

**1111FEDERAL RAILROAD ADMINISTRATION**  
**Reflectorization of Rail Freight Rolling Stock**  
**(Title 49 Code of Federal Regulations Part 224)**  
**SUPPORTING JUSTIFICATION**  
**OMB Control No. 2130-0566; RIN 2130-AC77**

Summary of Submission

- This submission is a revision to the last approved submission pertaining to Title 49 Code of Federal Regulations Part 224 (The Reflectorization Standards or Part 224), that was approved by OMB on March 29, 2024, which expires March 31, 2027.
- The Federal Railroad Administration (hereafter “FRA” or the “Agency”) is publishing a final rule revising Part 224 titled Reflectorization of Rail Freight Rolling Stock; Codifying Existing Waivers in the Federal Register on January 27, 2026. See 91 FR 3375.
- Program change decreased the burden by 72 hours and decreased responses by 9.
- The adjustments increased the burden by 41 hours and decreased responses by 20.
- The answer to question number 12 itemizes all information collection requirements.
- The answer to question number 15 itemizes all adjustments.

**1. Circumstances that make collection of the information necessary.**

In 1994, Congress passed the Federal Railroad Safety Authorization Act of 1994, Public Law 103-440 (“Act”). The Act added § 20148 to Title 49 of the United States Code. Section 20148 required FRA to conduct a review of the Department of Transportation’s rules with respect to visibility of railroad cars, and mandated that, if the review established that enhanced railroad visibility would likely improve safety in a cost-effective manner, the Secretary of Transportation initiate a rulemaking proceeding to prescribe regulations requiring enhanced visibility standards for railroad cars. Section 20148 specifically directed the Secretary to examine the use of reflectors. (*See* 49 U.S.C. 20148(b)(3)). Accordingly, FRA, as the Federal agency responsible for ensuring that America’s railroads are safe for the traveling public – and in direct response to a Congressional mandate – issued a final rule establishing The Reflectorization Standards, that require retroreflective material on the sides of rail freight cars and locomotives to enhance the visibility of trains in order to reduce the number of accidents at highway-rail grade crossings where train visibility is a contributing factor.<sup>1</sup>

Generally, FRA has provided two types of relief from Part 224’s requirements: (1) relief to Tourist, Historic, Excursion, Educational, Recreational, or Private (THEERP)

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<sup>1</sup> 70 FR 144, Jan. 3, 2005.

operations, because they do not typically travel over low visibility highway-rail grade crossings at nighttime; and (2) relief to allow the use of a performance-based method (comparator panels) to determine when to replace reflectorization sheeting. This final rule, FRA amends The Reflectorization Standards to codify waivers and remove the outdated implementation schedule. These changes will enhance safety, promote innovation, clarify existing requirements, and reduce unnecessary paperwork burdens.<sup>2</sup>

The amendments are consistent with the mandate of the Infrastructure Investment and Jobs Act (IIJA), which requires FRA to review and analyze certain longstanding waivers to determine whether incorporating the waivers into FRA's regulations is justified.

## **2. How, by whom, and for what purpose the information is to be used.**

The Reflectorization Standards contained in Part 224 outline the minimum performance specifications for new compliant sheeting to help motor vehicle operators see rail freight rolling stock at night and under conditions of poor visibility. They are intended to reduce the number and severity of highway-rail grade crossing accidents and deaths, injuries, and property damage resulting from those accidents.

FRA uses the information collected to verify that the person responsible for the car reporting mark is notified after the required visual inspection when the freight equipment has less than 80 percent of the required retroreflective sheeting present, undamaged, or unobscured. Further, FRA uses the information collected to verify that the required locomotive records of retroreflective sheeting defects found after inspection are kept in the locomotive cab or in a railroad accessible electronic database FRA can access upon request. Specifically, FRA uses the information collected to confirm that railroads/car owners meet the prescribed standards for the inspection and maintenance of the required retroreflective material.

This final rule would eliminate the need for railroads to submit petitions for waiver of compliance (and repeated extensions of those waivers every 5 years) from Part 224 for certain older railroad equipment used in THEERP operations, and eliminate the Federal government's need to review and approve the waiver petitions and extension requests. Codifying these waivers would also provide the railroad industry with regulatory certainty as to the applicability of Part 224 to equipment used for THEERP purposes, while enhancing safety.

Lastly, this final rule would allow railroads and private car owners to replace retroreflective sheeting based on performance, instead of time, thus increasing efficient use of resources and reducing environmental waste from discarding retroreflective sheeting prior to the end of its useful life.

## **3. Extent of automated information collection.**

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<sup>2</sup> 87 FR 43467 (July 21, 2022).

FRA strongly encourages the use of advanced information technology, wherever possible, to reduce burden on respondents. Specifically, under § 224.109(a), the inspecting railroad or contractor has the option to retain the required record (copy) of each such notification either in writing or electronically. Additionally, under § 224.109(b), records may be maintained either in the locomotive cab or in a secure and accessible electronic database that is available to FRA upon request.

For this information collection, about 100 percent of responses are submitted electronically to FRA upon request.

**4. Efforts to identify duplication.**

The information collection requirements – to FRA’s knowledge – are not duplicated anywhere.

Similar data are not available from any other source at this time.

**5. Efforts to minimize the burden on small businesses.**

The category of small businesses affected by Part 224 is all Class III freight railroads. Federal agencies may adopt their own size standards for small entities in consultation with the Small Business Administration and in conjunction with public comment. Pursuant to that authority, FRA has published a final policy that formally establishes “small entities” as railroads which meet the line haulage revenue requirements of a Class III railroad, which is annual carrier operating revenues of \$47.3 million or less after applying the Surface Transportation Board’s railroad revenue deflator formula, and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less.<sup>3</sup> FRA is using this definition for the final rule.

Based on railroads that report to FRA under Part 225 (Railroad Accidents/Incidents), FRA estimates the universe of small railroads consists of 745 Class III railroads. The final rule’s provision codifying waivers related to rail cars used in THEERP operations affects primarily the tourist railroads. FRA estimates there are 146 tourist railroads that are Class III railroads to which the final rule would apply. For the provision codifying the alternative method, FRA estimates 85 percent of the Class III universe that chooses to use the comparator panel to evaluate sheeting will be affected, or about 510 small railroads (745-146 x 85%).

In addition, FRA knows of one manufacturer of comparator panels, specifically Avery Dennison Corp. Avery Dennison employs more than 750 persons, the SBA threshold for large businesses. There are other manufacturers of retroreflective sheeting; in addition to Avery Dennison FRA is aware of ORAFOL Americas, Inc, a subsidiary of the ORAFOL

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<sup>3</sup> See 68 FR 24891 (May 9, 2003); 49 CFR part 209, app. C.

Group, that has purchased Reflexite Corp., and the 3M Co. Both ORAFOL and 3M currently do not make comparator panels and are large businesses.

To minimize burden, small entities that operate rate rail freight rolling stock used in THEERP operations will no longer need to file waivers for relief from the Reflectorization Standards.

**6. Impact of less frequent collection of information.**

This collection of information is another tool that enhances FRA's ability to promote and augment national rail safety, save lives, and reduce property damage by monitoring and enforcing, where necessary, the full reflectorization of freight cars and locomotive fleets by railroads and other car owners. Installation of reflective tape (reflectorization) increases the conspicuity/visibility of freight cars so that motorists can more readily identify them and better judge their speed and distance. This greater visibility will help prevent some accidents at highway-rail grade crossings, and will help to mitigate others by reducing the severity of those accidents which are unavoidable. The collection of information then aids both FRA's main mission and DOT's number one Strategic Goal (i.e., safe transportation of people and goods and the reduction of the number of injuries and fatalities and corresponding property damage which ensue from transportation related accidents/incidents).

**7. Special circumstances.**

All information collection requirements are in compliance with this section.

**8. Compliance with 5 CFR 1320.8.**

FRA published a Final Rulemaking in the Federal Register on January 27, 2026<sup>4</sup> titled Reflectorization of Rail Freight Rolling Stock; Codifying Existing Waivers.

FRA received two comments in response to the NPRM published on July 21, 2022<sup>5</sup>. These comments included the Association of American Railroads (AAR) and the Railway Supply Institute (RSI) both in support of the proposed updates. The details of these comments and FRA response are covered in the final rule document.

**9. Payments or gifts to respondents.**

There are no monetary payments provided or gifts made to respondents associated with the information collection requirements contained in this regulation.

**10. Assurance of confidentiality.**

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<sup>4</sup> 91 FR 3375

<sup>5</sup> 87 FR 43467

No assurances of confidentiality were made by FRA. Information collected is not of a private nature.

**11. Justification for any questions of a sensitive nature.**

There are no questions or information of a sensitive nature, or data that would normally be considered private matters contained in this collection of information.

**12. Estimate of burden hours for information collected.**

The estimates for the respondent universe, annual responses, and average time per responses are based on the experience and expertise of FRA's Office of Railroad Infrastructure and Mechanical Equipment.

The number of United States retroreflective manufacturers is estimated at two. Both make retroreflective material that complies with FRA's regulation. According to the Association of American Railroads (AAR) publication Railroad Facts (2019), the number of freight cars in the United States is 1,675,511, while the number of locomotives is 24,597.

CFR Section	Respondent Universe	Total Annual Responses (A)	Average Time per Response (B)	Total Annual Burden (C = A * B)	Wage Rate <sup>6</sup>	Total Cost Equivalent U.S.D (D = C * wage rates)	PRA Analyses
<b>224.7 Waivers</b>							
—Waivers (Revised requirement due to proposed revision under § 224.3)	727 railroads and freight car owners	1 petition	8 hours	8 hours	\$90.19	\$721.52	Any person subject to a requirement of this Part may petition the Administrator for a waiver of compliance with such a requirement. The filing of such a petition does not affect that person's responsibility for compliance with that requirement while the petition is being considered. Each petition for waiver under this section must be filed in the manner and contain the information required by Part 211 of this chapter.
<b>224.15 Special approval procedures</b>							
—(b) Petitions for special approval of alternative standard	2 manufacturers <sup>7</sup>	1 petition	40 hours	40 hours	\$90.19	\$3,607.60	Each petition for special approval of an alternative standard must be submitted to the Docket Clerk, Office of Chief Counsel, Federal Railroad Administration, RCC-10, Mail Stop-10, 1200 New Jersey Avenue, SE, Washington, D.C. 20590. Note: PRA requirements for alternative standards (§24.103(e)) are included in

<sup>6</sup> Surface Transportation Board (STB), *Quarterly Wage Form A&B Data* (2024). Compiled from Class I railroad data reported on Wage Form A&B for year 2024. Calculated as: Wage (\$/hour) = sum of *compensation for time worked and paid for straight time rates* (\$) for Class I railroads ÷ sum of *service hours for time worked and paid for straight time rates* (hours) for Class I railroads. Available: <https://www.stb.gov/reports-data/economic-data/quarterly-wage-ab-data/>.

<sup>7</sup> Association of American Railroads (AAR), *AAR Standard S-916* (Feb. 22, 2019). Available: <https://aar.com/standards/approvals/S-916.pdf>. Based on the AAR-approved products for use as the alternative method for evaluating retroreflective sheeting effectiveness. Of these, only one is currently produced by a manufacturer.

							this section.
—(d)(3) Hearing on the petition in accordance with the procedures provided in § 211.25	FRA does not believe that it will not need any additional information to consider any submitted petitions under the above requirement. Consequently, there is no burden associated with this provision.						
—(e) Disposition of petitions	This requirement is exempt from PRA under 5 CFR 1320.4(2).						
<b>224.103 Characteristics of retroreflective sheeting</b>							
—(d) Certification	The requirements for this Part are included as part of the standard manufacturing process.						
<b>224.109 Inspection and replacement of missing, damaged, or obscured retroreflective sheeting repair and replacement</b>							
—(a) Railroad freight cars— Railroads notification to person responsible for reporting mark after visual inspection for presence and condition when freight car on either side has less than 80% reflective sheeting of the damaged, obscured, or missing sheeting <i>(Revised text, section heading)</i>	AAR /400 car shops	33,510 notification s	5 minutes	2,793 hours	\$72.0 1	\$201,087.9 3	<p>The inspecting railroad or contractor shall retain a written or electronic copy of each such notification made for at least two years from the date of the notice and shall make these records available for inspection and copying by the FRA upon request.</p> <p>According to AAR Interchange Rule 3, freight cars must undergo a Single Car Air Brake Test (SCABT) once every 5 years. FRA estimates about 10% (1,675,511 freight cars divided by 5 years) of these cars will have missing or damaged retroreflective sheeting repaired or replaced. It takes 5 minutes to complete each notice of defects.</p>

—(b) Locomotive record of freight retroreflective sheeting defects found after inspection kept in locomotive cab or in railroad accessible electronic database that FRA can access upon request.	727 railroads and freight car owners	2,460 records	5 minutes	205 hours	\$72.0 1	\$14,762.05	<p>A record of the defect is maintained in the locomotive cab or in a secure and accessible electronic database to which FRA is provided access upon request.</p> <p>FRA estimates that approximately 10% of the 24,597 locomotives will have less than 80 percent retroreflective material on them because they are damaged, obscured, or missing at the time of the required annual locomotive inspection. It takes 5 minutes to record each defect.</p>
<b>224.111 Evaluation and replacement of 10-year old or underperforming retroreflective sheeting</b>							
—(c) Performance-based replacement <i>(Revised requirement)</i>	The burden for this requirement is covered under 49 CFR § 232.305 (2130-0008), or a locomotive receives an annual inspection required by 49 § CFR 229.27 (OMB Control Number 2130-0004).						
—(c)(iv) Labelling	The cost of labeling is included as part of the manufacturing process and consequently there is no burden associated.						
Total <sup>8</sup>	727 Railroads and 400 car shops	35,972 responses		3,046 hours		\$220,179.1 0	

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<sup>8</sup> Totals may not add due to rounding.



**13. Estimate of total annual costs to respondents.**

There is no additional cost to the respondents beyond the burden listed in question 12.

**14. Estimate of Cost to Federal Government.**

To estimate the government administrative cost, the 2025 Office of Personnel Management wage rates were used for the Washington, D.C. area. FRA uses an hourly wage rate of \$135.42 for each government administrative hour.<sup>9</sup> FRA estimates that it takes approximately \$3,859.47 (28.5 hours times \$135.42) annually to review documents.

**(1) Annual Review of 1 General Petitions for Waiver under § 224.7.**

FRA estimates that an Office of Safety Staff Specialist spends approximately 8 hours per petition, or a total of 8 hours annually perusing these petitions.

**(2) Annual Review of one (1) Special Approval Procedure Petitions (for alternative standards) under § 224.15.**

- FRA estimates that an Office of Safety Staff Technical Specialist/Engineer spends approximately 20 hours per petition, or a total of 20 hours annually thoroughly reviewing and evaluating these petitions.
- FRA estimates that an agency attorney spends approximately 30 minutes per petition to ensure that they comply with legal requirements and agency regulations.

**15. Explanation of program changes and adjustments.**

This is a revision to a current collection of information. The current OMB inventory for this information collection shows a total burden of 3,159 hours and 36,001 responses, while the requesting inventory estimates a total burden of 3,046 hours and 35,972 responses. Overall, the burden for this submission has decreased by 113 hours and decreased by 29 responses due to program change and adjustments.

**Program Change**

CFR Section	Total Annual Responses			Total Annual Burden Hours		
	Previous Submission	Current Submission	Difference	Previous Submission	Current Submission	Difference
224.7—Waivers (Revised requirement due to proposed revision under § 224.3)	10	1 petition	-9	80	8	-72

- Program change decreased the burden by 72 hours and decreased responses by 9.

<sup>9</sup> GS-14, Step 5 hourly wage rate of \$77.38 x 75% overhead = \$135.42.

## **Adjustments**

CFR Section	Total Annual Responses			Total Annual Burden Hours		
	Previous Submission	Current Submission	Difference	Previous Submission	Current Submission	Difference
224.15(b)—Special approval procedures—Petitions for special approval of alternative standard	2	1	-1	80	40	-40
224.109(a)—Inspection, repair, and replacement—Railroad freight cars—Railroads notification to person responsible for reporting mark after visual inspection for presence and condition when freight car on either side has less than 80% reflective sheeting of the damaged, obscured, or missing sheeting	33,380	33,510.22	130	2,782	2,793.50	11
—(b) Locomotive record of freight retroreflective sheeting defects found after inspection kept in locomotive cab or in railroad accessible electronic database that FRA can access upon request.	2,609 records	2,460 records	-149	217 hours	205 hours	-12

- The adjustments decreased the burden by 41 and decreased responses by 20.

### **16. Publication of results of data collection.**

FRA does not plan to publish the information collected.

### **17. Approval for not displaying the expiration date for OMB approval.**

FRA intends to display the expiration date.

### **18. Exception to certification statement.**

No exceptions are taken at this time.