

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

Summary of Submission

- This submission is a request for an extension without change (with changes in estimates) of the last three-year approval granted by the Office of Management and Budget (OMB) on November 21, 2017, and which expires November 30, 2020.
- The Federal Railroad Administration (FRA) published the required 60-day *Federal Register* Notice on July 22, 2020. See 85 FR 44357. FRA received no comments in response to this Notice.
- The total number of burden hours requested for this information collection is 3,159 hours. The total number of burden hours previously approved by OMB was 8,467 hours.
- The total number of responses requested for this information collection is 36,001. The total number of responses previously approved by OMB was 34,675.
- Overall, the adjustments decreased the burden by 5,308 hours and increased responses by 1,326 after a thorough review of the data.
- The answer to question number 12 itemizes information collection requirements.
- The answer to question number 15 itemizes adjustments.
- There are no program changes at this time.

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 to require use of 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

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

The information is used by FRA to ensure that freight rolling stock owners follow the stipulated timeframe for replacing/repairing retroreflective material on the sides of freight rolling stock (freight cars and locomotives) that is damaged, obscured, or missing in order to enhance the visibility of trains. Under section 224.109, retroreflective sheeting on freight cars (and locomotives) subject to this part must be inspected for presence and condition whenever a car undergoes a single air brake test required under 49 CFR 232.305. If at the time of inspection less than 80 percent of the amount of sheeting required under § 224.105 on either side of a car is present, not damaged, and not obscured, the inspecting railroad or contractor shall promptly notify the person responsible for the reporting mark, as indicated in the Universal Machine Language Equipment Register, of the damaged, obscured, or missing sheeting (unless the inspecting railroad or contractor is the person responsible for the reporting mark). 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. Any person notified of a defect under this section shall have nine months (270 calendar days) from the date of notification to repair or replace the damaged, obscured, or missing sheeting. Where the inspecting railroad or contractor is the person responsible for the reporting mark, the person shall have nine months (270 calendar days) from the date of the inspection to repair or replace the damaged, obscured, or missing sheeting. Since notification records must be furnished to FRA inspectors upon request, agency inspectors review them as part of their routine duties to ensure compliance Part 224.

Also, FRA reviews waiver petitions from railroads and car owners to make a determination whether it is appropriate, safe, and consistent with the public interest to grant an exception to any of the requirements of this Part. Moreover, FRA reviews petitions for special approval of alternative standards to ensure that appropriate data and analysis are provided by railroads/freight rolling stock owners regarding a proposed alternative standard, and to verify that any proposed alternative standard actually provides at least an equivalent level of safety and meets the requirements of this Part.

In sum, the information collected enables FRA to promote and enhance railroad safety. The information collected allows FRA to closely monitor the efforts of railroads/freight rolling stock owners to fully reflectorize their fleets, and maintain in good condition these reflectorized freight cars and locomotives. Full implementation/maintenance of freight rolling stock fleet reflectorization serves to provide much greater visibility of rail cars/locomotives to motorists, and helps to reduce the risk of accidents/incidents at highway-

¹ 70 FR 62176, Oct. 28, 2005.

rail grade crossings nationwide in which poor visibility of rail cars acts as a main or contributing factor.

3. Extent of automated information collection.

FRA highly encourages the use of advanced information technology, wherever possible, to reduce burden on respondents. In keeping with the requirements of the Paperwork Reduction Act and the Government Paperwork Elimination Act, FRA has provided respondents with the option for electronic submission of required information. Specifically, under § 224.109(a), railroad freight rolling stock owners must be notified by the inspecting railroad or contractor whenever freight cars undergoing single car air brake test inspections have more than 20 percent of the amount of retroreflective sheeting (required under § 224.105) located on either side of the car that is damaged, obscured, or missing. The inspecting railroad or contractor has the option to retain the required record (copy) of each such notification either in writing or electronically.

Under § 224.109(b), locomotives undergoing the annual inspection required under 49 CFR 229.27 must have the retroreflective sheeting visually inspected for presence and condition. Locomotives that have more than 20 percent of the amount of retroreflective sheeting required under § 224.105 that is damaged, obscured, or missing must have that damaged, obscured, or missing sheeting repaired or replaced. If conditions at the time of inspection are such that adequate repairs cannot be applied, or if sufficient material is not available, such application can be completed at the next forward location where conditions permit, provided a record is maintained. This record may be maintained either in the locomotive cab or in a secure and accessible electronic database that is available to FRA upon request.

According to FRA's Part 224 (Reflectorization) program specialist, approximately 100 percent of responses are now 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 requirements of this Part do not apply to freight railroads that operate only on track inside an installation that is not part of the general railroad system of transportation, rapid transit operations within an urban area that are not connected to the general system of transportation, or locomotives or passenger cars used exclusively in passenger service.

6. Impact of less frequent collection of information.

If this information is not conducted or is conducted less frequently, FRA's national rail safety program will be considerably hampered. Specifically, without this collection of information, FRA would have no means to monitor and, where necessary, enforce railroads/car owners' compliance with Part 224 requirements for the reflectorization of their freight cars/locomotives and maintenance of the reflectorization on these cars/locomotives in good condition. The consequence of such a failure is likely to be a greater number of collisions between motorists and train cars at highway-rail grade crossings, particularly collisions where cars run-into-trains ("RIT" accidents) at night time or during other times of limited visibility, in which lack of conspicuity or visibility played a decisive or contributing role in the causation of the accident/incident.

Moreover, collisions between trains and motor vehicles may result in damage to the rail equipment and often cause significant delays and disruptions to rail operations along that segment of track. Such collisions then have a variety of human and economic consequences.

In sum, 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.

As required by the Paperwork Reduction Act of 1995, FRA published a notice in the Federal Register on July 22, 2020, soliciting comment on this particular information collection.² FRA received no comments pertaining to this collection of information in response to this notice.

9. Payments or gifts to respondents.

² 85 FR 44357.

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 26,086.

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$).

§ 224.7 Waivers

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.

FRA estimates that approximately 10 waiver petitions will be filed by railroads/car owners each year under the above requirement. It is estimated that it will take approximately eight (8) hours to complete each waiver petition and send it to FRA. Total annual burden for this requirement is 80 hours.

Respondent Universe:	746 Railroads/Freight Rolling Stock Owners
Burden time per response:	8 hours
Frequency of Response:	On occasion
Annual number of Responses:	10 waiver petitions
Annual Burden:	80 hours
Annual Cost:	\$6,160 (\$77 x 80 hours)

Calculation: 10 waiver petitions x 8 hours = 80 hours

§ 224.15 Special Approval Procedures³

(b) Petitions. Each petition for special approval of an alternative standard must contain the following: (i) The name, title, address, and telephone number of the primary person to be contacted with regard to the petition; (ii) The alternative proposed, in detail, to be substituted for the particular requirements of this Part; and (iii) Appropriate data and analysis establishing that the alternative will provide at least an equivalent level of safety and meet the requirements of § 224.103(e).

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.

FRA estimates that approximately two (2) petitions for special approval of an alternative standard will be filed each year under the above requirement. It is estimated that it will take approximately 40 hours to complete each petition for special approval. Total annual burden for this requirement is 240 hours.

Respondent Universe:	2 Manufacturers
Burden time per response:	40 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 petitions for special approval
Annual Burden:	80 hours
Annual Cost:	\$6,160 (\$77 x 80 hours)

Calculation: 2 petitions for special approval x 40 hours = 80 hours

(d) Public comment. 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.

FRA estimates that zero comments will be received. Consequently, there is no burden associated with the above requirement

³ Includes burdens associated with §§ 224.101 and 224.103(e).

(d)(3) In the event FRA determines that it requires additional information to appropriately consider the petition, FRA will conduct a hearing on the petition in accordance with the procedures provided in § 211.25 of this chapter.

FRA does not believe that it will not need any additional information to consider any submitted petitions and thus will not need to conduct a hearing on any of these petition under the above requirement. Consequently, there is no burden associated with this provision.

Total annual burden for this entire requirement is 160 hours (80 + 80).

§ 224.103 Characteristics of Retroreflective Sheeting

(a) Certification. The characters “FRA-224”, constituting the manufacturer’s certification that the retroreflective sheeting conforms to the requirements of paragraphs (a) through (c) of this section, must appear at least once on the exposed surface of each piece of sheeting in the final application. The characters must be a minimum of three millimeters high, and must be permanently stamped, etched, molded, or printed within the product, and each certification must be spaced no more than four inches apart.

There is zero burden involved in this requirement because it takes the manufacturers the same amount of time to make the sheeting with or without the characters stipulated above. Additionally, there is no cost involved regarding the above requirement because the cost for stamping, etching, molding or printing is included as part of the manufacturing process.

§ 224.109 Inspection, Repair, and Replacement

(a) Railroad Freight Cars. Retroreflective sheeting on railroad freight cars subject to this part must be visually inspected for presence and condition whenever a car undergoes a single car air brake test required under 49 CFR 232.305. If at the time of inspection less than 80 percent of the amount of sheeting required under § 224.105 (§ 224.107 in the case of freight cars subject to § 224.107(a)(3)) on either side of a car is present, not damaged, and not obscured, the inspecting railroad or contractor must promptly notify the person responsible for the reporting mark, as indicated in UMLER, of the damaged, obscured, or missing sheeting (unless the inspecting railroad or contractor is the person responsible for the reporting mark). The inspecting railroad or contractor must retain a written or electronic copy of each such notification made for at least two years from the date of the notice, and must 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% of these cars will have

missing or damaged retroreflective sheeting repaired or replaced. Accordingly, about 33,380 freight cars (1,669,000 freight cars/5 = 333,800 freight cars * 10%) will undergo a SCABT and require replacement of retroreflective sheeting. It takes 5 minutes to complete each notice of defects. Total annual burden for this requirement is 2,782 hours.

Respondent Universe:	AAR + 300 Independent Car Shops
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	33,380 notifications
Annual Burden:	2,782 hours
Annual Cost:	\$161,356 (\$58 x 2,782 hours)

Calculation: 33,380 notifications x 5 minutes = 2,782 hours

(b) Locomotives. Retroreflective sheeting must be visually inspected for presence and condition when the locomotive receives the annual inspection required under 49 CFR 229.27 of this chapter. If at the time of inspection less than 80 percent of the amount of sheeting required under § 224.105 (§ 224.107 in the case of locomotives subject to § 224.107(b)(3)) on either side of a locomotive is present, not damaged, and not obscured, the damaged, obscured or missing sheeting must be repaired or replaced within nine months (270 calendar days) from the date of inspection, provided 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 26,086 locomotives, or approximately 2,609 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. Total annual burden for this requirement is 217 hours.

Respondent Universe:	746 Railroads/Freight Rolling Stock Owners
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	2,609 defect/restriction records
Annual Burden:	217 hours
Annual Cost:	\$12,586 (\$58 x 217 hours)

Calculation: 2,609 defect/restriction records x 5 minutes = 217 hours

Total annual burden for this entire requirement is 2,999 hours (2,782 + 217).

Total annual burden for this entire information collection requirement is **3,159 hours**, and the total annual dollar cost equivalent for these burden hours is **\$180,102**.

13. Estimate of total annual costs to respondents.

There is no additional cost to respondents relating to this collection of information since respondents, who already have the use of advanced information technology to transmit notifications and keep required records.

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 FRA estimates that it takes approximately 43.5 hours annually to review documents.

(1) Annual Review of 10 General Petitions for Waivers under § 224.7. FRA estimates that an Office of Safety Staff Specialist spends approximately 15 minutes per petition, or a total of 2.5 hours annually perusing these petitions.

(2) Annual Review of Six (2) 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 40 hours annually thoroughly reviewing and evaluating these petitions.
- FRA estimates that an agency attorney spends approximately 30 minutes per petition, or a total of 1 hour annually examining special approval procedures petitions to ensure that they comply with legal requirements and agency regulations.

The total cost to the Federal Government is \$5,032 (43.5 hours times \$115.68) for this information collection request.

15. Explanation of program changes and adjustments.

This is an extension without change (with changes in estimates) to a current collection of information.

The current OMB agency inventory for this information collection exhibits a total burden of 8,467 hours and 34,675 responses, while the present submission reflects a total burden of 3,159 hours and 36,001 responses. Hence, there is a total decrease in burden of 5,308 hours and increased responses by 1,326. The decrease in burden is solely the result of adjustments, which are completely delineated in the table below.

FRA determined many of the estimates were initial estimates and outdated. Moreover, other estimates were not derived from PRA requirements, thus leading to the increased

⁴ GS-14, Step 5 annual wage rate of \$66.10 x 75% overhead = \$115.68.

burden hours, which were decreased accordingly. For the most part, the reduction is due to review of time to complete a notification and keep a record. The previous estimate contained non-PRA estimates, such as, inspection and repair.

TABLE FOR ADJUSTMENTS

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	6 petitions (40 hours)	2 petitions (40 hours)	240 hours	80 hours	-160 hours -4 responses <i>The reduction is due to review of estimated number of submissions expected to be received.</i>
—(d) Public comment on special approval procedures/petitions	2 comments (8 hours)	0	16 hours	0	-16 hours - 2 responses <i>FRA estimates that zero comments will be received</i>
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	32,000 notifications (14 minutes)	33,380 notifications (5 minutes)	7,467 hours	2,782 hours	-4,685 hours + 1,380 responses <i>The reduction is due to review of time to complete a notification. The previous estimate contained non-PRA estimates, such as, inspection and repair. The amount of time it takes to prepare a notice is about 5 minutes.</i> <i>The number of submissions has increased after a review of the source data from AAR.</i>
—(b) Locomotive record of freight retroreflective sheeting defects found after inspection kept in locomotive cab or in railroad accessible electronic database	2,657 records (15 minutes)	2,609 records (5 minutes)	664 hours	217 hours	-447 hours -49 responses <i>The reduction is due to review of estimated number of submissions expected to be received and estimated time to complete a record. The previous estimate contained non-PRA estimates, such as, inspection and repair. The</i>

that FRA can access upon request.					<p><i>amount of time it takes to record a defect is about 5 minutes.</i></p> <p><i>The number of submissions has decreased after a review of the source data from AAR.</i></p>
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There is no change in cost to respondents.

16. Publication of results of data collection.

There are no plans for publication of this submission.

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

Once OMB approval is received, FRA will publish the approval number for these information collection requirements in the Federal Register.

18. Exception to certification statement.

No exceptions are taken at this time.

Meeting Department of Transportation (DOT) Strategic Goals

In this information collection, as in all its information collection activities, FRA seeks to do its utmost to fulfill DOT Strategic Goals and to be an integral part of One DOT.