

BEFORE THE FEDERAL RAILROAD ADMINISTRATION

DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

**COMMENTS OF**  
**THE AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION**

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## ATTACHMENTS

- Attachment A: ASLRRA 2022 Crew Size Initial Survey and 2022 Crew Size Follow-Up Survey
- Attachment B: ASLRRA Flowchart, “Would Your Short Line Railroad Qualify for an Exception to FRA’s Proposed Minimum Crew Size Rule?”
- Attachment C: ASLRRA Flowchart, “Would Your Railroad Qualify to Apply for Special Approval to Continue a Legacy One-Person Train Crew Operation Under FRA’s Notice of Proposed Rulemaking?”
- Attachment D: Report on Inference from ASLRRA Survey on One-Person Operations: Addressing Concerns on Sample Selection, Dr. Bentley Coffey (December 20, 2022)
- Attachment E: “FRA’s Train Crew Staffing NPRM Fails to Account for the Cost to Small Entities as Required by the Regulatory Flexibility Act.” Prepared for the Small Business Roundtable on FRA’s Proposed Train Crew Size Safety Requirements Rule (December 12, 2022)
- Attachment F: Statement of Chuck Baker, President, The American Short Line and Regional Railroad Association (December 14, 2022)
- Attachment G: Statement of Mitch Harris, Director of Safety, Training & Regulatory Compliance, Rio Grande Pacific Corporation (December 14, 2022)
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- Attachment K: Statement of John DeWaele, Senior Vice President, General Manager, Grafton and Upton Railroad Company (December 14, 2022)
- Attachment L: Statement of Scott Conner, Vice President of Operations, Transtar LLC/Texas and Northern Railway Company (December 14, 2022)

The American Short Line and Regional Railroad Association (ASLRRA), on behalf of itself and its member railroads, submits the following comments in response to the Federal Railroad Administration (FRA)'s Notice of Proposed Rulemaking (NPRM) in Docket No. FRA-2021-0032: Train Crew Safety Requirements.<sup>1</sup> ASLRRA is a non-profit trade association representing the interests of the nation's approximately 600 Class II and Class III (short line) railroads.<sup>2</sup> Short lines operate 47,500 miles of track, or approximately 29% of the national freight network, and employ approximately 18,000 people, thereby playing a vital role in the railroad industry's strong safety record.<sup>3</sup> The overwhelming majority of short line railroads are considered small businesses by both the Small Business Administration (SBA) and FRA's Policy Statement Concerning Small Entities.<sup>4</sup> These small businesses succeed in a competitive environment because of their flexibility, cost control, and customer-driven service – strengths which this NPRM threatens to eviscerate.

### **SUMMARY OF ARGUMENT**

This NPRM proposes a minimum requirement of two crewmembers for most railroad operations and requires that the second crewmember be physically located on the train, typically in the locomotive cab, at 49 C.F.R. § 218.123(b) and (d). FRA lacks statutory authority to issue this NPRM under its general regulatory authority, as the agency has failed to show a safety nexus between railroad staffing and safety. The NPRM violates the Regulatory Flexibility Act (RFA)

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<sup>1</sup> 87 Fed. Reg. 45,564 (July 28, 2022) [hereinafter NPRM].

<sup>2</sup> The data analysis undertaken by ASLRRA for this rulemaking identified 696 railroads, which includes non-common carrier freight railroad operations. FRA identified 704 Class III railroads for this rulemaking.

<sup>3</sup> See NPRM at 45,567.

<sup>4</sup> See 13 C.F.R. § 121.201 and North American Industry Classification System code 482112, "Short Line Railroad," and 49 C.F.R. Part 209, Appendix C.

because it grossly underestimates the impacted number of small railroads, omits the cost for small railroads to comply with the NPRM, and it miscalculates the burdensome process and cost on small railroads to comply with the special approval process.<sup>5</sup>

Short line railroads, a vital part of the national freight network, will be dramatically harmed by this NPRM. Ironically, the NPRM focuses entirely on Class I railroads, and fails to raise any safety concerns through either data or studies involving short line railroad operations. By mandating the location of the second crewmember, the NPRM threatens to upend the operational efficiencies and flexibilities that facilitate the ability of short line railroads to provide their signature customized, flexible, and responsive service to their customers. The NPRM also fails to propose a compliance schedule to meet the new requirements.

While the NPRM attempts to provide an exception for small railroad operations at 49 C.F.R. § 218.129(c), it does not even cover half of the approximately 414 short line railroads that currently operate a train with one crewmember in the locomotive cab.<sup>6</sup> At the outset, the hazardous materials exclusion to all exceptions disqualifies over 100 short line railroads from eligibility for the exception. Further, the operating rule requirement for the small railroad exception disqualifies over 100 railroads as the communication provisions are unjustified and the alerter requirement is an onerous burden not currently required via regulation for their operations.<sup>7</sup> The speed restriction in the exception disincentivizes short line railroads to upgrade their track as they would be obligated to incur additional expenses associated with hiring and training additional crew members. The grade provisions in the exception exceed the current

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<sup>5</sup> 5 U.S.C. 601 et seq. and 67 Fed. Reg. 53,461 (Aug. 16, 2002).

<sup>6</sup> See Attachment D: Report on Inference from ASLRRRA Survey on One-Person Operations: Addressing Concerns of Sample Selection, Dr. Bentley Coffey (Dec. 20, 2022).

<sup>7</sup> 49 C.F.R. § 229.140.

regulatory relief provided to small railroads under the brake system safety standards.<sup>8</sup> The exception also includes an arbitrary train length restriction without any correlating safety data. Finally, many short line railroads cannot avail themselves of the exception because they do not operate with a second crewmember intermittently accompanying their trains in a utility vehicle.

The NPRM's proposed process for a railroad to petition FRA to approve the continuance of a legacy one-person train crew operation at 49 C.F.R. § 218.131 is unworkably flawed. Almost 200 short line railroads will not qualify to even apply for a legacy approval due to either the commodities that the train carries or the railroad's operating rules. This proposed process is stricter and less certain than FRA's existing waiver petition process.<sup>9</sup> FRA has also underestimated the industry and government administrative cost associated with the special approval process. Further, the risk assessment required for a material modification under 49 C.F.R. § 218.135 is an unworkable burden for small businesses.

Finally, this NPRM will drive many short line railroads out of business, inevitably resulting in a modal shift of freight traffic from rail to its competing mode of truck transportation. The freight that had previously moved by rail will move to trucks and onto the highways, leading to an increase in accidents, injuries, and fatalities, not to mention an increase in pollution, CO<sup>2</sup> emissions, and cost to the public to maintain the road network.

FRA should withdraw this NPRM in its entirety or, alternatively, categorically exclude all short line railroads from any minimum crew size and crew location requirements.

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<sup>8</sup> 49 C.F.R. § 232.407.

<sup>9</sup> 49 C.F.R. part 211.

## I. FRA Lacks Authority to Issue a Staffing Rule Without a Safety Nexus.

The NPRM states that FRA’s authority to issue this NPRM comes from its general authority, delegated from the Secretary of Transportation, which states, in relevant part, that the Secretary “as necessary, shall prescribe regulations and issue orders for every area of railroad safety supplementing laws and regulations in effect on October 16, 1970.”<sup>10</sup> However, this NPRM fails to identify a data-driven safety concern with one-person crew operations or demonstrate that the proposed crew size and crew location mandate would improve railroad safety. It lacks a true cost-benefit analysis as it fails to quantify any benefits from the proposed restrictions.<sup>11</sup> Essentially, FRA does not provide a safety nexus in its proposal to regulate train crew size and crew member location, nor does it show why its proposal is necessary.

Furthermore, FRA issued this NPRM absent any specific mandate to regulate crew size, even though this issue has been considered and then rejected for inclusion in numerous Congressional bills since 2013.<sup>12</sup> As the U.S. Supreme Court has recently stated, absent specific direction from Congress, delegations of broad regulatory authority should not be lightly presumed.<sup>13</sup> In fact, the 195-year history of freight railroading in the United States, there has never been a federal regulation mandating the staffing of trains. This issue has traditionally been handled by individual railroads or left to the collective bargaining process.<sup>14</sup>

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<sup>10</sup> 49 U.S.C. § 20103, delegated to FRA at 49 C.F.R. § 1.89(a). Emphasis added.

<sup>11</sup> NPRM at 45,606.

<sup>12</sup> See, e.g., “Rail Safety Improvement Act of 2014,” S. 2784, “Safe Freight Act,” H.R. 3040, “Safe Freight Act of 2015,” H.R. 1763, “Safe Freight Act,” S. 2360, “Safe Freight Act of 2017,” H.R. 233, “Safe Freight Act of 2019,” S. 1979 and H.R. 1748, “INVEST in America Act,” H.R. 7095, and “INVEST in America Act,” H.R. 3684.

<sup>13</sup> West Virginia v. EPA, 985 F. 3d 914 (2022).

<sup>14</sup> “Statement from President Joe Biden on Congressional Action to Avert a Rail Shutdown.” *The White House*, Dec. 1, 2022, [www.whitehouse.gov/briefing-room/statements-releases/2022/12/01/statement-from-president-joe-biden-on-congressional-action-to-avert-a-rail-shutdown/](https://www.whitehouse.gov/briefing-room/statements-releases/2022/12/01/statement-from-president-joe-biden-on-congressional-action-to-avert-a-rail-shutdown/).

This NPRM is substantially like the Train Crew Staffing NPRM that FRA issued in 2016.<sup>15</sup> This NPRM shares the same fundamental flaws as the 2016 version as this proposed rule also does not provide reliable or conclusive statistical data to suggest whether one-person crew operations are generally safer or less safe than multiple-person crew operations. FRA’s accident/incident safety data does not establish that one-person operations are less safe than multi-person train crews.<sup>16</sup> Additionally, since 2016, FRA has not attempted to collect data that would allow it to more thoroughly examine the question of whether crew size impacts the safety of train operations. Furthermore, FRA has not complied with two safety recommendations issued by the National Transportation Safety Board that would allow FRA to capture crewmember data and use the data to evaluate the adequacy of current crew size regulations.<sup>17</sup>

The NPRM cites the 2013 accidents in Lac-Mégantic, Quebec and Casselton, North Dakota to support the need for the agency to regulate train crew size.<sup>18</sup> Although these accidents initially led FRA to review the potential impact of train crew staffing on safety for the 2016 NPRM, FRA subsequently determined that no direct conclusions could be drawn about train crew staffing’s safety impact based on those accidents.<sup>19</sup> However, FRA now asserts that the Lac-Mégantic accident exemplifies how “a second train crewmember might have prevented harm.”<sup>20</sup> This statement is at odds with the findings of Canada’s Transportation Safety Board (TSB), which concluded that the accident was caused by the railroad leaving a train unattended

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<sup>15</sup> 81 Fed. Reg. 13,918 (March 15, 2016).

<sup>16</sup> See 84 Fed. Reg. 24,735 (May 29, 2019) at 24,739.

<sup>17</sup> NTSB recommendations R-16-33 and R-16-34. The NTSB made a finding that FRA’s “accident database is inadequate for comparing relevant accident rates based on crew size because the information about accident circumstances and number of crewmembers in the controlling cab is insufficient.” NTSB, RAR-16/02, Derailment of Amtrak Passenger Train 188 at 19 (2016).

<sup>18</sup> NPRM at 45,568-45,570.

<sup>19</sup> 84 Fed. Reg. at 24,737.

<sup>20</sup> NPRM at 45,568.

on a main line, its failure to set enough handbrakes, and the lack of a backup safety mechanism – TSB did not conclude that a one-person crew contributed to the accident.<sup>21</sup> After reviewing the TSB findings, FRA issued a final rule to strengthen existing securement regulations, which mitigates risks associated with the unintended movement of unattended equipment.<sup>22</sup>

Likewise, regarding the Casselton accident, while the NPRM states that without teamwork, “there were factors indicating a one-person crew might not have survived,” this is at odds with the determination made by FRA in 2019, supported by the agency’s final accident investigation report, which states that the same type of positive post-accident mitigating actions could have been achievable with a well-planned, post-accident protocol that quickly brings railroad employees to the scene of an accident.<sup>23</sup> Following the Casselton accident, FRA and the Pipeline and Hazardous Materials Safety Administration promulgated a final rule to enhance tank car standards and operational controls for high-hazard flammable trains.<sup>24</sup>

Furthermore, FRA stated in the 2016 NPRM that existing one-person operations “have not yet raised serious safety concerns,” and that “it is possible that one-person crews have contributed to the [rail industry’s] improving safety record.”<sup>25</sup> This NPRM also fails to point to any safety concerns with existing one-person crew operations. Instead, it states that the first goal of this rule is to “ensure that trains are adequately staffed for their intended operation.”<sup>26</sup> Not only does it leave undefined “adequately staffed,” it also fails to establish a correlation between train crew size and safety. This NPRM lacks a clear nexus to railroad safety and fails to show

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<sup>21</sup> Railway Investigation Report R13D0054 at 117–18 (July 6, 2013), <http://bit.ly/VLqVBk..>

<sup>22</sup> 80 Fed. Reg. 47,350 (Aug. 6, 2015).

<sup>23</sup> NPRM at 45,570. *But see* 84 Fed. Reg. at 24,738 and [https://railroads.dot.gov/elibrary/hq-2013-31-finalized#p1\\_z50\\_gD\\_lAC\\_y2013](https://railroads.dot.gov/elibrary/hq-2013-31-finalized#p1_z50_gD_lAC_y2013).

<sup>24</sup> 80 Fed. Reg. at 26,644 (May 8, 2015).

<sup>25</sup> 81 Fed. Reg. at 13,950 and 13,932.

<sup>26</sup> NPRM at 45,564.

why a minimum crew size and crew location rule is necessary – therefore, it falls outside the scope of FRA’s general regulatory authority.

## **II. The NPRM Violates the Regulatory Flexibility Act.**

FRA neglected to conduct any industry research on current short line railroad operations. The NPRM states that although the proposed rule would be applicable to all railroads, “very few railroads would be affected.”<sup>27</sup> It claims that “there have been too few current one-person train crew operations to create any meaningful data.”<sup>28</sup> Without any evidence provided or evidence that FRA requested information from short line railroads about their current method of operations, the agency concluded that, as of February 2021, only seven short line railroads operate with a one-person crew.<sup>29</sup> Both the statement regarding the lack of data and the conclusion that only seven short line railroads operate with a one-person crew are incorrect by an order of magnitude. As early as the 19<sup>th</sup> Century, and especially after the implementation of the Staggers Act of 1980, short line railroads have played a major role in the national freight rail network – and many of them safely conduct operations with a single person in the locomotive cab.<sup>30</sup> FRA recognizes the rail industry’s strong safety record.<sup>31</sup> As even FRA previously stated, “it is possible that one-person crews have contributed to the improving safety record.”<sup>32</sup>

In anticipation of this rulemaking, ASLRRA began a lengthy process of surveying its member railroads, asking if they operated any of their trains with a single person in the locomotive cab. ASLRRA initiated the first survey on July 12, 2022, via email and phone

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<sup>27</sup> NPRM at 45,607.

<sup>28</sup> NPRM at 45,571.

<sup>29</sup> NPRM at 45,578.

<sup>30</sup> Short Line and Regional Railroad Facts and Figures. American Short Line and Regional Railroad Association, 2017; reprint Dec. 2019. Page 4.

<sup>31</sup> NPRM at 45,567.

<sup>32</sup> 81 Fed. Reg. 13,918 at 13,932 (March 15, 2016).

outreach, to its approximately 500 member railroads.<sup>33</sup> Out of the 280 railroads that responded to this survey, 176 indicated that they maintain at least one train operation with one person in the locomotive cab. After reviewing the proposed regulatory text in the NPRM and comparing the restrictions with the answers to the first survey, on September 8, 2022, ASLRRA again initiated, via personalized emails and phone calls, a follow-up survey to its member railroads to determine how the universe of short line railroads that indicated in the first survey that they have an operation with one person in the locomotive cab would be impacted by the provisions of the NPRM. ASLRRA created a flow chart to help its member railroads ascertain whether one of their single-person train movements would qualify for the small railroad exception.<sup>34</sup> For those railroads that would not qualify for the small railroad exception, ASLRRA created a second flow chart to help them determine whether they would be eligible to petition the FRA for continuance of legacy train operations.<sup>35</sup>

Given that the surveys performed by ASLRRA on crew size did not have a 100% response rate, the association then hired Dr. Bentley Coffey, an economics and statistics professor at the University of South Carolina, to develop an appropriate methodology utilizing data from the two surveys to estimate the number of railroads to be impacted by the provisions described in the NPRM. Following that methodology, ASLRRA identified a population of 696 Class II, III and switching railroads currently operating in the United States that would be subject to the proposed regulatory text in the NPRM, for whom baseline operational data could be sourced to build a model that estimates how railroads that did not respond to ASLRRA's surveys

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<sup>33</sup> See Attachment A: ASLRRA 2022 Crew Size Initial Survey and 2022 Crew Size Follow-Up Survey.

<sup>34</sup> See Attachment B: ASLRRA Flowchart, "Would Your Short Line Railroad Qualify for an Exception to FRA's Proposed Minimum Crew Size Rule?"

<sup>35</sup> See Attachment C: ASLRRA Flowchart, "Would Your Railroad Qualify to Apply for Special Approval to Continue a Legacy One-Person Train Crew Operation Under FRA's Notice of Proposed Rulemaking?"

would likely have responded. Based on that analysis, ASLRRA concludes that an estimated 414 short line railroads currently conduct at least some operations with only one person in the locomotive cab.<sup>36</sup>

Table 1 (below), shows the number of short line railroads estimated to be impacted by the major provision in the NPRM, based on the analysis of the data obtained through ASLRRA’s surveys included as Attachment D:

NPRM Restriction Category	Estimated Number of Short Line Railroads
Train w/ 20+ cars covered hazmat and/or RSSM	114
RR Lacks Prescribed RR Operating Rule element	120
Train speed may exceed 25 mph	22
Train length may exceed 6,000 ft	124
Railroad has high grade	73
Train w/out Trailing Support	103
Covered by Small Railroad Exception	163-184
Excluded from Small Railroad Exception and Ineligible for Legacy Operation Approval	198
Eligible to Apply for Legacy Operation Approval	22

*Table 1 - Summary of ASLRRA Data Analysis on NPRM Impacts*

In particular, the ASLRRA analysis shows that 198 short lines would be unable to qualify for the small railroad exception and would also be ineligible to petition for a special approval of a legacy operation, due to either the commodities that the train carries or the railroad’s operating rules.<sup>37</sup> Due to the crewmember location requirement of § 218.123(d), these railroads would be unable to deploy a second crewmember in a utility vehicle, a common industry practice, and

<sup>36</sup> See Attachment D.

<sup>37</sup> See proposed 218.123(c) and 218.129(b). See also Attachment D, explaining the data collection and analysis ASLRRA conducted in order to assess the impact of the NPRM to short line railroads.

instead be obligated to have a second crewmember ride on the train – an obligation that would necessitate the hiring and training of hundreds of railroad employees.

The NPRM fails to assess how such a transformative change would significantly impact a substantial number of short line railroads in accordance with the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act – and it also declines to provide regulatory relief or consider less burdensome alternatives for small businesses.<sup>38</sup> Most Class II and Class III railroads fit the SBA’s definition of a small entity in the railroad industry, as they have fewer than 1,500 employees.<sup>39</sup> The overwhelming majority of the short line railroads with a one-person crew operation ineligible to petition for a special approval for a legacy operation also fit the description in proposed § 218.129 of a “railroad with fewer than 400,000 total employee work hours annually.”

On December 12, 2022, the SBA’s Office of Advocacy held a small business roundtable to discuss small business concerns with the proposed rule. ASLRRA and several of its member railroads participated in the roundtable and presented an analysis of how the NPRM fails to account for the cost to small businesses.<sup>40</sup> Specifically, ASLRRA followed the elements required by an agency to conduct an initial regulatory flexibility analysis (IRFA) under the RFA and demonstrated how FRA’s IRFA in the Regulatory Impact Analysis (RIA) for the NPRM fails to capture the impact on small entities.<sup>41</sup> FRA failed to accurately count all of the small

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<sup>38</sup> 5 U.S.C. 601 et seq.

<sup>39</sup> NAICS Code 48211, “Short Line Railroads,” at SBA, “Table of Small Business Size Standards Matched to North American Industry Classification System Codes.” Effective Dec. 19, 2022. Available at: <https://www.sba.gov/document/support-table-size-standards>.

<sup>40</sup> See Attachment E: “FRA’s Train Crew Staffing NPRM Fails to Account for the Cost to Small Entities as Required by the Regulatory Flexibility Act.” Prepared for the Small Business Roundtable on FRA’s Proposed Train Crew Size Safety Requirements Rule (December 12, 2022).

<sup>41</sup> 5 U.S.C. § 603.

businesses that would be impacted by the NPRM, and therefore also failed to assess the cost to small businesses and neglected to provide compliance alternatives.

An IRFA must contain: (1) a description of why action by the agency is being considered, (2) a succinct statement of the objectives of and legal basis for the proposed rule, (3) a description of, and where feasible, an estimate of the number of small entities to which the proposed rule would apply, (4) a description of the projected compliance requirements of the rule, and (5) and identification of all relevant federal rules which may duplicate, overlap or conflict with the proposed rule.<sup>42</sup> FRA fails to meet the IRFA requirements because it did not accurately account for the number of small railroads that would be impacted, omits the cost for small railroads to comply with the NPRM and grossly underestimates the impact on small railroads to comply with the special approval process. FRA states that it is aware of “nine railroads across the country with one-person operations, all conducted by short line or regional railroads (i.e., Class II and III railroads), and passenger railroads.”<sup>43</sup> FRA predicts that the seven short line railroads could apply for a special approval for a legacy operation, which would cost approximately \$4,610 each with an annual compliance cost of approximately \$620 each. FRA also disregards any cost for railroads unable to apply for special approval of a legacy operation and neglects to provide an alternative means of compliance.

The RIA lacks any analysis of the significant impact that the NPRM would have on a substantial number of small entities. The NPRM and the RIA do not mention any safety concerns with current short line railroad operations that utilize one crew member in the locomotive cab. However, ASLRRA’s data analysis shows approximately 414 short line

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<sup>42</sup> 5 U.S.C. § 603(b).

<sup>43</sup> Regulatory Impact Analysis (RIA) at 10.

railroads currently have at least one operation with one person in the locomotive cab, dramatically higher than the 7 identified by FRA.<sup>44</sup> This failure to come close to counting all of the small businesses impacted cascades into a lack of understanding of how the rule would affect their operations and then leads into a dramatic underestimation of the total cost of the NPRM to the short line segment of the industry.

Most notably, the cost does not include significant costs associated with hiring and training additional employees in order to comply with the crew staffing requirements, which would impact the approximately 198 short line railroads that would not be covered by the small railroad exception and would not even be eligible to apply for the legacy special approval. As the current average fully burdened cost of a railroad employee is \$130,000, and many short lines would have to hire multiple employees each to convert current operations, this number rapidly soars into the tens of millions.<sup>45</sup> Assuming, for example that each of the estimated 114 short line railroads that cannot qualify for the exception or the legacy operation special approval due to hazardous material commodities transported had to hire two employees each, the cost for these railroads alone to comply with the NPRM for a single year would be \$29,640,000 or \$296 million over a ten-year period without even taking wage inflation into account.

Additionally, the RIA does not include a discussion of current FRA regulations that do not apply to many short line railroads but that the NPRM would require a railroad to implement if it wishes to avail itself of the small railroad exception, including the requirement to have an alerter and a radio in a controlling locomotive.<sup>46</sup> These requirements provide another source of

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<sup>44</sup> See Attachment D.

<sup>45</sup> National Railway Labor Conference, "Total Compensation." <https://raillaborfacts.org/total-compensation/>. Last accessed December 17, 2022. On average, a Class I rail employee covered by the most recent collective bargaining round received approximately \$130,000 in annual compensation.

<sup>46</sup> See 49 C.F.R. § 229.140 and § 220.9.

significant cost to small businesses, as ASLRRA member railroads report that current industry estimates show a cost of \$20,000 to install a single alerter. However, many short line railroads operate older locomotives that are unable to accommodate alerters, leaving those railroads completely unable to qualify for the small railroad exception due to this element of the NPRM.

The NPRM also lacks other elements required by the IRFA in that it does not distinguish between larger and small entities and does not propose a reasonable compliance schedule to meet the new requirements. The lack of a compliance date is also particularly burdensome on small businesses as they need time to hire and train new employees or implement operational changes.<sup>47</sup> The NPRM declines to use a performance standard and instead states that FRA will determine whether train operations that apply for a legacy special approval are consistent with railroad safety.<sup>48</sup> Finally, as will be discussed further, the very narrow small railroad exception and procedure for a small railroad to petition for special approval of a legacy operation will not address approximately 198 short line railroads operating with one person in the locomotive cab today.<sup>49</sup>

### **III. The NPRM Will Harm Small Railroads.**

As ASLRRA's data analysis shows, the NPRM will have a significant impact on a substantial number of small railroads. The studies and rhetoric of the NPRM suggest that FRA did not anticipate the impact to small businesses. However, the NPRM's restrictions, in particular the crew location mandate, would dramatically alter short line railroad operations. Further, as the NPRM lacks a compliance date, these impacted small businesses would

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<sup>47</sup> 5 U.S.C. § 603(c)(1)-(2).

<sup>48</sup> 5 U.S.C. § 603(c)(3).

<sup>49</sup> 5 U.S.C. § 603(c)(4).

immediately be in peril as the substantial changes needed to comply with the NPRM, including hiring and training additional employees, cannot be accomplished overnight.

**A. Short Line Railroads Are Vital to the National Freight Network.**

Short line freight railroads are a critical part of the U.S. freight network. Short line rail service provides safe, efficient, competitive, and environmentally responsible access to transportation for nearly 10,000 rail customers.<sup>50</sup> Today's short lines come in all shapes and sizes. Some short lines are owned by rail holding companies, some are mid-sized regional entities, and many are small, family-owned businesses.<sup>51</sup> Together they represent a diverse, dynamic and entrepreneurial collection of small businesses that make wise use of the limited resources available to them.

Short line railroads operate the most vulnerable segments of the railroad system and, in some cases, are the lifeline to the nation's marketplace for rural businesses. They succeed by competing aggressively for business and investing a significant portion of their revenues back into their rail infrastructure. They frequently partner with their customers to offer rail transportation alternatives that would otherwise be unavailable to those customers. Most short line railroads must invest a minimum of 25% of their annual revenue in rehabilitating their infrastructure, which is a percentage far higher than almost any other industry in the country.<sup>52</sup> The majority of railroads operating across America's 140,000-mile rail network are privately

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<sup>50</sup> See *Id.*; and Webber, Michael. "Freight trains are our future." *Popular Science*, May 9, 2019. Available at: <https://www.popsoci.com/power-trip-excerpt/>.

<sup>51</sup> For example, ASLRRA member railroads Mission Mountain Railroad and COLT Railroad each have only two operating employees.

<sup>52</sup> Short Line and Regional Railroad Facts and Figures at 3.

owned and pay for their own infrastructure – a point of departure from other transportation modes that utilize publicly funded roads and waterways.<sup>53</sup>

## **B. The NPRM Unintentionally Targets Short Line Operations.**

The NPRM states that, without this proposed rule, “FRA has a limited ability to address the totality of potential safety issues related to the reduction of crew staffing levels.”<sup>54</sup> The agency further elaborates that the proposed rule “would help FRA ensure that safety is not adversely affected when initiating train operations with fewer than two crewmembers.”<sup>55</sup> These statements suggest that the impetus behind the rulemaking is the concern that railroads will reduce the size of their existing train crews in the future. It does not suggest that the agency’s focus is on current single-person operations.

The research studies shared by FRA as supporting evidence in the NPRM presuppose a two-person crew. The NPRM states that these studies “contain presentations from multiple research reports, identifying many safety considerations with reducing train crew staffing to fewer than two persons.”<sup>56</sup> Emphasis added.

1. The 2012 report from the John A. Volpe National Transportation Systems Center provides a basis for FRA’s position that “the conductor and locomotive engineer operate as an integrated team.”<sup>57</sup>

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<sup>53</sup> McGurk, Russ. “Five Reasons Freight Rail is an Infrastructure Leader.” *GoRail*, May 14, 2018. Available at: <https://gorail.org/infrastructure/five-reasons-freight-rail-is-an-infrastructure-leader>.

<sup>54</sup> NPRM at 45,564. Emphasis added.

<sup>55</sup> NPRM at 45,606.

<sup>56</sup> NPRM at 45,572 and 81 Fed. Reg. 13,924-30.

<sup>57</sup> *Cognitive and Collaborative Demands of Freight Conductor Activities: Results and Implications of a Cognitive Task Analysis—Human Factors in Railroad Operations*, Final Report, dated July 2012, DOT/FRA/ORD-12/13. This research report was prepared by the John A. Volpe National Transportation Systems Center. <https://www.fra.dot.gov/eLib/details/L04331>.

2. The 2013 Volpe report that discusses the characteristics required to successfully perform the conductor's job on a passenger train.<sup>58</sup>
3. The 2013 FRA-sponsored report that examines fatigue in the railroad industry and recommends that railroads take steps to address fatigue-related accidents.<sup>59</sup>
4. The 2009 Volpe report that FRA references suggests that implementing positive train control could create new sources of workload and distraction.<sup>60</sup>
5. A 2011 conference report analyzing key aspects of successful teams.<sup>61</sup>
6. A 2020 Volpe report that discusses teamwork in railroad operations and potential implications for new technologies.<sup>62</sup>

In other words, all the studies cited within the NPRM looked at concerns of reducing train crew staffing - none of the studies addressed any concerns with current single-person train crew operations of short line railroads. Nevertheless, the NPRM proposes to restrict current single-person train crew operations citing to reports that do not address their method of train operations. FRA cannot justify the impact this NPRM would have to the over 400 short line railroads that currently operate a train with a single person in the locomotive cab.

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<sup>58</sup> *Rail Industry Job Analysis: Passenger Conductor*, Final Report, dated February 2013, DOT/FRA/ORD-13/07. This research report was prepared by the John A. Volpe National Transportation Systems Center. <https://www.fra.dot.gov/eLib/details/L04321>.

<sup>59</sup> *Fatigue Status in the U.S. Railroad Industry*, Final Report, dated February 2013, DOT/FRA/ORD-13/06. <https://railroads.dot.gov/elibrary/fatiguestatus-us-railroad-industry>.

<sup>60</sup> *Technology Implications of a Cognitive Task Analysis for Locomotive Engineers—Human Factors in Railroad Operations*, Final Report, dated January 2009, DOT/FRA/ORD-09/03.

<sup>61</sup> *Teamwork in U.S. Railroad Operations, A Conference*, April 23–24, 2009, Irvine, California, Transportation Research Board, Number E-C159, dated December 2011. The many authors of the research and reports are listed in the publication. <https://onlinepubs.trb.org/onlinepubs/circulars/ec159.pdf>.

<sup>62</sup> *Teamwork in Railroad Operations and Implications for New Technology*, Final Report, dated May 2020, DOT/FRA/ORD-20/01. <https://railroads.dot.gov/elibrary/teamwork-railroadoperations-and-implications-new-technology>.

### C. The Crewmember Location Requirement Will Stifle Short Line Railroads.

If a short line railroad with a one-person train crew does not qualify for the small railroad exception and is unable to obtain special approval to continue its legacy one-person crew operation, the railroad must operate all its trains with a two-person crew, and both crewmembers must be physically located on the train. The NPRM states at § 218.124(d) that a train crewmember that is not operating the train (i.e., the second required crewmember) may be located anywhere outside of the operating cab of the controlling locomotive when the train is moving, if, inter alia, “the train crewmember is on the train, except when the train crewmember cannot perform the duties assigned without temporarily disembarking from the train.” Emphasis added. FRA states that the NPRM was written “with an expectation that, in many operations, the best location for the conductor is in the cab of the controlling locomotive when the train is moving.”<sup>63</sup>

The NPRM ignores the actual, real-world operating experiences of hundreds of short line railroads. Short line railroads pride themselves on the excellent service that they provide their customers.<sup>64</sup> The location requirement in the NPRM threatens the ability of a short line railroad to provide flexibility and responsiveness to the unique needs of each customer. Industry experience with ASLRRRA survey data and statistical modeling show that the most common method of operation for short line railroads does not include having a second crew member physically on the train.<sup>65</sup> Many short line railroads operate with one crewmember in the cab of the locomotive and another individual in a utility vehicle. This longstanding practice gives the

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<sup>63</sup> NPRM at 45,588.

<sup>64</sup> Blaze, Jim. “Commentary: Short line railroads – custom high-growth freight service.” *Freight Waves*. Oct. 15, 2019. Available at: <https://www.freightwaves.com/news/commentary-short-line-railroads-custom-high-growth-freight-service>.

<sup>65</sup> *See, e.g.*, Attachment G.

second crewmember the ability to perform many tasks, including: throwing switches ahead of the train, providing extra protection at a grade crossing, or traveling ahead to speak with a customer prior to delivery.

For example, the Idaho Northern and Pacific Railroad Company (INPR) and the Wichita, Tillman and Jackson Railway Company (WTJR), both operated by the Rio Grande Pacific Corporation, utilize the practice of having a conductor assigned to each train in a utility vehicle. On both of these railroads, trains travel to their destination on one day, but due to statutory hours of service limitations, cannot return the same day.<sup>66</sup> The crew completes their work, secures the train, and drives themselves back to the on-duty location in the utility vehicle. The following day, the crew drives back to the train's location in the utility vehicle and returns the train for interchange service. Without the ability to use the second crew member in the vehicle, these short lines would have to hire and train another person, contract a taxi service, or both – expensive remedies for small businesses for a nonexistent problem.<sup>67</sup>

In fact, some Class I railroads report that they are considering moving the role of train conductor from the locomotive to the ground to achieve many of the benefits that short line railroads have recognized for years. At FRA's December 14, 2022, public hearing, a representative from Union Pacific Railroad noted that the railroad is looking to pilot a program of ground-based conductors, stating that it "will not only be safer and more efficient, but will also add a better quality of life for a large portion of our operating craft employees." And a representative from Norfolk Southern Railway provided, "by shifting [to] ground-based conductors, we can address these challenges, with conductors reporting to set locations on

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<sup>66</sup> 49 U.S.C. § 21101 et seq.

<sup>67</sup> See Attachment G.

scheduled shifts, performing their duties within a reasonable distance of their reporting locations and going home to their families at the end.”<sup>68</sup>

By mandating the location of the second crewmember to be physically on the train, FRA will stifle a short line railroad’s ability to promote additional safety measures and provide high-quality customer service. As they are small businesses, most short line railroads cannot afford to simply hire and train additional employees to fulfill these functions while another employee rides in the locomotive cab.

#### **D. The NPRM Lacks a Compliance Schedule.**

The NPRM also places an unrealistic burden on small businesses because it does not propose to establish a compliance schedule to meet the new requirements. As ASLRRA’s data and analysis shows, 198 short line railroads would not be covered by the small railroad exception and would be ineligible to petition for a special approval of a legacy operation. These small businesses would need to be able to have time to alter their operations to comply with a final rule. While many might be able to make operational changes to comply with the small railroad exception, such as choosing to invest in items such as alerters or a radio system, many others, such as the approximately 114 railroads that move a train consist containing 20 carloads of hazmat or at least one car of RSSM, would need time to hire and train additional employees. Other railroads might have to make the painful determination of whether their operation can support hiring additional employees or be forced to cease operations.

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<sup>68</sup> Marsh, Joanna. *FRA hearing clashing views from railroads, unions on train crew size*. Freight Waves, Dec. 15, 2022. Available at: <https://www.freightwaves.com/news/fra-hears-clashing-views-from-railroads-unions-on-train-crew-size>.

While ASLRRA urges FRA to withdraw the rulemaking or exempt short line railroads from any minimum crew size requirement, the association also recommends, should FRA continue down the regulatory path, that the agency at least consider a minimum of 18 months from publication of a final rule to a mandatory compliance date.

#### **IV. The Small Railroad Operation Exception is Inadequate**

FRA states that it has “provided exceptions to the two-person crew requirement which would limit the impact on small entities.”<sup>69</sup> FRA elaborates that “the operations of [small] railroads are generally less complex, and thus pose less risk, as compared to the operations of larger railroads.”<sup>70</sup> ASLRRA agrees that short lines railroad operations pose low risk; however, the exception at § 218.129 only covers an estimated 163 to 184 short lines with operations staffed by single-person crews today, far less than half of the estimated total 414 railroads.<sup>71</sup>

FRA’s small railroad exception is exceedingly complicated for a small business to follow, which is why ASLRRA created a flowchart to help its member railroads determine whether they would qualify for the exception.<sup>72</sup> In analyzing the data obtained through several surveys to ASLRRA member railroads, ASLRRA has determined that a substantial number of small business railroads would be unable to qualify for the exception. Again, approximately 198 railroads operating a train with one person in the locomotive cab would not be able to qualify for the small railroad exception or even be allowed to apply for the legacy operation special approval. This would result in FRA prohibiting almost 200 short line railroads from operating as

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<sup>69</sup> NPRM at 45,607.

<sup>70</sup> NPRM at 45,593.

<sup>71</sup> See Attachment D.

<sup>72</sup> See Attachment B.

they current operate, without any safety reasoning to justify such a significant economic change to these small entities.

The Madison Railroad provides one example of the arbitrary nature of the small railroad exception and how it threatens to eliminate current and long-held safe operating practices. An official from the Madison Railroad provided a statement to this effect in FRA's December 14, 2022, public hearing.<sup>73</sup> The Madison Railroad is a 41-mile short line railroad owned and operated by the City of Madison Port Authority in rural southern Indiana. Since 1978, the Madison Railroad has commonly operated with one-person crews in the locomotive cab and has never had an incident related to one-person operations. Despite its stellar safety record, there are multiple specific criteria outlined in the NPRM that would disqualify this railroad from a small railroad exception.

First, Madison Railroad does not operate with a dispatcher. It does not issue track authority in the form of mandatory directives or operate multiple trains at any time. Trains are operated at 10 mph over the entirety of the line at restricted speed, requiring movement to stop within half the range of vision. Anytime that vision is lost, or the safety of the train or track condition is in question, the crews stop until positive confirmation is obtained that it is safe to continue. This method of train operation negates the ability of a dispatcher to determine train movement status or approximate location in the field. Further, none of Madison Railroad's locomotives are equipped with alerters. Additionally, the railroad does not have electrified track circuits, or any other means of determining a train's progress or approximate location remotely -

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<sup>73</sup> See Attachment I: Statement of Adam Robillard, General Manager, Madison Railroad (December 14, 2022). Six short line railroads and ASLRRRA provided statements at the hearing. See also Attachment F: Statement of Chuck Baker, President, The American Short Line and Regional Railroad Association (December 14, 2022).

consistent with a non-dispatched operation. Finally, this small railroad operates over one mile of track with an average grade of 5.89%. This is an isolated location of the line where the railroad has created specific operating rules mitigating risk on this stretch of track, including higher requirements for brake systems, locomotives, and training.

The Madison Railroad has successfully run a compact business with unrelenting focus on cost control for over four decades. The impact of an obligation to have a second crewmember in the locomotive cab would require the railroad to hire, at a minimum, two additional employees. Although that may not seem large, with a staff of just five, this would result in a 40% increase in staffing with few, if any productivity improvements. Alternatively, the initial capital costs associated with equipping the fleet of locomotives with alerters, expanding the communication coverage, and creating dispatching facilities would exceed \$150,000 - or over half of Madison Railroad's annual capital budget. FRA has not provided any justification for imposing such a high cost on a railroad with a history of safe operations, nor to other similarly situated small railroads.

**A. The Hazmat Exclusion Disqualifies Over 100 Short Line Railroads.**

At its outset, the NPRM does not permit a train to qualify for the small railroad exception at § 218.129(c) if it transports twenty (20) or more loaded tank cars or loaded intermodal portable tanks of any one or any combination of hazardous materials identified in § 232.103(n)(6)(i)(B) or on train consists that contain one (1) or more carloads of rail-security sensitive materials (RSSM) as defined by § 1580.3.<sup>74</sup> The NPRM explains that “based on the known safety and security risks associated with operating trains transporting large amounts of

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<sup>74</sup> §218.123(c). Hazardous material two-person train crew mandate.

hazardous materials . . . FRA is proposing to prohibit the operation of trains transporting hazardous materials subject to FRA’s securement regulations or materials designated by [the Transportation Safety Administration] as RSSMs on trains with fewer than two crew members.”<sup>75</sup> FRA does not explain why two crew members would increase safety on these particular trains or why a railroad could not address any perceived concern with an alternative established safety practice.

Like all railroads, short lines are subject to the common carrier obligation, which refers to the statutory duty of railroads to provide “transportation or service on reasonable request.”<sup>76</sup> A railroad may not refuse to provide service merely because to do so would be inconvenient or unprofitable.<sup>77</sup> Therefore, short line railroads may not refuse service to a customer if they provide a properly packaged hazardous material, even if they would incur significant cost to employ an additional crewmember because of the requirements of the NPRM. Additionally, many short line railroads cannot pass this additional train staffing cost to their customers because of either line haulage agreements with a Class I partner or the realities of a competitive economic marketplace.

Many railroads reported to ASLRRRA that they currently carry more than 20 carloads of the indicated hazardous materials or one carload of RSSM in a train operated by one person in the locomotive cab. According to ASLRRRA’s data analysis, approximately 114 short line railroads currently operate a train with 20 or more carloads of hazardous materials or at least one

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<sup>75</sup> NPRM at 45,578.

<sup>76</sup> 49 U.S.C. § 11101(a). While the obligation applies only to regulated traffic (e.g., coal, grain, chemicals, etc.), the Surface Transportation Board has historically stepped in to ensure that shippers are reasonably served even for exempt commodities.

<sup>77</sup> *G.S. Roofing Prods. Co. v. Surface Transp. Bd.*, 143 F3d 387, 391(8<sup>th</sup> Cir. 1998).

carload of RSSM.<sup>78</sup> During FRA’s public hearing, representatives from several of these railroads provided more specific information to FRA regarding how this restriction would obligate their railroad to immediately change their operations.<sup>79</sup> For example, trains operated with a single-person in the locomotive cab by the Nebraska Central Railroad Company (NCRC) and the New Orleans and Gulf Coast Railway Company (NOGC), both operated by the Rio Grande Pacific Corporation, carry 20 or more carloads of hazardous materials.<sup>80</sup>

Florida East Coast Railway (FEC), a Class II railroad in Florida, shared at FRA’s public hearing that the NPRM would prohibit FEC from using one-person operations for its short distance intermodal trains, currently made possible due to its collective bargaining agreements.<sup>81</sup> While FEC has a robust deployment of safety devices above the minimum federal safety standards, it moves RSSM and 20 or more loaded cars of covered hazardous materials. FEC states that the NPRM would directly increase its operating costs and make it more difficult for FEC to compete with trucking companies in Florida.<sup>82</sup>

The NPRM references the Indiana Rail Road (INRD), a Class II railroad operating in Illinois and Indiana, prominently in its preamble.<sup>83</sup> FRA describes the development and procedure that INRD undertook before implementing its single-person crew operation and also states that “the limitations INRD has imposed on its one-person operations have helped establish

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<sup>78</sup> See Attachment D. ASLRRRA provided a lower number at the SBA Roundtable but has since refined its data analysis on this point.

<sup>79</sup> See Attachment G: Statement of Mitch Harris, Director of Safety, Training & Regulatory Compliance, Rio Grande Pacific Corporation (December 14, 2022), Attachment H: Statement of Robert Bullock, Vice President of Human Resources and Safety, Florida East Coast Railway (December 14, 2022), Attachment J: Statement of Dewayne Swindall, President and Chief Executive Officer, The Indiana Rail Road Company (December 14, 2022), and Attachment K: Statement of John DeWaele, Senior Vice President, General Manager, Grafton and Upton Railroad Company (December 14, 2022).

<sup>80</sup> See Attachment G.

<sup>81</sup> See Attachment H.

<sup>82</sup> Id. at 2.

<sup>83</sup> NPRM at 45,568.

its positive safety record.”<sup>84</sup> Despite this incontrovertible safety record, due to the fact that, inter alia, INRD transports train consists of 20 or more carloads of hazmat, INRD would be ineligible for the small railroad exception.<sup>85</sup>

The Grafton and Upton Railroad (GU), a Class III railroad that has been in operation since 1874, provides freight rail transportation to customers in central Massachusetts.<sup>86</sup> The GU transloads over 95% of its business and services many commodities and customers which include many hazardous chemicals and a large propane transload facility. An official from the GU shared at FRA’s public hearing that GU would not meet the requirements for the short line exception due to, inter alia, the fact that it operates trains with one person in the locomotive cab on a train carrying at least one carload of RSSM.<sup>87</sup> The NPRM would create higher operating costs that would have a profound impact on this 25-mile short line railroad. To comply with the hazardous materials restriction alone, GU would have to hire additional staff, immediately increasing its operating costs by over \$100,000 per year.

**B. The Operating Rule Provision Disqualifies Over 100 Short Line Railroads.**

In addition to the hazardous materials operation restrictions, the NPRM states that a railroad wishing to be covered by the small railroad exception must adopt and comply with a railroad operating rule or practice for its train with fewer than two crewmembers that includes seven separate elements delineated in § 218.129(b). Many of these elements present opportunities to disqualify short line railroads from the proposed small railroad exception.

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<sup>84</sup> Id.  
<sup>85</sup> See Attachment J at 3.  
<sup>86</sup> See Attachment K at 4.  
<sup>87</sup> Id at 5.

According to ASLRRRA's data analysis, approximately 120 railroads would not qualify for the exception based on one or more of the arbitrary elements proposed in the list at paragraph b.<sup>88</sup>

### **1. The Communication Provisions Are Unjustified.**

The NPRM requires a number of communication elements for the railroad operating rule restriction that do not reflect current short line railroad operations. This portion of the proposed regulatory text at 49 C.F.R. § 218.129(b) requires that a railroad adopt and comply with a railroad operating rule or practice for its train operation with fewer than two crewmembers that states, *inter alia*:

- A one-person crewmember must contact the dispatcher whenever it can be anticipated that radio communication could be lost, e.g., before the train enters a tunnel, unless technology or a protocol is established to monitor the train's real-time progress;
- If the railroad cannot monitor the train's real-time progress, the railroad must have a method of determining the train's approximate location when communication is lost with the one-person crew;
- The railroad must establish a protocol for determining when search-and-rescue operations shall be initiated when all communication is lost with a one-person train crew;
- The dispatcher must confirm with a one-person train crewmember that the train is stopped before conveying a mandatory directive by radio transmission as required in § 220.61 of this chapter; and

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<sup>88</sup> See Attachment D.

- A one-person train crewmember must have a working radio on the lead locomotive and a redundant, electronic device appropriate for railroad communications as permitted in part 220, subpart C of this chapter.

At the outset, these requirements appear to be based on a false assumption that all railroads use dispatchers to authorize train movements and permit track occupancy. In fact, there is no federal requirement to have a dispatcher and many short lines do not use them. They may use other means of instruction including Block Register, timetables, special instructions, and yard limits. This requirement would negatively impact approximately 55 short line railroads that currently operate single person crews safely today as they would have to modify their operations, hire extra crews, or employ dispatchers for an operation that does not currently do so. Further, ASLRRA's analysis shows that some of these railroads operate at speeds that exceed 25 mph, operate train consists with 20 or more tank cars of hazmat or RSSM, or operate a train longer than 6000 feet with at least one carload of RSSM.<sup>89</sup>

FRA does not currently require a working radio in the controlling locomotive of trains operating at speeds of less than 25 mph.<sup>90</sup> While FRA suggests that its requirements for train communication requirements were written with the expectation that there are always two crew members in the cab of a locomotive, FRA's Railroad Communications Rule specifically provides for the existing exception for small railroads operating at speeds of less than 25 mph that do not engage in joint operations, regardless of their train crew staffing.<sup>91</sup> The 1998 final rule stated that, "for freight trains, the communication requirements are determined by two factors: train

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<sup>89</sup> See Attachment D.

<sup>90</sup> See 49 C.F.R. § 220.9

<sup>91</sup> 63 Fed. Reg. 47,182 (Sept. 4, 1998).

operating speed, and extent of joint operations.”<sup>92</sup> No communication equipment is required if a train does not transport passengers or hazardous material, and does not engage in joint operations or operate at greater than 25 miles per hour.<sup>93</sup> It is arbitrary and capricious for FRA to invent a rationale for a regulatory requirement 24 years after issuance of the final rule without any data or analysis showing a new safety concern or risk.

According to ASLRRA’s data analysis, approximately 71 railroads operate a train with a single person in the locomotive cab with no means to monitor the train’s real time progress, and 10 railroads operate with one crewmember in the locomotive cab without a radio in the controlling locomotive.<sup>94</sup> These railroads may use company issued electronic devices such as cell phones instead.<sup>95</sup> These numbers demonstrate the capricious nature of the elements selected by FRA in the NPRM for the small railroad exception.

The cost for a railroad to comply with the radio element alone of the operating rule mandate would be difficult to quantify in the aggregate, as it includes the cost to install base stations, towers, and portable railroads. As an example, during the 1998 rulemaking proceeding, the Duluth, Missabe and Iron Range Railway, a short line railroad that operated in Minnesota and Wisconsin, stated that adding radios to its operation alone would cost approximately \$200,000.<sup>96</sup> Accounting for inflation, this cost would be \$345,000 in 2022. Especially given the expansion of the national cell network since 1998 and the prevalence of company-issued

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<sup>92</sup> Id. at 47,188.

<sup>93</sup> Id.

<sup>94</sup> See Attachment D.

<sup>95</sup> Id.

<sup>96</sup> 63 Fed. Reg. at 47,184.

alternative communication devices, it is puzzling that FRA does not provide any justification for this new substantial cost to small businesses.

For example, the Texas and Northern Railway Company, a Class III railroad in Lone Star, Texas, has operated with a single person in the locomotive cab for over 15 years and has received multiple industry recognitions for its exemplary safety performance.<sup>97</sup> Despite Texas and Northern's outstanding record of safely operating trains with single person crews, it would not qualify for the small railroad exception because, inter alia, it does not maintain technology or protocols to monitor the train's real time progress, it does not have a method of determining the train's approximate location when communication is lost with the one-person crew, and it does not utilize a dispatcher.<sup>98</sup> The NPRM would require this seven-mile short line railroad to dramatically alter its operating procedures that have proven over an extended period of time to be not only safe, but also an efficient and cost-effective means of serving its customers.

## **2. The Alerter Requirement is an Undue Burden.**

The railroad operating rule restriction in the NPRM requires a short line railroad wishing to be covered by the small railroad exception to have its lead locomotive equipped with an alerter, as defined in § 229.5, and the one-person crewmember to test the alerter to confirm that it is working before departure at § 218.129(b)(5). FRA states that, without an alerter on the lead locomotive, "a one-person train crew could become incapacitated with the train moving, and the train would continue to operate down the track indefinitely without another crewmember who could apply the emergency brake."<sup>99</sup> Without any facts to support the veracity of this

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<sup>97</sup> See Attachment L: Statement of Scott Conner, Vice President of Operations, Transtar LLC/Texas and Northern Railway Company, at 2.

<sup>98</sup> Id.

<sup>99</sup> NPRM at 45,592.

assumption, this presents an additional burden to short line railroads, as current federal regulations at 49 C.F.R. § 229.140 do not require an alerter for a controlling locomotive that is operated at speeds of 25 mph or less. In fact, FRA stated in the 2012 Locomotive Safety Standards final rule that “movements at lower speeds greatly reduce the risk of injury to the public and damage to the equipment. There is a reduced safety need for requiring alerters on locomotives conducting these shorter, low speed operations.”<sup>100</sup> Further, the 2012 FRA final rule did not distinguish the risk between a two-person crew and a one-person crew, it simply concluded that there was not a need to compel a railroad to have an alerter if it operates at a reduced speed.<sup>101</sup> FRA has not provided any data or rationale to support such a significant change to this standard, which was promulgated within the locomotive safety standards final rule over 10 years ago.

According to ASLRRA’s data analysis, approximately 83 railroads currently operate with one person in the locomotive cab using locomotives that are not equipped with an alerter.<sup>102</sup> In order to meet the requirements for special approval, these 83 railroads would need to equip at least some percentage of their locomotives to meet the by train requirements or hire and train additional employees to serve as a second crewmembers in the locomotive cab. Current industry benchmarking shows that it is approximately \$20,000 to equip a locomotive with an alerter, and this is not possible on some older models of locomotives.

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<sup>100</sup> 77 Fed. Reg. 21,312 (April 9, 2012).

<sup>101</sup> The accidents cited in the 2012 rulemaking as the basis for the alerter requirement, including the 2005 accident at Anding, MS, the 1990 accident at Sugar Valley, GA, and the 1997 accident at Delia, KS, each involved trains with multi-person crews. *See* 77 Fed. Reg. at 21,321.

<sup>102</sup> *See* Attachment D.

According to industry data, there are a median of six locomotives per Class III railroad.<sup>103</sup> Assuming that these 83 railroads would be obligated to equip half of their locomotives to comply with the proposed mandate, or three locomotive per railroad, the initial cost for compliance with this element would be approximately \$4,980,000, exclusive of maintenance costs.<sup>104</sup> Further, ASLRRA has not been able to create a separate cost estimate for locomotives that are not equipped with a 26L brake valve. The cost to equip these locomotives would be higher, as alerters available on the market may not function with these brake valves, which are often found on older locomotives. Additionally, railroads without alerters would need to develop rules, training and skills evaluation for train crews, which ASLRRA estimates would cost approximately \$43,160.<sup>105</sup> Also, the initial cost to train crews on alerter requirements, as required under FRA's training rule at 49 C.F.R. part 243, would be approximately \$118,690.<sup>106</sup> The total first-year cost to comply with this one element of the NPRM would be \$5.1 million for small businesses, with an annual cost of testing and skills evaluation at \$29,672.<sup>107</sup> Each railroad would also have to modify its training program as required by part 243 as well. FRA clearly did not consider this significant cost to small businesses, and it did not provide any safety benefit to justify this dramatic change to a railroad that currently operates with one engineer in the locomotive cab without an alerter.

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<sup>103</sup> Short Line and Regional Railroad Facts and Figures. Page 12.

<sup>104</sup> 83 railroads x 3 locomotives per railroad x \$20,000.

<sup>105</sup> This estimate assumes 83 railroads, each with 1 designated supervisor locomotive engineer spending 8 hours to create the rules and training with an average burdened wage rate of \$65 per hour. The \$65 figure comes from distilling an hourly rate (assuming 2,000 work hours in a year) from an average annual compensation of \$130,000 for a railroad employee. National Railway Labor Conference, "Total Compensation."

<sup>106</sup> This estimate assumes 83 railroads with 11 train and engine employees each, spending 2 hours on initial training at \$65 per hour.

<sup>107</sup> This estimate assumes 83 railroads with 11 train and engine employees each spending 30 minutes on recurrency skills and evaluation testing at \$65 per hour.

### C. The Speed Restriction Disincentivizes Railroads to Upgrade Track.

The NPRM states that the small railroad exception is not available for a train that operates at a speed greater than 25 mph over track at 49 C.F.R. § 218.129(c)(1). This suggests that FRA assumes that most small freight railroads maintain their track to no greater than Class 2 track standards, which allow freight trains to be operated at speeds no greater than 25 mph.<sup>108</sup> However, ASLRRA's analysis shows that this is a faulty assumption, as approximately 22 short line railroads operate trains at speeds greater than 25 mph. For example, the Indiana Rail Road (INRD), has operated trains with a one-person crew since 1997 with an average main track speed of 37 miles per hour, maintaining its core routes to FRA Class 3 track standards or higher.<sup>109</sup> Furthermore, as INRD has upgraded its class of track and speed, train operators are able to complete a job in less time, resulting in shorter shift and less time on-duty. INRD's internal data clearly indicates that one-person crews are just as safe as two-person crews.<sup>110</sup> Since 1997, INRD has seen improvements in productivity and safety, allowing it to provide competitive, environmentally friendly service to its customers.<sup>111</sup>

This exception also provides a disincentive to short line railroads to upgrade their infrastructure, which is contrary to the stated policy and goals of many federal grant programs, such as the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program, the Local and Regional Project Assistance Program Grants (RAISE) and the Nationally Significant Multimodal Freight & Highway Projects Program (INFRA).<sup>112</sup> There are many examples of

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<sup>108</sup> NPRM at 45,593.

<sup>109</sup> See Attachment J. See also 49 C.F.R. § 213.9.

<sup>110</sup> Id. at 5.

<sup>111</sup> Id. at 6.

<sup>112</sup> See 49 U.S.C. § 22907, 49 U.S.C. § 6702(d)(3) and 23 U.S.C. § 117. The CRISI Program funds projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail. RAISE funds are awarded for surface transportation infrastructure projects that will improve safety, environmental sustainability, quality of life, mobility and community connectivity, economic competitiveness and opportunity including tourism, state of

recent grant projects that focus on upgrading or repairing and rehabilitating existing track that limit operational train speeds.<sup>113</sup> Many short line railroads inherited track that had experienced years of deferred maintenance by their previous owners and must therefore devote a significant portion of revenue to rehabilitating their infrastructure.<sup>114</sup> Restricting the operational flexibility of short line railroads regarding their train crew staffing risks discouraging short lines from investing in their infrastructure and upgrading their track, as higher track speeds would necessitate hiring and training additional railroad transportation employees – a substantial expense for a small business.<sup>115</sup> Surely FRA does not intend to discourage short line railroads from participating in federal grant programs intended to improve the national freight rail network.

#### **D. The Grade Provisions Exceed Other Regulatory Restrictions.**

The NPRM proposes that the small railroad exception at § 218.129(c)(1)(i) can apply to train operations without a second crewmember intermittently assisting the train only if the average grade of any segment of the track operated over is less than 1 percent over 3 continuous miles or 2 percent over 2 continuous miles. Although FRA acknowledges that current

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good repair, partnership and collaboration, and innovation. INFRA awards competitive grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas.

<sup>113</sup> See, e.g., “U.S. Department of Transportation Announces More Than \$56 Million in Grants to Improve Rail Safety, Efficiency, and Reliability.” Federal Railroad Administration, Feb. 8, 2019. Available at: <https://railroads.dot.gov/newsroom/press-releases/us-department-transportation-announces-more-56-million-grants-improve-rail> (Announcing a CRISI award to the Heart of Georgia Railroad which includes upgrading the route to mitigate 8.6 miles of slow orders, reducing travel time across the route; and a CRISI award to Rapid City, Pierre & Eastern Railroad to replace 2.5 miles of track to improve operational efficiency); and Davidson, Kara “\$5.7 million from BUILD: PCC Railroad gets grant for bridge, track upgrades.” Whitman County Gazette, Dec. 27, 2018. Available at: <https://www.wcgazette.com/story/2018/12/27/news/57-million-from-build-pcc-railroad-gets-grant-for-bridge-track-upgrades/27804.html>, and Lockwood, Frank, “\$10.5 grant to aid in Arkansas rail line’s restoration.” Arkansas Democrat Gazette, July 29, 2019. Available at: <https://www.arkansasonline.com/news/2019/jul/29/10-5m-grant-to-aid-in-rail-line-s-resto/>.

<sup>114</sup> Short Line and Regional Railroad Facts and Figures. Page 3.

<sup>115</sup> For example, on average, a Class I railroad employee received \$130,000 in compensation in 2021. <https://raillaborfacts.org/total-compensation/>

regulations exempt small railroad operations from additional safety devices at these same grades, FRA nevertheless proposed this restriction to crew size.<sup>116</sup> This element would prevent many short line railroads from qualifying for the small railroad exception, as ASLRRA's data analysis shows that approximately 73 short line railroads currently operate at grades greater than those proposed by the NPRM.<sup>117</sup>

FRA's decision to link train crew size to grade is also at odds with the reasoning that the agency provided in exceptions to the Two-Way End-of-Train Telemetry Devices final rule. In 1997, FRA promulgated regulations pertaining to the use and design of two-way end-of-train telemetry devices (two-way EOT), which can provide locomotive engineers with the capability of initiating an emergency brake application that commences almost simultaneously at the front and rear of the train.<sup>118</sup> Mandated by Congress, the governing statute for this rule provides that the Secretary of Transportation must exclude, at a minimum, from the requirements of the rule, trains that do not exceed 30 mph and do not operate on heavy grade.<sup>119</sup> FRA's regulations require a two-way EOT for trains that operate in excess of 30 mph only for (1) trains operating with 4,000 trailing tons or less if it operates over track that has an average grade of 2 percent or greater for a distance of 2 miles; or (2) trains operating with greater than 4,000 trailing tons if a section of track over which it operates has an average grade of 1 percent or greater for 3 miles.<sup>120</sup> In the final rule, FRA explained that it excluded certain trains from the two-way EOT requirement after a thorough review of accident data.<sup>121</sup> This crew size NPRM provides no

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<sup>116</sup> See NPRM at 45,593.

<sup>117</sup> See Attachment D.

<sup>118</sup> 62 Fed. Reg. 278 (Jan. 2, 1997).

<sup>119</sup> See 49 U.S.C. § 20141 (formerly contained in Sec. 7 of the Rail Safety Enforcement and Review Act, Pub. L. No. 102-365 (Sept. 3, 1992), amending Sec. 202 of the Federal Railroad Safety Act of 1970, formerly codified at 45 U.S.C. § 421, 431 et seq.).

<sup>120</sup> See 49 C.F.R. § 232.23.

<sup>121</sup> 62 Fed. Reg. at 288.

explanation, data or analysis to support a grade restriction in the small railroad exception to support a drop from the current FRA requirements that exclude trains operating at the identical grades at speeds of 30 mph instead of 25 mph.

The grade restriction is also out-of-touch with current short line railroad operations. For example, in addition to Madison Railroad, the GU is an example of a safe short line railroad currently operating a train with a single-person crew without a second crewmember intermittently assisting the train over grades greater than the limits proposed in the NPRM.<sup>122</sup> In GU's operations, a dual-certified individual serves as a single-person crew to operate a train over a segment of track with grade greater than 1 percent over 3 continuous miles or 2 percent over 2 continuous miles. The single-person crew operates the train from one yard or customer to another, where it is met by an additional crewmember, who arrives in advance by vehicle.<sup>123</sup> Despite its history of safe railroad operations, GU and Madison Railroad would both be unable to qualify for the small railroad exception as, inter alia, they operate at grades higher than what is permitted by the NPRM.

#### **E. The Train Length Requirement is Arbitrary.**

The NPRM restricts the small railroad exception to a freight train operating with a single-person crew without a second train crewmember intermittently assisting the train's movements, to train consists less than 6,000 feet at 49 C.F.R. § 218.129(c)(1)(i). FRA states that this is because of its concerns involving blocked crossings.<sup>124</sup> The NPRM elaborates that, "the train length requirement is necessary to ensure a train operated under this proposed exception is less

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<sup>122</sup> See Attachment K.

<sup>123</sup> Id. at 5.

<sup>124</sup> NPRM at 45,593.

likely to block one or more crossings in a way that is unduly disruptive to the communities the train passes through.”<sup>125</sup> It suggests that a single-person crew would have difficulty notifying motorists in the event of a grade crossing activation failure and questions whether single-person operations would lead to an increase in blocked crossings.<sup>126</sup> However, FRA does not provide an explanation for the otherwise arbitrary length of 6,000 feet, nor does it explain why a short line railroad could not address this concern with an alternative safety protocol.

The NPRM does not illuminate how it developed 6,000 feet as the train length limit that would disqualify a railroad from operating a train using a single-person crew, other than estimating that a train that is 6,000 feet would be “over a mile long and have approximately 85 to 92 cars.”<sup>127</sup> While FRA mentions concerns involving blocked crossings and references the blocked crossing portal that it was Congressionally mandated to establish in order to collect information, perform outreach in communities, support collaboration in the prevention of incidents at highway-rail grade crossings, and assess the impacts of blocked crossings - it does not share any data obtained through this site or any analysis performed on the data.<sup>128</sup> The NPRM does not provide any data to suggest the number of grade crossings that a train could simultaneously occupy.

The NPRM appears to assume that short line railroads do not operate trainsets that are longer than 6,000 feet. Short line data proves that this is incorrect, as approximately 124 short line railroads operate trains in excess of 6,000 feet with a single crewmember in the locomotive cab.<sup>129</sup> For example, the Cimarron Valley Railroad (CVR) in Kansas currently handles unit

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<sup>125</sup> Id. at 45,594.

<sup>126</sup> Id. at 45,575.

<sup>127</sup> Id.

<sup>128</sup> The Infrastructure Investment and Jobs Act, Public Law 117-58 (Nov. 15, 2021), sec. 22404.

<sup>129</sup> See Attachment D.

trains of grain with approximately 110 cars (or 7,400 feet). In this operation, a trainmaster typically drives a locomotive engineer to Dodge City to pick up the train, and a single-person crew will operate the train without assistance from a utility vehicle. When the train is about two hours from its destination, a conductor will drive ahead to the customer's facility in a utility vehicle to remove derails, line switches, and perform any other necessary work prior to the train's arrival. Under the NPRM, this short line railroad would have to hire and train two employees, due to the size of the train and the lack of a trailing truck "intermittently assisting" the move. Like many short lines, this railroad is considered a handling line and paid on a per-car basis from its Class I partner. CVR estimates that the addition of employees would cost \$250,000 and the railroad would have no ability to adjust their rates to compensate. Further, as these unit grain trains are largely seasonally driven, the additional work force would not be needed for lengthy periods of the year, making it difficult to recruit, train and retain employees.

The NPRM also fails to explain why a railroad could not address any concerns pertaining to potential blocked crossings by other operational practices. Many short line railroads operate trains with a single person in the locomotive cab and a second person in a utility vehicle. As shared during FRA's December 14, 2022, public hearing, railroads can increase safety by choosing to deploy a second crewmember in a utility vehicle as opposed to physically riding on the train. For example, an official from Rio Grande Pacific Corporation shared that a second crewmember in a utility vehicle can travel ahead of the train to flag grade crossings if necessary for increased safety to the public.<sup>130</sup> Additionally, at one of Rio Grande Pacific Corporation's locations, the conductor drives ahead of the train in a utility vehicle to operate drawbridges in advance of the train's arrival, which saves time and reduces the possibility of blocked

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<sup>130</sup> See Attachment G.

crossings.<sup>131</sup> An official from GU also shared at the hearing that some short lines operate more efficiently and safely with their conductor located in a vehicle to safely make reverse moves, protect crossings, or to open and close gates that provide safety to the facilities that they serve.<sup>132</sup>

The NPRM would eliminate the ability of many short line railroads to continue their operations in what has proven to be a safe manner without data to support the train length restriction.

**F. The Second Crewmember Option Disqualifies Many Short Lines.**

The second proposed small railroad operation exception would apply to small operations of railroads with fewer than 400,000 total annual employee work hours that do not exceed 25 mph, and where a second train crewmember is assigned, but is not continuously on or observing the moving train as would be expected of a second crewmember that is working with a locomotive engineer as a unit that remains in close contact. § 218.129(c)(1)(ii). This option in the small railroad exception could apply to railroads that operate over a segment of track where the average grade is less than 1 percent over 3 continuous miles or 2 percent over 2 continuous miles and the total length of the train is no greater than 6,000 feet. § 218.129(c)(1)(i). According to ASLRRA's data analysis, 103 short line railroads currently operate a train with a single crewmember in the locomotive cab and without a second crewmember otherwise assigned to the train.<sup>133</sup>

Due to the arbitrary combination of train length and grade coupled with the requirement of a second crewmember, many of the short line railroads that operate a train with a single

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<sup>131</sup> Id. at 2.

<sup>132</sup> See Attachment K at 4.

<sup>133</sup> See Attachment D.

crewmember in the locomotive cab would not qualify for the small railroad exception. There are numerous examples of short line railroads that safely use a single person crew without another crew member assigned to the train, including INRD and Madison Railroad. INRD safely operates trains an average of 70 miles using a single-person crew without a second person in a utility vehicle or otherwise assigned to the train.<sup>134</sup> INRD's rigorous safety protocols show that an additional crewmember is unneeded from a safety, fatigue or emergency response perspective. However, INRD would not qualify for the small railroad exception because, inter alia, the railroad operates trains that exceed 6,000 feet in length without a second person in a utility vehicle or otherwise assigned to the train. The Madison Railroad has safely operated trains with a single-person dual-certified crew since 1978 without a second person in a utility vehicle or otherwise assigned to the train.<sup>135</sup> The railroad's unique territory presents unusual safety challenges that require Madison Railroad to be a safety innovator and provide additional risk mitigation steps above and beyond minimum FRA requirements. Despite Madison Railroad's stellar safety record, it would not qualify for the small railroad exception because, inter alia, it operates over grades that exceed the proposed grade restriction without a second person in a utility vehicle or otherwise assigned to the train.

## **V. The NPRM's Approach to Legacy Operations is Unworkably Flawed.**

The NPRM proposes a process for railroads to follow to petition the agency to approve the continuance of a legacy one-person train crew operation at § 218.131.<sup>136</sup> In the freight rail context, FRA states that this process pertains only to short line railroads, as the agency states that

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<sup>134</sup> See Attachment J at 3.

<sup>135</sup> See Attachment I.

<sup>136</sup> FRA proposes to define a legacy, one-person operation as one that a railroad established at least two years before the effective date of a final rule on train crew size safety requirements. See NPRM at 45,595.

no Class I railroad had any one-person crew operations as of July 28, 2022.<sup>137</sup> In § 218.131(a), the NPRM proposes that a legacy operation can continue in operation for 90 days after the effective date of the final rule if the railroad has filed a special approval petition under § 218.137 containing a description of its operation. FRA declares that, by requiring legacy operators to file a petition seeking approval, it will permit FRA “to closely examine the safety of legacy operations in accordance with established, minimum safety requirements.”<sup>138</sup> However, as the majority of short line legacy operators have been operating trains with a single person in the locomotive cab for decades, FRA already has a plethora of safety data on each entity. ASLRRA suggests that FRA first examine the safety record of the hundreds of operations with a single person in the locomotive cab before proposing an NPRM, rather than the other way around.

**A. Almost 200 Short Line Railroads Will Not Qualify to Apply.**

As mentioned above, ASLRRA provided a flowchart to help its member railroads understand the restrictions placed upon a short line railroad wishing to petition the FRA for special approval to continue its legacy train operations staffed with a one-person train crew.<sup>139</sup> Inexplicably, the NPRM imposes the exact same restrictions on covered hazardous materials commodities that apply to all freight train operation exceptions, including a prohibition on twenty (20) or more loaded tank cars or loaded intermodal portable tanks of any one or any combination of hazardous materials identified in § 232.103(n)(6)(i)(B) or on train consists that contain one (1) or more carloads of rail-security sensitive materials (RSSM) as defined by § 1580.3.<sup>140</sup> In other words, a short line railroad that currently operates trains with one person

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<sup>137</sup> See NPRM at 45,578.

<sup>138</sup> NPRM at 45,564.

<sup>139</sup> See Attachment C.

<sup>140</sup> §218.123(c). Hazardous material two-person train crew mandate.

physically on the locomotive and that safely transports the described hazardous material commodities cannot qualify for the small railroad exception proposed at § 218.129(c) and also cannot petition the FRA for special approval of its legacy operation under § 218.131 - in other words, this railroad must hire and train additional employees pursuant to the NPRM or cease operations.

As stated previously, ASLRRA's data analysis shows that approximately 114 railroads transport 20 or more cars of covered hazardous materials or at least one car of RSSM in a train operated by one person in the locomotive cab.<sup>141</sup> If each of just those approximately 114 railroads needed to hire and train only two additional employees each, the total cost for the short line segment of the industry to comply with the NPRM would be \$29,640,000 annually.<sup>142</sup> This estimate undoubtedly undercounts the true cost to the industry, as many railroads would most certainly have to hire and train more than two employees each.

In addition to the hazardous materials operation restrictions, the NPRM states FRA will not approve a petition to continue a legacy operation unless the railroad's rules or practices include the same seven elements delineated in § 218.129(b) at § 218.131(b)(12). As discussed above, the same elements that present opportunities to disqualify short line railroads from eligibility for coverage under the small railroad exception also make them ineligible to apply for special approval of a legacy operation. According to ASLRRA's data analysis, approximately 120 railroads would not qualify for the exception based on one or more of the arbitrary elements proposed in the list at paragraph b.<sup>143</sup>

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<sup>141</sup> See Attachment D.

<sup>142</sup> 114 railroads x \$130,000 for each employee x 2 employees each. National Railway Labor Conference, "Total Compensation."

<sup>143</sup> See Attachment D.

According to ASLRRRA’s data analysis, because of the restrictions in § 128.123(c) and § 128.131(b)(12), approximately 198 short line railroads would be ineligible for the small railroad exception and ineligible to apply for a special approval of their legacy operations. These small business railroads, many whom have operated with a single person in the locomotive cab safely for decades, would be forced to either make costly capital investments to continue their operations, hire and train additional employees to fulfill the crew size mandate, or abandon their operations.

**B. The Process is Stricter Than FRA’s Existing Waiver Petition Process.**

FRA’s RIA suggests that the special approval process is the favorable alternative to FRA’s traditional waiver process, as the waiver process may take “6 to 9 months” whereas a special approval petition “would likely be resolved in 120 days.”<sup>144</sup> In fact, this provision is stricter than FRA’s rules of practice for a waiver, which do not place any preemptive restrictions on a covered entity’s eligible to petition the agency for a permanent or temporary waiver of any rule or regulation.<sup>145</sup> 49 C.F.R. § 211.7 does not restrict a railroad from petitioning the agency for a waiver of any regulation, and § 211.9 only requires that the petition include (a) the text or substance of the rule, regulation, standard or amendment proposed, or specify the rule, regulation or standard that the petitioner seeks to have repealed or waived; (b) explain the interest of the petitioner, and the need for the action requested; in the case of a petition for waiver, explain the nature and extent of the relief sought, and identify and describe the persons, equipment, installations and locations to be covered by the waiver; and (c) contain sufficient information to support the action sought including an evaluation of anticipated impacts of the action sought;

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<sup>144</sup> RIA at 36.

<sup>145</sup> 49 C.F.R. § 211.7(a) states “any person may petition the Administrator for issuance, amendment, repeal or permanent or temporary waiver of any rule or regulation.”

each evaluation shall include an estimate of resulting costs to the private sector, to consumers, and to Federal, State and local governments as well as an evaluation of the resulting benefits, quantified to the extent practicable. Each petition pertaining to safety regulations must also contain relevant safety data.

The RIA explains that waivers require adequate safety data and other information sufficient to support the action sought, but no risk assessment – thereby concluding that the special approval process provides FRA more information about safety and is more standardized than the existing waiver process.<sup>146</sup> However, this alternative focuses solely on the special approval process for new operations – a legacy operation is not required to submit a risk assessment to FRA pursuant to the proposed regulation at § 218.131. Without any data, analysis or explanation of a potential safety risk, short line railroads with existing train operations with one person in the locomotive cab would not be afforded the ability to petition for a waiver of the crew size requirement, unlike any other FRA rail safety regulation.

**C. FRA Underestimates the Cost of the Special Approval for Legacy Operations.**

A short line railroad with a legacy one-person train crew operation that does not qualify for the small railroad exception, that does not transport the described hazardous materials, and that can meet all of the required railroad operating rules requirements, would be able to petition FRA for special approval of its legacy operation at § 218.131. Given that FRA dramatically underestimated the number of short line railroads that currently operate with one person in the

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<sup>146</sup> RIA at 36.

locomotive cab, it is not surprising that the RIA also miscalculated the cost of the legacy special approval process.

FRA states that it is aware of only nine one-person train crew operations, seven of which are short line railroads.<sup>147</sup> It further estimates a total cost for special approvals for railroads with existing one-person operations to be \$41,486 for these nine railroads, which would be incurred in the first year.<sup>148</sup> The RIA provides an estimate of the annual burden of conducting an annual review and providing an annual report to FRA, which it values at \$619.52 per year per railroad.<sup>149</sup>

According to ASLRRA's data analysis, however, approximately 22 short line railroads would be eligible to apply for a special approval of their legacy operations.<sup>150</sup> A better estimate of the cost to the short line railroad segment of the industry to apply for the legacy approval option is \$101,410. The cost of the annual review and reporting requirement would therefore be over \$13,500 for each year thereafter.

Furthermore, the RIA also undercalculates the government administrative cost for special approvals. Assuming that there are nine railroads that would apply for a legacy operation special approval, the RIA estimates the cost, incurred entirely in the first year of the analysis, to be \$20,752 to the government.<sup>151</sup> However, with approximately 22 railroads eligible to apply for a legacy operation special approval, the government administrative cost is actually estimated to be \$50,732. Likewise, the RIA underestimates the government administrative cost for the review of

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<sup>147</sup> NPRM at 45,607.

<sup>148</sup> RIA at 15. \$4,609.56 per railroad

<sup>149</sup> RIA at 24. This is calculated using an hourly wage rate of \$77.44 and 8 hours to create the review and report.

<sup>150</sup> See Attachment D.

<sup>151</sup> RIA at 25.

each legacy operation’s annual report. While the RIA provided an estimate of \$461.16 of government administrative cost per annual report per year, which would be \$4,150.44 to review the nine railroads identified in the NPRM, the actual number is approximately \$10,145.<sup>152</sup>

**D. The Risk Assessment for a Material Modification is an Unworkable Burden.**

Finally, the NPRM requires a short line railroad with a legacy one-person crew operation that intends to materially modify its already-approved legacy operation to request approval and submit a risk assessment meeting the requirements of § 218.135.<sup>153</sup> The NPRM explains that a modification is material “if it is a change to the railroad’s operations, infrastructure, or locomotive control or risk mitigation technology, that may affect the safety of the operation.”<sup>154</sup>

As the Association of American Railroads explained during the December 14, 2022, public hearing, the risk assessment requirement seems to have been designed in a way that makes it virtually impossible to satisfy. According to § 218.135, a risk assessment must identify and assess all possible hazards associated with the proposed operation, and then classify partially mitigated and unmitigated hazards by severity and probability. Without getting into the specifics of whether a small business would even be able to conduct this type of sophisticated analysis, especially in the mere 120 hours estimated by the RIA, this provision is so vague that it could be interpreted to include safety improvements, including track infrastructure upgrades enabling higher operating speeds, upgrades to locomotives, and upgrades to other safety appurtenances.<sup>155</sup>

Without any data showing that existing short line one-person train crew operations pose any safety risk, the extreme costs and uncertainties presented in the legacy operation special

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<sup>152</sup> RIA at 31.

<sup>153</sup> NPRM at 45,603.

<sup>154</sup> NPRM at 45,603-45,604.

<sup>155</sup> RIA at 12.

approval process for the 22 short line railroads that would be eligible to apply is an arbitrary, egregious, and unwarranted burden to place upon them.

## **VI. The NPRM Will Force Freight to Truck**

Finally, a collapse of the economic viability of short line railroads, due to their inability to shoulder the cost imposed by this NPRM, will inevitably result in a modal shift of freight traffic from rail to its competing mode of truck transportation. The freight that had previously moved by rail will move to trucks and onto the highways, leading to an increase in accidents, injuries, and fatalities, not to mention an increase in pollution, CO<sup>2</sup> emissions, and cost to the public to maintain the road network.<sup>156</sup>

The most recent data from the U.S. Department of Transportation with a direct comparison of fatalities per billion ton-miles is incorporated in the Federal Railroad Administration's 2010 National Rail Plan Progress Report to Congress and as shown below – it is illustrative of the vast difference in safety between shipping by rail vs. truck.<sup>157</sup> This difference has only grown over the past twelve years as rail safety has consistently improved and truck safety has declined.

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<sup>156</sup> See, e.g., AAR, *Oppose Longer & Heavier Trucks on Our Nation's Roads*. October 2022. Available at: <https://www.aar.org/wp-content/uploads/2020/08/AAR-Truck-Size-Weight-Fact-Sheet.pdf>.

<sup>157</sup> Federal Railroad Administration (2010). *National Rail Plan, Moving Forward: A Progress Report*. Available at: [https://railroads.dot.gov/sites/fra.dot.gov/files/fra\\_net/1336/NRP\\_Sept2010\\_WEB.pdf](https://railroads.dot.gov/sites/fra.dot.gov/files/fra_net/1336/NRP_Sept2010_WEB.pdf)

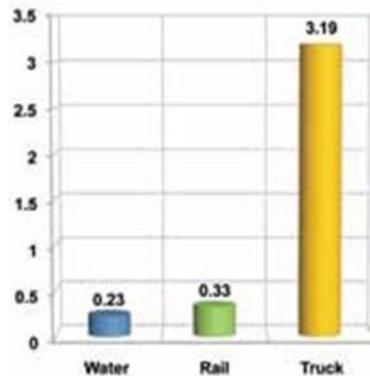


Figure 1: Fatalities (per billion ton-miles) in 2008<sup>158</sup>

A study of FRA safety data shows that train accidents per million train-miles have dropped 33 percent since 2000 and five percent since 2020.<sup>159</sup> On the other hand, the total estimated fatalities in crashes involving at least one large truck increased by 13 percent from 2020 to 2021. This estimate is based on involvement of large trucks, both in commercial and non-commercial use at the time of the crash. Nationwide, in 2008 there were 4,245 truck-involved fatalities, and in 2021, there were 5,601 fatalities, an increase of nearly 32 percent.<sup>160</sup> On the other hand, freight trains incur 14 percent of the fatalities that large trucks do per trillion ton-miles.<sup>161</sup> Additionally, freight trains incur about 3 percent of the injuries that large trucks do per trillion ton-miles.<sup>162</sup> The freight railroad rate of hazmat incidents per billion ton-miles is about 7 percent

<sup>158</sup> Id. at 7.

<sup>159</sup> Sources: <http://safetydata.fra.dot.gov/officeofsafety/publicsite/summary.aspx>. Note: Excludes grade crossing accidents. Data for 2021 is preliminary, as of March 2022.

<sup>160</sup> National Highway Traffic Safety Administration, *Early Estimates of Motor Vehicle Traffic Fatalities and Fatality rate by Sub-Categories in 2021*. DOT HS 813 298. May 2022. Available at: <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298>.

<sup>161</sup> Sources: Freight rail-related fatalities from FRA website <https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/TenYearFreightPassengerOperationsOverview.aspx> 2018. Large truck-related fatalities from NHTSA Traffic Safety Facts, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813021>. Both rail and large truck ton-miles in 2018 from Table 1-50 USDOT BTS National Transportation Statistics at <https://www.bts.gov/topics/national-transportation-statistics> (Truck ton-miles unavailable for 2019-2020.) Large trucks are trucks with a gross vehicle weight rating (GVWR) greater than 10,000 pounds.

<sup>162</sup> Sources: Freight rail-related injuries from FRA website, at <https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/TenYearFreightPassengerOperationsOverview.aspx>

that of trucks, and railroads incurred zero fatalities from 2012 through 2020 when transporting hazmat while trucks incurred 81.<sup>163</sup>

Rail is an efficient and environmentally sustainable mode of freight transportation. U.S. freight railroads, on average, are three-to-four times more fuel efficient than trucks and can move one ton of freight nearly 500 miles on one gallon of fuel.<sup>164</sup> Moving freight by train instead of truck reduces greenhouse gas emissions for such transportation by up to 75%.<sup>165</sup> Railroads account for around 40% of long-distance freight volume, but only 1.9% of U.S. transport-related greenhouse gas emissions.<sup>166</sup>

Short line railroads play an integral role in the freight role network, contributing to its safety and environmental benefits. Given the high costs posed by the NPRM, many short line railroads might be forced to cease operations, forcing freight transportation to truck, thus reducing safety and increasing pollution.

### **Conclusion**

ASLRRA appreciates the opportunity to provide the perspective of small business railroads to FRA on this very important matter and urges the agency withdraw the rulemaking or completely exempt short line railroads from any minimum crew size and crew location requirements.

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2018. Large truck-related injuries from USDOT, FMCSA, Large Truck and Bus Crash Facts, 2018 Trends Table 7, at <https://www.fmcsa.dot.gov/safety/data-and-statistics/large-truck-and-bus-crash-facts-2017#A5>

Both rail and large truck ton-miles in 2018 from Table 1-50 USDOT BTS National Transportation Statistics at <https://www.bts.gov/topics/national-transportation-statistics> (Truck ton-miles unavailable for 2019-2020.).

<sup>163</sup> Source: USDOT, Pipeline & Hazardous Materials Safety Administration, Hazardous Materials Incident Fatalities By Year & Mode, from: <https://hip.phmsa.dot.gov/analyticsSOAP/saw.dll?Dashboard> for 2012 through 2020, as of March 2022. PHMSA is experiencing a backlog in processing 2021 data as of March 2022.

<sup>164</sup> See Association of American Railroads, Freight Rail & Preserving the Environment. October 2022.

Available at: <https://www.aar.org/wp-content/uploads/2020/06/AAR-Sustainability-Fact-Sheet.pdf>.

<sup>165</sup> Id.

<sup>166</sup> Id. According to the U.S. Environmental Protection Agency.

# **Attachment A**

# 2022 Crew Size Initial Survey

## Introduction and Contact Information

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### 1. Contact Information \*

First Name

Last Name

Title

Company Name

Email Address

Phone Number

## Railroad Information

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### 2. What is the name of the railroad you are responding for? \*

VALIDATION Max character count = 4 Min character count = 2

3. What is the reporting mark for the railroad you are responding for?\*

## Single Person Operating Scenarios

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VALIDATION Min. answers = 1 (if answered)

4. For your **main line operations**, please check the boxes below if your railroad operates in the described mode under any circumstance. Feel free to choose multiple checkboxes as they apply to your railroad, or let us know if none apply. \*

- Only one person in the locomotive cab without outside support.
- One person operating the locomotive via remote control.
- One person in the locomotive cab, with an additional person in a trailing vehicle.
- One person in the locomotive cab, supported by a conductor who is supporting multiple trains simultaneously.
- Our railroad does not operate in any of the above modes.

**VALIDATION** Min. answers = 1 (if answered)

5. For all of your **non-main line operations**, please check the boxes below if your railroad operates in the described mode under any circumstance. Feel free to choose multiple checkboxes as they apply to your railroad, or let us know if none apply. \*

- Only one person in the locomotive cab without outside support.
- One person operating the locomotive via remote control.
- One person in the locomotive cab, with an additional person in a trailing vehicle.
- One person in the locomotive cab, supported by a conductor who is supporting multiple trains simultaneously.
- Our railroad does not operate in any of the above modes.

# 2022 Crew Size Follow-Up Survey

## Introduction and Contact Information

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### Contact Information \*

First Name

Last Name

Title

Company Name

Email Address

Phone Number

## Railroad Information

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What is the name of the railroad you are responding for? \*

**VALIDATION** Max character count = 4 Min character count = 2

What is the reporting mark for the railroad you are responding for? \*

## Information on Exception Criteria Referenced by FRA in General

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### Page description:

In FRA's proposed rulemaking there are several criteria FRA uses to define certain exception situations where a railroad would not be obligated to operate with two persons in a locomotive cab. As one of our member railroads we already know operate with one person crews, we would to know more about whether any of your rail operations meet or exceed the criteria on which FRA is focused.

For the following questions, please answer the questions regarding the overall operations of your railroad, regardless of how these operations are presently crewed.

1. Do you have a collective bargaining agreement with your T&E workforce? \*

- Yes
- No

2. How many total annual employee on duty (EOD) hours does your railroad have? \*

total EOD hours annually

## Information on Exception Criteria Referenced by FRA for Less Than Two Person Crew Operations

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### Page description:

Please answer the following questions only for your operations with less than two crewmembers in the locomotive cab.

**VALIDATION** Must be numeric

3. What is the maximum train length operated by crews with less than two crewmembers in the cab on your railroad? \*

feet

4. Does your railroad transport 20 or tank cars of hazardous materials (as defined below) in any combination during one train movement with less than two crewmembers in the locomotive cab? \*

For the purposes of this rule Hazardous Materials are defined as:

- [Division 1.1 or 1.2 \(explosive\)](#)
- [Division 2.1 \(flammable gas\)](#)
- [Class 3 \(flammable or combustible liquid\)](#)
- Hazardous substances listed at [49 CFR 173.31\(f\)\(2\)](#)

Yes

No

5. Does your railroad transport rail-security sensitive materials (RSSM) as defined below on trains with less than two crewmembers in the cab? \*

Rail security-sensitive materials (RSSM) means -

1. A rail car containing more than 2,268 kg (5,000 lbs.) of a Division 1.1, 1.2, or 1.3 (explosive) material, as defined in [49 CFR 173.50](#);
2. A tank car containing a material poisonous by inhalation as defined in [49 CFR 171.8](#), including anhydrous ammonia, Division 2.3 gases poisonous by inhalation as set forth in [49 CFR 173.115\(c\)](#), and Division 6.1 liquids meeting the defining criteria in [49 CFR 173.132\(a\)\(1\)\(iii\)](#) and assigned to hazard zone A or hazard zone B in accordance with [49 CFR 173.133\(a\)](#), excluding residue quantities of these materials; and
3. A rail car containing a highway route-controlled quantity of a Class 7 (radioactive) material, as defined in [49 CFR 173.403](#).

Yes

No

### Applicability of Proposed FRA Crew Size Exceptions to your Less Than Two Person Crew Operations

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#### Page description:

As a part of their proposed rulemaking, FRA has created exceptions for short lines based upon whether their less than two person crew operations meet certain operational criteria. Below are three questions that reflect these criteria and ask whether your railroad's less than two person crew operations meet all of those criteria, or which of the criteria your railroad would not meet.

Over the next two pages, please check any criteria that would make your railroad unable to continue its current less than two person operations if **ANY** of those operations would be unable to continue, even if there are some that would fit within the operational criteria for that exception. To meet the exception criteria, a railroad must not operate in situations reflected in the criteria below.

**VALIDATION** Min. answers = 1 (if answered)

6. This first group of criteria are required for any less than two person crew in the cab railroad operations to be excepted under the proposed rulemaking. Please check the boxes below if any of your less than two person crew operations occur under any of these operational criteria. If all of your less than two person crew operations do not meet these operations criteria, please select the final option. If your operations will meet some or all of these operational criteria, please choose multiple checkboxes as they apply to your less than two person crew operations. \*

Note: For the purposes of this rulemaking, "alerter" is defined in [49 CFR 229.5](#), and "electronic device" and "working radio" are defined in [49 CFR 220.5](#).

- Our railroad has more than 400,000 total employee hours annually.
- Any of our less than two person crew operations have maximum speeds exceeding 25 mph.
- Any of our less than two person crew operations transport 20 or more loaded tank cars of any combination of hazardous materials.
- Any of our less than two person crew operations transport 1 or more car loads of rail-security sensitive materials.
- Any of our less than two person crew operations occur over a segment of track with an average grade that is greater than 1% over 3 continuous miles OR 2% over 2 continuous miles.
- Any of our less than two person crew operations include trains whose length is greater than 6,000 feet.
- Any of our less than two person crew operations take place with those crews unable to communicate with a dispatcher.
- Our railroad is unable to monitor those a train with less than a two person crew's train's real time progress, or is unable to determine those trains approximate locations when communications are lost with the crew.
- Any of our less than two person crew operations take place with the crew in a locomotive without an alerter as defined in 49 CFR 229.5.
- We operate any trains with a less than two person crew whose lead locomotive is not equipped with a working radio and a redundant, electronic device appropriate for railroad communications as permitted in 49 CFR part 220.5.
- None of these criteria apply to our less than two person crew operations.

## Applicability of Proposed FRA Crew Size Exceptions to your Less Than Two Person Crew Operations (cont.)

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7. Do any of your less than two crew members in the locomotive cab operations include trains that are longer than 6,000 feet? \*

- Yes
- No

8. Do any your less than two person crew in the cab operations occur with no second crewmember outside of the train to intermittently assist with the train's movements and can directly communicate with the locomotive engineer in the cab? \*

- Yes
- No

### Additional Information

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**Page description:**

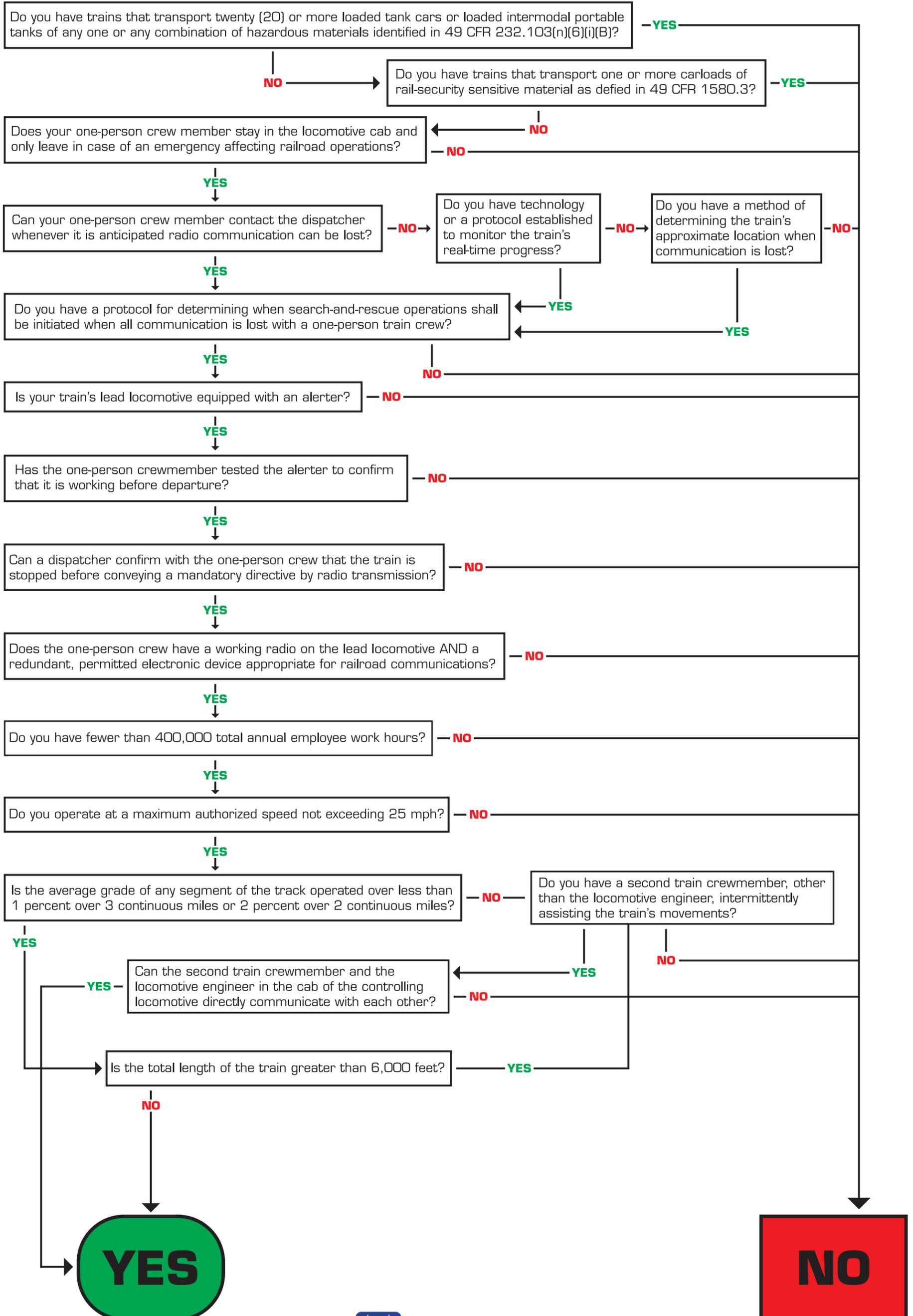
To help us better describe the negative impacts our member railroads will face should this rule be implemented as written, please let us know more about how your railroad determines the appropriate number and nature of crew on your trains, and if you have any plans to expand operations of less than two person crew in the cab operations.

9. What methodology does your railroad use to determine how many crew members are needed for operating staff to ensure safe operations?

10. Do you plan on expanding one person crew operations in the future and for what purposes?

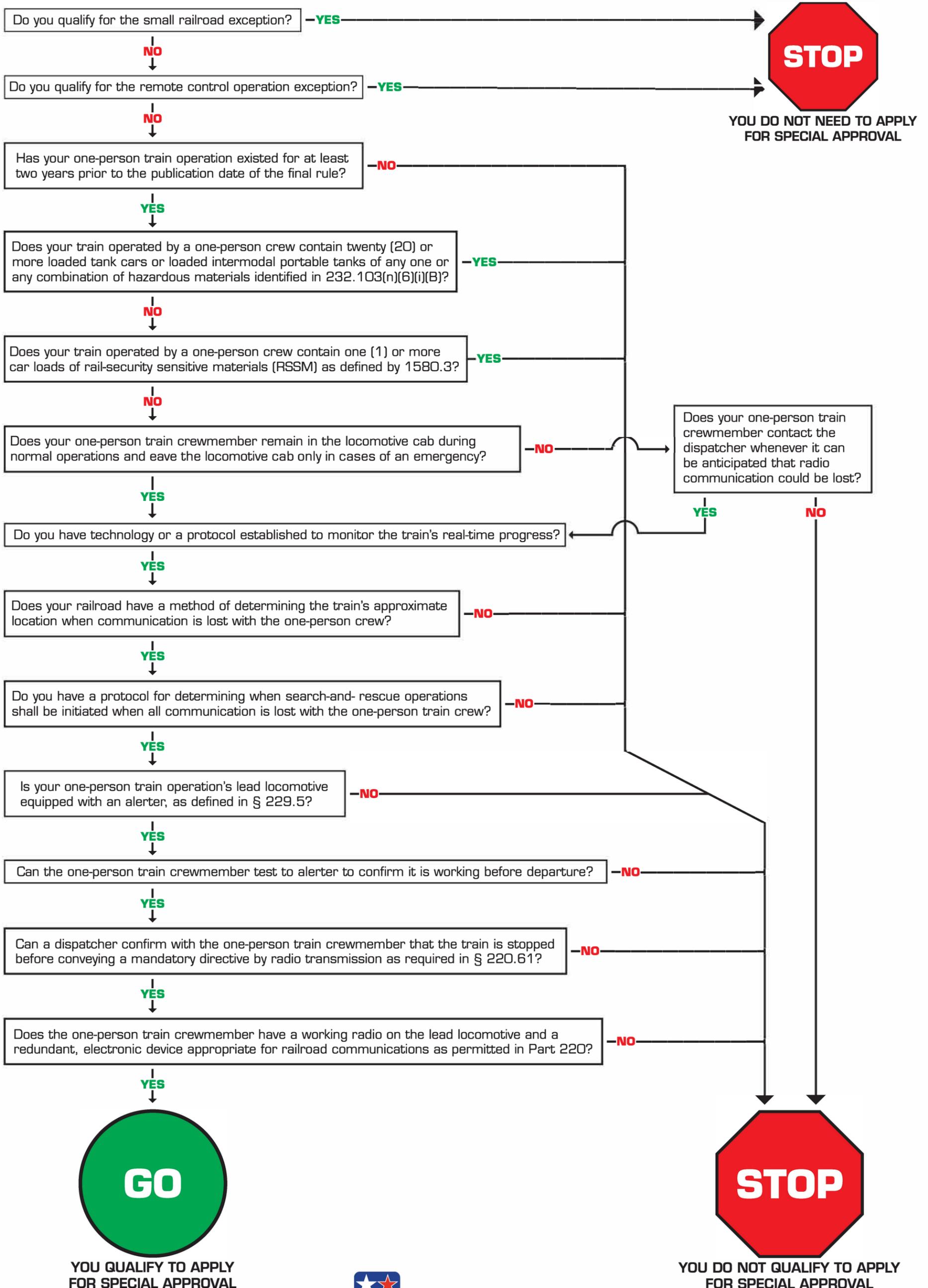
## **Attachment B**

# WOULD YOUR SHORT LINE RAILROAD QUALIFY FOR AN EXCEPTION TO FRA'S PROPOSED MINIMUM CREW SIZE RULE?



## **Attachment C**

# WOULD YOUR RAILROAD QUALIFY TO APPLY FOR SPECIAL APPROVAL TO CONTINUE A LEGACY ONE-PERSON TRAIN CREW OPERATION UNDER FRA'S NOTICE OF PROPOSED RULEMAKING?



## **Attachment D**

Report on Inference from ASLRRRA Survey on One-Person Operations:  
Addressing Concerns of Sample Selection

Prepared by: Dr Bentley Coffey  
Prepared for: ASLRRRA

December 20, 2022

An integral feature of surveys is making a statistical inference about a population from a sample. When the subjects surveyed lack autonomy (e.g., a survey of a sector of the night sky for a deep look to infer the number of galaxies), then the statistician is in complete control of which subjects are observed and thus can use a randomization device to draw the sample. This results in a simple random sample and that is almost surely the simplest situation for performing statistical inference. When the subjects surveyed are humans who can choose not to respond, such as officials at short line railroads (SLRRs), then we naturally worry about whether the respondents are representative of the non-respondents (as well as the broader population). We often refer to this as a sample selection problem, which is equivalent to a missing data problem where we seek to impute the results for the non-respondents.

The tradition in the literature is partition this problem into 3 cases: Missing Completely at Random (MCAR), Missing [Conditionally] At Random (MAR), and Missing Not at Random (MNAR).<sup>1</sup>

### MCAR

MCAR describes a case where essentially it is a coin toss (not necessarily a 50-50 coin) as to whether the subject would be invited to the survey sample and another (independent) coin toss as to whether the subject would respond. Hence, MCAR allows us to proceed with performing inference on the respondents as on a simple random sample. The estimate of the proportion (P) of the population answering “yes” to a question is then just computed by computing the yesses among the respondents in the sample (N):

$$\hat{P} = \frac{1}{N} \sum_{i=1}^N 1\{i \text{ responds yes}\}$$

For example, 176 SLRRs of the 280 respondents indicated that run some kind of 1-person operation and hence the estimate of that proportion in the population would be 0.629 (i.e., 63%). While this statistic may be our best guess, that is just point estimate that could have been the result of the luck of the draw in who happens to respond. Hence, we want to place an interval of uncertainty around that estimate. Because that statistic takes the form of a sample average of a relatively large sample, a Central Limit Theorem applies to its uncertainty distribution so that it is approximately normal:

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<sup>1</sup> For textbook treatments of these concepts, see: [Stef] van Buren (2008); [Andrew] Gelman, [Jennifer] Hill, and [Aki] Vehtari (2020); [Steven K] Thompson (2012); [Roderick J A] Little and [Donald B] Rubin (2019); and [Colin A] Cameron and [Pravin K] Trivedi (2005).

$$\hat{P} \sim N \left( E(\hat{P}), Var(\hat{P}) \right) = N \left( P, \frac{P(1-P)}{N} \right)$$

The estimate of that variance is usually presented as a standard error (i.e., which is effectively defined as how far from the point estimate would we construct a symmetric interval of uncertainty so that there a 66% chance that the true population proportion is within that interval):

$$SE(\hat{P}) = \sqrt{\frac{\hat{P}(1-\hat{P})}{N}}$$

In our example, the standard error on our estimate of the proportion of SLRRs with some kind of 1-person operation is 0.029 (i.e., 3 percentage points). We can then compute the margin of error as a factor multiple of the standard error such that we have the desired level of confidence that the true population proportion is within the uncertainty interval. We have used the conventional level of 95% confidence, which corresponds to a factor of 1.96:

$$ME(\hat{P}) = 1.96 \times SE(\hat{P}) = \sqrt{\frac{\hat{P}(1-\hat{P})}{N}}$$

In our example, the margin of error (associated with 95% confidence) on our estimate of the proportion of SLRRs with some kind of 1-person operation is 0.057 (i.e. 3 percentage points). We then construct the confidence interval as the point estimate plus or minus the margin of error:

$$CI = \hat{p} \pm ME(\hat{P})$$

In our example, the proportion of SLRRs with some kind of 1-person operation is  $0.629 \pm 0.057$  with 95% confidence (i.e.,  $63\% \pm 3$  percentage points with 95% confidence). To transform this from the proportion of SLRRs to the number of SLRRs, we simply multiply by the number of SLRRs in the population. In our example, we are 95% confident that  $437 \pm 40$  SLRRs have some kind of 1-person operation. The chief concern with this inference of the population is that it is only as valid as the assumption of MCAR.

## MAR

MAR differs from MCAR in that it does not assume that all subjects are equally likely to respond to the survey. Instead, some classes of subjects may be more likely to respond but those classes are determined entirely by variables that we can observe. This enables us to perform a sort of test for MCAR and MAR: is the distribution of covariates for respondents significantly different from non-respondents. Informally, it seems fairly clear that the respondents were not observably just like non-respondents. For instance, SLRRs in the Eastern Region appear to be much less likely to respond to the survey than SLRRs in the Southern, Central, or Pacific Regions.

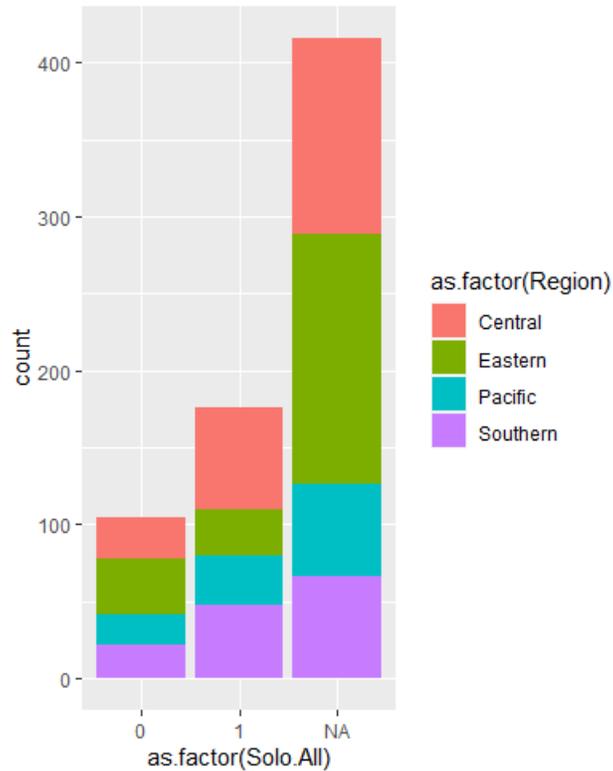


Figure 1. Stacked Bar chart by Region for Respondents vs all others, further separated into whether the SLRR had some kind of solo operations (i.e., Solo.All == TRUE)

When MAR is a more appropriate characterization of the observable data than MCAR, then there are two major ways to handle it. One way weights each observation in accordance with how much of the population that it represents instead of giving each subject in the observed sample equal weight; this works best when the observable covariates are discrete (i.e., their values are inherently restricted to a handful of categories) instead of continuous (i.e., their values can be anything in a broad continuum of numbers). Although regions are discrete, we also have FRA regulatory data on 2 continuous measures: the number of hours and miles for each SLRR, as well as confidential estimates of revenue for members. Regions might matter because of topography (e.g., affecting radio communication), when the track was laid (lots of crossings), whether there are close parallel roads, or even state regulations. Miles might matter because a longer track might make a 1-person operation more difficult. Revenue might matter because higher earnings might indicate more frequent operations dictating a larger staff and thus providing more flexibility, as well as some ability to pass increased costs onto buyers. Hours might matter for the reasons provided for both revenue and miles (the 3 tend to be fairly correlated). We could break these measures up into discrete bins but we would lose potentially valuable information in the process.

Hence, we pursued the other way of handling MAR in the sample: we construct a regression model of the outcome of interest from data on respondents (both their responses and covariates) to predict the responses of the non-respondents from their covariates. For example, here is our regression model for whether the SLRRs has some kind of 1-person operation:

$$p_j = \hat{p}_j + \varepsilon_j$$

$$\hat{p} = \underbrace{\beta_0}_{\substack{0.64 \\ \text{(Central)}}} + \underbrace{\beta_1[\text{East}]}_{-0.24} + \underbrace{\beta_2[\text{Pacific}]}_{-0.07} + \underbrace{\beta_3[\text{Southern}]}_{0.02} + \underbrace{\beta_4[\text{Hours}]}_{\substack{0.13 \text{ per} \\ 100k}} + \underbrace{\beta_5[\text{Revenue}]}_{\substack{-0.41 \text{ per} \\ \$100M}} + \underbrace{\beta_6[\text{Miles}]}_{\substack{-0.45 \text{ per} \\ 10M}}$$

The bold font is used here to indicate that our estimate of  $\beta_1$  (i.e., how SLRRs in the East differed from those in the Central Region) was revealed by the data to be statistically significantly different from zero; no other covariate's effect raised to the level of certainty that we'd be 95% confident that it made a substantial contribution to the model.<sup>2</sup> Our model's predictions for each SLRR is actually the probability of responding "yes"; we can then use this model prediction (and Standard Error for that prediction) as an imputation of the missing outcome for each non-respondent (j):

$$\hat{p} = \frac{\sum_{i=1}^N 1\{i \text{ responds yes}\} + \sum_{j=1}^M \hat{p}_j}{N + M}$$

In our example, this MAR estimate of the SLRRs with some 1-person operations is 0.609 (i.e., 61% or 424 SLRRs); this MAR estimate is 2 percentage points lower than the MCAR estimate (mostly) because SLRRs in the Eastern Region are both less likely to respond and less likely to use some 1-person operations. A natural question to ask is whether that's a statistically significant difference, which requires computation of the Standard Error of this estimate. Even without that computation, we can boldly claim that the difference lacks Economic Significance. The concept of Economic Significance differs from Statistical Significance in that the latter asks whether there is enough information to be certain if there is a difference not just due to luck of the draw and the former asks whether that difference would be of practical importance (e.g., to policymakers). Regardless of whether the rule affects 63% or 61% of SLRRs (i.e., 424 or 437 of 696 SLRRs), it clearly affects the majority of them – far more than less than the 1% prior beliefs expressed by FRA. The Standard Error of this MCAR estimate of the proportion can be computed from the Standard Errors for each predicted response as:

$$SE(\hat{P}) = \frac{1}{M} \sqrt{\sum_{j=1}^M SE(\hat{p}_j)^2}$$

In our example, the Standard Error on our MAR is 0.006 which is one-fourth of the uncertainty represented by our Standard Error in the MCAR estimate. Some of this decrease in uncertainty is because the use of covariates brings more information into the inference problem. Some of this decrease in uncertainty is by construction – the formula used for the Standard Error in the MAR case effectively assumes a finite population (for which the observed sample is sizeable) whereas the common MCAR formula is really more applicable when the observed sample is small relative to the population.<sup>3</sup> The remainder of the drop in the uncertainty comes from our choice to use methods that are relatively simple so that they are transparent and easy to understand.<sup>4</sup>

<sup>2</sup> We performed a different regression for each outcome variable (i.e., question in the survey about operations) and simplified the model (re-running it on all the data) for the cases where we had missing values to the covariates (revenue was most likely to be missing, although hours and miles were sometimes missing).

<sup>3</sup> Nonetheless, we use that MCAR formula for the standard error because it is (overwhelmingly) the most commonly used formula.

<sup>4</sup> Our linear regression model is technically a linear probability model which should have a different error structure given that  $\varepsilon$  should have whatever heteroscedastic binary distribution is necessarily to produce a binary outcome

## MNAR

Because we are committed to simplicity, MNAR are almost categorically ruled out. Nobel Laureate Jim Heckman solves the prickly problem of MNAR with a 2-step selection model: an initial step modeling the decision to respond and a follow-up step modeling the outcome variable in the response as a function of covariates and a measure of the unobserved determinants affecting the decision of whether to respond. This differs from the assumption of MAR because now the outcomes can depend not just on observed covariates and unobserved determinants but those unobserved determinants can be systematically related across subjects. Some unobservable that causes subjects to be more likely to respond can then be correlated with unobservables that causes subjects to be more likely to report 1-person operations; essentially, this handles the case of when only those who are most likely to be affected by the regulation (i.e., they have 1-person operations for reasons that we cannot observe) are those most likely to respond (skewing MAR inferences).

The key to making such a model work is to observe at least 1 variable that affects the decision to respond but doesn't seem to affect the outcomes (i.e., whether they have a 1-person operation). In our case, whether the SLRR is a subsidiary of a parent company might matter in generating responses. In theory, the existence of a parent company likely means a larger staff that includes a regulatory compliance officer who would make the time to respond to ASLRRRA's survey. In general, whether a SLRR utilizes 1-person operations is dictated by the facts on the ground where that particular SLRR is located and not whether there is a larger parent office. Of course, the existence of a parent office might be related to the same concerns that made Region a relevant variable so we include region as a control variable in our investigatory specification. We tried such a Heckman 2-step model but found that including these controls (for the unobservable determinants of whether a SLRR responded) did not substantially change the probability of utilizing 1-person operations. Hence, we concluded that this additional modeling complexity would be unlikely to qualitatively change our results and thus was not worth pursuing.

Hence, we decided that our MAR results (the medium case in the degree to which sample selection is problematic) are the best ones to rely on in constructing ASLRRRA's comments for FRA. The following table Summarizes those results:

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variable. Alternatively, a nonlinear model (such as logit) would address this concern but at the cost of additional complexity to the modeling endeavor. Technically, our method is a single-imputation of the outcome variable with its expected value but that likely underestimates uncertainty due to parameter uncertainty that can be captured by moving to a multiple imputation framework, which is (again) much more complicated.

Survey Question	Question Label	Observed		p		Imputed	SE	ME	Number of SLRRs		
		Yes	Total	MCAR	MAR				Best Guess	Lower Bound CI	Upper Bound CI
Initial 4a + 5a	Solo in Cab	40	280	14%	15%	416	0.5pp	0.9pp	103	96	110
Initial 4b + 5b	Solo Remote	20	280	7%	8%	416	0.3pp	0.7pp	54	48	59
Initial 4c + 5c	Solo Support Trailing	167	280	60%	58%	416	0.6pp	1.2pp	403	393	412
Initial 4d + 5d	Solo with Conductor Supporting Multiple Trains	32	280	11%	12%	416	0.4pp	0.8pp	82	75	88
Initial 4e + 5e	Any [of the above] Solo	176	280	63%	60%	416	0.6pp	1.2pp	414	405	423
Follow-up 1	Collective Bargaining Agreement	30	244	22%	13%	452	1.4pp	2.8pp	89	69	109
Follow-up 6b	Max Speed Exceeds 25mph	10	244	7%	3%	452	0.7pp	1.5pp	22	12	33
Follow-up 6c	HazMat 20+	34	244	22%	14%	452	1.4pp	2.8pp	101	80	121
Follow-up 6d	RSSM	14	244	10%	6%	452	0.9pp	1.8pp	39	26	52
Follow-up 6e	High Grade	17	244	10%	12%	452	1.5pp	3.0pp	73	51	94
Follow-up 6f	Length Exceeds 6k ft	38	244	27%	18%	452	1.6pp	3.2pp	124	102	147
Follow-up 6g	No Comm	20	244	14%	8%	452	1.3pp	2.6pp	55	37	73
Follow-up 6h	No Monitor	25	244	18%	10%	452	1.5pp	3pp	71	50	93
Follow-up 6i	No Alerter	31	244	22%	12%	452	1.8pp	3.6pp	83	58	109
Follow-up 6j	No Radio	5	244	4%	1%	452	0.7pp	1.4pp	10	5 <sup>5</sup>	20
Follow-up 6k	None of the Above	58	244	42%	23%	452	1.7pp	3.3pp	162	139	186

<sup>5</sup> The CLT states that the uncertainty distribution can be approximated by a normal distribution, but that approximation tends to be poor at probabilities near the boundary, which comes to the fore with SLRRs running 1-person operations that do not have a radio. Mechanically applying the formula without critical thought would put the lower bound of the probability at a negative number and the corresponding number of SLRRs at -1. To avoid such nonsense, we replace that negative lower bound with the number of SLRRs observed to have no radio (i.e. 5).

Survey Question	Question Label	Observed		p		Imputed	SE	ME	Number of SLRRs		
		Yes	Total	MCAR	MAR				Best Guess	Lower Bound CI	Upper Bound CI
Inferred 1	Solo and Not Exempt or Legacy (Hazmat)	36	244	26%	16%	452	1.5pp	2.9pp	114	93	135
Inferred 2	Solo and Not Exempt or Legacy (RR Ops Rules)	45	244	32%	17%	452	2.5pp	5pp	120	84	155
Inferred 3	Solo and Not Exempt or Legacy (Either Above)	66	244	47%	28%	452	1.6pp	3.2pp	198	175	221
Inferred 4	Solo and Exception Eligible (Max)	68	244	49%	26%	452	1.6pp	3.2pp	184	162	207
Inferred 5	Solo and Exception Eligible (Min)	61	244	44%	23%	452	1.6pp	3pp	163	142	185
Inferred 6	Solo and Legacy Eligible (Max)	7	244	5%	3%	452	0.7pp	1.4pp	22	12	32

Table 1. Summary of Results for Inference from ASLRR Survey of SLRRs on 1-person Operations

Survey Results

In the initial survey, four questions were asked under the conditions that they relate to mainline or non-mainline operations. As their results did not signify any meaningful difference between the two operational categories, their responses were combined to determine which railroads to survey in the following survey. The letter designations for questions four and five in the initial survey reflect the following operational modes for which information was requested:

- a) Solo in Cab -> Only one person in the locomotive cab without outside support.
- b) Solo Remote -> One person operating the locomotive via remote control.
- c) Solo Support Trailing -> One person in the locomotive cab, with an additional person in a trailing vehicle.
- d) Solo with Conductor Supporting Multiple Trains -> One person in the locomotive cab, supported by a conductor who is supporting multiple trains simultaneously.
- e) Any [of the above] Solo -> Our railroad does not operate in any of the above modes. [For the analysis structure this response was inverted to reflect railroads who operate in at least one of these modes]

For the follow-up survey, railroads who had answered affirmatively to operating any of the one-person crew operation types in the initial survey were polled. Under Question 6, several different operational modes were investigated. Per Table 1, these are the operational modes that respondents were asked about for the sub-questions under Question 6:

- 6a) Question skipped for analysis, employee on duty hours were sourced from 2021 FRA safety data were deemed more reliable than survey answers. For final question (6k) this value needed to be under 400,000 to select “none of the criteria.”
- 6b) Max Speed Exceeds 25mph -> Any of our less than two-person crew operations have maximum speeds exceeding 25 mph.
- 6c) HazMat 20+ -> Any of our less than two-person crew operations transport 20 or more loaded tank cars of any combination of hazardous materials.
- 6d) RSSM -> Any of our less than two-person crew operations transport 1 or more car loads of rail-security sensitive materials.
- 6e) High Grade -> Any of our less than two-person crew operations occur over a segment of track with an average grade that is greater than 1% over 3 continuous miles OR 2% over 2 continuous miles.
- 6f) Length Exceeds 6k ft -> Any of our less than two-person crew operations include trains whose length is greater than 6,000 feet.
- 6g) No Comm -> Any of our less than two-person crew operations take place with those crews unable to communicate with a dispatcher.
- 6h) No Monitor -> Our railroad is unable to monitor those a train with less than a two-person crew’s train's real time progress, or is unable to determine those trains approximate locations when communications are lost with the crew.
- 6i) No Alerter -> Any of our less than two-person crew operations take place with the crew in a locomotive without an alerter as defined in 49 CFR 229.5.
- 6j) No Radio -> We operate any trains with a less than two-person crew whose lead locomotive is not equipped with a working radio and a redundant, electronic device appropriate for railroad communications as permitted in 49 CFR part 220.5.
- 6k) None of the Above -> None of the criteria

As ASLRRRA’s comments were being drafted, certain combinations of the criteria previously surveyed were deemed relevant to answer specific questions about the number of railroads likely to be eligible or not eligible for the NPRM defined short line exception and legacy operations criteria. To ascertain how many railroads would fit into these categorizations, the following categories were inferred from combinations of survey responses:

- Inferred 1) Solo and Not Exempt or Legacy (Hazmat) -> Railroads responding true to either question related to hazardous material transport with one person in the cab that would preclude their eligibility for either the short line exemption or legacy approval process (Follow-ups 6c and 6d)
- Inferred 2) Solo and Not Exempt or Legacy (RR Ops Rules) -> Railroads responding true to questions regarding operational modes that would preclude their eligibility for either the short line exemption or legacy approval process (Follow-ups 6g, 6h, 6i, and 6j)
- Inferred 3) Solo and Not Exempt or Legacy (Either Above) -> Railroads responding true to either prior Hazmat or RR Operations related categories (Inferred 1 and 2).
- Inferred 4) Solo and Exception Eligible (Max) -> A calculation of the likely maximum possible number of railroads meeting the exception criteria based on survey responses indicating railroads with less than 400k EOD hours in 2021 based on FRA data and not performing one-person crew operations in excess of 25mph (Follow-up 6b) along with:
  - Either not having one-person crew operations with lengths in excess of 6,000 feet (Follow-up 6f) or not exceeding the grade limitations described in Follow-up 6e.
  - Or, indicating in the initial survey that the railroad utilizes a following conductor (Initial 4c + 5c).

Inferred 5) Solo and Exception Eligible (Min) -> A calculation of the likely minimum possible number of railroads meeting the exception criteria based on survey responses indicating railroads with less than 400k EOD hours in 2021 based on FRA data and not performing one-person crew operations in excess of 25mph (Follow-up 6b) along with not having one-person crew operations with lengths in excess of 6,000 feet (Follow-up 6f) or not exceeding the grade limitations described in Follow-up 6e.

Inferred 6) Solo and Legacy Eligible (Max) -> A calculation of the likely maximum possible number of railroads meeting the exception criteria based on survey responses indicating railroads with:

- Either not having one-person crew operations with lengths in excess of 6,000 feet (Follow-up 6f) or not exceeding the grade limitations described in Follow-up 6e.
- Or, indicating in the initial survey that the railroad utilizes a following conductor (Initial 4c + 5c).

Note: Certain criteria related to eligibility for the legacy application process described in the NPRM were not included in the survey. Therefore, this number is the estimated maximum possible under the above criteria that was surveyed among ASLRRRA members. In all likelihood, there are fewer short lines railroads eligible for the legacy application process than are reported here.

#### An additional Technical Point

Although we have not addressed it to this point, the structure of the ASLRRRA survey further complicates our inference efforts. ASLRRRA sent out an initial survey that asked about a few types of 1-person operations based on initial indications from FRA of what might matter. After the proposed rule was released, ASLRRRA sent out a follow-up survey that asked about additional details (e.g., HazMats) but only to those SLRRs that responded in the initial survey that they had some 1-person operations. In essence, subjects now have 2 sequential opportunities to become a non-respondent and go Missing at Random (MAR) from our data. Because responding to the follow-up survey is conditional upon responding “yes” to having some 1-person operation, the model for the responding to a question in the follow-up survey must be interacted with the model for responding to that key question in the initial survey (i.e., the joint probability of Solo and HazMat is the product of the conditional probability of HazMat given Solo and the marginal probability of Solo):

$$\Pr([Yes, Solo] \text{ AND } [Yes, HazMat]) = \underbrace{\Pr([Yes, HazMat] | [Yes, Solo])}_{P_2} \underbrace{\Pr([Yes, Solo])}_{P_1}$$

Without going into the model specification detail already discussed, let the models for these two probabilities be given by:

$$p_1 = \hat{p}_1 + \varepsilon_1 \quad p_2 = \hat{p}_2 + \varepsilon_2$$

Our estimate of the measure of interest is then given by:

$$\widehat{P_2 P_1} = \frac{1}{M} \sum_{j=1}^M \hat{p}_{2j} \times \hat{p}_{1j} = \frac{1}{M} \sum_{j=1}^M (\varepsilon_{2j} - p_{2j}) \times (\varepsilon_{1j} - p_{1j})$$

Given independence, the expected value of this estimate is the true value that we are interested in:

$$E(\widehat{P_2 P_1}) = \frac{1}{M} \sum_{j=1}^M E(p_{2j} p_{1j}) - p_{2j} \underbrace{E(\varepsilon_{1j})}_0 - p_{1j} \underbrace{E(\varepsilon_{2j})}_0 + \frac{1}{M} \sum_{j=1}^M \underbrace{E(\varepsilon_{2j} \varepsilon_{1j})}_0 = P_2 P_1$$

The variance of this statistic is a bit more complicated but independence zeros out the covariance:

$$Var(\widehat{P_2 P_1}) = Var\left(\frac{1}{M} \sum_{j=1}^M \hat{p}_{2j} \times \hat{p}_{1j}\right) = \frac{1}{M^2} \sum_{j=1}^M Var(\hat{p}_{2j} \times \hat{p}_{1j}) + \frac{2}{M^2} \sum_{j=1}^M \underbrace{Cov(\cdot)}_0$$

We can compute that inner variance of the product with:

$$Var(\hat{p}_{2j} \times \hat{p}_{1j}) = [SE(\hat{p}_{1j})^2 + \hat{p}_{1j}^2] \times [SE(\hat{p}_{2j})^2 + \hat{p}_{2j}^2] - \hat{p}_{1j}^2 \hat{p}_{2j}^2$$

From this variance, we can then construct the Standard Error of the statistic of interest, the Margin of Error associated with 95% confidence (the statistic is also a sample mean so a CLT again applies), and the Confidence Interval.

## Biography

Dr. Bentley Coffey is a clinical assistant professor at the Economics Department of the Darla Moore School of Business at the University of South Carolina (USC). Dr. Coffey received a BA in international studies double majored with economic theory and a BS in computer science with a minor in math from American University. While at American University, Dr. Coffey was also awarded an MS in environmental science. Duke University (which later hosted Dr. Coffey as a visiting professor for 3 semesters) awarded Dr. Coffey a PhD in economics with major fields in econometrics and public economics, including a special emphasis on environmental economics. His research interests span an unusually broad swath of economics from macroeconomic growth to inequality and competition in labor markets. He is perhaps best known among researchers for his ongoing work with Patrick McLaughlin and Pietro Peretto on structural models of the effects of regulations on economic growth using new quantitative measures of regulation generated by machine-learning. His work in regulation is informed by 5 years spent as a consultant at The Cadmus Group where the largest client was the EPA where he primarily served as an econometrician in support of rule-making on water utilities (his second largest set of clients were for-profit power utilities). Prior to Cadmus, Dr. Coffey was an assistant professor in the John E Walker Department of Economics at Clemson University; throughout his time in academia, Dr. Coffey has periodically conducted small consulting side projects such as injury/anti-trust litigation support, performing inferences from novel surveys, custom economic modeling, and supporting public comments on government actions such as proposed rules and facilities siting. Dr. Coffey's research projects have benefited from funding awarded by the government of Canada, the National Academy of Sciences, Resources for the Future, and the Mercatus Center.

## **Attachment E**

# FRA's Train Crew Staffing NPRM Fails to Account for the Cost to Small Entities as Required by the Regulatory Flexibility Act

Prepared for the Small Business Roundtable on FRA's  
Proposed Train Crew Size Safety Requirements Rule  
December 12, 2022

# Introduction

- Approximately 696 short line freight railroads in the United States
- Short line railroads operate 47,500 miles of freight rail in the United States (29% of the freight rail infrastructure)
- All meet the SBA definition of a small entity
  - A for profit, “line-haul railroad” that has fewer than 1,500 employees
- On average, short line railroads employ fewer than 30 people, run an average of only 79 miles, and have \$7.7 million or less in revenue

# Current Operations

- No current federal crew size regulations
- All Class I railroads and many Class II and Class III railroads operate with a two-person crew
- Many short line railroads currently operate with one person in the locomotive cab
  - One person crew
  - One person in the locomotive, another person in a utility vehicle
  - One conductor assigned to multiple trains
- No safety data shows that these operations are less safe than multi-person crew operations

# Train Crew Safety Requirements NPRM

- Proposes a minimum two-person crew for most railroad operations and requires both crewmembers to be physically located on the train (49 C.F.R. § 218.123(b) and (d))
  - Provides a limited exception for small railroad operations with many exclusions (49 C.F.R. § 218.129(c) as restricted by § 218.123(c) and § 218.129(b))
  - Provides a limited procedure for a railroad to petition FRA for continuance of a legacy train operation staff with a one-person crew (49 C.F.R. § 218.131 as restricted by 49 C.F.R. § 218.123(c))

# Train Crew Safety Requirements NPRM

- FRA did not attempt to count the number of short line railroads that operate with one person in the locomotive cab
  - FRA claims that only seven short line railroads operate with a one-person crew
- NPRM Assumes that those seven railroads can petition for a special approve to continue a legacy operation
  - FRA claims that very few railroads would be affected
- Claims that “there have been too few current one-person train crew operations to create any meaningful data”

# Train Crew Safety Requirements NPRM

- ASLRRRA surveyed its member railroads and analyzed the data
  - Over 420 short line railroads operate a train with one person in the locomotive cab
- ASLRRRA analyzed the data in relationship with the restrictions of the small railroad exception and legacy train special approve process
  - Hundreds of short line railroads would be ineligible for either option
- Short line railroads have been operating in the U.S. for decades, especially since 1980.
  - Short lines are part of the rail industry's impressive safety record
  - FRA has extensive data, some available to the public on its Office of Safety Analysis website.

# Regulatory Flexibility Act

FRA's actions do not fulfill the requirements in Section 603 of the Regulatory Flexibility Act (RFA), which requires a federal agency publishing an NPRM to prepare and make available for public comment an initial regulatory flexibility analysis (IRFA) which describes the impact of the proposed rule on small entities.

# IRFA Requirements

(b) Each IRFA shall contain:

(1) Description of why action by the agency is being considered

(2) A succinct statement of the objectives of and legal basis for the proposed rule

(3) Description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply

(4) Description of the projected compliance requirements of the rule

(5) An identification of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule

# IFRA Requirements: § 603(b)

(1) A description of why action by the agency is being considered.

“FRA is concerned that, as the railroads have implemented PTC and other technologies, implement upgrades to these technologies, or otherwise look to introduce operational efficiencies or reduce costs, the railroads may explore using fewer than two-person crews for train operations without properly considering safety risks.” – RIA, pg. 6.

The NPRM and RIA do not mention a safety concern with current short line railroad operations that utilize only one crew member in the locomotive cab.

# IRFA Requirements: § 603(b)

## (2) A succinct statement of the objectives of and legal basis for the proposed rule

“This proposed rule would ensure that trains are adequately staffed for their intended operation and railroads have appropriate safeguards in place for safe train operations, whenever a railroad is operating with a crew of fewer than two persons.” RIA, pg. 4

“FRA is proposing regulations concerning train crew size safety requirements based on the statutory general authority of the Secretary of Transportation.” RIA, pg. 7

➤ The Secretary “as necessary, shall prescribe regulations and issue orders for every area of railroad safety supplementing laws and regulations in effect on October 16, 1970.” 49 U.S.C. 20103

FRA does not define “intended operation” or “appropriate safeguards.” There is no Congressional mandate to regulate crew size, which has traditionally been handled nationally by collective bargaining agreements or by individual railroads.

# IRFA Requirements: § 603(b)

(3) Description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply

“FRA is aware of nine railroads across the country with one-person operations, all conducted by short line or regional railroads (i.e., Class II and III railroads), and passenger railroads.”

ASLRRA data analysis shows that approximately 420 short line railroads have at least one operation with one-person in the locomotive cab.

# IRFA Requirements: § 603(b)

(4) Description of the projected compliance requirements of the rule

\$4,610 = FRA estimated cost for special approval for each legacy operation (7 short line railroads, 40 hours to apply for each)

\$9,293 = FRA estimated cost for legacy railroad to apply for a material modification (FRA estimates 5 in a 10-year period)

\$619.55 = FRA estimated cost for annual compliance per railroad (total rule cost = \$2 million, \$0.8 million for industry)

# IRFA Requirements: § 603(b)

## (4) Description of the projected compliance requirements of the rule

- Cost assumes 7 short line railroad impacted; industry analysis shows 420
- **Cost does not include costs to hire and train additional employees**, as data shows that several hundred railroads do not qualify for the exception and cannot apply for the legacy special approval
  - Current average fully burdened cost of a railroad employee is **\$130,000**
  - Many short lines would have to **hire multiple employees** to convert current operations with one person in the locomotive cab
- Cost does not include operational changes needed to qualify for small railroad exception, including:
  - Alerters
  - Radios
  - Dispatching
  - Operational efficiencies lost (by reducing speed or additional switching moves to break up hazmat train)

# IRFA Requirements: § 603(b)

(4) Description of the projected compliance requirements of the rule

Assuming that each of the estimated 57 short line railroads that cannot qualify for the legacy operation special approval due to hazardous material commodities transported had to hire only one employee each, the **single year** cost to comply would be **\$7,410,000** for these railroads alone.

# IRFA Requirements: § 603(b)

(5) An identification of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule

The RIA does not include discussion over current FRA regulations that do not apply to many short line railroads but are required in order to obtain the small railroad exception here:

- Alerter on a controlling locomotive (49 C.F.R. § 229.140)
- Radio in a controlling locomotive (49 C.F.R. § 220.9)

# IRFA Requirements § 603(c)

(c) Each initial regulatory flexibility analysis shall also contain a description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives such as —

- (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
- (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;
- (3) the use of performance rather than design standards; and
- (4) an exemption from coverage of the rule, or any part thereof, for such small entities.

# IRFA Requirements § 603(c)

- (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;
- (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;

The NPRM makes no distinction between larger and small entities.

The NPRM does not provide a compliance date – any business, but in particular a small entity, needs time to plan, hire and train any new employee or implement operational changes.

# IRFA Requirements § 603(c)

(3) the use of performance rather than design standards

“Data provided in a special approval petition, including the risk assessment, would allow FRA to determine whether the train operation proposed is consistent with railroad safety.” RIA pg. 33

**No performance standard provided. No safety metric stated.**

# IRFA Requirements § 603(c)

(4) an exemption from coverage of the rule, or any part thereof, for such small entities

The very narrow small railroad exception and procedure for a small railroad to petition for special approval of a legacy operation will not address the majority of short line railroads operating with one person in the locomotive cab today.

# Conclusion

**ASLRRA urges FRA to either withdraw the NPRM in its entirety or, alternatively, categorically exclude short line railroads from any minimum crew size and crew location requirement.**

## **Attachment F**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF CHUCK BAKER

PRESIDENT

THE AMERICAN SHORT LINE AND REGIONAL RAILROAD ASSOCIATION

DECEMBER 14, 2022

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Good morning and thank you for the opportunity to share the short line industry's perspective on the FRA's proposed Train Crew Size Requirements rulemaking.

My name is Chuck Baker, and I am President of the American Short Line and Regional Railroad Association ("ASLRRRA"). I am here today to represent the interests of the nation's approximately 700 Class II and Class III railroads<sup>1</sup> that were identified by this rulemaking, commonly referred to as short line railroads.

My colleagues at the ASLRRRA Jo Strang and Sarah Yurasko are also here and signed in as presenters so they can be available to answer any questions that might arise. After I speak, which will take about 25 mins, I'll briefly turn it over to Dr. Bently Coffey, an economics

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<sup>1</sup> The ASLRRRA and the STB generally recognize about 600 Class II and III railroads, but the FRA rule refers to approximately 700 regulated small freight railroads.

professor at the University of South Carolina, to explain the modeling done on the survey data we collected that allows us to demonstrate the impact of this rule, and then after that there are six different short line railroad operators here or on Zoom to describe the specific impacts of this proposed rule on their operations.

Before I begin, I'll note that we really appreciate the opportunity the FRA holding this hearing, appreciate our opportunity to be here today, appreciate the work of each of you at the FRA, and in generally very much respect and appreciate FRA's crucial role as a safety regulator. We have serious concerns with this particular proposed rule but want to distinguish our criticisms of this NPRM from any sort of broader critique of the FRA.

Short lines collectively operate about 50,000 miles of track in the United States, which is approximately 30% of the national freight network. We however only touch about 20% of the carloads on the rail network, employ about 12% of the railroaders in the industry, roughly 18,000 people, and produce about 6% of the annual revenue in the industry.

Short lines exist to maintain the viability of previously marginal branch lines of the larger railroads. We connect manufacturers, businesses and farmers in rural communities and small towns to larger markets, urban centers, ports, and the larger freight rail network. In total, over 478,000 jobs throughout the economy are dependent on short line service remaining viable.

Almost all short lines are small businesses<sup>2</sup>. These small businesses have been able to survive, and in many cases thrive, over the decades because of their ability to be nimble, flexible, innovative, and focused on customer service while keeping safety at the forefront of their

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<sup>2</sup> See 13 C.F.R. § 121.201 and North American Industry Classification System code 482112, "Short Line Railroad."

operations every single day. That has included the ability for them to tailor their operations, their equipment, and their staffing to meet the unique needs of each railroad and each customer. This new prescriptive crew size rulemaking though would threaten the ability of short lines to survive and thrive in the future by adding major new costs and regulatory burden for no attendant safety benefit.

I want to start with the most striking fact that we will present today and in our formal written comments that will be submitted next week. The NPRM states that only 7 short lines would be affected by this rule – that is unfortunately not even close to true. Our survey and modeling show that approximately 420 railroads operate at least some movements with only one person in the cab of the locomotive, and that approximately 195<sup>3</sup> of those railroads would not qualify for an exception to this rule and would not even be eligible to apply for a special approval of legacy one-person operations. 420 and 195 are not remotely in the same ballpark as 7, and thus the basic premise of this rule as it applies to short lines, the consideration of alternatives, and the cost-benefit analysis for short lines is thrown into serious question. If the government's estimate of the number of entities affected by a rule is off by literally more than an order of magnitude, that requires a rethink of the basic structure and applicability of the rule.

It is frustrating to short lines that we are here to discuss a proposed regulation that is a) not tied to any documented safety metric or improvement, b) has grossly underestimated the impacts to an entire class of railroads that are critical to the nation's supply chain, including

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<sup>3</sup> The 420 and 195 numbers are approximations and are still being finalized. We will include final numbers in our written comments to be submitted by December 21.

decreased competitiveness, reduction of efficiency, and onerous compliance requirements and c) catches, we believe unintentionally, hundreds of small businesses in its net.

The history of the consideration of this rule is pretty well known, but it bears a very brief repeating. In 2009, when the FRA first considered a crew size rule, it stated that there was “*no factual evidence to support a prohibition against one-person crew operations.*”

Then, in 2015, the National Transportation Safety Board (NTSB) found that “*There is insufficient data to demonstrate that accidents are avoided by having a second qualified person in the cab.*”

And then, in 2016 when the FRA last proposed a crew size rule, it famously stated that it could not “*provide reliable or conclusive statistical data to suggest whether one-person crew operations are generally safer or less safe than multiple-person crew operations.*”

And there has been ZERO additional evidence uncovered in the six years since the last crew size rule was proposed that one person crews are less safe than two person crews.

Also, the language of the NPRM shows that the agency is focused on preventing **future crew size reductions**, not on current short line railroad operations. It states, “*this proposed rule would help FRA ensure that safety is not adversely affected when **initiating** train operations with fewer than two crewmembers.*” Also, “*without this NPRM, FRA has a limited ability to address the totality of potential safety issues related to the **reduction** of crew staffing levels.*”

All of the research studies shared by FRA as supporting evidence in the NPRM presuppose a two-person crew. The NPRM states that these studies “*contain presentations from multiple research reports, identifying many safety considerations with **reducing** train crew*

*staffing to fewer than two persons.*"<sup>4</sup> In other words, language explaining FRA's purpose behind the NPRM and all of the studies shared by FRA looked at concerns of moving **from** a two person crew **to** a less-than-two-person-crew - *none of the studies addressed any concerns with current single-person train crews operating in the country.* As stated earlier, our evidence shows that in fact the majority of short lines operate single person crews safely and have done so for decades. This all stems from the original fatal flaw of this NPRM, which again is that it dramatically underestimates, by more than an order of magnitude, the number of short lines that currently operate with some type of one person crew that would have their operations significantly and immediately affected by this rule.

In fact, one person operations may be equally as safe or safer in many situations than two person operations, but the FRA has not considered or studied the safety or variety of real-world short line operations prior to issuing this NPRM.

In the NPRM, the FRA has assumed that only nine non-Class I railroads operate with single person crews in the cab of the locomotive – two passenger railroads, one Class II, and six Class III railroads. In fact, the universe of affected railroads is far greater than the FRA's estimation based on our survey of our nearly 500 railroad members and the statistical modeling completed by Dr. Coffey. Again, approximately 420 short line railroads currently operate with a single person in the cab of a locomotive for at least some train movements and approximately 195 of those railroads would not qualify for either the small railroad exception or even be allowed to apply for special approval of their legacy one-person operations. Many of those approximately 195 railroads would either:

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<sup>4</sup> NPRM at 45,572 and 81 Fed. Reg. 13,924-30.

- 1) be forced to cease operations, or
- 2) be forced to significantly change their operations to accommodate the new requirements at significant cost.

For those railroads that have one person operations, don't qualify for an exception, but would be able to apply for special approval, they would be subject to an uncertain and undefined process for gaining permission to operate in the manner in which they have already been safely operating for decades.

And all of these small businesses would be subject to these rule changes and new prescriptive oversight immediately, since there is no compliance timeline proposed in the rule, despite the fact that they have been operating safely for years or even decades.

And FRA is proposing this onerous path entirely on its own, absent any Congressional request or direction. In fact, Congress has actively considered and then declined to legislate on this issue on numerous occasions, as will be documented in our written comments. In these situations, the Supreme Court has recently cautioned that *'absent specific direction from Congress, delegations of broad regulatory authority should not be lightly presumed.'*<sup>5</sup>

From the short line viewpoint, this proposed rule continues to be a drastic solution in search of a problem.

### ***Safety***

The title of this proposal is *Train Crew Size **Safety** Requirements*. Yet, there are no measurable improvements to safety included in the stated goals it intends to achieve with the

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<sup>5</sup> West Virginia v. EPA, 985 F. 3d 914 (2022).

implementation of this rule. This is because there is no safety analysis that would indicate any measurable improvements should this rule be implemented. Short line railroads are already committed to operating safely, and that very much includes considering how to staff and operate our trains. We are committed to bringing every employee home safely, every shift. There is no acceptable loss of life or limb, and as small businesses with employees that live and work in their communities and feel like family, and in some cases **are** literally family, this is very acutely felt. We see our colleagues and employees in the grocery store, on the baseball and football and soccer fields at our kids' games, and in our churches, synagogues, and mosques. Operating safely is good for our team members, it's good for our customers, it's good for business, it's good for our communities, and it's very personal for us.

We are ALL IN on *any* technology, *any* practice, or *any* operational change that would result in a safer environment.

However, this proposal fails the test on that measure. The FRA has not shown any specific safety gap closed by scheduling a two-person crew to do a job currently done by one person, nor has it identified statistical data to suggest that one-person crew operations are less safe than multiple-person crew operations.

FRA's own statistics do not show a need for this regulation. In 2018, FRA reviewed accident/incident data over a seventeen-year period ending in 2018 and could not determine that any of the accident/incidents involving a one-person crew would have been prevented by having multiple crewmembers.<sup>6</sup>

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<sup>6</sup> See 84 Fed. Reg. 24,735 (May 29, 2019) at 24,739.

Additionally, since 2016, FRA has not attempted to collect operational data that would allow the agency to more thoroughly examine the question of whether crew size impacts the safety of train operations. There are a variety of ways the FRA could have accomplished this, from adding questions to data currently required of every railroad, to collecting additional data on any accident, to asking OMB for approval to conduct its own survey of Class II and Class III railroads, to bringing this to an RSAC and within that process simply asking us at the Association to conduct a survey of our member railroads, as we in fact ended up doing.

Furthermore, FRA has not complied with two safety recommendations issued by the National Transportation Safety Board (“NTSB”) suggesting that FRA capture crewmember data and use the data to evaluate the adequacy of current crew size regulations.<sup>7</sup>

It is somewhat shocking that after FRA has not collected any of this data that it clearly COULD have collected, for the FRA to then issue this NPRM and have it be based off such a dramatic underestimate of the number of short lines affected.

There are actually many short lines who have shared that, in their experience, single person crews are safer than two person crews. You will hear from some of them later this morning. In their experience, a single person focused on a single task eliminates distractions. In their experience, single is simpler, and simpler is safer.

Without reliable studies supporting a safety improvement when adding one more crew member, the NPRM is simply levying additional regulatory burdens on a short line industry that

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<sup>7</sup> NTSB recommendations R-16-33 and R-16-34. The NTSB made a finding that FRA’s “accident database is inadequate for comparing relevant accident rates based on crew size because the information about accident circumstances and number of crewmembers in the controlling cab is insufficient.” NTSB, RAR-16/02, Derailment of Amtrak Passenger Train 188 at 19 (2016).

can ill-afford additional cost burdens as it strives to compete with ubiquitous single person truck operations on publicly funded roadways.

We also question whether the FRA has the authority to issue this particular rule. The FRA clearly has authority to “*prescribe regulations and issue orders for every area of railroad safety,*” which nobody would dispute, but this NPRM does not demonstrate a safety concern with current short line one-person crew operations or demonstrate that the proposed crew size and second crew member location mandate would improve railroad safety.

### ***Data on Short Line Industry***

The NPRM is seriously flawed in its quantification of the operational impacts to short line railroads. It failed to even come close to accurately counting the number of small entities that would be impacted, as required under the Regulatory Flexibility Act. The rule assumes that there are only a handful of railroads currently using less than two person operations, when, as we’ve now stated a few times, this is not close to reflecting the true number of railroads using less than two person crews. This is frustrating as it would have been eminently doable for the FRA to obtain an accurate estimate of the number of short lines affected by the rule.

Since the FRA did not accurately assess the number of affected railroads, it thus did not accurately reflect the cost of this rule’s implementation on short line railroads.

Upon the effective date, if finalized as is, the NPRM would place a short line railroad that currently operates with a single-person in the locomotive cab and is ineligible for the small railroad exception in the position of having to either:

(1) hire and train additional employees; or

- (2) alter their existing operations in significant ways such as restricting train length or breaking up some trains or limiting train speed or adding alerters or dispatching; or
- (3) petition the FRA for a special approval for its legacy operation, which would then include the new burden of an annual review and analysis, and may also include operating rule restrictions.

And many railroads would not even qualify to petition the FRA to approve the continuance of a legacy one-person train crew operation due to the restrictions that FRA has placed in the NPRM, such as on the amount of HazMat traffic that can be moved.

We will be providing two flow charts in our formal comments due next week, showing the spider web of requirements to obtain an exception or gain special approval. It's an easy way to visualize the complexity of the rule and the fact that most roads lead to NO. There would be many short lines who would simply have to add a crew member to comply with the rule. At that point, at least 18 months would be needed to hire and train additional employees, and that's ignoring that many short lines simply don't have the funds available to hire extra personnel, and that's of course also ignoring the question of whether those people are available at all.

The Regulatory Flexibility Act requires a review of proposed and final rules to assess their impact on small entities, unless the Secretary certifies that the rule would not have a Significant Economic Impact on a Substantial Number Of Small Entities (what the SBA calls a SISNOSE). This NPRM would clearly have a SISNOSE.

It is evident that FRA did not take the appropriate steps to determine the magnitude of the impact of the NPRM on the short line railroad industry. It is clear to us that this rule, if implemented as proposed, would have a massive impact on our industry.

Increasing labor costs to cover an additional crewmember with no quantifiable safety benefit would be risking viability for many short lines over time. Short lines I have spoken with tell me they would be looking at increased labor costs of 10, 20, or even 30%, which they simply cannot afford. You might then ask; can't short lines simply raise their rates to cover the burden of additional regulatory compliance?

Quite simply, no. As short lines, we are the first and last mile of a longer journey, and oftentimes the rates are dictated by the Class I handling the longest part of the journey. And even if a short line were to be in position to increase rates on their own, short line service is typically quite competitive with trucking. Raising our rates would in many cases just result in a modal shift from rail to truck, cutting our revenues and risking our ability to operate, which in turn affects all the other customers on our lines. Each customer and each carload is significant for short lines. It is no exaggeration to say the loss of one customer can send a short line into a vicious tailspin resulting in bankruptcy.

In addition, a modal shift to trucking would cause negative public impacts that are well established – increased air pollution, increased micro plastics from shredded truck tires seeping into the water supply, increased risk to the motoring public, increased taxpayer costs to cover road infrastructure damage, and increased traffic in local communities. Nationwide, in 2008 there were 4,245 truck-involved fatalities, and in 2021, there were 5,601 fatalities, an increase of nearly 32 percent. On the other hand, freight trains incur only 14% of the fatalities that large trucks do per trillion ton-miles. Similarly, freight trains incur only about 3% of the injuries that large trucks do per trillion ton-miles. The freight railroad rate of hazmat incidents per billion ton-miles is about 7% that of trucks, and railroads incurred **zero** fatalities from 2012 through 2020 due to hazmat while trucks incurred 81.

Put simply, it is easy to see how this rule could result in traffic moving away from rail onto the highway, and that would most certainly **harm** safety and result in **more** deaths and **more** injuries in the transportation system as a whole. This would be a lose-lose-lose-lose result for us as short lines, our customers, the USDOT, and the American public.

Short lines already operate on very thin margins in most cases and have survived over the decades by being flexible, nimble, responsive to customers, and innovative in their operations and business practices. Adding this heavy-handed, unnecessary, prescriptive regulation with very limited exception criteria and uncertain special approval processes hampers our ability to survive and thrive for the next generation.

And this all comes at a time when other parts of the USDOT are actively helping our competitors in the trucking industry develop fully autonomous systems that would have NO person in the delivery vehicle, on public roads.

I'm about to wrap up, so soon you will hear from six of our member short lines to speak to the real-world impacts of this rule on short lines – Mitch Harris of the Rio Grande Pacific Corporation, Robert Bullock of the Florida East Coast Railway, John DeWaele of the Grafton & Upton, Scott Conner of Transtar, Adam Robillard of the Madison Railroad, and Dewayne Swindall of the Indiana Rail Road Company later this afternoon. While we would have liked to have had sixty short lines instead of six here to testify, we wanted to be cognizant and respectful of the time constraints today, and also being completely honest some of our members were hesitant to testify publicly out of concern for souring their relationship with the FRA and risking increased scrutiny or perhaps lowering their chance of winning a desperately needed CRISI

grant. We assured our members that those concerns were unfounded, and that the FRA would constructively accept feedback on this NPRM with an open mind.

To sum up, short lines believe that they should retain their current flexibility to deploy skilled staff based on their specific operational and safety requirements. We see no need and no justification for this crew size and crew location rule that would solve a non-existent problem. This NPRM does not solve any safety concern associated with one person crew staffing on short line railroads. **Hundreds** of small business railroads, not seven, would be directly and immediately affected on an operational level, and it would be exceedingly difficult and burdensome for railroads to apply for and win special approval to continue their current safe and customer-focused operations.

Staffing has always been handled by short lines with safety as the first concern and customer service and financial survival as the next concerns. This NPRM is written at the train level, rather than the company level, which makes it exceedingly difficult to adhere to. There is no *de minimus* exception, and it fails to recognize the decades long existing safe practices of short lines. It risks our ability to service our customers and provide an economic engine to the communities in which we operate, and the modal shifts that it would inadvertently cause would not serve the American public well.

We urge the FRA to withdraw this NPRM or completely exempt short line railroads from any crew size and crew location mandate.

I thank you very much for your time and attention, and I look forward to your questions, either now, after our panel is complete, or at the end of the day.

If there are no questions right now, I will turn it next to Dr. Bentley Coffey to explain the data analysis and modeling he performed with the ASLRRA crew size survey data.

# **Attachment G**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF MITCH HARRIS  
DIRECTOR OF SAFETY, TRAINING, & REGULATORY COMPLIANCE  
RIO GRANDE PACIFIC CORPORATION

DECEMBER 14, 2022

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I appreciate the opportunity to speak today on behalf of my company and to support the American Short Line and Regional Railroad Association (ASLRRA) member railroads regarding crew size. My name is Mitch Harris. I am the Director of Safety, Training & Regulatory Compliance for Rio Grande Pacific Corporation and currently serve as Chairman to the ASLRRA Safety & Training Committee.

Rio Grande Pacific operates four (4) Class III short line freight railroads in 6 states. Our basic mode of operation is to staff trains with an engineer in the locomotive and a conductor in a utility vehicle. When not actively involved in assisting with the train's operation (switching, servicing customers, etc.) the conductor accompanies the train along its route, maintaining contact with the engineer via radio communication. This allows the conductor to perform functions that increase operational efficiency and safety, such as interaction with customers and flagging at grade

crossings when necessary.

At one of our locations the conductor operates draw bridges in advance of the train's arrival, which saves time and reduces the probability of blocked crossings. At two of our other locations, we have trains that travel to their destination, but due to HOS limitations cannot return the same day. So, the crew simply completes their work, secures the train, and drives themselves back to the on-duty location. Then the following day they drive back to that location and return the train for interchange. In this scenario, without use of a second crewmember in the vehicle we would need to hire another person or contract a taxi service, both expensive remedies for a non-existent problem.

### **Crew Size NPRM Impact**

The impact of the NPRM, if enacted, would be very burdensome & costly for my company and all railroads due to the location requirement of the 2<sup>nd</sup> crew member. Many trains operating today are longer than 6000 feet, carry 20 or more loaded cars of hazardous materials, and the railroads do not have a means to conduct real time monitoring of the train location. Further, regarding the special approval process to continue current operations, those with the hazmat restriction would be ineligible to even apply.

In closing, I would like to offer that safety truly is paramount in our industry and that my company has operated trains staffed with a single crew member in the locomotive for over twenty years safely and without a single attributable reportable incident/accident.

And on behalf of the membership of the Safety and Training Committee, I add that the most common method of operation for short line railroads does not have a second crew member or conductor in the cab of the locomotive and hasn't for many decades.

# **Attachment H**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF ROBERT BULLOCK  
VICE PRESIDENT OF HUMAN RESOURCES AND SAFETY  
FLORIDA EAST COAST RAILWAY

DECEMBER 14, 2022

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Good morning, my name is Robert Bullock, I am Vice President of Human Resources and Safety at Florida East Coast Railway, also known as FEC. FEC operates 351 miles of track between Jacksonville and Miami Florida. We move more than 400,000 containers and trailers annually. We compete directly with trucks every day, providing all types of goods to the market. FEC has several rail yards throughout the east coast of Florida. Our collective bargaining agreements with our unions provide us with the flexibility to have one person operating our trains. Moreover, our main line is equipped with state-of-the-art safety appliances including CTC, ATC, and PTC. We have a dispatch center staffed 24/7, live on-board locomotive cab monitoring systems, and in most cases, we have wayside defect detectors every ten miles.

The proposed FRA regulation will prohibit FEC from using one-person operations for our short distance intermodal trains. While FEC has more than a sufficient number of safety devices

that would allow for special approval under the proposed FRA rule, FEC moves RSSM and 20 or more loaded cars of covered hazardous materials and therefore is precluded from ever obtaining a special approval or any other type of approval for the use of one-person operations.

FEC objects to the implementation of FRA's two-person crew requirements as it directly increases our costs and makes it more difficult for FEC to compete with trucking companies in Florida. The State of Florida is very active in autonomous vehicles. The mandate of two-man crews makes it more and more difficult to compete when trucking is going the other way and removing people from the operation of moving freight.

FEC did not furlough any train and engine employees during the pandemic. We have an active recruiting and training program and have hired over eighty (80) T&E employees in the last eighteen months. We train our conductors to cover yard, local, and mainline service. The mandated rule will result in annulled trains and poor service to our customers. Daily we are challenged to fill trains under the current rest rules and other requirements. The addition of the two-person rule adds another burden on our operations and therefore we request the rule not proceed to implementation or the FRA expressly exempt Class II and III railroads from the regulation.

# **Attachment I**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF ADAM ROBILLARD  
GENERAL MANAGER, MADISON RAILROAD

DECEMBER 14, 2022

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The Madison Railroad is a 41-mile-long short line railroad owned and operated by the City of Madison Port Authority in rural southern Indiana. Since 1978, the Madison Railroad has commonly operated with one-person crews in the cab and has never had an incident related to one-person operations. We are incredibly proud of our overall safety record winning the Jake Award for Safety since its inception, which includes operating the 5.89% grade on the southern portion of our line along the Ohio River. This mile and a half long grade is the steepest standard gauge, mainline railroad line ever built in the US. The uniqueness of our territory presents unusual safety challenges that require us to be a safety innovator and provide additional risk mitigation steps above and beyond minimum FRA regulations. This includes maintaining high compliance standards and a safety-oriented culture.

Although our legacy operations have proven to be safe there are specific reasons outlined in the proposed rule why we would not qualify for a short line exception.

1. We do not, and have never operated with, a Dispatcher in any form. We do not issue track authority in the form of mandatory directives. We do not operate multiple trains at any time. Trains are operated at 10 mph over the entirety of the line at restricted speed, requiring movement to stop within half the range of vision. MOW work is protected using inaccessible track. Anytime that vision is lost, or the safety of the train or track condition is in question, the crews stop until positive confirmation is obtained that it is safe to continue. This method of train operation, core to our business, rules out the ability for a Dispatcher to determine train movement status or approximate location in the field. Engineers do have cab radios for communication with crew members and company issued cell phones available in the cabs as an emergency communication backup.
2. None of our locomotives are equipped with alerters. This isn't required for our operation under existing rules. Additionally, we don't have GPS, electrified track circuits, or any other means of determining a train's progress or approximate location remotely - consistent with not having a dispatching network.
3. Thirdly, we operate over one mile of track with an average grade of 5.89% in Madison. This is an isolated location of our line where we have created specific operating rules mitigating risk on this stretch of track. That includes higher requirements for brake systems, locomotives, and training.

Our railroad serves nearly 20 storage and freight customers with 5 total employees. Three of those employees are dual-qualified engineers and conductors, with myself also dual-qualified covering vacancies, as needed. This small team is also qualified to maintain our four locomotives, inspect, and maintain our 41 miles of track and associated crossing signals.

Each morning, our operating staff participates in a safety briefing to coordinate work duties and discuss tasks for the day. A portion of that time is devoted to understanding the train schedule, how communication will be established by train crews, and any other abnormalities such as track inspections, mechanical work, or contractors working along the line. None of our operation occurs over track directed by a dispatcher, including an automatic interlocking and interchange with CSX.

Many of our train operations utilize a conductor to be in a vehicle ahead of the train movement, leaving the engineer as the only occupant of a train. When available, a second crew member will ride in the lead locomotive of a train, especially when operating a train long-hood forward when visibility is reduced. When an additional crew member is not available to be in the cab, the conductor will often assist in building the train and perform an air brake test before allowing the train to depart at 10 mph. Due to the slow track speeds and relatively short operating distances, the conductor then has the ability to prepare for arrival on the other end of the railroad. This includes inspecting inbound interchange traffic from CSX, contacting customers for their daily work orders, and generating switch lists.

In North Vernon, IN we have a unique operating situation which requires a crew member on the ground to activate the manual interlocking signals with CSX and also activate a flashing stoplight at a busy grade crossing. Our special instructions require activating the flashing stoplight and establishing radio contact with CSX crews prior to the train's arrival. This is done to avoid train conflicts and guarantee that a route is lined and available prior to our train arrival. This practice cannot be done remotely and having that crew member on the ground in advance enhances the safety of our operation to the public by avoiding blocked crossings, allowing our crews to participate in a job briefing with any CSX crews in the area prior to train arrival, and

ultimately minimizing overall train delay for both CSX and our operation. With the engineer having both radio and backup cell communications with the conductor, someone always the ability to rapidly respond to any emergency enroute. That vehicle is also used to provide the crew transportation to and from the reporting station at the beginning and end of the day.

Our small team works together every day to run a safe railroad, and we do so very well. We understand the value of our employees and the critical role they play in operating safely. We provide excellent employee benefits, including paid sick leave and flexible paid time off to all employees from day one and our employee retainage percentage is high.

Nearly as important as investing in our employees, is the critical need to rebuild and invest in the physical infrastructure of our line – locomotives, bridges, and track. In the past two decades, we've reinvested nearly all our operating profits back into safety improvements on our line, totaling over \$15M – or 8 years' worth of our net income. The financial impact of this rule will have significant implications on our ability to continue making these investments which generate measurable safety and environmental benefits. The proposal directly decreases our ability to fund these projects resulting in what we believe is an overall net decrease in the safety of our operation, our employees, and the general public.

Our business is run very similar to many small railroads in the US. We run a compact business with extreme focus on cost control. The impact of us requiring a second crew member in the cab on each train will require us to hire, at a minimum, two additional employees. Although that may not seem large, with a staff of just five, this results in a 40% increase in staffing with few, if any productivity improvements. Additionally, the initial capital costs associated with equipping our fleet of locomotives with alerters, expanding our communication

coverage, and creating dispatching facilities would exceed \$150k - or over half of our annual capital budget.

Ongoing, compliance will result in a 15% increase in total operating costs, and a staggering 35% decrease in annual infrastructure spending.

The proposed rulemaking would negatively impact our business financially, operationally, and practically without demonstrational benefit. Compliance would require the Madison Railroad to immediately sideline critical safety investments related to bridges, grade crossings, and trespassing. Overall, we see this rulemaking as generating a net decrease in safety on our railroad. It's our hope that any crew size rulemaking would categorially exclude all existing and future short line and regional railroads.

## **Attachment J**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF DEWAYNE SWINDALL  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
THE INDIANA RAIL ROAD COMPANY<sup>1</sup>

DECEMBER 14, 2022

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I am President and CEO for The Indiana Rail Road Company (“INRD”), a 250- mile regional railroad operating in Indiana and Illinois. In this Statement I will describe how INRD has been safely and effectively operating with one-person crews since 1997.

**Background on Indiana Rail Road Company’s One-Person Crew Operations**

The Indiana Rail Road Company (“INRD”) is a 250-mile regional railroad operating in Indiana and Illinois, and it has been safely and effectively operating with one-person crews since 1997. In 1986, INRD purchased a rail line from the Illinois Central. Prior to purchase by INRD, Illinois Central was operating two trains a day with 10 people (5 people per train) on a dilapidated 110-mile segment of railroad. After purchasing the Illinois Central rail line, INRD reduced redundant positions from train service, implemented innovative operating practices, such

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<sup>1</sup> Mr. Swindall provided his statement at the FRA public hearing as a joint witness for the American Short Line and Regional Railroad Association and the Association of American Rail Roads.

as one-person crews, and shed rigid work rules. Subsequently, INRD could then offer rates competitive with the trucking industry and capture substantial amounts of traffic that previously moved by lower cost trucking operations. As a result, INRD has grown from 14,000 carloads in its first full year of operation to 136,203 carloads in 2021 and has grown the company from 16 employees to 130 employees in the same time frame.

The implementation of one-person crew operations at INRD required research, innovation, and use of modern-day technology. The railroad worked closely with the Federal Railroad Administration (“FRA”) Chicago Region Office to develop safe one-person crew practices and rules. There is a section in the INRD Special System Instructions, developed with assistance from FRA, applicable to one person crew operations, which is periodically reviewed by the FRA. In addition to consulting with the FRA, INRD studied the operations of New Zealand’s Tranz Rail. Tranz Rail implemented one person crews in 1987. INRD observed Tranz Rail’s operating practices, reviewed their Alternative Train Crewing Handbook, interviewed employees, and discussed issues of alertness and fatigue with Tranz Rail officials. INRD also obtained information from a study performed by New Zealand Tranz Rail that concluded that the health and safety of individuals and the public were not compromised by employing one-person crew operations. Prior to implementing one-person crew operations, INRD also reviewed the Study of One-Person Train Operations, dated May 1997, prepared by Beauchemin Beaton Lapointe Inc. for the Transportation Development Centre (TDC) in Canada, which studied one-person operations in Belgium, Sweden, United Kingdom, Germany, Netherlands, New Zealand, Sweden, and Norway. Finally, INRD considered suggestions and safety concerns of its own employees and management during implementation of the new one-person crew operations.

## **Scope of One-Person Crew Operations**

In 2021 INRD utilized one-person crew operations on about thirty-one (31) starts per week. Today, the INRD maintains our core routes to FRA Class III standards or higher with an average main track train speed of thirty-seven (37) miles per hour in controlled territory. The average distance a train is operated during a one-person crew shift is seventy (70) miles and the average on-duty time of a one-person crew is 8.3 hours. One-person crew operations run seven (7) days a week. The average train size is approximately sixty-eight (68) railcars, typically merchandise or coal trains. Merchandise trains may contain some hazmat cars, but do not contain any crude oil or PIH.

Currently, all train operators undergo a rigorous year-long training program that involves classroom and field work and are certified, per FRA regulations, as both conductors and engineers and are thereafter referred to at INRD as “train operators.” They are trained and tested on the INRD Special System Instructions, including rules for “One Person Road Operations,” developed in conjunction with the FRA. INRD train operators, on a one-person crew, are not distracted by managing consist and train make up because they handle trains that have already been made up. The train operator receives the train consist of a complete train from customer service. In the event a car must be set-out of the train, the one-person crew must wait for assistance from other employees to perform these actions, according to INRD rules.

Any FRA rules that apply to an engineer or conductor also apply to an INRD one-person crew and all one-person crews are required to hold a job briefing with dispatch prior to beginning the job. There are additional rules that apply only to one-person operations. For instance, per INRD One Person Road Operations rules, a train operator may not operate a locomotive long

hood forward in excess of two miles and must contact dispatch to send another employee to assist in the event a crossing must be flagged. Additionally, a train operator who is performing one-person operations must stop the train before copying a mandatory directive from dispatch. INRD rules require that before a train dispatcher may issue a mandatory directive to a one-person crew, the dispatcher must ask the crew, "Are you stopped?" and receive verbal confirmation the movement has stopped before issuing a mandatory directive.

INRD has implemented additional safety measures as well. Each INRD locomotive has an in-cab alerter that continuously monitors train operator vigilance, senses train operator's control inputs such as throttle, brakes and horn and prompts the train operator for response if no activity is detected after thirty seconds. If no response is received from the train operator the in-cab alerter initiates a safe emergency stop. INRD also uses a fleet management system which permits managers and dispatchers to monitor the condition, speed, and location of each train. INRD continues to test new technology, such as a recent trial of in-cab automated warning system that gives verbal warnings to train operators if they are getting close to the speed limit or improperly utilizing the braking system.

When operating as a one-person crew, train operators are required to have a redundant form of communication in the form of a company issued electronic device should the primary locomotive radio malfunction. The train operator must test both the electronic device and radio prior to departure. Cell phones remain off and are stored out of sight in a train operator's grip during operation of the train and are only to be turned on in case of an emergency. INRD's train operators are in continuous radio contact with dispatch. In the event of a train problem, the train operator is instructed to contact dispatch to call another employee in for assistance. At any given time, a train is not more than about an hour away from another employee on the railroad. In the

unlikely event a train operator must leave the cab of the locomotive, the train operator must secure the train, lock the cab, and check in at regular intervals with dispatch.

INRD has never had an incident involving a one-person crew that was caused by crew fatigue. Prior to implementing one-person crews, INRD considered ways in which to regulate train operator schedules. All INRD employees work local jobs and have the ability to return to their home after every shift. Where operationally possible, one-person crews are given assigned jobs with set schedules where they work the same time each day. Two-thirds of INRD's train operators are on assigned jobs. Train operators on INRD's extra board positions maintain two consecutive off days each work week.

Further, as INRD has upgraded its class of track and speed, train operators are able to complete a job in less time, resulting in shorter shifts and less time on-duty. INRD employs one-person crews only where it makes operational sense and creates efficiencies without compromising safety or violating FRA regulations. For instance, jobs that require protection for shoving or pushing movements or require manual activation of switches are staffed with a two-person crew. INRD performs regular drug and alcohol testing and strictly enforces the prohibition on using electronic devices in the locomotive cab. Random testing for Rules Compliance is routinely performed by qualified managers.

### **Safety Experience/Results**

Safety is the number one priority at INRD. If there were any indication that operating with one-person crews endangered the safety of INRD employees or the public, INRD would not continue one-person operations regardless of the efficiencies. However, there is no evidence that

one-person operations are unsafe. In fact, INRD has operated safely with one person crews for over two decades now.

INRD's own internal data clearly indicates one-person crews are, in fact, just as safe as two-person crews. INRD has only incurred one FRA Reportable human factor incident involving a one-person crew in twenty-five years of one-person crew operations. Single-person crews accounted for 18.3% of INRD total man hours from 2006 to July 2022 and accounted for only 5.9% of total human factor incidents. On the other hand, two-person crews were 81.7% of INRD man hours in that same time frame but accounted for 94.1% of human factor incidents. Additionally, the BLET has contractually agreed to our safe, single person crews since 2001, in the collective bargaining agreement.

## **Conclusion**

INRD has safely operated with one-person crews since 1997. During those twenty- five years, INRD has seen improvements in its productivity and safety, allowing it to provide competitive, environmentally friendly service to its customers.

# **Attachment K**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF JOHN DEWAELE  
SENIOR VICE PRESIDENT, GENERAL MANAGER  
GRAFTON AND UPTON RAILROAD COMPANY

DECEMBER 14, 2022

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Thank you for taking the time to host the American Short line and Regional Railroad association and allowing me the opportunity to offer my perspective on single person crews. My name is John DeWaele, Senior Vice President and General Manager of the Grafton and Upton Railroad Company, and I am representing my thoughts and perspective on the safe operation of single person crews today. Here is a brief background of my experience that I believe is sufficient to understanding railroad operations and proper use of single person crews. I am a certified conductor, going on 19 years. I am a certified locomotive engineer, going on 17 years. I am a Designated Supervisor of Locomotive Engineers, going on 8 years. I was a trainmaster for 5 years.

I have almost 2 decades of experience operating in CTC, PTC and dark territory with qualifications on Amtrak's Northeast Corridor from New York to Boston, CSX's Mainline from Boston to Albany and many other short line owned rail lines in Southern New England.

I've safely operated freight trains in excess of 13,000 tons, with multiple high horsepower locomotives, carrying a variety of cargo including Toxic Inhalation Hazards, unit ethanol trains and mixed freight over grades that are 2% or greater and at speeds of up to 50 MPH. I've safely operated unit ethanol trains in excess of 13,000 tons as a single person crew, at speeds of 30 MPH in heavy grade territory, with a conductor in a chase vehicle at times without radio communication. I've safely operated switching locomotives, in the locomotive cab alone for up to 12 hours per shift. I've safely operated passenger trains, in the locomotive cab alone for up to 8 hour per shift, in complex yards and at maximum authorized speeds on congested rail corridors up to 80 MPH.

As a DSLE, I've ridden in the controlling cab with engineers and conductors present for shifts of 12 hours. As a DLSE, I've observed downloads of locomotive engineers operating alone while switching and while a conductor is present in the cab. As a trainmaster, I've performed tests on engineers operating alone in the cab, while the conductor is thousands of feet away riding on the rear of the train or positioned elsewhere to protect train movements.

My statements do not reflect a general opinion that two person crews are more or less safe than single person crews, but that single person crews can and do currently and historically operate safely. My statements are focused on the safe operation of single person crews and financial implications of single person crew mandate on small businesses such as short line or switching railroad.

As a career railroader, I've had the pleasure of working with many different professionals in different areas in New England. Most of the railroaders I've had the pleasure of working with are well trained professionals, with the goal of safely moving the train, completing their work assignments, and going home safely with all members of their crew at the end of the shift.

Often times railroaders, working alone are solely focused on completing the tasks at hand safely. However, it has been my experience, that when other personnel or team members are positioned in the cab of the controlling locomotive, conversations can quickly turn away from railroading. This is human nature. These conversations happen every day between crew members and most days, they do not result in failure. As in all professions, they talk about work changes, company issues, family and fun. However, these conversations can take 2 railroad professionals away from the task at hand, resulting in passing authority limits, noncompliance with speed restrictions or worse, resulting in a collision.

The FRA has done a great job in researching the cause for failures, implementing safety technologies and reducing railroad related failures and fatalities. However, this NPRM does not support the facts that were present in the aforementioned improvements to rail safety. As you know, in 2016, the FRA stated that it could not “provide reliable or statistical data to suggest whether one-person crew operations are generally safer or less safe than multiple-person crew operations”. Without this statistical data available, short lines cannot base the financial changes in fact and as a result, may face civil penalties for failing to adhere to the NPRM should it become final.

The NPRM, if in effect, will result in higher costs for operations and less of an opportunity for short lines to make investments in safety that have a stronger impact on overall safety for their personnel. Many short lines have found success in diversification in training with their personnel as a means of financial perseverance. This means that short line railroads cross train their employees so that they can effectively serve their customers and operate within tight budgets as this is a high fixed cost industry with high barriers to entry. Short line railroads may not have the resources of large class I's, Regionals or holding companies. Generally, their resources are limited

as are their budgets. This has resulted in an industry that has succeed by doing more with less. Short line railroads have tremendously strong safety records, even where employees are tasked with different classes of work.

This NPRM removes the ability for short lines to fully utilize their personnel, many of whom enjoy diversification of their jobs, creating higher operating costs. Some short lines don't have enough work throughout the day to employee staff that only performs a single task. Some short lines operate more efficiently, and safely, with their conductor located in a vehicle to safely make reverse moves, protect crossings, or open and close gates that provide safety to the facilities they serve. A crew member located in a vehicle can also serve the needs of a train in repair more efficiently, reducing delays and improving customer service.

Further, the NPRM, if effective, immediately increase the cost for operations on a short line by increasing the cost for new equipment installed in locomotives, maintenance to that equipment, training and hiring additional staff losing the efficiency of the operation as it is today. A short line railroad is rarely positioned to hire additional staff to fully take on the tasks that a conductor working outside the locomotive cab in a separate vehicle can safely perform.

### **Grafton and Upton**

The NPRM, if effective, would have an immediate adverse effect on the Grafton & Upton Railroad (GU), which is a privately owned railroad that has been in operation since 1874. The GU's 25-mile system interchanges with CSX in North Grafton, Massachusetts. The railroad provides freight rail transportation to customers in central Massachusetts. The GU transloads over 95% of their business and services many commodities and customers which include many hazardous chemicals and a large propane transload facility. GU's success is largely based on a

safety focused staff that can do multiple jobs efficiently which has helped GU's continued growth, such as single person operations.

Often, GU's operates using one or two locomotives equipped with 2 way radios and back up emergency cell phones, and an engineer (dual qualified as a conductor) to move a train in one direction from one yard or customer to another, where they will meet their conductor who arrived by vehicle. The Engineer is often tasked with assisting the conductor in securing the train, inspecting loaded or empty railcars, and then moving the train forward to the next spot or customer location. The Conductor may operate a vehicle to assist train at the various locations served by GU on GU property and to provide flag protection passive highway grade crossings. The challenging New England topography may momentarily interrupt radio communication.

#### **Crew size NPRM impact-**

The GU would not meet requirements for the short line exception due to RSSM and operations occur over a segment of track with an average grade that is greater than 1% over 3 continuous miles OR 2% over 2 continuous miles. Further, less than two-person crew operations take place with those crews unable to communicate with a dispatcher. GU is unable to monitor a train with less than a two-person crew's train's real time progress, or is unable to determine those trains approximate locations when communications are lost with the crew due to occasional loss of service due to topography. GU would not be able to apply for a special approval to continue their current operations as they would not be eligible to apply due to the loads of RSSM.

The NPRM if effective would create higher operating costs that would have profound effects on GU. GU operates safely without the need for a dispatcher. GU operates safely with the conductor outside of the locomotive cab, safely moving trains over passive crossings and assisting

with other railroad related activities. GU's trains operate at restricted speed, not exceeding 10 MPH, not requiring alerters. Given the NPRM, GU would have to hire additional staff which would immediately increase their operating costs by over \$100,000 per year. GU would have to rewire their locomotives to accommodate alerters, at \$20,000 per locomotive, that would alter GU's budget for other, more meaningful safety improvements. Combined, the NPRM could create capital investments of over \$100,000 year one simply with additional added equipment costs and with additional salaries and increased locomotive maintenance, increasing annual operating costs by over \$275,000.00. These are numbers that would have profound impacts on the financial stability of a short line railroad and their ability to provide railroad service.

You've heard a number of statements today from short line railroads, railroad professionals and the ASLRRA as to why the NRPM would have a dramatic effect on the industry. I ask that you consider the factual reasoning presented before you today and the effects the NPRM will have on a short line railroad as small business with high operating costs. Your time is greatly appreciated, thank you.

# **Attachment L**

BEFORE THE  
FEDERAL RAILROAD ADMINISTRATION

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DOCKET NO. FRA-2021-0032:  
TRAIN CREW SIZE SAFETY REQUIREMENTS

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STATEMENT OF SCOTT CONNER  
VICE PRESIDENT OF OPERATIONS  
TRANSTAR LLC/TEXAS AND NORTHERN RAILWAY COMPANY

DECEMBER 14, 2022

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I am Scott Conner, Vice President of Operations of Transtar, LLC. I would like to thank the Federal Railroad Administration, the esteemed members of the panel, and the American Short Line and Regional Railroad Association for the opportunity to speak today.

Transtar is a short line railroad holding company operating five regulated Class 3 short line railroads and one contract switching carrier. Transtar's railroads have been operating across North America for over 130 years. Our railroads have been integral part of the US Economy, with a particular focus on the steel industry, although we serve a diverse customer base from Fortune 500 companies to local, family-owned small businesses.

I have been in the railroad industry for over 28 years, working for both Class 1 and short line railroads. I have worked in the craft as a Conductor, Locomotive Engineer, and a Yardmaster, as well as in various leadership roles, including my current role in which I am

responsible for the safe, efficient, and profitable operation of Transtar's shipment of roughly 500,000 railcars annually in six states.

I am here today to express my concern over the impacts the FRA's proposed train crew size rule would have on Transtar's operations. As currently written, the proposed rule would have a significant negative impact on Transtar, especially at our Texas and Northern Railway Company, in Lone Star, Texas. Texas and Northern Railway serves various small customers on approximately 7 miles of main line track and another few dozen miles of yard and storage track, as well as industry spur track. Texas and Northern Railway has 7 employees that run train crews consisting of a Locomotive Engineer and a Conductor 3 times a week, or as needed by the customers. Texas and Northern crews consist of an Engineer in the cab of the locomotive operating at half the range of vision at speeds not exceeding 10 miles per hour, and a Conductor operating a passenger vehicle accompanying the train. Despite not having two crew members in the locomotive as the proposed rule would require, Texas and Northern has safely operated in this manner for over 15 years and has received multiple industry recognitions for our exemplary safety performance.

Despite Texas and Northern's outstanding record of safely operating single person crews, if this proposed rule would be implemented as written, it would not qualify for any exemptions, waivers, or special approvals, since, among other things:

- we do not qualify for the remote-control operation exception;
- we do not maintain technology or protocols to monitor the train's real time progress;
- we do not have a method of determining the train's approximate location when communication is lost with the one-person crew;
- we do not utilize a dispatcher;

- our locomotives are not equipped with alerters; and
- our track exceeds a 1% grade for 3 continuous miles.

In short, the proposed rule would require Texas and Northern to alter operating procedures that have proven over an extended period of time to be not only safe, but also an efficient and cost-effective means of serving our customers.

I understand that the intent of the rule is to create a “safer” environment for transporting commodities. However, I believe that the proposed rule would very likely have the opposite effect and actually result in the less safe shipment of commodities, as well as adverse impacts on the environment. Allow me to provide two examples of how safety would be adversely affected, one indirect and one more direct.

First, the proposed rule would likely result in more commodities being shipped via truck, which is considerably less safe than rail transportation and worse for the environment. Texas and Northern is a relatively modest, low margin railroad that provides vital services primarily to small businesses, for whose shipments Texas and Northern fiercely competes with trucking providers. If Texas and Northern became subject to the proposed rule, our operating costs would increase, Texas and Northern would be forced to increase its customer pricing, and our customers would, in turn, either pass those increased costs on to their customers, further compounding already unprecedented inflation, or choose to ship its commodities via truck, which is considerably less safe and less environmentally friendly than shipping via rail. Either result is less than ideal for Texas and Northern, our customers, our customers’ customers, or overall public safety.

Second, one of the greatest risks our employees face when operating locomotives is lack of focus and distraction from the assigned task. Under current operating procedures, each of our

Engineers and Conductors operate independently, with separate responsibilities, in separate vehicles with multiple vantage points to observe trains that are traveling at very modest speeds, all of which ensure that each crew member remains singularly focused on his or her assigned task without being distracted by the other's actions or non-task-oriented conversations that commonly occur when individuals are placed in close proximity. Placing multiple crew members in the cab of a locomotive creates the risk of negating most, if not all, of those protections. Texas and Northern Railway's outstanding safety record while operating with only one person in the cab of a locomotive indicates that our operations are already the safest means of shipping commodities and that the increased crew sizes will not improve an already perfect safety record and may, in fact, result in increased risk of harm to the public.

We strongly believe that subjecting Texas and Northern to the proposed rule will not only result in compounding the effects of inflation on all affected parties, while not providing any discernible safety benefit, but may, in fact, result in a decreased public safety and increase in environmental impact. As an operator who is obsessively focused on safety and profitability, I believe the economic and public safety risks of the proposed rule far outweigh the proposed benefits.

In light of the foregoing, on behalf of, Transtar, Texas and Northern Railway Company, and all our railroads, I respectfully urge the Administration to withdraw its proposed rule regarding increased crew sizes or, at a minimum, unconditionally exclude all short line railroads from the application of the proposed rule.