STATEMENT OF

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SUBCOMMITTEE ON SURFACE TRANSPORTATION AND MERCHANT MARINE INFRASTRUCTURE, SAFETY, AND SECURITY

HEARING ON THE RAILROAD SAFETY ENHANCEMENT ACT OF 2007

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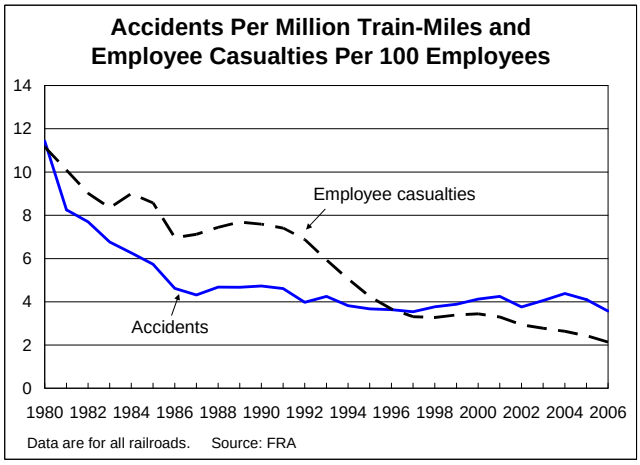
On behalf of the members of the Association of American Railroads (AAR), thank you for the opportunity to address rail safety in general and the Railroad Safety Enhancement Act of 2007 in particular. AAR members account for the vast majority of freight railroad mileage, employees, and traffic in Canada, Mexico, and the United States.

Overview of Rail Safety

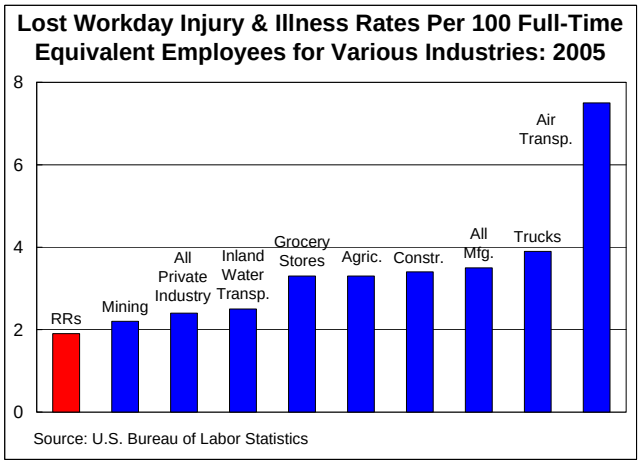
For railroads, pursuing safe operations is not an option, it is an imperative. It makes business sense and it's the right thing to do. Through massive investments in safety-enhancing infrastructure, equipment, and technology; extensive employee training; cooperation with rail labor, suppliers, customers, communities, and the Federal Railroad Administration (FRA); cutting-edge research and development; and steadfast commitment to applicable laws and regulations, railroads are at the forefront of advancing safety.

The overall U.S. rail industry safety record is excellent. As an FRA official noted in February 2007 testimony to Congress, "The railroads have an outstanding record in moving all goods safely." Rail safety continues to improve. In fact, in aggregate 2006 was the safest year for railroads ever. According to FRA data, the rail employee casualty rate in 2006 was the lowest in history, having fallen 81 percent since 1980. Likewise, the grade crossing collision rate in 2006 was the lowest ever, having fallen 76 percent since 1980. And from 1980 to 2006, railroads reduced their overall train accident rate by 69 percent. The train accident rate in 2006 was just fractionally higher than the record low.



Preliminary FRA data for the first four months of 2007 show a 14 percent improvement in the train accident rate compared with the same period in 2006, as well as improvements in the employee injury rate and the grade crossing collision rate.

Moreover, according to U.S. Department of Labor data, railroads today have lower employee injury rates than other modes of transportation and most other major industry groups, including agriculture, construction, manufacturing, and private industry as a whole. Available data also indicate that U.S. railroads have employee injury rates well below those of most major foreign railroads.



Railroads are proud of their safety record, which results from railroads' recognition of their responsibilities regarding safety and the enormous resources they devote to its advancement. At the same time, railroads want rail safety to continue to improve, and they agree that safety should be the FRA's highest priority. Railroads are always willing to work cooperatively with you, other policymakers, the FRA, rail employees, and others to find practical, effective ways to make this happen.

A commitment to safety that permeates the workplace is critical to promoting safety. Railroads have that commitment. But a healthy balance sheet is important to safety as well. A financially-viable railroad will be in a much better position to invest in safety enhancements than a financially-weak carrier.

The record investments that railroads have made in their infrastructure, equipment, and technology in recent years have made railroads much safer. These investments were

made possible by the moderate improvements in profitability that railroads have enjoyed since passage of the Staggers Rail Act of 1980. Consequently, legislative or regulatory actions that created significant new spending requirements, and/or unduly restricted rail earnings, could have unintended negative safety consequences in addition to negative capacity, efficiency, and service reliability consequences.

Of course, no budget is unlimited, even for something as important as safety and even for railroads that have experienced financial improvement in recent years. Safety will not be advanced if resources are spent on programs or requirements that do little to improve safety, or if unfunded mandates lock up resources that would have a more pronounced impact on safety if spent elsewhere. Unnecessary and unfunded mandates would increase the cost of rail service and drive more traffic to the highways, where the safety record is far less favorable than it is on the rails.

Below I will discuss several important topics associated with rail safety, discuss ways that railroads are working to advance safety in those areas, and discuss steps that we believe policymakers should take (or not take) to promote rail safety, especially as they relate to the Railroad Safety Enhancement Act of 2007. For the sake of brevity, at times I refer back to my testimony on rail safety to this committee on May 22 of this year.

Role of Technology

Technology plays a crucial role in rail safety. Much of this technology has been, and is being, developed and/or refined at the Transportation Technology Center, Inc. (TTCI) in Pueblo, Colorado, a wholly-owned subsidiary of the AAR and the world's finest rail research facility. Its 48 miles of test tracks, highly-sophisticated testing equipment, metallurgy labs, simulators, and other diagnostic tools are used to test track structure, evaluate freight car and locomotive performance, assess component reliability, and much more. The facility is owned

by the FRA but has been operated (under a competitively-bid contract with the FRA) by TTCI since 1984. TTCI is responsible for all the facility's operating costs and some capital costs.

The rail industry is pleased that some members of this committee have had the opportunity to see TTCI in person, and I extend an open invitation to others in Congress, including members of this committee, to visit the facility when they can.

In my testimony to this committee on May 22, I listed many of the technological advances that are contributing to improved rail safety, including advanced wayside detectors that identify defects on passing rail cars; ground-penetrating radar that helps identify problems below the ground (such as excessive water penetration and deteriorated ballast) that hinder track stability; advanced track geometry cars that use sophisticated electronic and optical instruments to inspect track conditions; and much more.

Train Control Technology

Among the most important new railroad technologies under development are train control systems that, in certain circumstances, can help prevent accidents by automatically stopping or slowing trains before they encounter a dangerous situation. Through predictive enforcement, train control technologies could significantly reduce the incidence of train accidents caused by human error, especially train collisions, derailments due to excessive speed, and incursions onto unauthorized trackage.

Train control systems are extremely complex. At a minimum, they must include reliable technology to inform dispatchers and operators of a train's precise location; a means to warn operators of actual or potential problems (*e.g.*, excessive speed); and a means to take action, if necessary, independent of the train operator (*e.g.*, stop a train before it reaches the physical limits of its operating authority or allowed speed). Some systems will also include additional features, such as expanding the ability to monitor the position of hand-operated

switches. Perhaps the most critical element of these systems is sophisticated software capable of accommodating all of the variables associated with rail operations. When successfully implemented, these enhanced train control capabilities will promote and enhance safe train operations.

Major railroads are engaged in various ongoing projects to test elements of this new technology. For example, BNSF has performed extensive and successful pilot testing of its version of train control (Electronic Train Management System) in Illinois and elsewhere. BNSF recently received final approval from the FRA to implement the technology on lines elsewhere on its system. Other train control projects in progress on major freight railroads include CSX's Communications-Based Train Management (CBTM) system, Norfolk Southern's Optimized Train Control (OTC) system, and Union Pacific's Communications-Based Train Control (CBTC) system.

Implementing advanced train control technology will require major capital investments in wireless networks; sophisticated location-determination systems; highly-reliable software; and digital processors on board locomotives, in dispatching offices and, for some systems, along tracks.

Railroads are committed to the development and implementation of advanced train control technology where it makes sense to do so (*e.g*, on high-density main lines, rather than low-density branch lines or yards), and at a pace that can be justified by available funds. Because there are so many variables involved, and because railroads are still investigating different train control systems and the advantages and disadvantages they offer, railroads believe that a rigid deadline is not appropriate. Railroads recognize that 2018 (the year mentioned in the legislation, though it allows the Secretary of Transportation to set an earlier date) is some years away, but the tremendous costs and complexities involved in train control

systems argue for flexibility, not rigidity, both in time and operational functionality. As an alternative to a specific date, railroads favor a commitment to provide the FRA with an implementation plan regarding train control within 12 months, with the FRA then reporting to Congress. Perhaps at that point a firmer implementation timetable could be established.

Just one of the many complexities involved concerns radio spectrum issues. Railroads use the radio spectrum in a wide variety of safety-critical settings, including yard operations, maintenance of way, police, equipment identification, end-of-train units, defect detectors, distributed power, and train control. Only radio can provide immediate information on the speed, location, and direction of the hundreds of trains that might be operating at the same time on a single railroad. Thus, safe and reliable railroad operation depends on immediate and reliable access to the radio spectrum, as well as protection against interference and encroachment on railroad frequencies by others.

However, there is concern that widespread use of train control technology could be inhibited because of "spectrum congestion" — *i.e.*, the lack of sufficient and available spectrum frequencies within the portion of the spectrum used by railroads. This problem takes on even greater urgency in light of efforts by the Federal Communications Commission to narrow (or "refarm") the bandwidth for existing channels. Suitable spectrum alternatives for nationwide usage for train control are few. The rail industry continues to investigate this issue, but may need federal government assistance in finding suitable alternatives.

Fatigue Management in the Rail Industry

It is not in a railroad's best interest to have employees who are too tired to perform their duties properly. That's why railroads have long partnered with labor to gain a better understanding of fatigue-related issues and find effective, innovative solutions to fatigue-related problems.

Combating fatigue is a shared responsibility. Employers need to provide an environment that allows their employees to obtain necessary rest during off-duty hours, and employees must set aside time when off duty to obtain the rest they need. It is also clear that factors that can result in fatigue are multiple, complex, and frequently intertwined. Therefore, efforts to combat fatigue should be based on sound scientific research, not on anecdotes or isolated events. There is no single, easy solution to fatigue-related problems, especially in an industry that must operate 24 hours per day every day of the year.

Individual railroads are pursuing a variety of fatigue countermeasures, based on what they've found to be most effective for their particular circumstances and the provisions of their collective bargaining agreements. I discussed many of these countermeasures in my May 2007 testimony. Not every countermeasure is appropriate for every railroad, or even for different parts of the same railroad, because the effectiveness of various fatigue countermeasures depends on the circumstances unique to each railroad.

Background on Railroad Hours of Service

The on-duty time of rail employees involved in operating, dispatching, and signaling trains is governed by the Hours of Service Act (HSA).

Under the HSA, rail employees who operate trains (*i.e.*, conductors and engineers) must go off duty after 12 consecutive hours on the job, and then must have at least 10 consecutive hours off duty. If they go off duty after less than 12 hours on the job, they must have at least 8 consecutive hours off duty. On-duty time starts the minute the employee reports for duty and includes any work that involves engaging in the movement of a train and deadhead transportation (see p. 9) to a duty assignment. Off-duty time starts when the employee is released from duty, generally at a designated terminal or place of lodging.

For dispatchers, a workday is limited to nine hours in a 24-hour period where two shifts are used, or 12 hours over the same period when there is only one shift.

Finally, signal employees can work a maximum of 12 consecutive hours on duty, followed by at least 10 consecutive hours off duty.

Railroads must keep detailed records specifying when each covered employee is on duty or off duty. Violations of the HSA can result in fines of between $500 and $10,000 per violation, with each employee considered a separate violation.

To comply with the HSA and still operate as a highly-competitive 24-hours per day, 7-days per week industry, freight railroads try to schedule crew assignments with as much precision as possible. Unfortunately, the nature of rail operations makes precision extremely difficult to achieve.

Most people are familiar with passenger modes of transportation, and that familiarity at times slants our thinking about how freight railroads do and should operate. A single flight crew, for example, will typically fly a plane from, say, Los Angeles to Washington. Occasionally, weather or other problems might impact airline schedules, but by and large passenger airlines are able to offer predictable, regularly-scheduled service. The fact that airlines can often "reset the clock" each day (because operations are greatly reduced at night) helps them maintain scheduled service.

Generally speaking, freight railroads are quite different. Unlike airlines, freight railroads require multiple crew changes to move commodities across the country. Railroads must use multiple local and yard assignments to gather freight at the beginning of a trip, then use multiple crews to move it across the country, and then use more local crews to deliver the freight to its final destination.

Where appropriate and practical, train scheduling is being implemented and can have positive impacts on fatigue. However, for a variety of reasons, including the variability in demand for rail transportation, weather, track conditions, provisions in collective bargaining agreements, and countless other factors, trains in many cases cannot run on a precise schedule.

Limbo Time

The HSA limits the number of hours that train crew employees can remain on duty. At times, though, because of unforeseen events, a train may be unable to reach its scheduled (or even a convenient) crew change point within its crew's allotted 12 hours.

When this happens, the crew becomes "outlawed" and must immediately stop the train and wait for a new crew to replace it. Transportation of the replacement crew to the train, and of the outlawed crew from the train to a designated location where it is released from duty, is called "deadhead" transportation. Deadhead transportation is typically provided by other rail personnel or by private contractors hired by railroads for this purpose. Deadhead time is not counted as on-duty time in either the airline or motor carrier industries.

Under existing hours of service limitations, the time a railroad crew spends waiting to be taken to a duty assignment, and the time it spends being transported to the duty assignment, count as time on duty.

However, time that outlawed crews spend waiting for deadhead transportation, and the time they spend being transported to where they are released from duty, currently count as neither time on duty nor time off duty. Instead, this time is considered "limbo time." During limbo time, the train crew has been relieved of, and will not perform, safety-sensitive duties. Employees' off-duty rest time begins only after they are released from duty (for example, to a terminal or a place of lodging).

Hours of Service Reform

Railroads support continued research on ways to fight fatigue and will continue to work with rail labor to find effective solutions to fatigue issues. To that end, railroads are amenable to a careful reexamination of the HSA's statutory limitations.

Generally speaking, railroads do not object to the provision in the Railroad Safety Enhancement Act of 2007 that prohibits train and engine and signal employees from working unless they have had at least 10 consecutive hours off duty (up from eight hours under current law) during the prior 24 hours, unless collective bargaining agreements between the railroad and affected employees provide otherwise. Railroads also do not object to a requirement that those 10 hours should be free of non-emergency communications from railroads.

Railroads disagree, though, that time spent deadheading from a duty site should count as on-duty time, rather than as limbo time.

If time spent deadheading from a duty site were counted as on-duty time, as proposed in the Railroad Safety Enhancement Act of 2007, railroads would have to calculate the approximate deadheading time and stop the train early enough to take account of that interval in order to avoid a violation of the HSA. But because limbo time generally results from unforeseen circumstances, this is not a realistic option. Countless actions as varied (and from a railroad's point of view, virtually unavoidable) as a grade crossing accident that delayed a train, a blown tire on a van carrying a train crew back to its release-from-duty site, or a sudden track washout would mean an almost certain violation of the HSA.

Railroads are aware of the provision in the proposed legislation that preserves limbo time if delays are the result of certain specified unforeseen causes, including an accident, a track obstruction, an act of God, severe weather events, a landslide, washouts, a major equipment failure, and other "unknown or unforeseeable" events. Railroads look forward to

working with you to develop a more comprehensive and better-defined list of causes of delays that should be added to this existing list. Delays caused by congestion on the network are an example of delays that should be exempted from the bill's limbo-time requirements.

Although limbo time does not contribute to employee fatigue during the immediate work assignment, railroads are aware of concerns that it could play a role in creating a cumulative sleep deficit. To guard against this possibility, railroads support three changes to current hours-of-service regulations as an alternative to changes offered in the legislation.

First, any employee who works 12 consecutive hours on duty, and then at least one hour of limbo time, would receive at least 14 hours of off-duty time once he or she is released from duty. Second, railroad train and engine employees would be subject to a new monthly maximum of 276 hours on duty. Third, even though limbo time is not on-duty time, it would be included in those 276 hours.[1] Hours beyond this new maximum, which is consistent with permissible hours for other modes of transportation, would be a violation of the HSA. (Today rail employees can theoretically work 432 hours per month and still comply with the HSA.[2])

Together, these measures not only significantly reduce the maximum on-duty time for train and engine employees under current law, but they also strike a balance between the concerns that limbo time contributes to fatigue and the realities of the unpredictability of railroad operations.

The above proposal is the railroad industry's preferred approach. Failing use of this approach, railroads would support a transfer of the hours of service authority to the FRA, with reliance on FRA's professional judgment.

[1] Kansas City Southern and Canadian National do not agree with this position, and Amtrak abstains on the issue.

[2] In fact, though, railroads know of no cases where this has occurred. The vast majority of railroad workers are on duty each month for periods comparable to most other U.S. workers. Some 83 percent of these rail workers are on duty less than 200 hours per month and more than 95 percent are on duty less than 250 hours per month.

Another provision in the Railroad Safety Enhancement Act of 2007 mandates that train and engine employees cannot work unless they have had at least 24 consecutive hours off duty during the previous seven days. This limit is arbitrary and inconsistent with railroad work schedules, particularly for employees assigned short hauls and who work in terminals. Generally speaking, the limit would be appropriate if extended one more day, to require 24 consecutive hours off duty in a period of eight consecutive days. Railroads do support a provision in the bill that allows exemptions from the legislation's requirements for train employees in cases where a collective bargaining agreement provides a different arrangement.

Although modified work schedules are permitted by the HSA, they are not permitted by Federal Motor Carrier Safety Administration (FMCSA) hours-of-service regulations, which apply to the many railroad signal employees who drive commercial vehicles to perform their duties. Several years ago, railroads and rail labor (through the Brotherhood of Railroad Signalmen) petitioned FMCSA to allow the HSA to take precedence over FMCSA's hours of service requirements. To date, FMCSA has refused. Railroads strongly endorse the provision in the Railroad Safety Enhancement Act of 2007 that clarifies that railroad signal employees who operate motor vehicles are subject only to hours of service requirements promulgated by the FRA, and not by those issued by any other government agency (including FMCSA).

Another provision in the proposed legislation prohibits railroads from invoking the emergency work provision for signal employees for "routine repairs, maintenance, or inspection." (Under the HSA, signal workers are permitted to work more hours during emergencies than they can during non-emergencies.) Presumably, the purpose of this provision is to prevent railroads from "gaming the system" by invoking the emergency work provision when an emergency does not exist. The railroads do not object to statutory language ensuring the provision is only invoked when appropriate.

Finally, railroads do not oppose the imposition of hours of service regulations on contractor employees doing work which, if done by a railroad employee, would be subject to hours of service regulation. However, the contractor — not the railroad — should be responsible for compliance. Railroads can make contractor employees follow railroad rules while working on railroad projects, but railroads lack the ability to police contractors' overall labor policies and employee hours.

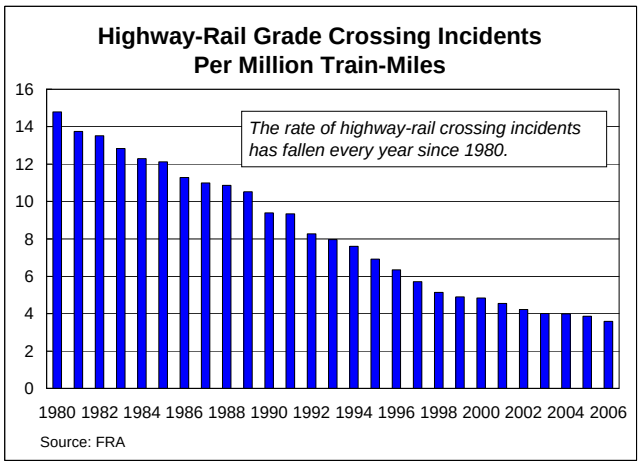
If policymakers determine that any group of non-railroad employees should be subject to hours of service limitations, policymakers should address the issue with those groups directly, not indirectly through railroads. As written, the Railroad Safety Enhancement Act of 2007 would apply hours of service restrictions to contractor signal employees and would hold a railroad responsible for compliance by its contractor employees.

Highway-Rail Grade Crossings and Trespassers

Collisions at grade crossings, along with incidents involving trespassers on railroad rights-of-way, are critical safety problems. In 2006, these two categories accounted for 97 percent of rail-related fatalities. Although these incidents usually arise from factors that are largely outside of railroad control[3], and even though highway-rail crossing warning devices are properly considered motor vehicle warning devices there for the benefit of motorists, not trains, railroads are committed to efforts aimed at further reducing the frequency of crossing and trespasser incidents.

[3] A June 2004 report by the U.S. DOT's Office of Inspector General (OIG) confirmed that motorist behavior causes the vast majority of grade crossing accidents. According to the OIG report, "Risky driver behavior or poor judgment accounted for 31,035 or 94 percent of public grade crossing accidents" from 1994-2003. The remaining accidents included such circumstances as vehicles stuck, stalled, or abandoned at crossings.

Much success has already been achieved. In 1980, according to FRA data, 10,611 grade crossing collisions resulted in 833 fatalities and 3,890 injuries. According to the most recent available FRA data, 2,918 collisions in 2006 (down 73 percent) involved 368 fatalities (down 56 percent) and 1,010 injuries (down 74 percent). The rate of grade-crossing collisions per million train-miles fell 76 percent from 1980 through 2006, and has fallen every year since 1980. And because total exposure (train-miles multiplied by motor vehicle-miles) has risen sharply over time, the reduction in crossing incidents and casualties per unit of exposure has been even higher.



The Section 130 program, a national highway safety program created by the Highway Safety Act of 1973 and expanded most recently in SAFETEA-LU, is a major reason for the impressive grade crossing safety gains. Under the program, funds are apportioned to states each year for the installation of new active warning devices such as lights and gates, upgrading existing devices, and replacing or improving grade crossing surfaces. The rail industry commends and thanks the members of this committee and others in Congress for their support of this critical program.

Railroads continue to work hard to improve grade-crossing safety, including cooperating with state agencies to install and upgrade grade crossing warning devices and signals (and bearing the cost of maintaining those devices); helping to fund the closure of unneeded or redundant crossings; and supporting the national Operation Lifesaver grade

crossing and pedestrian safety program. Railroads spend more than $250 million annually to improve, operate, and maintain grade crossings.

A recent initiative that will result in improved safety is the use of "stop" or "yield" signs along with crossbucks at grade crossings. The National Committee on Uniform Traffic Control Devices has recommended revising the Manual of Uniform Traffic Control Devices (MUTCD) to require the use of stop or yield signs in conjunction with crossbucks to make it clear what is expected of motorists at crossings. The AAR strongly supports amending the MUTCD as recommended by the committee and follow through on sign installation. The AAR also supports the FRA's recommendation, included in its May 2006 report to Congress on emergency notification systems for grade crossings, that signs comply with the MUTCD recommendations.

The AAR's testimony to this committee on May 22 noted a number of other engineering, education, and enforcement actions that should be implemented so that further improvement in crossing safety can be achieved, such as adopting a uniform national grade crossing closure process; continuing to fund the national Operation Lifesaver grade crossing and pedestrian safety program (addressed in Section 206 of the Railroad Safety Enhancement Act of 2006); increasing federal liability insurance requirements for contractors whose funded projects interface with or impact a railroad; and enhancing grade crossing traffic law enforcement by requiring grade crossing safety as part of commercial driver's license educational curricula and by maintaining tough grade crossing traffic violation penalties.

Class I railroads support (and, in fact, are already engaged in) a program to provide the public with telephone numbers, posted at public grade crossings and at private crossings open to unrestricted public access (as declared in writing to the railroad by the holder of the crossing right), that can be called in the event of grade-crossing emergencies. Railroads also

support a requirement for the development of model legislation that provides for penalties for violations of grade crossing laws, which occurs far too often — and often with tragic results. Both of these issues are addressed in the Railroad Safety Enhancement Act of 2007.

Railroads have programs in place to control vegetation on their property near crossings because they agree that motorists' sight lines should not be obstructed. If Congress decides that there should be a federal requirement for clearing vegetation for this purpose, then the federal requirement should preempt state or local laws so that there is national uniformity. FRA implementing regulations should also specify a required clearance distance, rather than simply call for "reasonable" clearance. Of course, railroads have limited ability to address vegetation at private crossings and on private land adjacent to railroad rights-of-way.

Trespassers

Since 1997, significantly more fatalities on railroad property have been associated with trespassers than with highway-rail grade crossing accidents. It is an unfortunate reality that too many people inappropriately use railroad property for short cuts, recreation, or other purposes, sometimes with terrible results. Railroads are engaged in ongoing efforts to educate the public that, for their own safety, they should stay off rail property.

Each year, scores of people tragically choose to end their life by stepping or lying in front of a train. To help prevent the tragedy of suicide, railroads support the Suicide Prevention Action Network (SPAN USA), a charitable organization dedicated to preventing suicide through public education and awareness; community action; and federal, state, and local grassroots advocacy. In addition, through its Railroad Research Foundation, the AAR is researching the prevalence of, and underlying causal factors for, rail-related suicides. Such understanding could facilitate countermeasures to reduce suicides on railroad rights-of-way.

Other Provisions in the Railroad Safety Enhancement Act of 2007

Railroads have comments regarding various other provisions of the Railroad Safety Enhancement Act of 2007:

- Railroads strongly support the provision that authorizes funding for the design, development, and construction of a Facility for Underground Rail Station and Tunnel at the Transportation Technology Center in Pueblo, Colorado. As the legislation notes, this facility would be used to test and evaluate the vulnerabilities of rail tunnels, to mitigate and remediate the consequences of accidents and incidents in tunnels, and to provide a realistic scenario for training emergency responders.

- Section 401 requires railroads and railroad contractors to develop training programs, approved by the FRA, for classes of employees that the Department of Transportation deems appropriate. Railroads agree that a well-trained work force is essential to safe and efficient railroad operations. After all, "human factors" (*i.e.*, human error) is the cause of more rail accidents than any other single factor, and in most (if not all) of these accidents, the employee(s) involved broke a rule or set of rules.

  A new rigid federal program would be redundant and is unnecessary, since railroads already have procedures in place, including ongoing training programs overseen by the FRA, to ensure that their workforce is adequately trained. New locomotive engineers, for example, receive at least 15 to 20 weeks of classroom and on-the-job training as a conductor before beginning work. Locomotive engineer training will add an additional 20-25 weeks before they are certified and ready to work. Total costs to train a conductor and later an engineer range from $52,000 to more than $70,000 per individual.

- Section 402 requires the Department of Transportation to report on whether certification of certain classes of employees is "necessary" to improve safety. Locomotive engineers require certification. Certification requirements for other classes of rail employees (*e.g.*, conductors) would be burdensome without accomplishing any safety objective. Certification is not necessary to ensure that rail employees are appropriately trained.

- Section 302 significantly increases (from $10,000 to $25,000) the maximum fine for railroad safety violations. This proposed higher fine is disproportionate. By comparison, the maximum penalty for a violation of safety requirements by motor carriers (railroads' primary competitors) is $5,000.

- Sections 406 and 407 provide for railroad safety technology grants and railroad safety infrastructure improvement grants, respectively. Improved rail safety benefits the public, not just railroads, making financing partnerships appropriate.

- Camp cars, house trailers on wheels, and emergency trailers have been a vital part of the railroad industry for many years. They serve as safe, dependable places for railroad workers to eat and sleep in many isolated, undeveloped areas where motels

and restaurants are not easily accessible. Any notion that they have a negative impact on employee quality of life is misplaced. One Class I railroad which relies on camp cars in the remote locations it serves is currently modernizing its cars and converting them from eight-person to four-person sleepers, with two full baths, desks, and modern HVAC systems. Employee reaction on that railroad has been extremely positive. This same railroad has a 44-car "emergency fleet" that is critical to its ability to respond to emergencies and natural disasters such as Hurricane Katrina. These cars stand at the ready to be deployed to handle emergency situations at a moments notice.

The FRA already has formal guidelines governing the location and sanitary conditions of railroad camp cars. The imposition of any restrictions on the future use of camp cars is not only unwarranted but would force employees to venture long distances in unfamiliar environments to seek lodging and dining facilities that are likely to be inadequate. Again, such travel does not enhance employee health and safety.

Performance Standards

There are two general approaches to workplace safety regulation: design-based standards and performance standards.

Design-based standards specify the precise characteristics of facilities, equipment, and processes a firm must use in the manufacture or delivery of its product or service. The FRA relies overwhelmingly on design-based standards in regulating rail safety. Design-based standards are costly for both railroads and the FRA to administer and maintain. They also tend to impede innovation by "locking in" existing designs, technology, and ways of thinking.

The discolored wheel rule provides a classic example of a design-based standard that discourages new technology. This FRA rule required railroads to remove freight car wheels that showed four or more inches of discoloration, on the grounds that such discoloration could portend wheel failure. However, research demonstrated conclusively that discoloration in new heat-treated, curved-plate wheels did not portend failure. Despite this evidence, the FRA took more than a decade to exempt such wheels from the requirement. During this period, railroads had to discard perfectly safe wheels at a cost that reached $100 million per year.

In contrast to design-based standards, performance-based standards define the desired result, rather than mandate the precise characteristics that a workplace must exhibit. Performance-based goals focus attention and effort on the outcome, not the method.

Under one type of safety regime based on performance standards, each railroad would have goals for train safety (*e.g.*, accidents per million train-miles) and employee safety (*e.g.*, injuries per 100 employees) as part of a comprehensive risk management plan, based on targets established by the industry and approved by the FRA. If a railroad failed to meet these goals, it would come under increased FRA scrutiny, be required to specify how it planned to correct the problems, and eventually be subject to monetary penalties or even a return to design-based regulation.

While some (but not all) of the old regulations would be suspended under a performance-standard regime, the FRA would retain the power to conduct safety audits and to impose emergency directives at any time to protect public safety.

Under safety performance standards, railroads would have the opportunity and incentive to achieve safer operations as efficiently as possible. Performance standards would rely on the superior knowledge of railroads and their employees and would give railroads the discretion to experiment with new technologies and processes to improve safety. The result would be *superior* safety performance at a lower cost to railroads and their customers.

Risk-based performance standards represent a reform, not an abandonment, of safety regulation. Except in emergencies or after continued failure to meet targets, the FRA would no longer specify how a railroad would achieve its safety goals. Instead, the FRA would oversee and validate the goal-setting process, ensure that measures and data are accurate, and impose any necessary sanctions.

Railroads respectfully suggest that the Railroad Safety Enhancement Act of 2007 should incorporate performance standards as much as possible in place of rigid and unresponsive design-based rules to regulate safety in the railroad industry.

Conclusion

Thank you for the opportunity to testify on this critical topic. The railroad industry is committed to working with its employees, Congress, the FRA, its customers, and others to ensure that rail safety continues to improve.