Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Peter A. DeFazio
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Katherine W. Dedrick, Staff Director

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June 9, 2022

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Railroads, Pipelines, and Hazardous Materials
FROM: Staff, Subcommittee on Railroads, Pipelines, and Hazardous Materials
RE: Subcommittee Hearing on "Examining Freight Rail Safety"

PURPOSE

The Subcommittee on Railroads, Pipelines, and Hazardous Materials will meet on Tuesday, June 14, 2022, at 10:00 a.m. ET in 2167 Rayburn House Office Building and via Zoom to hold a hearing titled "Examining Freight Rail Safety." The purpose of this hearing is to hear from government and stakeholder witnesses about the state of freight rail safety and issues pertinent to keeping rail operations, rail workers, and communities safe. The Subcommittee will receive testimony from the Federal Railroad Administration; the National Transportation Safety Board; the Brotherhood of Maintenance of Way Employes Division; Brotherhood of Railway Carmen Division; retired transportation policy consultant; Loram Technologies, Inc.; Norfolk Southern Corporation and Association of American Railroads; and Sheet Metal, Air, Rail Transportation-Transportation Division.

BACKGROUND

I. Federal Railroad Administration

The Federal Railroad Administration (FRA) is responsible for administering the federal rail safety program.[1] FRA has the authority to issue regulations and orders pertaining to rail safety and to issue civil and criminal penalties to enforce those regulations and orders.[2]

FRA executes its railroad safety responsibilities through various skilled staff. FRA headquarters staff include technical experts who manage the mission critical programs, provide technical oversight and management of field personnel, and support development of safety

[1] Subtitle V of Title 49, United States Code.
[2] *Id.*

standards and regulations.[3] The agency relies on its field presence to monitor compliance with federally mandated standards, which includes approximately 350 railroad safety inspectors covering six safety disciplines and more than 100 specialists, engineers, analysts, and managers who work in the field.[4] FRA further relies on 202 state safety inspectors employed by 33 states by agreement to perform compliance inspections and additional investigative and surveillance activities.[5]

In addition to FRA's field-based specialists and inspectors, FRA's Office of Railroad Safety includes nine Safety Management Teams (SMT) located across the country.[6] Created in June 2020 during a reorganization of the office, the SMTs are responsible for oversight and engagement with a single railroad or a class of railroads to monitor risks at a railroad-specific system-wide level rather than by region.[7]

II. National Transportation Safety Board

The National Transportation Safety Board (NTSB) is an independent federal agency charged with investigating significant accidents in railroad and other transportation modes.[8] Staff working in the Railroad Division of the Office of Railroad, Pipeline and Hazardous Materials Investigations investigate accidents and incidents involving passenger and freight railroads, commuter rail transit systems, and other fixed guideway systems.[9] The division also assesses selected railroad safety issues, often based on a set of accident investigations.[10] Special studies may focus on analyses of regulations, railroad safety programs or procedures, or audit reviews of management and operations practices.[11] The NTSB also coordinates the resources of the federal government and other organizations to assist victims and their family members impacted by transportation disasters.[12]

The NTSB's 2021-2022 Most Wanted List of Transportation Safety Improvements ("Most Wanted List") includes a call to improve the safety of rail workers.[13] The Most Wanted List highlights recurring safety issues impacting roadway workers in accident investigations such as concerns for continued use of train approach warning, the need for proper training and job briefings, access to necessary protective equipment, and work schedules and limitations based on science to prevent fatigued workers from working overtime.[14] The Most Wanted List also calls for protection of operating crews and mechanical workers through the use of buffer cars.[15]

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[3] Federal Railroad Administration, Fiscal Year 2023 Budget Estimates, Page 46.
[4] The six disciplines include: operating practices; motive power and equipment; signal and train control; track; hazardous materials; and grade crossing safety. FY 2023 Budget Estimates, Page 42: https://www.transportation.gov/sites/dot.gov/files/2022-04/FRA_Budget_Estimates_FY23.pdf
[5] Communication from Federal Railroad Administration to Subcommittee Staff, and https://railroads.dot.gov/divisions/partnerships-programs/state-rail-safety-participation.
[6] Safety Management Teams, https://railroads.dot.gov/divisions/regional-offices/safety-management-teams
[7] *Id.*
[8] 49 USC 1131.
[9] National Transportation Safety Board Fiscal Year 2023 Budget Request, Page 66.
[10] *Id.*
[11] *Id.*
[12] 49 USC 1139.
[13] Improve Rail Worker Safety, 2021-2022 Most Wanted List, National Transportation Safety Board https://www.ntsb.gov/Advocacy/mwl/Pages/mwl-21-22/mwl-rph-02.aspx
[14] *Id.*
[15] *Id.*

III. Safety Data

Railroads must regularly report to FRA on safety events occurring in their systems that meet certain thresholds specified in FRA regulations.[16] FRA uses the information concerning hazards and risks to carry out its regulatory responsibilities, and for determining comparative trends of railroad safety and to develop hazard elimination and risk reduction programs that focus on preventing railroad injuries and accidents.[17] Accuracy of such reported information is critical.[18] FRA publishes on its website railroad reports and safety data. Below is publicly reported data on Class I railroads for the decade of 2013 to 2022.[19]

Train accidents (not at grade crossings):

The number and rate of train accidents have fluctuated for the last decade. The number of accidents include a low of 1,229 accidents (2021) and a high of 1,592 accidents (2018). The rate of accidents per million train miles include a low of 2.415 accidents per million train miles (2013), and a high of 3.019 accidents per million train miles (2019).[20] This compares to the previous decade (2003-2012) annual train accidents which measured at a low of 1,390 (2012) and a high of 2,778 (2004), and rate of train accidents per million train miles at a low of 2.402 (2012) and a high of 4.372 (2004).[21]

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TRAIN ACCIDENTS (Not at Grade-Crossings)	1,428	1,486	1,503	1,346	1,414	1,592	1,550	1,298	1,229	335
..... RATE of Train Accidents per mil train miles	2.415	2.450	2.581	2.531	2.593	2.900	3.019	2.959	2.815	3.149
--- Train accident deaths	2	2	.	3	1	4	.	4	1	.
--- Train accident injuries	66	47	260	31	43	49	27	29	29	5

Train accidents (not at grade crossings) by cause:

Railroads assign causes to reportable accidents. Human factor and track remain the leading causes of train accidents, followed by miscellaneous. This is consistent with the previous decade.[22]

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
--- Human factor caused	565	599	592	517	557	608	662	566	535	162
--- Track caused	406	386	401	371	320	398	375	283	266	59
--- Motive power/equipment caused	182	201	216	211	212	243	216	184	166	53
--- Signal caused, all track types	50	43	49	37	44	52	39	40	22	5
-------- Signal caused, main line track	1	4	3	1	2	2	2	1	1	.
--- Miscellaneous caused	225	257	245	210	281	291	258	225	240	56

[16] 49 CFR Part 225.
[17] 49 CFR 225.1
[18] 49 CFR 225.33 regulates Internal Control Plans.
[19] Data includes only Class I railroads, excluding Amtrak. Ten Year Accident/Incident Overview 1.12, January – December 2022, retrieved June 3, 2022, Available at https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/TenYearAccidentIncidentOverview.aspx.
[20] Accidents per million train miles is an FRA standard measurement.
[21] Data includes only Class I railroads, excluding Amtrak. Ten Year Accident/Incident Overview 1.12, January – December 2012, retrieved April 29, 2022. Available at https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/TenYearAccidentIncidentOverview.aspx.
[22] *Id.*

Highway-rail grade crossing incidents:

The number of highway-rail grade crossing incidents ranged from 1,386 (2020) to 1,709 (2014); the rate of such incidents per million train miles includes a low of 2.627 (2014) and high of 3.633 (2021).

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
HIGHWAY-RAIL INCIDENTS	1,553	1,709	1,540	1,466	1,519	1,613	1,553	1,386	1,586	364
..... RATE of Highway-rail incidents per mil train miles	2.627	2.818	2.644	2.757	2.785	2.938	3.024	3.160	3.633	3.422
--- Highway-rail incidents deaths	146	188	147	153	155	161	168	129	156	38
--- Highway-rail incidents injuries	678	600	633	548	614	556	508	476	483	114

Employee on-duty cases (injury, illness, and fatalties):

The number of employee on-duty deaths ranged from 6 (2016, 2019, 2020) to 9 (2013, 2017, 2018, 2021).

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
--- Employee on duty deaths	9	7	8	6	9	9	6	6	9	1
--- Nonfatal EOD injuries	1,892	1,901	1,776	1,578	1,671	1,587	1,518	1,238	1,180	293
--- Nonfatal EOD illnesses	45	50	46	34	31	33	37	17	8	.
--- Total employee on duty cases	1,946	1,958	1,830	1,618	1,711	1,629	1,561	1,261	1,197	294
--- Employee hours worked	322,927,569	339,567,807	332,121,716	291,322,578	286,845,808	290,079,542	270,362,099	229,073,974	223,664,066	55,734,928
..... RATE of Employees on duty per 200K hours	1.205	1.153	1.102	1.111	1.193	1.123	1.155	1.101	1.070	1.055

Accidents in yards:

In yards, switching is the process of putting cars in a specific order. The total number of yard switching miles has decreased over the decade, but the number of accidents on yard track has fluctuated and the rate of yard accidents per yard switching miles has increased. [23]

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
--- Yard switching miles	69,962,072	71,657,455	70,456,273	62,014,747	62,075,709	61,643,218	57,942,142	49,010,533	47,868,792	11,674,057
--- Accidents on yard track	829	899	953	801	873	1,017	974	838	798	227
..... RATE of yard accidents / yard switching miles	11.849	12.546	13.526	12.916	14.063	16.498	16.810	17.098	16.671	19.445

IV. Safety Issues

Fatigue:

Research has shown that various conditions can affect fatigue such as sleep loss, workload, stress, monotony, workplace ergonomics, age, health, medications, noise, and circadian disruption.[24] Rapid changes in the circadian pattern of sleep and wakefulness disrupt many physiological functions, and such disruptions may impair human performance and cause a general feeling of debility until realignment is achieved.[25] Symptoms of fatigue include, but are not limited to, falling

[23] Yard accidents per yard switching miles is an FRA standard measurement.

[24] Citations for research related to fatigue can be found in Federal Railroad Administration, Notice of Proposed Rulemaking, Fatigue Risk Management Programs for Certain Passenger and Freight Railroads, Docket No. FRA-2015-0122, December 22, 2020. See page 83486 of that document for a description of fatigue symptoms.

[25] *Id at 83486.*

asleep, increased reaction time, loss of attentional capacity, and decline of short-term and working memory function which may impair performance, increase error, and increase accident risk.[26]

FRA research has established that the probability of rail accidents increases as fatigue increases.[27] Between 2000 and 2020, the NTSB conducted 11 major investigations of accidents involving railroads subject to FRA jurisdiction in which fatigue was identified as the probable or a contributing cause of the accident.[28]

Congress and the FRA require railroads to manage their employees' fatigue associated with railroad operations through hours of service (HOS) limitations and rest requirements.[29] HOS limitations are generally based on the assumption that fatigue simply increases as time passes.[30] This does not account for factors such as sleep loss, amount of sleep, circadian rhythms, sleep quality, and the effects of the type of task being performed on the resulting level of fatigue.[31] Additionally, not all railroad workers are covered by HOS protections; ordinarily HOS do not apply to maintenance-of-way employees, carmen, or yardmasters.[32]

As part of the Rail Safety Improvement Act of 2008, Congress required that by 2012 FRA require the Class I railroads, railroad carriers providing intercity or commuter rail passenger transportation, and railroad carriers that have inadequate safety performance, develop fatigue management plans (as part of safety risk reduction programs) to reduce the fatigue experienced by safety-related railroad employees and to reduce the likelihood of accidents, incidents, injuries, and fatalities caused by fatigue.[33] In December 2020, FRA issued a Notice of Proposed Rulemaking (NPRM) to implement the 2008 mandate.[34]

Workforce:

The average total number of workers employed by the Class I railroads at the end of 2021 was nearly one-third less than the total employed in 2015, according to data reported by the railroads and published by the Surface Transportation Board.[35] These cuts were implemented as part of precision scheduled railroading and continued through the COVID-19 pandemic.[36] Railroad workers

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[26] *Id.*

[27] *Id. at 83491.*

[28] National Transportation Safety Board, Correspondence to the Federal Railroad Administration dated February 17, 2021, on Safety Recommendation R-12-016, https://www.ntsb.gov/investigations/_layouts/ntsb.recsearch/Recommendation.aspx?Rec=R-12-016.

[29] 49 USC Chapter 211; 49 CFR Part 228; Federal Railroad Administration, Notice of Proposed Rulemaking, Fatigue Risk Management Programs for Certain Passenger and Freight Railroads, Docket No. FRA-2015-0122, December 22, 2020, Page 83486.

[30] *Id.* at Page 83486.

[31] *Id.*

[32] *Id.* and Federal Railroad Administration, Yardmasters and Yard Safety in the U.S. Railroad Industry: An Exploratory Study, January 2007, Page 9 https://railroads.dot.gov/sites/fra.dot.gov/files/fra_net/422/ord0701.pdf

[33] Section 103 of Division A, Rail Safety Improvement Act of 2008, P.L. 110-432.

[34] Federal Railroad Administration, Notice of Proposed Rulemaking, Fatigue Risk Management Programs for Certain Passenger and Freight Railroads, Docket No. FRA-2015-0122, December 22, 2020.

[35] Employment data reported by the Class Is, published by the Surface Transportation Board. https://www.stb.gov/reports-data/economic-data/employment-data/

[36] See for example page 5 of Norfolk Southern 2019 Annual Report to Investors http://www.nscorp.com/content/dam/nscorp/get-to-know-ns/investor-relations/annual-reports/annual-report-2019.pdf and page 55 of Union Pacific 2020 Annual Report to Investors https://www.up.com/cs/groups/public/@uprr/@investor/documents/investordocuments/pdf_up_10k_02072020.pdf .

and unions representing them contend that the workforce cuts are causing worker fatigue from increased working hours, increased workload, and management pressure to rush safety work, all of which are leading to deteriorated workplace conditions and reduced safety culture.[37] Examples include employees working 16-hour shifts consecutively, fewer workers covering larger territories, and less time permitted to inspect a rail car from three minutes to one minute.[38] They claim that this has contributed to workers leaving the industry and refusing recalls from furlough.[39] Railroads have in place plans to hire certain railroad workers and are reporting regularly on those plans and their progress to the Surface Transportation Board.[40]

Crew Size:

Federal regulations do not require a minimum crew size. While some railroad operations use single-person crews, Class I railroads operate with two crewmembers: a locomotive engineer and a conductor.[41] In two-person crew operations, engineers and conductors work together to safely operate a train.[42] FRA regulations do not prohibit railroads from choosing to operate a train with only one crewmember.[43]

In March 2016, FRA issued an NPRM that proposed a standard requiring a minimum of two crewmembers and minimum requirements for the roles and responsibilities of the second crewmember.[44] The NPRM proposed two options for permitting existing single-crew operations to continue and allowing operations to begin single-crew operations, as well as exceptions for certain passenger and freight operations.[45] The agency held a public hearing on the NPRM in July 2016.[46] On May 29, 2019, the FRA published in the Federal Register a notice to withdraw the 2016 NPRM.[47] In the May 2019 document, FRA wrote that the withdrawal of the NPRM preempts states from enacting laws relating to crew size.[48]

Crew Certification and Training:

FRA regulations require that railroads have approved locomotive engineer and conductor certification programs to reduce the rate and number of accidents and incidents and to improve railroad safety.[49] The standards include minimum eligibility, training, testing, certification, and

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[37] Comments of BMWE, BRS, SMART Mechanical Division, NCFO 32BJ/SEIU, TWU, Submitted by Rich Edelman to the Surface Transportation Board in Docket EP 770, Urgent Issues in Freight Rail Service, April 22, 2022, throughout including pages 84, 86, 90, 103, 105, 108, 109, 122, 125, 126, 129, 130, 131, 136, 142, 148, 149, 155, and 157-159.
[38] *Id.*
[39] *Id* throughout including pages 60-63, 73-75, 90, 122, 136, and 143.
[40] The Surface Transportation Board began requiring this reporting following its April 26 and 27, 2022 public hearing with the issuance of Decision, Surface Transportation Board, Urgent Issues in Freight Rail Service – Railroad Reporting, May 6, 2022, Docket No. EP770 (Sub-No. 1).
[41] U.S. Department of Transportation, Federal Railroad Administration, Train Crew Staffing Notice of Proposed Rulemaking Regulatory Impact Analysis, February 18, 2016, FRA-2014-0033, Page 22.
[42] Subtitle V of Title 49, United States Code. Train Crew Staffing Notice of Proposed Rulemaking, Federal Railroad Administration, March 15, 2016, FRA-2014-0033, throughout including at Page 13925.
[43] *Id* at page 13943.
[44] Train Crew Staffing Notice of Proposed Rulemaking, Federal Railroad Administration, March 15, 2016, FRA-2014-0033.
[45] *Id.*
[46] Federal Railroad Administration, Proposed rule; notice of public hearing and reopening of comment period, FRA-2014-0033 Notice No. 3, June 15, 2016.
[47] Train Crew Staffing Notice, Federal Railroad Administration, May 29, 2019, FRA-2014-0033-1606.
[48] *Id.*
[49] 49 CFR Parts 240 and 242.

monitoring standards to help ensure that only those who meet minimum safety standards serve as engineers and conductors.[50]

From March to August 2021, two certified conductors were fatally injured while performing their duties relating to train operations.[51] There were also incidents that resulted in amputation and crushing injuries.[52] In November 2021, FRA identified the concern that the industry was reducing the duration of conductor certification training for new-hire employees and noted that there had recently been two certified conductors with less than a year of service who suffered amputations after being struck by moving railroad equipment.[53] FRA began conducting comprehensive reviews and audits of all conductor certification programs to confirm compliance with Part 242.[54]

Section 22410 of the *Infrastructure Investment and Jobs Act* (*IIJA*, P.L. 117-58) directs FRA to audit the locomotive engineer and conductor qualification, certification, and training programs, in consultation with the railroads and their workers, for compliance with Parts 240 and 242.

Safe Train Makeup:

Proper train makeup is critical for ensuring a train is able to effectively negotiate track and prevent derailment, according to FRA.[55] Train makeup refers to the placement of individual railcars that make up a train.[56] Freight trains carry a variety of freight using different types of railcars that vary in capacity, length, weight, and other characteristics, and they operate through various weather conditions and diverse terrain as flat plains and undulating or mountainous territories.[57] Improperly assembled trains are more susceptible to derailment, in part because of vertical, longitudinal, and lateral forces throughout the train—also known as "in-train" forces—that can affect the stability of a train on its tracks, depending on a variety of factors, including the train's specifications, speed, and terrain, among others.[58] For example, excessive "in-train" forces can cause a long, heavy train to pull apart or climb off the track upon a change of grade (e.g., going up or down hills) or when the train enters a curve.[59]

A conventional air-braking system is controlled by an air pressure signal from the leading locomotive, which sends a signal through the train to engage brakes.[60] Because each railcar receives this signal sequentially, it takes multiple seconds for railcars at the end of the train to receive the air pressure signal and begin braking.[61] Application of air brakes generates in-train forces, as railcars at the front of the train that have applied brakes will be pushed by railcars further back that have not yet received the air signal.[62] Other technologies, including two-way end-of-train (EOT) devices and

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[50] *Id.*
[51] November 12, 2021 letter from Deputy Administrator Bose to the Association of American Railroads, American Short Line and Regional Railroad Association, and American Public Transportation Association.
[52] *Id.*
[53] *Id.*
[54] *Id.*
[55] Government Accountability Office, Rail Safety are Getting Longer, and Additional Information is Needed to Assess their Impact, May 2019, GAO-19-443, Page 6.
[56] *Id.*
[57] *Id.*
[58] *Id. at 7.*
[59] *Id.*
[60] *Id.*
[61] *Id.*
[62] *Id.*

radio-controlled locomotives (distributed power "DP" units), are sometimes used by railroads in conjunction with conventional brakes to provide improved braking performance or other benefits, such as adding extra power to help pull or push long and/or heavy trains.[63] EOT devices measure brake pressure and transmit this information via radio signal to the front of the train.[64] An EOT device can also engage air brakes at the rear end of a train in an emergency to decrease the time required to apply the brakes on all cars.[65]

If radio communication between the controlling locomotive and EOT device is interrupted, an EOT device will not be able to initiate emergency braking when requested, according to FRA.[66] Regulations allow communication between the EOT device and the controlling locomotive to be lost for up to 16 minutes and 30 seconds before the crew is notified.[67] If an engineer encounters a situation necessitating an emergency brake application during a loss of communication, the engineer may have to request an emergency brake application multiple times before the system responds.[68] FRA raised concern with the safety risks associated with loss of communication between controlling locomotives and EOT and sought public comment in a January 2020 NPRM. [69] It published a final rule in December 2020 without mitigating communication loss; the final rule required that operating employees be trained on the limitations and use of the emergency application signal and the loss of communication indicator.[70]

In 2020, NTSB reported on an October 2018 accident in Granite Canyon, WY, in which a Union Pacific (UP) freight train collided with a stationary UP freight train after cresting a hill and descending a grade for 13 miles, killing the locomotive engineer and conductor of the striking train.[71] NTSB determined that the probable cause was the failure of the air brake system due to restricted air flow in the train's brake pipe and the failure of the EOT to respond to an emergency brake command.[72] Contributing to the accident was failure to maintain the railcars in accordance with federal regulations, and the existence of regulatory and industry standards that permit loss of communication with EOTs for extended periods of time without warning the operating crew.[73]

Also in 2020, NTSB reported on a CSX derailment in August 2017 in Hyndman, PA, in which three derailed tank cars containing hazardous materials breached, resulting in a fire, three destroyed homes, and the evacuation of 1,000 residents.[74] This 10,612-foot long, 18,252 ton-train

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[63] *Id.*
[64] *Id. at 8.*
[65] *Id.*
[66] Federal Railroad Administration, Final Rule, Miscellaneous Amendments to Brake System Safety Standards and Codification of Waivers, Docket No. FRA-2018-0093, December 11, 2020, page 80551.
[67] *Id.* and 49 CFR 232.407
[68] *Id* at 80551.
[69] Federal Railroad Administration, Notice of Proposed Rulemaking, Miscellaneous Amendments to Brake System Safety Standards and Codification of Waivers, Docket No. FRA-2018-0093, January 15, 2020, page 2506.
[70] Federal Railroad Administration, Final Rule, Miscellaneous Amendments to Brake System Safety Standards and Codification of Waivers, Docket No. FRA-2018-0093, December 11, 2020, Page 80571.
[71] National Transportation Safety Board, Accident Report, NTSB/RAR-20/05 PB2020-101016, Collision of Union Pacific Railroad Train MGRCY04 with a Stationary Train, Granite Canyon, Wyoming, October 4, 2018, adopted December 29, 2020, Page 3.
[72] *Id.* at 10.
[73] *Id.*
[74] National Transportation Safety Board, Accident Report, NTSB/RAR-2020/04 PB2020-101012, CSX Train Derailment with Hazardous Materials Release, Hyndman, Pennsylvania, August 2, 2017, adopted November 23, 2020, Page 3.

had no distributed power and the train encountered leaks in the braking system that were repaired enroute.[75] No injuries or fatalities occurred, with NTSB determining the probable cause of the accident was the inappropriate use of hand brakes on empty rail cars to control train speed and the placement of blocks of empty rail cars at the front of the train leading to longitudinal and lateral forces and tread buildup, both of which were permissible under CSX operating practices.[76]

Track Inspection and Autonomous Track Inspection Technology:

FRA regulates track safety under the minimum requirements of 49 CFR Part 213. The regulations specify four categories of track components requiring inspection, including track geometry, roadbed, track structure, and track appliances and track-related devices.[77] The regulations require that a designated qualified person perform visual inspections, at frequencies determined by class of track, to monitor conditions for compliance.[78] When a track inspector identifies a deviation from the minimum track safety standards, the inspector must verify the defect and take appropriate action to correct a verified defect, including immediate remediation in certain circumstances.[79]

Automated Track Inspection (ATI) systems measure and identify railroad track geometry defects.[80] Since 1974, FRA has operated an Automated Track Inspection Program (ATIP) to supplement required visual track inspections to help railroads identify noncompliant track geometry conditions requiring repairs.[81] ATI technologies can be equipped on locomotives or other rolling stock and travel over the track to be inspected via a train's movement over that track segment, including trains operating in revenue service.[82] Under FRA's ATIP, the agency operates a fleet composed of a hi-rail vehicle and seven track geometry cars, two of which are pulled by freight trains in general revenue service.[83]

Part 213 allows track owners to operate ATI systems; such technologies are not prohibited by current regulations.[84] Beginning in 2018, six of the seven Class I railroads have operated with FRA's approval under 49 CFR 211.51 ATI testing programs that include temporary suspension from the visual inspection frequency intervals required by 49 CFR 213.233.[85] The test programs permitted the carriers to reduce the frequency at which track inspectors conduct visual inspections while the carriers operated ATI systems on track in designated territories.[86] At the end of 2021, the total average of Class I maintenance of way and structures employees—which includes those who

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[75] *Id.* at 15, 16.
[76] *Id.* at 10, 50.
[77] 49 CFR Subparts C, B, D, and E, respectively.
[78] 49 CFR 213.7.
[79] 49 CFR Part 213.
[80] Ian Jeffries, Association of American Railroads, Letter to Federal Railroad Administration Administrator Amit Bose, January 11, 2022, Page 1.
[81] Office of Inspector General, U.S. Department of Transportation, FRA Uses Automated Track Inspections to Aid Oversight but Could Improve Related Program Utilization Goals and Track Inspection Reporting, April 27, 2022, https://www.oig.dot.gov/library-item/38939, Page 8.
[82] Ian Jeffries, Association of American Railroads, Letter to Federal Railroad Administration Administrator Amit Bose, January 11, 2022, Page 3.
[83] Office of Inspector General, U.S. Department of Transportation, FRA Uses Automated Track Inspections to Aid Oversight but Could Improve Related Program Utilization Goals and Track Inspection Reporting, April 27, 2022, https://www.oig.dot.gov/library-item/38939, Page 8.
[84] 49 CFR Part 213.
[85] FRA-2018-0091; FRA-2019-0099; FRA-2020-0031; FRA-2019-0099; FRA-2021-0044; FRA-2020-0013; FRA-2020-0014; FRA-2020-0056.
[86] *Id.*

inspect, repair, maintain, and construct track—has decreased by approximately 23 percent compared to 2014.[87]

FRA approved extensions of test programs, four of which are set to expire in November 2022.[88] FRA approved a request for a limited waiver under 213.233 from one carrier, denied its request to expand the terms of that waiver, and denied a second carrier's waiver request.[89] In the former case, an association representing state rail safety managers and the labor union representing workers who inspect and repair track filed comments voicing concerns and objection to the waiver, respectively. In the second waiver, the same labor union commented in opposition to the waiver. [90] In the denial letters, FRA stated that "given the ongoing RSAC [Railroad Safety Advisory Committee] task related to ATI, expanding the existing relief at this time is not justified."[91] "FRA notes that in carrying out this task, the RSAC will need to consider data not only from the [carriers' ATI Test Programs], but data from the relevant ATI Test Programs that are still underway at multiple railroads. FRA finds that short-circuiting this evaluation process on individual railroads is not in the public interest and consistent with railroad safety at this time."[92]

[87] Data reported by Class I railroad carriers to the Surface Transportation Board, https://www.stb.gov/reports-data/economic-data/employment-data/.
[88] FRA-2020-0031; FRA-2020-0013; FRA-2020-0014; FRA-2020-0056.
[89] FRA-2020-0064, FRA-2021-0044.
[90] Docket No. FRA-2020-0064-0011, *available at*; Docket No. FRA-20201-0044, *available at* https://www.regulations.gov/document/FRA-2021-0044-0003.
[91] Federal Railroad Administration Letter to BNSF dated March 21, 2022, FRA-2020-0064, Page 2.
[92] Federal Railroad Administration Letter to Norfolk Southern dated March 21, 2022, FRA-2021-0044, Page 2-3; Federal Railroad Administration Letter to BNSF dated March 21, 2022, FRA-2020-0064, Page 2-3.

WITNESS LIST

PANEL I:

The Honorable Amit Bose
Administrator
Federal Railroad Administration

The Honorable Thomas B. Chapman
Member
National Transportation Safety Board

PANEL II:

Mr. Roy L. Morrison
Director of Safety
Brotherhood of Maintenance of Way Employes Division
International Brotherhood of Teamsters

Mr. Don Grissom
Assistant General President
Brotherhood of Railway Carmen Division
TCU/IAM

Mr. Grady C. Cothen, Jr.
Retired
Transportation Policy Consultant

Mr. Nathan Bachman
Vice President of Sales & Business Development
Loram Technologies, Inc.

Ms. Cindy Sanborn
Executive Vice President & Chief Operating Officer
Norfolk Southern Corporation
Chair, Safety & Operations Management Committee
Association of American Railroads

Mr. Jeremy Ferguson
President
Sheet Metal, Air, Rail, Transportation-Transportation Division