**FEDERAL 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 January 7, 2021, which expires January 31, 2024.
  + FRA is publishing a Notice of Proposed Rulemaking (NPRM) revising Part 224 titled Reflectorization of Rail Freight Rolling Stock; Codifying Existing Waivers in the Federal Register on July 21, 2022. See 87 FR 43467. FRA plans to respond to any comments received in response to the NPRM in the final rule.
  + Program change decreased the burden by 72 hours and decreased responses by 9.
  + The adjustments increased the burden by 38 hours and decreased responses by 17.
  + 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.[[1]](#footnote-2)

The Reflectorization Standards contain minimum safety requirements 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. Generally, FRA has provided two types of relief from part 224’s requirements: (1) relief to Tourist, Historic, Excursion, Educational, Recreational, or Private (THEERP) 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. In this NPRM, FRA proposes to amend The Reflectorization Standards to codify waivers and remove the outdated implementation schedule. The proposed changes are expected to enhance safety, promote innovation, clarify existing requirements, and reduce unnecessary paperwork burdens.[[2]](#footnote-3)

This proposed rule would respond to the mandate in section 22411 of the Infrastructure Investment and Jobs Act (Pub. L. 117-58). Section 22411 requires the Secretary to review and analyze existing waivers issued under 49 U.S.C. 20103 that have been in continuous effect for a 6-year period to determine whether issuing a rule consistent with the waiver is in the public interest and consistent with railroad safety. After conducting the appropriate analysis, if the Secretary concludes that it would be in the public interest and consistent with railroad safety to initiate a rulemaking to incorporate into the regulations the relevant aspects of the waivers analyzed, section 22411 specifically authorizes the Secretary to initiate such a rulemaking.

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

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. Finally, 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 proposed rule would eliminate the need for railroads to submit waiver petitions (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.

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

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 Regulatory Flexibility Act of 1980 (5 U.S.C. 601 et seq.) and Executive Order 13272, “Proper Consideration of Small Entities in Agency Rulemaking,” (67 FR 53461 (Aug. 16, 2002)) require agency review of proposed and final rules to assess their impacts on small entities. An agency must prepare an Initial Regulatory Flexibility Analysis (IRFA) unless it certifies that a rule, if promulgated, would not have a significant economic impact on a substantial number of small entities. FRA has not determined whether this proposed rule would have a significant economic impact on a substantial number of small entities, and has therefore prepared this IRFA. FRA seeks comment from small entities on the economic impacts of this proposed rule.

“Small entity” is defined in 5 U.S.C. 601 as a small business concern that is independently owned and operated and is not dominant in its field of operation. The U.S. Small Business Administration (SBA) has authority to regulate issues related to small businesses, and stipulates in its size standards that a “small entity” in the railroad industry includes a for-profit “line-haul railroad” that has fewer than 1,500 employees and a “short line railroad” with fewer than 500 employees.

Federal agencies may adopt their own size standards for small entities in consultation with SBA and in conjunction with public comment. Under that authority, FRA has published a final statement of agency policy that formally establishes “small entities” or “small businesses” as railroads, contractors, and hazardous materials shippers that meet the revenue requirements of a Class III railroad as set forth in 49 CFR 1201.1-1, which is $20 million or less in inflation-adjusted annual revenues; and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less. The $20 million limit is based on the Surface Transportation Board’s revenue threshold for a Class III railroad carrier. Railroad revenue is adjusted for inflation by applying a revenue deflator formula in accordance with 49 CFR 1201.1-1. The current threshold is $40.4 million. FRA is using this definition for the proposed rule.

Based on railroads that report to FRA under part 225 (Railroad Accidents/Incidents), FRA estimates the universe of small railroads consists of 744 Class III railroads. The NPRM’s provision codifying waivers related to rail cars used in THEERP operations affects primarily the tourist railroads. FRA estimates there are 123 tourist railroads that are Class III railroads to which the NPRM would apply. Although some of these tourist railroads may have been excepted before this rulemaking because they are not on the general railroad system of transportation, and are excepted under existing § 224.3, it may have been unclear to stakeholders which railroads were exempt. 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 632 small railroads.

In addition, FRA knows of one manufacturer of comparator panels, specifically Avery Dennison Corp. Avery Dennison employs more than 750 persons, the SBA benchmark for large businesses. There are other manufacturers of retroreflective sheeting; FRA is aware of ORAFOL Americas, Inc, a subsidiary of the ORAFOL Group, that has purchased Reflexite Corp., and the 3M Co. Both manufacturers currently do not make comparator panels and are large businesses.

**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 is publishing a Notice of Proposed Rulemaking (NPRM) revising Part 224 titled Reflectorization of Rail Freight Rolling Stock; Codifying Existing Waivers in the Federal Register on July 21, 2022. See 87 FR 43467. FRA plans to respond to any comments received in response to the NPRM in the final rule.

**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.**

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 retro-reflective manufacturers is estimated at two. Both make retro-reflective 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 1,669,000, while the number of locomotives is 24,597.

FRA is including the dollar equivalent cost for each of the itemized hours below using STB’s Full-Year Wage A&B data series as the basis for each cost calculation. For professional and administrative staff, the hourly wage rate is $77 per hour ($44.27 \* 1.75 = $77). For maintenance of equipment and stores, the hourly wage rate is $61 ($33.37 \* 1.75).

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| CFR Section | Respondent Universe | Total Annual Responses (A) | Average Time per Response (B) | Total Annual Burden (C = A \* B) | Total Cost Equivalent in U.S. Dollar  (D = C \* wage rates) | PRA Analyses |
| 224.7—Waivers (Revised requirement due to proposed revision under § 224.3) | 722 railroads and freight car owners | 1petition | 8 hours | 8 hours | $619.52 | 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.  It is estimated that it will take about 8 hours to complete each waiver petition and send it to FRA. |
| 224.15(b)—Special approval procedures—Petitions for special approval of alternative standard | 2 manufacturers | 1 petition | 40 hours | 40 hours | $3,097.60 | 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.  It is estimated that it will take about 40 hours to complete each petition for special approval. |
| —(d) Public comment on special approval procedures/petitions | Manufacturers, railroads, or  general public | 3 comments on special petition | 1 hour | 3 hours | $232.32 | FRA will provide a period of not less than 30 days from the date of publication of the notice in the Federal Register during which any person may comment on the petition.  It is estimated that it will take about an hour to complete each comment. |
| —(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 | Exempted from PRA under 5 CFR 1320.4(2). | | | | | |
| 224.101—General requirements | The burden for this requirement is covered under § 224.15. | | | | | |
| 224.103(d)—Characteristics retroreflective sheeting—Certification | There would be no burden involved for new cars. Additionally, the cost for stamping, etching, molding, printing is included as part of the manufacturing process and consequently there is no burden associated. | | | | | |
| 224.103(e)—Characteristics retroreflective sheeting—Alternative standards | The burden for this requirement is covered under § 224.15. | | | | | |
| 224.109(a)—Inspection and replacement of missing, damaged, or obscured retroreflective sheeting—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 (Revised text, section heading) | AAR/400 car shops | 33,510.22 notifications of defect and restriction | 5 minutes | 2,792.52 hours | $167,244.02 | 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.  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. |
| —(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. | 722 railroads and freight car owners | 2,459.70 records of defect and restriction | 5 minutes | 204.98 hours | $12,276.25 | 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.  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. |
| 224.111(c)—Evaluation and replacement of 10-year-old or underperforming retroreflective sheeting—Performance-based replacement | 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). | | | | | |
| 224.111(c)(iv)—Evaluation and replacement—Labelling | The cost of labeling is included as part of the manufacturing process and consequently there is no burden associated. | | | | | |
| Total[[3]](#footnote-4) | 722 railroads and 400 car shops | 35,975  responses | N/A | 3,049 hours | $183,470 | N/A |

**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 2020 Office of Personnel Management wage rates were used for the Washington, D.C. area. FRA uses an hourly wage rate of $115.68 for each government administrative hour.[[4]](#footnote-5) FRA estimates that it takes approximately $2,429 (28.5 hours times $115.68) 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 Six (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 3,049 hours and 35,975 responses. Overall, the burden for this submission has decreased by 111 hours and decreased by 26 responses due to program change and adjustments.

**Program Change**

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| CFR Section | Responses & Avg. Time (Previous Submission) | Responses & Avg. Time (This Submission) | Burden Hours (Previous Submission) | Burden Hours (This Submission) | Difference (plus/minus) |
| 224.7—Waivers (Revised requirement due to proposed revision under § 224.3) | 10 petitions  (8 hours) | 1 petition  (8 hours) | 80 hours | 8 hours | -72 hours  -9 responses  *The reduction is due to program change.* |

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

**Adjustments**

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| --- | --- | --- | --- | --- | --- |
| CFR Section | Responses & Avg. Time (Previous Submission) | Responses & Avg. Time (This Submission) | Burden Hours (Previous Submission) | Burden Hours (This Submission) | Difference (plus/minus) |
| 224.15(b)—Special approval procedures—Petitions for special approval of alternative standard | 2 petitions  (40 hours) | 1 petition  (40 hours) | 80 hours | 40 hours | -40 hours  -1 response  *The reduction is due to review of estimated number of submissions expected to be received.* |
| —(d) Public comment on special approval procedures/petitions | 0 | 3 comments  (1 hour) | 0 | 3 hours | +3 hours  +3 responses  *The increase in burden is due to review of estimated number of submissions expected to be received.* |
| 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 notifications (5 minutes) | 33,510.2 notifications (5 minutes) | 2,782 hours | 2,792.5 hours | +10.52 hours  + 130.22 responses  *The number of submissions has increased after a review of the source data from AAR.* |
| —(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  (5 minutes) | 2,459.7 records  (5 minutes) | 217 hours | *204.98 hours* | *-12.02 hours*  *-148.90 responses*  *The number of submissions has decreased after a review of the source data from AAR.* |

* + The adjustments decreased the burden by 38 and decreased responses by 17.

**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 is not seeking approval to not display the expiration date.

**18. Exception to certification statement.**

No exceptions are taken at this time.

1. 70 FR 144, Jan. 3, 2005. [↑](#footnote-ref-2)
2. 87 FR 43467 (July 21, 2022). [↑](#footnote-ref-3)
3. Totals may not add due to rounding. [↑](#footnote-ref-4)
4. GS-14, Step 5 annual wage rate of $66.10 x 75% overhead = $115.68. [↑](#footnote-ref-5)