



DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 232

[Docket No. FRA-2025-0127]

RIN 2130-AD51

Permitting Use of Virtual Simulation for Periodic Refresher Training on Brake Systems

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: FRA proposes to allow railroads to use three-dimensional virtual simulation to satisfy the hands-on portion of periodic refresher training under FRA's brake system training requirements, consistent with waivers FRA has granted to date. FRA has found that such virtual training provides employees with randomized scenarios that may not be readily available for hands-on training and real-time feedback on performance of duties.

DATES: Comments on the proposed rule must be received by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. FRA may consider comments received after that date, but only to the extent practicable.

ADDRESSES: *Comments:* Comments related to Docket No. FRA-2025-0127 may be submitted by going to <https://www.regulations.gov> and following the online instructions for submitting comments.

Instructions: All submissions must include the agency name, docket number (FRA-2025-0127), and Regulatory Identification Number (RIN) for this rulemaking (2130-AD51). All comments received will be posted without change to <https://www.regulations.gov>; this includes any personal information. Please see the

Privacy Act heading in the **SUPPLEMENTARY INFORMATION** section of this document for Privacy Act information related to any submitted comments or materials.

Docket: For access to the docket to read background documents or comments received, go to <https://www.regulations.gov> and follow the online instructions for accessing the docket.

FOR FURTHER INFORMATION CONTACT: Lance Hawks, Human Performance Specialist, Safety Partnerships Division, Federal Railroad Administration, telephone: (678) 633-7400, email: Lance.Hawks@dot.gov; or Jason Schlosberg, Attorney Adviser, Federal Railroad Administration, telephone: (202) 302-7218, email: Jason.Schlosberg@dot.gov.

SUPPLEMENTARY INFORMATION:

I. Background

Consistent with the deregulatory agenda of President Donald J. Trump and Secretary of Transportation Sean P. Duffy, which seeks to unleash America's economic prosperity without compromising transportation safety, FRA is reviewing its regulatory requirements in parts 200 through 299 of title 49, Code of Federal Regulations (CFR). Under 49 CFR part 232, FRA prescribes Federal safety standards for freight and other non-passenger train brake systems and equipment. Based on its review, FRA has preliminarily determined that periodic refresher training requirements in § 232.203(b)(8) could be updated to permit railroads to use three-dimensional virtual simulation to meet the hands-on portion of the refresher training requirement. Please review the Section-by-Section Analysis below for the relevant information related to FRA's proposed change.

II. Section-by-Section Analysis

Section 232.203 Training Requirements

FRA proposes to amend paragraph (b)(8) of this section to permit railroads to use three-dimensional virtual simulation to meet the hands-on portion of the periodic

refresher training requirement. This section generally requires railroads to adopt and comply with a training, qualification, and designation program for employees who perform brake system inspections, tests, or maintenance. Currently, paragraph (b)(8) of this section specifies, in part, that a railroad's program must require periodic refresher training that includes classroom and hands-on training. Paragraph (b)(8) further provides that observation and evaluation of actual performance of duties may be used to meet the hands-on training requirement.

FRA's proposal would amend paragraph (b)(8) specifically to include three-dimensional virtual simulation as another way to meet the hands-on refresher training requirement, in addition to observation and evaluation of actual performance of duties. This proposal is consistent with waivers FRA has granted to several Class I freight railroads to use three-dimensional virtual simulation to meet the hands-on refresher training requirement.¹ FRA first granted this relief to BNSF Railway (BNSF) in 2012 in a waiver that allowed BNSF to use a three-dimensional virtual simulation using web-based and desktop software, called the Air Brake System Virtual Training Environment (ABSVTE), to satisfy the hands-on portion of the periodic refresher training requirement for train, yard, and engine service employees.² Since that time, BNSF reports having provided such virtual refresher training using ABSVTE in over 72,000 training events, representing training provided to over 25,000 employees. At the same time, BNSF's number of reportable brake-related defects has trended downward. FRA subsequently provided similar relief to the Norfolk Southern Railway (NS), CSX Transportation, Inc. (CSX), and the Canadian National Railway (CN).³

¹ See Docket Nos. FRA-2011-0074, FRA-2018-0100, FRA-2020-0008, and FRA-2020-0087 on www.regulations.gov.

² See <https://www.regulations.gov/document/FRA-2011-0074-0011>.

³ See Docket Nos. FRA-2018-0100 (NS); FRA-2020-0008 (CSX); and FRA-2020-0087 (CN) on www.regulations.gov.

Different types of freight equipment move across the nation's rail network, freely interchangeable between railroads. As a result, FRA has found that three-dimensional virtual simulation provides employees with randomized scenarios on equipment types that may not otherwise be readily available for hands-on training, as well as allows for real-time feedback on employee performance of duties. Three-dimensional virtual simulation training may also provide for more consistent training across employees and reduce the risk of hazards or potential injury that may occur in a field training setting. Accordingly, FRA proposes to amend § 232.203(b)(8) to provide railroads the flexibility to use three-dimensional virtual simulation to meet the hands-on refresher training requirement.

III. Regulatory Impact and Notices

A. Executive Order (E.O.) 12866 (Regulatory Planning and Review) and DOT Regulatory Policies and Procedures

FRA has considered the impact of this proposed rule under E.O. 12866, Regulatory Planning and Review (58 FR 51735, Oct. 4, 1993), and DOT Order 2100.6B, Policies and Procedures for Rulemaking (Mar. 10, 2025). The Office of Information and Regulatory Affairs within the Office of Management and Budget (OMB) determined that this NPRM is not a significant regulatory action under section 3(f) of E.O. 12866. FRA proposes to amend § 232.203(b)(8) to permit railroads to use three-dimensional virtual simulation to meet the hands-on refresher training requirement for employees who perform brake system inspections, tests, or maintenance.

FRA analyzed the potential costs and benefits of this proposed rule. This rule proposes to allow railroads to use three-dimensional virtual simulation to satisfy the hands-on portion of periodic refresher training for employees who perform brake system inspections, tests, or maintenance. This rule would provide some qualitative benefits as it would enable training to become more consistent across employees, provide an

alternative method to satisfy the hands-on portion of the periodic refresher training requirement, reduce the risk of potential hazards or injury that may occur in a field training environment, and facilitate real-time feedback on performance of duties. This rule, if finalized as proposed, would result in cost savings. Railroads would no longer be required to submit waiver requests to be able to use virtual simulation for hands-on training under § 232.203(b)(8). In addition, all railroads, not just those granted a waiver, would have the flexibility to use three-dimensional virtual simulation to satisfy the hands-on portion of the periodic refresher training requirement.

B. E.O. 14192 (Unleashing Prosperity Through Deregulation)

E.O. 14192, Unleashing Prosperity Through Deregulation (90 FR 9065, Jan. 31, 2025), requires that for “each new [E.O. 14192 regulatory action] issued, at least ten prior regulations be identified for elimination.”⁴ Implementation guidance for E.O. 14192 issued by OMB (Memorandum M-25-20, Mar. 26, 2025) defines two different types of E.O. 14192 actions: an E.O. 14192 deregulatory action, and an E.O. 14192 regulatory action.⁵

An E.O. 14192 deregulatory action is defined as “an action that has been finalized and has total costs less than zero.” This proposed rulemaking is expected to have total costs less than zero, and therefore it would be considered an E.O. 14192 deregulatory action upon issuance of a final rule. While FRA affirms that each amendment proposed in this NPRM has a cost that is negligible or “less than zero” consistent with E.O. 14192, FRA requests comment on the extent of the cost savings for the changes proposed in this NPRM.

C. Regulatory Flexibility Act and E.O. 13272

⁴ Executive Office of the President. *Executive Order 14192 of January 31, 2025. Unleashing Prosperity Through Deregulation.* 90 FR 9065–9067 (Feb. 6, 2025).

⁵ Executive Office of the President. Office of Management and Budget. Guidance Implementing Section 3 of Executive Order 14192, Titled “Unleashing Prosperity Through Deregulation.” Memorandum M-25-20. Mar. 26, 2025.

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996,⁶ requires Federal agencies to consider the effects of the regulatory action on small business and other small entities and to minimize any significant economic impact. Accordingly, DOT policy requires an analysis of the impact of all regulations on small entities, and mandates that agencies strive to lessen any adverse effects on these businesses. The term *small entities* comprises small businesses and not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000 (5 U.S.C. 601(6)).

No regulatory flexibility analysis is required, however, if the head of an Agency or an appropriate designee certifies that the rule will not have a significant economic impact on a substantial number of small entities. This proposed rule would not preclude small entities from continuing practices that comply with part 232; it merely offers flexibilities that could result in cost savings, if a small entity or other regulated entity chooses to utilize those flexibilities. By extending this regulatory relief, many regulated entities, including small entities, would experience a cost savings. Consequently, FRA certifies that the proposed action would not have a significant economic impact on a substantial number of small entities.

In accordance with section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104–121, 110 Stat. 857), FRA wants to assist small entities in understanding this proposed rule so they can better evaluate its effects on themselves and participate in the rulemaking initiative. If the proposed rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please consult the person listed under **FOR FURTHER INFORMATION CONTACT**.

⁶ Pub. L. 104–121, 110 Stat. 857 (Mar. 29, 1996).

D. Paperwork Reduction Act

This proposed rule offers regulatory flexibilities, and it contains no new information collection requirements under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501, *et seq.* Therefore, an information collection submission to OMB is not required. The recordkeeping and reporting requirements already contained in part 232 became effective when it was approved by OMB on April 24, 2024. The OMB control number is 2130-0506, and the OMB approval expires on April 30, 2027.

E. Environmental Assessment

FRA has analyzed this rule for the purposes of the National Environmental Policy Act of 1969 (NEPA). In accordance with 42 U.S.C. 4336 and DOT NEPA Order 5610.1C, FRA has determined that this rule is categorically excluded pursuant to 23 CFR 771.118(c)(4), “[p]lanning and administrative activities that do not involve or lead directly to construction, such as: [p]romulgation of rules, regulations, and directives.” This rulemaking is not anticipated to result in any environmental impacts, and there are no unusual or extraordinary circumstances present in connection with this rulemaking.

Pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations, FRA has determined this undertaking has no potential to affect historic properties. FRA has also determined that this rulemaking does not approve a project resulting in a use of a resource protected by Section 4(f).

F. Federalism Implications

This proposed rule would not have a substantial effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Thus, in accordance with E.O. 13132, “Federalism” (64 FR 43255, Aug. 10, 1999), preparation of a Federalism Assessment is not warranted.

G. Unfunded Mandates Reform Act of 1995

This proposed rule would not result in the expenditure, in the aggregate, of \$100,000,000 or more, adjusted for inflation, in any one year by State, local, or Indian Tribal governments, or the private sector. Thus, consistent with section 202 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4, 2 U.S.C. 1532), FRA is not required to prepare a written statement detailing the effect of such an expenditure.

H. Energy Impact

E.O. 13211, Actions Concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use, 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare a Statement of Energy Effects for any “significant energy action.” FRA has evaluated this proposed rule in accordance with E.O. 13211 and determined that this proposed rule is not a “significant energy action” within the meaning of E.O. 13211.

I. E.O. 13175 (Tribal Consultation)

FRA has evaluated this proposed rule in accordance with the principles and criteria contained in E.O. 13175, Consultation and Coordination with Indian Tribal Governments (Nov. 6, 2000). The proposed rule would not have a substantial direct effect on one or more Indian tribes, would not impose substantial direct compliance costs on Indian tribal governments, and would not preempt tribal laws. Therefore, the funding and consultation requirements of E.O. 13175 do not apply, and a tribal summary impact statement is not required.

J. International Trade Impact Assessment

The Trade Agreement Act of 1979⁷ prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. This

⁷ 19 U.S.C. ch. 13.

rulemaking is purely domestic in nature and is not expected to affect trade opportunities for U.S. firms doing business overseas or for foreign firms doing business in the United States.

K. Privacy Act Statement

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, to <https://www.regulations.gov>, as described in the system of records notice, DOT/ALL-14 FDMS, accessible through www.transportation.gov/privacy. To facilitate comment tracking and response, we encourage commenters to provide their name, or the name of their organization; however, submission of names is completely optional. Whether or not commenters identify themselves, all timely comments will be fully considered. If you wish to provide comments containing proprietary or confidential information, please contact the agency for alternate submission instructions.

L. Rulemaking Summary

As required by 5 U.S.C. 553(b)(4), a summary of this rule can be found at [regulations.gov](http://www.regulations.gov), Docket No. FRA-2025-0127, in the SUMMARY section of this proposed rule.

List of Subjects in 49 CFR Part 232

Penalties; Railroad safety; Reporting and recordkeeping requirements.

The Proposed Rule

For the reasons discussed in the preamble, FRA proposes to amend part 232 of chapter II, subtitle B of title 49, Code of Federal Regulations as follows:

PART 232—BRAKE SYSTEM SAFETY STANDARDS FOR FREIGHT AND OTHER NON-PASSENGER TRAINS AND EQUIPMENT; END-OF-TRAIN DEVICES

1. The authority citation for part 232 continues to read as follows:

Authority: 49 U.S.C. 20102-20103, 20107, 20133, 20141, 20301-20303, 20306, 21301-20302, 21304; 28 U.S.C. 2461, note; and 49 CFR 1.89.

2. Amend § 232.203 by revising the second sentence of paragraph (b)(8) to read as follows:

§ 232.203 Training requirements.

* * * * *

(b) * * *

(8) * * * Observation and evaluation of actual performance of duties or three-dimensional virtual simulation may be used to meet the “hands-on” portion of this requirement, provided that such testing or training is documented as required in paragraph (e) of this section; and

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Issued in Washington, DC.

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Chief Counsel.