

**SUPPORTING JUSTIFICATION
49 CFR 228 HOURS OF SERVICE REGULATIONS
OMB No. 2130-0005; RIN 2130-AC41**

Summary of Submission

- This submission is a revision to the last approved submission pertaining to Part 228 that was approved by OMB on **January 11, 2018**, and which expires **January 31, 2021**.
- FRA is publishing a Final Rule titled Hours of Service Recordkeeping; Automated Recordkeeping revising Part 228 in the **Federal Register** on August 29, 2018. See 83 FR 43988.
- The total number of burden **hours requested** for this submission is **3,421,290 hours**.
- The total number of burden hours **previously approved** is **3,514,805 hours**.
- Total number of **responses requested** for this submission is **27,796,044**.
- Total number of **responses previously approved** for this submission is **27,687,317**.
- The **change** in burden from the last approved submission amounts to a decrease of **93,515 hours**, and an increase of **108,727** in the number of **responses**.
- Total **program changes** amount to/decreased the burden by **93,505 hours**, and increased the number of responses by **108,728**
- Total **adjustments** amount to/decreased the burden by **10 hours**, and decreased the number of responses by **1**.

The answer to question **number 12 itemizes the hourly burden associated with each requirement of this rule (See pp. 16-55).

*** The tables in answer to question number 15 itemize **program changes** and **adjustments** (See pp. 59-61).

1. Circumstances that make collection of the information necessary.

Federal laws governing railroad employees' hours of service date back to 1907¹ and are presently codified as positive law in title 49 of the U.S. Code (U.S.C.) at secs. 21101-21109,² 21303, and 21304.³ FRA, under 49 U.S.C. 103(g), title 49 of the Code of Federal Regulations (CFR), section (§) 1.89, and internal delegations, has long administered the statutory hours of service (HS) requirements for the three groups of employees now covered by the statute; namely, employees performing the functions of a train employee, signal employee, or dispatching service employee, as those terms are defined at Sec. 21101. These terms are also defined for purposes of FRA's HS recordkeeping and reporting regulations (49 CFR part 228, subpart B) at 49 CFR 228.5 and discussed in FRA's "Requirements of the Hours of Service Act; Statement of Agency Policy and Interpretation" at 49 CFR part 228, appendix A, most of which was issued in the 1970s.

The HS statutory requirements have been amended several times over the years, most recently by the Rail Safety Improvement Act of 2008⁴ (RSIA). The RSIA substantially amended the requirements of Sec. 21103, applicable to a train employee, who is defined as an "individual engaged in or connected with the movement of a train, including a hostler,"⁵ and the requirements of Sec. 21104, applicable to a signal employee, defined as an "individual who is engaged in installing, repairing, or maintaining signal systems."⁶ The RSIA also added new provisions at Secs. 21102(c) and 21109 that together made train employees providing rail passenger transportation subject not to Sec. 21103 but to HS regulations, if issued timely by the Secretary. Subsequently, FRA, as the Secretary's delegate, issued those regulations, codified at 49 CFR part 228, Subpart F (Passenger Train Employee HS Regulations), which became effective on October 15, 2011. Section 108(f) of the RSIA required the Secretary to --

prescribe a regulation revising the requirements for recordkeeping and reporting for Hours of Service of Railroad Employees contained in part 228 of title 49, Code of Federal Regulations . . . to adjust record keeping and reporting requirements to support compliance with chapter 211 of title 49, United States Code, as amended by [the RSIA]; . . . to authorize electronic record keeping, and reporting of excess service,

¹ See the Hours of Service Act (Public Law 59-274, 34 Stat. 1415 (1907)). Effective July 5, 1994, Public Law 103-272, 108 Stat. 745 (1994), repealed the Hours of Service Act as amended, then codified at 45 U.S.C. 61-64b, and also revised and reenacted its provisions, without substantive change, as positive law at secs. 21101-21108, 21303, and 21304.

² These sections may also be cited as 49 U.S.C. chapter 211. Hereinafter, references to a "sec." are to a section of title 49 of the U.S. Code.

³ For a table comparing and contrasting the current Federal hours of service (HS) requirements with respect to freight train employees, passenger train employees, signal employees, and dispatching service employees, please see Appendix A to the Second Interim Interpretations. 78 FR 58830, 58850-58854. (Sept. 24, 2013).

⁴ Public Law 110-432, Div. A, 122 Stat. 4848.

⁵ Sec. 21101(5).

⁶ Sec. 21101(4). The RSIA also amended the definition of "signal employee" effective October 16, 2008. Before the RSIA, the term meant "an individual employed by a railroad carrier who is engaged in installing, repairing, or maintaining signal systems." Emphasis added.

consistent with appropriate considerations for user interface; and . . . to require training of affected employees and supervisors, including training of employees in the entry of hours of service data.

FRA, as the Secretary's delegate, issued those regulations, codified at 49 CFR part 228, including subpart D (Electronic Recordkeeping), which became effective on July 16, 2009. 74 FR 25350 (May 27, 2009) (2009 recordkeeping amendments).

FRA's issued its first HS recordkeeping regulation, codified at 49 CFR part 228, subparts A and B, in 1972. 37 FR 12234 (June 21, 1972). Because that regulation did not contemplate electronic recordkeeping, that regulation required that HS records be signed manually by the same employee whose time was being recorded. Therefore, prior to the effective date of the 2009 recordkeeping amendments, railroads that wished to create and maintain their HS records electronically rather than manually needed FRA's waiver of the requirement for a handwritten signature. See FRA procedural regulations at 49 CFR part 211. At the time that the 2009 recordkeeping amendments went into effect, several Class I railroads were creating and maintaining their records using an electronic recordkeeping system that had been approved by FRA pursuant to a waiver.⁷

In general, the 2009 Recordkeeping Amendments required that either the employee whose time was being recorded, or the reporting crewmember of a train crew or signal gang whose time was being recorded, certify their electronic HS records, instead of signing them by hand, and that the recordkeeping system electronically stamp the records with the name of the certifying employee and the date and time of certification. See 49 CFR 228.9(b). The 2009 recordkeeping amendments also established comprehensive requirements for electronic recordkeeping systems. A brief summary of the most significant requirements follows.

- First, electronic recordkeeping systems must be capable of generating records that provide sufficient data fields for an employee to report a wide variety and number of activities that could arise during a duty tour. See 49 CFR 228.201.
- Second, the systems also must have security features to control access to HS records and to identify any individual who entered information on a record. See 49 CFR 228.203(a)(1)(i), (a)(2) - (a)(7) and (b).
- Third, systems must include complex program logic that allows the system to identify how periods of time spent in any activity that is entered on a record is treated under the HS laws (and also now under the substantive HS regulations for passenger train employees).

⁷ The preamble of the 2009 recordkeeping amendments contains a detailed discussion of the history of electronic recordkeeping and the development of waiver-approved electronic recordkeeping systems.

- Fourth, program logic must be sufficient to allow the system to calculate total time on duty from the data entered by the employee, flag employee-input errors so that they may be corrected before the employee certifies the record, and require that the employee enter an explanation when the data as entered shows a violation of the HS laws or regulations. See 49 CFR 228.203(c).
- Fifth, electronic recordkeeping systems also must provide a method known as a “quick tie-up” for employees to enter limited HS information when an employee has met or exceeded the maximum hours allowed for the duty tour, and railroads must have procedures for employees to do a quick tie-up by telephone or facsimile (fax) if computer access is not available. See 49 CFR 228.5 and 228.203(a)(1)(ii).
- Finally, an electronic recordkeeping system must provide search capability so that records may be searched by date or date range and by employee name or identification number, train or job assignment, origin or release location, territory, and by records showing excess service, and all records matching specified criteria must be retrievable. See 49 CFR 228.203(d).

FRA aims to allow railroads with less than 400,000 employee hours per year, and their contractors and subcontractors who provide those railroads with covered service employees (collectively referred to for the purpose of this final rule as “eligible smaller railroads”), to use an “automated recordkeeping system” to create and maintain their covered-service employees’ HS records.⁸ FRA is aware that some railroads currently use what FRA refers to as an automated system, in which covered service employees access a blank HS record on a railroad computer, enter required data on the form, and then print and sign the record, which is still considered a manual or paper record. This final rule would allow employees of eligible smaller railroads to electronically sign the automated record and store it in a railroad computer system, eliminating the requirement to print and sign the record. The final rule would not require an automated system to comply with some of the existing requirements for electronic recordkeeping systems under 49 CFR Part 228, subpart D that may not be relevant to the operations of these eligible smaller railroads. Electronic or automated records require substantially less time to complete than manual records. However, some eligible smaller railroads have told FRA the existing requirements of 49 CFR Part 228, Subpart D for electronic recordkeeping systems make using such systems infeasible for their operations, which are less complex and variable than other railroads’ operations. By providing an alternative set of

⁸Given the size and nature of their operations, FRA’s understanding is that it is not common for Class 3 railroads to have contractors or subcontractors that provide employees to perform covered service for the railroad. However, in the event that a Class 3 railroad has a contractor or subcontractor whose employees perform covered service for the Class 3 railroad, such contractors and subcontractors would also be subject to the requirements of this proposed rule for the HS records of their employees performing covered service on Class 3 railroads. For the purposes of this document, references to Class 3 railroads include any contractors or subcontractors to Class 3 railroads whose employees perform covered service and are required to keep HS records under this part.

requirements specifically tailored to the circumstances of smaller operations, FRA expects a greater number of railroads to create and maintain HS records using an automated recordkeeping system, rather than continuing to use manual records. These changes will produce a total estimated reduction of over 194,000 burden hours. In addition, the cost of implementing an automated recordkeeping system is expected to be substantially less than an electronic recordkeeping system.

FRA also expects that many of the companies that would be subject to this final regulation could choose to comply with its requirements using existing equipment and software that many of them already use for other purposes. For example, many eligible smaller railroads will find that their existing equipment and software can be used to generate a form that would allow employees to enter the information relevant to their duty tour that is required by § 228.11 and save the record in a directory structure that would allow either the railroad or FRA to retrieve it using the search criteria provided in this proposed regulation. FRA believes it is appropriate to allow the eligible smaller railroads to use a system that lacks the programming and analysis that are required of an electronic recordkeeping system because of the less complex and less varied nature of the operations of eligible smaller railroads. Thus, the final rule would not require an automated system to calculate and fill in total time on duty based on the information the employee entered because that would require costly programming to enable the system to identify how various periods of time are treated and to perform the calculation. Instead, the employee would enter that information just as if it were a paper record. Similarly, the proposed rule would not require an automated system to include costly programming that would prompt the employee to enter an explanation of a duty tour over 12 hours or that would flag possible input errors or missing data (for example, showing an on-duty location that differs from the released location of the previous duty tour).

Currently, the final rule would apply to 597 Class III railroads and Class II railroads, and 18 commuter railroads, and their contractors and subcontractors. FRA considered extending the scope of this final regulation to all Class III railroads and all commuter railroads. However, because of the number of employees, volume of HS records, and complexity of operations on some commuter railroads, FRA believes an electronic recordkeeping system that complies with subpart D of part 228 is the appropriate alternative to the use of manual records for these railroads. Likewise, the definition of “Class III railroad” includes all terminal and switching operations,⁹ regardless of their operating revenues. Some of these operations have extensive operations and a number of employees and HS records more appropriately served by an electronic recordkeeping system. A larger and more complex operation would benefit from an electronic recordkeeping system’s program logic capability to help ensure accurate recordkeeping. In addition, the greater search capabilities of an electronic recordkeeping system would

⁹ See 49 CFR 1201.1-1(d).

enable a railroad with larger and more complex operations to better identify relevant records, whether for the railroad's own review, or in response to requests from FRA.

FRA is aware that at least one commuter railroad is currently using an electronic recordkeeping system and that several other commuter railroads are in the process of developing electronic recordkeeping systems. FRA understands that these railroads are willing to share some information with other commuter railroads to help them to develop their systems. This may provide an opportunity for more commuter railroads to eliminate paper records and adopt electronic recordkeeping systems.

In sum, this rule is part of FRA's broader initiative to reduce the paperwork burden of its regulations while still supporting compliance with the Federal hours-of-service laws and regulations. Current regulations require employees covered by those laws or regulations (covered service employees) to create and retain hours-of-service records by hand (a paper system) or "certify" the record using a compliant computerized system (an electronic system) with program logic. Cognizant of the burden placed on small operations, FRA provides a simplified method of computerized recordkeeping (an automated system) — in which employees apply their electronic signatures to automated records stored in a railroad computer system without the complexity and functionality of an electronic system — for eligible smaller railroads (and contractors and subcontractors providing covered service employees to such railroads). This rule does not require the use of automated recordkeeping but, when implemented by the small operations for which it is tailored, will decrease the burden hours spent on hours-of-service recordkeeping.

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

The collection of information associated with this rule is a revision to the last OMB approved submission. The information collected under revised Subpart B (i.e., sections 228.9, 228.11, 228.201, 228.206, and 228.207) will be used by Class III railroads, contractors, and subcontractors to establish automated recordkeeping systems for their employees Hours of Service (Hours of Duty) records. Under the proposed rule, FRA is providing a third, simplified method of compliance for keeping these essential required records for those Class III railroads, contractors, and subcontractors wishing to eliminate the paper option. Class III railroads, contractors, and subcontractors electing the automated option will be required to train their employees on the entry of Hours of Service data into the automated system and provide refresher training on any relevant changes to the Hours of Service laws, the reporting requirements in this Part, or the carrier's electronic, automated, or other recordkeeping system since the employee last received training. For those Class III railroads, contractors, and subcontractors exercising this new compliance option, automated recordkeeping will reduce both the monetary and time burden associated with maintaining Hours of Service/Hours of Duty records on paper.

The information collected under revised Subpart B will also be used by FRA inspectors and participating Part 212 State inspectors to ensure that Class III railroads, contractors, and subcontractors exercising the new automated option for Hours of Service (Hours of Duty) records comply with all of the requirements spelled out in sections 228.9, 228.11, 228.201, 228.206, and 228.207 through their periodic audits of these critical records. FRA inspectors and State inspectors will verify that affected Class III, contractor, and subcontractor employees do indeed receive the required automated recordkeeping training so that they can properly account for the hours they have worked each week.

In general, the information collected is also used by FRA and its inspectors to ensure compliance with the Hours of Service Laws and this regulation. The information collected under Subpart F is used to verify that the employees of covered commuter and intercity passenger railroads do not exceed maximum on-duty periods, abide by minimum off-duty periods, and adhere to other limitations set forth in this regulation to enhance rail safety and reduce the risk of accidents/incidents caused by train employee fatigue, as well as those accident/incidents where fatigue of train employees served as a contributory factor.

The rule covers tourist, scenic, historic, and excursion railroads as well as commuter and intercity passenger railroads. Under Subpart F, railroads having not more than 15 train employees, signal employees, and dispatching service employees may apply for an exemption from the requirements of the rule. FRA reviews and evaluates exemption requests to determine whether it is appropriate, safe, and in the public interest to grant such requests. FRA grants such requests for a specific period of time, which are subject to annual review, where a positive agency determination has been made that rail safety will not be adversely affected.

Each railroad subject to Subpart F must perform an analysis of one cycle of the work schedules of its train employees engaged in commuter and intercity rail passenger transportation and identify those schedules that, if worked, put the train employee at risk for a level of fatigue at which safety may be compromised. Railroads must use an FRA approved valid bio-mathematical model of performance and fatigue (e.g., FAST, FAID, or any other approved model) to determine where the fatigue risk posed exceeds the fatigue threshold. The fatigue model would be able to look back at the previous duty tours and rest periods to determine which schedules might have sufficiently rested employees available to report for the assignment, not only under the limitations on time on duty and required minimum time off duty that would be established by this rule but also in terms of the fatigue threshold. FRA carefully scrutinizes submitted work schedule analyses to assure that those exceeding the fatigue threshold are appropriately modified or that risk mitigation tools are available and put in place to reduce the level of train employee fatigue. FRA is particularly concerned about nighttime duty tours (Type 2 assignments) where the risk of fatigue for train employees is high.

Under the rule, covered railroads are required to submit written fatigue mitigation plans to FRA for review and approval where railroads have made determinations that their work schedules exceed the fatigue threshold. Railroads may provide a variety of methods (e.g., by developing a tool box) to reduce fatigue in their plans. FRA reviews these plans closely to make sure that they are effective and that they bring work schedules into compliance with this regulation. It is expected that railroads will choose mitigation tools most appropriate to each circumstance. The tool box is expected to be a living document, since the available mitigation tools will change over time as fatigue science continues to develop or as railroad operations change either generally or as related to specific properties or schedules. Each covered railroad is required to review its fatigue mitigation plan every two years and update it as necessary for FRA review and approval. Under Subpart F, each covered railroad must consult with, employ good faith, and use its best efforts to reach agreement with all of its directly affected employees, including nonprofit employee labor organizations representing a class or craft of directly affected employees of the railroad. These consultations are used by railroads and employees/employee representatives to reach consensus on the analysis of work schedules, selection of mitigation tools, and any required submissions to FRA. If the railroad and its affected employees or their labor organization cannot reach consensus on any of the aforementioned items, the employees or labor organizations may file a statement with FRA, explaining their views on any issue on which consensus was not reached. FRA reviews these statements and takes them into account in its evaluation and approval of the analysis of work schedules and fatigue mitigation plans.

Under Subpart F, each covered railroad subject to this Subpart must provide training to its employees and the immediate supervisors of these employees. FRA reviews railroad training programs to ensure that critical topics are covered and fully explained to railroad employees during their initial training and triennial refresher training. Railroad supervisors and their employees use this information to understand the factors that affect their performance, the causes and effects of fatigue on job performance, the importance of rest periods and the various options available to obtain rest in order to improve alertness and thus reduce the risk of rail accidents/incidents and corresponding casualties and property damage.

The collection of other information under the current rule is used by FRA to monitor and enforce compliance with the existing (and recently revised) Hours of Service Laws (HSL) and regulations that cover freight railroads. In particular, under amended § 228.11, the *Hours of Duty* records are monitored and reviewed by FRA to ensure that train and engine employees, dispatchers, and railroad signal workers and covered signal workers of contractors/subcontractors to railroads provide the required information and work the stipulated number of hours and experience the necessary rest periods now prescribed for their job category.

Presently, there are approximately 100,500 covered employees, comprising approximately 82,780 train and engine employees, and approximately 17,720 dispatchers,

signalmen, and PTC employees. FRA Federal and participating State inspectors examine *Hours of Duty* records to ensure that a record of duty hours is maintained for each railroad worker and for each job category covered by the newly enacted Hours of Service Laws as provided in Section 108 of the Rail Safety Improvement Act of 2008 and as provided in this regulation. Thus, FRA Federal and State inspectors carefully monitor and review all *Hours of Duty* records to ensure that covered railroad employees do not work an excessive and illegal amount of hours such that they are overtired and exhausted, and thereby pose an unacceptably high safety risk, not only to themselves and other railroad workers, but also to the safe and efficient movement of passenger and freight trains along the areas they are working. Eliminating worker fatigue – to the greatest extent possible – is a high priority both for the railroad industry and FRA. Moreover, *Hours of Duty* records have been and are used by FRA attorneys to enforce compliance with this regulation. Since both railroads and railroad workers certify the hours worked in these records, FRA attorneys use them to enforce violations of the Hours of Service Laws by imposition of regulatory fines, or other court mandated civil and/or criminal penalties.

Under § 228.17, the *Dispatcher's Records of Train Movements*, the information collected is used by FRA and participating State safety inspectors to monitor and obtain compliance with statutory provisions and FRA regulations by each of the 150 dispatching offices nationwide. Each carrier is required to keep a record of train movements for each dispatching district under the direction and control of a dispatcher who uses a telegraph, telephone, radio, or any other electrical or mechanical device to dispatch, report, transmit, receive, or deliver orders relating to train movements. FRA inspectors review these records to verify that they contain the required data about train movements, which are particularly valuable to FRA during accidents/incidents investigations to determine causes and devise and implement necessary remedial programs/actions.

Under § 228.19, the *Monthly Reports of Excess Service*, the information collected is used by FRA and participating State safety inspectors to monitor and ensure that each railroad or contractor or subcontractor of a railroad reports to FRA each instance of excess service mandated under this section and in the manner prescribed within 30 days after the calendar month in which the instance occurs. FRA reviews these reports to ensure that railroads are not routinely overworking the covered categories of employees and have legitimate reasons for having them work excess hours. FRA's review seeks to eliminate situations that may lead to or contribute to increased numbers of accident/incidents and accompanying casualties caused by human fatigue.

The records mentioned above are also used/scrutinized by participating NTSB investigators whenever there is an accident/incident involving a train movement, and serve as a vital resource both in determining the cause(s) that led to or contributed to the accident/incident under investigation, and in determining any necessary Federal remedial measures/actions to promote/increase rail safety.

Under § 228.103, *Construction of Employee Sleeping Quarters*, FRA’s Headquarters Safety Board members review petitions for construction, reconstruction, or acquisition of employee sleeping quarters in order to render an informed and logical decision regarding approval or denial of such petitions based on pertinent safety considerations relating to the affected railroad employees. In particular, the FRA Safety Board reviews each petition to make sure necessary information is provided that will enable them to make a fair and impartial decision.

Section 228.201, *Electronic Recordkeeping/Automated Systems*, provides that a railroad or a contractor or subcontractor to a railroad may create and maintain any of the records required by Subpart B of this rule – records specified in sections 228.7-228.23 – through both electronic transmission, storage, and retrieval and automated systems as well. This option is particularly important regarding *Hours of Duty* records. Currently, there are four Class I railroads and one Class II railroad, which were previously granted waivers and which now keep the required *Hours of Duty* records electronically. These railroads fully met the conditions spelled out in the guide developed by FRA related to electronic recordkeeping that addressed such issues as accuracy, security, reliability, employee and FRA access, etc. Other railroads now have the option to keep their *Hours of Duty* records electronically provided the requirements specified in sections 228.201 and 228.203 are met, and railroads with less than 400,000 employee hours now have the option to automate these records as well,. FRA reviews and evaluates any new electronic recordkeeping system/automated system to ensure that all stipulated conditions/criteria are met.

Finally, under the requirements stipulated in 49 U.S.C. 21102, FRA’s Office of Safety carefully reviews exemption petitions from the *Hours of Service Laws* – on a case-by-case basis – to determine whether it is consistent with rail safety and in the public interest to grant an exemption from these regulations. As noted previously, exemptions are granted for a specific period of time by FRA, and FRA reviews them annually to determine whether circumstances have changed and whether it is appropriate and consistent with rail safety to renew such exemptions.

In sum, FRA would be seriously hindered in enforcing the *Hours of Service Laws* and accompanying regulations and in promoting and maintaining a safe rail environment, as well in determining the cause(s) of rail accidents/incidents, without the vitally important information provided by this collection of information.

3. Extent of automated information collection.

Years before the passage of the Government Paperwork Elimination Act (GPEA), FRA was well known for strongly endorsing and highly encouraging the use of advanced information technology, particularly electronic recordkeeping, to reduce burden on respondents, where feasible. As mentioned in a previous submission, FRA specifically provides the option of electronic recordkeeping and reporting for all the rule's Subpart B requirements and requires training of those covered employees and supervisors of employees who are required to complete *Hours of Service (Hours of Duty)* records.

Before that amended rule, railroads that wanted to keep their *Hours of Duty* records electronically had to petition the agency for a waiver in order to meet the signature requirement of § 228.9 and could only do so after the waiver was granted by FRA. As a result of that amended rule, the process of keeping *Hours of Duty* records electronically was greatly simplified, which facilitated this option for other railroads interested in keeping these records electronically.

Under the proposed rule, employers with less than 400,000 employee hours per year and their contractors and subcontractors now have the option to establish automated systems to keep their *Hours of Duty* records. Based on this fact and the available data, FRA estimates that approximately 60% of all responses will now kept electronically.

4. Efforts to identify duplication.

The information collection requirements, to our knowledge, are not duplicated elsewhere.

Similar data are not available from any other source.

5. Efforts to minimize the burden on small businesses.

The term “small entity” is defined in 5 U.S.C. 601 (Section 601). Section 601(6) defines “small entity” as having the same meaning as “the terms ‘small business’, ‘small organization’ and ‘small governmental jurisdiction’ defined in paragraphs (3), (4), and (5) of this section.” In turn, Section 601(3) defines a “small business” as generally having the same meaning as “small business concern” under Section 3 of the Small Business Act, and includes any a small business concern that is independently owned and operated, and is not dominant in its field of operation. Next, Sec. 601(4) defines “small organization” as generally meaning any not-for-profit enterprises that is independently owned and operated, and not dominant in its field of operations. Additionally, Sec. 601(5) defines “small governmental jurisdiction” in general to include governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000.

The U.S. Small Business Administration (SBA) stipulates “size standards” for small entities. It provides that the largest a for-profit railroad business firm may be and still

classify as a “small entity” is 1,500 employees for “Line-Haul Operating” railroads, and 500 employees for “Short-Line Operating” railroads. See “Size Eligibility Provisions and Standards,” 13 CFR part 121 subpart A.

Under exceptions provided in section 601, Federal agencies may adopt their own size standards for small entities in consultation with the SBA and in conjunction with public comment. Under that authority, FRA has published a “Final Policy Statement Concerning Small Entities Subject to the Railroad Safety Laws,” which formally establishes small entities as including, among others, the following: (1) railroads classified by the Surface Transportation Board as Class III; and (2) commuter railroads “that serve populations of 50,000 or less. See 68 FR 24891 (May 9, 2003) codified at appendix C to 49 CFR Part 209. Currently, to be a small entity under the Policy, the eligible railroads also must have \$20 million or less in annual operating revenue, adjusted annually for inflation. The \$20 million limit (adjusted annually for inflation) is based on the STB’s threshold for a Class III railroad, which is adjusted by applying the railroad revenue deflator adjustment. For further information on the calculation of the specific dollar limit, see 49 CFR part 1201. FRA is using this definition of “small entity” for this final rule.

FRA amends its hours of service recordkeeping regulations, to provide simplified recordkeeping requirements to allow railroads with less than 400,000 employee hours annually, and their contractors and subcontractors, to utilize an automated system to create and maintain hours of duty records as required by 49 CFR 228.11. FRA has reports that indicate there are 742 Class III with less than 400,000 employee hours annually that would be eligible to use the simplified automated recordkeeping system this final rule provides. There are also four (4) small passenger railroads. However, if they are affected, it is voluntary because the final rule would not require any railroad to develop and use an automated recordkeeping system. FRA estimates an adoption rate of 80 percent (a total then of 597 railroads). Also, there are an additional 18 smaller commuter railroads, each of which is run by a State, County, or Municipal Agency that could be affected by the final rule if they voluntarily decide to develop and use an automated recordkeeping system, but all serve populations of 50,000 or more and are not designated as small businesses.

FRA estimates that 80 percent of small railroads and all small commuter railroads to convert to automated recordkeeping and expects the impact of the final rule will be a reduction in the paperwork burden for smaller railroads. For the purposes of this analysis, the 615 railroads FRA estimates to be affected by this final rule are assumed to be small railroads. However, the impact on these small railroads would not be significant. Although FRA estimates that each of these railroads will expend \$5,590, this final rule will have a positive net economic effect on these railroads, saving each railroad approximately \$89,584 in costs at discounted 7 percent over the 10-year analysis.

Since this amount is relatively small and beneficial, FRA concludes that this final rule will not have a significant impact on these railroads.

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601(b), the Administrator of the FRA hereby certifies that this rule will not have a significant economic impact on a substantial number of small entities. FRA continues to invite comments from members of the public who believe there will be a significant impact.

6. Impact of less frequent collection of information.

If this information were not collected or collected less frequently, rail safety in the United States would be considerably jeopardized (and the daily operations of commuter and intercity passenger railroads covered under Subpart F of this rule would become much more expensive because these railroads would have to comply with the more stringent freight Hours of Service Laws and regulations). Specifically, without the information collected under Subpart F, FRA would not be able to monitor and enforce compliance with this regulation and so unsafe policies, practices, and procedures might be put in place by these railroads, leading to increased numbers of rail accidents/incidents.

Without the submission of analyses of employee work schedules and fatigue mitigation plans, FRA would have no way to determine whether commuter and intercity passenger railroads are scheduling their employees to work shifts that are at excessively high risk to cause fatigue and thereby increase the probability of rail accidents/incidents. Also, FRA would have no way of knowing whether these railroads were providing options to reduce fatigue and allow for rest. Thus, train and engine employees or signal employees who were fatigued because they worked too many night shifts or were not provided options to rest might inadvertently neglect an important function of their jobs such as stopping a train at a red light or throwing a switch, possibly leading to a catastrophic train collision or derailment.

Without the required training required under Subpart F, FRA would have no way to know if railroads developed essential training programs regarding human performance and fatigue and provided this critical training to their employees. Also, without the required training of employees and supervisors of employees, these individuals would not be informed of the factors that affect human performance and alertness, the causes and effects of fatigue, the importance of rest and the railroad provided/permitted options for them to rest, and other fatigue mitigation tools available to them. Again, high fatigue increases the probability of mistakes or omissions that could lead to greater numbers of rail accidents/incidents.

Without the data collected in the *Hours of Duty* Records and the careful review and examination of these records by FRA and participating State inspectors, covered railroad employees might work excessive and illegal amounts of hours. Such overwork could

lead to fatigue, poor judgment, and mistakes on the part of train and engine employees, dispatching service employees, and signal employees, which could result in increased numbers of accidents/incidents where railroad workers and members of the public are seriously injured and possibly killed. The *Hours of Duty* records and Monthly Reports of Excess Service reports allow FRA's Office of Safety to closely monitor the railroad industry to ensure that the law and its regulations are being complied with. If the law and agency regulations are not complied with and covered railroad employees are working excessive hours, FRA can take immediate corrective action upon discovering this.

If FRA did not collect the information provided by the *Dispatcher's Record of Train Movements*, or collected this information less frequently, the agency would lose a valuable resource used by agency and NTSB investigators to determine the cause(s) or contributing cause(s) of rail accidents/incidents. These records provide vital information such as the identification of the timetable in effect, location and date, the identification of dispatchers and their times on duty, weather conditions at six-hour intervals, identification of enginemen and conductors and their times on duty, identification of trains and engines, station names and office designations, distances between stations, direction of movement and the time each train passes all reporting stations, arrival and departure times of trains at all reporting stations, and unusual events affecting movement of trains and identification of trains affected.

If FRA did not collect the information contained in the petitions for approval for construction of employee sleeping quarters, the safety of certain railroad workers could be greatly endangered. Specifically, if FRA were not permitted to collect this information, agency Regional staff would not be able to investigate these petitions, and the Associate Administrator would not be able to render an informed and logical approval or denial of such petitions. As a result, the construction, reconstruction, or acquisition of sleeping quarters for railroad employees covered by the RSIA and revised agency rule might be unsafely located "within or actually in the immediate vicinity" of an area where railroad switching or humping operations are performed. Railroad workers might be seriously injured or killed if this were to occur.

Finally, without the petition information collected under 49 U.S.C. 21102, *Federal Hours of Service Laws*, FRA would have no means to determine whether it is safe or in the public interest to grant exceptions to the *Hours of Service* Laws. There may be times when exceptions benefit both public safety and the interests of the railroads.

In sum, this collection of information facilitates the accomplishment of FRA's main mission, which is to promote and enhance rail safety throughout the country.

7. **Special circumstances.**

Excess Service Reports (Form FRA F 6180.3) are required to be filed monthly (within 30 days of the close of the month in which the excess service occurred). This is so FRA can closely monitor circumstances where employees work excessive hours, and take any necessary measures to correct situations where the safety of train crews (and correspondingly the travelling public), signalmen, and other railroad employees might be put in jeopardy.

All other information collection requirements contained in the rule are in compliance with this section.

8. Compliance with 5 CFR 1320.8.

FRA published a Notice of Proposed Rulemaking (NPRM) titled Hours of Service Recordkeeping; Automated Recordkeeping on **August 24 2015**, soliciting comment from the public, interested parties, and the regulated community on the proposed rule and associated information collection. See 80 FR 51180.

FRA received two public comments on the automated recordkeeping NPRM. The American Short Line and Regional Railroad Association filed a short comment on October 23, 2015, indicating that the NPRM accurately assessed the ability of small railroads to capture Hours of Service data and expressing eagerness to see a final rule in effect. FRA also received an anonymous comment on October 22, 2015, indicating only that the NPRM was, “Good.” FRA received no public comments conveying a need to change the substance of the proposed rule when promulgating this final rule. Also, FRA received no comments concerning burden hour or burden cost estimates provided in the published NPRM.

9. Payments or gifts to respondents.

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

10. Assurance of confidentiality.

Information collected is not of a confidential nature, and FRA pledges no confidentiality.

11. Justification for any questions of a sensitive nature.

These requirements have nothing to do with sensitive matters such as sexual behavior and attitudes, religious beliefs, and other matters commonly considered private.

12. Estimate of burden hours for information collected.

Note: Any railroad with less than 400,000 employee hours under FRA jurisdiction could be affected by this final rule – approximately four (4) Class II railroads, 742 Class III railroads, and 18 small commuter railroads (a total of 764 railroads). However, FRA believes that not all eligible railroads will adopt automated recordkeeping systems. An adoption rate of 80 percent is anticipated for the Class II and Class III railroads. For purposes of this analysis then, respondent universe is estimated at 615 railroads (597 Class II and III railroads plus 18 passenger and commuter railroads). FRA also estimates that 400 signal contractor or subcontractor employees could be affected by this final rule. The final rule covers sections 228.5, 228.9, 228.201, 228.206, and 228.207.

FRA is including the dollar equivalent cost for each of the itemized hours below using the AAR publication [Railroad Facts 2016](#) as the basis for each cost calculation. For railroad professional and administrative staff, the hourly wage rate is \$75 per hour. For railroad train and engine employees (e.g., locomotive engineers, conductors, etc.), the hourly wage rate is \$73 per hour. For maintenance of way and structures employees (e.g., signalmen), the hourly wage rate is \$69 per hour. For transportation other than train and engine employees, the hourly wage is \$72 per hour. The average hourly wage rate for these last three worker groups amounts to \$71 per hour. Note: All hourly wage calculations include 75% overhead costs.

Respondent universe for the current rule is estimated at approximately 768 entities (728 railroads plus 40 signal employee contractors). The number of railroad workers covered by the Hours of Service Regulations is estimated to be approximately 100,200 (which include current signal employees and newly hired employees as well). The number of employees is based on contacts with railroad industry representatives (ASLRRRA, BRS, National Railroad Construction and Maintenance Association (NRCMA), signal contractors, FRA Regional Specialists, and those contractors covered by FRA's drug and alcohol rule). The requirements of the current rule pertaining to passenger railroads and Hours of Service affect Amtrak, the Alaska Railroad, 26 commuter/intercity railroads, and approximately 140 tourist and excursion railroads that operate nationwide.

49 C.F.R. Part 228.9 - Railroads records; general.

(a) Manual records. Each manual record maintained under this part must be (1) signed by the employee whose time on duty is being recorded or, in the case of a train and engine crew or a signal employee gang, signed by the ranking crew member; (2) retained for two years at locations identified by the carrier; and (3) available upon request at the identified location for inspection and copying by the Administrator during regular business hours.

(b) Electronic records. Each electronic record maintained under this part must be:
(1) Certified by the employee whose time on duty is being recorded, or in the case of a train and engine crew or a signal employee gang, certified by the reporting employee who

is member of the train crew or signal gang whose time is being recorded; (2) Electronically stamped with the certifying employee's name and the date and time of certification; (3) Retained for two (2) years in a secured file that prevents alteration after certification; (4) Accessible by the Administrator through a computer terminal of the railroad, using a railroad-provided identification code and a unique password; (5) Reproducible using the printing capability at the location where records are accessed.

(c) Automated records. Each automated record maintained under this part shall be --
(New Requirement)

(1) Signed electronically by the employee whose time on duty is being recorded or, in the case of a member of a train crew or a signal employee gang, digitally signed by the reporting employee who is a member of the train crew or signal gang whose time is being recorded as provided by § 228.206(a);

(2) Stamped electronically with the certifying employee's electronic signature, and the date and time that the employee electronically signed the record;

(3) Retained for 2 years in a secured file that prevents alteration after electronic signature;

(4) Accessible by the Administrator through a computer terminal of the railroad; and

(5) Reproducible using printers at the location where records are accessed.

The burden for specific manual, electronic, and automated records that incorporate the above requirements is accounted for under § 228.11 below. Consequently, there is no additional burden associated with this provision.

49 C.F.R. Part 228.11 - Hours of Duty Records.

(a) In general. Each railroad, or a contractor or a subcontractor of a railroad, shall keep a record of the hours of duty of each employee. Each contractor or a subcontractor of a railroad must also record the name of the railroad for whom its employee performed covered service during the duty tour covered by the record. Employees who perform covered service assignments in a single duty tour that are subject to the recordkeeping requirements of more than one paragraph of this section must complete the record applicable to the covered service position for which they were called, and record other covered service as an activity constituting other service at the behest of the railroad.

(b) For train employees. Except as provided by paragraph (c), each hours of duty record for a train employee must include the following information about the employee:

(1) Identification of the employee (initials and last name; or if last name is not the

employee's surname, provide the employee's initials and surname).

(2) Each covered service position in a duty tour.

(3) Amount of time off duty before beginning a new covered service assignment or resuming a duty tour.

(4) Train ID for each assignment required to be reported by this part, except for the following employees, who may instead report the unique job or train ID identifying their assignment: (i) utility employees assigned to perform covered service, who are identified as such by unique job or train ID; (ii) employees assigned to yard jobs, except that employees assigned to perform yard jobs on all or parts of consecutive shifts must at least report the yard assignment for each shift; (iii) assignments, either regular or extra, that are specifically established to shuttle trains into and out of a terminal during a single duty tour that are identified by a unique job or train symbol as such an assignment.

(5) Location, date, and beginning time of the first assignment in a duty tour, and, if the duty tour exceeds 12 hours and includes a qualifying period of interim release as provided by 49 U.S.C. 21103(b), the location, date, and beginning time of the assignment immediately following the interim release.

(6) Location, date, and time relieved for the last assignment in a duty tour, and, if the duty tour exceeds 12 hours and includes a qualifying period of interim release as provided by 49 U.S.C. 21103(b), the location, date, and time relieved for the assignment immediately preceding the interim release.

(7) Location, date, and time released from the last assignment in a duty tour, and, if the duty tour exceeds 12 hours and includes a qualifying period of interim release as provided by 49 U.S.C. 21103(b), the location, date, and time released from the assignment immediately preceding the interim release.

(8) Beginning and ending location, date, and time for periods spent in transportation, other than personal commuting, if any, to the first assignment in a duty tour, from an assignment to the location of a period of interim release, from a period of interim release to the next assignment, or from the last assignment in a duty tour to the point of final release, including the mode of transportation (train, track car, railroad-provided motor vehicle, personal automobile, etc.).

(9) Beginning and ending location, date, and time of any other service performed at the behest of the railroad.

(10) Identification (code) of service type for any other service performed at the behest of

the railroad.

(11) Total time on duty for the duty tour.

(12) Reason for any service that exceeds 12 hours' total time on duty for the duty tour.

(13) The total amount of time by which the sum of total time on duty and time spent awaiting or in deadhead transportation to the point of final release exceeds 12 hours;

(14) The cumulative total for the calendar month of -- (i) Time spent in covered service; (ii) Time spent awaiting or in deadhead transportation from a duty assignment to the place of final release; and (iii) Time spent in any other service at the behest of the railroad.

(15) The cumulative total for the calendar month of time spent awaiting or in deadhead transportation from a duty assignment to the place of final release following a period of 12 consecutive hours on duty.

(16) Number of consecutive days in which a period of time on duty was initiated.

(c) Exceptions to requirements for train employees. Paragraphs (b)(13) through (b)(16) of this section do not apply to the hours of duty records of train employees providing commuter rail passenger transportation or intercity rail passenger transportation. In addition to the information required by paragraphs (b)(1) through (b)(12), each hours of duty record for a train employee providing commuter rail passenger transportation or intercity rail passenger transportation shall include the following information:

(1) For train employees providing commuter rail passenger transportation or intercity rail passenger transportation, the date on which the series of at most 14 consecutive calendar days began for the duty tour.

(2) For train employees providing commuter rail passenger transportation or intercity rail passenger transportation, any date prior to the duty tour and during the series of at most 14 consecutive calendar days on which the employee did not initiate an on-duty period, if any.

(d) For dispatching service employees. Each hours of duty record for a dispatching service employee must include the following information about the employee:

(1) Identification of the employee (initials and last name; or if last name is not the employee's surname, provide the employee's initials and surname).

(2) Each covered service position in a duty tour.

(3) Amount of time off duty before going on duty or returning to duty in a duty tour.

(4) Location, date, and beginning time of each assignment in a duty tour.

(5) Location, date, and time released from each assignment in a duty tour.

(6) Beginning and ending location, date, and time of any other service performed at the behest of the railroad.

(7) Total time on duty for the duty tour.

(e) For signal employees. Each hours of duty record for a signal employee must include the following information about the employee:

(1) Identification of the employee (initials and last name; or if last name is not the employee's surname, provide the employee's initials and surname).

(2) Each covered service position in a duty tour.

(3) Headquarters location for the employee.

(4) Amount of time off duty before going on duty or resuming a duty tour.

(5) Location, date, and beginning time of each covered service assignment in a duty tour.

(6) Location, date, and time relieved for each covered service assignment in a duty tour.

(7) Location, date, and time released from each covered service assignment in a duty tour.

(8) Beginning and ending location, date, and time for periods spent in transportation, other than personal commuting, to or from a duty assignment, and mode of transportation (train, track car, railroad-provided motor vehicle, personal automobile, etc.).

(9) Beginning and ending location, date, and time of any other service performed at the behest of the railroad.

(10) Total time on duty for the duty tour.

(11) Reason for any service that exceeds 12 hours total time on duty for the duty tour.

A record of duty hours must be maintained for each job category of employees covered

by the Act by all railroads and now signal contractors. Thus, according to the latest available data, the following freight/passenger railroads and signal contractors and their employees must keep the required hours of duty records:

<u>Type RR</u>	<u>No. of RRs/Contractors</u>	<u>No. of Employees</u>
Class Is	7	74,571
Amtrak	1	3,917
Commuter	33/18	9,143
ASLRRR/Tourist (Cl. III)	704	9,824
Signal Contractors	40	1,000
PTC		2,000 (expected hires)
TOTAL	785	
	100,455 or 100,500	

Thus, based on this latest data available provided to FRA from railroad industry sources and from agency independent research conducted in conjunction with other future agency rulemakings, there are approximately 100,500 covered employees – 82,780 train and engine employees plus 17,720 dispatchers, signalmen, and PTC employees. It is estimated that 75% of this total will work 365 days per year (taking into account days off, etc.). FRA estimates then that a total of 27,511,875 hours of duty records (75,375 workers’ records x 365 days) will be generated each year.

Broken down, it is estimated that three-quarters (75%) of the records of the approximately 45,098 train and engine employees will be completed/kept electronically under systems set up by railroads already (45,098 T&E employees x .75 x 365 days) and that three-quarters of the remaining 37,682 train and employee (T&E) records will be completed/kept on paper. Thus, a total of 12,345,578 T&E records (33,823.5 records x 365 days) will be kept electronically by the Union Pacific, (UP), CSX Transportation (CSX), Florida East Coast Railway (FEC), and Norfolk Southern (NS) railroads and a total of 10,315,447 T&E records (28,261.5 records x 365 days) will be completed/kept on paper. It is estimated that it will take approximately two (2) minutes to keep each electronic record and an approximately 10 minutes to complete each paper record.

Of the additional 17,720 dispatchers/signalmen/PTC employees, approximately 3,222 are dispatchers. Again, 75% of these employees will work 365 days per year (3,222 employees’ x .75 x 365 days = 882,023 records). These dispatcher records will be completed/kept on paper. It is estimated that it will take approximately five (5) minutes to complete these paper records since they are less involved than those for T&E and signal employees. The rest of the 17,720 employees or 14,498 employees are signalmen/PTC employees. These workers will complete automated records. Again, 75% of these employees will work 365 days per year (14,498 employees’ x .75 x 365 days = 3,968,827 automated records). It is estimated that automated records will take an

average of eight (8) minutes to complete (10 minutes in the 1st year, 8 minutes in the 2nd year, and 6 minutes in the 3rd year after the rule becomes effective). The total annual burden for this requirement then is 2,733,439 hours (411,519 hours + 1,719,241 hours + 73,502 hours + 529,177 hours).

	Respondent Universe:
	785 railroads/signal contractors
Burden time per response:	2 minutes/5minutes/8 minutes
Frequency of Response:	On occasion
Annual number of Responses:	27,511,875 records
Annual Burden:	2,733,439 hours
Annual Cost	\$205,007,925 (2,733,439 hrs. x \$75)

Calculation: 12,345,578 electronic T&E records x 2 min. + 10,315,447 T&E paper records x 10 min. + 882,023 dispatcher paper records x 5 min. + 3,968,827 signalmen/PTC employee automated records x 8 min. = 2,733,439 hours

Total annual burden for this requirement is 2,733,439 hours.

49 C.F.R. Part 228.17 - Dispatchers Record of Train Movements.

Each carrier must keep, for each dispatching district, a record of train movements made under the direction and control of a dispatcher who uses telegraph, telephone, radio, or any other electrical or mechanical device to dispatch, report, transmit, receive, or deliver orders pertaining to train movements. The following information must be included in the record: (1) Identification of timetable in effect; (2) Location and date; (3) Identification of dispatchers and their times on duty; (4) Weather conditions at six (6) hour intervals; (5) Identification of enginemen and conductors and their times on duty; (6) Identification of trains and engines; (7) Station names and office designations; (8) Distances between stations; (9) Direction of movement and the time each train passes all reporting stations; (10) Arrival and departure times of trains at all reporting stations; and (11) Unusual events affecting movement of trains and identification of trains affected.

Each dispatching office is required to maintain a record of train movements made under the direction of a dispatcher. There are approximately 550 dispatching desks in the approximately 150 dispatching offices nationwide, and each dispatching desk will keep a record 365 days a year. A total of 200,750 records then will be kept each year. It is estimated that it will take approximately three (3) hours to complete each record. Total annual burden for this requirement is 602,250 hours.

Respondent Universe:	150 dispatch offices
Burden time per response:	3 hours
Frequency of Response:	On occasion
Annual number of Responses:	200,750 records
Annual Burden:	602,250 hours
Annual Cost	\$45,168,750 (602,250 hrs. x \$75)

Calculation: 200,750 records x 3 hrs. = 602,250 hours

Total annual burden for this requirement is 602,250 hours.

49 CFR Part 228.19 - Monthly Reports of Excess Service.

(a) In general. Except as provided in paragraph (h) of this section, each railroad, or contractor or subcontractor to a railroad, must report to the Associate Administrator for Railroad Safety/Chief Safety Officer, Federal Railroad Administration, Washington, D.C. 20590, each ins of excess service listed in paragraphs (b) through (e) of this section, in the manner provided by paragraph (f) of this section, within 30 days after the calendar month in which the instance occurs.

(b) For train employees. Except as provided in paragraph (c), the following instances of excess service by train employees must be reported to FRA as required by this section:

(1) A train employee is on duty for more than 12 consecutive hours.

(2) A train employee continues on duty without at least 10 consecutive hours undisturbed off duty during the preceding 24 hours. Instances involving duty tours that are broken by less than 10 consecutive hours undisturbed off duty which duty tours constitute more than a total of 12 hours time on duty must be reported.* (**Instances involving duty tours that are broken by four or more consecutive hours of undisturbed off duty time at a designated terminal which duty tours do not constitute more than a total of 12 hours time on duty are not required to be reported, provided such duty tours are immediately preceded by 10 or more consecutive hours of undisturbed off-duty time.*)

(3) A train employee returns to duty without at least 10 consecutive hours undisturbed off duty during the preceding 24 hours. Instances involving duty tours that are broken by less than 10 consecutive hours undisturbed off duty which duty tours constitute more than a total of 12 hours time on duty must be reported.* (**Instances involving duty tours that are broken by four or more consecutive hours of off duty time at a designated terminal which duty tours do not constitute more than a total of 12 hours time on duty are not required to be reported, provided such duty tours are immediately preceded by 10 or*

more consecutive hours undisturbed off-duty time.)

(4) A train employee returns to duty without additional time off undisturbed, equal to the total amount of time by which the employee's sum of total time on duty and time spent awaiting or in deadhead transportation to the point of final release exceeds 12 hours.

(5) A train employee exceeds a cumulative total of 276 hours in the following activities in a calendar month:

(i) Time spent in covered service;

(ii) Time spent awaiting or in deadhead transportation from a duty assignment to the place of final release; and

(iii) Time spent in any other service at the behest of the railroad.

(6) A train employee initiates an on-duty period on more than six (6) consecutive calendar days, when the on-duty period on the sixth consecutive day ended at the employee's home terminal, and the seventh consecutive day is not allowed pursuant to a collective bargaining agreement or pilot project.

(7) A train employee returns to duty after initiating an on-duty period on six (6) consecutive calendar days, without 48 consecutive hours undisturbed off duty at the employee's home terminal.

(8) A train employee initiates an on-duty period on more than seven (7) consecutive calendar days.

(9) A train employee returns to duty after initiating an on-duty period on seven (7) consecutive calendar days, without 72 consecutive hours off duty undisturbed at the employee's home terminal.

(10) A train employee exceeds the following limitations on time spent awaiting or in deadhead transportation from a duty assignment to the place of final release following a period of 12 consecutive hours on duty:

(i) 40 hours in any calendar month completed prior to October 1, 2009;

(ii) 20 hours in the transition period from October 1, 2009-October 15, 2009;

(iii) 15 hours in the transition period from October 16, 2009-October 31, 2009; and

(iv) 30 hours in any calendar month completed after October 31, 2009;

(c) Exception to requirements for train employees. For train employees who provide commuter rail passenger transportation or intercity rail passenger transportation during a duty tour, the following instances of excess service must be reported to FRA as required by this section:

(1) A train employee is on duty for more than 12 consecutive hours.

(2) A train employee returns to duty after 12 consecutive hours of service without at least 10 consecutive hours off duty.

(3) A train employee continues on duty without at least eight (8) consecutive hours off duty during the preceding 24 hours. Instances involving duty tours that are broken by less than eight (8) consecutive hours off duty which duty tours constitute more than a total of 12 hours time on duty must be reported.* (**Instances involving duty tours that are broken by four or more consecutive hours of off-duty time at a designated terminal which duty tours do not constitute more than a total of 12 hours on-duty time are not required to be reported, provided such duty tours are immediately preceded by eight (8) or more consecutive hours off-duty time.*)

(4) A train employee returns to duty without at least eight (8) consecutive hours off duty during the preceding 24 hours. Instances involving duty tours that are broken by less than eight (8) consecutive hours off duty which duty tours constitute more than a total of 12 hours time on duty must be reported.* (**Instances involving duty tours that are broken by four or more consecutive hours of off-duty time at a designated terminal which duty tours do not constitute more than a total of 12 hours time on duty are not required to be reported, provided such duty tours are immediately preceded by eight (8) or more consecutive hours off-duty time.*)

(5) A train employee, after first initiating an on-duty period each day for 6 or more consecutive calendar days including one or more Type 2 assignments, the last on-duty period of which ended at the employee's home terminal, initiates an on-duty period without having had 24 consecutive hours off duty at the employee's home terminal.

(6) A train employee, after first initiating an on-duty period each day for 6 or more consecutive days including one or more Type 2 assignments, initiates two or more on-duty periods without having had 24 consecutive hours off duty at the employee's home terminal.

(7) A train employee, after initiating on-duty periods on 13 or more calendar days during a series of at most 14 consecutive calendar days as defined in § 228.405(a)(3)(i), the last of which ended at the employee's home terminal, then initiates an on-duty period without

having had at least two consecutive calendar days off duty at the employee's home terminal.

(8) A train employee, after initiating an on-duty period on 13 or more calendar days during a series of at most 14 consecutive calendar days as defined in § 228.405(a)(3)(i), then initiates two or more on-duty periods without having had at least two consecutive calendar days off duty at the employee's home terminal.

(d) For dispatching service employees. The following instances of excess service by dispatching employees must be reported to FRA as required by this section:

(1) A dispatching service employee is on duty for more than nine (9) hours in any 24-hour period at an office where two or more shifts are employed.

(2) A dispatching service employee is on duty for more than 12 hours in any 24-hour period at any office where one shift is employed.

(e) For signal employees. The following instances of excess service by signal employees must be reported to FRA as required by this section:

(1) A signal employee is on duty for more than 12 consecutive hours.

(2) A signal employee continues on duty without at least 10 consecutive hours undisturbed off duty during the preceding 24 hours.

(3) A signal employee returns to duty without at least 10 consecutive hours undisturbed off duty during the preceding 24 hours.

(f) Except as provided in paragraph (h), reports required by paragraphs (b) through (e) of this section must be filed in writing on Form FRA F 6180.3 with the Office of Railroad Safety, Federal Railroad Administration, Washington, DC 20590. A separate form must be used for each instance reported.

(g) Use of electronic signature. For the purpose of complying with paragraph (f) of this section, the signature required on Form FRA F 6180.3 may be provided to FRA by means of an electronic signature provided that:

(1) The record contains the printed name of the signer and the date and actual time the signature was executed, and the meaning (such as authorship, review, or approval) associated with the signature;

(2) Each electronic signature must be unique to one individual and must not be used by, or assigned to, anyone else;

(3) Before a railroad, or a contractor or subcontractor to a railroad, establishes, assigns, certifies, or otherwise sanctions an individual's electronic signature, or any element of such electronic signature, the organization must verify the identity of the individual;

(4) Persons using electronic signatures must, prior to or at the time of such use, certify to the agency that the electronic signatures in their system, used on or after the effective date of this regulation, are the legally binding equivalent of traditional handwritten signatures;

(5) The certification must be submitted, in paper form and signed with a traditional handwritten signature, to the associate Administrator for Railroad Safety/Chief Safety Officer; and

(6) Persons using electronic signatures must, upon agency request, provide additional certification or testimony that a specific electronic signature is the legally binding equivalent of the signer's handwritten signature.

(h) Exception. A railroad, or a contractor or subcontractor to a railroad, is excused from the requirements of paragraphs (a) and (f) of this section as to any employees for which -- (1) The railroad or a contractor or subcontractor to a railroad, maintains hours of service records using an electronic recordkeeping system that complies with the requirements of subpart D of this Part; and (2) The electronic recordkeeping system referred to in paragraph (h)(1) of this section requires: (i) the employee to enter an explanation for any excess service certified by the employee; and (ii) the railroad, or a contractor or subcontractor of a railroad, to analyze each instance of excess service certified by one of its employees, make a determination as to whether each instance of excess service would be reportable under the provisions of paragraphs (b) through (e) of this section, and allows the railroad, or a contractor or subcontractor to a railroad, to append its analysis to its employee's electronic record; and (iii) allows FRA inspectors and State inspectors participating under 49 CFR 212 access to employee reports of excess service and any explanations provided.

Each carrier then must report the circumstances where their employees have exceeded maximum duty hour limitations. There are approximately 300 respondents. The excess service situations vary considerably due to carrier size and compliance considerations. Due to additional requirements to keep track of limbo time and consecutive days on duty time, FRA estimates that the average annual number of submissions will number approximately 2,670. It is estimated that it will take approximately two (2) hours to prepare the report and forward it to FRA. Total annual burden for this requirement is 5,340 hours.

Respondent Universe:	300 railroads
Burden time per response:	2 hours

Frequency of Response:	On occasion	
Annual number of Responses:	2,670 reports (forms)	
Annual Burden:	5,340 hours	
Annual Cost		\$400,500
	(5,340 hrs. x \$75)	

Calculation: 2,670 reports x 2 hrs. = 5,340 hours

FRA estimates that the provision under (g)(4) above pertaining to certifying electronic signatures will not be utilized by railroads for quite some time. Consequently, there is no burden associated with this requirement.

Total annual burden for this requirement is 5,340 hours.

49 CFR Part 228.23 - Criminal Penalty for False Report or Record

Any person who knowingly and willfully falsifies a report or record required to be kept under this Part or otherwise knowingly and willfully violates any requirement of this Part may be liable for criminal penalties of a fine up to \$5,000, imprisonment for up to two years, or both, in accordance with 49 U.S.C. 21311(a).

FRA estimates that there will be zero (0) falsified reports or records kept by railroad under this Part. Consequently, there is no burden associated with this requirement.

49 CFR Part 228.103 - Construction of Employee Sleeping Quarters.

A common carrier that has developed plans for the construction or reconstruction of sleeping quarters subject to this Subpart and which is considering a site less than one-half mile (2,640 feet) (804 meters) from any area where switching or humping operations are performed, measured from the nearest rail of the nearest trackage utilized on a regular or intermittent basis for switching or humping operations to the point on the site where the carrier proposes to construct or reconstruct the exterior wall of the structure, or portion of such wall, which is closest to such operations, must obtain the approval of the Federal Railroad Administration before commencing construction or reconstruction on that site. Approval may be requested by filing a petition conforming to the requirements of this Subpart.

A petition must be filed in triplicate with the Secretary, Railroad Safety Board, Federal Railroad Administration, Washington, D.C. 20590 and must contain the following information: (1) A brief description of the type of construction planned, including materials to be employed, means of egress from the quarters, and actual and projected exterior noise levels and projected interior noise levels; (2) The number of employees expected to utilize the quarters at full capacity; (3) A brief description of the site, including: (i) Distance from trackage where switching or humping operations are

performed, specifying distances from particular functions such as classification, repair, assembling of trains from large groups of cars, etc.; (ii) Topography within a general area consisting of the site and all of the rail facilities close to the site; (iii) Location of other physical improvements situated between the site and areas where railroad operations are conducted; (4) A blueprint or other drawing showing the relationship of the site to trackage and other planned and existing facilities; (5) The proposed or estimated date for commencement of construction; (6) A description of the average number and variety of rail operations in the areas within one-half mile (2,640 feet) (804 meters) of the site (e.g., number of cars classified in 24-hour period; number of train movements); (7) An estimate of the average daily number of placarded rail cars transporting hazardous materials through the railroad facility (where practicable, based on a 365-day period sample, that period not having ended more than 120 days prior to the date of filing the petition), specifying the (i) Number of such cars transporting class A explosives and poison gases; and (ii) Number of DOT Specification 112A and 114A tank cars transporting flammable gas subject to FRA emergency order No. 5; (8) A statement certified by a corporate officer of the carrier possessing authority over the subject matter explaining any plans of that carrier for utilization of existing trackage, or for the construction of new trackage, which may impact on the location of switching or humping operations within one-half mile of the proposed site (if there are no plans, the carrier official must so certify); and (9) Any further information which is necessary for evaluation of the site. A petition filed under this section must contain a statement that the petition has been served on the recognized representatives of the railroad employees who will be utilizing the proposed sleeping quarters, together with a list of the employee representatives served.

Each railroad then must petition FRA to allow the construction or reconstruction of employee sleeping quarters in the vicinity of any area where switching is performed. There have been no submissions under this requirement in the last five years. However, it is possible that FRA could receive one such a petition a year over the next three (3) years and, if a railroad should decide to petition FRA under this requirement, it is estimated that it would take approximately 16 hours to gather the necessary data, prepare the petition and other required documentation, and send the stipulated number of copies to the appropriate parties. Total annual burden for this requirement is 16 hours.

Respondent Universe:	50 railroads
Burden time per response:	16 hours
Frequency of Response:	On occasion
Annual number of Responses:	1 petition
Annual Burden:	16 hours
Annual Cost	\$1,200 (16 hrs. x \$75)

Calculation: 1 petition x 16 hrs. = 16 hours

Total annual burden for this requirement is 16 hours.

49 CFR Part 228.201 - Electronic Recordkeeping System and Automated System; General.

(a) Electronic Recordkeeping System. For the purposes of compliance with the recordkeeping requirements of Subpart B, a railroad or a contractor or a subcontractor to a railroad, may create and maintain any of the records required by Subpart B through electronic transmission, storage, and retrieval, if all of the following conditions are met: **(Revised Requirement)**

(1) The system used to generate the electronic record meets all requirements of this paragraph (a) and all requirements §§ 228.203 and § 228.205;

(2) The electronically generated record contains the information required by § 228.11;

(3) The railroad, or contractor or subcontractor to the railroad, monitors its electronic database of employee hours of duty records through a sufficient number of monitoring indicators to ensure a high degree of accuracy of these records;

(4) The railroad, or contractor or subcontractor to the railroad, trains its affected employees on the proper use of the electronic recordkeeping system to enter the information necessary to create their hours of service record, as required by § 228.207;

(5) The railroad, or contractor or subcontractor to the railroad, maintains an information technology security program adequate to ensure the integrity of the system, including the prevention of unauthorized access to the program logic or individual records; and

(6) FRA's Associate Administrator for Railroad Safety/Chief Safety Officer may prohibit or revoke the authority to use the electronic system if FRA finds the system is not properly secure, is inaccessible to FRA, or fails to record and store the information adequately and accurately. FRA will record such a determination in writing, including the basis for such action, and will provide a copy of its determination to the railroad.

The burden for this requirement is included under that of § 228.11, § 228.203, and § 228.207. Consequently, there is no additional burden associated with this provision.

(b) Automated recordkeeping system. For purposes of compliance with the recordkeeping requirements of Subpart B of this Part, an eligible smaller railroad, or a contractor or a subcontractor that provides covered service employees to such a railroad, may create and maintain any of the records required by Subpart B using an automated recordkeeping system if all of the following conditions are met: **(New Requirement)**

(1) The automated recordkeeping system meets all the requirements of paragraph (b) of this section and all requirements of § 228.206; and

(2) The eligible smaller railroad or its contractor or its subcontractor complies with all of the requirements of paragraph (a)(2) and (a)(4) through (6) of this section for its automated records and automated recordkeeping system.

As noted in the Regulatory Impact Analysis accompanying this final rule, FRA estimates that approximately 80 percent of the 746 potentially affected railroads (742 Class III + 4 Class II) or approximately 597 railroads plus all 18 commuter railroads (a total of 615 railroads) will need to acquire additional software to establish automated systems. These railroads will need to set up and test the simplistic reporting/ recordkeeping programs on their computers. It is estimated that it will take approximately 24 hours to complete this task. Total annual burden for this requirement is 14,760 hours.

Respondent Universe:	764 railroads
Burden time per response:	24 hours
Frequency of Response:	On occasion
Annual number of Responses:	615 automated systems
Annual Burden:	14,760 hours
Annual Cost	\$1,107,000
	(14,760 hrs. x \$75)

Calculation: 615 automated systems x 24 hrs. = 14,760 hours

(c) If a railroad, or a contractor or subcontractor to the railroad, is no longer eligible to use an automated recordkeeping system to record data Subpart B of this Part requires, the entity must begin keeping manual or electronic records and must retain its automated records as required under § 228.9(c) unless the entity requests, and FRA grants, a waiver under § 211.41 of this chapter. **(New Requirement)**

FRA estimates that approximately two (2) entities (railroads/contractors/subcontractors) when no longer eligible to use an automated recordkeeping system to record data subpart B of this part requires will request waivers to refrain from keeping manual or electronic records or will request a waiver to refrain from having to retain its automated records as required by § 228.9(c) under the above requirement. It is estimated that it will take approximately eight (8) hours to complete each waiver request. Total annual burden for this requirement is 16 hours.

Respondent Universe:	615 railroads
Burden time per response:	8 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 waiver requests

Annual Burden:	16 hours
Annual Cost	\$1,200 (16 hrs. x \$75)

Calculation: 2 waiver requests x 8 hrs. = 16 hours

Total annual burden for this entire requirement is 14,776 hours (14,760 + 16)

49 CFR Part 228.203 - Program Components.

(a) System Security. The integrity of the program and database must be protected by a security system that utilizes an employee identification number and password, or a comparable method, to establish appropriate levels of program access meeting all of the following standards:

(1) Data input is restricted to the employee or train crew whose time is being recorded, with the following exceptions:

(i) A railroad, or a contractor or subcontractor to a railroad, may allow its recordkeeping system to pre-populate fields of the hours of service record provided that --

A. The recordkeeping system may pre-populate fields of the hours of service record with information known to the railroad, or contractor or subcontractor to the railroad to be factually accurate for a specific employee.

B. The recordkeeping system may also provide the ability for employees to copy data from one field of a record into another field, where applicable.

C. Estimated, historical, or arbitrary data are not used to pre-populate any field of a hours of service record.

D. A railroad, or a contractor or subcontractor to a railroad, is not in violation of this paragraph if it makes a good faith judgment as to the factual accuracy of the data for a specific employee but nevertheless errs in pre-populating a data field.

E. The employee may make any necessary changes to the data by typing into the field, without having to access another screen or obtain clearance from the railroad, or a contractor or subcontractor to a railroad.

(ii) A railroad, or a contractor or subcontractor to a railroad, shall allow employees to

complete a verbal quick tie-up, or to transmit by facsimile or other electronic means the information necessary for a quick tie-up, if –

(A) The employee is released from duty at a location at which there is no other terminal available;

(B) Computer systems are unavailable as a result of technical issues; or

(C) Access to computer terminals is delayed and the employee has exceeded his or her maximum allowed time on duty.

(2) No two individuals have the same electronic identity.

(3) A record cannot be deleted or altered by an individual after the record is certified by the employee who created that record.

(4) Any amendment to a record is either –

(i) Electronically stored apart from the record that it amends, or

(ii) Electronically attached to the record as information without changing the original record.

(5) Each amendment to a record uniquely identifies the individual making the amendment.

(6) The electronic system provides for the maintenance of inspection records as originally submitted without corruption or loss of data.

(7) Supervisors and crew management officials can access, but cannot delete or alter the records of any employee after the report-for-duty time of the employee or after the record has been certified by the reporting employee.

(b) Identification of the individual entering data. The program must be capable of identifying each individual who entered data for a given record. If a given record contains data entered by more than one individual, the program must be capable of identifying each individual who entered specific information within the record.

(c) Capabilities of program logic. The program logic must have the ability to –

(1) Calculate the total time on duty for each employee, using data entered by the employee and treating each identified period as defined in § 228.5;

- (2) Identify input errors through use of program edits;
 - (3) Require records, including outstanding records, the completion of which was delayed, to be completed in chronological order;
 - (4) Require reconciliation when the known (system-generated) prior time off differs from the prior time off reported by an employee;
 - (5) Require explanation if the total time on duty reflected in the certified record exceeds the statutory maximum for the employee;
 - (6) Require the use of a quick tie-up process when the employee has exceeded or is within three minutes of his or her statutory maximum time on duty;
 - (7) Require that the employee's certified final release be not more than three minutes in the future, and that the employee may not certify a final release time for a current duty tour that is in the past, compared to the clock time of the computer system at the time that the record is certified, allowing for changes in time zones;
 - (8) Require automatic modification to prevent miscalculation of an employee's total time on duty for a duty tour that spans changes from and to daylight savings time;
 - (9) For train employees, require completion of a full record at the end of a duty tour when the employee initiates a tie-up with less than the statutory maximum time on duty and a quick tie-up is not mandated;
 - (10) For train employees disallow use of quick tie-up when the employee has time remaining to complete a full record, except as provided in paragraph (a)(1)(ii) of this section.
 - (11) Disallow any manipulation of the tie-up process that precludes compliance with any of requirements specified by subparagraphs (1) through (10) of this subparagraph (c).
- (d) Search capabilities. The program must contain sufficient search criteria to allow any record to be retrieved through a search of one or more of the following data fields, by specific date or by a date range not exceeding 30 days for the data fields specified by subparagraphs (1) and (2), and not exceeding one day for the data fields specified by subparagraphs (3) through (7):
- (1) Employee, by name or identification number;
 - (2) Train or job symbol;

- (3) Origin location, either yard or station;
 - (4) Released location, either yard or station;
 - (5) Operating territory (i.e., division or service unit, subdivision, or railroad-identified line segment);
 - (6) Certified records containing one or more instances of excess service; and
 - (7) Certified records containing duty tours in excess of 12 hours.
- (e) The program must display individually each train or job assignment within a duty tour.

The burden for this provision has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement

49 CFR Part 228.205 - Access to Electronic Records

- (a) FRA inspectors and State inspectors participating under 49 C.F.R. Part 212 must have access to hours of service records created and maintained electronically that is obtained as required by § 228.9(b)(4).
- (b) Railroads must establish and comply with procedures for providing an FRA inspector or participating State inspector with an identification number and temporary password for access to the system upon request, which access will be valid for a period not to exceed seven days. Access to the system must be provided as soon as possible and no later than 24 hours after a request for access.
- (c) The inspection screen provided to FRA inspectors and participating State inspectors for searching employee hours of duty records must be formatted so that –
- (1) Each data field entered by an employee on the input screen is visible to the FRA inspector or participating State inspector; and
 - (2) The data fields are searchable as described in § 228.203(d) and yield access to all records matching criteria specified in a search.
 - (3) Records are displayed in a manner that is both crew-based and duty tour oriented, so that the data pertaining to all employees who worked together as part of a crew or signal gang will be displayed together, and the record will include all of the assignments and activities of a given duty tour that are required to be recorded by this part.

The burden for this provision has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement.

§ 228.206 -- Requirements for Automated Records and for Automated Recordkeeping Systems on Eligible Smaller Railroads, and Their Contractors or Subcontractors that Provide Covered Service Employees to Such Railroads. (New Requirement)

(a) Use of electronic signature. Each employee creating a record required by Subpart B of this Part must sign the record using an electronic signature that meets the following requirements:

(1) The record contains the printed name of the signer and the date and actual time that the signature was executed, and the meaning (such as authorship, review, or approval) associated with the signature.

(2) Each electronic signature is unique to one individual and shall not be used by, or assigned to, anyone else.

(3) Before an eligible smaller railroad, or a contractor or subcontractor to such a railroad, establishes, assigns, certifies, or otherwise sanctions an individual's electronic signature, or any element of such electronic signature, the organization shall verify the identity of the individual.

(4) A person using an electronic signature shall, prior to or at the time of such use, certify to FRA that the person's electronic signatures in the system, used on or after August 29, 2018, is the legally binding equivalent of the person's traditional handwritten signature.

(5) Each employee shall sign the initial certification of his or her electronic signature with a traditional handwritten signature, and each railroad using an automated system must maintain certification of each electronic signature at its headquarters or the headquarters of any contractor or subcontractor providing employees who perform covered service to such a railroad, and railroads, contractors, and subcontractors must make the certification available to FRA upon request; and

FRA estimates that approximately 19,365 certifications will be completed by employees, signed with a traditional handwritten signature, and kept by railroads under the above requirements. It is estimated that it will take approximately five (5) minutes to complete and file each certification. Total annual burden for this requirement is 1,614 hours.

Respondent Universe:	100,500 employees
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	19,365 certifications

Annual Burden:	1,614 hours
Annual Cost	\$114,594
	(1,614 hrs. x \$71)

Calculation: 19,365 certifications x 5 min. = 1,614 hours

(6) A person using an electronic signature in such a system shall, upon FRA request, provide additional certification or testimony that a specific electronic signature is the legally binding equivalent of his or her handwritten signature.

FRA estimates that approximately 75 additional certifications/testimony will be provided by railroads upon FRA request under the above requirement. It is estimated that it will take approximately five (5) minutes to complete each additional certification/testimony. Total annual burden for this requirement is six (6) hours.

Respondent Universe:	100,500 employees
Burden time per response:	5 minutes
Frequency of Response:	On occasion
Annual number of Responses:	75 additional certifications /testimonies
Annual Burden:	6 hours
Annual Cost	\$426 (6 hrs. x \$71)

Calculation: 75 additional certifications/testimony x 5 min. = 6 hours

(b) System security. Railroads using an automated recordkeeping system must protect the integrity of the system by the use of an employee identification number and password, or a comparable method, to establish appropriate levels of program access meeting all of the following standards:

(1) Data input is restricted to the employee or train crew or signal gang whose time is being recorded, except that an eligible smaller railroad, or a contractor or subcontractor to such railroad, may pre-populate fields of the hours of service record provided that--

(i) The eligible smaller railroad, or its contractor or subcontractor, pre-populates fields of the hours of service record with information the railroad, or its contractor or subcontractor knows is factually accurate for a specific employee.

(ii) The recordkeeping system may allow employees to copy data from one field of a record into another field, where applicable.

(iii) The eligible smaller railroad, or its contractor subcontractor does not use estimated, historical, or arbitrary information to pre-populate any field of an hours of service record.

(iv) An eligible smaller railroad, or a contractor or a subcontractor to such a railroad, is not in violation of paragraph (b)(1) of this section if it makes a good faith judgment as to the factual accuracy of the data for a specific employee but nevertheless errs in pre-populating a data field.

(v) The employee may make any necessary changes to the data by typing into the field, without having to access another screen or obtain clearance from the railroad, or contractor or subcontractor to the railroad.

(2) No two individuals have the same electronic signature.

(3) No individual can delete or alter a record after the employee who created the record electronically signs the record.

(4) Any amendment to a record is either:

(i) Electronically stored apart from the record that it amends, or

(ii) Electronically attached to the record as information without changing the original record.

(5) Each amendment to a record uniquely identifies the individual making the amendment.

(6) The automated system maintains the records as originally submitted without corruption or loss of data. Beginning August 29, 2018, an eligible smaller railroad must retain back-up data storage for its automated records for the quarters prescribed in the following table for the time specified in § 228.9(c)(3), to be updated within 30 days of the end of each prescribed quarter –

Quarter 1	January 1 through March 31
Quarter 2	April 1 through June 30
Quarter 3	July 1 through September 30
Quarter 4	October 1 through December 31

(7) Supervisors and crew management officials can access, but cannot delete or alter, the records of any employee after the employee electronically signs the record.

(c) Identification of the individual entering data. If a given record contains data entered by more than one individual, the record must identify each individual who entered specific information within the record and the data the individual entered.

(d) Search capabilities. The automated recordkeeping system must store records using the following criteria so all records matching the selected criteria are retrieved from the same location:

(1) Date (month and year);

(2) Employee name or identification number; and

(3) Electronically signed records containing one or more instances of excess service, including duty tours in excess of 12 hours.

(e) Access to records. An eligible smaller railroad, or contractor or subcontractor providing covered service employees to such a railroad, must provide access to its hours of service records under Subpart B that are created and maintained in its automated recordkeeping system to FRA inspectors and State inspectors participating under 49 CFR Part 212, subject to the following requirements:

(1) Access to records created and maintained in the automated recordkeeping system must be obtained as required by § 228.9(c)(4).

(2) An eligible smaller railroad must establish and comply with procedures for providing an FRA inspector or participating State inspector with access to the system upon request, and must provide access to the system as soon as possible but not later than 24 hours after a request for access.

FRA estimates that approximately 615 system access procedures will be provided by Class III railroads under the above requirement. The whole idea behind the option of automated recordkeeping is simplification. Thus, the system access procedures would be simple and FRA estimates that it will take approximately 90 minutes to establish such procedures. Total annual burden for this requirement is 923 hours.

Respondent Universe:	615 railroads
Burden time per response:	90 minutes
Frequency of Response:	On occasion
Annual number of Responses:	615 system access procedures
Annual Burden:	923 hours

Annual Cost \$69,225 (923
hrs. x \$75)

Calculation: 615 system access procedures x 90 min. = 923 hours

(3) Each data field entered by an employee on the input screen must be visible to the FRA inspector or participating State inspector; and

(4) The data fields must be searchable as described in paragraph (d) of this section and must yield access to all records matching the criteria specified in a search.

The burden for automated records is already included under § 228.11 and the burden for automated recordkeeping systems is already included under that of § 228.201. Consequently, there is no additional burden associated with these requirements.

Total annual burden for this entire requirement is 2,543 hours (1,614 + 6 + 923).
49 C.F.R. Part 228.207 - Training

(a) In general. A railroad must provide its train employees, signal employees, and dispatching service employees and its supervisors of these employees with initial and refresher training in the use of the electronic system.

(b) Initial training. (1) Initial training must include the following:

(i) Instructional components presented in a classroom setting or by electronic means; and

(ii) Experiential (“hands-on”) components; and

(iii) Training on –

(A) The aspects of the hours of service laws relevant to the employee’s position that are necessary to understanding the proper completion of the hours of service record required by this part, and

(B) The entry of hours of service data, into the electronic system or automated system or on the appropriate paper records used by the railroad or contractor or subcontractor to a railroad for which the employee performs covered service, and (**Revised Requirement**)

(iv) Testing to ensure that the objectives of training are met.

(2) Initial training must be provided –

(i) To each current employee and supervisor of an employee as soon after May 27, 2009,

as practicable; and

(ii) To new employees and supervisors prior to the time that they will be required to complete an hours of service record or supervise an employee required to complete an hours of service record.

Railroads that move to automated recordkeeping will need to train their staff, specifically train and engine, and dispatchers and signalmen, on how to enter their time on the automated system. As the employees are already providing the information on a paper record, it is a simple transfer of the entry to keyed input on an automated record. FRA estimates that approximately 5,316 employees plus 615 railroad trainers (a total of 5,931 employees) will be trained under the above revised requirement. It is estimated that it will take approximately two (2) hours to train each employee and keep the corresponding training record. Total annual burden for this requirement is 11,862 hours.

Respondent Universe:	615 railroads
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	5,931 trained trainers/trained employees and corresponding records
Annual Burden:	11,862 hours
Annual Cost	\$842,202
	(11,862 hrs. x \$71)

Calculation: 5,931 trained trainers/employees x 2 hrs. = 11,862 hours

(c) Refresher Training. (1) The content and level of formality of refresher training should be tailored to the needs of the location and employees involved, except that the training must:

(i) Emphasize any relevant changes to the hours of service laws, the recording and reporting requirements in Subparts B and D of this Part, or the electronic, *automated*, or manual recordkeeping system of the railroad or contractor or subcontractor to a railroad for which the employee performs covered service since the employee last received training; and **(Revised Requirement)**

(ii) Cover any areas in which supervisors or other railroad managers are finding recurrent errors in the employees' records through the monitoring indicators.

(2) Refresher training must be provided to each employee any time that recurrent errors in records prepared by the employee, discovered through monitoring indicators, suggest,

for example, the employee’s lack of understanding of how to complete hours of service records.

FRA estimates that approximately 47,000 employees will receive refresher training on the proper use of the manual, automated, or electronic recordkeeping system and relevant aspects of the hours of service laws under the above requirement. It is estimated that it will take approximately one (1) hour to train each employee keep the corresponding training record. Total annual burden for this requirement is 47,000 hours.

Respondent Universe:	785 railroads/signal contractors
Burden time per response:	1 hour
Frequency of Response:	On occasion
Annual number of Responses:	47,000 refresher trained employees corresponding training record
Annual Burden:	47,000 hours
Annual Cost	\$3,337,000 (47,000 hrs. x \$71)

Calculation: 47,000 refresher trained employees/records x 1 hr. = 47,000 hours

Total annual burden for this entire requirement is 58,862 hours (11,862 + 47,000).

49 U.S.C. 21102 - The Federal Hours of Service Laws.

The Secretary of Transportation may exempt a railroad carrier having not more than 15 employees covered by this chapter from the limitations imposed by this chapter. The Secretary may allow the exemption after a full hearing, for good cause shown, and on deciding that the exemption is in the public interest and will not affect safety adversely. The exemption shall be for a specific period of time and is subject to review at least annually. The exemption may not authorize a carrier to require or allow its employees to be on duty more than a total of 16 hours in a 24-hour period.

As stipulated above, a railroad that employs not more than 15 persons covered by the Federal Hours of Service Laws may be exempted from the laws’ requirements by FRA after a hearing and for good cause shown. FRA estimates that it will receive approximately one (1) petition annually under this provision. It is estimated that it will take approximately 10 hours to accumulate the necessary data, and prepare each petition. Total annual burden for this requirement is 10 hours.

Respondent Universe:	10 railroads
Burden time per response:	10 hours

Frequency of Response:	On occasion
Annual number of Responses:	1 petition
Annual Burden:	10 hours
Annual Cost	\$750 (10 hrs. x \$75)

Calculation: 1 petition x 10 hrs. = 10 hours

Total annual burden for this requirement is 10 hours.

Subpart F–Substantive Hours of Service Requirements for Train Employees Engaged in Commuter or Intercity Rail Passenger Transportation (New)

§ 228.403 Exemption.

- A. (b) The Administrator may exempt a railroad having not more than a total of 15 train employees, signal employees, and dispatching service employees from the limitations imposed by this Subpart on the railroad's train employees who are engaged in commuter or intercity rail passenger transportation. The Administrator may allow the exemption from this Subpart after a full hearing, for good cause shown, and on deciding that the exemption is in the public interest and will not affect safety adversely. The exemption shall be for a specific period of time and is subject to review at least annually. The exemption may not authorize a railroad to require or allow its train employees to be on duty more than a total of 16 hours in a 24-hour period.

The burden for this requirement is already included above under that of the Hours of Service Laws above. Consequently, there is no additional burden associated with this requirement.

§ 228.407 Analysis of Work Schedules; Submissions; FRA Review and Approval of Submissions; Fatigue Mitigation Plans.

- (a) Analysis of work schedules. Each railroad subject to this Subpart must perform an analysis of one cycle of the work schedules (the period within which the work schedule repeats) of its train employees engaged in commuter or intercity rail passenger transportation and identify those work schedules intended to be assigned to its train employees, that, if worked by such a train employee, put the train employee at risk for a level of fatigue at which safety may be compromised. Schedules identified in paragraph (g) of this section do not have to be analyzed. A level of fatigue at which safety may be compromised, hereafter called "the fatigue threshold," shall be determined by procedures that use a scientifically valid, bio-mathematical model of human performance and fatigue that has been approved by the Associate Administrator for Railroad Safety/Chief Safety

Officer pursuant to paragraph (c)(1) of this section, or previously accepted pursuant to paragraph (c)(2) of this section.

This requirement applies to two (2) railroads. FRA estimates then that approximately two (2) work schedule analyses will be performed under the above requirement. It is estimated that it will take approximately 20 hours to complete each work schedule analysis. Total annual burden for this requirement is 40 hours.

Respondent Universe:	168 railroads
Burden time per response:	20 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 work schedule analyses
Annual Burden:	40 hours
Annual Cost	\$3,000 (40 hrs. x \$75)

Calculation: 2 work schedule analyses x 20 hrs. = 40 hours

Each work schedule that exceeds the fatigue threshold must be --

(1) Reported to the Associate Administrator as provided in paragraph (b) of this section, no later than April 12, 2012;

FRA estimates that it will receive approximately one (1) report under the above requirement. It is estimated that it will take approximately two (2) hours to complete each report. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	168 railroads
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	1 report
Annual Burden:	2 hours
Annual Cost	\$150 (2 hrs. x \$75)

Calculation: 1 report x 2 hrs. = 2 hours

(2) Either --

(i) Mitigated by action in compliance with the railroad's fatigue mitigation plan that has been approved by the Associate Administrator as specified in paragraph (b) of this section, no later than April 12, 2012;

FRA estimates that it will receive approximately one (1) fatigue mitigation plan under the

above requirement. It is estimated that it will take approximately four (4) hours to complete each fatigue mitigation plan. Total annual burden for this requirement is four (4) hours.

Respondent Universe:	168 railroads
Burden time per response:	4 hours
Frequency of Response:	On occasion
Annual number of Responses:	1 fatigue mitigation plan
Annual Burden:	4 hours
Annual Cost	\$300 (4 hrs. x \$75)

Calculation: 1 fatigue mitigation plan x 4 hrs. = 4 hours

Or (ii) supported by a determination that the schedule is operationally necessary, and that the fatigue risk cannot be sufficiently mitigated by the use of fatigue mitigation tools to reduce the risk for fatigue to a level that does not violate the fatigue threshold, no later than April 12, 2012; or (iii) Both, no later than April 12, 2012; and

(3) Approved by FRA for use in accordance with paragraph (b) of this section.

As noted below, the burden for this provision has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement.

(b) Submissions of certain work schedules and any fatigue mitigation plans and determinations of operational necessity or declarations; FRA review and approval.

(1) No later than April 12, 2012, the railroad shall submit for approval to the Associate Administrator the work schedules described in paragraphs (b)(1)(i) and (ii) of this section. The railroad shall identify and group the work schedules as follows:

(i) Work schedules that the railroad has found, using a validated model (as specified in paragraph (c)(1) of this section or approved by FRA in accordance with paragraph (c)(2) of this section) to present a risk for a level of fatigue that violates the applicable threshold, but that the railroad has determined can be mitigated by the use of fatigue mitigation tools so as to present a risk for a level of fatigue that does not violate the fatigue threshold. The fatigue mitigation tools that will be used to mitigate the fatigue risk presented by the schedule must also be submitted.

The burden for this provision has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement.

(ii) Work schedules that the railroad has found, using a validated model (as specified in paragraph (c)(1) of this section or approved by FRA in accordance with paragraph (c)(2)

of this section), to present a risk for a level of fatigue that violates the applicable fatigue threshold, but that the railroad has determined cannot be mitigated so as to present a risk for a level of fatigue that does not violate the applicable fatigue threshold by the use of fatigue mitigation tools, and that the railroad has determined are operationally necessary. The basis for the determination must also be submitted.

The burden for this provision has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement.

(2) If a railroad performs the analysis of its schedules required by paragraph (a) of this section, and determines that none of them violates the applicable fatigue threshold, and therefore none of them presents a risk for fatigue that requires it to be submitted to the Associate Administrator pursuant to this paragraph, that railroad shall, no later than April 12, 2012, submit to the Associate Administrator a written declaration, signed by an officer of the railroad, that the railroad has performed the required analysis and determined that it has no schedule that is required to be submitted.

The burden for this provision has already been fulfilled by railroads. Consequently, there is no additional burden associated with this requirement.

(3) FRA will review submitted work schedules, proposed fatigue mitigation tools, and determinations of operational necessity. If FRA identifies any exceptions to the submitted information, the agency will notify the railroad within 120 days of receipt of the railroad's submission. Railroads are required to correct any deficiencies identified by FRA within the time frame specified by FRA.

(4) FRA will audit railroad work schedules and fatigue mitigation tools every two years to ensure compliance with this section.

FRA estimates that approximately one (1) work schedule, proposed fatigue mitigation tools, and determination of operational necessity will be need to be revised/corrected under the above requirement. It is estimated that it will take approximately two (2) hours to complete each corrected document. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	168 railroads
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	1 corrected document
Annual Burden:	2 hours
Annual Cost	\$150 (2 hrs. x \$75)

Calculation: 1 corrected document x 2 hrs. = 2 hours

(c) Submission of models for FRA approval; validated models already accepted by FRA.

(1) If a railroad subject to this Subpart wishes to use a model of human performance and fatigue, not previously approved, for the purpose of making part or all of the analysis required by paragraph (a) or (d) of this section, the railroad shall submit the model and evidence in support of its scientific validation, for the approval of the Associate Administrator. Decisions of the Associate Administrator regarding the validity of a model are subject to review under § 211.55 of this Chapter.

(2) A railroad may use a model that is already accepted by FRA. FRA has approved the Fatigue Avoidance Scheduling Tool™ (FAST) issued on July 15, 2009, by Fatigue Science, Inc. (with a fatigue threshold for the purpose of this regulation less than or equal to 70 for 20 percent or more of the time worked in a duty tour), and Fatigue Audit InterDyne™ (FAID) version 2, issued in September 2007 by InterDynamics Pty Ltd. (Australian Company Number (ACN) 057 037 635) (with a fatigue threshold for the purpose of this regulation greater than or equal to 72 for 20 percent or more of the time worked in a duty tour) as scientifically valid, biomathematical models of human performance and fatigue for the purpose of making the analysis required by paragraph (a) or (d) of this section. Other versions of the models identified in this paragraph must be submitted to FRA for approval prior to use as provided by paragraph(c)(1) of this section.

(3) If a new model is submitted to FRA for approval, pursuant to paragraph (c)(1) of this section, FRA will publish notice of the submission in the Federal Register, and will provide an opportunity for comment, prior to the Associate Administrator's making a final determination as to its disposition. If the Associate Administrator approves a new model as having been validated and calibrated, so that it can be used for schedule analysis in compliance with this regulation, FRA will also publish notice of this determination in the Federal Register.

FRA believes that railroads will work with the currently approved FAST and FAID models for the near future. Thus, FRA estimates that zero (0) models of human performance and fatigue will be submitted to the agency over the next three years and that zero (0) comments will be made as a result. Thus, there is no burden associated with this requirement.

(d) Analysis of certain later changes in work schedules. (1) Additional follow-up analysis must be performed each time that the railroad changes one of its work schedules in a manner —

(i) That would differ from the FRA-approved parameters for hours of duty of any work schedule previously analyzed pursuant to paragraph (a) of this section; or

(ii) That would alter the work schedule to the extent that train employees who work the schedule may be at risk of experiencing a level of fatigue that violates the FRA-approved fatigue threshold established by paragraph (a) of this section.

(2) Such additional follow-up analysis must be submitted for FRA approval as provided under paragraph (b) of this section, as soon as practicable, prior to the use of the new schedule for an employee subject to this Subpart. FRA approval is not necessary before a new schedule may be used; however, a schedule that has been disapproved by FRA may not be used.

FRA estimates that approximately five (5) follow-up analyses will be performed by railroads and submitted to the agency whenever they change work schedules under the above requirement. It is estimated that it will take approximately four (4) hours to complete each follow-up analysis. Total annual burden for this requirement is 20 hours.

Respondent Universe:	168 railroads
Burden time per response:	4 hours
Frequency of Response:	On occasion
Annual number of Responses:	5 follow-up analyses
Annual Burden:	20 hours
Annual Cost	\$1,500 (20 hrs. x \$75)

Calculation: 5 follow-up analyses x 4 hrs. = 20 hours

(3) FRA will review submitted revised work schedules, and any accompanying fatigue mitigation tools, and determinations of operational necessity. If FRA identifies any exceptions to the submitted information, the agency will notify the railroad as soon as possible. Railroads are required to correct any deficiencies identified by FRA within the time frame specified by FRA.

FRA estimates that approximately one (1) revised work schedule, and accompanying fatigue mitigation tools, and determination of operational necessity will be needed to be corrected under the above requirement. It is estimated that it will take approximately two (2) hours to complete each corrected document. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	168 railroads
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	1 corrected document
Annual Burden:	2 hours

Annual Cost	\$150 (2 hrs. x \$75)
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Calculation: 1 corrected document x 2 hrs. = 2 hours

(e) Fatigue mitigation plans. A written plan must be developed and adopted by the railroad to mitigate the potential for fatigue for any work schedule identified through the analysis required by paragraph (a) or (d) of this section as at risk, including potential fatigue caused by unscheduled work assignments. Compliance with the fatigue mitigation plan is mandatory. The railroad shall review and, if necessary, update the plan at least once every two years after adopting the plan.

The burden for fatigue mitigation plans is included above under that of paragraph (a). Consequently, there is no additional burden associated with this requirement.

FRA estimates that it will receive approximately eight (8) updated fatigue mitigation plans under the above requirement. It is estimated that it will take approximately four (4) hours to complete each updated fatigue mitigation plan. Total annual burden for this requirement is 32 hours.

Respondent Universe:	168 railroads
Burden time per response:	4 hours
Frequency of Response:	On occasion
Annual number of Responses:	8 updated fatigue mitigation plans
Annual Burden:	32 hours
Annual Cost	\$2,400 (32 hrs. x \$75)

Calculation: 8 updated fatigue mitigation plans x 4 hrs. = 32 hours

(f) Consultation. (1) Each railroad subject to this Subpart shall consult with, employ good faith, and use its best efforts to reach agreement with all of its directly affected employees, including any nonprofit employee labor organization representing a class or craft of directly affected employees of the railroad, on the following subjects:

(i) The railroad’s review of work schedules found to be at risk for a level of fatigue at which safety may be compromised (as described by paragraph (a) of this section);

(ii) The railroad’s selection of appropriate fatigue mitigation tools; and

(iii) All submissions by the railroad to the Associate Administrator for approval that are required by this section.

(2) For purposes of this section, the term “directly affected employee” means an employee to whom one of the work schedules applies or would apply if approved.

FRA estimates that approximately five (5) consultations will take place under the above requirement. It is estimated that it will take approximately two (2) hours to complete each consultation. Total annual burden for this requirement is 10 hours.

Respondent Universe:	168 railroads
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	5 consultations
Annual Burden:	10 hours
Annual Cost	\$710 (10 hrs. x \$71)

Calculation: 5 consultations x 2 hrs. = 10 hours

(3) If the railroad and its directly affected employees, including any nonprofit employee labor organization representing a class or craft of directly affected employees of the railroad, cannot reach consensus on any area described in paragraph (f)(1) of this section, then directly affected employees and any such organization may file a statement with the Associate Administrator explaining their views on any issue on which consensus was not reached. The Associate Administrator shall consider such views during review and approval of items required by this section.

FRA estimates that approximately two (2) statements will be filed with the agency under the above requirement. It is estimated that it will take approximately two (2) hours to complete each statement. Total annual burden for this requirement is four (4) hours.

Respondent Universe:	RR Employees/Employee Organizations
Burden time per response:	2 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 filed statements
Annual Burden:	4 hours
Annual Cost	\$284 (4 hrs. x \$71)

Calculation: 2 filed statements x 2 hrs. = 4 hours

Total annual burden for this entire requirement is 116 hours (40 + 2 + 4 + 2 + 20 + 2 + 32 + 10 + 4).

§ 228.409 Requirements for Railroad-Provided Employee Sleeping Quarters During Interim Releases and Other Periods Available for Rest within a Duty Tour.

Any sleeping quarters provided by a railroad that are proposed as a fatigue mitigation tool, pursuant to § 228.407(b)(1)(i) are subject to the requirements of § 228.407(f), Consultation.

The burden for this requirement is included that of § 228.407(f) above. Consequently, there is no additional burden associated with this requirement.

§ 228.411 Training.

(a) Individuals to be trained. Except as provided by paragraph (f) of this section, each railroad subject to this Subpart shall provide training for its employees subject to this Subpart, and the immediate supervisors of its employees subject to this Subpart.

(b) Subjects to be covered. The training shall provide, at a minimum, information on the following subjects that is based on the most current available scientific and medical research literature:

(1) Physiological and human factors that affect fatigue, as well as strategies to reduce or mitigate the effects of fatigue;

(2) Opportunities for identification, diagnosis, and treatment of any medical condition that may affect alertness or fatigue, including sleep disorders;

(3) Alertness strategies, such as policies on napping, to address acute drowsiness and fatigue while an employee is on duty;

(4) Opportunities to obtain restful sleep at lodging facilities, including employee sleeping quarters provided by the railroad; and

(5) The effects of abrupt changes in rest cycles for employees.

FRA estimates that the 14 intercity/commuter railroads will develop training programs under the above requirement. It is estimated that it will take approximately five (5) hours to develop each training program. Total annual burden for this requirement is 70 hours.

Respondent Universe:	168 railroads
Burden time per response:	5 hours
Frequency of Response:	On occasion
Annual number of Responses:	14 training programs
Annual Burden:	70 hours
Annual Cost	\$5,250 (70

hrs. x \$75)

Calculation: 14 training programs x 5 hrs. = 70 hours

(c) Timing of initial training. Initial training shall be provided to affected employees not later than December 31, 2012, and to new employees subject to this Subpart before the employee first works a schedule subject to analysis under this Subpart or not later than December 31, 2012, whichever occurs later.

The burden for this requirement has already been fulfilled. Consequently, there is no additional burden associated with this requirement.

Subsequent Years

FRA estimates that approximately 150 new employees each year will need to be initially trained under the above requirement. It is estimated that it will take approximately one (1) hour to train each employee. Total annual burden for this requirement is 150 hours.

Respondent Universe:	168 railroads
Burden time per response:	1 hour
Frequency of Response:	On occasion
Annual number of Responses:	150 initially trained employees
Annual Burden:	150 hours
Annual Cost	\$10,650 (150 hrs. x \$71)

Calculation: 150 initially trained employees x 1 hr. = 150 hours

(d) Timing of refresher training.

(1) At a minimum, refresher training shall be provided every three calendar years.

(2) Additional refresher training shall also be provided when significant changes are made to the railroad's fatigue mitigation plan or to the available fatigue mitigation tools applied to an employee's assignment or assignments at the location where he or she works.

FRA estimates that approximately 3,400 employees each year will receive refresher training each year under the above requirement. It is estimated that it will take approximately one (1) hour to train each employee. Total annual burden for this requirement is 3,400 hours.

Respondent Universe:	168 railroads
Burden time per response:	1 hour
Frequency of Response:	On occasion
Annual number of Responses:	3,400 refresher trained employees
Annual Burden:	3,400 hours
Annual Cost	\$241,400 (3,400 hrs. x \$71)

Calculation: 3,400 refresher trained employees/records x 1 hr. =
3,400 hours

(e) Records of training. A railroad shall maintain a record of each employee provided training in compliance with this section and shall retain these records for three years.

FRA estimates that approximately 3,550 records of trained employees will be kept under the above requirement. It is estimated that it will take approximately five (5) minutes to complete each record. Total annual burden for this requirement is 296 hours.

Respondent Universe:	168 railroads
Burden time per response:	5 minutes (.083 hours)
Frequency of Response:	On occasion
Annual number of Responses:	3,550 records
Annual Burden:	296 hours
Annual Cost	\$22,200 (296 hrs. x \$75)

Calculation: 3,550 records x 5 min. = 296 hours

(f) A railroad engaged in tourist, scenic, historic, or excursion rail passenger transportation, may be excluded from the requirements of this section, if its train employees subject to this rule are assigned to work only schedules wholly within the hours of 4 a.m. to 8 p.m. on the same calendar day that comply with the provisions of § 228.405, upon that railroad's submission to the Associate Administrator of a written declaration, signed by an officer of the railroad, indicating that the railroad meets the limitations established in this paragraph.

FRA estimates that approximately two (2) written declarations will be sent to FRA under the above requirement. It is estimated that it will take approximately 60 minutes to complete each written declaration. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	140 railroads
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Burden time per response:	60 minutes
Frequency of Response:	On occasion
Annual number of Responses:	2 written declarations
Annual Burden:	2 hours
Annual Cost	\$150 (2 hrs. x \$75)

Calculation: 2 written declarations x 60 min. = 2 hours

Total annual burden for this entire requirement is 3,918 hours (70 + 150 + 3,400 + 296 + 2).

APPENDIX D: GUIDANCE ON FATIGUE MANAGEMENT PLANS

Railroads subject to Subpart F of this Part, Substantive Hours of Service Requirements for Train Employees Engaged in Commuter or Intercity Rail Passenger Transportation, may wish to consider adopting a written fatigue management plan that is designed to reduce the fatigue experienced by their train employees subject to that Subpart and to reduce the likelihood of accidents, incidents, injuries, and fatalities caused by the fatigue of these employees. If a railroad is required to have a fatigue mitigation plan under § 228.407 (containing the fatigue mitigation tools that the railroad has determined will mitigate the risk posed by a particular work schedule for a level of fatigue at or above the fatigue threshold), then the railroad's fatigue management plan could include the railroad's written fatigue mitigation plan, designated as such to distinguish it from the part of the plan that is optional, or could be a separate document. As provided in § 228.407(a)(2) and (e), compliance with the fatigue mitigation plan itself is mandatory.

A good fatigue management plan contains targeted fatigue countermeasures for the particular railroad. In other words, the plan takes into account varying circumstances of operations by the railroad on different parts of its system, and should prescribe appropriate fatigue countermeasures to address those varying circumstances. In addition, the plan addresses each of the following items, as applicable:

- (1) Employee education and training on the physiological and human factors that affect fatigue, as well as strategies to reduce or mitigate the effects of fatigue, based on the most current scientific and medical research and literature;
- (2) Opportunities for identification, diagnosis, and treatment of any medical condition that may affect alertness or fatigue, including sleep disorders;
- (3) Effects on employee fatigue of an employee's short-term or sustained response to emergency situations, such as derailments and natural disasters, or engagement in other intensive working conditions;

- (4) Scheduling practices for employees, including innovative scheduling practices, on-duty call practices, work and rest cycles, increased consecutive days off for employees, changes in shift patterns, appropriate scheduling practices for varying types of work, and other aspects of employee scheduling that would reduce employee fatigue and cumulative sleep loss;
- (5) Methods to minimize accidents and incidents that occur as a result of working at times when scientific and medical research has shown that increased fatigue disrupts employees' circadian rhythm;
- (6) Alertness strategies, such as policies on napping, to address acute drowsiness and fatigue while an employee is on duty;
- (7) Opportunities to obtain restful sleep at lodging facilities, including employee sleeping quarters provided by the railroad;
- (8) The increase of the number of consecutive hours of off-duty rest, during which an employee receives no communication from the employing railroad or its managers, supervisors, officers, or agents; and
- (9) Avoidance of abrupt changes in rest cycles for employees.

Finally, if a railroad chooses to adopt a fatigue management plan, FRA suggests that the railroad review the plan and update it periodically as the railroad sees fit if changes are warranted.

FRA estimates that approximately two (2) updated fatigue management plans will be completed under the above requirement. It is estimated that it will take approximately 10 hours to complete each updated fatigue management plan. Total annual burden for this requirement is 20 hours.

Respondent Universe:	168 railroads
Burden time per response:	10 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 fatigue management plans
Annual Burden:	20 hours
Annual Cost	\$1,500 (20 hrs. x \$75)

Calculation: 2 fatigue management plans x 10 hrs. = 20 hours

Total annual burden for this requirement is 20 hours.

Total annual burden (Subpart F) is 4,054 hours.

The total burden for this entire collection of information is **3,421,290** hours

13. Estimate of total annual costs to respondents.

As noted in the regulatory impact analysis accompanying this final rule, FRA estimates that there will be a small investment cost for implementing automated systems. These costs are for hardware, software, training employees in data entry and using the automated system, and setting up and transferring the current Hours of Service (Hours of Duty) reporting to an automated recordkeeping system.

Cost **\$4,300,000** (undiscounted over 10 years) or **\$430,000** per year

Previously, for adding Subpart F, FRA estimated that there would be programming costs for railroads to modify computer software for the bio-mathematical models of fatigue that they will use for work schedule analyses. Additionally, employees from the railroad who will be performing the work schedule analysis would need training in the use of the models and subsequent support. The software model may also require periodic maintenance for updates and to resolve other issues that may arise when using the model. Purchasing a software license, training in its use, and providing for its future support and maintenance are typical features of many software applications. Based upon the FAST model, FRA estimates that the programming modifications will cost about \$75,000; training will cost about \$50,000; support will cost \$7,500, for a total cost of **\$132,500**. Costs for training and support in future years are each estimated at about 10% of the initial programming cost, or about **\$15,000 annually** (i.e., \$7,500 for training + \$7,500 for support = \$15,000). Thus, the costs are as follows:

Subsequent Yearly Cost = \$147,500

Additional annual costs to respondents associated with the current rule are as follows:

Cost to Maintain IT Electronic Database of Hours of Duty Record	\$ 10,000
Postage and Miscellaneous	\$ 1,000
TOTAL	\$ 11,000

GRAND SUBTOTAL: SUBSEQUENT YEARS = \$158,500

AUTOMATED RECORDKEEPING COSTS = \$430,000

GRAND TOTAL = \$588,500

14. Estimate of Cost to Federal Government.

Annual recurring costs to FRA for the final and current rule are as follows:

Federal Costs

49 C.F.R. 228.11

The cost to the Federal Government in connection with these recordkeeping requirements is included under the costs listed below for sections 228.201 and 228.203.

49 C.F.R. 228.17

There is no cost to the Federal Government in connection with these recordkeeping requirements because the requirements are essentially the same as before.

49 C.F.R. 228.19

Approximately, an estimated 1,400 hours will be spent by FRA inspectors interviewing, processing and following up on the reports submitted by the railroads. Multiplying 1,400 hours times the estimated \$74 per hour (including 75 percent overhead) would be **\$103,600** in labor costs annually.

Although railroads have the option to file the required reports electronically, railroads may elect to fill them out on paper. FRA -- to be conservative -- is calculating a cost to take into account any railroads which might not file electronically or have access to the Internet to download the agency form. The cost for providing the estimated 2,670 forms used to file excessive service is approximately **\$187** (2,670 x \$.07 for cost of form and distribution).

Total Cost = **\$103,787**

49 C.F.R. Part 228.103

The estimated total annual cost to the Federal Government for obtaining, evaluating, and processing the required information is **\$1,369**.

This is calculated as follows: One-half hour for each petition to prepare public notice, eight hours' field investigation and reporting of findings, three hours evaluating investigative report and preparing recommendation. As stated earlier, FRA estimates that it will receive and handle one petition annually. Government cost is calculated at \$119 per hour which includes a 75 percent allowance for overhead and operational expenses. (11.5 hours x 1 petition x \$119 = **\$1,369**).

Total Cost = **\$1,369**

49 C.F.R. Part 228.207

Under this requirement, railroads must provide its train employees, signal employees, and dispatching service employees and its supervisors of these employees with initial and refresher training in the use of the electronic system. FRA inspectors will monitor this process. It is estimated that approximately 18 field inspectors will spend about six (6) hours each annually conducting monitoring/auditing activities regarding training. Thus, the cost to the Federal Government is as follows:

18 FRA field inspectors x 6 hrs. or a total 108 hours (@ \$74 p/hr) = **\$7,992**

Total Cost = **\$7,992**

49 U.S.C. 21102 - The Federal Hours of Service Laws.

Under this requirement, the Secretary of Transportation may exempt a railroad carrier having not more than 15 employees covered by chapter 211 from the limitations imposed by this chapter. The Secretary may allow the exemption after a full hearing, for good cause shown, and upon deciding that the exemption is in the public interest and will not adversely affect safety. The exemption shall be for a specific period of time and is subject to review at least annually. The exemption may not authorize a carrier to require or allow its employees to be on duty more than a total of 16 hours in a 24-hour period.

This cost is calculated as follows: One-half hour for each petition to prepare public notice, eight hours field investigation and reporting of findings, three hours evaluating investigative report and preparing recommendation. As stated earlier, FRA estimates that it will receive and handle one petition annually. Government cost is calculated at \$119 per hour which includes a 75 percent allowance for overhead and operational expenses. (11.5 hours x 2 petitions x \$119 = **\$2,737**).

Total Government Cost = **\$2,737**

Grand Total Government Cost = **\$115,885**

ADDITIONAL FEDERAL COSTS FOR SUBPART F

There will also be costs to the Federal government related to the requirements in Subpart F of the rule. Costs are as follows and hourly wage rates for FRA staff include overhead charges of 75 percent:

49 C.F.R. Part 228.407 – Work Schedules

Under this requirement, each railroad subject to this Subpart must perform an analysis of one cycle of the work schedules (the period within which the work schedule repeats) of its train employees engaged in commuter or intercity rail passenger transportation and identify those work schedules intended to be assigned to its train employees, that, if worked by such a train employee, put the train employee at risk for a level of fatigue at which safety may be compromised.

Also, under this requirement, railroads must identify work schedules that the railroad has found, using a validated model (as specified in paragraph (c)(1) of this section or approved by FRA in accordance with paragraph (c)(2) of this section) to present a risk for a level of fatigue that violates the applicable threshold, but that the railroad has determined can be mitigated by the use of fatigue mitigation tools so as to present a risk for a level of fatigue that does not violate the fatigue threshold. FRA staff will need to review these documents.

The cost is as follows:

2 work schedule analyses/work schedules @ 4 hrs. per work schedule x \$100 p/hr.(GS-13/5) = **\$800**

Additionally, under this section, a written plan must be developed and adopted by the railroad to mitigate the potential for fatigue for any work schedule identified through the analysis required by paragraph (a) or (d) of this section as at risk, including potential fatigue caused by unscheduled work assignments. FRA staff will need to review these documents.

The cost is as follows:

1 fatigue mitigation plans @ 8 hrs. per plan x \$100 p/hr (GS-14/5) = **\$800**

Total Cost = **\$1,600**

49 C.F.R. Part 228.411 – Training

Under this new requirement, each railroad subject to this Subpart must provide training

for its employees subject to this Subpart, and the immediate supervisors of its employees subject to this Subpart. FRA staff will need to review these training program documents.

The cost is as follows:

14 training programs @ 4 hrs. per program x \$85 p/hr (GS-13/5) = **\$4,760**

Total Cost = **\$4,760**

Appendix D – Fatigue Management Plans

Under this section, railroads have the option to submit fatigue management plans to the agency. FRA staff will need to review these documents.

The cost is as follows:

2 fatigue management programs @ 12 hrs. per program x \$100 p/hr (GS-14/5) = **\$2,400**

Total Cost = **\$2,400**

Grand Total Subpart F = **\$8,760**

GRAND TOTAL (PART 228 ALL) = **\$124,645**

15. Explanation of program changes and adjustments.

The burden for this collection of information has decreased by 93,515 hours from the last approved submission. The change in burden is due to seven (7) **program changes** and one (1) **adjustment**. The **program changes** are as follows:

TABLE OF PROGRAM CHANGES

49 CFR Part 228	Responses & Avg. Time (Previous Submission)	Responses & Avg. Time (This Submission)	Burden Hours (Previous Submission)	Burden Hours (This Submission)	Difference (plus/minus)
228.11 – Revised Requirement Hours of Duty Records –	27,429,750 record 2 min./5 min./ 10 min.	27,511,875 record 2 min./5 min./ 8 min.	2,856,125 hrs.	2,733,439 hrs.	- 122,686 hours + 82,125 resp.

Electronic, Paper, and Automated Records					
228.201 – New Requirements -- (b) RR Electronic Recordkeeping System and Automated Systems (c) Waiver requests by RRs/contractor/subcontractors to continue to use automated records when no longer eligible or to refrain from obligation to keep old automated records	0 systems 0 hours 0 waiver requests 0 hours	615 systems 24 hours 2 waiver requests 8 hours	0 hours 0 hours	14,760 hours 16 hours	+ 14,760 hours + 615 responses + 16 hours + 2 responses
228.206 – Automated Record & Automated Recordkeeping Systems -- Certification of Employee's Signature - Additional certification/testimony provided by employee upon FRA request - Class III Procedure for providing FRA/State inspector with system access upon request	0 certifications 0 minutes 0 certifications 0 minutes 0 procedures 0 minutes	19,365 signed certifications 5 minutes 75 signed certifications 5 minutes 615 procedures 90 minutes	0 hours 0 hours 0 hours	1,614 hours 6 hours 923 hours	+ 1,614 hours + 19,365 resp. + 6 hours + 75 responses + 923 hours + 615 responses
228.207 – RR Training of employees in use of electronic/automated record keeping system	0 employees 0 hours	5,931 trained employees 2 hours	0 hours	11,862 hours	+11,862 hours + 5,931 resp.

Program changes above decreased the burden by *93,505 hours* and increased the number of *responses* by *108,728*.

TABLE OF ADJUSTMENT(S)

49 U.S.C. 21102	Responses & Avg. Time (Previous Submission)	Responses & Avg. Time (This Submission)	Burden Hours (Previous Submission)	Burden Hours (This Submission)	Difference (plus/minus)
Federal Hours of Service Laws – Petition for Exemption	2 petitions 10 hours	1 petition 10 hours	20 hours	10 hours	- 10 hours - 1 response

Adjustment(s) above decreased the burden by *10 hours* and decreased the number of *responses* by *one (1)*.

The current OMB inventory for this information collection shows a total burden of **3,514,805 hours**, while the present submission reflects a total burden of **3,421,290 hours**. Hence, there is a burden decrease of **93,515 hours**.

The cost to respondents has increased by **\$562,500** from the previously approved submission. The increase in cost is due to **program changes**. FRA estimates that hardware, software, and training costs associated with the proposed rule’s automated recordkeeping provisions will increase the burden by **\$430,000** per year. Additionally, the cost to respondents will increase by **\$158,500** due to **program changes** resulting from the new requirements under new Subpart F that reflect programming costs for railroads to modify computer software for the bio-mathematical models of fatigue that they will use for work schedule analyses. Further, the increase in cost reflects training and support costs for employees from the railroad who will be performing the work schedule analysis. The total revised cost to respondents amounts to **\$588,500**. The previously approved cost to respondents came to **\$26,000**. Hence, the change in cost to respondents resulting from this final rule is **\$562,500**.

16. Publication of results of data collection.

There are no plans to publish the information collected in 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

This information collection supports the main DOT strategic goal, namely transportation safety. Without this collection of information, rail safety throughout the U.S. might be seriously jeopardized. Specifically, the number of accidents/incidents and the severity of injuries might increase because railroad employees performing covered service worked excessive amounts of hours. Such excessively heavy work schedules could lead to

fatigue, poor judgment, and mistakes on the part of these employees that could result in a greater likelihood/increased risk of accident/incidents. The collection of information, particularly the Hours of Duty Records and the Monthly Reports of Excess Service, enhances rail safety by allowing FRA to closely monitor the railroad industry to ensure compliance with Federal regulations, and to take immediate corrective action in situations where the law and Federal regulations are not being observed.

The collection of information, notably the Dispatcher's Record of Train Movements, further enhances rail safety by providing a valuable resource that FRA and other investigating agencies can use in determining the cause(s) or contributing cause(s) of accidents/incidents. These records provide vital information, such as the identification of the timetable in effect; location and date; the identification of dispatchers and their times on duty; weather conditions at six-hour intervals; identification of enginemen and conductors and their times on duty; identification of trains and engines, direction of movement and the time each train passes all reporting stations; and unusual events affecting movement of trains and identification of trains affected. By accurately determining the cause(s) of accidents/incidents, FRA and the railroad industry can take measures to reduce the likelihood of similar events occurring in the future.

Lastly, the collection promotes rail safety by providing a safe environment for railroad workers. In particular, the petitions for approval for construction of employee sleeping quarters that must be submitted to FRA ensures that any construction or reconstruction of sleeping quarters located "within or in the immediate vicinity" of an area where railroad switching or humping operations are performed is done in a manner consistent with railroad safety. Thus, it is highly unlikely that railroad workers will be injured or killed because sleeping quarters were placed in an unsafe area.

In summary, this collection of information enhances railroad safety by providing an additional layer of protection through the agency's close monitoring and full awareness of the number of hours worked by railroad employees performing covered service. It furthers DOT's goal of promoting the public health and safety by working toward the elimination of transportation-related deaths, injuries, and property damage.

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.