

December 21, 2022

The Honorable Amitabha (Amit) Bose Administrator Federal Railroad Administration 1200 New Jersey Avenue, SE Washington, DC 20590

RE: Train Crew Size Safety Requirements
Docket No. FRA-2021-0032

Dear Administrator Bose:

On behalf of the Transportation Trades Department, AFL-CIO (TTD), I am pleased to respond to the Federal Railroad Administration's (FRA) proposed rule regarding Train Crew Size Safety Requirements. These requirements are necessary to ensure the safety and efficient operation of the U.S. freight and passenger railroad systems, the millions of Americans who rely on these systems every day, and the employees who work on these systems. TTD consists of 37 affiliated unions representing the totality of rail labor, including both passenger and freight rail workers, and specifically, the engineers and conductors that drive and operate freight and passenger trains who will be most impacted by this proposed rule.¹

In addition to our own comments, TTD endorses the comments and testimony filed by our affiliates: the International Association of Sheet Metal, Air, Rail, and Transportation Workers – Transportation Division (SMART-TD), the Brotherhood of Locomotive Engineers and Trainmen (BLET), the American Train Dispatchers Association (ATDA), and the International Association of Fire Fighters (IAFF).

This Notice of Proposed Rulemaking (NPRM) requiring two-person crews on most freight and passenger trains is fundamentally necessary to ensure the safe operation of our freight rail and passenger systems and we applaud FRA's leadership in releasing this NPRM. Many of the provisions included in the NPRM represent fundamental safeguards that must be enforced to

¹ Attached is a list of TTD's affiliated unions.

ensure that our nation's rail system operates at minimum standards that workers and the public demand. At the same time, there are areas of the rule that could be strengthened to ensure that the intent of the proposed rule is truly fulfilled and potential weaknesses are fully addressed.

Below, TTD outlines sections of the rule that are vital and that must not be eliminated or weakened, such as the requirement that railroads undergo a risk assessment and public comment process before being able to operate with less than two-person crews; that legacy one-person train operations need to seek special approval from FRA to continue operating; or the requirement that all trains carrying hazardous materials, as defined by the proposed rule, be operated by two crewmembers on the train. TTD also outlines areas that must be strengthened or changed, such as the ability to use an alternative risk assessment process in lieu of the proposed risk assessment or the lack of a requirement that the second crewmember be certified as a conductor. TTD urges FRA to finalize the strongest rule possible that keeps all of the fundamental tenets of the rule while addressing the areas mentioned in these comments.

I. Need & Context For Notice of Proposed Rulemaking (NPRM)

TTD believes that it is important to highlight the context in which this Notice of Proposed Rulemaking (NPRM) has been proposed. That context only heightens the need for FRA to finalize swiftly the strongest possible rule.

While FRA has been considering action on crew size for almost 10 years now, trends from the last few years in the rail industry have shined a clear spotlight on the need for strong, swift action by FRA. Since 2015, the Class I freight railroads have introduced a new operating model known as Precision Scheduled Railroading, or PSR. As part of its organizational mission, TTD interacts with many different industries and companies. The railroads' actions through PSR are some of the most reckless and dangerous TTD has seen in recent history.

The Precision Scheduled Railroading model exists not to improve service to customers or increase the efficiency of the industry, but rather, to squeeze every last nickel and dime out of the industry. It exclusively serves the short-term benefit of the railroads' shareholders at the expense not just of rail workers, but also of the very customers the companies are supposed to be serving. The Class I railroads proudly tout that the PSR model has allowed them to achieve record profits – more than \$146 billion since 2015. But they refuse to acknowledge that this comes at the cost of unsafe working conditions for rail workers and the communities through which they operate, and detrimental service for rail shippers, and ultimately, their consumers. In nominal terms, these profits are even more than what the railroads made at the height of their robber baron days in the 19th century. To achieve these profits for their shareholders' benefit, this business model has stripped railroads of their human and physical capital. Since 2015, these railroads have laid off 45,000 workers, which is the equivalent of 30% of the nation's total freight rail workforce.²

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² See the Testimony of Surface Transportation Board Chairman Marty Oberman before the House Transportation & Infrastructure Committee on May 12, 2022 (page 3)

Railroads want us to believe these workers are redundant, but it has become clear that the massive reductions in workforce are simply about cutting costs for the sake of profit, even if those cuts result in the degradation of safety and service as the cuts certainly have. The railroads say they care about safety, but all evidence clearly points to the fact that those claims are hollow rhetoric.

Reports from our affiliates' and news media stories reflect a freight rail industry that is in a state of crisis because of the railroads' own decision making.³ The railroad workers who remain after the Class I railroads cut 45,000 of their colleagues have been forced to do more with less, and are faced with discipline or dismissal if they are unable to comply. The consequences of these choices are no longer hypothetical. Rather than maintaining appropriate staffing levels, carriers are mandating overtime for workers who are already stretched thin or creating schedules that make it impossible for workers to actually take time off.⁴ Carriers are also penalizing workers who refuse to come to work when they are sick because carriers do not have enough staff to cover when someone is sick and cannot show up for work.⁵ All of these policies are backed by draconian attendance policies that the carriers have unilaterally implemented that put someone's job at risk if they take any unexcused absences.⁶ In an industry where fatigue is a known and constant risk factor, exposing employees to additional fatigue by asking them to work longer, faster or perform multiple jobs, especially while sick, is a proven recipe for disaster.

Carriers are also compensating for reduced staffing by changing operating practices that are making the rail system less safe. For example, railroads are now running much longer trains, upwards of five miles in some parts of the country to compensate for not having enough train crews. They are also requiring remaining employees to perform work outside of their craft, in addition to fulfilling their regular duties. In practice, that means that railroad workers are being forced to do safety-critical tasks that they are not experienced in, and do not have proper training and qualification to perform. Furthermore, carriers are cutting back on the amount of training that a new employee receives before being expected to do the job by themselves all because they have cut so much staff. Norfolk Southern, for example, has cut the amount of new training for conductors from 16 weeks to 6-8 weeks. That is putting inexperienced workers at risk of severe injury or death.

All of these decisions and practices by the Class I railroads has led to a railroad system that is getting progressively less safe. The FRA's own safety data shows that since 2009, the number of railroad accidents and incidents reported to FRA has not meaningfully declined. Derailments,

⁴ https://prospect.org/labor/potential-rail-worker-strike-caused-by-erratic-scheduling/

https://transportation.house.gov/imo/media/doc/Testimony,%20STB%20Chairman%20Oberman.pdf

³ https://time.com/6213399/railroad-strike-impact-trains/

⁵ https://www.nytimes.com/2022/09/15/business/economy/railroad-workers-strike.html

 $[\]label{lem:com2022} $6https://flatheadbeacon.com/2022/05/06/railroaders-quit-after-bnsf-institutes-draconian-attendance-policy/#:~:text=1\%2C\%20the\%20railroad\%20implemented\%20a,or\%20fatigue\%2C\%20they\%20lose\%20points.$

⁷https://www.progressiverailroading.com/bnsf_railway/article/Class-I-railroads-continue-the-longer-train-trend-55035

fatalities, and collisions all increased in the years leading up to the pandemic, with fatalities rising from 640 to 732 between 2017 and 2019 alone. Total accidents/incidents rose from 9,215 in 2012 to 9,744 in 2019, reversing a decades-long decline. Trespasser deaths not on highway-rail crossings rose from 335 in 2012 to 477 in 2019. Given the notorious pressure that railroads put on their workers to prevent them from reporting incidents to the FRA, TTD suspects that these accidents/incidents are severely undercounted, especially during the pandemic when safety risks have been much higher, and normal government functions – including safety inspections – were curtailed. In other words, there is no strong evidence that safety outcomes have improved in the previous two years and any claims to this effect should be viewed with a high degree of skepticism. The trends from the last decade instead point to a worsening safety situation that is reaching a crisis point.

The bottom line is that PSR prioritizes short-term profits over the long-term health and safety of our freight rail system, its workers, and its customers. Between reports from frontline employees and the FRA's own data, it is clear that PSR puts rail workers and the public at a real and unacceptable safety risk. The railroads' implementation of PSR clearly demonstrates that they are prioritizing profits above safety, no matter the cost.

The unacceptable and dangerous safety risks that currently exist will be worse if railroads move from two-person crews to one-person crews. As FRA notes in this proposed rule, while two-person crews are currently the norm on U.S. Class I freight railroads, crew size is often an issue that the railroads would like to determine only during the collective bargaining process, not by government legislation or regulation. That was certainly the case during this latest round of collective bargaining negotiations where the Class I railroads wanted to put this issue on the table with the unions. By their own admission, if the Class I railroads can save a single dollar by moving to less than two-person crews, they will do so no matter the safety costs.

The connection between crew size and safety is recognized by other transportation modes such as aviation and maritime. These modes generally require at least two crewmembers to ensure necessary redundancy and safety in the event of an incident. In the aviation sector, commercial passenger flights have for decades had at least two pilots in the cockpit in case one pilot becomes incapacitated.¹¹ Most large cargo flights have at least two pilots as well for that reason.

In the maritime industry, most large cargo and passenger vessels have multiple crewmembers in order to handle the complex tasks needed to operate such vessels and respond to emergencies. On ocean-going vessels for example, federal law requires that two crewmembers must be certified as global maritime distress and safety system (GMDSS) radio operators, which is the maritime global distress system, so that there is redundancy in responding to emergencies should one arise. ¹²

⁸https://railroads.dot.gov/safety-data/accident-and-incident-reporting/accidentincident-dashboards-data-downloads ⁹ Id.

¹⁰ Id.

¹¹ See 14 CFR § 121.385, https://www.law.cornell.edu/cfr/text/14/121.385

¹² See 47 CFR § 80.1073, https://www.law.cornell.edu/cfr/text/47/80.1073

The connection between crew size and train safety should be self-evident, just as it is recognized in other transportation modes. As FRA notes in this proposed rule, operating a train is a fundamental part of our rail system, it would be hard to have a rail system without running trains, and the safe operation of trains is an integral part of rail safety. Our rail system is not a safe one if trains get into frequent incidents or accidents. And just like the aviation and maritime industries, the number and qualifications of the crewmembers operating the train has a direct impact on the safe operation of that train.

FRA's proposed rule recognizes two fundamental truths. First, crew size is directly correlated to the safe operation of trains. Second, reducing the number of persons operating a train creates substantial safety risks that need to be addressed, especially when those crewmembers have complementary but distinct responsibilities as engineers and conductors do. The framework FRA proposes in this rule rightly attempts to mitigate the safety risks that arise when reducing the number of people operating a train. And as explained above, the railroads have been taking actions over the last several years that are making the rail system less safe and they will continue to do so, including attempting to reduce crew size, unless FRA acts.

Other non-rail stakeholders concur on the safety need and rationale for two-person crews and this proposed rule. Our affiliate, the International Association of Fire Fighters (IAFF) highlights in their comments how two-person crews are needed to assist fire fighters and other emergency responders in an emergency:

The IAFF firmly believes that requiring at least two crewmembers per train is a critical safety feature that protects both the train's occupants and any community through which the train travels. Train lengths have increased significantly in recent years and often exceed two miles. When trains of this length break down or stop moving, they block railroad crossings and other infrastructure that can impede fire fighters' responses to emergencies in their communities. One crewmember is simply unable to quickly assess whether a stopped train is blocking crossings and separate the cars if needed. A minimum of two crewmembers are needed to ensure a community's first responders can continue answering emergency calls for service and meet their response time criteria.

TTD firmly believes that FRA has the statutory authority to issue this proposed rule. The FRA has broad rail safety authority granted by Congress which is now codified at 49 U.S.C. § 20103, and delegated from the Secretary of the United States Department of Transportation to the Administrator of the Federal Railroad Administration. That authority reads as follows, "The Secretary of Transportation, as necessary, shall prescribe regulations and issue orders for every area of railroad safety supplementing laws and regulations in effect on October 16, 1970."13 That safety authority recognizes that FRA's chief mission is to ensure the safety of our rail system.

¹³ See 49 U.S.C. § 20103, https://www.law.cornell.edu/uscode/text/49/20103

FRA's mission statement also reflects FRA's critical role as the rail safety regulator, "The Federal Railroad Administration's mission is to enable the <u>safe</u>, reliable, and efficient movement of people and goods for a strong America, now and in the future" (emphasis added). ¹⁴ To reiterate, crew size is fundamentally a safety issue. The number and qualifications of the crewmembers operating the train has a direct impact on the safe operation of that train. FRA's broad authority from Congress to prescribe regulations for every area of railroad safety clearly covers this proposed rule on crew size since crew size is a safety issue.

The above facts reinforce the fundamental need for this rule. A basic safety issue like crew size should not be open for negotiation and it should not be something for which unions have to give something else up, like wages, in order to achieve. Additionally, smaller, non-union railroads can put one-person crews out on the tracks, not only jeopardizing safety, but also setting a dangerous, competitive trend that larger railroads will seek to follow. It is also worth highlighting that, while railroads engage in bargaining with their workers, the same is not true for the communities through which they operate and whose safety they would put at risk every single day by reducing crew sizes. In the absence of the American public's ability to negotiate over their own safety, it is incumbent for the federal government to ensure it as a matter of policy.

Based on the testimony at the public hearing held by the FRA on December 14, 2022, we know the FRA will receive comments from the railroads to withdraw this rule or except whole classes of railroads. Given the alarming deteriorating safety trends in the rail industry caused by the Class I railroads' own decision making, TTD urges the FRA not to act on those comments and instead move forward with swiftly finalizing the strongest possible rule.

II. Discussion About Preemption of State Laws Regarding Crew Size

TTD broadly supports the rights of states to enact safety standards that provide humane working conditions for employees and reduce the risks of death, injuries and illnesses. Federal laws and regulations that set safety standards for transportation should be a floor, not a ceiling. TTD's position extends to state laws that attempt to improve rail safety. Several states like California, Illinois, Nevada, West Virginia, and Wisconsin in recent years have enacted state laws regarding minimum crew size for train operations in their states in recognition of the fundamental connection between crew size and the safety and welfare of their citizens, including rail workers. Especially in this era where Class I railroads are all too willing to flout safety laws if they can make an extra buck or two, TTD applauds states that have taken this action.

TTD firmly believes that there is nothing that inherently requires the Federal Railroad Administration, as part of finalizing this proposed law regarding crew size, to preempt state laws regarding crew size. As stated above, the FRA has explicit jurisdiction to issue a crew size rule

¹⁴ https://railroads.dot.gov/about-fra/about-fra

¹⁵ E.g. see https://ttd.org/policy/california-meal-and-rest-break-requirements-must-not-be-preempted/

using the rail safety authority granted by Congress which is now codified at 49 U.S.C. § 20103, and delegated from the Secretary of the United States Department of Transportation to the Administrator of the Federal Railroad Administration.

Under the Federal Railroad Safety Act of 1970 (FRSA), now recodified at 49 U.S.C. § 20106, states also retain the right to adopt laws regarding rail safety under certain circumstances. The relevant part of that section reads as follows:

- "A State may adopt or continue in force an additional or more stringent law, regulation, or order related to railroad safety or security when the law, regulation, or order—
- (A)is necessary to eliminate or reduce an essentially local safety or security hazard;
- (B)is not incompatible with a law, regulation, or order of the United States Government; and
- (C)does not unreasonably burden interstate commerce."

Therefore, State laws that require two-persons or more to operate trains in situations that are not covered by this proposed rule are not incompatible with this proposed rule. FRA has proposed several exceptions to the requirement that railroads seek approval from FRA to operate trains with fewer than two-person crews on the train. TTD provides comments on those proposed exceptions elsewhere in this document. But it's not surprising that states may still want to mitigate the safety risks of some of those proposed exceptions.

For the purposes of discussing preemption, there are potentially numerous instances where a local safety or security hazard would necessitate having two-person crews that FRA is at a national level not proposing to require railroads to get special approval to use less than two-person crews under the proposed rule. Some examples include a very dense area with high amounts of train traffic, an area that suffers from extreme weather like cold temperatures or copious amounts of snow, or an area that may have steeper grades because of topological features like mountains.

State laws covering these instances fit the criteria recodified at 49 U.S.C. § 20106. These laws are necessary to eliminate or reduce a local safety or security hazard caused by the unique characteristics of a specific area; they are not incompatible with FRA's proposed rule here which seeks to put in place a framework on regulating crew size that is tailored to the risks of a particular train operation. The risks of train operations are higher in areas with the characteristics listed above. Because these laws are likely to impact smaller, more local train operations based on the contents of FRA's proposed rule, they won't unreasonably burden trains going between states and therefore wouldn't unreasonably burden interstate commerce. As FRA itself notes, mainline Class I rail operations already use two-person crew operations and would not have their existing operation affected by FRA's proposed rule. Since those Class I rail main line operations are the ones most likely to travel between states, TTD believes that they are unlikely to be affected by state laws requiring two-person crews given how FRA's proposed rule is structured.

The 9th Circuit Court of Appeals' ruling from 2021 regarding the previous Administration's 2019 attempt to preempt states' laws on crew size reinforces TTD's position here. ¹⁶ The 9th Circuit in that case found that the previous Administration's 2019 withdrawal order of the 2016 NPRM on crew size did not preempt these states' laws:

"The [2019] Order, although declaring it "negatively preempt[s] any state laws" concerning crew staffing, does not address why state regulations addressing local hazards cannot coexist with the Order's ruling on crew size. The Order offers an economic rationale: "a train crew staffing rule would unnecessarily impede the future of rail innovation and automation." 84 Fed. Reg. 24,740. But this is not a safety consideration....In sum, although preemption of state safety laws is not beyond the FRA's mandate, the Order does not do so implicitly."

TTD therefore requests that as FRA finalizes this proposed rule, it does not preempt state laws regarding crew size for the reasons listed above.

III. Strengths of Notice of Proposed Rulemaking (NPRM)

TTD believes that the following aspects of the NPRM from FRA are critically important for the reasons listed below and urges the FRA not to weaken them as the rulemaking process progresses.

A. Baseline Two-Person Crew Requirement for Class I Railroads

TTD strongly supports FRA's proposal to require two-person crew operations for all railroad operations with certain exceptions. As FRA notes, this requirement would result in a baseline requirement of at least two-person crews on Class I freight railroad operations, which TTD strongly supports.

Two people are necessary to operate a freight rail train because a minimum crew size of two people can prevent mistakes caused by fatigue, health issues, and mechanical difficulties. As FRA notes in its proposed rule, there are many situations where two-person crews can address safety issues that may arise that one-person crews cannot address. These situations include: communication with other personnel such as train masters or train dispatchers; addressing emergency situations when they arise, including communication with first responders; a derailment or accident where one crewperson becomes incapacitated; dealing with a train blocking a crossing; communication and other issues resulting from long trains; mechanical issues that require detection and inspection; fatigue of the crewmember(s) and the need to stay alert; and the negative consequences on the mental and physical health of one crewmember being isolated for long periods of time.

Cir. 2021). Ruling can be found online here http://cdn.ca9.uscourts.gov/datastore/opinions/2021/02/23/19-71787.pdf

¹⁶ See Transp. Div. of the Int'l Ass'n of Sheet Metal, Air, Rail & Transp. Workers v. FRA, 988 F.3d 1170, 1182 (9th

Technology, including Positive Train Control (PTC), is not now nor was it ever intended to be a substitute for human knowledge and expertise, as TTD has indicated numerous times. ¹⁷ PTC is, and was, designed to be nothing more than a safety overlay. It is not, nor is any other software currently within the cab of the locomotive, capable of identifying obstructions and/or hazards – especially those occurring under the tenets of restricted speed. It should come as no surprise then that the frequency and veracity of derailments has had no substantial change since its implementation. On the contrary, the improvements in safety that PTC was expected to offer have been undermined by the above described behavior by the Class 1 railroads and their reckless disregard for safety.

Severe transportation incidents such as the Lac-Megantic incident in Quebec, Canada in 2013 that resulted tragically in multiple preventable deaths shows that the best and most effective way to ensure transportation safety is to have multiple well-trained and experienced crewmembers who can react quickly when an incident or accident occurs.

As previously noted, FRA's own safety data shows that since 2009, the number of railroad accidents/incidents reported to FRA has not meaningfully declined. Given the well -documented pressure that railroads put on their workers not to report incidents to FRA, TTD suspects that these accidents/incidents are severely undercounted, especially during the pandemic when safety risks have been much higher and normal government functions, including safety inspections, were curtailed.

This stagnation, despite the railroads' investment of significant sums of money in technology, including Positive Train Control, underscores the point that technology is not a substitute for well-trained, knowledgeable and experienced human beings.

In the following pages, TTD addresses the exceptions FRA is proposing to the baseline two-person crew requirement, in particular for certain aspects of Class I railroads operations. As FRA moves forward with this rulemaking, TTD urges FRA to reject requests to weaken the baseline requirement, including by creating additional exceptions, and keep the vital requirement of two-person crew operations while addressing the areas of the rule addressed elsewhere in these comments that TTD believes could be improved.

B. Requirement for Legacy Operation Approval

As FRA notes in its proposal, legacy operations with one-person crew operations are not necessarily safe and may not address every safety concern FRA has that led to the issuing of this

¹⁷ https://ttd.org/policy/physical-brake-inspections-keep-everyone-safe/ https://ttd.org/policy/ttd-to-fra-there-is-no-substitute-for-physical-safety-inspections/

proposed rule. Legacy operations should be evaluated with rigorous review to ensure that workers, communities, and the public are protected in accordance with the safety requirements proposed in this rulemaking.

TTD supports FRA's proposal to define legacy operations as those in existence "two years before the final effective of the rule, and that are not otherwise prohibited from operating one-person operations". This definition prevents any train operation from rushing toward one-person crew train operations to try and circumvent the requirements under this proposed rule while it is being finalized. TTD believes that measuring "legacy operations" in terms of the time the legacy operation has existed for rather than the total number of operating hours or rail miles operated is the appropriate metric and conforms better with the common definition of "legacy". TTD does not oppose FRA establishing a specific date, (e.g., January 1, 2021) by which a fewer than two-person operation must be established to be considered a legacy operation under this rule. Establishing a specific date also keeps the definition of legacy operations tied to a time-based metric, which TTD believes is the most appropriate way to define "legacy".

TTD also supports FRA's proposal to require legacy one-person train operations to file a special approval petition to continue those operations. FRA's proposal fits the fundamental framework and purpose of the NPRM. The whole purpose of this proposed rule is to recognize the risks of railroads operating with less than two-person crews and require that approval be granted *only after* a railroad undergoes an approval process, including a robust risk assessment and comment period, to identify and appropriately mitigate any risks identified by a railroad operation with less than two-person crews. Allowing railroads with legacy operations to continue operating without a special approval petition would undermine the purpose of the proposed rule and the appropriate framework FRA is proposing for other railroads seeking to use less than two-person crews.

TTD further supports FRA's proposal that would prevent a legacy one-person train operation from continuing operations beyond 90 days after the effective date of a final rule if the railroad fails to file a special approval petition containing a description of the operation. This proposal is necessary to effectuate the requirement that legacy one-person train operations file a special approval petition in order to ensure there aren't any inappropriate risks associated with those legacy operations. Otherwise, legacy one-person train operations could ignore the requirement to file and potentially operate indefinitely, which again would undermine the purpose of the proposed rule.

As FRA moves forward with this rulemaking, TTD urges FRA to keep the following important provisions related to legacy operations fully intact and not weaken them.

C. Petition and Public Comment for Special Approval Requests

TTD strongly supports FRA's proposal to require any railroad operation seeking to move to less than two-person crews to file a special petition with FRA to do so and go through a public comment period of not less than 60 days in order to receive FRA permission to move to less than two-person crew operations.

Public comment periods provide a meaningful due process that allows the public and stakeholders to weigh in on important issues and thus are a core tenet of the Administrative Procedure Act. This fact is why the FRA has public comment periods for regulatory changes, waiver petitions, and Positive Train Control safety plan amendments. Additionally, the length of the public comment period should not be abridged in acknowledgement of the practical and logistical impacts on rail workers and the need to allow these workers to personally have time to review and comment on issues that would affect them. TTD urges FRA to reject any request to eliminate or reduce the proposed 60-day public comment period on a petition submitted under 218.131 or 218.133.

As the FRA notes in this NPRM, there are numerous potential safety risks associated with moving from two-person crew operations to one-person crew operations. Those risks include the complex and large volume of duties needed to operate a train; communication with other personnel, such as train masters or train dispatchers; addressing emergency situations when they arise, including communication with first responders; mechanical issues that require detection and inspection; fatigue of the crewmember(s) and the need to stay alert; and the negative consequences on the mental and physical health of one crewmember being isolated for long periods of time.

Comment periods are also important to allow experts and organizations to provide additional data and information to improve the safety and applicability of the rule or requested waivers. These public comment periods are particularly important in an environment where the railroads have been pushing increasingly concerning policies on their workers such as <u>dangerous attendance practices</u> and efforts to force workers to conduct <u>safety inspections in ever-shortening time windows</u> that do not allow for thorough inspections.

In addition, providing a public comment period allows workers on the ground to communicate situations that they experience that might not be known to the railroads and can illustrate the safety needs of workers.

D. Required Risk Assessment Process

TTD strongly supports FRA's proposal that any railroad applying through a special petition to move to less than two-person crew operations undergoes a risk assessment to determine the safety risks involved in moving toward such an operator and whether or not that railroad has identified appropriate mitigation strategies to address that risk.

It is of paramount importance that the FRA conducts a rigorous risk assessment of any operations with fewer than two-person crews at any time. The Class I railroads in particular, as evident in their implementation of Precision Scheduled Railroading, have not shown that they can responsibly assess risk, and robust oversight is necessary to ensure worker safety and hold the railroads accountable. This risk assessment will allow FRA and the general public to evaluate a railroad's proposal to move to less than two-person crew operations and identify any deficiencies with said proposal or alternatively have confidence that the railroad's risk assessment and any mitigation measures will ensure the safety of the crewmembers, rail system, surrounding

communities, and the general public.

Furthermore, TTD supports the rigor and level of detail that FRA is proposing as part of this risk assessment under 218.135(a). Such rigor and detail, at least six parts that in total require at least twenty-two (22) specified pieces of information, is necessary given both how fundamental crew size is to train operations and the volume and complexity of factors that must be considered and questions that must be answered when considering operation a train with less than two-person crews on the train.

As FRA moves forward with this rulemaking, TTD urges the FRA to keep this section and its requirements intact.

E. Two-Person Crew Requirement for Transporting Hazardous Materials

TTD strongly supports FRA's proposal that all trains carrying hazardous materials, as defined by the rule, must have two crew persons on the train and that these operations are not eligible to petition for approval to move to one-person train crew operations. As our affiliate, the International Association of Fire Fighters (IAFF) says in their comments in this docket, "Trains can also pose a severe hazard when they are understaffed and ill-prepared for emergencies. Fire fighters and EMS personnel train to respond to rail emergencies; however, they rely on fully-staffed rail crews to assist in emergencies."

Especially for trains carrying hazardous materials, having a second crewmember physically on the train in the event of an emergency quite literally could be the difference between life and death. Trains carrying hazardous materials have the potential to cause widespread death and destruction if something goes wrong. The 2013 Lac-Megantic incident that killed 47 people and demolished the town of Lac-Megantic was caused by a train carrying 72 tank cars of crude oil, which is considered a hazardous material regulated by FRA. Many of the materials covered by the definition of "hazardous material" under this proposed rule are flammable or can easily leak and cause severe casualties or immense damage in a short period of time.

As IAFF further points out in their comments, "Trains provide transportation of all types of raw products, chemicals, produce, passengers, and more. Given trains' size, potentially hazardous cargo, and large numbers of passengers, there must be a sufficient crew size to respond to emergencies. Rail emergencies may occur in remote areas, and these crewmembers are the first line of defense until emergency responders arrive. Even once fire and EMS personnel are on-scene, these first responders rely on train crews to provide critical cargo information and services such as separating train cars. If a train has only one crewmember, there is no redundancy and a much higher risk of first responders not receiving crucial information."

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 $^{^{18}} https://safetydata.fra.dot.gov/officeofsafety/PublicSite/FormFRAF6180RailEquipmentAccidentReportInstructions. aspx\#: \sim: text=Crude\%20Oil\%20has\%20been\%20defined, Safety\%20Administration\%20(PHMSA)\%20regulations.$

Given the stakes of an emergency, it is imperative to have that second crewmember on board the train, and not have to wait for an unknown amount of time before another crewmember can arrive at the site of an emergency. The Union Pacific Railroad's own video regarding ground based conductors shown at the December 14, 2022, public hearing estimated it would take a crewmember stationed off the train a minimum of 29 minutes to get to the train. 19 29 minutes is an eternity in terms of emergency response and a great deal of destruction can occur involving flammable or poisonous hazardous materials in 29 minutes. Union Pacific's scenario is also under ideal circumstances in terms of that crewmember being able to locate and access the site without any difficulty. In an emergency with numerous first responders and potential other problems like blocked access to the site or limited visibility if there's a fire or heavy smoke, a crewmember arriving from off-site is likely going to be severely delayed.

If a train being operated by a single crewmember carrying hazardous materials were to encounter an emergency situation such as a release of hazardous materials, a highway crossing collision with an automobile, or a mechanical problem, expecting one crewmember to execute every required task in an emergency while anticipating all possible operating scenarios is an unacceptable risk and beyond irresponsible. In particular, expecting a single crewmember to be able to do all of the communication necessary with first responders while ensuring the safety of the train is ludicrous. For example, that crewmember could not leave the train engine idling in order to investigate the issue. Many emergency response needs would have to wait until another crewmember could arrive from many miles away. For example, should a train break down and block a highway crossing, that train could not be disconnected to unblock that crossing until a second crewmember arrived to help disconnect the train. These scenarios also assume that the crewmember is not injured, killed, or otherwise incapacitated in an incident or accident. That is quite the dangerous assumption for a train carrying hazardous materials and underscores the need for a second crewmember to be physically on the train and not offsite at an unknown time away from the train.

FRA applies the two-person hazardous materials requirement under this proposed rule to any train consisting of "20 or more tank car loads or intermodal portable tank loads of any combination of Division 2.1 (flammable gas), Class 3 (flammable or combustible liquid), or Division 1.1 or 1.2 (explosive) hazardous material, or a hazardous substance listed at 49 CFR 173.31(f)(2)) or one or more car loads of hazardous materials designated as rail-security sensitive materials (RSSM) as defined by the Department of Homeland Security". FRA notes that "[i]ncluded within the definition of RSSMs are tank cars containing [poisonous by inhalation] PIH materials and shipments of certain threshold quantities of explosive and radioactive materials." To state the obvious, 20 car loads is a voluminous amount of hazardous materials. This is not one or two carloads. Additionally, regarding poisonous by inhalation materials or explosive and radioactive materials, FRA is rightly deferring to the Department of Homeland Security's determination that these materials are so potentially dangerous that a single car load should trigger the two-person crew requirement.

¹⁹ https://www.youtube.com/watch?v=6hr15dtWwGU, See 4:50-4:55 (Accessed December 20, 2022)

Another example of the need for a second crewmember on board a train carrying RSSM is that the second crewmember can help the train engineer identify any potential terrorist threats while the train is in operation. Given the train engineer's responsibilities for focusing on operating the train, they are extremely unlikely to be able to be constantly monitoring their surroundings for threats, including terror threats. A crewmember off site miles away cannot provide that same function as a second crewmember physically located on the train.

TTD is aware that FRA heard complaints during the public hearing held on December 14 from The American Short Line and Regional Railroad Association (ASLRRA) and some short line railroads that this requirement would prevent short line railroads (Class II or III railroads) carrying hazardous materials, as defined by the rule, from applying for an exception to be able to move to one-person crew operations when carrying hazardous materials.

TTD notes that the inability of short lines carrying hazardous materials to apply for special approval to move to one-person crew operations is the whole purpose of this proposed requirement related to the transport of hazardous materials and a wise proposal from FRA. Regardless of whether the train operation is a Class I railroad or a Class II or III railroad or the type of train operation (long distance, short distance, speed, grade, etc.), carrying hazardous materials comes with a certain level of risk and that risk and the potential catastrophic damage that can result from an incident is not sufficiently reduced just because it's a Class II or III railroad or a relatively simple train operation. The only way to ensure the level of safety needed to mitigate the risk of carrying hazardous materials is to require that two crewmembers be onboard a train carrying hazardous materials, as defined under this rule.

As FRA moves forward with this rulemaking, TTD urges the FRA to keep this section and its requirements intact.

F. FRA Yearly Safety Review & Recertification of Railroad Operations Granted Special Approval

TTD strongly supports FRA's proposal under § 218.139 to require railroads that receive special approval under either § 218.131 or § 218.133 to conduct a formal, annual review and analysis of the FRA-approved train operation(s) with fewer than two crewmembers and annually provide a report of that reviews' findings and conclusions to FRA. The information detailed under § 218.139, including fatalities, injuries, and incidents where rules or operating protocols were not followed, will provide critical data that will enable the FRA to monitor the appropriateness of the special approvals that FRA does grant as well as the overall safety and implementation of this proposed rule.

FRA's proposed intention and approach would allow it to address safety issues as they arise and affirmatively identify that no operational changes have occurred to a railroad's operation since the special approval was granted that would erode safety. The required formal, annual review and analysis under paragraphs (a) and (b) will ensure that FRA has the data and information it needs

to review whether a railroad is deploying the safety measures necessary to mitigate the risks of operating without a second crewmember.

TTD in particular strongly supports FRA's proposal under paragraph (c) of section § 218.139 to require that railroads either certify their risk assessment has not changed or if it has substantially changed, submit a new or updated risk assessment with their annual report that meets the requirements of § 218.135. Rail operations do change over time and this proposed requirement will ensure that railroads take these risk assessments seriously and submit accurate information about their operations so that FRA has the appropriate information to make a determination regarding the risks of operating with single person crew operations.

TTD expects that FRA will receive comments from railroads about the "heavy burden" of collecting this data and filing these annual reports. Much of this information, including fatalities and reportable injuries are already collected by railroads, minimizing the additional burden upon railroads. To the extent that other information would have to be newly collected, such a small additional information collection burden is more than warranted to provide FRA with necessary data to provide oversight of a regulation that has life-saving implications.

Furthermore, if railroads feel that this data is too burdensome to collect, then they are unlikely to be doing the proactive monitoring and analysis of their train operations that would warrant a special approval being granted by the FRA in the first place to use less than two-person crewmembers. Given that much of the data is already gathered, it is entirely reasonable to expect railroads to produce reports in the annual timeline proposed in the rule. Even one life saved by identifying dangerous trends and empowering FRA with information needed to intervene when a railroad's operation is unsafe is worth the additional reporting. This information should also be made available to the public to ensure maximum transparency and public confidence.

If railroads receiving special approval cannot certify yearly to FRA that are still in compliance with the provisions of this proposed rule and meet the terms of the special approval they are operating under, FRA should immediately initiate a review and possibly revoke the exception and direct the railroad to halt single person crewmember operations. FRA's default position should be to revoke special approval when a railroad receiving special approval is not operating according to the required conditions. Allowing railroads to continue operating with single person crewmember operations when FRA has found they are no longer in compliance with the conditions of the special approval jeopardizes the safety of workers, communities, and the general public

TTD does have some requested changes to make this section even stronger, mostly dealing with paragraph (d), so that FRA is taking an even more proactive role in ensuring the safe operation of railroads operating with less than two-person crewmembers under special approval or one of FRA's exceptions. Those requested changes and comments are in Sections IV(E) and IV(F).

As FRA moves forward with this rulemaking, TTD urges the FRA to keep section § 218.139 of the proposed rule and its requirements intact.

IV. Areas of Notice of Proposed Rulemaking (NPRM) That Should Be Strengthened or Changed

While TTD believes the Notice of Proposed Rulemaking has many strengths as outlined above, we believe that there are aspects of the NPRM that should be strengthened or changed. TTD asks that FRA consider and address these comments as the rulemaking process proceeds.

A. Alternative Risk Assessment

As noted above, FRA's proposed contents for the required risk assessment under § 218.135(a) is very specific, with at least six parts that in total require at least twenty-two (22) specified pieces of information. This risk assessment and the contents required reflect both the thoughtfulness that FRA put into figuring out the correct risk assessment and the number and complexity of items that are relevant to consider when a railroad wants to move from two-person crew operations to less than two-person crew operations.

FRA also proposes allowing an alternative risk assessment under § 218.135(b). In contrast to the specific and detailed risk assessment under § 218.135(a), § 218.135(b) has practically zero specificity. Instead, this alternative risk assessment would allow a railroad to petition for approval to use "alternative methodologies or procedures" and the Associate Administrator may approve such alternative methodologies or procedures if he or she determines it will provide an accurate assessment of the risk associated with the operation. The only other item required under this section is public notice of the request for approval and an opportunity for public comment on the request.

TTD believes the proposed alternative risk assessment as proposed is wholly inadequate. There is no proposed criteria that the Associate Administrator must evaluate alternative methodologies against other than the vague notion that said alternative methodologies provide an "accurate assessment" of the risk associated with the operation. Leaving such an open-ended and subjective determination up to be decided by whoever happens to be the Associate Administrator at the time is a very arbitrary way of conducting these alternative risk assessments and risks having wild swings as personnel shifts, which is contrary to the foundation of how government regulation is normally conducted. Again, the vagueness of the alternative risk assessment is in stark contrast to the minimum of twenty-two specified pieces of information required under the risk assessment under § 218.135(a).

Furthermore, there are no basic details on the public notice of the request for approval and an opportunity for public comment. For example, it is not entirely clear whether the 60 day requirement for the public comment period for the proposed standard risk assessment applies here so it is possible there is no specified time requirement for public notice or a minimum time requirement for the public to comment for a petition seeking to use an alternative risk assessment. TTD requests that FRA clarify that explicitly in the text of the rule.

More concerning, FRA under this proposed rule is not proposing any required additional time for public comment and input on any proposed alternative standard or methodology a party seeks to use. FRA rightly recognizes that FRA's approval of an alternative methodology or process of conducting a risk assessment may set the standard for future risk assessments by other parties. In response to FRA's request for comment on this particular issue, TTD strongly believes that FRA needs to require a robust amount of additional time and multiple opportunities for public input for petitions proposing to use alternative standards or methodology since those alternative standards or methodology are not specified under this proposed rule. Additionally, TTD requests that FRA add an explicit requirement that a party seeking to use an alternative methodology or process address the public comments and input received and that FRA also address the public comments or input before approving or denying a request proposing to use alternative standards or methodology under the alternative risk assessment.

Given the specificity of the proposed risk assessment, TTD does not believe that an alternative risk assessment is necessary or warranted. If FRA or stakeholders believe that changes to the proposed risk assessment are needed as the rule is implemented and risk assessments are conducted, FRA can pursue those changes through the normal regulatory process. TTD's first request then is that FRA eliminates the proposed alternative risk assessment option and require railroads to use the proposed risk assessment in any petition submitted under § 218.131 or § 218.133.

If FRA decides to keep the alternative risk assessment in the final rule, TTD strongly believes that there needs to be more specific details on the standards the alternative risk assessment must meet and the criteria it must include. The current stark contrast between the detail of the proposed risk assessment and the vagueness of the proposed alternative risk assessment does not make sense and undermines the overall framework of the proposed rule, and therefore that stark contrast should be significantly narrowed. At a minimum, FRA should (1) define what an "accurate assessment" means, (2) provide guidance on what constitutes an inappropriate level of risk, and (3) clarify that the alternative risk assessment should have to include basic identifying information similar to what's proposed under (a)(1) about the railroad environment and train environment and include the identification about the severity and potential frequency of hazards similar to what's proposed under (a)(4) so that FRA and the general public have enough detail to properly be able to comment on and analyze the alternative risk assessment.

Additionally, the description of the rule includes this detail about the alternative risk assessment, "As proposed, any railroad seeking FRA's approval to use such an alternative standard will need to demonstrate to FRA that the methodology and procedures provide at least as accurate an assessment of risk as the specific methodology and processes proposed." (emphasis added). However, that detail of the alternative standard is not actually included in the text of the proposed rule, which only requires an "accurate assessment of the risk associated with the operation." That detail proposes a different standard that TTD believes is a better one and therefore should be incorporated explicitly into the text of the rule if FRA is going to keep the option of submitting an

alternative risk assessment. TTD endorses BLET's position that if FRA is going to keep the alternative risk assessment, it must not only provide an equivalent assessment, but also provide an equivalent level of safety to the proposed risk assessment.

To reiterate, the vagueness of the alternative risk assessment standard and criteria is in sharp contrast to the otherwise detailed and thoughtful framework proposed by this rule, including the proposed risk assessment. TTD believes that FRA should eliminate the alternative risk assessment and have all railroads use the proposed risk assessment in any petition submitted under § 218.131 or § 218.133.

Alternatively, TTD asks FRA to clarify the alternative risk assessment to provide more specificity on the standard the alternative risk assessment must meet, the level of acceptable risk, and descriptive detail an alternative risk assessment must include. This clarity is necessary so that FRA and the general public have enough detail to properly be able to comment on or analyze the alternative risk assessment if FRA chooses to keep that as an option. To reiterate, TTD firmly believes that any alternative risk assessment must not only provide an equivalent assessment, but also provide an equivalent level of safety to the proposed risk assessment.

B. Lack of Clarity Around Zero Person Crews & Potential Requirements

Throughout FRA's proposed rule, there are references to one-person crew train operations and assumptions that there will always be an engineer present in the cab of the train, "The NPRM is written under the premise that the locomotive engineer is the first crewmember, i.e., the crewmember operating the train, and is always located in the cab of the controlling locomotive when the train is moving".

However, in TTD's reading of the proposed rule, there is nothing that would specifically prevent a railroad from petitioning in the future to move to zero-person crew train operations. This reading is reinforced by footnote 11 of the NPRM which states, "Although current FRA regulations do not explicitly require the presence of a human operator, FRA's regulations were developed and drafted based on a general assumption that a train would be operated by a person albeit with assistance from technology."

Given that regulations can and do last for several years or decades before being amended, TTD firmly believes that FRA needs to "future-proof" this rule, given the likely changes in technology and railroad operating practices in the years ahead that could have a profound effect on safety.

Railroads have previously publicly cited Rio Tinto's automated train operation in rural Australia as something they are interested in exploring in the future.²⁰ Already, certain Class I railroads like Union Pacific have expressed interest in redeploying conductors on the locomotive to ground

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²⁰ <u>https://www.freightwaves.com/news/rio-tintos-autonomous-trains-cant-work-in-north-america-yet</u> (accessed December 19th, 2022)

based crews. It is clear that the Class I railroads in particular with their current intense focus on cost cutting at all costs under their PSR operating model have a future interest in moving zero-person crew operations, with the idea that some form of technology could replace human beings in operating trains and save the railroads money, even if it is unsafe as TTD firmly believes zero-person crew operations would be.

For as many safety concerns that TTD has about one-person train operations, TTD has at least equal the number of additional concerns about zero-person train operations. TTD strongly believes that FRA needs to provide some clarity in this proposed rule about what it means and doesn't mean in terms of zero-person crew train operations. TTD requests FRA make the following clarifications:

- 1. TTD suggests that FRA make clear in the preamble and throughout the description and text of the rule that the process included in this proposed rule for railroads to petition to move fewer than two-person crew operations is not an endorsement of zero-person crew operations and furthermore that this proposed rule is not meant to contemplate a transition to zero-person crew operations. Such a statement and conforming clarifications would ease concerns that the proposed rule purposefully leaves that option open.
- 2. TTD suggests that FRA also make it explicit that this rule is not meant to allow for zero-person crew operations by requiring that any petition submitted under § 218.131 or § 218.133 for conducting a train operation with fewer than two-persons must have a human engineer in the cab of a locomotive. Making it a mandatory requirement for one crewmember that is certified to be an engineer to be in the cab of a locomotive during the operation of a train would eliminate the concern that this proposed rule leaves open the possibility of zero-person crew operations.
- 3. If FRA is going to decline to include an explicit requirement that any train operation covered under this proposed rule must have a human being in the cab of a locomotive that is certified as an engineer, TTD strongly believes that additional requirements and procedures need to be included to cover the possibility that railroads will submit petitions in the future to move to zero-person crew operations.

At a minimum, the required petition and risk assessments under this proposed rule should be amended to include additional requirements for a railroad to explain how certain tasks that a human being currently does such as, but not limited to: communicating with other train personnel and first responders during an emergency; mechanical inspections when something goes wrong; identifying hazards on rail tracks or at grade crossings; and taking over the train safely when technology fails, would be addressed as part of zero crew operations.

TTD also strongly believes that in the case of such petitions, additional time and opportunities for stakeholder and public input would be needed. The 60 day comment period proposed under this rule for the public to comment on petitions for deploying one-person crew operations is not sufficient in TTD's opinion to address a petition to move to zero-person crew operations given the additional complexity and safety concerns involved with a potential zero-person crew operation. While TTD is not going to suggest in these comments a specific amount of time needed to comment on such a hypothetical petition, TTD does believe that multiple rounds of public comment should be required for any petition by a railroad to move to zero-person crew operations in order to facilitate a robust dialogue on how such an operation would address the numerous safety concerns TTD believes would exist under a zero-person crew operation.

4. TTD notes that FRA's regulations for the safe operation of trains are written with the assumption that there will be human beings physically on board the locomotive. If zero crew person operations ever happen any time soon, which TTD believes would be very unsafe, FRA's current regulations are likely to have to be rewritten wholescale to even make such an operation legal. The copious amount of waivers that would be necessary for such an operation to happen without violating federal law should not be done through this rulemaking given how stark of a change zero crew person operations would be and the fundamental questions such an operation would raise.

Instead, TTD suggests that FRA make it clear explicitly in this proposed rule that should FRA receive a petition to move to zero-person crew operations, it will hold such petition until it has a chance outside this proposed rule to engage stakeholders and the public on either the waivers necessary to be granted for such an operation to be legal or the proposed changes to federal safety regulations that would be needed to allow for zero-person crew operations. In addition, TTD strongly believes that FRA, should it receive such a proposal, should first go through the Rail Safety Advisory Committee (RSAC) where such a proposal could be discussed among the rail stakeholders, including labor, that are part of RSAC. RSAC is purposely designed to handle important and complex matters like the ones that a petition to move to zero-person crew operations would raise. TTD believes FRA should explicitly amend the proposed rule to include a role for RSAC should it receive a petition to move to zero-person crew operations.

As previously stated, the Class I railroads in particular the last few years have shown they are willing to cut costs as a result of their PSR operating model that prioritizes making money above anything else, no matter the safety consequences. Class I railroads have already since 2015 cut 45,000 jobs or about 30% of the workforce to save money even though those cuts have placed such a strain on the remaining workforce that the current system is in a safety crisis. These same railroads are likely to have a future interest in moving to zero-person crew operations, with the

idea that some form of technology could replace human beings in operating trains and save the railroads money, even if it is unsafe as TTD firmly believes zero-person crew operations would be.

TTD urges FRA to "future-proof" this proposed rule by amending it to include or address the specific suggestions above about zero-person crews, given the likely changes in technology and railroad operating practices in the years ahead that could have a profound negative effect on safety.

C. Certification of Second Crew Member as a Conductor

TTD strongly supports FRA adopting the alternative option that FRA is seeking comment on regarding whether FRA should require a second crewmember be a certified conductor, even if the other crewmember is dual-certified, in an effort to ensure a level of teamwork that may not be attainable with any other crewmember. TTD believes that FRA should require a second crewmember be certified as a conductor for the reasons outlined below.

The conductor is a vital part of modern day train operations. A safe, well-functioning train operation needs to have both a certified engineer and a separate person that is certified as a conductor. The two roles have distinctive responsibilities and skills, but the two roles complement one another in a way that provides a level of safety needed for modern train operations.

In its proposed rule, the FRA outlines the fundamental role of the conductor, "The conductor is the crewmember in charge of a train or yard crew and the conductor's job requires supervising train operations so they are safe and efficient. The conductor's responsibilities include: managing the train consist; coordinating with the locomotive engineer for safe and efficient en route operation; interacting with dispatchers, roadway workers, and others outside the cab; and dealing with exceptional situations (e.g., mechanical problems)."²¹

In recognition of the unique skills that conductors have and the need to make sure that persons fulfilling that role are properly trained, in the 2008 Rail Safety Improvement Act of 2008 (RSIA), Congress required FRA to issue regulations establishing the certification of train conductors. FRA issued those requirements in 2012, which are now housed under 49 CFR part 242. The FRA sums up the purpose of these certifications in this rule well by saying, "The purpose of the conductor certification regulation is to ensure that only those persons meeting minimum Federal safety standards serve as conductors."²²

Regular research from the United States Department of Transportation (USDOT)'s Volpe Center, USDOT's premier research center, in both 2013 and 2020 highlights the fact that the safest way to operate a train is to have both a certified engineer and a separate certified conductor. The Volpe Center's January 2020 report on "Teamwork in Railroad Operations and Implications for New

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²¹ 87 FR 45568

²² Id.

Technology" reinforces how engineers and conductors work best as a team and the Volpe Center's findings are worth quoting at length here:

"An important finding of the locomotive engineer and conductor CTAs [Cognitive Task Analyses] is that conductors and locomotive engineers operate as a tightly coupled cooperative team. While each has a distinct set of formal responsibilities, the conductor is responsible for managing the train consist, and the locomotive engineer is responsible for running the locomotive, they jointly contribute to the set of cognitive activities required to operate the train safely and efficiently. This includes jointly monitoring outside the window, as well as participating jointly in planning activities, problem solving, and identifying and mitigating risk....

In addition to performing their formal duties, conductors and locomotive engineers actively engage in informal activities intended to improve overall efficiency and safety. The CTA results revealed that conductors and locomotive engineers closely coordinate tasks with one another, adaptively share perceptual and cognitive load, and rely on one another to successfully accomplish the mission of the train. This includes contributing knowledge and backing each other up as necessary.

Conductors and locomotive engineers participate jointly in monitoring status and progress. They coordinate observations, catching and communicating information that the other may have missed. For example, when operating on the mainline, conductors serve as a 'second pair of eyes,' alerting the locomotive engineer to upcoming signals and potential hazards (e.g., activity at grade crossings, and people working on or around the track).

The conductor and locomotive engineer also extend each other cognitively, filling in knowledge gaps, reminding each other about upcoming tasks, and contributing jointly to problem solving and decision-making situations that arise. For example, conductors participate jointly with locomotive engineers in planning activities to perform along the route and identifying and mitigating potential risk. Locomotive engineers serve an important support role for conductors by assisting to fill in knowledge gaps, support planning, and help conductors anticipate and mitigate risks."²³

As BLET noted in its oral testimony at the public hearing that FRA held on Wednesday, December 14, 2022, the introduction of Positive Train Control, which is not present on all train operations covered by this proposed rule, has not simplified train operations or lessened the need for a train conductor.

²³ U.S. Department of Transportation-John A. Volpe National Transportation Systems Center "Teamwork in Railroad Operations and Implications for New Technology", Emilie Roth, Hadar Rosenhand, and Jordan Multer, January 2020, DOT/FRA/ORD-20/51 (Accessed December 19, 2022)

"However, PTC has not made a train crew's job easier. It has introduced new complexities and levels of attention capture not seen prior to the implementation of PTC. As mentioned, the nature of how technology has been introduced into the locomotive cab has left train crews looking at more computer screens with more prompts and more electronic communications between the crew doing the work and the computers requiring attention and feedback from that crew. How people interact with hardware and software at work is classically referred to in human factors studies as human machine interface issues. As those issues become more prevalent, the need for a two-person crew becomes even greater."²⁴

The FRA in its proposed rule also notes similar findings. "The research suggests that PTC technology may require locomotive engineers to focus more on in-cab displays and thereby reduce their ability to monitor activity outside the cab. This raises the question of whether engineers will lose some of the situational awareness that helps them perceive where the train is based on their prior experiences. Typically, a locomotive engineer will use that situational awareness to help anticipate future events.²⁵"

Conductors also provide several additional cognitive support functions to locomotive engineers that PTC does not provide. These functions include supporting locomotive engineers in monitoring events outside the cab window for potential obstacles and hazards that would not be detected by automated systems (e.g., people working on or around the track; trespassers; cars at grade crossings). They also include filling knowledge gaps that locomotive engineers may have (e.g., knowledge of the territory; appropriate interpretation of operating rules) and supporting decision-making (e.g., where to stop to avoid blocking a grade crossing). Knowledge and decision-making support is especially important in the case of less experienced locomotive engineers. Conductors also serve an important role in handling unanticipated events and keeping the locomotive engineer alert, especially on long monotonous trips where there is a risk of falling asleep.

The FRA sums up the nature of the relationship of PTC versus a conductor best in its proposed rule when it rightly states that "However, PTC systems do not completely perform all the job functions of a conductor."²⁶

The research from the Volpe Center, the FRA's own findings in this proposed rule, and our affiliates' own experiences shared through their testimony all point to the indisputable importance of the role that conductors play in today's operations of trains. FRA already has the certification requirements in place for conductors from its 2012 final rule on conductor certification.²⁷ As noted in the proposed rule, FRA already requires that when operating with a one-person train crew, the single crewmember must be dual-certified as a locomotive engineer and a conductor. The FRA

(accessed at https://www.federalregister.gov/documents/2012/02/08/2012-2915/conductor-certification)

²⁴ Testimony of Vince Verna, Vice President and National Legislative Representative, Brotherhood of Locomotive Engineer and Trainmen; Oral Testimony Page 4

²⁵ 87 FR 45573

²⁶ 87 FR 45582

²⁷ 77 FR 6482

should take the next step here and require that the second crewmember on trains be certified as a conductor so that train operations are guaranteed the immense safety benefits that come from having a train operated by a certified engineer and a second member that is certified as a conductor.

D. Railroads with Less than 400,000 Annual Employee Work Hours

FRA's proposed rule includes an exception from the two-person crew requirement for small railroads with fewer than 400,000 total employee work hours annually, which allows for operations with one crewmember at a maximum authorized speed not exceeding 25 miles per hour under certain conditions. However, there is no connection between the number of employee work hours a railroad has and the safety of operating rail equipment. Rail equipment is inherently dangerous. A derailment of a single car can be deadly given the size and weight of the equipment even if that car is moving at low speeds below 25 miles per hour. In fact, the Montreal, Maine and Atlantic Railway, which operated the train that destroyed the town of Lac-Megantic, was a Class II railroad that may have been able to operate under this proposed exception.

FRA must use evidence-based metrics to determine which railroads, if any, would be eligible for an exception from the basic two-person crew requirement. The number of employees or payroll details do not mitigate risk to employees who are operating trains or the adjacent communities that these trains travel through. While small railroads may have operations that fall under other proposed exceptions, if these small railroads are excepted from the two-person crew requirements, they should be excepted based on factors other than work hours. FRA's proposed rule establishes a well-thought out framework for train operations that wish to apply for special approval to move to fewer than two-person train operations that requires the risk inherent in all operations, including these smaller ones, to be mitigated as part of any petition.

Assuming all employees are working full time, 400,000 work hours could equate to nearly 200 employees. There is no excuse to deprive 200 employees from critical safety protection provided by the two-person crew requirement simply because of the total number of work hours. TTD requests that FRA amend the proposed rule to eliminate this proposed exception.

E. Establishing Expiration Dates For Special Approval and Enumerated Exceptions

As stated above, TTD strongly supports FRA's proposal under § 218.139 to require railroads that receive special approval under either § 218.131 or § 218.133 to conduct a formal annual review and analysis of the FRA-approved train operation(s) with fewer than two crewmembers and annually provide a report of that review's findings and conclusions to FRA so that FRA can determine whether those railroads should continue receiving special approval from FRA.

TTD appreciates and applauds FRA's recognition under the proposed rule the need to annually review railroads annual submissions to ensure the special approval they have received to operate one-person crews is not jeopardizing safety: "FRA may reopen consideration of a petition under § 218.137 based on a finding that a railroad's annual report submission suggests that the petition

does not comply with the requirements of this subpart or that the operation is no longer consistent with railroad safety."

But this proposed approach of annual safety reviews is one that is more reactive than TTD believes it should be. The approach also excludes railroads that are using train operations with one-person crews under an enumerated exception rather than through special approval since those railroads do not have to file annual reports to FRA under the proposed rulemaking.

TTD firmly believes that petitions for special approval to use fewer than two crewmembers should not be granted in perpetuity to railroads who initially meet the requirements to obtain special approval. TTD similarly believes that any enumerated exceptions included in this rulemaking for railroads to use single crewmember operations should not be granted in perpetuity either. As currently drafted, FRA's proposed rule does not establish an expiration date for any of the special approvals granted or any of the enumerated exceptions proposed to the two-person crew requirement.

TTD believes this proposed approach is flawed and notes it is very different from waivers granted by FRA from other safety regulations, such as brake inspections or safety training. Those waivers expire after a set number of years and must be renewed if the railroad wishes to continue operating outside of the regulations as written. As FRA mentions in the proposed rule, railroad operations can change dramatically over time, and indeed the railroad industry has changed dramatically over the past few years. Therefore, TTD believes it is prudent and necessary to have a de novo approach by requiring railroads to proactively reapply and undergo a corresponding review and approval process by FRA to continue single crewmember operations under this proposed rule. Similarly, TTD believes that FRA should periodically review the enumerated exceptions and have to proactively decide to keep the ones it finds are still consistent with the purpose of this proposed rule and FRA's safety mission.

Therefore, TTD requests that FRA amend the proposed rule to automatically have special approvals expire after two years so that any railroad seeking to continue using operations with fewer than two-person crews on the locomotive has to reapply for special approval and FRA can take a de novo approach at their application and proposed train operation.

TTD also requests that FRA amend the proposed rule to establish a process whereby FRA will periodically review the enumerated exceptions FRA establishes to the two-person crew requirement under this proposed rule. TTD further requests that FRA seek public input during these periodic reviews on the continued exceptions to the two-person crew requirement to ensure that the public has a chance to weigh in before FRA decides whether to continue the automatic exceptions previously established.

These proactive periodic reviews would be a prudent step by FRA to ensure that the special approvals and enumerated exceptions are not jeopardizing the safety of workers, communities, and the general public as railroad operations and the state of the rail industry inevitably change.

F. Required FRA Review Following Incidents & Accidents by Railroads Granted Special Approval

TTD requests that FRA amend the proposed rule to require that if an accident or reportable incident were to occur on a train staffed with only a single crewmember, FRA would, upon learning of the incident, conduct a mandatory review of the accident and circumstances. The purpose of such a review should be to determine if the one-person crew operations were in accordance with this proposed rule, the relevant risk assessment, and the conditions attached to special approval the railroad received from FRA, if it was required to petition for special approval to use one-person crew operations. The review should also examine the one-person train operation's compliance with FRA's safety regulations broadly. Similarly, if railroad workers make complaints to FRA through the Confidential Close Call Reporting System (C3RS) or another communication method to report safety issues about one-person train operations, TTD requests that FRA initiate a review to investigate those complaints and if those complaints are substantiated, that would trigger a similar review by FRA about the railroad's operations and the appropriateness of any special approval it received or exceptions it is operating under.

TTD requests that these FRA reviews apply to both railroads operating with a single crewmember under an exception established by the proposed rule and for railroads operating with special approval from FRA to use single crewmember operations. Such a step would allow FRA to ensure that the exceptions it establishes to two-person crew requirements and the special approvals it grants are consistent with this proposed rule and FRA's overall safety mission and statutory responsibility, while proactively addressing any issues as they arise rather than waiting for the yearly reports from railroads under §218.139 using single crewmember operations with special approval.

TTD requests that these reviews by FRA following an accident or reportable incident be made publicly available and be considered by FRA during its deliberation whether to recertify and renew special approvals allowing single crewmember operations for the railroad that petitioned FRA for special approval. There is no excuse for railroads to receive special approval from FRA under this proposed rule to conduct single crewmember train operations, then have a subsequent string of reportable incidents, and be allowed by FRA to continue operating under that special approval without a thorough review to ensure that all safety measures are being followed, the railroad's risk assessment was accurate, and that FRA's continued granting of special approval does not jeopardize safety. Failure to conduct this due diligence for railroads that have received special approval and have reportable incidents could miss threats to the safety of workers, communities, and the general public.

Furthermore, TTD requests that FRA amend the proposed rule to establish a process whereby FRA will use these reviews of accidents or reportable incidents involving train operations with a single crewmember to periodically review the enumerated exceptions FRA establishes to the two-person crew requirement under this proposed rule. Such a periodic review would be a prudent step by

FRA to ensure that these exceptions are not jeopardizing the safety of workers, communities, and the general public as railroad operations and the state of the rail industry inevitably change. TTD further requests that FRA seek public input during these periodic reviews on the continued exceptions to the two-person crew requirement to ensure that the public has a chance to weigh in before FRA decides whether to continue the enumerated exceptions previously established.

TTD strongly believes that these requested changes would allow FRA to proactively ensure that train operations using a single crewmember are safe and consistent with the goals of this proposed rule and FRA's safety mission, rather than wait for a tragedy to strike involving deaths or severe injuries of rail workers or the general public before addressing safety risks involving single crewmember train operations.

G. Proposed Categories Regarding Probability or Severity

With respect to the Risk Matrix provided in the FRA's proposed rule, TTD believes that incidents that would be considered Critical but Improbable (category 2E) should be acceptable only under specific conditions, and with additional justifications, review, and safety measures – just as categories 1E, 2D, 3C, 3D, 4B, and 4C are. This is in alignment with the Generic Conceptual Risk Matrix included in the rule. The FRA has not provided justification to deviate from the generic risk matrix regarding category 2E, and it is prudent to take additional considerations and precautions for potentially Critical incidents, even if they are Improbable.

As defined in the proposed rule, Critical incidents are those that cause significant injury, reversible significant environmental damage, or reportable monetary loss – including incidents that are required to be reported to the FRA. These are not minor incidents that can be ignored. If accidents or incidents are major enough that they must be reported to the FRA, it only makes sense that additional consideration should be taken to prevent injury and environmental damage. Such incidents should not be considered acceptable, even if they are unlikely.

Therefore, TTD requests that FRA amend the proposed rule and specifically the Risk Matrix included to clarify that incidents that would be considered Critical but Improbable (category 2E) should be acceptable only under specific conditions, and with additional justifications, review, and safety measures – just as categories 1E, 2D, 3C, 3D, 4B, and 4C are.

V. Responses to Proposed Two-Person Crew Exceptions from FRA

In general, TTD strongly believes that FRA should require two-person crews for any passenger and freight train operation. If FRA does choose to include exceptions, FRA should minimize any exceptions proposed to the baseline requirement included in this proposed rule that railroads seek special approval from FRA to use less than two-person crewmembers on trains given the safety risk of operating without two-person crewmembers.

Below TTD includes some specific responses to the 10 exceptions FRA proposes. In addition, TTD explicitly endorses the positions of its affiliates, SMART-TD and BLET, when it comes to these proposed exceptions.

Exception 1. Trains operating in helper service (i.e., a train that is assisting another train that has incurred a mechanical failure or lacks the power to traverse difficult terrain);

Helper service occurs when there is already a known issue with existing equipment or terrain in grade territory. For this reason, it is even more important to make sure the assisting train is fully equipped and staffed with a minimum of two crewmembers to operate the helper link. If a single crewmember were operating the helper service, that crewmember would be entirely reliant on the helper link technology, which can fail and is not present in all trains, to couple and uncouple with the other train. In these cases, a calibration test should be performed every shift to ensure that the helper link mechanisms are working properly. A lone crewmember should never be expected to manually couple or uncouple the helper link. An engineer should not be put in the position of being assigned to operate a helper service without assurance that the helper link is fully operational and tested.

Additionally, a helper locomotive may be on a consist with multiple locomotives, and without a second crewmember, a single person would be held responsible for securing their train and separating the locomotives from their train before helping the stranded train, which is neither practical nor safe. In grade territory, it is not possible for a single person to comply with securement rules that ensure safety when operating a helper service.

In the proposed rule, FRA asserted that railroads are unlikely to dispatch a locomotive consist a great distance away simply because helper service is typically unplanned. Even if railroads do not have an incentive to dispatch locomotive consists from a long way away, they may be forced to do so given the necessity to get the stranded train up a hill. This locomotive consist would have to comply with existing air brake testing requirements when separating, attaching to the stranded train, and then returning to the original train. All of these tasks need two people to ensure that all necessary steps are taken to ensure safety.

Exception 2. Trains consisting of a locomotive or a consist of locomotives (excluding diesel or electric multiple units (DMUs or EMUs)) not attached to any piece of equipment or attached only to a caboose.

Regardless of the presence of freight rail cars, TTD believes that two-person crews are required to move trains consisting of a locomotive or a consist of locomotives or electric multiple units (DMUs or EMUs)) not attached to any piece of equipment. This fact is true particularly on main track where it is likely the locomotive or DMUs/EMUs will encounter high or restricted speeds, grade crossings, work zones, or other hazards.

The absence of freight cars does not mitigate the risks inherent with operating a train. A locomotive could be required to traverse long distances and perform specific work such as route lining or signal compliance where the safety of a two-person crew is needed. Operating on the main track comes with many rules and regulations that necessitate a second crewmember who is certified as a conductor. In some ways, operating a locomotive that is not attached to a train can require even more diligence from an engineer to prevent the locomotive from accelerating too quickly and being over speed and the conductor's presence becomes vital in such scenarios to help the engineer complete those tasks and remain vigilant about any risks to the safe operation of that locomotive or DMUs/EMUs.

Exception 3. Tourist, scenic, historic, or excursion operations that are not part of the general railroad system of transportation;

TTD is concerned about granting a blanket exception to tourist railroads that operate on the general railroad system of transportation, especially if they are operating anywhere on the Class I mainline network. Exceptions to tourist railroads should only be granted if the tourist railroad operates entirely on its own lines and does not interact with the general rail network. Interaction with the general rail network exposes the tourist railroads to interactions with large freight trains that could be carrying hazardous materials. No train that is on a main track and could be exposed to other trains carrying hazardous materials should be excepted from the requirement to seek special approval from FRA to operate a train with less than two-person crewmembers.

Exception 4. Passenger or tourist operations in which cars, empty of passengers, are being moved and passengers do not board the train's cars until the crew conducts a safety briefing on the safe operation and use of the cars' exterior side doors, consistent with the current door safety briefing requirement;

Conductors are still necessary crewmembers on passenger trains being moved, even if those trains do not have passengers on them. As noted elsewhere in these comments, conductors do far more than take tickets and enforce noise levels on quiet cars on passenger trains. To reiterate TTD's previous comments on this subject, the conductor is the crewmember in charge of a train or yard crew and the conductor's job requires supervising train operations so they are safe and efficient. The conductor's responsibilities also include: managing the train consist; coordinating with the locomotive engineer for safe and efficient en route operation; interacting with dispatchers, roadway workers, and others outside the cab; and dealing with exceptional situations (e.g., mechanical problems).

Passenger trains that operate on the main line railroad network, even if there are no passengers on board, still need two crewmembers, including a conductor, to address the many issues and potential hazards that have already been raised in these comments. The engineer does not act alone in operational compliance – the conductor is an integral part of regulatory and operational safety, particularly for movements over the road or through crossings.

Exception 5. Passenger or tourist operations where the locomotive engineer has direct access to the passenger seating compartment;

As with exception 4, conductors are still necessary crewmembers on passenger trains being moved, even if those trains do not have passengers on them. Passenger trains that operate on the main line railroad network, still need two crewmembers, including a conductor, to address the many issues and potential hazards that have already been raised in these comments.

Furthermore, if the locomotive engineer has direct access to the passenger seating compartment, the passengers also have direct access to the locomotive engineer. This access poses additional hazards such as the potential for distraction to the engineer and security concerns, including terrorist threats, if passengers are able to access the cab of a locomotive and take control.

There are no reasons that having direct access to passengers would mitigate hazards associated with operating a single-person crew or assist in the operation of the train. In fact, direct access to passengers only heightens the need to have a second crewmember certified as a conductor who is capable of dealing with issues that arise with potential passengers on board. This factor alone should not be reason to grant an exception because it does not increase safety – and in fact it poses reasonable threats that would complicate the job of the locomotive engineer such that it is even more necessary to have a second crewmember certified as a conductor.

Exception 6. Rapid transit operations in an urban area connected with the general railroad system of transportation under certain conditions;

FRA states that in order to meet this exception, a rapid transit operation in an urban area must meet three conditions. The first condition is that the rapid transit operation must be temporarily separated from any conventional railroad operations, meaning that the rapid transit operation in an urban area is strictly time-separated from conventional operations.

FRA rightly notes that the biggest safety concern with rapid transit operations on the general system is that they have the potential to collide with much heavier freight or passenger trains. TTD is very skeptical of the practical ability for rapid transit operations to be temporarily separated from freight operations for specific periods of time. Freight operations, especially in this PSR era, have notoriously unpredictable schedules and face delays, especially in congested urban areas that make it difficult to predict when they will be at a particular area.

As stated above, any trains operating over Class I territory or that may interact with Class I trains, particularly trains containing hazardous materials, need a second crewmember that is certified as a conductor in order to safely operate. Given the likely impracticability of rapid transit operations from being temporarily separated from any conventional freight railroad operations and the catastrophic impacts that could result in a collision between a lighter rapid transit vehicle and a large freight train, TTD requests that FRA eliminate this exception and instead require two crewmembers on rapid transit operations that would otherwise be covered by this exception.

Exception 7. Unit freight train loading and unloading operations;

Unit freight trains are defined as those composed of cars carrying a single type of commodity, being loaded or unloaded in an assembly line manner while the train moves at 10 miles per hour or less on a track which is temporarily made inaccessible from the general railroad system of transportation. During the loading or unloading process, FRA states in the proposed rule that "there must not be any duties requiring a second crewmember (e.g., no operation of a hand-operated switch, filling out paperwork, or calling of signal indications)."

TTD opposes granting exceptions to unit trains from the two-person crew requirement. There are many safety concerns regarding unit trains. For example, mine loadout trains are often on extremely steep grades. If any work needs to be done to the train, such as tying handbrakes or manipulation of the car's air system, those tasks would need to be completed by a second crewmember. Unit trains such as coal trains may be dumped over a pit and require the separation of cars, or cuts of cars to facilitate moving cars through a facility such as a power plant. Without a second crewmember, these tasks could not be physically completed. It would not be possible to rely upon an employee of a facility such as a power plant to serve these functions because that employee is unlikely to be appropriately trained and they would not be a member of the train crew. The requirements set forth in §218.129(b) are not robust enough to cover the scenarios involving operating unit trains in a plant temporarily separated from a railroad system (i.e., use of derail, electronic switch).

TTD is also confused by the exception in §218.129(a) with respect to unit trains. That exception states "there must not be any duties requiring a second crewmember [but] if the operation is overseen by another person, typically in a tower or on the ground, that person must have the capability of communicating with the locomotive engineer operating the train."

The above quoted statement says there must not be any duties requiring a second crewmember and then goes on to say immediately after there may be duties required of another person such as overseeing or communicating with the locomotive engineer. TTD notes that communicating with the locomotive engineer can be construed as requiring that person to functionally act as a second crewmember. TTD believes further clarification is sorely needed for this particular exception if FRA is going to keep it, but as stated above, TTD believes that unit trains should not receive an exception.

Exception 8. Small railroad operations;

Small railroad operations are defined as operations with fewer than 400,000 total employee work hours annually. They may operate with one crewmember at a maximum authorized speed not exceeding 25 miles per hour under either of the following sets of conditions

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As discussed earlier in section IV(D), the number of employee work hours is irrelevant to the safety concerns of train operations. Often, the smaller railroads with fewer work hours do not have the types of technology, such as PTC, that can serve a supportive role to assist crewmembers in safe operations. Similarly, speed alone is not a sufficient mitigation measure that would accommodate the degradation of safety that accompanies single crewmember operations.

Rail equipment is inherently dangerous. A derailment of a single car can be deadly given the size and weight of the equipment even if that car is moving at low speeds below 25 miles per hour. Speed is not the only unsafe condition present. Small railroads can have devastating accidents and derailments just like large railroads. The town of Lac Megantic learned the hard way that small railroads such as the Montreal Maine and Atlantic Railroad (MMA) can experience catastrophic tragedies. Prior to the Lac Megantic incident, the MMA chief executive officer had a history of cutting crew sizes to increase profits. The fact that the MMA railroad was small and would possibly qualify for an exception under this proposed benchmark did not unfortunately prevent the Lac Megantic tragedy in any way.

Exception 9. Work train operations where a non-revenue service train of 4,000 trailing tons or less is used for the administration and upkeep service of the railroad. This includes when such a work train is traveling to or from a work site;

Work trains must not be excepted from the two-person crew requirement. Conductors do many of the tasks on work trains, including monitoring mechanisms and technology that are outside the cabin and used for the administration and upkeep of the railroad. Because many work trains are designed to service tracks and adjacent areas, work happening on the ground, outside of the cab can be a distraction to the engineer. Furthermore, there are likely to be additional rail workers nearby, such as maintenance of way employees, doing work in close proximity to the work train. Vigilance is of the utmost importance in these situations to ensure that work trains don't accidentally hit these workers and cause injury or death. Having a certified conductor present on the train can mitigate the possibility of distraction and keep the engineer acutely aware of his or her surroundings.

Additionally, work trains may need to travel hundreds of miles to reach the work site, including over grade crossings, trespassers, and every other type of hazard that any other train would encounter. With a single person operating the train, a terrible scenario could occur if an accident with a trespasser occurred. A work train could strike a pedestrian or automobile at a grade crossing. When this occurs, getting help rapidly is vital. It is nearly impossible for a single person operating the train to leave the train unattended and aid victims while also contacting emergency services. For these reasons, work trains have the same risks as any other type of train, and they should not be excepted from the two-person crew requirement.

Exception 10. Remote-control operations that meet existing requirements of operating at 15 mph or less. While FRA currently does not believe that such remote operations need a distance restriction, FRA would appreciate any comments on this issue.

TTD opposes an exception for remote-control operations. There are no existing regulations regarding any aspect of remotely controlled trains, so there are no backstops that establish the necessary safety requirements and procedures. Given the lack of regulations, remote-control operations at any speed and distance need further regulation, likely being initiated by consideration of the Rail Safety Advisory Committee (RSAC), before any contemplation is given by FRA to providing exceptions to allow the running of such trains with a single operator at any speed for any distance.

The RSAC Working Group concerning remote control operations was never able to adequately consult with labor and deliver recommendations. FRA should withdraw this proposed exception and instead allow the RSAC Working Group to continue this important work for remote-control operations in a forum that would allow all stakeholders to bring their perspective and try to allow a consensus to develop.

VI: Responses to Questions from FRA

1. FRA requests comments and data on the identified issues and other safety concerns that may stem from train operations with fewer than two crewmembers.

There are numerous safety concerns with respect to train operations with fewer than two crewmembers. Those concerns include, but are not limited to: medical emergencies, fatigue of crewmembers, mechanical malfunctions, blocked tracks or crossings, and quality of life for employees, including the negative mental and physical health effects of a single crewmember being isolated for long periods of time.

Any medical emergency experienced by a single person while operating a train puts the safety of that crewmember and everyone around the train at risk, including the surrounding community and local environment. The ability of a second person to bring the train to a controlled stop and radio for assistance as quickly as possible, while giving aid to the person in distress, can be the difference between life and death, not only for the crewmember. A recent example of an Envoy Air pilot becoming incapacitated and later passing away shows just how important it is to have a second, fully qualified individual who is capable of ensuring that the cargo and/or passengers come to a safe and controlled stop.²⁸

2. As an alternative to the proposed risk assessment requirement, FRA requests comment on whether other specific actions should be mandated (e.g., frequent supervisory monitoring during a tour of duty or similar interactions that would

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 $^{{}^{28}\,\}text{https://www.cnbc.com/}{2022/11/22/\text{envoy-air-says-pilot-who-was-reported-incapacitated-during-flight-has-died.html}$

discourage a one-person crewmember from violating the prohibitions on electronic device use).

Comprehensive risk assessments similar to what FRA has proposed are a vital tool to fully understand the potential dangers associated with operating with a single crewmember. An equivalent level of safety simply cannot be achieved without first fully understanding the risks of moving to one-person crews. Frequent monitoring or any other mitigating measures cannot counter likely or severe risks, and there is no way to know if such levels of risk are present without first conducting a comprehensive risk assessment.

The proposed risk assessment requirement, however, should not preclude FRA from requiring specific actions <u>in addition</u> to the proposed risk assessment if FRA finds that those specific actions are necessary to maintain safety for any one-person train crew operations. Those actions, as FRA suggests, could be measures like frequent supervisory monitoring during a tour of duty or similar interactions that would discourage a one-person crewmember from violating the prohibitions on electronic device use.

3. FRA finds that a railroad seeking to implement a less than two-person crew operation would be in the best position to identify its own mitigation strategies. As alternative options to the proposed risk assessment, FRA considered whether to require those face-to-face meetings with supervisors at the beginning and end of each tour of duty, or more frequent supervisory monitoring during a tour of duty, or similar interactions that would discourage a one-person crewmember from violating the prohibitions on alcohol and drug use. FRA requests comment on this issue, including comments on whether each railroad that continues a legacy operation under proposed § 218.131(b)(12) and/or each railroad that implements certain specific freight train operations proposed for exception under § 218.129(b) should be required to adopt and comply with a railroad operating rule or practice whereby those one-person train crewmembers must have face-to-face meetings with supervisors at the beginning and end of each tour of duty, or more frequent supervisory monitoring during a tour of duty. ... Thus, FRA expects that a railroad's risk assessment would best address the job briefing issue. Alternatively, FRA requests comment on whether FRA should add job briefing requirements to address the safety implications of a train operation with a one-person crew.

TTD agrees strongly with FRA's statement in the proposed rule that, "Generally, an acceptable level of risk is achieved when it is determined that further risk reduction measures will not result in an additional, significant reduction of risk in excess of the cost of such measures." To this end, we believe that all steps should be taken that improve safety, including increased communication with workers. Safety briefings and other communications and monitoring have always been a critical tool to ensure that everyone is aware of the risks of any operations happening that shift. There are very few situations where a job briefing would NOT reduce risk significantly, and thus be applicable to FRA's statement above regarding acceptable levels of risk. These briefings,

however, are not a replacement for a second crewmember.

4. Although FRA believes a risk assessment provides the best option to identify hazards regarding mandatory directives received by radio transmission and allow each railroad to devise its own mitigation strategies, FRA requests comment on other options, such as the option FRA considered to prohibit the conveyance of a mandatory directive by radio when a one-person crew is operating a train on a steep grade.

The scenario outlined above by FRA is just one example of why one-person crew train operations pose an unacceptable safety risk and two-person crew operations should be required. A lone crewmember should not be permitted to accept a mandatory directive while moving simply because it presents an unnecessary safety risk. This includes directives received both through radio and electronic communication. If there were a situation where a single individual were operating a train, and a mandatory directive was sent, the train would need to come to a complete stop while the crewmember records or reads the directive to prevent the crewmember from approaching hazards while distracted. Additionally, acknowledgement and comprehension should be confirmed if possible if a second person is not in the cab to verbally acknowledge and confirm the directive.

This approach is simply not as efficient or safe as having a second crewmember in the cab of the locomotive. The situation described demonstrates that, to achieve anything close to the same level of safety of a two-person crew, extraordinary measures would need to be taken that are simply not in the best interest of workers, shippers, or railroads.

5. For instance, FRA considered an alternative option of adding to the current regulatory requirements that, when a controlling locomotive has a radio or wireless communication device that fails en route, a one-person train crew is prohibited from continuing beyond a location where a second crewmember can be safely added to the train. Thus, the alternative prohibition FRA considered would be significantly more stringent than the current rule, as FRA would expect the train to be stopped and a second crewmember added at any location where the train can be safely stopped and a crewmember can be safely added, which would likely be at a location much closer than a repair point in most situations. FRA requests comments regarding why this alternative option might be preferable to the risk assessment as proposed, or whether there are alternative options.

As discussed above, TTD believes that the procedures needed to achieve a similar level of safety while operating with a single crewmember are not reasonable or as efficient as maintaining a minimum of two crewmembers. This scenario is another example. To maintain adequate safety, if a communication device fails, the train would need to stop at the first location where a second crewmember could be safely added. It is simply not responsible or in any way providing an equivalent level of safety to ask that train to continue to a repair point with no means of communication. If there were any incidents in the distance to the repair point — a health issue, a derailment, a hazardous materials incident, etc. — the crewmember would have no means of calling

for assistance and would be stranded.

6. FRA requests comment on any additional short line and regional freight railroads conducting one-person train crew operations and the interest of railroads to conduct one-person train crew operations in the future.

As we heard in detail at the December 14, 2022, FRA hearing regarding this docket, there are railroads that have detailed plans to operate trains with a single crewmember.²⁹ Union Pacific elaborated upon a plan to replace Conductors with "Expediters" who would be ground-based employees who would respond in a truck to trains when needed. These Expediters would have to drive to the train to respond – which is no simple task in difficult terrain. Much of the country's freight rail track is simply not accessible via roadways or driveable terrain.

Additionally, these Expediters would be responsible for multiple trains over a geographic area, making it possible that multiple incidents could occur at once and no one would be available to assist more than one train. Just such a situation could happen simultaneously during difficult weather conditions.

Union Pacific (UP) cites quality of life as the most important factor when choosing to switch to this business model, but that claim fails to mention the many, many times UP has chosen to prioritize profits over investing in their workforce. That is certainly the case with their proposal to use Expediters instead of trained, certified Conductors as part of a two-person crew. Expediters would be considered Utility employees, and these employees have regulatory constraints under §218.22 to specify that they are authorized only to perform the following duties:

- 1. Set or release handbrakes;
- 2. couple or uncouple air hoses and other electrical or mechanical connections;
- 3. prepare rail cars for coupling:
- 4. set wheel blocks or wheel chains:
- 5. conduct air brake test to include cutting air brake components in or out and position retaining valves;
- 6. inspect, test, install, remove or replace a rear end marking device or end of train device;
- 7. or change batteries on the rear end marking device or the end-of-train device if the change may be accomplished without the use of tools.

In UP's own video, the Expediter was dispatched to replace a knuckle, which is not a function that utility employees are authorized to perform under §218.22. In the scenario raised in UP's video, the employee replacing the knuckle would need blue flag protection. A conductor would need to drive to both ends of the train to ensure that signals are protected, lock out the locomotive, and

²⁹ https://www.trains.com/trn/news-reviews/news-wire/union-pacific-details-plans-to-test-feasibility-of-ground-based-conductors/

install blue flags. The far simpler alternative is to operate with a certified conductor on board the train so that the conductor can perform tasks like replacing knuckles when needed.

7. To the extent that commenters believe foreign, one-person train operations are relevant, FRA requests that the comments include information and data describing the operations. FRA would also appreciate comments that explain how the foreign operation is comparable to U.S.-based operations and whether the operation would need to file a special approval petition under the rule as proposed if it was U.S.-based, or whether the operation if it was U.S.-based might meet the criteria in one of the exceptions of the proposed rule with or without a change to the proposed requirements.

The U.S. rail system is quite different in many respects from those in Europe and other countries, such as Australia, that make comparisons of operations between railroads in the United States and railroads in other countries of limited relevance. First, the volume of cargo moved by railroads in the United States is much higher than the volume moved by railroads in other countries. Second, the United States' land area is much larger, especially than countries in Europe, and has a much higher level of diverse topographic and weather conditions that pose significant risks and difficulties.

To take one example, freight railroads operate at elevations much higher and grades much steeper than other countries given the existence of rail trackage through mountain ranges such as the Rocky Mountains and the Sierra Nevadas in the United States. Third, the U.S. rail network has a high level of commingling between freight and passenger rail operations, especially in congested, dense urban areas like the Northeastern United States, Chicago, or Los Angeles. Europe's rail networks tend to be much more passenger focused and their tracks are also likely to be owned by the national government as they are, for example, in France. In the United States, private rail companies own much of the trackage outside of the Northeast, which makes coordination of freight and passenger traffic challenging.

Given all these factors that separate the U.S. rail system from other rail systems, TTD urges FRA to either not consider the experience of rail operations in countries or at least minimize the comparison to situations that are directly applicable between the two countries.

8. FRA expects that some of these legacy operations do not address every FRA safety concern. For example, in the background section of the NPRM (III.D.2), FRA identified how the adoption of a one-person train crew could degrade safety without considering, for example, how the railroad would monitor the use of prohibited electronic devices, or how operational concerns may arise, such as the loss of a second crewmember's experience during a job briefing. If a railroad does not address those issues, FRA may permit the operation to continue with special conditions that require the railroad to devise strategies to address those safety concerns in a manner that appropriately fits the size and scope of the operation. FRA requests comment

regarding the clarity of the proposed requirements and where FRA should include additional guidance or examples for any of the requirements.

It is not acceptable or safe to allow railroads to continue single crewmember operations, regardless of legacy status, if there are not robust safety mechanisms in place to ensure that workers, communities, and the environment are protected. Simply because a railroad attains legacy status does not mean that their prior single-person crew operations met the safety standards that the public expects and are necessary for responsible railroading. The FRA should therefore not allow legacy operations to continue until all safety concerns have been fully addressed to come into compliance with this rule.

9. Because FRA finds that making the petitions and accompanying risks analyses available for public comment is critical to ensure transparency of the approval process, FRA concludes that protecting them from public disclosure under FOIA is not necessary to promote public safety. FRA nevertheless requests public comment on whether to exercise its discretion to prohibit the public disclosure of the proposed risk assessments under FOIA, as well as alternative options that would allow for some disclosure protection but still allow for meaningful public comment.

Public comment and public inspection of important safety plans, such as risk assessments, are critical to ensure the risk assessments are holistic and do not neglect any important information. There is no convincing reason that such documents should be protected from public disclosure. These documents are intended to protect railroad workers, and these workers have a right to examine and comment on the government regulations that are intended to keep them safe. Additionally, as the railroad workers are the true experts on the ground, prohibiting them from accessing documents through FOIA or other means removes a very important backstop of policy review from subject matter experts.

10. In March 2018, FRA published a Request for Information (RFI) on the future of automation in the railroad industry.

Particularly in light of <u>recent efforts</u>, this rulemaking takes on new significance to ensure that the excitement for new technologies and automation do not erode safety in the railroad industry. TTD and SMART-TD filed comments in response to FRA's March 2018 RFI, and we echo those same concerns here.³⁰

Unleashing unsafe, untested and unreliable technology, whether in a locomotive, on a signal or dispatch system, or elsewhere, creates untenable risks on a national railroad network that moves millions of people and billions of tons of freight each year. Regardless of the appeal of these technologies, they must not be deployed at the expense of safety or the railroad workforce.

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 $^{^{30}\} https://ttd.org/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-\underline{must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-must-not-ignore-safety-and-worker-issues-in-railroad-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automation/policy/federal-comments/fra-must-not-ignore-safety-automati$

For as long as it has existed, the railroad industry has continually pursued and deployed technological advancements which alter the nature of work in the sector, from the invention of the steam locomotive to electrified rail, to the integration of computers. Rail unions have stood at the forefront of the deployment of these technologies, working to perfect and implement those that improved safety and service, and urging caution against those that did not. TTD and its rail affiliates do not oppose automated technology which can assist railroad workers in better performing the multitude of tasks required to make a railroad operate. However, we believe that the human factor is a key element of this performance, and urge extreme caution towards any technology which purports to entirely replace the skill and knowledge of railroad workers. As an example, rail labor has championed the adoption of Positive Train Control (PTC) as a valuable tool in promoting rail safety and preventing accidents. We have also been clear that PTC is just that -a tool, and not a replacement for trained, qualified human operators, and FRA has agreed. In 2009, FRA released its Final Report on the agency's Task Analysis for Locomotive Engineers, in which it stated: "Train crews must avoid too much reliance on the new train control technologies. In particular, it is important to continue to run the trains without the PTC system activated. Therefore, if the system ever fails, the engineer will still be able to operate the train safely". Automation technology should be viewed similarly, as an augmentation and not a replacement.

While locomotives, alongside signaling and dispatching technologies, differ immensely from those found in motor vehicles, many of the same automation problems present themselves. For example, as long as a human operator for any type of railroad equipment is present, that individual will be required to interact with the technology installed. This interaction, known as the human-machine interface (HMI) has a substantial impact on safety, and on whether the technology ultimately offers meaningful improvements. In any situation in which autonomous technology is present, FRA must ensure that HMI systems are designed to maintain awareness and engagement to best facilitate cooperation between machine and human operator. FRA must also ensure that data exchanged between the employee and technology must not cause interruptions, distractions or overload the employee's ability to synthesize and process information. A failure to do so will have dangerous results for the railroad.

We also note FRA's reference to the Rio Tinto Group, and its tests of an autonomous freight train in Australia. While Rio Tinto's train may fulfill its particular needs, we caution FRA against the assumption that its operation is easily transferable to U.S. operation. The Rio Tinto train currently transverses track in a relatively remote area, with minimal grade crossings or other obstacles. Conversely, U.S. rail operations frequently have far more complex routes. For example, 25 percent of all U.S. freight trains, and half of all intermodal trains that ferry shipping containers and trailer trucks, pass through the Chicago area, most of it at Chicago's 75th Street Corridor hub. At this location, operations must contend with well over 100 other trains on any given day, and slow, careful movement for as long as 30 hours. The technical and engineering capabilities required to

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http://www.cmap.illinois.gov/documents/10180/614540/08.23.17_As+The+Nations+Rail+Hub+Chicago+Is+An+Ex

navigate this challenge far outpaces the needs of Rio Tinto's operations. Any technology which cannot handle such conditions is technology which is not ready for U.S. railroads.

Similarly, railroad operations in an extremely limited or test setting cannot hope to replicate the realities of operating across the nation's 233,000 miles of railroad track. As seen with the deployment of PTC and the spirit of NHTSA's now-withdrawn Vehicle-to-Vehicle and Vehicleto-Infrastructure communication rulemakings, interoperability across equipment and trains is a feature of upmost importance. FRA must determine how it plans to regulate a system in which different operators may propose to develop and install autonomous technology which is inoperable with trains and equipment currently installed, or that will be installed in the future. Relatedly, unlike motor vehicles which are frequently replaced every 10-15 years, locomotives and train cars are frequently built with lifespans of 30-50 years. Control and signaling systems can also be designed to function for prolonged periods of time. Mandating standardization and interoperability may prove difficult due to the realities of equipment lifecycle management in the railroad industry, and a lack of standardization is likely to produce unnecessary risks and confusion.

11. This proposed section is intended to cover those general exceptions that apply to freight, passenger, or tourist train operations. FRA requests comments for other similarly situated operations that it should consider excepting and whether a mechanism should be included in the rulemaking to allow future exceptions to be added through a petition process.

TTD strongly opposes allowing future broad exceptions to be added through a petition process. The realities of railroading demand two crewmembers, at a minimum, to safely operate and provide quality of life for employees. The FRA should not entertain efforts in future years to degrade this basic safety requirement.

12. In paragraph (b), the proposed rule would allow a passenger or tourist train operation with fewer than two crewmembers if the train's cars are empty of passengers and passengers will not board the train's cars until the crew conducts a safety briefing on the safe operation and use of the train's exterior side doors. The proposed exception would not apply just because a passenger or tourist train happens to be empty of passengers, as FRA is proposing a safety briefing requirement, consistent with FRA's passenger equipment safety standards, [206] to help ensure passengers board, and later exit, the train safely. Passenger or tourist trains might need to be moved without passengers for repairs or for the convenience of the railroad, such as to position rolling equipment for future train movements. This exception is proposed because FRA views these movements without passengers as generally not needing a passenger conductor, who would normally ride in a passenger car and not in the locomotive cab. FRA requests comments on this exception,

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especially if it would require changes to passenger or tourist operations at the point of origin for a train or commenters have information suggesting the exception would be an unsafe practice.

See Section V, Exception 4, of these comments for TTD's comments on this matter.

13. As proposed, the exception in § 218.129(c)(1)(i) would apply only to small railroad operations over territory with limited grade. Specifically, FRA proposes to limit the exception to operations over track segments with an average grade of "less than 1 percent over 3 continuous miles or 2 percent over 2 continuous miles." This proposed grade threshold is consistent with grade limitations in other FRA regulations. Because many small railroad operations are excepted from operating with a two-way end-of-train device, but those devices are essential for the safety of a one-person train operation over territory with a heavy grade to perform brake tests or make an emergency brake application, FRA proposed to limit this exception. FRA requests comments on whether a final rule should include a two-way end-of-train device option for those small railroad operations that operate over heavy grades or whether there is an alternative option to address this safety concern.

Regardless of crew size, two-way end-of-train (EOT) devices should be standard. This technology has existed for over 40 years and is a helpful tool to diagnose certain air brake faults. The two-way EOT devices also provide a critical function to allow communication with the front of the train that there is an emergency that requires the train to stop. TTD disputes that small railroad operations should be given a blanket exception from the two-person crew requirement, but if a single person is going to be expected to operate a train, a two-way EOT device is a critical support that should be required.

14. FRA expects that railroads with potential legacy operations will submit comments on their particular factual circumstances so that FRA can consider the impact the proposed rule might have on the regulated community wishing to establish legacy operations. Accordingly, FRA requests comments on this issue.

By requesting further information from railroads prior to the finalization of this proposed rule, FRA acknowledges that there are likely to be circumstances unique to each railroad that require consideration to ensure adequate levels of safety are achieved. This information collection should not end once the rule is finalized. Railroad operations are not static. The railroads have also not proven to be forthcoming with necessary information, even regarding safety and appropriate staffing levels.³² Particularly when the railroads cannot be relied upon to disclose their factual circumstances, it is incumbent upon FRA to ensure that the rule requires railroads to adhere to the highest standards. In virtually all cases, there will not be sufficient evidence to show that a single

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³² https://ttd.org/policy/continued-rail-service-problems-necessitate-additional-transparency-to-enable-stb-action/

crewmember can provide an equivalent level of safety. The rule must ensure that FRA has all evidence needed to make a determination regarding the necessity of a second crewmember, and it has been made clear that the railroads will attempt to obfuscate any evidence that would not support their position.

15. FRA requests comment on the proposed two-year requirement for establishing a legacy, one-person train operation. FRA recognizes there may be other ways to demonstrate the existence of an established legacy operation such as total number of operating hours or rail miles operated ... FRA also requests comment on other potential criteria that should be required, if any, to establish a legacy operation.

TTD does not object to the proposed two-year requirement for establishing a legacy, one-person train operation. We would oppose alternative methods that would allow railroads to quickly move to establish themselves as "legacy operations" when that is not the case. To this end, FRA should explicitly state that operating hours or rail miles operated under pilot programs should not count towards qualifying for legacy operation status. Pilot programs are approved by FRA specifically to test new or novel technologies or procedures. These are not operations that are time-tested and proven to be effective and safe. In fact, many of the pilot programs that FRA allows do not later meet muster to continue after the pilot program. The FRA should not count such operations as establishing legacy status for the purposes of this rule.

16. FRA requests comments on these proposed categories. (Catastrophic, critical, marginal, negligible, frequent, probably, occasional, remote, improbable)

See Section IV(G) for TTD's comments on this matter.

17. Recognizing that FRA's approval of an alternative methodology or process of conducting a risk assessment may set the standard for future risk assessments by other parties, it is important to allow for public comment and input on any proposed alternative standard or methodology a party seeks to use. FRA requests comment on this proposal.

See Section IV(A) for TTD's comments on this matter.

18. As with all aspects of this NPRM, FRA requests comment on the proposal to require risk assessments as part of the petition process for a railroad seeking FRA's approval to initiate a train operation with fewer than two crewmembers. FRA also requests comment on the specific risk assessment process proposed.

See Section III(D) and Section IV(A) for TTD's comments on this matter.

19. The information collection estimates in the NPRM show that the burden on Class III railroads would not be a significant economic burden. FRA requests comments on

this estimate and will consider all comments when making a determination for the final rule.

When considering such a potentially life-saving rulemaking that has far-reaching safety impacts, FRA's primary concern should be safety and potential lives saved and catastrophes avoided. The information collection burden is an incredibly small price to pay for safety of workers, communities, and the environment. TTD has suggested some additional reporting requirements in these comments, and we believe that this additional reporting will have negligible impact on information collection burden estimates that will provide exponentially greater benefit to the public. As it is, TTD agrees that there will not be a significant economic burden on any railroad because of the information collection requirements in this rule, including the additional reporting we believe should be added to the rule.

VII. Conclusion

TTD appreciates the opportunity to comment on this docket and the ability to work with FRA on these important and often technical issues. While we have offered many suggestions technical in nature regarding the specific language and procedures in the rule, we have a responsibility to remind FRA and the public that two-person crews are not only an important part of FRA's safety regulations; they also have a fundamental real-world impact on the lives of the workers that TTD represents, the communities that we live in, and our fellow Americans.

At the public hearing on December 14, SMART-TD President Jeremy Ferguson recalled this story:

"Eight years ago, I was working as an Engineer on a solid loaded bulk coal train with 108 cars and six engines. The train weighed approximately 16,000 tons. Controlling this train required my full attention and to be readily aware of my surroundings outside the cab of the locomotive. With equipment of this size and having incredible velocity, I am sure we all know how it turns out when we hit something. Especially if that something is a 3-year-old child. This is my story and a nightmare that lives often in my head. A train requires a mixture of constant scanning of the Engineers Control Stand and looking out the windows of the cab. Looking out the windows as much as possible to keep vigilant to the conditions of the track ahead is a must. The Conductor and I were approaching an area where there is a speed change. The Conductor reminded me of the change, and I acknowledged him. I started monitoring the speed of our train on my console, making preparations to slow the train down. Out of nowhere the Conductor screamed "Look out ahead! There is a child on the track!!" When something like that is yelled inside the cab of a locomotive you are almost too terrified to look. A young boy around 3 years old, wearing bibbed overalls, wearing a light blue shirt, with blonde hair was standing in the middle of the track. It's crazy I still remember what he had on. I imagine most people will remember things like that when something this intense happens. I started blowing the horn and ringing the bell hoping and praying he would move (he didn't). I slid open the window and started screaming at him "Run kid! Move!!" He started waving at me. It wasn't until the Conductor ran out on the nose of the engine and waved his arms in a manner to tell him to move! At the last second that child stepped out of the track and

we missed him by inches. If my Conductor had not been there, I am convinced I would have killed that poor child. If there had not been anyone to report this to the dispatcher, the next train coming through may have killed him."

These are the sorts of memories that stay with you for a lifetime. Without a second crewmember physically on the locomotive in a position to intervene, radio for help, or perform other essential functions, this child and others like him may be lost. TTD and its affiliates are not advocating for a meaningless policy. A two-person crew minimum is a policy that will save the lives of children, workers, and communities.

As our affiliate, the American Train Dispatchers Association (ATDA), says in their comments, "From the perspective of the host communities in which the railroads operate the ATDA membership strongly objects to train crews consisting of less than two members. Our members reside in these communities and, as rail professionals who know of the hazards involved, not to comment in the best interest of our families, friends and neighbors would be a dereliction of our moral obligations as responsible citizens. As stated, said trains are now longer and heavier than ever. They carry some of the most hazardous cargoes imaginable. To halve the number of crewmembers tasked with the safe operation of these behemoth trains now regularly running is tantamount to reducing the safety of our communities by half."

TTD calls on FRA to finalize this proposed rule swiftly with our suggestions fully implemented to ensure the rule is as strong as possible. This is an opportunity to demonstrate profound and meaningful leadership. Many people will never know about this policy; and frankly, we hope that most people never have a reason to personally understand how important two-person crews are. We simply cannot wait until another tragedy forces parents or families to appear before the FRA to plead for their dead children or loved ones. These are tragedies that could be prevented if this proposed rule is finalized by FRA.

Workers are pleading – right now, in this docket – for their own lives and for the lives of all of those who could be harmed without two-person crews. We are sounding the alarm. We are confident that when this rule is finalized, it will save lives.

Sincerely,

Greg Regan President