensure that American consumers, workers and the environment can continue to benefit from the U.S. energy renaissance, we need rational and science-based energy policies which recognize that the oil and natural gas industry is part of the solution to advancing U.S. economic and national security goals. Well-designed policies are predicated on following a formal process—established by the Administrative Procedures Act—that provides all stakeholders with the opportunity to provide input for consideration. Additionally, wherever possible, collaborative engagement by the public sector with the experts in the regulated community ensures that policies are using the latest information available. If done well, effective and efficient policies can be established that do not hinder growth and contribute to the economy while at the same time significantly advancing safety.

Historically, PHMSA has pursued performance-based regulations versus prescriptive ones. This is compliant with direction given by the Office of Management and Budget (OMB) to give preference to performance-based standards. A performance-based regulatory model allows operators to utilize a variety of options to maximize the safety of their pipeline systems. For instance, in 2004, PHMSA issued Integrity Management (IM) regulations that give the operators the capability to use the tools most suitable for their assets in ensuring the continued integrity of their pipelines. Specifically, the regulation provides operators with the flexibility to use different in-line inspection (ILI) tools that are better at

detecting a defect that one type of pipe may be more susceptible to than another. This flexibility is essential given pipeline systems are complex and vary greatly from operator to operator and system to system. Each pipeline operates uniquely; therefore, companies need flexibility to implement the tools and methodologies to help them appropriately manage the safety risk associated with their assets. We are concerned, however, that recent regulatory action by PHMSA takes a much more simplistic and narrow-minded assessment that solely considers one factor—such as the type of steel used in the pipeline—to determine which in line inspection tool is used. A more comprehensive, risk-based approach that allows consideration of all factors (type of pipeline steel being one factor of many) through an appropriate analysis will ensure proper tools are used to establish preventive measures and, if necessary, make repairs. As such, API and its members strongly encourage PHMSA to modify pending rulemakings to revert back to a traditional performance-based regulatory scheme, which ensures that the latest advances in new technologies and understanding of pipeline anomalies are utilized fully to improve pipeline safety.

#### PIPELINES

Pipelines safely and efficiently move crude oil, natural gas, and other products from production areas to consumers, delivering energy and feedstocks for everyday goods, affordable heat for homes, and fuel for power generation and motor vehicles. In addition to the benefits derived from the delivery of oil and natural gas, pipeline companies support the economy during construction of the pipeline by hiring skilled construction and building trades' workers and during operation of the pipeline through local tax revenue that supports communities through which the pipelines pass.

Industry's commitment to safe operations is evident by the fact that more than 99.99 percent of crude oil, petroleum products, and natural gas are delivered safely via pipeline. Protecting the public and the environment is a top priority for pipeline operators and a central component to pipeline design, construction and maintenance. For instance, during development, pipeline operators design routes to avoid environmentally sensitive areas. All pipelines are constructed from certified steel pipe that meets or exceeds federal quality regulations. Every project undergoes rigorous environmental review and must comply with existing environmental laws such as the Clean Air and Clean Water Acts before it can be built and placed into operation. PHMSA also routinely inspects these projects during their construction and throughout their operation to ensure that the pipelines are being maintained safely and responsibly.

API and AOPL members are fully committed to maintaining the highest standards and establishing a strong foundation with the public by holding ourselves accountable and continually striving for improvement. Not satisfied with this near-perfect record, however, pipeline companies are striving to achieve an industry-wide goal of zero incidents. This requires selecting effective prevention, mitigation, and response strategies based on a number of factors that are most appropriate for their unique assets and operations.

Since 2014, the pipeline industry has worked collaboratively through the API-AOPL Pipeline Safety Excellence Initiative to establish shared safety principles and commit to a long-term strategy that

promotes continuous improvement and excellent safety performance. Our 2017-2019 Pipeline Safety Excellence Strategic Plan will drive the industry to achieve advances in pipeline safety technology, improve ways to engage with our key stakeholders, strengthen emergency preparedness and response planning, and adopt holistic pipeline safety management systems.

API has also developed a number of standards for prevention, mitigation, and response activities to address pipeline safety in close coordination with subject matter experts from government, academia and industry. API Recommended Practice (RP) 1173, *Pipeline Safety Management Systems*, provides the framework for managing complex operations with safety as the top priority. It provides operators with established guidelines to manage risk, promote best practices, continuously improve safety performance and build a strong organizational safety culture. As U.S. production continues and pipeline capacity keeps apace, operators are motivated to develop a management system that ensures new pipelines are built to the appropriate specifications, keeping safety a priority. The upcoming API RP 1177, *Steel Pipeline Construction Quality Management Systems*, outlines the steps needed for constructing safe steel pipelines, from purchasing the correct material to completing the right inspections prior to initiating operation.

While pipeline operators are taking significant steps to meet the goal of zero incidents, they must have a comprehensive mitigation strategy to reduce the impact should a release occur. Developed with industry and regulator input, API RP 1175, *Pipeline Leak Detection - Program Management*, outlines how to use multiple leak detection tools to create a robust and holistic program. Available tools include aerial overflights, ground patrols, and computational pipeline monitoring (CPM). In addition, the RP encourages senior leaders within companies to enforce a leak detection culture that promotes safety. Properly trained employees will also aid in mitigating incidents. Pipeline operator qualifications (OQ) ensure companies properly prepare their personnel to perform high-risk duties. Continuous testing to verify the skills of qualified employees is a critical effort of operators. API has developed RP 1161, *Pipeline Operator Qualification*, to give operators direction on ensuring those individuals performing high-risk tasks are appropriately trained and competent.

Should an incident occur, pipeline operators are ready to respond. Through coordinated emergency response programs with federal, state and local first responders and agencies, operators ensure timely, seamless and effective responses. API RP 1174, *Onshore Hazardous Liquid Pipeline Emergency Preparedness and Response*, recently completed by pipeline operators, federal regulators, and first responders, seeks to improve emergency response capabilities by providing a framework for immediate notification and continued coordination with first responders. The aforementioned RPs are just a few of the available recommended practices developed in collaboration with federal and state regulators, academics and interested stakeholders which through effective implementation and training will help improve safety across the industry.

#### NATURAL GAS TRANSMISSION AND GATHERING LINE RULE

API members are dedicated to a risk-based approach to pipeline safety—one that strives for continuous improvement through addressing known, quantifiable risks. Importantly, that is the same approach that

Congress has used over the decades in its directives to DOT and PHMSA for regulating pipeline safety. However, API believes that the proposals in the Safety of Gas Transmission and Gathering Pipelines Notice of Proposed Rulemaking (NPRM) do not reflect a risk management approach, as directed by Congress, targeted toward eliminating the most significant risks posed to public safety and the environment.

The NPRM sets forth prescriptive repair criteria requirements following pipeline inspections. According to the NPRM, if an operator discovers an anomaly in their pipeline, the operator is not allowed to holistically assess the conditions of their pipeline and operate based on available data. The operator is instead forced to repair all discovered anomalies despite the level of risk posed to the pipeline and potential disruption to the public. As such, the proposal is not based on risk, but is instead based on a misguided principle that more is better without grounding that determination in potential pipeline safety improvements and benefits to the public and the environment.

Pipeline safety regulations should be based on sound data collection and risk analyses that support increases in safety for the public and minimize impacts to the environment. The NPRM proposes to regulate small-diameter rural gathering lines without regard to congressional mandates that required adequate data collection and appropriate risk-based analysis in order to demonstrate that such regulations would increase public safety. PHMSA failed to conduct a thorough risk analysis and provide both qualitative and quantitative data demonstrating that small-diameter gathering lines pose a direct risk to the public as required by the Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011.

Additionally, the Regulatory Impact Assessment (RIA) completed along with the NPRM significantly underestimates the cost that would be required to implement these proposed regulations. The benefits provided were also grossly inaccurate. The NPRM suggests that implementation costs would be surprisingly low, \$597 million, and greatly outweighed by an equally surprising high estimate of benefit, between roughly \$3.2 billion and \$3.7 billion. By PHMSA's own accounting however, roughly \$3 billion of the benefits are cost savings to industry - not safety or environmental benefits. API sought an external party, ICF International, to further evaluate PHMSA's work. ICF International evaluated the benefits and cost impacts of the proposed rule and found that when properly accounted for, the total cost of the proposed rule increases by almost two orders of magnitude from \$597 million to \$33.4 billion to achieve safety and environmental benefits of approximately \$437million.

API and its members ask that PHMSA allow operators to focus their resources on the highest risks to their pipelines and subsequently provide operators with the flexibility to apply these requirements to operating pipeline systems. PHMSA should only publish regulations based on comprehensive data. Further, prior to publication, PHMSA should endeavor to fully understand how industry operates and how proposed changes in regulations impact industry operations.

#### HAZARDOUS LIQUID PIPELINES RULE

Industry shares PHMSA's goal of increasing pipeline safety and is supportive of developing a final rule, but achieving this objective must be done in an effective and efficient manner, which does not appear evident through the text published by the agency on January 13<sup>th</sup> of this year. There were positive

changes made, and API appreciates PHMSA's consideration of the input received during the notice and comment period, as well as the Liquid Pipeline Advisory Committee meetings. However, a few issues still remain, mostly around the repair criterion that continues to contain unworkable changes to the methodology used to identify and assess when to repair certain pipeline defects. Unfortunately, this proposed provision is another example that illustrates the earlier point of PHMSA moving from performance-based to more prescriptive regulations by forcing operators to fix and repair a particular anomaly even if an engineering analysis says differently. Additionally, while industry is grateful for including engineering assessments as a tool in the integrity management process, the methodology proposed is too restrictive, complex, and unnecessarily conservative, not allowing for assessments to defer the remediation of all repairs, and should be revised to provide industry with greater flexibility and certainty. Industry recognizes the important role advanced internal inspection technologies such as in line inspection (ILI) tools can play in identifying risks and is supportive of using more of these inspection methods as appropriate. However, they must be fit for purpose for the anomaly being examined. The regulator should not mandate that all types of internal inspection tools be run on all lines, as that approach can create unintended safety risks as a result of increasing unnecessary activity on a pipeline. Finally, pipelines categorized as "stump lines" because of their location and short distance pose a low risk and should therefore be exempted, further providing for a performance-based regime best utilizing industry resources.

Industry stands ready to work collaboratively with PHMSA and relevant stakeholders to develop regulatory language that meets the desired outcomes. There is also an opportunity to incorporate new API standards, such as one on assessing and managing pipeline anomaly, cracking. This could replace existing regulatory text, complementing administrative goals. Dialogue on incorporating other API standards, RPs, and Technical Reports holds the potential to safely decrease the regulatory burden, since these are best practices on which stakeholders, including the public and PHMSA, have concurred with industry.

#### UNDERGROUND NATURAL GAS STORAGE FACILITIES RULE

Underground natural gas storage facilities play a critical role in the reliable delivery of natural gas. They allow operators to store gas produced when demand is low, typically in the warmer months, and release it during periods of high demand, during the heating season in the winter. Late 2015, prior to the Aliso Canyon storage facility incident, API along with Interstate Natural Gas Association (INGAA) and American Gas Association (AGA), published two recommended practices on underground storage facilities. After the incident, API, INGAA, and AGA created a joint industry task force to cooperatively address storage safety. This task force has been working cooperatively with PHMSA and state agencies to address the further ways to improve the safety of storage facilities. Unfortunately, PHMSA's interim final rule on underground natural gas storage facilities, released in December 2016, improperly incorporates by reference API Recommend Practices 1170 and 1171 by "adopting the non-mandatory provisions of API RPs 1170 and 1171 in a manner that would make them mandatory (i.e., provisions containing the word "should" or other non-mandatory language will be considered mandatory)" and by requiring compliance within 12 months of the issuance of the rule. This unwisely takes a performance-based standard and attempts to make it prescriptive. While PHMSA has tried to address some of the shortcomings of the

rule via FAQs, we believe that changes should be made to the final version of the rule to incorporate by reference RP 1170 and 1171 without modification, codify the reasonable implementation periods outlined in the current PHMSA Underground Storage FAQs 5 and 6, and incorporate underground natural gas storage facilities into a new “Part 19X,” separate from Part 192.

#### RAIL

In recent years, the United States has seen a dramatic increase in the amount of crude oil transported by rail, much of it from newly-developed shale resources that are located far from existing energy infrastructure. Rail infrastructure also plays an important role in the shipment of other key petroleum products such as heating oil, propane, diesel, lubricants, chemicals, plastics, and other necessities people rely on every day. While the amount of crude being moved by rail has declined somewhat from its peak in 2015, due in part to increased pipeline infrastructure, rail is still an important tool supporting the nation’s energy renaissance. Like pipelines, the industry places the highest priority on safety and 99.99 percent of crude oil deliveries reach their destinations without incident.<sup>4</sup>

However, our industry’s goal for safety is always zero incidents.<sup>5</sup> This is not a goal that can be reached through any single action or step but requires instead continual attention and focus. Furthermore, in instances such as these where more than one industry is involved, API and its members partner with industries such as the rail industry to collaborate on holistically improving safety in crude by rail operations.

In 2011, API, as a member of the Association of American Railroad’s Tank Car Committee, petitioned PHMSA to adopt new tank car standards. The industry worked collectively to develop a stricter tank car standard – known as the CPC 1232 car - and began building and using these cars prior to any action from PHMSA. PHMSA was petitioned multiple times by industry between 2011 and 2014 to approve this standard. A new tank car rule was finally adopted in early 2015—building on the 1232 design—creating the current DOT 117 standard. API also supported provisions in the 2015 FAST Act which added additional requirements to the 117 standard including thermal blankets and top fittings.

API worked with the best experts from our industry, the railroad industry and others to develop API RP 3000, *Classifying and Loading of Crude Oil into Rail Tank Cars*, a standard for characterizing, testing and quantifying crude oil transported by rail. We continue to be an active participant on the AAR’s Tank Car Committee, and we have worked cooperatively with railroads and tank car builders to further advance safer designs for tank cars. We are also a member of Federal Railroad Administration’s Railroad Safety Advisory Committee and the Transportation Research Board’s Crude Oil Transportation Subcommittee; cooperatively working with regulators to address issues related to moving crude by rail. In addition, we are an organizing partner, along with railroads and academia, of an international conference on safety culture to be held this October, which will provide opportunities to share safety lessons learned across the rail, oil and gas and other industries.

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<sup>4</sup> <http://www.energytomorrow.org/our-energy-today>

<sup>5</sup> <http://www.infrastructurereportcard.org/>

Our work on rail safety is not just limited to accident prevention. API worked closely with railroads and safety experts to develop a training video, released last year, to educate first responders on specific tank car markings and other visual depictions of what to consider when responding to a crude by rail incident, should one occur. The video complements an instructor-led course released in 2015 to educate first responders and firefighters on the characteristics of crude oil, the rail cars in which it is shipped, considerations and strategies for spill response and firefighting, and the importance of following training and the incident command system. API is committed to cooperation with our railroad partners in advancing a goal of zero incidents in the shipment of crude by rail.

#### REGULATORY REFORMS

API works with regulators to achieve our goal of zero incidents while at the same time helping ensure that American families and businesses have access to affordable energy. We can achieve our shared goals without imposing requirements that are unachievable, not cost-effective, or that will not accomplish the intended results. That often leads industry to litigate flawed final rules to obtain the necessary relief from unnecessary, duplicative or misguided agency actions.

Technological innovations and industry leadership have propelled the oil and natural gas industry forward despite the unprecedented onslaught of new and pending federal regulatory and other administrative actions targeting our industry. The oil and natural gas industry remains committed to regulatory structures that promote safety, environmental protection, and responsible operations and it continues to look for ways to collaborate with regulators. In particular, we appreciate the recent efforts by Congress taken to pass the FAST Act and the President's recent Executive Orders pertaining to pipeline streamlining and regulatory reform. We look forward to working with both Congress and the Administration as the details of these initiatives develop. At the same time, we believe that many other regulatory reform opportunities still exist.

Above all else, our members need certainty and consistency in the regulatory and permitting process for the purpose of planning the construction or expansion of energy infrastructure projects. When it comes to long term investment, pipeline operators typically are looking at 10, 20 or 30 year planning horizons based on contractual agreements with customers. Thus, the impacts of large regulatory and policy swings that can occur with changing political landscapes can create angst and hesitation on the part of gas and liquid pipeline operators to make longer term investments. Thus, it is critical that actions are taken on a several fronts without delay to ensure investments in critical energy infrastructure continues to keep pace with our country's energy needs and demands. Specifically, FERC currently lacks a quorum, with three out of five seats vacant, and potentially a fourth seat coming vacant this summer. The absence of a quorum, has put a freeze in final permitting and siting approvals preventing natural gas infrastructure projects moving forward toward construction and operation. We strongly urge the President to put forward nominations to fill those seats and for the Senate to confirm those individuals as soon as possible so that current projects are not continually and unnecessarily delayed. Additionally, as it relates to permitting, it is important that Congress continue to encourage Federal agencies and the states toward streamlining and synchronizing their separate reviews and permitting processes and

decisions, while holding them accountable for following prescribed permitting activities and deadlines. The reforms should be used to improve confidence of investors and to facilitate and expedite the interagency review process and not act as a roadblock to building infrastructure.

Consistency is also needed as it relates to regulatory oversight. The oil and gas industry supports rulemaking that improves the safety of the industry in an effective and efficient manner. As such, we also urge the President to move forward with appointing leadership at agencies like PHMSA that have a key regulatory role over energy infrastructure. With good leadership in place, the agency can develop a workforce that is not only suitably staffed but also properly trained and qualified to carry-out their mandates such as the development of appropriate regulations and policies and the conducting of timely inspections.

In conclusion, let me reiterate once more that the oil and natural gas industry is committed to delivering 100 percent of our product to its destination without incident. We look forward to continuing our work with Congress and the Administration to ensure that American families and businesses can safely and efficiently access affordable and reliable energy. Thank you and I would be happy to answer any questions that you may have.

**TESTIMONY OF  
DONALD F. SANTA  
PRESIDENT AND CEO  
INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA**

**BEFORE THE  
SUBCOMMITTEE ON RAILROADS, PIPELINES AND HAZARDOUS MATERIALS  
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
U.S. HOUSE OF REPRESENTATIVES**

**REGARDING  
THE STATE OF RAILROAD, PIPELINE AND HAZARDOUS MATERIALS  
SAFETY REGULATIONS AND OPPORTUNITIES FOR REFORM**

**APRIL 26, 2017**

Mr. Chairman and Members of the Subcommittee:

Good morning. My name is Donald Santa, and I am President and CEO of the Interstate Natural Gas Association of America (INGAA). INGAA represents the interstate natural gas pipeline industry. INGAA's members transport the vast majority of the natural gas consumed in the United States through a network of approximately 200,000 miles of interstate transmission pipeline. These transmission pipelines are analogous to the interstate highway system; in other words, they are large-capacity transportation systems spanning multiple states or regions.

Thank you for the opportunity to share INGAA's perspective at this hearing. My remarks are focused on the rulemaking process at the Pipeline and Hazardous Materials Safety Administration (PHMSA), not the substance of the agency's rulemakings. The process by which rules are developed, proposed, made available for public comment and then finalized is critical to ensuring that the substance of any rule is reasonable, practicable, and advances the public safety goals embodied in the law. In this testimony, I will present opportunities to improve stakeholder dialogue and consensus building early in PHMSA's rulemaking process.

We all want PHMSA to be an effective regulator, and that includes the ability to promulgate important regulations on a timely basis. It also includes the ability to rescind legacy regulations that more recent rules have rendered redundant. Timely rulemakings are essential to PHMSA fulfilling its stated mission "to protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives."<sup>1</sup> The timeliness of PHMSA's action on rulemakings also is material for the pipeline industry and other stakeholders affected by these regulations. The inability to complete important rulemakings on a timely basis retards improvements in pipeline safety and creates uncertainty surrounding the industry's investment in the facilities and pipeline inspection tools that will be subject to anticipated regulations.

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<sup>1</sup> PHMSA's mission is described on its website: <https://www.phmsa.dot.gov/about/mission>.

The time needed to complete a rulemaking is affected, in part, by the quantity and quality of dialogue with affected stakeholders. Apart from satisfying the legal requirements of the Administrative Procedure Act, there is great value for all in the dialogue that occurs as part of the notice and comment rulemaking process. Furthermore, beyond formal rulemakings, the goals of pipeline safety regulation can be advanced by a robust dialogue involving PHMSA, the pipeline industry and other stakeholders. Some of the greatest improvements in pipeline safety have occurred when industry, other stakeholders and government have worked together. These include collaborative efforts around technology research and development, damage prevention, safety management systems, and cyber and physical security.

Stakeholder dialogue is especially important when the subject of the rulemaking is a complex, technical topic such as pipeline safety regulation. The pending natural gas transmission and gathering rule provides a good example of why an appreciation of the capabilities and limitations of pipeline infrastructure and the technologies and practices used to manage pipeline integrity is so important to achieving effective and technically workable pipeline safety rules. New rules should leverage stakeholder knowledge and expertise to facilitate the deployment of new technologies that may be more effective, more efficient, and less disruptive than the legacy technologies that may be endorsed by existing regulations.

Unfortunately, PHMSA's recent approach to fulfilling its rulemaking responsibilities has resulted in less, rather than more, constructive dialogue in developing pipeline safety rules. PHMSA has foregone robust dialogue with all stakeholders prior to publishing a proposed rule for public comment. Foregoing this dialogue on the front end of the process has resulted in both delay in the rulemaking process and problematic technical content in PHMSA's proposals.

We recognize that the development of proposed rules, the notice and comment process and the production of a final rule can be a multi-year exercise. Still, the PHMSA process has become unusually protracted. The case in point is the natural gas transmission and gathering rule to implement the mandates in the Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011. It has been more than five years since the law was enacted. A proposed rule was not published until more than four years after enactment and we likely will see the six-year anniversary of enactment before a final rule is issued. This delay is the cumulative result of three flaws in the rulemaking process. The first is the failure to embrace consensus building as an early step in developing the rulemaking proposal. The second is the agency's choice to address too much in a single rulemaking. Third, the "pre-filing" process used by the White House Office of Management and Budget (OMB) compounded the consequences of these choices.

The natural gas transmission and gathering rule is a gigantic proposed rule that was created by assembling what could be 16 separate rules into one rulemaking. (Colloquially, some have referred to this as the "mega" rule). Advancing this proposal to a final rule has been especially daunting due to the complexities of dealing with multiple proposals addressing disparate topics. Broken into components, many of these individual initiatives could have been (and still could be) implemented in a comparatively short time, and thus complete many of the unfulfilled congressional mandates. We suggest that PHMSA avoid these catch-all mega rules in the future.

INGAA suspects PHMSA proceeded this way out of concern it would not succeed in getting OMB approval for the full array of separate rules needed to implement all applicable congressional mandates and National Transportation Safety Board recommendations. While PHMSA clearly hoped that its strategy would facilitate addressing a multitude of important tasks in one giant step, the size of the mega rule itself ultimately, and ironically, frustrated any hope of quickly completing the pre-filing negotiation.

OMB's recent invention of "pre-filing" was intended to facilitate an expedited substantive review of proposed rules before the rule was filed with OMB and before notice and comment occurred. This OMB pre-filing review is unnecessary, since the APA notice and comment process provides ample opportunity to vet the merits of a proposed rule and its associated cost-benefit analysis. OMB's critical role in an efficient and timely rulemaking process was subverted by the pre-filing requirement created by the last administration. We urge the new administration to discontinue the OMB pre-filing obligation.

What is the cost of this delay and inefficiency? INGAA's members are committed to the goal of zero incidents, and progress toward that target must continue whether new regulations are issued, or not. Still, the practical consequence of this delay is that operators may be reluctant to dedicate the enormous resources needed to implement voluntary pipeline safety commitments. This hesitancy is rooted in the risk that the final rules ultimately adopted by PHMSA might compel a repeat of certain steps in an operator's pipeline safety action plan. This "do-over risk" is not insignificant. For example, testing pipelines for material strength is both costly and disruptive to service because pipelines are removed from operation to complete the testing – operators would not want to conduct this testing twice. This delay in proposing and finalizing rules also has diminished public confidence in PHMSA as a regulator and, derivatively, public confidence in the safety of the pipelines that it regulates.

Another opportunity for improvement concerns PHMSA's recent use of "interim final rule" (IFR) authority under the APA and federal pipeline safety law. The IFR process allows a federal regulator to determine that there is "good cause" for issuing a regulation without notice and public comment, because such notice and public comment would be "impracticable, unnecessary, or contrary to the public interest." PHMSA used the IFR process for the underground gas storage rule and for a new regulation on emergency order authority.

While an IFR may be appropriate in some cases, it produced a flawed underground gas storage rule. This "ready, fire, aim" process resulted in a rule that PHMSA and the regulated community now are trying to untangle. The underground gas storage IFR includes clear mistakes that could have been identified and easily fixed had the normal notice-and-comment procedure been used. Instead, those mistakes now are part of an "interim final rule" that took effect 30 days after publication.

Yes, PHMSA can correct these mistakes in a final rule, and INGAA understands that PHMSA plans to do so. INGAA, along with three other trade associations representing pipeline

operators, petitioned PHMSA for reconsideration in January. The agency has yet to respond and now is over a month past its own deadline for doing so.<sup>2</sup>

These mistakes, and the delays in resolving them, led INGAA and others to seek judicial review of the rule, just to preserve our options should PHMSA not correct its mistakes upon reconsideration or in a final rule. This illustrates a pitfall of the IFR process. The effectiveness of the interim rule, and the potential consequences of failure to comply, compel regulated entities to pursue litigation and put themselves in an adversarial posture with the regulator far earlier than should be necessary. This outcome is especially ironic in the case of the underground gas storage rule, because INGAA was among the advocates for creating this rule in the first place.

PHMSA's regulations also provide for something called a "direct final rule," which can be an alternative to an IFR, if PHMSA adopts a standard developed under a consensus process. With a direct final rule, there is front-end buy-in and communication with the stakeholders. A rule is issued with the proviso that it will become final unless there is significant objection. It is an approach that is much more likely to result in a consensus-driven rule that can be implemented quickly. We respectfully suggest that this approach could have been used for the underground gas storage rule and believe that rule would have been every bit as effective as that which PHMSA and Congress intended.

Collaboration in the rulemaking process is fully consistent with PHMSA's statutory mandate. The Pipeline Safety Act requires that a safety standard be "practicable" and designed to meet gas pipeline safety needs and protect the environment. Achieving this balance requires PHMSA to consider outside input. Yet, PHMSA recently seems to have eschewed seeking this input in the formative stages of its rulemaking initiatives. This is unfortunate, especially because PHMSA has the means to do so via the Gas Pipeline Advisory Committee (GPAC).

The GPAC membership is equally divided among representatives of the public (such as advocacy groups or first responders), government agencies, and industry. The stated role of the GPAC is to review PHMSA's proposed regulatory initiatives to ensure the technical feasibility, reasonableness, cost-effectiveness and practicability of each proposal. The committee also evaluates the cost-benefit analysis and risk assessment information of the proposals. Given its diverse membership, the GPAC is a useful forum for stakeholder outreach and input, and therefore should be involved early and often during the rulemaking development and drafting process.

PHMSA earlier this year initiated a series of GPAC meetings to consider the proposed natural gas transmission and gathering rule. While we welcome the opportunity for dialogue provided by these meetings, one must wonder whether it would have been more productive to solicit the views of the GPAC in the formative stages of the proposal when important threshold decisions were being made.

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<sup>2</sup> INGAA withdrew from the petition for reconsideration on April 17 to perfect its intervention in the proceeding before the US Court of Appeals for the 5<sup>th</sup> Circuit in which the Texas Railroad Commission has sought judicial review of the underground storage IFR. The other three trade associations will continue to pursue administrative reconsideration through the petition mentioned above.

The Congress remains mindful of PHMSA's need for outside input given the ripples that may be created by the agency's rules. For example, as part of the Pipeline Safety, Regulatory Certainty and Job Creation Act of 2011, the Congress directed PHMSA to consult with the chairman of the Federal Energy Regulatory Commission and with state regulators in developing timeframes for the completion of pipeline testing that consider potential consequences for public safety and the environment and that minimize costs and service disruptions. Based on the extensive preamble to the proposed natural gas transmission and gathering rule, it does not appear that PHMSA engaged in such consultations as part of the development of its proposal.

In conclusion, let me reiterate that INGAA continues to support the fundamental mission of PHMSA, including completing the various statutory mandates for new regulations. We suggest that the end results of PHMSA's rulemakings can be improved with better stakeholder outreach and involvement, and with internal improvements to the regulatory process. The pitfalls that have undermined the pending natural gas transmission and gathering rule and the underground gas storage IFR hopefully can be avoided in future rulemakings. We also suggest that it is not too late to apply the lessons learned to the development of final rules in these two proceedings. It is important for natural gas pipeline operators to have the certainty that will come with finalizing these regulations.

Thank you once again for the opportunity to testify today.



**Testimony of John Tolman  
Vice President and National Legislative  
Representative  
Brotherhood of Locomotive Engineers and  
Trainmen  
Before the House Committee on Transportation  
& Infrastructure  
April 26, 2017**

Good morning Mr. Chairman, Mr. Ranking Member, and Members of the Committee; my name is John Tolman. I am Vice President and National Legislative Representative for the Brotherhood of Locomotive Engineers and Trainmen, which is a Division of the Rail Conference of the International Brotherhood of Teamsters. Thank you for the opportunity to testify today on such an important subject ... it is a privilege to be here.

I also am a locomotive engineer, having run trains during my career for the Penn Central Railroad, for Conrail, and at Amtrak. So I've seen firsthand the problems that we encounter when the nation's railroads and other infrastructure are not properly maintained. And, in all honesty, it seems to me that the risks now are greater than ever. The freeways, streets and roads we drive on every day — and the airports we fly into and out of — are the very backbone of mobility in America.

According to Federal Railroad Administration safety data covering the period from January 2016 to January 2017, accidents caused by defective track, roadbed and associated structures — the core of the railroad infrastructure — resulted in monetary damages totaling \$283,488,892. Yes, nearly \$300 million! Included in this number of 1,580 reportable accidents and incidents are 1,500 derailments, 10 collisions, and 70 other types of incidents ... and 48 injuries. And as you likely know, railroad infrastructure failures caused a number of widely-reported accidents in recent years.

In 2012, two 19-year-old young women were killed after coal cars overturned on a bridge they were standing on beside the tracks in Ellicott City, Maryland. Rail head wear and rolling contact fatigue were found to be the causes of the derailment. But it was not just the unfortunate young women who were in harm's way. When the 11<sup>th</sup> through 17<sup>th</sup> rail cars derailed they fell onto a public parking lot below the bridge.<sup>1</sup>

On July 11, 2012, a Norfolk Southern train derailed in Columbus, Ohio, causing a major fire and forcing the evacuation of residents inside a one-mile radius of the derailment. Two citizens in the derailment area sustained injuries. The fire occurred when the 12<sup>th</sup> through 14<sup>th</sup> cars, carrying denatured ethanol, were breached. The conductor was able to uncouple the locomotives from the train, so the locomotive engineer could pull away from the fire and move the train crew to a safe distance from the fire. Were it not for that kind of teamwork, more injuries may have occurred. The likely causes of the accident, again, were rolling contact fatigue and rail head wear.

In another incident in Cherry Valley, Illinois, on June 19, 2009, a Canadian National train derailed due to infrastructure weakness caused by a washout that had not been repaired. NTSB concluded that the failure was due to the railroad not working with the county to properly mitigate flood damage to the tracks. The derailment happened while vehicular traffic was stopped on an adjacent highway waiting for the train to pass. A total of 19 cars derailed from the 114-car train. Thirteen of the derailed tank cars were breached and caught fire. As a result, a passenger in one of the cars was killed and two other passengers in that car sustained serious injuries. Five occupants of other cars waiting also were injured, as were two firefighters who responded to the incident. This accident forced the evacuation of 600 residences within a one-

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<sup>1</sup> See National Transportation Safety Board Railroad Accident Brief (NTSB/RAB/14-07).

half mile radius of the derailment and caused monetary damages estimated at \$7.9 million. The NTSB report stated that

“the probable cause of the accident was the washout of the track structure that was discovered about 1 hour before the train’s arrival, and the Canadian National Railway Company’s (CN) failure to notify the train crew of the known washout in time to stop the train because of the inadequacy of the CN’s emergency communication procedures. Contributing to the accident was the CN’s failure to work with Winnebago County to develop a comprehensive storm water management design to address the previous washouts in 2006 and 2007. Contributing to the severity of the accident was the CN’s failure to issue the flash flood warning to the train crew.”<sup>2</sup>

On October 20, 2006, in New Brighton, Pennsylvania, a Norfolk Southern train derailed. According to the NTSB’s report:

About 10:41 p.m. eastern daylight time on Friday, October 20, 2006, Norfolk Southern Railway Company train 68QB119, en route from the Chicago, Illinois, area to Sewaren, New Jersey, derailed while crossing the Beaver River railroad bridge in New Brighton, Pennsylvania. The train consisted of a three-unit locomotive pulling 3 empty freight cars followed by 83 tank cars loaded with denatured ethanol, a flammable liquid. Twenty-three of the tank cars derailed near the east end of the bridge, with several of the cars falling into the Beaver River. Of the 23 derailed tank cars, about 20 released ethanol, which subsequently ignited and burned for about 48 hours. Some of the unburned ethanol liquid was released into the river and the surrounding soil. Homes and businesses within a seven-block area of New Brighton and in an area adjacent to the accident were evacuated for 2 days. No injuries or fatalities resulted from the accident. The Norfolk Southern Railway Company estimated total damages to be \$5.8 million.

As a result of its investigation of this accident, the Safety Board identified three safety concerns:

1. ultrasonic rail inspection and rail defect management,
2. oversight of the internal rail inspection process and requirements for internal rail inspection, and
3. the placement of hazardous materials cars in trains for crew protection.<sup>3</sup>

The point here is not to single out railroad track and bridge problems. The railroads generally have been diligent in maintaining their infrastructure. In fact, according to the Association of American Railroads, freight railroads are on track to spend \$22 billion on the nation’s freight network in 2017. We view this as a laudable effort by the industry.

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<sup>2</sup> See NTSB/RAR-12/01 at pg. 89.

<sup>3</sup> See NTSB/RAR-08-02 at pg. vi.

It is equally true that advances in safety on the nation's railroads reflect the efforts of railroad workers who have partnered with the nation's rail carriers in implementing and working with new and safer technologies. The accidents that I have mentioned happened during a period when the railroads are devoting a lot of time, effort and resources to the problem. But railroads could do much more in the area of human factors by ensuring that advances in technology are implemented with deliberate speed and not used as base justifications for downsizing the workforce.

A railroad can build and maintain world class infrastructure, but if the issue of fatigue on the nation's railroads is not addressed in a serious and fundamental way, catastrophic accidents will not cease. Technology can help with the problem, but technologies such as Positive Train Control (PTC) alone will not solve the problem. PTC will do much to make rail operations safer and we applaud it for being designed to prevent many of the worst types of collisions — but it will not and is not designed to prevent all collisions. Further, PTC has not been designed to be an answer to over-worked train crews who toil around the clock with unpredictable on-duty times. Crews on freight trains rarely go to work at the same time on any two days in a row.

Some in Congress, the Federal Railroad Administration and several railroads would like to reduce the fatigue discussion and problem to one of a single sleep disorder — Obstructive Sleep Apnea (“OSA”). While OSA can be a problem for train crews and members of the public, OSA does not begin to explain the causes of fatigue in the rail industry. Employees who have been treated for OSA and employees who do not suffer from it, are still fighting the problem of never having a regular sleep/wake cycle. And that means an OSA program cannot be a silver bullet for solving the challenges posed by fatigue.

Despite not having any routine sleep/rest cycles in their daily lives, railroad workers also face a never-ending push by the nation's rail carriers to work longer hours and be away from home for longer periods of time or face the risk of being dismissed. Further increasing risk, at least one of the four largest Class I railroads is now proposing a concept they refer to as a “Super-Pool”. In application, train and engine crews who have traditionally been assigned to a specific run or territory are being merged into a single group or “Super Pool” at their location that must now work on multiple territories. The end result is that these train and engine crews could be expected to know the territorial characteristics of over 1000 miles of railroad, including the speed of every curve and every section of track, as well as the location of every signal on every route. They must know this whenever they are called to report for duty with little notice before the phone rings.

Further, there is an endless push by railroads to waive safety regulations regarding the testing of train brakes by qualified personnel in favor of track detectors placed beside the track in a few locations along the rail, usually without any actual data that could support a waiver. There are no federal safety standards whatsoever for these track detectors, and they do not detect many defects that can be found simply by visually examining the brake system. The detectors can be a helpful tool when used in conjunction with regular inspections, but there is no evidentiary safety basis for their use as a replacement for physical inspections performed by qualified car inspectors.

There also is the issue of the rail carriers' repeated resistance to regulations that would govern the installation of electronic controlled pneumatic ("ECP") brakes. Conventional brakes in use today are a technology that is 150 years old. They work, but clearly there is newer and better technology available that can slow and stop trains up to 70% faster. ECP brakes on every car can be monitored in real time. ECP brakes also all apply on each car at the same instant, making it easier and more efficient to stop trains more quickly and more safely in the event of an emergency.

The history of the railroad industry demonstrates clearly that you can't deregulate your way to an improved infrastructure. When I entered the industry over 45 years ago, one of the first things I was told is that every safety law, each safety regulation and all operating rules were written in blood ... that their origin was in some accident that cost railroad workers their limbs or their lives. And my experience as a locomotive engineer proved the truth of that statement to me.

The only reason we have automatic couplers, power brake systems, and signal and train control systems is because your predecessors enacted laws to require those safety appliances. And every such effort was fought tooth and nail by the industry, which employed the very same arguments they make to you today. Even PTC — which still hasn't been implemented — has been promoted by the National Transportation Safety Board for over four decades.

Are there some regulations that could be updated to reflect the current state of the industry and identifiable future trends? I don't think anyone can seriously deny that's the case. In fact, we already have a process in place by which all rail safety regulations are subject to periodic review, and all stakeholders participate in revising regulations through the Federal Railroad Administration's Railroad Safety Advisory Committee process.

But we strongly reject the notion that regulatory reviews should be predicated upon a simple mathematical cost/benefit analysis. Such a narrow view reduces the lives and limbs of our members to merely the cost of doing business, and places the human, natural citizen in a position of permanent inferiority to the judicially-created, artificial corporate citizen. It is the embodiment of the theory that created human carnage in our industry during the years that implementation of safety appliances like automatic couplers, power brake systems, and signal and train control systems was delayed.

Instead, the important lesson of the accidents I mentioned before is that we should be wary of overreliance on funding mechanisms like public-private partnerships (PPPs) for infrastructure projects. Right-of-way maintenance at the locations where these accidents occurred did not involve an investment opportunity for the railroads ... it involved upkeep of the arteries through which their revenue flows. But — in retrospect — those areas were not as highly prioritized as they should have been. In the marketplace of PPP opportunities, that maintenance would have been even less important, and such accidents will increase in frequency.

In the United States, we have seen this problem develop in various ways, particularly regarding the use of toll roads. The problem with PPPs in this area is that the private entity usually oversells the nature of the problem in order to attract investors, promises to correct the

problem when it is exposed, and then the resulting revenue is either less than projected or the problem did not exist to the extent it was originally portrayed.

For example, according to David Hall of the Public Services International Research Unit (PSIRU) citing a Bloomberg article, the actual first-year revenue of 26 toll roads that opened between 1986 and 2004 averaged one-third less than projected. A 2013 PPP proposal for a bridge in Oregon forecast publicly that it would be used by 160,000 vehicles a day, enough to cover the cost from tolls — but privately they expected only 78,400 vehicles a day, which would require constant subsidy from the state.<sup>4</sup>

The trouble is that when the problem is overstated and the private company builds the infrastructure to implement the operation of, say, a toll road, and then the revenue risks are shifted to the government so that if the traffic levels fall when people do not want to pay the toll, the government is left holding the bag and must guarantee the revenue to the private entity. In such a case there is only a private benefit ... there is no public benefit.

Bloomberg also points out that toll roads were common in the 1800s but had to be taken over by the government or shut down for similar reasons. Privately-backed roads in California, Colorado, Illinois, Indiana, South Carolina, Virginia and Texas have undergone bankruptcies, restructurings, credit downgrades or suffered from less traffic than projected. In some cases, anticipated commercial development near the roads simply never materialized.<sup>5</sup>

PPPs just are not delivering the bang for the buck that they have promised. Again, according to David Hall:

The evidence from international experience and studies of PPPs can be summarized as follows:

1. The cost of capital is always cheaper without a PPP, for high income and developing countries alike.
2. The cost of construction is higher under a PPP, because the financiers require a turnkey contract, which is about 25 per cent more expensive.
3. The private sector is not more efficient in operation, and the public sector has the advantage of greater flexibility.

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<sup>4</sup> Bloomberg Nov 27, 2013 Private Toll Road Investors Shift Revenue Risk to States By David Milenberg <http://www.bloomberg.com/news/2013-11-27/private-toll-road-investors-shift-revenue-risk-to-states.html> (accessed on *April 16, 2017*); Infrastructure Journal 17 Jan 2013 Toll Roads: Big Trouble Down Under IJ Interviews Dr Robert Bain <http://www.robbain.com/Toll%20Roads.pdf> (accessed on *April 16, 2017*); [http://www.wweek.com/portland/article-21194-the\\_toll\\_truth.html](http://www.wweek.com/portland/article-21194-the_toll_truth.html) (accessed on *April, 16, 2017*).

<sup>5</sup> <https://www.bloomberg.com/news/articles/2013-11-27/private-toll-road-investors-shift-revenue-risk-to-states> (accessed on *April 16, 2017*).

4. The transactions costs of tendering and monitoring PPPs add 10-20 percent to their costs.
5. The public sector faces real risks from PPPs including incomplete contracts, the likelihood of renegotiations, and the potential public liabilities in case of bankruptcy or default by the private company.
6. There are negative impacts on public services, the environment and workers, from cost-cutting or from distorted selection of projects to suit the need for profitability in PPPs.<sup>6</sup>

The story of the growth of our Nation — the expansion of 13 eastern seaboard states from sea to shining sea — is the story of infrastructure. It is the story of inland waterways, like the Erie Canal, and the Transcontinental Railroad. It is the story of federal highway system of nearly a century ago, and the interstate highway system created during the 1950s. And it is the story of the Hoover Dam and the Tennessee Valley Authority.

Most of all, it is a story of big ideas, and even bigger projects, that were implemented of the people, by the people and for the people. These were investments in America, by America and for America ... for Main Street, first and foremost.

But lately we have lost our way. Bipartisan transportation and infrastructure goals that have been shared for a century and a half have fallen victim to the paralysis of ideology.

And so, bridges are crumbling and tunnels are threatened. Citizens run into potholes and instead of paying an extra couple of cents at the pump to grade the streets, they pay hundreds to repair their vehicle. This is the politics of being pennywise and dollar foolish.

Tunnels are being used to carry passenger trains into and out of New York City that were built in the early 1900s. Penn Station in New York is forced to handle three times as many trains as it was designed to accommodate. And every day three railroads, scores of employers, and hundreds of thousands of commuters cross their fingers that this won't be the day that infrastructure fails in a catastrophic way.

In 2016, 58,495 bridges were rated as structurally deficient. Cars, trucks, buses and emergency vehicles cross deficient bridges more than 200 million times a day. If placed end to end, the deficient bridges would stretch 1,340 miles from New York City to Miami.<sup>7</sup> The Arlington Memorial Bridge here in Washington carries 68,000 vehicles a day and the National Parks Service estimates it will take \$250 million to repair.<sup>8</sup>

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<sup>6</sup> David Hall, *Why Public Private Partnerships Don't Work: The many advantages of the public alternative*, pg. 46.

<sup>7</sup> <https://www.usatoday.com/story/news/2016/02/18/fewer-bridges-need-repairs-but-task-still-monumental/80512038/> (accessed on *April 16, 2017*).

<sup>8</sup> <http://dailycaller.com/2016/06/21/dcs-memorial-bridge-in-dangerous-disrepair-risks-closure/> (accessed on *April 16, 2017*).

The people want, need and deserve better and safer infrastructure. We should have the best airports, rail systems and freeways in the world. It was exciting during the presidential campaign to hear candidate Trump offer the idea of a big infrastructure project for the U.S. The public will is there, and the political will must address the needs of the people.

I have worked with the Chairman of this Committee for many years and on many issues and I know he has good intentions and wants to get things done. The Transportation and Infrastructure Committee has a long history of being bipartisan for the safety and good of the travelling public and our nation's economy. Let's get the transportation system moving into the 21<sup>st</sup> Century ... let's buy American products ... let's put tens of thousands of underemployed Americans back to work ... and let's build the transportation infrastructure that will equal what our forefathers created.

I thank you for the opportunity to testify and if I can answer your questions I will endeavor to do so.



April 26, 2017

The Honorable Bill Shuster  
Chairman  
Committee on Transportation and Infrastructure  
2165 Rayburn House Building  
Washington, DC 20515

The Honorable Peter Defazio  
Ranking Member  
Committee on Transportation and Infrastructure  
2163 Rayburn House Building  
Washington, DC 20515

The Honorable Jeff Denham  
Chairman  
Subcommittee on Railroads, Pipelines,  
and Hazardous Materials  
B-376 Rayburn House Building  
Washington, DC 20515

The Honorable Michael E. Capuano  
Ranking Member  
Subcommittee on Railroads, Pipelines,  
and Hazardous Materials  
2163 Rayburn House Building  
Washington, DC 20515

Dear Chairman Shuster, Ranking Member Defazio, Subcommittee Chairman Denham, and Ranking Member Capuano:

Thank you for holding today's hearing, titled "Building a 21st Century Infrastructure for America: The State of Railroad, Pipeline, and Hazardous Materials Safety Regulation and Opportunities for Reform." I appreciate the opportunity to share the views of The Fertilizer Institute (TFI).

TFI represents the nation's fertilizer industry, including producers, importers, retailers, wholesalers and companies that are engaged in all aspects of the fertilizer supply chain. The U.S. fertilizer industry generates more than \$154 billion in economic benefit each year and provides approximately 89,000 direct jobs and 406,000 indirect jobs for a total of 495,000 U.S. jobs.

Fertilizer is a key ingredient in feeding a growing global population, which is expected to surpass 9.5 billion people by 2050. Half of all food grown around the world today is made possible through the use of fertilizer.

A reliable transportation network is vital to moving fertilizer around the nation. The majority of all fertilizers (56 percent) move by rail. While we may disagree at times, TFI and its members have a positive relationship with the railroad industry. TFI works closely with the rail industry and regulators to promote safety for employees, the public, and first responders. We want the rail industry to be successful because its success is essential to our success. As shippers, we also want the power dynamic in the rail marketplace to be more balanced. In the past 12 months, the first steps in a generation have been taken to modernize the Surface Transportation Board (STB). These efforts should continue.

As the rail transportation marketplace has changed, the importance of the STB's ability to efficiently respond to rate and service issues has grown. Yet, rate and service cases have become so expensive, cumbersome and time consuming that most captive shippers do not have the time or money to pursue regulatory remedies to rail market power.

This is why it is important for the STB to modernize the methods, standards and procedures for resolving

Capitol View  
425 Third Street, S.W., Suite 950  
Washington, DC 20024

202.962.0490  
202.962.0577 fax  
www.tfi.org

rate disputes. STB Commissioners have expressed agreement with these sentiments and with those in a report by the National Research Council's Transportation Research Board. The report concluded that the STB's rate review procedures are now "unusable by most shippers."

The STB's current rate review standards were put in place for coal shippers more than three decades ago when the railroad industry was quite different. Over two dozen railroads competed across the country for most carload traffic, while unit train coal traffic bore the brunt of rail market power, and railroads were emerging from financial crisis. While rail industry fortunes have changed a great deal, the rate review process has not. Rate and service cases at the STB typically take three years at a cost of more than \$5 million. The time and expense to file a rate case does not work for most shippers whose traffic, unlike coal, does not move in unit trains between the same locations over many years. TFI appreciates the efforts of the STB to find ways to improve how rate disputes are resolved.

As a way to promote competition in lieu of regulation, TFI urges the STB to complete its reciprocal switching rulemaking. For decades, reciprocal switching has worked successfully in Canada. The Canadian Pacific Railway, during its proposed merger discussions with Norfolk Southern, proposed to allow reciprocal switching for its customers if it acquired Norfolk Southern. Under the current reciprocal switching proposal, unlike in Canada, shippers still must demonstrate their need for, and the feasibility of, switching. If STB grants a request -- after reviewing all safety and fairness questions -- a shipper would then pay the incumbent rail carrier to switch the shipment to another nearby railroad to complete the movement, instead of remaining captive to the incumbent for the entire route. Reciprocal switching, also known as competitive switching, is a practical way to give rail customers access to more competitive options. The fertilizer industry appreciates the Board's efforts on competitive switching and looks forward to continued engagement on this important matter.

The STB is a critical oversight Board for shippers in the agriculture sector, most of which are dependent upon a single railroad for service. President Trump presently has the opportunity to appoint two Commissioners to the STB. It is important that these nominees and the Chairman of the STB's Board are impartial and have the sound judgment necessary to fairly represent a broad cross-section of stakeholders. STB Commissioners must also be committed to ongoing efforts to modernize the agency so it can better serve railroads and shippers.

Finally, TFI is very concerned by the rail industry's recent unilateral attempts to impose standards for hazmat packages that would supersede those already enforced by the U.S. Department of Transportation (DOT). DOT, which relies on input and public comment from all affected stakeholders, is widely recognized as the authority on what constitutes a safe hazmat package. DOT or Congress should ensure these lines of authority are made clear.

Thank you again for holding today's hearing. Please feel free to contact me by email or phone at [cjahn@tfi.org](mailto:cjahn@tfi.org) or 202-962-0490 or Justin Louchheim at [jlouchheim@tfi.org](mailto:jlouchheim@tfi.org) or 202-515-2718.

Sincerely,



Chris Jahn  
President  
The Fertilizer Institute

Cc: House Committee on Transportation and Infrastructure

# SAAMI®

SPORTING ARMS AND AMMUNITION MANUFACTURERS' INSTITUTE, INC.  
SINCE 1926

May 10, 2017

Congressman Jeff Denham, Chairman  
Subcommittee on Railroads, Pipelines and Hazardous Materials  
Committee on Transportation and Infrastructure  
U.S. House of Representatives  
Washington, DC 20515

Re: Responses to Questions at April 26th Hearing on Regulatory Reform

Dear Chairman Denham,

The Sporting Arms & Ammunition Manufacturers' Institute (SAAMI) is responding to questions stemming from the April 26, 2017 hearing, "Building a 21st Century Infrastructure for America: The State of the Railroad, Pipeline, and Hazardous Materials Safety Regulations and Opportunities for Reform." We are a member of the Interested Parties for Hazardous Materials who testified at the hearing.

SAAMI is an association of the nation's leading manufacturers of firearms, ammunition and components. SAAMI was founded in 1926 at the request of the federal government to create standards for safety, interchangeability, and reliability. Technical excellence is always our goal and safety is always the prerequisite. As a standards developer accredited by the American National Standards Institute (ANSI—the US representative to the International Standardization Organization), we live by the rigorous and inclusive standards development process. SAAMI has a core belief that "none of us is as smart as all of us." This is as true for promulgation of regulations as it is for development of safety and reliability standards.

SAAMI's regulatory efforts are coordinated by the SAAMI Logistics and Regulatory Affairs Committee (SLARAC), which works to shape the constantly evolving transportation and storage regulations, both international and domestic, so that SAAMI products can be distributed safely, securely and economically throughout the world. Education is a key function and SLARAC is dedicated to providing science-based information to regulators.

#### Fundamentals

Hazardous materials (hazmat) are essential to the functioning of modern society. They are essential to daily activities of industry and the public, and as such, risks must be managed rather than eliminated. Good regulations can only be made by government and industry working together. Industry provides best-practices and unlimited expertise. Healthy government applies their expertise in effective regulation to incorporate this

input and provide a safe and efficient environment for competitive trade. Details are important, as often a single sentence in the regulations may have an impact of millions of dollars annually, so regulatory oversight must be competent and efficient. Industry input is essential, not only in public consultation meetings, but also by accredited non-governmental organization (NGO) participation in regulatory promulgation processes.

To demonstrate the mainstream nature of this trade, consider the following examples: Hazmat is divided into classes including explosives (e.g. fire extinguisher actuators and other power device cartridges on passenger aircraft, automotive air bags, mining, oil and gas, fireworks, and ammunition not only for firearms but also for commercial handheld applications like modern steel-on-steel construction nail guns and cable splicing by electric utilities), flammable and compressed gases (e.g. aerosols, oxygen, fire extinguishers), flammable liquids (e.g. gasoline, paint, aircraft fuel, crude oil), flammable solids (e.g. charcoal briquettes, matches), oxidizers (e.g. chlorine for swimming pools, fertilizers), toxic materials (e.g. chlorine for safe drinking water), infectious substances (e.g. laboratory blood samples), radio-actives (e.g. radiotherapy medicine and sterilization), corrosives (e.g. cleaning chemicals, and certain paints), and miscellaneous (e.g. dry ice and lithium batteries for phones and laptops). A few thousand products are listed by name, but all chemicals meeting the broad criteria for these classes are regulated by inclusion in catch-all entries.

Around 5% of all shipments contain hazmat. Most companies offer hazmat shipments regardless if it is their main business. PHMSA has estimated there are 1.2 million hazmat shipments per day in the USA, which doesn't account for the huge commerce in hazardous household goods—which are largely exempt from regulations. Hazmat spans the spectrum from high to low hazard that requires a graduated system of regulation to appropriately apply varying levels of restrictions to promote safe commerce. Overly restrictive regulations breed behavioral complacency, and bans cause undeclared illegal shipments that are more dangerous than legally managed shipments.

SAAMI responses to issues raised at the hearing are as follows:

1. "What is the relationship of the United Nations and other international bodies to hazardous materials regulations in the USA?"

Hazmat regulations were created in the USA in the 1970's. Long before that, restrictions appeared in railroad standards and there also existed restrictions on explosives, the original hazmat. To facilitate import/export, in 1991 the US Hazardous Materials Regulations (HMR, or 49 CFR Parts 100-199) were aligned with the United Nations Model Regulations for dangerous goods (the international term for hazmat). Regulations in most countries and all modes of transport (road, rail, vessel, air) are based on the work of experts participating in the United Nations forum in Geneva, Switzerland. Participation by the USA in this global forum also works to align international regulations with approaches used in the USA, optimizing import/export efficiency. A major example

of this is the modification of the UN Limited Quantities system to reflect ORM-D, a classification used only in the USA for high volumes of low hazard shipments. PHMSA currently chairs this meeting, and OSHA chairs the sister committee working on the Globally Harmonized System (GHS) of hazard communication, with good results individually and together. Hazmat regulations are some of the most sophisticated and rigorously enforced regulations in existence. They are in a constant state of evolution, and are updated by the UN every two years in a set of Model Regulations using an effective system of government interaction and industry input from accredited non-governmental organizations. The International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO) function similarly. They use the UN Model Regulations as their basis and then apply additional mode-specific requirements (e.g. whether incompatible goods are allowed next to each other on ships or must be separated by a bulkhead, and redundant package closures on liquids on aircraft). These modal bodies, as well as the USA and most nations, update their regulations after each UN revision. PHMSA attends these modal meetings to implement changes of the UN Model Regulations and also to address mode-specific issues. On-schedule adoption of harmonized requirements in the USA is necessary to avoid disruption to commerce, as happened recently. In this case PHMSA led a group of agencies to create a central policy for interim relief.

Countries maintain alignment with the UN without surrendering sovereignty by adopting the UN regulations with adaptations tailored to their economy, culture and infrastructure (e.g. facilitation of air transport in Alaska, and added restrictions for tunnels in Europe). This flexible alignment is called "harmonization." The main logistical investments of packaging, package marking and documentation are harmonized globally by all modes to avoid costly impediments to trade, but additional requirements may be country specific. For example, PHMSA requires an emergency response phone number to be added to bills of lading. Management of these international, multi-modal regulations is centralized in PHMSA, which sets the basis of the regulations and adds mode-specific provisions in coordination with US modal agencies (FMCSA, FRA, Coast Guard and FAA). De-harmonization, for example different modal requirements affecting classification and packaging, must be avoided, or commerce faces an impossible task of complying with complex and contradictory regulations. Therefore, it is important to have one regulatory agency with management responsibility for hazmat regulations.

2. "Why should PHMSA, a dysfunctional agency, be returned to the lead at ICAO, as opposed to the last administration's change to FAA?"

The PHMSA Office of Hazardous Materials Safety (OHMS) is an exemplary agency. Current priorities include investing in their people, increasing communications, greater transparency, redefining outreach and engagement, and innovation. OHMS is working on ISO accreditation, gap analysis, focused inspections, a collaborative consultation program to reward best practices and rehabilitate non-compliant operations, and increasing their substantial expertise to better meet industry expectations. Relative to innovation, the agency is moving proactively to anticipate the use of autonomous

(driverless) delivery by multiple modes, and to move to a paperless system of shipment documentation that will be more effective for emergency responders. Injuries and fatalities due to hazmat are very low while efficiency is high, and based on this metric OHMS is effective and not dysfunctional. On the other hand, legislative mandates that don't address root issues, e.g. those for crude oil by rail, consume resources and impair the agency without improving safety.

PHMSA special permits and approvals (SP&A) are greatly misunderstood to be loopholes in the regulations. The hazmat industry is large and diverse, and is managed by rules that industry applies to itself. SP&A provide for heightened government oversight of activities which merit specific attention. Special permits allow narrow exceptions to the regulations for efficiency or innovation. They specify who may use the permit, what regulations are exempted, and what precautions are required to maintain an equivalent or greater level of safety than provided by the regulations. Written approvals supervise potentially high consequence activities like classification of explosives and testing of gas cylinders. As an example of the value of the SP&A program, PHMSA recently issued a special permit that will save \$609 million over a 15-year period by allowing firefighters to keep their SCBA cylinders longer. In this case PHMSA responded to a need identified by industry, conducted a \$500,000 research study, and provided a safe solution.

In the context of hazardous materials, PHMSA is not only functional, they are a world leader in international and domestic regulations by all modes, and cooperate well with other agencies and state enforcement. FAA, on the other hand, is dysfunctional when regulating hazmat shippers. FAA's mission appears to be the elimination of hazard, as opposed to managing risk and promoting safe commerce. FAA's adversarial "us versus them" approach is myopic and unhealthy, which creates unwarranted loss for industry without commensurate safety benefits. For example, the UN recently changed a minor dimensional requirement on a label (the border is about 1 mm wider). An intelligent phase-in of this relatively insignificant difference would not be a problem, but the implementation forced by ICAO, with FAA oversight, has caused inefficiencies of discarding existing label inventory and rejected shipments which have to be disassembled and relabeled. PHMSA was quick to provide relief domestically, but ICAO refused to listen to requests by nations and airlines and opted not to provide relief for international air shipping. FAA did not engage proactively. Because of the enforcement environment created by FAA, freight companies are measuring these lines with calipers and rejecting shipments. This type of behavior is only normal in the air mode, where enforcement is frequently unreasonable without adding safety.

FAA has espoused positions at ICAO that are contrary to US regulations enacted with the support of other agencies and industry, and by acts of omission has not supported US positions. Although they've greatly expanded their hazmat enforcement resources in the last few years, FAA does not have statutory authority to regulate shippers of hazardous materials by air. Instead they use their ICAO status to create international regulations which then must be incorporated into the Code of Federal Regulations by

PHMSA. In other words, PHMSA has responsibility without authority, and must implement regulations in the USA which are contrary to PHMSA positions. FAA wields great influence, and accordingly ICAO is also becoming dysfunctional in this area, as exemplified by their attempts to remove accredited NGO's from the rulemaking process. Unlike the other international forums, the ICAO Secretariat voices opinions and does not remain impartial and neutral, and has been seen to impose positions in coordination with FAA. Recently the President of ICAO wrote to the United Nations complaining about the lack of support for air regulations of lithium batteries. However, it should be noted that ICAO has representation in the UN meeting, but only sends the Secretary and no technical experts to engage in substantive work, contrary to other delegations. The real challenges posed by lithium batteries need to be solved, rather than using them as a vehicle to redistribute power, and new air-centric systems for lithium batteries should not accrue into general deterioration of harmonization for other dangerous goods. This situation is untenable and international authority must be restored to the central agency, PHMSA.

Further, we understand that questions have been raised as to whether PHMSA functions should be decentralized and the safe transport of hazmat materials be managed under each mode. As mentioned above, a decentralized approach creates an unworkable confusion of different and potentially contradictory compliance requirements for industry. Further, one of the current administration's goals is to streamline processes and strategically review the delivery of specific programs. Decentralization would not support that goal, and to the contrary, entails bigger budgets with more full-time employees and a heavier administration. The focus should be on centralization for a more viable approach. As such, elements of the hazmat program under FAA could be transferred to PHMSA. It would streamline processes and unify positions on a number of domestic and international issues. Industry would have to engage with one agency only. This would also allow PHMSA to maximize the use of all the resources in the regions and in headquarters by including air in their multi-modal enforcement program. Precedent exists; Canada, in order to maximize resources in time of budgetary pressures, centralized all modal inspection under their program for transport of dangerous goods, and this dangerous goods directorate currently chairs the ICAO Dangerous Goods Panel.

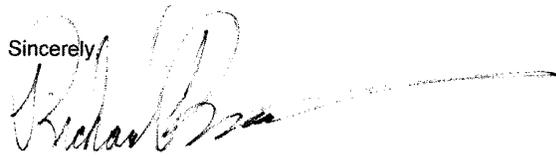
### 3. "Why do we need ANPRM's (Advanced Notice of Proposed Rulemaking)?"

Industry requests consistent usage of the ANPRM stage of the rulemaking process, which means we recommend a public consultation to coordinate with industry on goals and direction before a regulation is drafted. Without the ANPRM process, the first step is a Notice of Proposed Rulemaking, which means the regulatory text is already drafted by an agency without public input. Only minor tweaks can be made at this stage before a final rule is issued, and these have to be done without direct interaction between government and industry. Per administrative rules, an agency can't discuss issues with industry while a rulemaking is open in the stage of Notice of Proposed Rulemaking.

Congressman Denham  
Page 6 of 6  
May 10, 2017

Thank you for the opportunity to provide comments. Safety and commerce are complementary; hazmat transportation needs to be proactively controlled in order to manage risks and avoid incidents. Inappropriate and/or contradictory regulations decrease safety, which impede commerce. The PHMSA Hazardous Material Regulations are without peer in the world for fine-tuned control of a large and diverse trade. Overall, these US regulations are excellent, and necessary to ensure safety, with great flexibility and appropriate levels of restrictions. PHMSA is neither broken nor dysfunctional; we need to acknowledge and protect the great investment we have in these exemplary regulations. The reform initiative provides a platform for greater industry input in revisiting specific regulations and tweaking an already great system. We look forward to participating in this process.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Patterson", with a long horizontal flourish extending to the right.

Richard Patterson  
Executive Director