



**Testimony of John Tolman
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Representative
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Trainmen
Before the House Committee on Transportation
& Infrastructure
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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 11th through 17th rail cars derailed they fell onto a public parking lot below the bridge.¹

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 12th through 14th 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-

¹ 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.”²

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.³

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.

² See NTSB/RAR-12/01 at pg. 89.

³ 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.⁴

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.⁵

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.

⁴ 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.robain.com/Toll%20Roads.pdf> (accessed on *April 16, 2017*); http://www.wweek.com/portland/article-21194-the_toll_truth.html (accessed on *April, 16, 2017*).

⁵ <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.⁶

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.⁷ 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.⁸

⁶ David Hall, *Why Public Private Partnerships Don't Work: The many advantages of the public alternative*, pg. 46.

⁷ <https://www.usatoday.com/story/news/2016/02/18/fewer-bridges-need-repairs-but-task-still-monumental/80512038/> (accessed on *April 16, 2017*).

⁸ <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 21st 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.