Testimony of

The Honorable Jennifer Homendy
Member
National Transportation Safety Board

Before the

Committee on Commerce, Science, and Transportation

— On —

Amtrak: Next Steps for Passenger Rail

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NTSB | National Transportation Safety Board
An Independent Federal Agency

Good morning Chairman Wicker, Ranking Member Cantwell, and Members of the Committee. Thank you for inviting the National Transportation Safety Board (NTSB) to testify today.

Congress established the NTSB in 1967 as an independent agency within the United States Department of Transportation (DOT) with a clearly defined mission to promote a higher level of safety in the transportation system. In 1974, Congress reestablished the NTSB as a separate entity outside of the DOT, reasoning that "no federal agency can properly perform such (investigatory) functions unless it is totally separate and independent from any other . . . agency of the United States."[1] Because the DOT has broad operational and regulatory responsibilities that affect the safety, adequacy, and efficiency of the transportation system, and transportation accidents may suggest deficiencies in that system, the NTSB's independence was deemed necessary for proper oversight.

The NTSB is charged by Congress with investigating every civil aviation accidents in the United States and significant accidents in other modes of transportation—highway, rail, marine, and pipeline. We determine the probable cause of the accidents we investigate, and we issue recommendations to federal, state, and local agencies, as well as other entities, aimed at improving safety, preventing future accidents and injuries, and saving lives. The NTSB is not a regulatory agency—we do not promulgate operating standards nor do we certificate organizations and individuals. The goal of our work is to foster safety improvements for the traveling public.

Our Office of Railroad, Pipeline and Hazardous Materials Investigations is responsible for investigating railroad accidents. The majority of railroad investigations involve freight train accidents, such as collisions and derailments, but the office also places special emphasis on train accidents that involve the traveling public, such as passenger train and rail transit accidents. Based on these accident investigations, the NTSB issues safety recommendations to federal and state regulatory agencies, industry and safety standards organizations, railroads, rail transit agencies, manufacturers and emergency response organizations. There are currently 25 open recommendations that we have made to Amtrak, and 89 open recommendations that we have made to the Federal Railroad Administration (FRA). [2]

Our nation's system of rail transportation is generally safe. However, when an accident does occur the consequences can be devastating. When there is a fatality or an accident involving a passenger train, it is the NTSB's role to investigate, determine probable cause, and issue safety recommendations. Recent accidents involving passenger rail remind us of the need to be vigilant in improving safety, and should compel all those who are responsible for the safety of rail transportation and of the travelling public to make improvements.

On May 15, 2019, the Board held a meeting to determine the probable cause of the December 18, 2017, derailment of Amtrak train 501 onto Interstate 5 near DuPont, Washington.[3] Of the 83 people on the train, 3 passengers died, and 57 passengers and crew members were injured. In addition, eight people in highway vehicles were injured. There were multiple factors

[1] Independent Safety Board Act of 1974 § 302, Pub. L. 93-633, 88 Stat. 2166–2173 (1975).
[2] A list of all open and closed unacceptable recommendations to Amtrak and the FRA is contained in the appendix.
[3] NTSB, *Amtrak Passenger Train 501 Derailment, DuPont, Washington, December 18, 2017.*

contributing to this accident and its severity, but the tragic fact is that it, and the deaths and injuries that resulted, were preventable. Several of the factors relate to safety issues that we have identified and made recommendations to address in previous investigations.[4] This testimony will discuss those issues and the need to address them in order to prevent the continued recurrence of such accidents.

Positive Train Control

Positive Train Control (PTC) is an advanced train control system designed to prevent train-to-train collisions, overspeed derailments, incursions into established work zones, and movement through a switch left in the wrong position. The first NTSB-investigated accident that train control technology would have prevented occurred in 1969, when 4 people died and 43 were injured in the collision of two Penn Central commuter trains in Darien, Connecticut. In the 50 years since then, we have investigated over 150 accidents that could have been prevented by PTC. These accidents have claimed almost 300 lives.

On February 4, 2019, we announced our Most Wanted List of Transportation Safety Improvements for 2019–2020, which identifies the top safety improvements that can be made across all modes to prevent accidents and injuries and save lives, based on our investigations.[5] The implementation of PTC appeared on the first Most Wanted List in 1990, and remains on the current list due to lack of full implementation.

According to Amtrak's First Quarter 2019 PTC Progress Report submitted to the FRA, Amtrak has made progress in implementing PTC on the tracks that it owns. Amtrak-owned locomotives are all PTC-equipped and 85 percent of the route miles on its own tracks are operational. [6] However, Amtrak's progress toward PTC implementation on host railroads cannot be determined through reports provided to the FRA because the host railroads report on the entirety of their systems (all locomotives and all infrastructure), with no transparency as to whether Amtrak is PTC operational on their lines. Additionally, the NTSB remains concerned about the FRA's granting of exemptions to PTC, including more than 1,400 miles of freight railroad-owned track on which Amtrak operates, some of which is in dark (non-signaled) territory.

In the DuPont investigation, the Central Puget Sound Regional Transit Authority (Sound Transit) had identified the need for PTC to mitigate the risk of the accident curve on the Point Defiance Bypass; and, at the time of the accident was working with Amtrak and BNSF Railway on the installation, testing and verification, and validation of the PTC system on the route. However, service was initiated even though neither PTC, nor any other risk mitigation, had been implemented. Without PTC and the lack of oversight to implement mitigations, there was an increased safety risk to the traveling public. We found that had PTC been fully installed and operational at the time of the accident, it would have intervened to stop the train prior to the curve, thus preventing the overspeed derailment.

[4] A list of all open recommendations to Amtrak is contained in the appendix.
[5] National Transportation Safety Board, *2019–2020 Most Wanted List*.
[6] Amtrak Quarter 1, 2019, PTC Progress Report.

As a result of the DuPont investigation, we have recommended that the FRA prohibit the operation of passenger trains on new, refurbished, or updated territories unless PTC is implemented. PTC must be fully implemented to ensure the safety of railroad passengers and crews.

Speed Limit Action Plans

Without PTC in place, it was critical for Sound Transit, Amtrak, and FRA to ensure that processes and procedures were in place to reduce the risk of derailment at the accident curve due to train overspeeds. The maximum authorized speed for passenger trains on the Point Defiance Bypass was 79 miles per hour (mph), but it reduced to 30 mph at the curve.

Section 11406 of the Fixing America's Surface Transportation Act of 2015 (the FAST Act) required each railroad carrier providing intercity rail passenger transportation or commuter rail passenger transportation, in consultation with host railroad carriers, to survey their systems and identify each main track location where there is a reduction of more than 20 mph from the approach speed to a curve, bridge, or tunnel. The carriers also must develop appropriate actions to enable warning and enforcement of the maximum authorized speed for passenger trains at each of those locations. The plans must be reviewed and approved by the Secretary of Transportation, who is also provided authority to add conditions to the approval. The FAST Act did not require the FRA to continue to solicit updates from railroads beyond the initial submission deadline, nor did FRA pursue additional submissions for new or updated routes from railroads that owned or operated service on such routes even though the FRA has authority to do so. Because the upgrade had not yet occurred at the time of the enactment of the FAST Act, the accident curve was not addressed in any speed limit action plans. Additionally, FRA did not require railroads in the planning or construction phases of projects to evaluate the potential risk to future operational territories, and Sound Transit did not apply risk mitigation strategies as outlined by the FAST Act on the accident curve.

For its part, Amtrak had planned to update its Speed Limit Reduction Action Plan through a General Order implementing a "crew focus zone" at the accident curve. Crew focus zones are locations where the operating crews are required to communicate warnings of upcoming speed restrictions. This was not planned to be completed until January 2018, several weeks after revenue service on the subdivision had begun. We recommended that Amtrak update its safety review process to ensure all operating documents are up to date and accurate before initiating new or revised revenue operations.

Although FRA participated in the Point Defiance Bypass project through federal grant funding administration and safety oversight, FRA officials located in both headquarters and in the field failed to recognize that additional hazard mitigations strategies were not implemented by Sound Transit or Amtrak at the accident location. While the FAST Act did not require it, the FRA should have ensured that speed limit action plans include new or updated routes owned or operated by railroads. As a result of this investigation, we have recommended that FRA require intercity and passenger railroads to periodically review and update their speed limit action plans to reflect any operational or territorial operating changes requiring additional safety mitigations and to continually monitor the effectiveness of their speed limit action plan mitigations. We also

recommended that the agency require railroads to apply their existing speed limit action plan criteria for overspeed risk mitigation to all current and future projects in the planning, design, and construction phases, including projects where operations are provided under contract.

Safety Culture and Management

Our investigation of the DuPont accident, as well as of the February 4, 2018, collision of Amtrak train 91 and a CSX train in Cayce, South Carolina, highlighted that there is inconsistency in the approach to managing safety on the territories in which Amtrak operates. Amtrak operates on track that it owns, as well as track that it does not own—referred to as a host railroad. Amtrak maintains host railroad agreements to access the infrastructure necessary to provide nationwide passenger rail service. On July 10 and 11, 2018, we held an investigative hearing regarding the DuPont and Cayce accidents to explore issues on managing safety on passenger railroads.[7]

In the Cayce accident, the Amtrak train unexpectedly entered a siding and collided with a stationary CSX freight train. Two of the Amtrak crewmembers—the engineer and the conductor—were killed, and 91 others transported to medical facilities.[8] At the time of the accident, a signal suspension was in place through the area, due to signal work being done by CSX, including upgrades to prepare for implementation of PTC. Trains were being directed through the area by a CSX dispatcher, who would issue warrants, or permissions, to use the main line.[9] The crew of the CSX train had completed work in the area, moved the train to the siding, and released their authority to use the main line back to the dispatcher. However, the switch on the main line was left open to the siding and locked. As we saw in DuPont and other accidents, this accident also demonstrates Amtrak's incapability to control or influence the management of safety on the host railroad. When operating over the territory of a host railroad Amtrak is subjected to the risk mitigation strategies implemented by that host. Although there is a host railroad agreement in place between Amtrak and the host railroad, this agreement does not establish the parameters for safe operations and a consistent level of risk mitigation from host railroad to host railroad.

Amtrak relies on host railroads to meet the minimum federal safety standards to ensure safe operations of Amtrak trains. However, on its own territory, Amtrak aims to meet and exceed these standards. Our investigation of the DuPont derailment determined that, to improve safety for the public, Amtrak needs to implement a safety management system (SMS) program on all of its operations, whether internal or on a host railroad. We have recommended that Amtrak work collaboratively with all host railroads and states that own infrastructure over which Amtrak operates to develop and implement a comprehensive SMS program.

[7] NTSB, Investigative Hearing: Managing Safety on Passenger Railroads (July 10-11, 2018).
[8] NTSB, *Amtrak Passenger Train Head-on Collision With Stationary CSX Freight Train, Cayce, South Carolina, February 4, 2018.*
[9] Signal suspension means train control signals located alongside the track have been taken out of service, oftentimes for maintenance or system upgrades. When these signals are taken out of service, train movements are controlled by means such as absolute blocks or by track warrants.

The NTSB has long recommended the implementation of SMS across all modes of transportation. For example, SMS is becoming a standard of practice among Part 121 commercial aviation operators. There are four components to SMS per Federal Aviation Administration Order:

- a safety policy that sets out what the organization is trying to achieve; outlines the requirements, methods, and processes the organization will use to achieve the desired safety outcomes; establishes senior leadership's commitment to incorporate and continually improve safety in all aspects of the business; and reflects management's commitment to implementing processes and procedures for establishing and meeting safety objectives and promoting a safety culture.
- a safety risk management process that identifies all hazards, analyzes the risk, assesses the risk, controls the risk, and then continually evaluates whether those risk management strategies are working.
- a safety assurance process that evaluates the continued effectiveness of, and compliance with, requirements and implemented risk control strategies and supports the identification of new hazards.
- a safety promotion program which includes training, communication, and other actions to create a positive safety culture within all levels of the workforce.

Had Amtrak developed and implemented a comprehensive SMS, the DuPont accident, and others, would likely never have occurred.

This accident is not the first time we have raised the importance of Amtrak implementing SMS. In 2016, an Amtrak train traveling near Chester, Pennsylvania, struck a backhoe with a worker inside, killing the operator and a track supervisor and injuring 39 others.[10] We found that Amtrak allowing a passenger train to travel at maximum authorized speed on unprotected track where workers were present, the absence of worker protection devices, the failure of the foreman to conduct a job briefing at the start of the shift, all coupled with the numerous inconsistent views of safety and safety management throughout Amtrak, led to the accident. We also found that Amtrak did not have an effective program to ensure that its employees, especially those in safety-sensitive positions, were drug-free while performing their public transportation duties. We continue to investigate other accidents where unsafe practices have killed railway workers In our report, we recommended that Amtrak develop a comprehensive SMS that vitalizes safety goals and programs with executive management accountability; incorporates risk management controls for all operations affecting employees, contractors, and the traveling public; improves continually through safety data monitoring and feedback; and is promoted at all levels of the company.

The Rail Safety Improvement Act of 2008 required the Secretary of Transportation to promulgate a regulation that requires each Class I railroad and railroad carriers that provide intercity rail passenger or commuter rail passenger transportation to develop and implement a railroad safety risk reduction program that systematically evaluates railroad safety risks on its system and manages those risks in order to reduce the numbers and rates of railroad accidents, incidents, injuries, and fatalities. On August 12, 2016, the FRA published a final rule to implement the 2008 mandate, known as the System Safety Program, with an initial effective date of October

[10] NTSB, *Amtrak Collision with Maintenance-of-Way Equipment, Chester, Pennsylvania, April 3, 2016.*

11, 2016.[11] However, the enactment of the final rule has been continually delayed, and on June 12, 2019, the FRA issued a notice of proposed rulemaking seeking to further delay for an undetermined time period the final rule for a seventh time.

As part of our investigation into the collision near Chester, Pennsylvania, we found that by delaying progressive system safety regulation, the FRA had failed to maximize safety for the passenger rail industry and the traveling public and recommended that the FRA enact the System Safety Program without further delay. We also recommended that Amtrak and the labor unions work collaboratively to develop and implement a comprehensive SMS program that complied with the pending System Safety Program regulation.

We also reiterated our recommendation to FRA to enact the 2016 final rule without delay in the DuPont accident report. Despite evidence further demonstrating the need for the timely enactment of the System Safety Program regulation, the FRA continues to delay the requirement for commuter and intercity passenger railroads to improve the safety of their operations. It has been 11 years since Congress mandated implementation of a final rule. The rule itself provides another year for railroads to submit their plans for review and approval to the FRA and another three years for them to implement it, which means a full 15 years will have gone by before the mandate is even implemented, and that is assuming there is not another delay as the FRA has proposed. The absence of a sense of urgency by the FRA to implement this safety recommendation and the willingness to continue to jeopardize the safety of train crews and their passengers is unacceptable. The railroads should not wait one more day on the FRA to implement a final rule, and each railroad should take swift action to ensure system safety.

Training

The failure of Sound Transit to provide an effective mitigation for the hazardous curve on the Point Defiance Bypass without PTC in place allowed the engineer of Amtrak 501 to enter the curve at too high of a speed due to his inadequate training on the territory and inadequate training on the newer equipment.

Our investigation found that the engineer only had rudimentary knowledge and experience with both the accident locomotive and the physical characteristics of the territory. The Amtrak qualification program for the Point Defiance Bypass did not effectively train and test qualifying crewmembers on the physical characteristics of a new territory, and Amtrak did not provide sufficient training on all characteristics of the Charger locomotive, the type of lead locomotive involved in the accident. The engineer had qualified on the route two days before the accident, and the accident trip was his first time operating on the territory in revenue service and without supervision. He was accompanied in the operating compartment by a qualifying conductor who was making his first trip over that territory. The engineer's qualification training included a number of observation rides, then making two northbound and one southbound trips while operating the train under supervision. Some of these trips were made on the Charger locomotive.

As a result of our investigation, we made recommendations to Amtrak to improve training for crewmembers to ensure proficiency on the physical characteristics of a territory and operating

[11] 49 CFR Part 270

characteristics of locomotives, including through the use of simulators. Simulators are very useful in addressing in a controlled environment operating behaviors that are either too dangerous to undertake using actual equipment or that must be evaluated more precisely than is possible through observation alone. However, to be most effective, this type of training must closely reproduce the conditions and operating tasks of the equipment being represented.[12]

We also recommended that Amtrak conduct training that specifies and reinforces how each crewmember, including those who have not received their certifications or qualifications, may be used as a resource to assist in establishing and maintaining safe train operations.

Passenger Rail Car Crashworthiness

The rail cars involved in the DuPont accident have a unique design, different from conventional United States passenger equipment. The Talgo Series VI trainsets were manufactured by Talgo for Amtrak and the Washington State Department of Transportation between 1996 and 1998, and the accident trainset was built in 1998. On May 12, 1999, the FRA published a final rule strengthening passenger equipment safety standards.[13] The Talgo Series VI trainsets did not meet the requirements of the new rule, so Amtrak petitioned the FRA to grandfather or permit the use of the Talgo Series IV trainsets on three corridors, including the Pacific Northwest corridor between Eugene, Oregon, and Blane, Washington, via Portland and Seattle (Puget Sound route). In 2009, the FRA ultimately authorized the use of the Talgo Series VI on the route. However, the FRA did express concern about the performance of the trainsets in higher energy events, particularly collisions at greater than 25 mph. Additionally, although risk analyses conducted by Amtrak at the request of the FRA showed that PTC would have reduced the risk of fatality by 47 percent and injury by 30 percent, the FRA did not require implementation of PTC on the route, even the FRA had the authority to attach special conditions to the approval of the petition.[14]

On September 6, 2017, Amtrak submitted a petition to the FRA requesting permission to operate the Talgo Series VI trainsets on Sound Transit's Lakewood Subdivision near Tacoma, Washington. On December 14, 2017, just four days before the accident, FRA determined that granting Amtrak's request was "in the public interest and consistent with railroad safety" with no risk assessment of the new route or review of the risk of operations between the original route and the new route.[15]

As the result of our investigation, we found that the Talgo Series VI did not provide adequate occupant protection, resulting in complex uncontrolled movements and secondary collisions with the surrounding environment which led to damage so severe to the railcar body structure, that it caused passenger ejections. The failure of the railcars directly resulted in three fatalities and two partially ejected passengers. We recommended that WSDOT discontinue the use of the Talgo Series VI trainsets as soon as possible and replace them with passenger railroad equipment that meets all current safety requirements. We also found that allowing the

[12] NTSB, *Derailment and Collision of Amtrak Passenger Train 66 with MBTA commuter train 906 at Back Bay Station, Boston, Massachusetts, December 12, 1990.*
[13] 49 CFR Part 238
[14] FRA Docket ID: FRA-1999-6404
[15] https://www.regulations.gov/document?D=FRA-1999-6404-0098

grandfathering provision to remain in FRA regulations is an unnecessary risk that is not in the public interest nor consistent with railroad safety, and recommended its removal.

Audio and Image Recorders

In the DuPont accident, the locomotive was equipped with an inward-facing image recorder that provided investigators with both a visual and audio recording of the crewmember activities during the accident trip. Amtrak installed these devices even though they are not required by the FRA. This accident demonstrated the value of image and audio data for investigations and development of safety recommendations

Dozens of previous railroad accident investigations would have benefitted from this technology. These types of recorders are also critical to improving operational safety and management oversight. When investigating the September 12, 2008, accident in Chatsworth, California, we were unable to determine the actions of the Metrolink engineer leading up to the collision and after discovering some illicit activities by the engineer during previous trips. The railroad had no way of monitoring the engineer's activities to ensure appropriate behaviors. This accident, in which 25 people were killed and 102 people were injured, underscored the importance of understanding the activities of crewmembers in the time leading up to the accident. As a result of that investigation, we recommended that the FRA require the installation, in all controlling locomotive cabs and cab car operating compartments, of crash- and fire-protected inward- and outward-facing audio and image recorders.[16] The FAST Act required the Secretary of Transportation to require each railroad carrier that provides regularly scheduled intercity rail passenger or commuter rail passenger transportation to the public to install inward- and outward-facing image recording devices in all controlling locomotive cabs and cab car operating compartments in such passenger trains.

We continue to believe that inward- and outward-facing audio and image recorders improve the quality of accident investigations and provide the opportunity for proactive steps by railroad management and the FRA to improve operational safety. Nonetheless, after six reiterations of the NTSB's recommendations, the FRA has not taken positive action regarding inward-facing devices nor developed inward-facing recorder regulations as required by the FAST Act. Therefore, as a result of the DuPont investigation, we have recommended that the Secretary of Transportation require the FRA issue regulations for inward-facing recorder regulations that include audio recordings as recommended by NTSB, not just image recordings as required in the FAST Act.

Conclusion

Over the last 52 years, our investigations have found that railroad safety is a shared responsibility among operators, government oversight agencies, and local communities.

Railroads remain one of the safest means of transportation. However, the consequences are tragic when there is a lack of PTC, lack of SMS, or insufficient training. Our 2019 – 2020 Most Wanted List of Transportation Safety Improvements includes additional safety issues related to rail that, if addressed, would make a significant impact. To that end, the NTSB urges FRA, Amtrak, and other operators to expeditiously implement all NTSB safety recommendations.

[16] NTSB Safety Recommendations R-10-001 and R-10-002.

We recognize the progress that has been made; yet, there will always be room for improvement. The NTSB stands ready to work with the Committee to continue improving the safety of our nation's rail network.

Thank you again for the opportunity to testify today. I am happy to answer your questions.

Appendix
Open Safety Recommendations to Amtrak (as of June 26, 2019)

R-15-28	TO THE NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK): Install, in all controlling locomotive cabs and cab car operating compartments, crash- and fire-protected inward-and outward-facing audio and image recorders capable of providing recordings to verify that train crew actions are in accordance with rules and procedures that are essential to safety as well as train operating conditions. The devices should have a minimum 12-hour continuous recording capability with recordings that are easily accessible for review, with appropriate limitations on public release, for the investigation of accidents or for use by management in carrying out efficiency testing and system wide performance monitoring programs.	Open - Acceptable Response
R-15-29	TO THE NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK): Semi-annually, issue a public report detailing Amtrak's progress in installing crash- and fire-protected inward-and outward-facing audio and image recorders. The report should include the number of locomotives and cab car operating compartments that have been equipped with the recorders, as well as the number of locomotives and cab car operating compartments in Amtrak's fleet that still lack those devices.	Open - Acceptable Response
R-16-37	TO THE NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK): Incorporate strategies into your initial and recurrent training for operating crewmembers for recognizing and effectively managing multiple concurrent tasks in prolonged, atypical situations to sustain their attention on current and upcoming train operations.	Open - Acceptable Response
R-16-45	TO BNSF RAILWAY, CANADIAN NATIONAL RAILWAY, CANADIAN PACIFIC RAILWAY, CSX TRANSPORTATION, KANSAS CITY SOUTHERN RAILWAY, NORFOLK SOUTHERN RAILWAY, INTERCITY RAILROADS, AND COMMUTER RAILROADS: Review and revise as necessary your medical rules, standards, or protocols to ensure you are informed of any diagnosed sleep disorders that employees in safety-sensitive positions must report and, when an employee makes such a report, perform periodic evaluations to ensure the condition is appropriately treated and the employee is fit for duty.	Open - Await Response

R-17-19	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Establish a method to ensure that on-track protection in an active work zone is not lost during shift transfer.	Open - Initial Response Received
R-17-20	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Develop and implement an engineering safety procedure for preparing site-specific work plans for maintenance projects on the Northeast Corridor main line tracks spanning multiple shifts or multiple workdays to reduce or mitigate the inherent risks of maintenance-of-way work in a high-speed train operations environment.	Open - Initial Response Received
R-17-21	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Require supervisors to review train dispatchers' foul time log sheets to verify whether supplemental shunting devices are being adequately applied.	Open - Initial Response Received
R-17-22	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Revise its train dispatcher rules so that potentially distracting activities, such as making personal telephone calls, are not allowed while dispatchers are on duty and responsible for safe train operations.	Open - Initial Response Received
R-17-23	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Conduct a risk assessment for all engineering projects and use the results to issue significant speed restrictions for trains passing any engineering project that involves safety risks for workers, equipment, or the traveling public, such as ballast vacuuming, as part of a risk-mitigation policy.	Open - Initial Response Received
R-17-24	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Work with labor to achieve full participation in all applicable safety programs.	Open - Initial Response Received
R-17-25	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Work collaboratively with labor to develop and implement a viable safety reporting system (for example, C3RS); ensure that employees do not experience reprisal for using the system; respond quickly to the data collected; and communicate any resulting safety improvements to all employees.	Open - Initial Response Received
R-17-26	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Work collaboratively with labor in an effort to develop a comprehensive safety management system program that complies with pending Federal Railroad Administration regulation Title 49 Code of Federal Regulations Part 270, System Safety Program, and that vitalizes safety goals and programs with executive management accountability; incorporates risk management	Open - Initial Response Received

	controls for all operations affecting employees, contractors, and the traveling public; improves continually through safety data monitoring and feedback; and is promoted at all levels of the company.	
R-17-27	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Once Safety Recommendation R-17-26 is completed, implement the safety management system program throughout the company with resources sufficient to ensure that all levels of management and all labor unions involved with Amtrak operations accept and comply with the system.	Open - Initial Response Received
R-19-6	TO CSX TRANSPORTATION AND THE NATIONAL RAILROAD PASSENGER CORPORATION: Prohibit employees from fouling adjacent tracks of another railroad unless the employees are provided protection from trains and/or equipment on the adjacent tracks by means of communication between the two railroads.	Open - Initial Response Received
R-19-19	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Ensure operating crewmembers demonstrate their proficiency on the physical characteristics of a territory by using all resources available to them, including; in-cab instruments, signage, signals, and landmarks; under daylight and nighttime conditions; and during observation rides, throttle time, and written examinations	Open - Await Response
R-19-20	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Revise your classroom and road training program to ensure that operating crews fully understand all locomotive operating characteristics, alarms and the appropriate response to abnormal conditions.	Open - Await Response
R-19-21	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Require that all engineers undergo simulator training before operating new or unfamiliar equipment (at a minimum, experience and respond properly to all alarms), and when possible, undergo simulator training before operating in revenue service in a new territory and experience normal and abnormal conditions on that territory	Open - Await Response
R-19-22	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Implement a formal, systematic approach to developing training and qualification programs to identify the most effective strategies for preparing crewmembers to safely operate new equipment on new territories.	Open - Await Response
R-19-23	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Work with host railroads and states that own infrastructure over which you operate to conduct a	Open - Await Response

	comprehensive assessment of the territories to ensure that necessary wayside signs and plaques are identified, highly conspicuous, and strategically located to provide operating crews the information needed to safely operate their trains.	
R-19-24	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Conduct training that specifies and reinforces how each crewmember, including those who have not received their certifications or qualifications, may be used as a resource to assist in establishing and maintaining safe train operations.	Open - Await Response
R-19-25	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Update your safety review process to ensure that all operating documents are up to date and accurate before initiating new or revised revenue operations.	Open - Await Response
R-19-26	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Incorporate all prerevenue service planning, construction, and route verification work into the scope of your corporate-wide system safety plan, including your rules and policies, risk assessment analyses, safety assurances, and safety promotions.	Open - Await Response
R-19-27	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Work collaboratively with all host railroads and states that own infrastructure over which you operate in an effort to develop a comprehensive safety management system program that meets or exceeds the pending Federal Railroad Administration regulation Title 49 Code of Federal Regulations Part 270, "System Safety Program."	Open - Await Response
R-19-28	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Conduct risk assessments on all new or upgraded services that occur on Amtrak-owned territory, host railroads, or in states that own infrastructure over which you operate.	Open - Await Response
R-19-29	TO AMTRAK (NATIONAL RAILROAD PASSENGER CORPORATION): Develop policies for the safe use of child safety seats to prevent uncontrolled or unexpected movements in passenger trains and provide customers with guidance for securing these child safety seats.	Open - Await Response

Open Safety Recommendations to the Federal Railroad Administration (as of June 26, 2019)

R-00-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Develop, then periodically publish, an easy-to-understand source of information for train operating crewmembers on the hazards of using specific medications when performing their duties.	Open - Unacceptable Response
R-00-003	TO THE FEDERAL RAILROAD ADMINISTRATION: Establish and implement an educational program targeting train operating crewmembers that, at a minimum, ensures that all crewmembers are aware of the source of information described in R-00-2 regarding the hazards of using specific medications when performing their duties.	Open - Unacceptable Response
R-00-004	TO THE FEDERAL RAILROAD ADMINISTRATION: Establish, in coordination with the U.S. Dept. of Transportation, the Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the U.S. Coast Guard, comprehensive toxicological testing requirements for an appropriate sample of fatal highway, railroad, transit, and marine accidents to ensure the identification of the role played by common prescription and over-the-counter medications. Review and analyze the results of such testing at intervals not to exceed every 5 years.	Open - Unacceptable Response
R-01-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Evaluate, with the assistance of the Research and Special Programs Administration, the Association of American Railroads, and the Railway Progress Institute, the deterioration of pressure relief devices through normal service and then develop inspection criteria to ensure that the pressure relief devices remain functional between regular inspection intervals. Incorporate these inspection criteria into the U.S Dept. of Transportation hazardous materials regulations.	Open - Acceptable Response
R-01-017	TO THE FEDERAL RAILROAD ADMINISTRATION: Modify 49 Code of Federal Regulations 219.201(b) as necessary to ensure that the exemption from mandatory postaccident drug and alcohol testing for those involved in highway-rail grade crossing accidents does not apply to any railroad signal, maintenance, and other employees whose actions at or near a grade crossing involved in an accident may have contributed to the occurrence or severity of the accident.	Open - Acceptable Response

R-06-007	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to implement for all power-assisted switch machines, regardless of location, a formal commissioning procedure and a formal maintenance program that includes records of inspections, tests, maintenance, and repairs.	Open - Unacceptable Response
R-07-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Assist the Pipeline and Hazardous Materials Safety Administration in developing regulations to require that railroads immediately provide to emergency responders accurate, real-time information regarding the identity and location of all hazardous materials on a train.	Open - Acceptable Response
R-08-006	TO THE FEDERAL RAILROAD ADMINISTRATION: Require redundant signal protection, such as shunting, for maintenance-of-way work crews who depend on the train dispatcher to provide signal protection.	Open - Unacceptable Response
R-08-007	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise the definition of covered employee under 49 Code of Federal Regulations Part 219 for purposes of Congressionally mandated alcohol and controlled substances testing programs to encompass all employees and agents performing safety-sensitive functions, as described in 49 Code of Federal Regulations 209.301 and 209.303.	Open - Unacceptable Response
R-09-001	TO THE FEDERAL RAILROAD ADMINISTRATION: Establish uniform signal aspects that railroads must use to authorize a train to enter an occupied block, and prohibit the use of these aspects for any other signal indication.	Open - Unacceptable Response
R-09-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Study the different signal systems for trains, identify ways to communicate more uniformly the meaning of signal aspects across all railroad territories, and require the railroads to implement as many uniform signal meanings as possible.	Open - Unacceptable Response
R-09-003	TO THE FEDERAL RAILROAD ADMINISTRATION: Require that emergency exits on new and remanufactured locomotive cabs provide for rapid egress by cab occupants and rapid entry by emergency responders.	Open - Unacceptable Response

R-10-001	TO THE FEDERAL RAILROAD ADMINISTRATION: Require the installation, in all controlling locomotive cabs and cab car operating compartments, of crash- and fire-protected inward- and outward-facing audio and image recorders capable of providing recordings to verify that train crew actions are in accordance with rules and procedures that are essential to safety as well as train operating conditions. The devices should have a minimum 12-hour continuous recording capability with recordings that are easily accessible for review, with appropriate limitations on public release, for the investigation of accidents or for use by management in carrying out efficiency testing and systemwide performance monitoring programs.	Open - Acceptable Response
R-10-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Require that railroads regularly review and use in-cab audio and image recordings (with appropriate limitations on public release), in conjunction with other performance data, to verify that train crew actions are in accordance with rules and procedures that are essential to safety.	Open - Acceptable Response
R-12-003	TO THE FEDERAL RAILROAD ADMINISTRATION: Require that safety management systems and the associated key principles (including top-down ownership and policies, analysis of operational incidents and accidents, hazard identification and risk management, prevention and mitigation programs, and continuous evaluation and improvement programs) be incorporated into railroads' risk reduction programs required by Public Law 110-432, Rail Safety Improvement Act of 2008, enacted October 16, 2008.	Open - Acceptable Response
R-12-016	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to medically screen employees in safety-sensitive positions for sleep apnea and other sleep disorders.	Open - Unacceptable Response
R-12-017	TO THE FEDERAL RAILROAD ADMINISTRATION: Establish an ongoing program to monitor, evaluate, report on, and continuously improve fatigue management systems implemented by operating railroads to identify, mitigate, and continuously reduce fatigue-related risks for personnel performing safety-critical tasks, with particular emphasis on biomathematical models of fatigue.	Open - Acceptable Response
R-12-018	TO THE FEDERAL RAILROAD ADMINISTRATION: Conduct research on new and existing methods that can identify fatigue and mitigate performance decrements associated with fatigue in on-duty train crews.	Open - Acceptable Response

R-12-019	TO THE FEDERAL RAILROAD ADMINISTRATION: Require the implementation of methods that can identify fatigue and mitigate performance decrements associated with fatigue in on-duty train crews that are identified or developed in response to Safety Recommendation R-12-18.	Open - Acceptable Response
R-12-020	TO THE FEDERAL RAILROAD ADMINISTRATION: Require the use of positive train control technologies that will detect the rear of trains and prevent rear-end collisions.	Open - Unacceptable Response
R-12-021	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise Title 49 Code of Federal Regulations Part 229 to ensure the protection of the occupants of isolated locomotive operating cabs in the event of a collision. Make the revision applicable to all locomotives, including the existing fleet and those newly constructed, rebuilt, refurbished, and overhauled, unless the cab will never be occupied.	Open - Acceptable Response
R-12-022	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise Title 49 Code of Federal Regulations Part 229 to require crashworthiness performance validation for all new locomotive designs under conditions expected in a collision.	Open - Unacceptable Response
R-12-027	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to install, along main lines in non-signaled territory not equipped with positive train control, appropriate technology that warns approaching trains of incorrectly lined main track switches sufficiently in advance to permit stopping.	Open - Unacceptable Response
R-12-039	TO THE FEDERAL RAILROAD ADMINISTRATION: Develop side impact crashworthiness standards (including performance validation) for passenger railcars that provide a measurable improvement compared to the current regulation for minimizing encroachment to and loss of railcar occupant survival space.	Open - Acceptable Response
R-12-040	TO THE FEDERAL RAILROAD ADMINISTRATION: Once the side impact crashworthiness standards are developed in Safety Recommendation R-12-39, revise 49 Code of Federal Regulations 238.217, “Side Structure,” to require that new passenger railcars be built to these standards.	Open - Acceptable Response
R-12-041	TO THE FEDERAL RAILROAD ADMINISTRATION: Require that passenger railcar doors be designed to prevent fire and smoke from traveling between railcars.	Open - Unacceptable Response
R-13-005	TO THE FEDERAL RAILROAD ADMINISTRATION: Identify, and require railroads to use in locomotive cabs, technology-based solutions that detect the presence of signal-emitting portable electronic devices and that inform the railroad management about the detected devices in real time.	Open Acceptable Alternate Response

R-13-007	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to implement initial and recurrent crew resource management training for train crews.	Open - Unacceptable Response
R-13-018	TO THE FEDERAL RAILROAD ADMINISTRATION: Determine what constitutes a reliable, valid, and comparable field test procedure for assessing the color discrimination capabilities of employees in safety-sensitive positions.	Open - Unacceptable Response
R-13-019	TO THE FEDERAL RAILROAD ADMINISTRATION: When you have made the determination in Safety Recommendation R-13-18, require railroads to use a reliable, valid, and comparable field test procedure for assessing the color discrimination capabilities of employees in safety-sensitive positions.	Open - Unacceptable Response
R-13-020	TO THE FEDERAL RAILROAD ADMINISTRATION: Require more frequent medical certification exams for employees in safety-sensitive positions who have chronic conditions with the potential to deteriorate sufficiently to impair safe job performance.	Open - Unacceptable Response
R-13-021	TO THE FEDERAL RAILROAD ADMINISTRATION: Develop medical certification regulations for employees in safety-sensitive positions that include, at a minimum, (1) a complete medical history that includes specific screening for sleep disorders, a review of current medications, and a thorough physical examination, (2) standardization of testing protocols across the industry, and (3) centralized oversight of certification decisions for employees who fail initial testing; and consider requiring that medical examinations be performed by those with specific training and certification in evaluating medication use and health issues related to occupational safety on railroads. [This recommendation supersedes Safety Recommendations R-02-24 through -26.]	Open - Unacceptable Response
R-13-022	TO THE FEDERAL RAILROAD ADMINISTRATION: Require all information captured by any required recorder to also be recorded in another location remote from the lead locomotive(s), to minimize the likelihood of the information's being unrecoverable as a result of an accident.	Open - Unacceptable Response

R-13-038	TO THE FEDERAL RAILROAD ADMINISTRATION: Work with the Federal Highway Administration to (1) include guidance in the Manual on Uniform Traffic Control Devices (MUTCD) for the installation of advance warning devices, such as movement-activated blank-out signs, that specifically use the word "train" to indicate the preemption of highway traffic signals by an approaching train, and (2) amend the MUTCD to indicate that preemption confirmation lights, while not intended to provide guidance to the general public, would be useful in providing advance information on train movements to law enforcement and emergency responders.	Open - Acceptable Response
R-14-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Develop a program to audit response plans for rail carriers of petroleum products to ensure that adequate provisions are in place to respond to and remove a worst-case discharge to the maximum extent practicable and to mitigate or prevent a substantial threat of a worst-case discharge.	Open - Acceptable Response
R-14-011	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise the Track Safety Standards specified in Title 49 Code of Federal Regulations 213.233(b)(3),removing the exemption for high-density commuter railroads and requiring all railroads to comply with these requirements: (1)to traverse each main track by vehicle or inspect each main track on foot at least once every 2weeks, and (2) to traverse and inspect each siding, either by vehicle or on foot, at least once every month.	Open - Unacceptable Response
R-14-015	TO THE FEDERAL RAILROAD ADMINISTRATION: Promulgate a regulation for permitting a train to pass a red signal aspect protecting a moveable bridge that is similar to the criteria for allowing a train to cross a broken rail as contained in Title49Code of Federal Regulations213.7(d) to ensure that the bridge has been inspected by a qualified employee before a train is authorized to proceed across the bridge.	Open Acceptable Alternate Response
R-14-016	TO THE FEDERAL RAILROAD ADMINISTRATION: Collaborate with the Pipeline and Hazardous Materials Safety Administration and the American Short Line and Regional Railroad Association to develop a risk assessment tool that addresses the known limitations and shortcomings of the Rail Corridor Risk Management Safety software tool.	Open - Acceptable Response

R-14-017	TO THE FEDERAL RAILROAD ADMINISTRATION: Collaborate with the Pipeline and Hazardous Materials Safety Administration and the American Short Line and Regional Railroad Association to conduct audits of short line and regional railroads to ensure that proper route risk assessments that identify safety and security vulnerabilities are being performed and are incorporated into a safety management system program.	Open - Acceptable Response
R-14-035	TO THE FEDERAL RAILROAD ADMINISTRATION: Work with the Occupational Safety and Health Administration (OSHA) to establish clear guidelines for use by railroads and railroad workers detailing when and where OSHA standards are to be applied.	Open - Acceptable Response
R-14-036	TO THE FEDERAL RAILROAD ADMINISTRATION AND THE FEDERAL TRANSIT ADMINISTRATION: Require initial and recurring training for roadway workers in hazard recognition and mitigation. Such training should include recognition and mitigation of the hazards of tasks being performed by coworkers.	Open - Acceptable Response
R-14-044	TO THE FEDERAL RAILROAD ADMINISTRATION AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION: Assist the Federal Transit Administration in establishing roadway worker protection rules, including requirements for job briefings.	Open - Acceptable Response
R-14-048	TO THE FEDERAL RAILROAD ADMINISTRATION: Require equivalent levels of reporting for both public and private highway–railroad grade crossings.	Open - Unacceptable Response
R-14-069	TO THE FEDERAL RAILROAD ADMINISTRATION: When the proposed system safety program regulation is promulgated, develop and implement a robust performance-based audit program to ensure that railroads are maintaining effective system safety programs.	Open - Acceptable Response
R-14-074	TO THE FEDERAL RAILROAD ADMINISTRATION: Develop a performance standard to ensure that windows (e.g., glazing, gaskets, and any retention hardware) are retained in the window opening structure during an accident and incorporate the standard into 49 Code of Federal Regulations(CFR) 238.221 and 49CFR 238.421 to require that passenger railcars meet this standard.	Open - Acceptable Response

R-14-075	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise Title49 Code of Federal RegulationsPart213 to define specific allowable limits for combinations of track conditions, none of which individually amounts to a deviation from Federal Railroad Administration regulations that requires remedial action, but, which when combined, require remedial action.	Open - Acceptable Response
R-14-076	TO THE FEDERAL RAILROAD ADMINISTRATION: Once you have completed the actions specified in Safety Recommendation R-14-75, program your geometry inspection vehicles to detect combinations of conditions that require remedial action.	Open - Acceptable Response
R-15-001	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise Title 49 Code of Federal Regulations (CFR) 238.213 to require the existing forward-end corner post strength requirements for the back-end corner posts of passenger railcars.	Open - Unacceptable Response
R-15-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise Title 49 Code of Federal Regulations Part 238 to incorporate a certificate of construction, similar to the one found at Title 49 Code of Federal Regulations 179.5, and require that the certificate be furnished prior to the in-service date of the railcar.	Open - Unacceptable Response
R-15-004	TO THE FEDERAL RAILROAD ADMINISTRATION: Review your existing regulations and your motive power and equipment compliance manual, and revise them as needed to prohibit automatic systems from resetting the locomotive alerter. (Urgent)	Open - Acceptable Response
R-15-026	TO FEDERAL RAILROAD ADMINISTRATION: Prohibit the use of a white light as a marking device on the rear of a train.	Open - Unacceptable Response
R-15-035	TO THE FEDERAL RAILROAD ADMINISTRATION: Enhance your medical standards by identifying a list of medical conditions that disqualify employees for safety-sensitive positions because of the conditions' potential for negatively affecting rail safety.	Open - Unacceptable Response
R-15-036	TO THE FEDERAL RAILROAD ADMINISTRATION: Enhance your medical standards by identifying a list of medical conditions that disqualify employees for safety-sensitive positions because of the conditions' potential for negatively affecting rail safety.	Open - Unacceptable Response

R-15-037	TO THE FEDERAL RAILROAD ADMINISTRATION: Once disqualifying medical conditions and medications have been identified, develop specific criteria (such as standards for medical test results) that may allow employees who have been disqualified but have been determined by a subsequent, individualized assessment to pose no increased danger to rail safety to obtain a medical certification.	Open - Unacceptable Response
R-16-032	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to install devices and develop procedures that will help crewmembers identify their current location and display their upcoming route in territories where positive train control will not be implemented.	Open - Unacceptable Response
R-16-033	TO THE FEDERAL RAILROAD ADMINISTRATION: Modify form 6180.54 (Rail Equipment Accident/Incident Report) to include the number of crewmembers in the controlling cab of the train at the time of an accident.	Open - Initial Response Received
R-16-034	TO THE FEDERAL RAILROAD ADMINISTRATION: After form 6180.54 is modified as specified in Safety Recommendation R-16-33, use the data regarding number of crewmembers in the controlling cab of the train at the time of an accident to evaluate the safety adequacy of current crew size regulations.	Open - Initial Response Received
R-16-035	TO THE FEDERAL RAILROAD ADMINISTRATION: Conduct research to evaluate the causes of passenger injuries in passenger railcar derailments and overturns and evaluate potential methods for mitigating those injuries, such as installing seat belts in railcars and securing potential projectiles	Open – Unacceptable Response
R-16-036	TO THE FEDERAL RAILROAD ADMINISTRATION: When the research specified in Safety Recommendation R-16-35 identifies safety improvements, use the findings to develop occupant protection standards for passenger railcars to mitigate passenger injuries likely to occur during derailments and overturns.	Open – Unacceptable Response
R-16-043	TO THE FEDERAL RAILROAD ADMINISTRATION: Require freight railroads to use validated biomathematical fatigue models, similar to the models used by passenger railroads, to develop work schedules that do not pose an excessive risk of fatigue.	Open - Unacceptable Response
R-16-044	TO THE FEDERAL RAILROAD ADMINISTRATION: Develop and enforce medical standards that railroad employees in safety-sensitive positions diagnosed with sleep disorders must meet to be considered fit for duty.	Open - Unacceptable Response

R-17-003	TO THE FEDERAL RAILROAD ADMINISTRATION: Evaluate the risks posed to train crews by hazardous materials transported by rail, determine the adequate separation distance between hazardous materials cars and locomotives and occupied equipment that ensures the protection of train crews during both normal operations and accident conditions, and collaborate with the Pipeline and Hazardous Materials Safety Administration to revise 49 Code of Federal Regulations 174.85 to reflect those findings.	Open - Acceptable Response
R-17-006	TO THE PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION AND THE FEDERAL RAILROAD ADMINISTRATION: Work together to develop specific guidance for railroads when using the list of items found in appendix D of title 49 Code of Federal Regulations Part 172 in their risk assessments and apply the information gathered in those risk assessments when analyzing proposed routes for high-hazard flammable trains or high-hazard flammable unit trains.	Open - Initial Response Received
R-17-017	TO THE FEDERAL RAILROAD ADMINISTRATION: Enact Title 49 Code of Federal Regulations Part 270, System Safety Program, without further delay.	Open - Unacceptable Response
R-17-018	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to install technology on hi-rail, backhoes, other independently operating pieces of maintenance-of-way equipment, and on the leading and trailing units of sets of maintenance-of-way equipment operated by maintenance workers to provide dispatchers and the dispatch system an independent source of information on the locations of this equipment to prevent unauthorized incursions by trains onto sections of track where maintenance activities are taking place in accordance with the Congressional mandate under the Rail Safety Improvement Act of 2008.	Open - Acceptable Response
R-17-032	TO THE FEDERAL RAILROAD ADMINISTRATION: Research and evaluate wheel impact load thresholds to find remedial actions that address the mechanical condition of tank cars used in high-hazard flammable trains.	Open - Initial Response Received
R-17-033	TO THE FEDERAL RAILROAD ADMINISTRATION: Mandate remedial actions that railroads should take to avoid or identify mechanical defects that are identified by wheel impact load detectors.	Open - Initial Response Received

R-17-034	TO THE FEDERAL RAILROAD ADMINISTRATION AND THE ASSOCIATION OF AMERICAN RAILROADS: Collaborate in the evaluation of safe kip thresholds to determine the remedial actions for suspected defective wheels conditions in high-hazard flammable train service based upon equipment detector data, and revise the Federal Railroad Administration Safety Advisory 2015-01 and the Association of American Railroads interchange rules.	Open - Acceptable Response
R-18-001	TO THE FEDERAL RAILROAD ADMINISTRATION: Require intercity passenger and commuter railroads to implement technology to stop a train before reaching the end of tracks.	Open - Initial Response Received
R-18-002	TO THE FEDERAL RAILROAD ADMINISTRATION: Include the Collision Hazard Analysis Guide for Commuter and Intercity Passenger Rail Service as part of the regulation or part of a detailed compliance manual to assist railroads in implementing Title 49 Code of Federal Regulations Part 270.	Open - Initial Response Received
R-18-005	TO THE FEDERAL RAILROAD ADMINISTRATION: Issue an Emergency Order directing railroads to require that when signal suspensions are in effect and a switch has been reported relined for a main track, the next train or locomotive to pass the location must approach the switch location at restricted speed. After the switch position is verified, the train crew must report to the dispatcher that the switch is correctly lined for the main track before trains are permitted to operate at maximum-authorized speed. (Urgent)	Open - Unacceptable Response
R-18-009	TO THE FEDERAL RAILROAD ADMINISTRATION: Review and evaluate the notifications received from the Occupational Safety and Health Administration, and use the information contained in them to modify the National Inspection Plan to include more plant railroads in your routine inspections.	Open - Initial Response Received
R-18-010	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to develop a device or technique to eliminate the possibility of employees failing to perform critical tasks such as lining a switch, lining a derail, or ensuring cars are in the clear.	Open - Initial Response Received
R-18-011	TO THE FEDERAL RAILROAD ADMINISTRATION: Assist the Federal Highway Administration (FHWA) in developing specific criteria to establish when an existing grade crossing should be reconstructed, closed, or otherwise have the risk posed by its unsafe vertical profile comprehensively mitigated, to be incorporated into the FHWA Railroad-Highway Grade Crossing Handbook.	Open - Await Response

R-18-016	TO THE FEDERAL RAILROAD ADMINISTRATION: Review, and modify if necessary, your current inspection guidance regarding watchman/lookout equipment to verify that it requires railroads to provide the necessary equipment for a watchman/lookout to notify a roadway work group of approaching trains and that this accurately reflects the definition contained in Title 49 Code of Federal Regulations 214.7.	Open - Initial Response Received
R-18-017	TO THE FEDERAL RAILROAD ADMINISTRATION: Review railroads' on-track safety programs to determine if the necessary equipment is required and provided for a watchman/lookout to notify roadway work groups of approaching trains. If deficiencies are discovered, use enforcement options to encourage compliance.	Open - Initial Response Received
R-18-018	TO THE FEDERAL RAILROAD ADMINISTRATION: Revise your guidance for inspectors regarding required watchman/lookout equipment and procedures, train all of your inspectors on the revised guidance, and audit subsequent inspections to verify adherence to the specifications outlined in Title 49 Code of Federal Regulations 214.	Open - Initial Response Received
R-18-019	TO THE FEDERAL RAILROAD ADMINISTRATION: Modify the National Inspection Plan to require periodic unannounced inspections for roadway worker protection regulation compliance.	Open - Initial Response Received
R-18-024	TO THE FEDERAL RAILROAD ADMINISTRATION: Issue a guidance document railroads can use to assess their on-track safety program to ensure it encompasses the role of signal and train control equipment, including redundant protection, such as supplemental shunting devices to protect roadway workers and their equipment.	Open - Initial Response Received
R-18-025	TO THE FEDERAL RAILROAD ADMINISTRATION: Study available technologies that automatically alert maintenance-of-way workers fouling tracks of approaching trains, then require that such technology be implemented as a redundant protective measure.	Open - Initial Response Received
R-18-026	TO THE FEDERAL RAILROAD ADMINISTRATION: Provide additional training to all your track inspectors on regulatory track safety standards compliance and provide guidance of available enforcement options to obtain compliance with minimum track safety standards when defective conditions are not being properly remediated by railroads on all routes that carry high hazardous flammable materials.	Open - Initial Response Received

R-19-008	TO THE FEDERAL RAILROAD ADMINISTRATION: Study the efficacy of how signs used in other modes of transportation may be effectively used in the railroad industry.	Open - Await Response
R-19-009	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to periodically review and update their speed limit action plans to reflect any operational or territorial operating changes requiring additional safety mitigations and to continually monitor the effectiveness of their speed limit action plan mitigations.	Open - Await Response
R-19-010	TO THE FEDERAL RAILROAD ADMINISTRATION: Require railroads to apply their existing speed limit action plan criteria for overspeed risk mitigation to all current and future projects in the planning, design, and construction phases, including projects where operations are provided under contract.	Open - Await Response
R-19-011	TO THE FEDERAL RAILROAD ADMINISTRATION: Prohibit the operation of passenger trains on new, refurbished, or updated territories unless positive train control is implemented.	Open - Await Response
R-19-012	TO THE FEDERAL RAILROAD ADMINISTRATION: Remove the grandfathering provision within Title 49 *Code of Federal Regulations* 338.206(d) and require all railcars comply with the applicable current safety standards.	Open - Await Response
R-19-013	TO THE FEDERAL RAILROAD ADMINISTRATION: Use your authority and compel all commuter and passenger railroads to meet the requirements outlined in Title 49 *Code of Federal Regulations* Part 238 without delay, such that in the event of a loss of power, adequate emergency lighting is available to allow passengers, crewmembers, and first responders to see and orient themselves, identify obstacles, safely move throughout the railcar, and evacuate safely.	Open - Await Response
R-19-014	TO THE FEDERAL RAILROAD ADMINISTRATION: Reevaluate existing seat securement mechanisms and their susceptibility to inadvertent rotation, to identify a means to prevent the failure of these devices to maintain seat securement.	Open - Await Response
R-19-015	TO THE FEDERAL RAILROAD ADMINISTRATION: Conduct research into the effectiveness of occupant protection through compartmentalization for passengers whose size (including children) is not within the current range of anthropomorphic passenger sizes in Federal Railroad Administration standards.	Open - Await Response