

11 FEDERAL RAILROAD ADMINISTRATION
Inspection Standards for Steam Locomotives
(Title 49 Code of Federal Regulations (CFR) Part 230)
SUPPORTING JUSTIFICATION
OMB Control No. 2130-0505

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 10, 2021, which expires November 30, 2024.
- The Federal Railroad Administration (hereafter “FRA” or “the Agency”) published the required 60-day notice in the Federal Register on August 5, 2024. See 89 FR 63469. FRA received no comments in response to this notice.
- Overall, the adjustments decreased the burden by 308 hours and responses by 3,690.
- The answer to question 12 itemizes all information collection requirements.

1. Circumstances that make collection of the information necessary.

FRA issued new Steam Locomotive Inspection and Maintenance Standards in 1999 in order to update and enhance its steam locomotive regulatory program. In recognition of the reduced frequency of use of steam locomotives in today’s transportation system, the revised standards, which reflected the consensus recommendations of the Railroad Safety Advisory Committee’s (RSAC) Tourist and Historic Working Group (THWG), better tailor inspections to actual use of the steam locomotives.

Significant changes included the following: (1) the creation of a “service-day” inspection system that directly relates inspection time periods to the actual use of the steam locomotive; (2) the elimination, with certain exceptions, of waivers for steam boilers, steam locomotives and their appurtenances; (3) the inclusion of allowances which encourage the use of new technologies, such as non-destructive testing, for boiler testing and inspections; and (4) the imposition of qualification requirements for individuals making certain repairs to steam locomotives, steam locomotive boilers, and steam locomotive appurtenances.

Presently, there are approximately 150 steam locomotives in operation nationwide. Most of them are used in tourist or historic service on an intermittent, seasonal basis. The requirements in this section focus on reducing/eliminating hazards that are unique to steam-operated locomotives. Moreover, these requirements further FRA’s main mission, which is to promote and enforce railroad safety throughout the U.S. railroad system.

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

Title 49 CFR part 230 prescribes minimum Federal safety standards for all steam-propelled locomotives operated on railroads to which this part applies. The information collected is used by FRA to ensure that tourist/historic railroads and other locomotive owners and/or operators covered by this part comply with the requirements of this rule.

Specifically, part 230 requires that steam locomotive owner/operators perform daily inspections (FRA F 2); 31 and 92 service day inspections (FRA F 1); and annual inspections as well as a 1,472 service day inspection (FRA F 3). After each of these inspections, steam locomotive owner/operators must submit the completed forms to FRA for review. FRA reviews these inspection forms to help ensure that these locomotives are “safe and suitable” to operate in the type of service in which they are placed. Steam locomotive owners and/or operators must also have available for inspection a current copy of the service day record that contains the number of service days the steam locomotive has accrued since the last 31, 92, Annual and 1472 service day inspections.

Waiver requests are reviewed to determine whether it is safe and in the public interest to grant exceptions for railroads and other steam locomotive owners and/or operators to any of the provisions of part 230. Additionally, FRA inspectors review alteration and repair reports (FRA F 19) for steam locomotive boilers when an alteration is made to a steam locomotive boiler to ensure that boiler repairs and alterations are detailed and done properly.

Records are also created under part 230 by tourist or historic railroads and by locomotive owners and/or operators when identifying steam locomotives with non-complying part 230 mechanical defects that can be safely moved with appropriate restrictions for the purpose of repair. Before moving a locomotive, a tag bearing the words “non-complying locomotive” and containing the information specified in § 230.12(b) must be securely attached to that locomotive.

Finally, the collected information is used by FRA during accident/incident investigations and provides an invaluable resource in determining the condition of the steam locomotive and possible cause(s) of the accident/incident.

3. Extent of automated information collection.

FRA strongly endorses and highly encourages the use of advanced information technology and other automated collection techniques, wherever possible, to reduce burden on respondents. Currently, there are few automated reporting systems, if any, in use among tourist/historic railroads and other steam locomotive owner/operators. To date, steam locomotive railroads and other owner/operators have furnished FRA with most of the required information by periodically filing reports using paper forms. FRA has made these forms available on its Website so that they are readily available and can

be downloaded by users. FRA would like to see these reports filed and stored electronically in the future, provided railroads and other owner/operators have the capability to do so.

It should be noted that the burden for this collection is fairly minimal.

4. Efforts to identify duplication.

The information collection requirements are not duplicated elsewhere. Similar data are not available from any other source.

5. Efforts to minimize the burden on small businesses.

Under the old (1978) standards, steam locomotive boilers were required to be inspected at various time periods that were linked to an annual calendar, regardless of the amount of actual usage the locomotive incurred. Under the new inspection regime of the current rule, however, required locomotive inspections are based on the number of “service days” a steam locomotive has accrued, with various intermediate calendar inspection requirements retained to ensure an adequate level of safety. The effect of this reduction in the need for frequent inspections and, correspondingly, in the paperwork associated with them, has been to decrease the cost and paperwork burdens experienced by owners and/or operators of steam locomotives. The largest impact and greatest savings have occurred on steam locomotives transitioning from the old rule (1978 standards) to the current rule.

Additionally, the current standards resulted from a collaborative process where the affected parties were thoroughly involved.

6. Impact of less frequent collection of information.

If this information were not collected or collected less frequently, rail safety relating to the operation and use of steam locomotives may be jeopardized. Specifically, without this collection of information, FRA could not perform its congressionally mandated oversight function to ensure that railroads in this country are operated in a safe manner.

The operation of steam locomotives presents potential hazards both to the crews who run them and to the public who ride in trains propelled by them. Steam locomotives that are not properly operated and maintained may present great potential dangers, such as derailments and boiler explosions, that could result in injuries and fatalities.

Without this collection of information, FRA would not have a direct means to oversee entities, including tourist and historic railroads, which own or operate steam locomotives to verify that they run and maintain these units properly so as to be “safe and suitable for service.”

FRA reviews waiver requests to determine where it might be appropriate and permissible to grant steam locomotive owners and/or operators a delayed implementation of, or perhaps even dispense with, any requirement of this part and still maintain satisfactory levels of rail safety. FRA requires that non-complying or defective steam locomotives, including those developing a non-complying condition en route, be tagged before movement with specific information so as to ensure that the locomotive engineer and train crew members are properly notified and are not endangered, and to allow the safe movement of these types of locomotives.

Without the required forms, FRA would have no direct way to track the status or condition of steam locomotives in this country. FRA reviews the required inspection forms to confirm that steam locomotives are “safe and suitable for service.” Without this collection of information, it would be very difficult, if not impossible, for FRA to track changes when an alteration is made to a steam locomotive boiler (through FRA F 19).

In sum, all the information collected allows FRA to make certain that tourist and historic railroads and other steam locomotive owners and/or operators properly run and maintain their steam locomotives so that they are “safe and suitable for service” and so that accident/incidents are kept to the lowest minimum possible.

7. Special circumstances.

Part 230 requires that the steam locomotive and its tender and appurtenances be inspected each day that they are offered for use to determine that they are safe and suitable for service. The results of the daily inspection are entered on FRA F 2 and a report must be filed even if no non-complying conditions are detected.

Additionally, the current regulations require that a qualified individual perform a 31-service day inspection after the steam locomotive has accrued 31 “service days. Within 10 days of conducting the 31-service day inspection, the steam locomotive owner/operator must file a report, for each locomotive inspected, on FRA F 1, in the place where the steam locomotive is maintained and with the appropriate FRA office.

8. Compliance with 5 CFR 1320.8.

As required by the Paperwork Reduction Act of 1995 (PRA) and 5 CFR part 1320, FRA published a notice in the *Federal Register* on August 5, 2024,¹ soliciting comment from the public, railroads, and other interested parties on these information collection requirements. FRA received no comments in response to this notice.

Consultations with representatives of the affected population:

¹89 FR 63469.

As a part of FRA's oversight and enforcement, individuals from the railroad industry are generally in direct contact with FRA's inspectors at the time of on-site inspections and can provide any comments or concerns to them.

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.

The information collection does not contain any data of a personal or sensitive nature.

12. Estimated burden hours for information collected.

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

The respondent universe for this burden table consists of approximately 82 steam owners/operators. Most of these steam locomotives operate on an intermittent or seasonal basis.

CFR Part 230 Section/FRA Form Name and Number	Annual Responses (A)	Avg. Time Per Response (Hours) (B)	Total Annual Burden Hours (A*B=C)	Wage Rate (D) ²	Total Cost Equivalent U.S.D (E =C*D)	PRA Analyses and Estimates
FRA F 1 — 31 and 92 Service Day Inspection Report	480	0.33	160.00	89.13	\$14,260.80	Per § 230.14(c) and § 230.15(b) within 10 days of conducting a 31 and 92 service day inspection the steam locomotive owner and/or operator shall file, for each steam locomotive inspected, a report of inspection (FRA F 1), in the place the locomotive is maintained and with the FRA Office of Railroad Infrastructure and Mechanical Equipment.
FRA F 2 — Daily Locomotive Inspection Report	3,650	0.17	608.33	89.13	\$54,220.45	Per § 230.13(c) the results of the daily inspection must be entered on FRA F 2 which must contain, at a minimum, the name of the railroad, the initials and number of the steam locomotive, the place, date and time of the inspection, the signature of the employee making the inspection, a description of the non-complying conditions disclosed by the inspection, conditions found in non-

² The dollar equivalent cost is derived from the 2023 Surface Transportation Board Full Year Wage A&B data series using the employee group 200 (Professional & Administrative) hourly wage rate of \$50.93 and group 400 (Maintenance of Equipment & Stores) hourly wage rate of \$39.77. The total burden wage rate (Straight time plus 75%) used in the table is \$89.13 (\$50.93 x 1.75 = \$89.13), and \$69.60 (\$39.77 x 1.75 = \$69.60).

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						<p>compliance during the day and repaired and the signature of the person who repaired the non-conforming conditions.</p> <p>This report shall be filed even if no non-complying conditions are detected. A competent individual shall sign the report, certifying that all non-complying conditions were repaired before the steam locomotive is operated. This report shall be filed and retained for at least 92 days at the location designated by the steam locomotive owner and/or operator.</p> <p>The estimated 10 minutes to complete each FRA F 2 takes into account that some of these locomotives only run on weekends or 5 days a week and are tourist and historic railroads.</p>
FRA F 3 — Annual Inspection Report	115	0.50	57.50	89.13	\$5,124.98	<p>Per § 230.16 an individual competent to conduct the inspection shall perform the annual inspection after 368 calendar days have elapsed from the time of the previous inspection. This inspection shall include all daily, all 31 service day, all 92 service day, and all annual inspection items.</p> <p>Within 10 days of completing the annual inspection, the steam</p>

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						<p>locomotive owner and/or operator shall file, for each steam locomotive inspected, form FRA F 3, in the place where the steam locomotive is maintained and with the FRA Office of Railroad Infrastructure and Mechanical Equipment.</p> <p>Additionally, under § 230.17(b), within 30 days of completing the 1472 service day inspection, the steam locomotive owner and/or operator shall, for each steam locomotive inspected, file form FRA F 3 in the place where the steam locomotive is maintained within the FRA Office of Railroad Infrastructure and Mechanical Equipment.</p>
FRA F 4 — Boiler Specification Card	12	0.5	6.00	89.13	\$534.78	<p>Under § 230.17(a) before any steam locomotive is initially put in service or brought out of retirement, and after every 1472 service days or 15 years, whichever is earlier, an individual competent to conduct the inspection shall inspect the entire boiler. The locomotive owner and/or operator shall complete, update, and verify the locomotive specification card (FRA F 4), to reflect the condition of the boiler at the time of this inspection.</p>
FRA F 5 — Locomotive Service Day Report	150	0.25	37.50	89.13	\$3,342.38	<p>Under § 230.18(b), by the 31st of every January, every steam locomotive owner and/or operator shall file a</p>

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						service day report, FRA F 5, with the FRA Office of Railroad Infrastructure and Mechanical Equipment. accounting for the days the steam locomotive was in service from January 1 through December 31 of the preceding year. If the steam locomotive was in service zero (0) days during that period, a report must still be filed to prevent the steam locomotive from being considered retired by FRA.
FRA F 19 — Report of Alteration or Welded or Riveted Repair	10	1	10.00	89.13	\$891.30	Under § 230.20 when an alteration is made to a steam locomotive boiler, or whenever welded/riveted repairs are made on unstayed or on stayed portions of a steam locomotive boiler, the steam locomotive owner and/or operator must file an alteration report (FRA F 19), detailing the changes to the locomotive with FRA (within 30 days from the date the work was completed in the first two situations).
Forms Subtotal	4,417		879.33		\$78,374.68	
230.6—Waivers (a)—Petition for waiver	1	1.00	1.00	89.13	\$89.13	A person subject to a requirement of this part may petition the Administrator of FRA for a waiver of compliance with such requirement. Each petition for waiver under this section must be filed in the manner and contain the information required by part 211 of this chapter.
230.12—Movement of non-						A tag bearing the words “non-

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complying steam locomotives (b)—Conditions for movement (tagging)	10	0.10	1.00	69.60	\$69.60	complying locomotive” must be securely attached to each defective steam locomotive.
230.14—Thirty-one (31) service day inspection (b)—FRA notification of 31 service day inspection.	360	0.08	30.00	89.13	\$2,673.90	FRA may require a steam locomotive owner or operator to provide FRA with timely notification before performing a 31-service day inspection. If FRA indicates the desire to be present for the 31-service day inspection, the steam locomotive owner and/or operator shall provide to FRA a scheduled date and location for the inspection.
230.16—Annual inspection (b)—FRA notification of annual inspection	120	0.08	10.00	89.13	\$891.30	FRA Office of Railroad Infrastructure and Mechanical Equipment shall be provided written notice at least one month prior to an annual inspection and shall be afforded an opportunity to be present. If the FRA Office of Railroad Infrastructure and Mechanical Equipment or its delegate indicates a desire to be present, the steam locomotive owner and/or operator will provide a scheduled date and location for the inspection.
230.19—Posting of FRA F 1 and FRA F 3 (a)-(b)—Posting of forms	662	0.08	52.96	89.13	\$4,720.32	FRA F 1. The steam locomotive owner and/or operator shall place a copy of the 31 and 92 service day inspection report (FRA F 1), properly filled out, under transparent cover in a conspicuous place in the cab of the steam locomotive before the inspected boiler is put into service. This FRA F 1

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						will not be required for the first 31 service days following an annual inspection and the posting of an FRA F 3. FRA F 3. In addition to the FRA F 1, the steam locomotive owner and/or operator shall also maintain in the cab a current copy of FRA F 3 in the manner described in paragraph (a) of this section.
230.21—Steam locomotive number change —Number change	1	0.03	0.03	89.13	\$2.67	When a steam locomotive number is changed, the steam locomotive owner and/or operator must reflect the change in the upper right-hand corner of all documentation related to the steam locomotive by showing the old and new numbers.
230.22—Accident reports	<i>The burden hours associated with this requirement are included in OMB Control No. 2130-0500. Consequently, there is no additional burden associated with this requirement.</i>					
230.33—Welded repairs and alterations (a)—Written requests to FRA	8	2.00	16.00	89.13	\$1,426.08	Prior to welding on unstayed portions of the boiler, or before performing weld build up on wasted areas of unstayed surfaces of the boiler that exceed a total of 100 square inches or the smaller of 25 percent of minimum required wall thickness or ½ inch, the steam locomotive owner and/or operator must submit a written request for approval to FRA.
230.34 - Riveted repairs and alterations	2	2.00	4.00	89.13	\$356.52	Prior to making riveted alterations on unstayed portions of the boiler, the

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(a)—Written requests						steam locomotive owner and/or operator must submit a written request for approval to FRA.
230.46—Badge plates —Attaching of metal badge plate	3	2.00	6.00	69.60	\$417.60	A metal badge plate showing the allowed steam pressure shall be attached to the boiler backhead in the cab. If boiler backhead is lagged, the lagging and jacket shall be cut away so that the plate can be seen.
230.47 - Boiler number (a)—Stamped boiler number	1	1.00	1.00	69.60	\$69.60	The builder's number of the boiler, if known, shall be stamped on the steam dome or manhole flange. If the builder's number cannot be obtained, an assigned number, which shall be used in making out specification cards, shall be stamped on the steam dome or manhole flange.
230.49 - Setting of safety relief valves (d)—Labeling of lowest set pressure	5	1.00	5.00	69.60	\$348.00	The set pressure of the lowest safety relief valve must be indicated on a tag or label attached to the steam gauge so that it may be clearly read while observing the steam gauge.
230.60 - Time of washing	<i>The burden for this requirement is included above in the burden listed under § 230.15 and § 230.16. Consequently, there is no additional burden associated with this requirement.</i>					
230.75—Stenciling dates of tests and cleaning —Stenciling	50	0.50	25.00	69.60	\$1,740.00	The date of testing and cleaning and the initials of the shop or station at which the work is done must be legibly stenciled in a conspicuous place on the tested parts or placed on a card displayed under a transparent cover in the cab of the steam locomotive.

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230.96—Main, side, and valve motion rods (b)—Written request for repairs	1	2.00	2.00	89.13	\$178.26	The steam locomotive owner and/or operator must submit a written request for approval to FRA prior to welding defective main rods, side rods, and valve gear components.
230.98—Driving, trailing, and engine truck axles (b)— Journal diameter stamped	1	0.25	0.25	69.60	\$17.40	Currently, all locomotives are marked. However, if a steam locomotive was to have a journal replaced once a year, FRA estimates that it will take approximately 15 minutes to perform this task.
230.116 - Oil tanks —Marking of hand operated locations	30	0.50	15.00	69.60	\$1,044.00	The oil supply pipe (on tanks on oil burning steam locomotives) must be equipped with a safety cut-off device that can be hand operated from clearly marked locations.
Subtotal		1,255		169.24	\$14,044.39	
Total³	5,672 responses		1,049 hours		\$92,419	

³ Totals may not add up due to rounding.

13. Estimate of total annual costs to respondents.

The additional costs to respondents are listed below.

\$ 300.00 Printing of Forms
350.00 Postage
\$ 650.00

14. Estimate of Cost to Federal Government.

There is very little cost to the Federal Government associated with the recordkeeping requirements. These records are reviewed on a somewhat routine basis in connection with regular agency enforcement activity that monitors steam locomotive owners and/or operators for compliance with inspection and testing requirements.

Approximately 200 burden hours are expended yearly to review the special petitions and other reports forwarded to FRA under the requirements of this rule. To estimate the government administrative cost, the 2024 Office of Personnel Management (OPM) wage rates at the GS-9 to GS-15 grades for the Washington, D.C. area were used. The average wage (step 5) was used as a midpoint.⁴ Wages were considered at the burdened wage rate by multiplying the actual wage rate by an overhead cost of 75 percent. The breakdown is shown in the table below:

Grade/Step	No. Of Employees	Hours (Annually)	Hourly Wage	Wage Rate (Incl. 75% Overhead)	Total Annual Cost
GS-15/5	1	5	\$89.04	\$155.82	\$ 779.10
GS-13/5	1	20	\$64.06	\$112.11	\$ 2,242.20
GS-12/5	1	140	\$53.87	\$94.27	\$ 9,427.00
GS-9/5	1	35	\$37.15	\$65.02	\$13,197.80
Total Annual Cost		200			\$25,646.10

15. Explanation of program changes and adjustments.

This is an extension without change (with changes in estimates) of a currently approved information collection. The current OMB inventory for this information collection shows a total burden of 1,357 hours and 9,362 responses, while the requesting inventory estimates a total burden of 1,049 hours and 5,672 responses.

Overall, the burden for this submission has decreased by 308 hours and decreased by 3,690 responses. There is no change in the method of the collection. The decrease in burden is solely the result of adjustments.

This decrease in burden hours is the result of a more accurate analysis of the number of

forms, FRA F 1, and FRA F 3, that are required to be posted in the locomotive cab. Additionally, the burden hours being reported under § 230.41 for the removal of flexible stay bolt caps on FRA F 3 is already included in the average time of 30 minutes reported to complete each form.

16. Publication of results of data collection.

FRA does not plan to publish the results of the data collection.

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

FRA intends to display the expiration date.

18. Exception to certification statement.

FRA takes no exceptions at this time.