Pursuant to 49 C.F.R. § 211.29, the American Short Line and Regional Railroad Association (ASLRRA), on behalf of itself and its member railroads, petitions the Federal Railroad Administration (FRA) for reconsideration of certain provisions of the Risk Reduction Program (RRP) final rule. As described below, FRA should revise the provisions in the final rule pertaining to the determination of inadequate safety performance and how contractors are included in the RRP process. The agency should also provide clarity regarding the implementation deadlines.

I. FRA Should Modify Two Elements of Inadequate Safety Performance in the Regulatory Text.

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1 ASLRRA is a non-profit trade association representing the interests of approximately 600 short line and regional railroad members and railroad supply company members in legislative and regulatory matters. Short lines operate 47,500 miles of track in 49 states, or approximately 29% of the national freight network, touching in origin or destination one out of every five cars moving on the national railroad system, serving customers who otherwise would be cut off from the national railroad network. 85 Fed. Reg. 9,262 (Feb. 18, 2020). FRA graciously granted ASLRRA an extension of time to submit a petition for reconsideration due to the COVID-19 pandemic.
On February 27, 2015, FRA issued a notice of proposed rulemaking (NPRM) to implement the requirement in the Rail Safety Improvement Act of 2008 that requires the development and implementation of railroad safety risk reduction programs. The NPRM proposed requiring each Class I railroad and each railroad with inadequate safety performance to develop and implement a Risk Reduction Program (RRP). On February 18, 2020, FRA issued a final rule, which modified the provisions in the NPRM. In particular, the final rule’s version of Section 271.13 – *Determination of Inadequate Safety Performance*, is significantly different from the version proposed in the 2015 NPRM.

FRA’s methodology consists of a two-phase annual analysis, comprised of both a quantitative analysis and qualitative assessment. The methodology changed significantly from what was initially proposed in the NPRM. Based upon ASLRRRA’S independent analysis of the revised methodology, FRA has significantly reduced the number of short line railroads that the rule has the potential to implicate. Overall, ASLRRRA and its member railroads appreciate this consideration but see two additional opportunities for FRA to provide sufficient relief for small businesses: FRA should (1) automate the discontinuation process for ISP railroads and (2) accept voluntary participation by Class II and Class III railroads in the Short Line Safety Institute (SLSI) in lieu of compliance with the delineated requirements of Part 271.

**A. FRA Should Automate the Discontinuation Process for ISP Railroads.**

Section 271.13(g) states that after a five-year compliance period, a railroad with inadequate safety performance (ISP) may petition FRA for approval to discontinue compliance with Part 271. Preparing a petition consumes a significant amount of resources that are note

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uniformly available to small businesses. It does not benefit FRA if a railroad continues to operate as an ISP because it fails to submit a petition to FRA. Instead, FRA should annually review its pool of ISP railroads and notify railroads if they must continue to comply with Part 271. A process for reconsideration should be included for railroads who chose to engage in a dialogue with FRA over whether there is additional information the agency should have considered. By modifying this process, FRA will be able to better manage agency resources by ensuring that high-performing railroads do not stay in the ISP pool simply because they are small businesses without the resources to submit a required petition.

B. FRA Should Accept Voluntary Participation in SLSI as Compliance with Part 271.

The robust work of SLSI, as shown by reviews of FRA’s Office of Research, Development and Technology (RD&T), justify this as a merited approach for improving the safety performance of short line railroads. While FRA has noted in the preamble that “it is more appropriate to make this determination when reviewing RRP plans under § 271.301 of the final rule,” there is no language in the regulatory text to support this proposition. FRA should include regulatory text specifying that a short line railroad may provide evidence of its participation in the SLSI as part of its RRP submission.

SLSI began in 2014 as a pilot project supported by FRA’s RD&T. In 2016, as a newly incorporated nonprofit organization, SLSI began the industry-wide implementation of its Safety Culture Assessments (SCA), a diagnostic appraisal of the safety culture at a participating railroad at a specific point in time. This is a confidential, voluntary, and non-punitive safety culture assessment of Class II and III railroads carried out by a trained assessment team of railroad
industry safety experts. The assessments yield thorough and reliable feedback to participating railroads in the form of a close-out meeting and a final assessment. As recognized by FRA, SLSI utilizes the most robust safety culture assessment model in the U.S. railroad industry based on a systematic review by Volpe.

SLSI fulfills its mission in the following functional areas: (1) conducting Safety Culture Assessments and HMIT Training; (2) providing education and training programs to improve the safety and safety culture of Class II and III railroads and ensure they know and understand how to safely handle hazardous materials; and (3) providing timely disseminated information to key industry stakeholders about the SLSI’s vision, mission and goals, and programmatic activities and outcomes from implementation.

Critical features of SLSI’s model include utilizing a multiple method, data-focused, in-depth approach involving surveys, observations, interviews, and a document inventory. Subsequent to the initial assessment, SLSI conducts a follow-up assessment to determine the progress the assessed railroad has made related to its safety outlook. In addition, SLSI provides formalized technical assistance to the railroads, providing them with opportunities to improve their safety such as safety action plans, how to improve safety communications, and how to establish safety committees. The results of the follow-up assessment have shown that 96% of the

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3 See “About,” Short Line Safety Institute, 2020. Available at: shortlinesafety.org/about/.
small railroads have reported safety related changes and 76% have stated that those changes have had a positive impact on safety.\(^5\)

When ASLRRRA initially provided comments to FRA regarding the work of SLSI, it had been in existence as a non-profit organization for only one year.\(^6\) Since ASLRRRA’s initial comments, SLSI’s mission has expanded to include the SLSI Hazardous Materials Instructor Training Program (SLSI HMIT Program). This program ensures that employees of Class II and III railroads are conversant with the regulations regarding the transportation of hazardous materials and compliments the railroad’s existing training program. SLSI's HMIT curriculum contains five modules consisting of the following training topics: general awareness, function specific training, safety procedures, OSHA/EPA spill awareness, and security awareness. Key components include hazmat incident planning, identifying best practices, providing emergency response protocols, and instructing emergency response coordination.

Given the robust work of SLSI and its proven success in improving the safety culture and performance of short line railroads, FRA should include in the regulatory text that proven successful participation in the SLSI would serve as compliance for all or part of the regulatory provisions of Part 271.

II. FRA Should Narrow the Scope of Contractors in the RRP Process.

The NPRM contained provisions at various sections in Part 271 related to the requirement that railroads identify persons, including contractors, who utilize or provide


“significant safety-related services” to a railroad and that railroads ensure such persons “support and participate” in a railroad’s RRP.\footnote{See 49 C.F.R. § 271.101(d).} ASLRA and the Association of American Railroads (AAR) submitted comments in response to this NPRM proposal requesting FRA clarify the potentially expansive scope of those proposals as applied to railroad contractors. The final rule discussion somewhat narrows the meaning of utilization or performance of significant safety-related duties (not applicable to railroad passengers, the general public, or contractors performing duties unrelated to railroad operations). However, FRA failed to substantively address, in the preamble discussion, what it intends “support and participate in” to mean.

The final rule adds text at § 271.205(a)(4) that could significantly broaden the scope of what “support and participate in” means. Section 271.205(a)(4) states that a railroad’s system description addressing how it will ensure contractors “support and participate in” an RRP must include how such contractors will “assist in identifying hazards, developing and implementing mitigation strategies, conducting internal annual assessments, or otherwise performing actions required by this part.” This new language could be read to now mandate the inclusion of virtually all railroad contractors and their employees into Part 271, which is not accounted for in the final rule’s regulatory analysis and is beyond the plain language of the legislative mandate. If broadly interpreted in this manner, the resulting compliance would be extremely burdensome to any Class II or Class III railroad designated as an ISP.

FRA should amend the final rule to delete the unnecessary provisions regarding contractors and their employees supporting and participating in an RRP. FRA has identified no significant safety benefits in its regulatory analysis justifying a blanket inclusion of all
contractors and their employees on freight railroads without regard for the scope of contractor activities actually performed. Short line railroads will often employ contractors for very limited engagements on the railroad. It is impractical and at times impossible for a railroad to track down and include these types of individuals in the formation and execution of an RRP. At the very least, FRA should narrow the scope of this requirement to contractors with a defined, long-term relationship with the railroad.

III. **FRA Should Clarify Implementation Deadlines in the Regulatory Text.**

The preamble to the rule clearly states that it requires, “each Class I railroad to have a fully implemented RRP within five years of the rule's effective date and requires the first set of ISP railroads to implement all portions of their RRPs within six years after the final rule's effective date.”\(^8\) Since the rule is effective on April 20, 2020, the preamble language suggests that the implementation deadline is April 20, 2025 for Class I railroads and April 20, 2026 for initially determined ISPs. However, specific implementation deadlines are not referenced in the regulatory text. FRA should clarify the compliance dates to avoid any confusion for the railroads who must comply with the RRP rule.

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ASLRRA and its member railroads appreciate the additional time that FRA provided to submit a petition for reconsideration due to the COVID-19 pandemic. The additional time has afforded ASLRRA the ability to conduct a thorough independent review of the ISP determination process as presented in Section 271.13 and to be able to focus our comments on a

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\(^8\) See 85 Fed. Reg. 9,262 at 9,264.
small number of proposed changes that would adequately address the concerns of the small railroad community.

Respectfully submitted,

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APPENDIX 1
SUMMARY
The Short Line Safety Institute (SLSI) began in 2014 as a pilot project supported by the Federal Railroad Administration (FRA) Office of Research, Development and Technology (RD&T).

In 2016, as a newly incorporated nonprofit organization, SLSI began the industry-wide implementation of its Safety Culture Assessments (SCA), a diagnostic appraisal of the safety culture at a participating railroad at a specific point in time. The original conception of the SLSI SCA model included post-Assessment processes; those aspects were developed in 2018.

Post-Assessment actions are an integral part of fostering a stronger safety culture in the short line and regional railroad industry. In support of SLSI’s mission, such actions provide mechanisms for understanding the extent to which an assessed railroad made changes based on the SCA process.

The research reported here, conducted by the U.S. Department of Transportation (DOT) Volpe Center (Volpe), provides insight into (a) what changes assessed railroads have implemented based on their SCA, and (b) what further technical assistance those railroads may need to strengthen their safety culture.

Participating railroads reported the following changes that created or improved indicators of a strong safety culture: safety committees, safety action plans, job-safety briefing protocols, and other safety communications with employees.

Technical assistance needs included: ready-to-use resources for craft employees (e.g., safety tips or one-page briefs), training opportunities (e.g., hazmat or management leadership training), and reports to the industry on the status of safety culture in the industry based on SLSI work thus far.

BACKGROUND
FRA RD&T has been a collaborating supporter of the SLSI’s development and vision to build a stronger, sustainable safety culture on short line and regional railroads. The concept for the SLSI emerged from the American Short Line and Regional Railroad Association’s formal response to the 2013 Lac Megantic incident.

Since the Pilot Project (2014–2015), SLSI has been conducting voluntary, non-punitive, confidential assessments of the safety culture at participating short line and regional railroads (i.e., Class II and Class III railroads). The industry consists of 603 short lines and regionals with approximately 18,000 employees, serves nearly 10,000 customers, and represents 29 percent of U.S. freight rail track across 49 states.

SLSI defines safety culture as “the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands,” language derived from the DOT Safety Council safety culture definition (FRA, 2017). The SLSI SCA process uses the most
robust model in the U.S. rail industry, based on a review of published literature (FRA, 2019).

The SCA model uses teams of paired Assessors and a multi-method, data-focused, site-customized, in-depth process that involves a survey, observation, interview, and document inventory. An FRA Technical Report, “Ten Core Elements of a Strong Safety Culture” (FRA, 2017), serves as the theoretical framework to operationalize the SLSI definition of safety culture.

At the end of a typical 5- to 8-day onsite portion of the SCA (more or less time, depending on the specific site), the railroad receives a final report presenting the findings in relation to the “Ten Core Elements” report. Findings reveal the strengths and gaps in the railroad’s safety culture. The SCA report includes an Opportunities for Improvement section—suggested changes that, if implemented, may strengthen the railroad’s safety culture.

SLSI has applied its SCA model to more than 70 Class II and Class III railroads that employ approximately 6,300 employees.

OBJECTIVES
Since 2014, FRA RD&T and SLSI have commissioned Volpe to conduct an independent, third-party program evaluation to inform the SLSI’s research-based practices and to improve its ongoing program development efforts.

Volpe conducted a follow-up review with assessed railroads to understand the extent to which and ways those railroads had implemented changes based on an SCA conducted in 2016 or 2017 (i.e., after the Pilot Project and before any formal SLSI follow-up activities).

Volpe also engaged with railroads to determine which types of technical assistance SLSI could provide to support the railroads in strengthening their safety culture. The following evaluation questions guided Volpe’s activities:

- To what extent has the safety culture changed at assessed railroads since participating in a SCA?
- In what ways have the railroads changed their safety practices in effort to strengthen their safety culture since participating in a SCA?
- In what ways should the SLSI design and implement a Post-Assessment Follow-up Process to understand and assist in safety culture change at assessed railroads?

METHODS
Volpe’s review involved a scan of all feedback documents collected from the assessed railroads and conducted individual or paired, semi-structured discussions with a sample of their representatives (i.e., SCA point-of-contact and/or a senior leader).

Three key criteria framed the sample of 27 railroads: (a) 2016–2017 assessed railroad, (b) no prior formal SLSI follow-up contact, and (c) complete contact information provided by SLSI. All known contacts were invited and reminded to participate; 24 representatives from 17 railroads across 14 States participated during the allotted one-month period.

In December 2018, Volpe conducted 30- to 45-minute telephone discussions with participants. Participants represented positions such as presidents, general managers, vice presidents of operations, and safety managers from large to small railroads. Thematic analysis of the discussions took place in early 2019. The results herein are reported at the railroad level.

RESULTS
Participating railroads reported making a change or taking multiple actions, based on their SCA, that created or improved the following indicators of a strong safety culture:

- Safety committee (29 percent)
- Safety action plan (35 percent)
- Job safety briefing protocol (47 percent)
- Other safety communications with field employees (53 percent)
Other changes of note included safety personnel changes, prioritizing safety over competing demands in decision-making, creating a safety slogan, and developing incident tracking systems.

Regarding potential SLSI technical assistance, participants discussed the following needs:

- Ready-to-use resources (e.g., safety tips or one-page postings)
- Training opportunities (e.g., hazmat or management leadership training)
- Reports on the status of safety culture in the industry based on the SLSI’s work thus far

Railroads positively responded to the idea of an SLSI post-SCA process. Most (77 percent) expressed value in potential activities, ranging from an Assessor check-in call after a month, offering technical assistance support in implementing safety culture changes, to a follow-up SCA after 2 years to gauge a railroad’s safety culture change since its first SCA.

Across documents and discussions, most railroads expressed appreciation for the SCA process and described a high level of respect for the Assessors’ extensive railroad experience, knowledge, and communication skills. Some recommended adding Assessors with experience beyond train and engine (T&E), particularly mechanical and track. Most noted that the SCA was well-organized, on-time as scheduled, and posed little strain on daily operations. These accolades reinforce the intentional SCA design elements and Assessor training areas as implemented by SLSI.

A few railroads expressed negative perceptions of the SCA process, stating that an inadequate number of field observations were conducted. Respondents emphasized that field observations are critical to a thorough SCA.

Also, some railroads saw the SCA as more oriented to T&E operations because other crafts, including mechanical, track, or yardmaster, seemed under-sampled in the interviews. Thus, they believed that the SCA did not validly represent the strength of the safety culture at their railroad in relation to their craft.

Many railroads indicated they had communicated either the whole SCA Report or selections from it during safety meetings, on-shift briefings, crew-room postings, and one-on-one meetings.

A railroad that shares its SCA Report demonstrates a preliminary positive outcome for the SLSI’s aim to strengthen the safety culture at assessed railroads. Such railroad leadership actions reflect the “Ten Core Elements,” particularly its emphasis on communication and mutual trust.

Those railroads that had communicated their SCA Report to some degree described receiving positive employee responses, affirming that management was taking steps to address their safety culture. This is also a positive outcome for the SLSI because throughout an SCA, Assessors encourage railroads to include employees in pre-, on-site, and post-assessment activities.

**CONCLUSIONS**

Post-SCA actions described in documents and/or in discussions are evidence of preliminary safety culture change indicators at railroads assessed in 2016-2017.

Railroads described the SCA process as highly valuable, and subsequently, almost all took actions to strengthen safety culture based on their SCA Report.

Almost all railroads indicated openness to and welcoming of an SLSI Assessor following up with a telephone call within a couple months, and many were interested in a full follow-up SCA after a couple years to document their safety culture change over time.
FUTURE ACTION

SLSI is maintaining its focus on continuous improvement through independent, third-party program evaluation.

Future program evaluation work will continue to examine the fidelity of the SCA model when implemented in the field.

The other results in this report will be used to inform SLSI’s development of follow-up and technical assistance activities for assessed railroads and other educational efforts for the short line and regional railroad industry at-large.

REFERENCES


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Safety culture, safety culture model, safety culture assessment, safety culture change, evaluation, short line railroads, regional railroads, safety culture outcomes, technical assistance

Contract Number: DTFR5315X00043
SUMMARY
Research shows that a strong safety culture can influence a railroad’s safety outcomes, resulting in less frequent, less severe accidents. The U.S. Department of Transportation’s (DOT) Safety Council defines safety culture as “the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands” (Morrow, S., & Coplen, M., 2017).

The Federal Railroad Administration (FRA) recognizes the importance and function of a strong safety culture to railroad safety. Since 2014, FRA’s Office of Research, Development and Technology (RD&T) has supported the American Short Line and Regional Railroad Association (ASLRRRA) in its efforts to establish a Short Line Safety Institute (SLSI) focused on improving safety culture on short line and regional railroads. SLSI conducts voluntary, non-punitive, confidential Safety Culture Assessments (SCAs) for short line and regional railroads across the United States. SCAs provide a diagnostic appraisal of a railroad’s safety culture at a given point in time, with documented opportunities for improvement across the DOT Safety Council’s Ten Core Elements of a Strong Safety Culture, adapted for a railroad setting (Morrow, S., & Coplen, M., 2017).

This research summarizes findings from a case study analysis of initial and follow-up SCA reports completed for two railroads.

BACKGROUND
SLSI began industry-wide implementation of its SCA model in 2016. It was originally envisioned that the SCA model would include post-Assessment processes, to measure changes made by railroads following initial Assessments. In 2019, SLSI developed its post-Assessment processes. To date, SLSI has completed post-Assessments for two railroads referred to as Railroad 1 and Railroad 2 in this report, both of which completed their first Assessments in 2017.

SLSI’s SCA model utilizes teams of two Assessors and a multi-method, data-focused, site-customized, in-depth process that involves survey, observation, interview, and document inventory. SLSI uses the Ten Core Elements of a Strong Safety Culture as a theoretical framework to operationalize its definition of safety culture.

Each on-site Assessment lasts approximately a week. At the end of each Assessment, the participating railroad receives a final report that presents the Assessment Findings, in relation to the Ten Core Elements of a Strong Safety Culture. In addition to presenting positive and negative findings about the railroad’s safety culture, the report also details Opportunities for Improvement (opportunities), where the Assessors suggest organizational changes that, if implemented, may strengthen the railroad’s safety culture.

CASE STUDY ANALYSIS
To increase understanding of the safety culture growth realized by participating railroads over time, the Volpe National Transportation Systems Center (Volpe) completed a case study analysis of the initial and follow-up SCA reports for Railroad 1 and Railroad 2.
METHODS
To gauge safety culture growth across the two participating railroads, the Volpe team systematically compared each railroad’s initial SCA report with its follow-up SCA report. The analysis, framed around the Ten Core Elements of a Strong Safety Culture, focused on two aspects:

1. Differences between first-time and second-time findings and;
2. Whether the railroad took action on noted opportunities for improvement.

Volpe analysts identified positive and negative safety culture indicators under each of the Ten Core Elements of a Strong Safety Culture. Using these indicators, the Volpe team estimated whether the safety culture under a particular Core Element strengthened, stayed about the same, or weakened. The Volpe team then determined whether the railroad’s overall safety culture, across all Ten Core Elements, showed evidence of strengthening.

To support interpretation of the SCA summary reports, the Volpe team reviewed areas of uncertainty with the SLSI Assessors.

RESULTS
Both railroads demonstrated evidence of safety culture growth. Figure 1 shows the changes that took place from 2017 to 2019, by Core Element. A plus sign indicates strengthening, a negative sign indicates weakening, and an equal sign indicates no change.

The analysis identified six Core Elements that strengthened from 2017 to 2019 for both railroads. Two Core Elements showed no change for both railroads, and one Core Element weakened for both railroads. For the final two Core Elements, the results differed by railroad. Railroad 1’s safety culture weakened under Core Element 9, while Railroad 2’s safety culture strengthened. Conversely, Railroad 1’s safety culture strengthened under Core Element 10, while Railroad 2’s safety culture showed no substantial change.

In both the initial and follow-up SCA reports, SLSI issued multiple opportunities for the two railroads to act on. After the initial Assessment, Railroad 1 fully implemented 10 opportunities and partially implemented three opportunities out of 19 that SLSI made. Railroad 2 fully implemented 8 of the 15 opportunities that SLSI made in 2017.

![Figure 1. Change in Safety Culture Elements, 2017–2019](image)

CONCLUSIONS
Both railroads implemented the majority of the opportunities identified by SLSI in 2017, which supported a stronger safety culture in 2019. This case study raises the possibility that it may be easier for railroads to strengthen their safety culture under some Core Elements and more difficult under others. This was supported by the fact that both railroads showed improvements across the same six Core Elements and the same decline under one Core Element.

For both railroads, the Assessors reported that there was room for safety culture improvement. The Assessors repeated or expanded upon seven opportunities for Railroad 1 and eight opportunities for Railroad 2 in their second Assessments.

FUTURE ACTION
The results of this study suggest that the SCA process and follow-up support hold promise for strengthening railroad safety culture. Note that the results of this study should be interpreted...
with caution, given the very small number of railroads included in the analysis. Additional data is needed to determine if these results generalize beyond the two railroads studied.

A larger study examining additional railroads would increase understanding of the relationship between the Assessment process and changes observed at the railroads.

Future research could also examine barriers to improving safety culture and identify ways that organizations like SLSI can equip railroads with the tools they need to implement best practices.

REFERENCES


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