

SUPPORTING JUSTIFICATION
49 CFR 228 HOURS OF SERVICE REGULATIONS
OMB No. 2130-0005; RIN 2130-AC15

Summary of Submission

- This submission is a request for an **revision** to the last approval of this collection of information cleared by OMB on July 22, 2012, which expires on **October 31, 2014**.
- FRA published the required 60-day **Federal Register** Notice on March 21, 2014. See 79 FR 15795. FRA received one comment in response to this notice.
- The total number of burden **hours requested** for this submission is **3,514,805 hours**.
- Total number of burden **hours previously approved** is **3,529,267 hours**.
- Total number of **responses requested** for this submission is **27,687,317**.
- Total number of **responses previously approved** is **27,703,668**.
- The decrease in burden from the last approved submission is **14,462 hours**.
- Total **adjustments** decreased the burden by **14,462 hours**.
- There were no **program changes**.
- ****The answer to question number 12 itemizes the hourly burden associated with each requirement of this rule (See pp. 24-55).**

1. Circumstances that make collection of the information necessary.

Background

Federal laws governing railroad employees' hours of service date back to 1907 with the enactment of the Hours of Service Act. See Pub. L. 59-274, 34 Stat. 1415 (1907). These laws, codified as amended primarily at 49 U.S.C. 21101-21109, are intended to promote safe railroad operations by limiting the hours of service of certain railroad employees and ensuring that they receive adequate opportunities for rest in the course of performing their duties. Pub. L. 103-272 (1994). The Secretary of Transportation ("Secretary") is charged with the administration of those laws, collectively referred to in this document as the Hours of Service Laws (HSL). This function has been delegated to the FRA Administrator. 49 U.S.C. 103(c); 49 CFR 1.49(d).

Congress substantially amended the HSL on three occasions. The first significant amendments occurred in 1969. Pub. L. 91-169, 83 Stat. 463. The 1969 amendments reduced the maximum time on duty for train employees¹ from 16 hours to 14 hours effective immediately, with a further reduction to 12 hours automatically taking effect two years later. Congress also established provisions for determining, in the case of a train employee, whether a period of time is to be counted as time on duty. 49 U.S.C. 21103(b). In so doing, Congress also addressed the issue of deadhead transportation² time, providing that “[t]ime spent in deadhead transportation to a duty assignment” is counted as time on duty. (Emphasis added). Although time spent in deadhead transportation from a duty assignment to the point of final release is not included within any of the categories of time on duty, Congress further provided that it shall be counted as neither time on duty nor time off duty. 49 U.S.C. 21103(b)(4). This provision effectively created a third category of time, known commonly as “limbo time.” In 1976, Congress again amended the HSL in several important respects. Most significantly, Congress expanded the coverage of the laws by including hostlers within the definition of employees now termed “train employees”, and by adding the section providing hours of service requirements for “signal employees”, now codified at 49 U.S.C. 21104. Congress also added a provision that prohibited a railroad from providing sleeping quarters that are not free from interruptions of rest caused by noise under the control of the railroad and that are not clean, safe, and sanitary, and prohibited beginning construction or reconstruction of sleeping quarters in an area or in the immediate vicinity of an area in which humping or switching operations are performed after July 7, 1996. See Pub. L. 94-348, 90 Stat. 818 (1976).

Section 108 of the Rail Safety Improvement Act of 2008 (RSIA) amended the HSL in a number of significant ways, most of which became effective July 16, 2009. See Section 108 of Pub. L. 110-432, Div. A, and FRA Interim Statement of Agency Policy and Interpretation at 74 FR 30665 (June 26, 2009). The RSIA established a limit of 276 hours per calendar month for train employees on service performed for a railroad and on time spent in or waiting for deadhead transportation to a point of final release, increased the quantity of the statutory minimum off-duty period after being on duty for 12 hours in

¹ A “train employee” is defined at 49 U.S.C. 21101(5) and 49 CFR 228.5 as an individual engaged in or connected with the movement of a train, including a hostler. FRA also interpreted this statutory term in published interpretations in 49 CFR part 228, appendix A, providing: “Train or engine service refers to the actual assembling or operation of trains. Employees who perform this type of service commonly include locomotive engineers, firemen, conductors, trainmen, switchmen, switchtenders (unless their duties come under the provisions of section 3 [49 U.S.C. 21105]) and hostlers.” Other employees, such as food service providers or sleeping car attendants, who may work on passenger trains, but have no responsibility for assembling or operating the train, are not within the definition of a train employee, and are, as such, not generally covered by this rule, or any other hours of service limitations, but they would be covered if they performed functions related to assembling or operating the train, regardless of the employee’s job title.

² “Deadheading” is defined at 49 CFR 228.5 as the physical relocation of a train employee from one point to another as a result of a railroad-issued verbal or written directive.

broken service from 8 hours of rest to 10 hours of rest, prohibited communication with train or signal employees during certain minimum statutory rest periods, and established mandatory time off duty for train employees of 48 hours after initiating an on-duty period on six consecutive days, or 72 hours after initiating an on-duty period on seven consecutive days. 49 U.S.C. 21103-21104. The RSIA also revised the definition of “signal employee” to include contractors who perform the work of a signal employee within the scope of the statute. 49 U.S.C. 21101(4).

However, Section 108(d) of the RSIA, which became effective on October 16, 2008, provided that the requirements described above for train employees would not go into effect on July 16, 2009, for train employees when providing commuter or intercity rail passenger transportation. 49 U.S.C. 21102(c). Section 108(d) further provided that these train employees, who provide commuter or intercity passenger rail service, would continue to be governed by the old HSL, (as they existed immediately prior to the enactment of the RSIA, at 49 U.S.C. 21103 prior to its 2008 amendment), until the effective date of regulations promulgated by the Secretary. 49 U.S.C. 21102(c). However, if no new regulations are in effect before October 16, 2011, the provisions of Section 108(b), which applied to train employees, would be extended to these employees at that time. Id.

Section 108(e) of the RSIA specifically provides the Secretary with the authority to issue hours of service rules and orders applicable to train employees engaged in commuter rail passenger transportation and intercity rail passenger transportation (as defined in 49 U.S.C. 24102), that may be different than the statute applied to other train employees. 49 U.S.C. 21109(b). Section 108(e) further provides that such regulations and orders may address railroad operating and scheduling practices, including unscheduled duty calls, communications during time off duty, and time spent waiting for deadhead transportation or in deadhead transportation from a duty assignment to the place of final release, that could affect employee fatigue and railroad safety. Id.

Section 108(e) of the RSIA also provides:

[i]n issuing regulations under subsection (a) the Secretary shall consider scientific and medical research related to fatigue and fatigue abatement, railroad scheduling and operating practices that improve safety or reduce employee fatigue, a railroad's use of new or novel technology intended to reduce or eliminate human error, the variations in freight and passenger railroad scheduling practices and operating conditions, the variations in duties and operating conditions for employees subject to this chapter, a railroad's required or voluntary use of fatigue management plans covering employees subject to this chapter, and any other relevant factors. 49 U.S.C. 21109(c).

Section 21109(a) of title 49 of the U.S. Code refers to other regulatory authority granted to FRA as the Secretary's delegate related to the HSL, which is not relevant to this rule. One of the goals of the present rulemaking is to identify and reduce unacceptable fatigue

for the employees who will be covered by the final rule. Therefore, FRA has based these regulations on scientific research related to fatigue and fatigue abatement, as applied to railroad scheduling practices and operating conditions for train employees providing commuter and intercity rail passenger transportation.

Scientific Background

Most mammals, including human beings, have an approximately 24-hour sleep-wake cycle known as a “circadian rhythm.” Rapid changes in the circadian pattern of sleep and wakefulness disrupt many physiological functions such as hormone releases, digestion, and temperature regulation. Human function can be affected, performance may be impaired, and a general feeling of debility may occur until realignment is achieved. Jet lag when flying east is the most commonly experienced syndrome similar to the experience of consistently working on a less-than-24-hour cycle.

Fatigue risk in an industry that operates 24 hours a day and 7 days per week is not just dependent on how many hours per day a person is permitted to work, or the amount of time that a person is required to be off duty between periods of work. Other significant factors in the level of fatigue risk include the time of day that an employee works and the number of consecutive days that an employee works. In addition, the quantity and quality of sleep vary with the time of day. Because of natural circadian rhythms and environmental and social factors, most people are able to achieve the best quality and most restful sleep at night.

As previously mentioned, the existing statutory hours of service requirements currently in effect for train employees of commuter and intercity passenger railroads establish a maximum on-duty time of 12 hours in a 24-hour period and a minimum off-duty time of 8 hours in a 24-hour period, or 10 hours after a period of consecutive hours on duty. Statutory requirements applicable to train employees on freight railroads, as revised by the RSIA, include a limitation on the number of consecutive days on which a train employee may initiate an on-duty period. However, the HSL for the railroad industry have never, up to the present day, differentiated in their requirements based on the time of day in which service is performed, or the time of day that a period is available for rest.

FRA conducted two work/rest diary studies with train employees in freight and passenger operations. Data from these studies indicate that train employees get more sleep than the average U.S. adult. While 46 percent of U.S. adults get less than seven hours of sleep, only 35 percent of freight train employees and 41 percent of passenger train employees get less than seven hours of sleep. This amount of sleep results in a level of fatigue that increases accident risk by 21 to 39 percent.³ Moreover, certain operational characteristics of commuter and intercity passenger service mitigate the fatigue associated with this

³ See Hursh, *et al.* *infra* at footnote 8.

amount of sleep loss relative to freight service. For example, many train employees on commuter and intercity passenger railroads work scheduled assignments, in which they begin and end their work day at approximately the same time each day. These employees also usually begin and end their duty tour at the same location, meaning that they can go home at the end of their work day and sleep in their own beds. In addition, very few scheduled assignments on most railroads operate during late night hours, and many of them result in duty tours significantly shorter than the maximum hours that the employee would be allowed to remain or go on duty under the existing law or this regulation.

Because these characteristics are more likely to allow for periods of rest that are consistent with normal circadian rhythms, they will provide better opportunities for rest, and less risk for fatigue. In addition, two FRA work/rest diary studies demonstrate that levels of fatigue are not equivalent in freight and passenger operations (*Work Schedules and Sleep Patterns of Railroad Train and Engine Service Workers* <http://www.fra.dot.gov/downloads/Research/ord0922.pdf> (which included data from a small number of train employees in passenger operations); *Work Schedules and Sleep Patterns of Railroad Train and Engine Employees in Passenger Operations* http://www.fra.dot.gov/rpd/downloads/TR_Work_Schedules_and_Sleep_Patterns_final.pdf (the diary study conducted to support this rulemaking).

However, FRA also recognizes that some train employees covered by this rule will experience a level of fatigue at which safety may be compromised. This is particularly true of those employees who do not work scheduled assignments and may not return home at the end of each duty tour, or who are required to perform service during late night hours, or to work duty tours of the maximum length allowed by existing requirements, with only the minimum required rest between duty tours. FRA has attempted, in this regulation, to specifically address those employees who are most at risk for fatigue, even when in compliance with specific hours of service limitations. Research that resulted in the validation of fatigue models using data from freight railroads demonstrated that fatigue increases the risk of a human factors accident. In addition, diary data show the risk of fatigue in passenger operations. The risk must be measured in order to be managed, and fatigue models allow for that measurement.

An effective proactive fatigue risk management program needs to balance the amount of work performed against when the work is performed, how long a work schedule is in effect in terms of hours in a day, and consecutive days, and other variables. This regulation addresses fatigue risk by going beyond establishing limitations on the amount of time that an employee may work, and minimum amounts of time that an employee must be off duty between duty tours. It additionally requires the analysis of the fatigue risk in employee work schedules using a biomathematical model of performance and fatigue, identification of those schedules that present an unacceptable level of fatigue risk, and mitigation of the identified fatigue risk. Moreover, the regulation establishes different requirements for schedules of employees who operate trains during the late

night hours in which the fatigue risk is greatest. Thus, the rule would specifically address those schedules the characteristics of which present a risk for fatigue, even when otherwise in compliance with required maximum on-duty and minimum off-duty periods and other limitations. These risks would not be addressed by a regulation that simply established maximum on-duty and minimum off-duty periods, just as they are not addressed by the existing statutory requirements

FRA believes that the prediction of the effectiveness of an employee's performance may be used to improve work schedules, to alter to the extent possible the timing of safety-critical tasks to coincide with periods of optimal performance, and to apply countermeasures to reduce the fatigue risk, and the corresponding risk of accidents or other errors associated with that fatigue. It is for this reason that FRA has concluded that it is appropriate to require analysis of employee work schedules using a validated and calibrated bio-mathematical model of performance and fatigue, as an essential component of these proposed hours of service regulations. Furthermore, the regulation would establish different requirements for schedules of employees who operate trains during the late night hours in which the fatigue risk is greatest.

In summary, FRA is amending its hours of service recordkeeping regulations, to add substantive hours of service regulations, including maximum on-duty periods, minimum off-duty periods, and other limitations, for train employees (e.g., locomotive engineers and conductors) providing commuter and intercity rail passenger transportation. The new substantive regulations require that railroads employing such train employees analyze and mitigate the risks for fatigue in the schedules worked by these train employees, and that the railroads submit to FRA for its approval the relevant schedules and fatigue mitigation plans. The final rule also makes corresponding changes to FRA's hours of service recordkeeping regulation, to require railroads to keep hours of service records and report excess service to FRA in a manner consistent with the new substantive requirements. This regulation is authorized by the Rail Safety Improvement Act of 2008.

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 is used by FRA and its inspectors to ensure compliance with the Hours of Service Laws and this regulation. In particular, 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 biomathematical 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 100,200 covered employees, comprising approximately 82,600 train and engine employees, and approximately 17,600 dispatchers and signalmen. 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 rule. 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*, 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 electronic transmission, storage, and retrieval. 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 as well, provided the requirements specified in sections 228.201 and 228.203 are met. FRA reviews and evaluates any new electronic recordkeeping systems 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.

Most of the commuter and intercity railroads subject to this rule do not yet create and maintain their Hours of Service records electronically, although there is interest among those railroads in developing hours of service electronic recordkeeping programs. So, for the near future, most of these railroads will keep the required records on paper. Based on economic considerations, railroads will naturally choose the option most appropriate for their operations.

Based on the available data, FRA estimates that approximately 45% of all responses are

now kept electronically. *Note: This number will increase in the near future as other Class I railroads and other large railroads (e.g., Norfolk Southern, Canadian National, Canadian Pacific, Amtrak, and Metro North) fully transition their Hours of Duty records from a paper to an electronic format).*

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.

“Small entity” is defined in 5 U.S.C. 601 (Section 601). Section 601(3) defines a “small entity” as having the same meaning as “small business concern” under Section 3 of the Small Business Act. This includes any small business concern that is independently owned and operated, and is not dominant in its field of operation. Section 601(4) likewise includes within the definition of “small entities” not-for-profit enterprises that are independently owned and operated, and are not dominant in their fields of operation. Additionally, Section 601(5) defines as “small entities” 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.

Federal agencies may adopt their own size standards for small entities in consultation with the SBA and in conjunction with public comment. Pursuant to the authority provided to it by SBA, FRA has published a final policy that formally establishes small entities as railroads that meet the line haulage revenue requirements of a Class III railroad. Currently, the revenue requirement is \$20 million or less in annual operating revenue, adjusted annually for inflation (\$30.3 million for 2009). This threshold is based on the Surface Transportation Board’s (STB) threshold of a Class III railroad carrier, which is adjusted by applying the railroad revenue deflator adjustment. FRA is using the STB’s threshold in its definition of “small entities” for this rule.

This regulation applies to all railroads with respect to their train employees engaged in commuter or intercity rail passenger transportation as well as train employees of tourist and excursion railroads. Intercity passenger railroads include Amtrak and the Alaska Railroad, both of which employ their own train crews and neither of which is considered a small entity. Amtrak is a Class I railroad, and the Alaska Railroad is a Class II railroad.

Amtrak is owned by the U.S. Government, and the Alaska Railroad is owned by the State of Alaska. Neither the U.S. nor the State of Alaska has a population of less than 50,000. All commuter railroads in operation in the U.S. serve major metropolitan areas with populations higher than 50,000. Although some commuter railroads contract with Amtrak or other entities to operate some or all of their trains, most employ their own train crews.

Train employees of only two small entities that operate trains under contract for commuter railroads would be covered by this rule, and they are not expected to be impacted significantly. Both of the entities are Class III freight railroads with commuter rail train crew schedules that would be considered Type 1 assignments as defined by this rule and thus be determined not to exceed the fatigue threshold, thus exempting the railroads from analyzing those work schedules. Their current train crew assignments would be allowed to continue without change. Although this rule imposes some additional recordkeeping burden on these entities for tracking days of consecutive service, the increase would be nominal and proportionate to the extent of their passenger train service, which is quite limited. These train crews are also subject to initial and refresher training no less frequently than every three years. This training must cover the following topics: (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. There is flexibility with respect to how the training is delivered (e.g., computer-based training, job briefings, pamphlets, as well as in class instruction). Such training could be accomplished in about one hour initially and 15 minutes triennially per train employee. Small freight railroads operating commuter trains could recoup any costs associated with this rulemaking from the commuter authorities with which they contract.

The requirements of this rule that would apply to tourist and excursion railroads are those contained in subpart F, Substantive Hours of Service Requirements for Train Employees Engaged in Commuter or Intercity Rail Passenger Transportation, as well as the conforming changes to the recordkeeping requirements in subpart B. FRA regulates approximately 140 tourist and excursion railroads nationwide. Approximately 130 of these railroads have 15 or fewer covered employees and thus are eligible to be considered for exemption from the limitations that would be imposed under § 228.403.

As noted earlier, this particular exemption is substantively identical to the exemption provision of the HSL at 49 U.S.C. 21102(b), which was unchanged by the RSIA, and § 228.403 provides the same opportunity for a railroad to seek an exemption from the requirements of this Subpart as a railroad has to seek an exemption from the statutory

requirements applicable to its other employees. Thus, these 130 tourist and excursion railroads will not be impacted any differently by this rulemaking than by the Hours of Service Laws (HSL).

About 10 tourist and excursion railroads have more than 15 covered employees, yet by virtue of their train service schedules generally have only Type 1 assignments, which have been determined not to exceed the fatigue threshold, thus exempting the railroads from analyzing or mitigating Type 2 work schedules. Scheduled assignments that include “Dinner Train” operations may be the only ones impacted by the requirement for analysis or mitigation. Information available regarding train schedules for these railroads indicates that trains do not operate for more than 12 hours on any day, with virtually all train service starting at 10:00 a.m. or afterward. Dinner trains operate until no later than 10:00 p.m. and are not in operation every day of the week. They generally operate once a week and in no case more than three days a week. Thus, the impact of crew assignment limitations would be minimal.

Impacted railroads may conduct the analysis in house, contract it out for a nominal fee, or rely on the analysis of another railroad. Given the similarity of the assignments, the tourist and excursion railroads impacted may decide to address the assignments that include “Dinner Trains” jointly, either under the auspices of the Tourist Railway Association, Inc. or otherwise. The consecutive-day limitations will likely not impact these railroads since they already accommodate time off for their train crews. Given the very limited train service and the need to accommodate time off now, crew schedules should allow for the proposed time off enabling the consecutive days of service requirements to be met. Since “Dinner Trains” are not included in most assignments, the majority of current scheduled train crew assignments would run no later than 6:30 p.m. and thus be considered Type 1 assignments and be unaffected, assuming the consecutive-day limitations do not affect them. Although the modifications to existing recordkeeping requirements will impose some additional net burden on these entities, the increase is nominal and proportionate to the size of their passenger service, which is quite limited.

The training requirements discussed above would also apply to the approximately 10 tourist and excursion railroads and vary in proportion to the size of each operation. Note, however, that the training cost associated with this rule is lower than that associated with complying with the training requirements for the freight hours of service laws.

The limitations on service afford significantly more flexibility to passenger train employees than those imposed by RSIA on freight train employees. Given that, in absence of a final rule effective by October 16, 2011, passenger train employees would be subject to the more stringent freight hours of service laws (49 U.S.C. 21103) and associated information collection requirements, issuance of this rule creates a cost savings for small entities impacted. In addition, the more stringent requirements for schedules of employees who operate trains during the late night hours, in which the

fatigue risk is greatest, probably do not affect any tourist and excursion railroads because they do not operate during late night hours.

No shippers, contractors, or small governmental jurisdictions will be directly impacted by this rule.

It should be noted that railroads or a contractor or subcontractor of a railroad that operates only on track inside an installation which is not part of the general railroad system of transportation are excluded from the requirements of this rule.

Also, to reduce railroad costs, it bears mentioning that FRA has provided flexibility in the way the required training is delivered to covered employees. Thus, this training may be delivered through classroom training, computer-based training, brochures and pamphlets, job briefings, or other methods. Moreover, FRA is providing additional flexibility in the final rule for the use of freight railroad employees who may occasionally provide pilot service for passenger railroads by excluding them from being subject to the schedule analysis and other requirements of this regulation. Further, FRA is providing an opportunity for Class III railroads and tourist, scenic, historic, and excursion railroads to be excluded from the training provisions of this rule. The exclusion is available to such railroads if they meet all three of the following conditions: they have 15 or fewer employees subject to hours of service limitations, their train employees subject to this rule only work schedules wholly between the hours of 4 a.m. and 8 p.m. on the same calendar day, and they provide written notice to FRA. This exclusion should further reduce the burden on small railroads.

Finally, it should be noted that, in the regulatory impact analysis that accompanied the amended rule, FRA certified that this rule would not have a significant economic impact on a substantial number of small entities.

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.

In accordance with the Paperwork Reduction Act of 1995, Public Law 104-13, § 2, 109 Stat. 163 (1995) (codified as revised at 44 U.S.C. §§ 3501-3520), and its implementing regulations, 5 C.F.R. Part 1320, FRA published a notice in the Federal Register on March 21, 2014, (See 79 FR 15795) soliciting public comments on these information collection requirements. FRA received one comment in response to this notice.

The comment was not about the collection of information itself, its requirements, or the burden estimates delineated in the Federal Register Notice. Rather, it pertained to the issue of fatigue and came from a resident, Ms. Michelle Horton, of East Moline, Illinois. She wrote the following:

As a wife of a railroader I feel an area of what you are classifying as "fatigue" is only in context of scheduled hours worked. Identifying the "fatigue" is the issue. Currently railroad employees are required to work in conditions that in itself cause fatigue. Switch men walking miles a day in -30 [degree] weather, at times in two feet of snow, in blizzard conditions for 8 hours a day is detrimental to their health, but with hours of service laws, employers can force these men to work in these conditions for 12 hours for 5 days straight. AND they do it. In opposite conditions 110 degrees and no wind walking miles a day. I see it every day and watch my husband struggle to walk, hold his head up, or even focus on a conversation for 5 minutes without falling asleep, right after he gets home from work. The cramping he endures is intense. And now railroad employees are required to submit all their time off with no sick days. My husband was very ill, worked 9 1/2 hours reported he had to go see a doctor when he was being forced to continue and upon his return (after he saw a doctor) was placed on a 30 day suspension for not completing his job duties. Workers are in fear of losing their jobs for reporting fatigue! My husband has been with the railroad for 17 years. No discipline was in his file. He is only 42. Currently there is no regulation to support an employee to say I am fatigued without persecution and dismissal. After 8 hours an employee should have a say especially under the conditions I noted. Not supporting the ability to have a choice after 8 hours of service is simply stating even the law could care less about fatigue.

This comment is outside the scope of the Notice requirements of the 1995 Paperwork Reduction Act and OMB PRA Implementing Guidance. However, the issue of fatigue is one that has been of longstanding concern to FRA and one that FRA plans to address by rulemaking in the near future.

Background

FRA published its Notice of Proposed Rulemaking in the Federal Register on March 22, 2011. See 76 FR 16200. FRA received 10 sets of comments on the proposed rule. Comments were received from the National Institute for Occupational Safety and Health (NIOSH); the American Academy of Sleep Medicine (AASM); Port Authority Trans-Hudson (PATH); Metropolitan Transportation Authority (MTA); SEPTA; Strasburg Rail Road Company (Strasburg); Transportation Trades Department (TTD), AFL-CIO (American Federation of Labor and Congress of Industrial Organizations); BLET and UTU, which filed joint comments; AAR and APTA.

NIOSH questioned whether the training costs included in the NPRM included costs to train staff on the use of the models. In the proposed rule, the cost of training staff to use the models was included in the cost of the biomathematical model, which also includes programming (for product enhancement) and technical support, and remains included in the model cost of the final rule. For purposes of clarification, FRA is presenting training related to the models separately.

APTA indicated that the licensing cost for FAST is approximately \$500,000 for a single railroad, which is far in excess of the cost estimated by FRA at the NPRM stage, and that

the licensing cost for FAID is about five percent of the cost of FAST, or \$25,000. FRA clarifies that its cost estimate was used for conduct of the regulatory analysis and as such includes only the cost to “society,” which does not include distributional effects that may arise through transfer payments including the revenue collected through a fee, surcharge in excess of the cost of services provided. “Transfer payments are monetary payments from one group to another that do not affect total resources available to society.” OMB Circular A-4, p. 38.⁴ Thus, the FRA cost estimate included some programming costs for the development of certain enhancements tailored to the passenger rail industry that included the license cost, training on use of the model, and system support. FRA did not include costs associated with the original model development or economic rent from the sale of licenses to passenger railroads. Administrative costs associated with using the model to analyze assignments for purposes of complying with this rule are included in the FRA cost estimate separately. The development costs of the models themselves are considered “sunk costs” incurred prior to the rulemaking and not attributable to this rule.

In addition, FRA assumed that railroads would select the lowest cost alternative for achieving compliance. While FRA did not and does not endorse any particular model or method for use in complying with this rule and railroads are certainly permitted to use more costly alternatives, for purposes of conducting regulatory analysis, only “opportunity cost” is included. Any additional expense would not be a cost attributable to this rule. APTA did not provide a basis for its cost estimate of \$500,000 per railroad for the FAST model, and based on information available to FRA, a cost of \$500,000 does not reflect the opportunity cost to society. “The opportunity cost is equal to the net benefit the resource would have provided in absence of the requirement.” OMB Circular A-4, p. 19. In this case the opportunity cost includes the programming and licensing cost estimated at \$75,000, the training cost estimated at \$50,000, and product support associated with analyzing assignments for purposes of complying with this rule estimated at \$7,500 annually. Distributional costs are treated separately. As noted at the NPRM stage, FRA believes that a significantly lower-cost viable alternative for compliance would be for the railroads to enter into a cost sharing agreement via a trade organization, such as APTA and the Association of Railway Museums (ARM), to facilitate one or a few licenses are purchased for the use of all member railroads.

APTA also contended that the cost of fatigue training will exceed \$1.8 million for a sample of 5 commuter railroads subject to this regulation. APTA does not provide any background or details related to this stated cost, and it is not consistent with information provided to FRA during the development of the proposed rule. However, it is possible that these costs are based on providing formal, classroom training to all of the employees to be covered by this regulation. As explained in the NPRM, FRA incorporated significant flexibility into the training requirement, so that each railroad would be

⁴ OMB Circular A-4 is available at: <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a004/a-4.pdf>

allowed to tailor the level of complexity and formality to the needs of its employees. There are likely railroads, or locations on a particular railroad, where the nature of the operations and assignments do not warrant formal classroom training and such training would not be practical or cost effective. In many cases, there will be lower cost alternatives that will be more appropriate and sufficient to comply with the training requirement.

APTA and MTA both claimed costs related to the hiring of additional personnel. MTA says that it would have compliance costs of at least \$5 million per year, including the cost of hiring additional train and engine employees. APTA contended that the cost of additional personnel will exceed \$15 million for five sample commuter railroads, and \$12 million for Amtrak. Neither MTA nor APTA provided any specific information regarding these costs, and FRA does not believe that additional personnel will be required by the regulation. The rule provides substantial flexibility in how railroads may mitigate fatigue in their schedules. Many of the available fatigue mitigation tools, such as allowing employees to take a nap during available periods within a schedule, would significantly reduce fatigue without requiring the railroad to hire additional employees. In addition, should a railroad be unable to sufficiently mitigate the risk of fatigue in one of its schedules, it would also have the option of submitting a declaration of operational necessity to FRA for approval. See § 228.407(b)(1)(ii). Although there may be some circumstances in which a railroad would choose to hire additional employees, the regulation does not require extra hiring, especially not to the extent of the costs alleged by MTA and APTA. Finally, addition of new train crews to perform the same train operations would result in a decrease in the hours of service performed by existing train crews, which in turn would result in a savings that would in large part offset the expense associated with the hours of service performed by new employees and must be taken into account. In other words, it would basically take the same number of total employee hours to operate trains if the train schedules are unchanged regardless of how many train crews participate in the operation, leaving the total wage expense largely unchanged and only impacting the fixed overhead costs resulting from a larger employee pool.

PATH also indicated that it would need to hire additional engineers and conductors “to mitigate the effects of a mandatory 48 to 72 consecutive-hour rest period” the cost of which it estimates at \$4 million annually. This comment appears to refer to the statutory requirements at 49 U.S.C. 21103(a)(4), which do not apply to train employees subject to this regulation. The requirements of this regulation are imposed instead of – rather than in addition to – to the requirements for train employees in freight service. If, as PATH contends, its schedules will pass any fatigue analysis, its costs resulting from this regulation should be minimal.

Finally, AAR objected to the cost of having some employees subject to two different sets of hours of service requirements, referring specifically to those employees working from an extra board that includes both freight and passenger assignments. For this reason,

AAR suggested that train employees employed by freight railroads should be governed only by the freight hours of service provisions in 49 U.S.C. 21103. From a cost perspective, however, the cost of compliance with two separate hours of service schemes is not a new cost, as freight railroads have already had to track their train employees who perform both freight and passenger service under the different statutory provisions currently applicable to both, as freight and passenger train employees have had different requirements since the effective date of the RSIA. In addition, AAR admits that very few employees would be affected by being subject to both freight and passenger requirements, so any cost would likely be minimal.

Comments about training were centered on the timing of both initial training of existing employees subject to the subpart and immediate supervisors of those employees, and initial training of new employees. The NPRM proposed initial training of such existing employees and supervisors “as soon as practicable.” This description of the deadline was deemed too uncertain. NIOSH suggested initial training should be provided to existing employees and supervisors within 90 days of the effective date of the final rule, while SEPTA recommended delaying the deadline for compliance with the initial training requirement for existing employees and supervisors until December 2012, so that it could be aligned with other railroad training schedules. FRA believes that SEPTA’s proposal is reasonable, has the benefit of certainty, and is consistent with the period for providing training in certain other FRA rules. Consequently, FRA has amended the training provision to require initial training of existing employees and supervisors no later than December 31, 2012.

With regard to initial training of new employees, which FRA proposed to require within 90 days of an employee’s working an assignment that would be subject to this rule, AAR commented that this time frame will not allow employees to be trained within the railroads’ normal training schedules. FRA has revised the time period in which new employees must be trained to be consistent with the latest version of FRA’s forthcoming training standards, which was discussed in the Working Group as a standard with which it was agreed that the training provision in this regulation should be consistent.

Additional Background

In March 1996, FRA established the RSAC, which provides a forum for developing consensus recommendations on rulemakings and other safety program issues. The Committee includes representation from all of the agency's major stakeholder groups, including railroads, labor organizations, suppliers and manufacturers, and other interested parties. A list of member groups follows:

American Association of Private Railroad Car Owners (AARPCO)
American Association of State Highway & Transportation Officials (AASHTO)
American Chemistry Council (ACC)

American Petroleum Institute (API)
 American Public Transportation Association (APTA)
 American Short Line and Regional Railroad Association (ASLRRA)
 American Train Dispatchers Association (ATDA)
 Association of American Railroads (AAR)
 Association of Railway Museums (ARM)
 Association of State Rail Safety Managers (ASRSM)
 Brotherhood of Locomotive Engineers and Trainmen (BLET)
 Brotherhood of Maintenance of Way Employees Division (BMWED)
 Brotherhood of Railroad Signalmen (BRS)
 Chlorine Institute
 Federal Railroad Administration (FRA)
 Federal Transit Administration (FTA)*
 Fertilizer Institute
 High Speed Ground Transportation Association (HSGTA)
 Institute of Makers of Explosives
 International Association of Machinists and Aerospace Workers
 International Brotherhood of Electrical Workers (IBEW)
 Labor Council for Latin American Advancement (LCLAA)*
 League of Railway Industry Women*
 National Association of Railroad Passengers (NARP)
 National Association of Railway Business Women*
 National Conference of Firemen & Oilers
 National Railroad Construction and Maintenance Association (NRC)
 National Passenger Railroad Corporation (Amtrak)
 National Railroad Construction and Maintenance Association
 National Transportation Safety Board (NTSB)*
 Railway Supply Institute (RSI)
 Safe Travel America
 Secretaria de Comunicaciones y Transporte*
 Sheet Metal Workers International Association (SMWIA)
 Tourist Railway Association Inc.
 Transport Canada*
 Transport Workers Union of America (TWU)
 Transportation Communications International Union/BRC (TCIU/BRC)
 United Transportation Union (UTU)
 *Indicates associate membership.

When appropriate, FRA assigns a task to RSAC, and after consideration and debate, RSAC may accept or reject the task. If the task is accepted, RSAC establishes a working group that possesses the appropriate expertise and representation of interests to develop recommendations to FRA for action on the task. These recommendations are developed by consensus. A working group may establish one or more task forces to develop facts

and options on a particular aspect of a given task. The individual task force then provides that information to the working group for consideration. If a working group comes to unanimous consensus on recommendations for action, the package is presented to the full RSAC for a vote. If the proposal is accepted by a simple majority of the RSAC, the proposal is formally recommended to FRA. FRA then determines what action to take on the recommendation. Because FRA staff plays an active role at the working group level in discussing the issues and options and in drafting the language of the consensus proposal, FRA is often favorably inclined toward the RSAC recommendation. However, FRA is in no way bound to follow the recommendation and the agency exercises its independent judgment on whether the recommended rule achieves the agency's regulatory goal, is soundly supported, and is in accordance with policy and legal requirements. Often, FRA varies in some respects from the RSAC recommendation in developing the actual regulatory proposal or final rule. If the working group or RSAC is unable to reach consensus on recommendations for action, FRA moves ahead to resolve the issue through traditional rulemaking proceedings.

FRA proposed Task No. 08-06 to the RSAC on April 2, 2009. The RSAC accepted the task, and formed the Passenger Hours of Service Working Group (Working Group) for the purpose of developing implementing regulations for the hours of service of train employees of commuter and intercity passenger railroads under the RSIA.

The Working Group is comprised of members from the following organizations:

- AASHTO;
- Amtrak;
- APTA;
- ASLRRA;
- ATDA;
- AAR, including members from BNSF Railway Company (BNSF), Canadian National Railway Company (CN), Canadian Pacific Railway, Limited (CP), CSX Transportation, Inc. (CSXT), Iowa Interstate Railroad, Ltd. (IAIS), Kansas City Southern (KCS) railroads, Metra Electric District, Norfolk Southern Corporation (NS) railroads, and Union Pacific Railroad Company (UP);
- BLET;
- BRS;
- Federal Railroad Administration (FRA);
- Federal Transit Administration (FTA);
- IBEW;
- Long Island Rail Road (LIRR);
- Metro-North Commuter Railroad Company (Metro-North);
- National Association of Railroad Passengers (NARP);
- National Railroad Construction and Maintenance Association;
- National Transportation Safety Board (NTSB);

- Southeastern Pennsylvania Transportation Authority (SEPTA);
- Tourist Railway Association; and
- UTU.

The Working Group completed its work after six meetings and several conference calls. The first meeting of the Working Group took place on June 24, 2009, in Washington, DC. At that meeting, the group heard several presentations on fatigue science, including a report on the diary study that was to be conducted as described above. The group discussed the general approach for the rulemaking, and it was agreed that analysis of the railroads' work schedules would support the rulemaking. Subsequent meetings were held on February 3, 2010; March 4, 2010; April 6, 2010; May 20, 2010; and June 29, 2010. In addition, a Task Force was formed that met on January 14-15, 2010, March 30-31, 2010, and April 28-29, 2010.

At the conclusion of the June 29, 2010, meeting, the Working Group voted to approve a draft of the proposed rule text, with the exception of two sections, to which the group had suggested numerous edits. It was agreed that FRA would address the remaining issues in those sections and circulate a revised draft, on which the group would vote electronically. After the revised draft was produced, the Task Force had several conference calls to discuss the revised provisions, and FRA also participated in several calls with task force members. Ultimately, on September 22, 2010, the Working Group voted full consensus on the rule text presented in this proposed rule. The group's recommendation was presented to the full RSAC on September 23, 2010. The full RSAC agreed to vote electronically on the rule text recommended by the Working Group, and ultimately accepted its recommendation. Although only a majority was required, the vote was unanimous.

Following the vote of the Working Group and the full RSAC, FRA recognized the need to make two changes to the recordkeeping and reporting requirements in 49 CFR 228.11 and 228.19, to accommodate a new substantive limitation contained in the proposed rule as approved by the RSAC. While the RSAC voted in favor of the substantive requirement in question, and all other elements of the proposed rule, the corresponding amendments to the recordkeeping and reporting provisions were not presented to them. After publication of the proposed rule on March 22, 2011, and consideration of public comments, FRA has made additional changes.

Earlier, at the February 3, 2010, meeting, FRA presented a straw man draft of the rule text, identifying the basic concepts and direction of the rulemaking. Based on discussions at that meeting, a more complete draft was presented at the March 4, 2010, meeting, and the text was refined and supplemented at subsequent meetings. Further, during the course of the Working Group and Task Force meetings, a number of significant issues were discussed that resulted in changes in the rule text.

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: Respondent universe 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 (ASLRRA, 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 this 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) 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) 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.

The burden for specific manual and electronic 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, must keep a record, either manually or electronically, concerning 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	4,241
Commuter	26	9,098
ASLRRRA/Tourist	694	9,267
Signal Contractors	4 0	1,000
PTC		2,000 (expected hires)
TOTAL	768	100,177 or 100,200
rounded off)		

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 100,200 covered employees – 82,600 train and engine employees plus 17,600 dispatchers, and signalmen. 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 27,429,750 hours of duty records (75,150 workers x 365 days) will be generated each year.

It is further estimated that three-quarters (75%) of the records of the approximately 45,000 train and engine employees will be kept electronically and that three-quarters of the other 37,600 train and employee (T&E) records will be kept on paper. Thus, a total of 12,318,750 T&E records (33,750 records x 365) 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 10,293,000 T&E records (28,200 records x 365) will be kept on paper. It is estimated that it will take approximately two (2) minutes to keep each electronic record and approximately 10 minutes to keep each paper record.

Of the additional 17,600 covered employees, approximately 3,200 employees are dispatchers and 14,400 are signalmen. All these records are currently kept on paper. The paper records for dispatchers are less involved than those for the T&E employees and signalmen employees, and will thus take less time to complete. FRA estimates that three-quarters of the dispatchers records (2,400 records x 365 days) or a total of 876,000 records will take approximately five (5) minutes to finish and that three-quarters of the signalmen records (10,800 records x 365 days) or a total of 3,942,000 records will take approximately 10 minutes to finish. The total annual burden for this requirement then is 2,856,125 hours.

	Respondent Universe:
	768 railroads/signal contractors
Burden time per response:	2 minutes/5minutes/10 minutes
Frequency of Response:	On occasion
Annual number of Responses:	27,429,750 records
Annual Burden:	2,856,125 hours

Calculation: 12,318,750 electronic T&E records x 2 min. + 10,293,000
T&E paper records x 10 min. + 876,000 dispatchers records
x 5 min + 3,942,000 signalmen records x 10 min. =
2,856,125 hours

Total annual burden for this requirement is 2,856,125 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

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 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.*)
- (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 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), 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

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

Calculation: 1 petition x 16 hrs. = 16 hours

Total annual burden for this requirement is 16 hours.

49 CFR Part 228.201 - Electronic Recordkeeping; general.

For the purposes of compliance with the recordkeeping requirements of Subpart B, a railroad or a contractor or subcontractor to a railroad may create and maintain any of the records required by Subpart B through electronic transmission, storage, and retrieval provided that all of the following conditions are met:

- (1) The system used to generate the electronic record meets all requirements of this Subpart;
- (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 sufficient number of monitoring indicators to ensure a high degree of accuracy of these records; and
- (4) The railroad or contractor or subcontractor to the railroad trains its employees on the proper use of the electronic recordkeeping system to enter the information necessary to create his or her 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;
- (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.

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 C.F.R. 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.

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 on the appropriate paper records used by the railroad or contractor or subcontractor to a railroad for whom the employee performs covered service, and

(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.

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

(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 reporting requirements in this Part, or the carrier's electronic recordkeeping system since the employee last received training; and

(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 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. Total annual burden for this requirement is 47,000

hours.

Respondent Universe:	768 railroads/signal contractors
Burden time per response:	1 hour
Frequency of Response:	On occasion
Annual number of Responses:	47,000 refresher trained employees
Annual Burden:	47,000 hours

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

Total annual burden for this entire requirement is 47,000 hours.

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 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

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 two (2) petitions 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 20 hours.

Respondent Universe:	10 railroads
Burden time per response:	10 hours
Frequency of Response:	On occasion
Annual number of Responses:	2 petitions
Annual Burden:	20 hours

Calculation: 2 petitions x 10 hrs. = 20 hours

Total annual burden for this requirement is 20 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

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

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

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

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

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 need 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

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

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

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

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

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

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

Calculation: 3,400 refresher trained employees 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

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
Burden time per response:	60 minutes
Frequency of Response:	On occasion
Annual number of Responses:	2 written declarations
Annual Burden:	2 hours

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

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 4,034 hours.

The total burden for this entire collection of information is 3,514,805 hours.

13. Estimate of total annual costs to respondents.

In the previous submission, based upon the FAST model, FRA estimated that first year costs would include the following: the programming modifications for computer software for the biomathematical model of fatigue that railroads will use for work schedules would cost about approximately \$75,000; training will cost about \$50,000; support will cost approximately \$7,500, for a total cost of \$132,500. These costs have already been incurred.

First Year Cost = \$0 (expenses already incurred)

The ongoing costs are as follows: 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 Years Cost = \$15,000

Additional annual costs to respondents associated with the other rule requirements 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 TOTAL SUBSEQUENT YEARS = \$26,000

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 14,462 hours from the last approved submission. The change in burden is due solely to **adjustments**. They are reflected in the table below.

TABLE OF ADJUSTMENTS

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)
228.203 – RR Adjustments to Hours of Service Electronic Recordkeeping Programs and Development of Security/Search Capability in these Programs	5 adjusted programs + 1 developed Search/Security Capability 120 hours + 720 hours	0 adjusted programs + 0 Search/Security Capability	1,320 hours	0 hours	-- 1,320 hours -- 6 responses
228.205 – Electronic Records Access Procedures	100 procedures 30 minutes	0 procedures 0 minutes	50 hours	0 hours	-- 50 hours -- 100 responses
228.207 – Use of Electronic System Training for Train/Signal/Dispatching Service Employees - Refresher Training	47,000 trained employees 1 hour 2,200 trained employees 1 hour	0 trained employees 0 hour 47,000 trained employees 1 hour	47,000 hours 2,200 hours	0 hours 47,000 hours	-- 47,000 hours -- 47,000 resp. + 44,800 hours + 44,800 resp.
228.403 – Exemption Requests -- Initial Exemption Requests by	5 requests 8 hours 10 requests 2 hours	0 requests 0 hours 0 requests 0 hours	40 hours 20 hours	0 hours 0 hours	-- 40 hours -- 5 responses -- 20 hours -- 10 responses

Tourist/Excursion Railroads -- Renewal Exemption Requests by Tourist/Excursion Railroad	5 requests 30 minutes	0 requests 0 hours	3 hours	0 hours	-- 3 hours -- 5 responses
228.407 – RR Analysis of Work Schedules that risk Fatigue	28 analyses 80 hours	2 analyses 20 hours	2,240 hours	40 hours	-- 2,200 hours -- 26 responses
- Reports to FRA of Each Work Schedule that exceeds Fatigue Threshold	20 reports 2 hours	1 report 2 hours	40 hours	2 hours	-- 38 hours -- 19 responses
- RR Fatigue Mitigation Plans	15 plans 4 hours	1 plan 4 hours	60 hours	4 hours	-- 56 hours -- 14 responses
- Work Schedules that Violate Threshold but can be Mitigated	15 work schedules 4 hours	0 work schedules 0 hours	60 hours	0 hours	-- 60 hours -- 15 responses
- Work Schedules that Violate Threshold but cannot be Mitigated	5 work schedules 4 hours	0 work schedules 0 hours	20 hours	0 hours	-- 20 hours -- 5 responses
- Determinations that Work Schedules Violating Threshold cannot be Mitigated	20 determinations 2 hours	0 determinations 0 hours	40 hours	0 hours	-- 40 hours -- 20 responses
- Written Declaration that No Work Schedule Violates Threshold	148 declarations 1 hour	0 declarations 0 hours	148 hours	0 hours	-- 148 hours -- 148 responses
- FRA Review and Corrected Work Schedules, Etc.	2 documents 2 hours	1 document 2 hours	4 hours	2 hours	-- 2 hours -- 1 response
- Follow-up Analyses	28 analyses 4 hours	5analyses 4 hours	112 hours	20 hours	-- 92 hours -- 23 responses
-- FRA Review and Corrected Work Schedules, Etc.	2 documents 2 hours	1 document 2 hours	4 hours	2 hours	-- 2 hours -- 1 response
- Updated Fatigue Mitigation Plans	28 plans 4 hours	8 plans 4 hours	112 hours	32 hours	-- 80 hours -- 20 responses

- Consultations w/ RR Employees on Work Schedules	20 consultations 4 hours	5 consultations 2 hours	80 hours	10 hours	-- 70 hours -- 15 responses
- Filed Statements by Employees/ Labor Organizations on non-consensus issues	5 statements 2 hours	2 statements 2 hours	10 hours	4 hours	-- 6 hours -- 3 responses
228.411 –Training Programs	29 initial training programs 20 hours	14 amended training programs 5 hours	580 hours	70 hours	-- 510 hours -- 15 responses
-Initially trained employees	10,200 employees 1 hour	0 employees 0 hours	10,200 hours	0 hours	--10,200 hours --10,200 resp.
-Refresher trained employees	0 employees 0 hours	3,400 employees 1 hour	0 hours	3,400 hours	+ 3,400 hours + 3,400 resp.
- Training Records	10,350 records 5 minutes	863 hours	3,550 records 5 minutes	296 hours	-- 567 hours -- 6,800 resp.
- Written Declarations that RR meets Prescribed Limitations for Exemption of this Section’s Requirements	100 declarations 1 hour	2 declarations 1 hour	100 hours	2 hours	-- 98 hours -- 98 responses
App. D – Fatigue Management Plans	4 plans 15 hours	2 plans 10 hours	60 hours	20 hours	-- 40 hours -- 2 responses

Adjustments above decreased the burden by a total of **14,462 hours** and decreased the number of **responses** by a total of **16,351**.

The current OMB inventory for this information collection shows a total burden of 3,529,267 hours, while the present submission reflects a total burden of 3,514,805 hours. Hence, there is a burden decrease of **14,462 hours**.

The cost to respondents exhibits a decrease of **\$106,500** from the previous submission. This decrease in costs is solely the result of **adjustments**. Specifically, the first year cost for programming modifications for computer software (based on the FAST model) for the biomathematical model of fatigue that railroads used for employee work schedules of \$75,000 and initial program training cost of \$50,000 have already been incurred. Thus, there remain the ongoing costs of \$15,000 for training and support (\$7,500 for training and \$7,500 for support) plus \$11,000 in costs for maintenance of the IT electronic database for the Hours of Duty Records (\$10,000) and for postage/miscellaneous expenses (\$1,000). The previous submission shows a total cost to respondents of

\$132,500 while the present submission displays a total cost to respondents of \$26,000. Hence, there is decrease in costs of **\$106,500**.

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.