

**INFORMATION COLLECTION  
SUPPORTING STATEMENT  
WORK SCHEDULES AND SLEEP PATTERNS OF  
RAILROAD TRAIN AND ENGINE SERVICE EMPLOYEES  
FRA Form Numbers F 6180.127; F 6180.128**

**Part A - Justification**

- 1. EXPLAIN THE CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY. IDENTIFY ANY LEGAL OR ADMINISTRATIVE REQUIREMENTS THAT NECESSITATE THE COLLECTION. ATTACH A COPY OF THE APPROPRIATE SECTION OF EACH STATUTE AND REGULATION MANDATING OR AUTHORIZING THE COLLECTION OF INFORMATION.**

The Federal Railroad Administration (FRA) has statutory responsibility to ensure the safety of railroad operations. See the Federal Rail Safety Act of 1970 (45 U.S.C. §§ 421 et seq.; now 49 U.S.C. 20103 et seq.). Under this authority, the authority of the Accident Reports Act (originally codified at 45 U.S.C. 42 and then re-codified at 49 U.S.C. 20901) and its accident/incident reporting regulations (found at 49 CFR Part 225), FRA collects data on railroad accidents/incidents and worker casualties, and monitors industry trends. Data collected by FRA indicate that injuries to railroad workers have declined steadily over the past decade. However, the proportion of injuries resulting in one or more days absent from work continues to be substantially greater for railroad workers than for all private industry combined. In 2005, 29 percent of the injuries to workers in private industry resulted in work absence. The corresponding figure for railroad workers was 68 percent, perhaps indicating that railroad workers sustain more serious injuries than their counterparts in other industries.

Over the past 15 years, the volume of shipments of goods by rail increased significantly, while the railroad work force declined. In 1990, the volume of goods transported by railroads amounted to 1.1 trillion ton-miles. By the year 2005, the volume of goods carried by railroads totaled 1.7 trillion ton-miles. Meanwhile, the number of train and engine service employees working for U.S. railroads has declined over the same period. Increasing traffic, combined with the shrinking work force, intensified the demands on train and engine service employees who are responsible for train movement.

Employee fatigue and alertness have been increasingly implicated in transportation accidents over the past ten years. Fatigue is on the National Transportation Safety Board's "Most Wanted List" of Transportation Safety Improvements. The Department of Transportation's Safety Council and Human Factors Coordinating Committee recognized fatigue as a factor in accidents in all modes of transportation when they launched a partnership initiative with industry and labor to develop tools for Fatigue Management. In recent years, the relationship between railroad worker fatigue and accidents, particularly among train and engine service employees, has received industry, labor and government attention through the North American Rail Alertness Partnership

(NARAP). Many government and industry research and demonstration projects have now examined fatigue and alertness among train and engine service (T&E) employees. While train and engine service employees have been the focus of some research and demonstration projects, a consistent set of data that characterizes the work schedules and sleep patterns of this group is lacking. The proposed study will provide a defensible and definitive estimate of work/rest cycle parameters and fatigue in T&E employees that will inform possible future FRA regulatory policy and action.

The proposed study of T&E employees is similar in scope and methodology to that of recently completed studies of signalmen, maintenance of way employees, and railroad dispatchers. These studies were conducted in, respectively, 2003, 2004, and 2005. Obtaining insight into the schedule-related fatigue issues of any population of workers requires data on both their work and their sleep patterns. As was the case for the other three groups of railroad employees, there is no readily available data for both work schedules and sleep patterns of T&E employees for a given period. FRA, in conjunction with its contractor (Foster-Miller, Inc.), proposes to undertake the study described below in order to develop an understanding of the work schedule-related fatigue issues for train and engine service employees. The railroad industry, the Brotherhood of Locomotive Engineers and Trainmen (BLET), and the United Transportation Union (UTU) all agree that the issue of T&E employee fatigue is a critical one and needs to be studied. The BLET and the UTU strongly support this project on the study of fatigue as well as any recommendations that might result from it that would enhance the safety of its members and the public.

**2. INDICATE HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED. EXCEPT FOR A NEW COLLECTION, INDICATE THE ACTUAL USE THE AGENCY HAS MADE OF THE INFORMATION RECEIVED FROM THE CURRENT COLLECTION.**

This is a new collection of information. FRA, through its contractor (Foster-Miller, Inc.), seeks to document and characterize the work and rest schedules, as well as the sleep patterns, of train and engine service employees by the use of a background survey and a daily log. Over a period of two weeks, T&E respondents will complete the background survey and daily log in order to convey as much detail as possible regarding their work, health, and rest activities. FRA will use the data obtained through this survey to identify whether or not this segment of the railroad workforce has a work and sleep schedule pattern that may compromise their ability to carry out their safety-critical role in railroad operations in a suitable manner. The data for this worker population will be compared with similar data for other groups of railroad workers and documented adult norms. The work/sleep characteristics of this population will also be compared against work and sleep patterns that the sleep research literature has identified as being potentially problematic with respect to compromising cognitive or physical performance. This information will be used to inform both railroad management and rail labor concerning the potential, or the lack thereof, for fatigue associated with various aspects of the work schedules of train and engine service employees. In industries that have employees engaged in irregular work schedules, collecting data on employee work

schedules and sleep patterns is the first step in developing a Fatigue Management Plan.

3. **DESCRIBE WHETHER, AND TO WHAT EXTENT, THE COLLECTION OF INFORMATION INVOLVES THE USE OF AUTOMATED, ELECTRONIC, MECHANICAL, OR OTHER TECHNOLOGICAL COLLECTION TECHNIQUES OR OTHER FORMS OF INFORMATION TECHNOLOGY, E.G. PERMITTING ELECTRONIC SUBMISSION OF RESPONSES, AND THE BASIS FOR THE DECISION FOR ADOPTING THIS MEANS OF COLLECTION. ALSO DESCRIBE ANY CONSIDERATION OF USING INFORMATION TECHNOLOGY TO REDUCE BURDEN.**

For many years, FRA has strongly endorsed and highly encouraged the use of advanced information technology, wherever possible, to reduce burden. The proposed data collection process does not lend itself to and, therefore, will not employ any automated, electronic, mechanical or other technological collection techniques. The nature of this data collection effort precludes the use of these types of methods because respondents must have the ability to record data when working from both a home and away terminal. For this reason, recording cannot be done from a central or common location with automated technology. Since this study will be conducted over a very limited time period (two weeks), providing each respondent with a handheld data collection device would not be feasible both in terms of the amount of information to be collected and in terms of cost.

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

4. **DESCRIBE EFFORTS TO IDENTIFY DUPLICATION. SHOW SPECIFICALLY WHY ANY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSES DESCRIBED IN ITEM 2 ABOVE.**

There are no existing sources of information that contain work schedules, self-assessments of alertness, and data regarding sleep patterns of train and engine service employees, such as the time of day sleep occurred, the duration of sleep, and other pertinent rest information that is relevant to this study. Analysis of work schedule-related fatigue requires work schedule and sleep information for the same time period. Train and engine service employees are subject to Hours of Service regulations; however, the Hours of Service records do not include data that are critical to the proposed study. Hours of Service records indicate *only* the hours that employees worked.

Similar data are not available from any other source.

5. **IF THE COLLECTION OF INFORMATION IMPACTS SMALL BUSINESSES OR OTHER SMALL ENTITIES (ITEM 5 OF OMB FORM 83-I), DESCRIBE ANY METHODS USED TO MINIMIZE BURDEN.**

This proposed collection of information does not impact small businesses because all of the data will be collected from a random sample of T&E employees who are employed

by the different classes of American railroads. They will record the data on their own time, not during working hours. Also, there is no cost for materials since participating T&E employees will receive a background survey questionnaire and a daily log book from FRA's contractor (Foster-Miller, Inc.).

In an effort to minimize burden, the proposed study aims to survey a small number of the approximately 80,000 T&E employees who work throughout the United States. Also, the proposed study will be undertaken for a very limited period of time -- two weeks. Consequently, the burden associated with this collection of information is minimal.

**6. DESCRIBE THE CONSEQUENCE TO FEDERAL PROGRAM OR POLICY ACTIVITIES IF THE COLLECTION IS NOT CONDUCTED OR IS CONDUCTED LESS FREQUENTLY, AS WELL AS ANY TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN.**

If the proposed information collection activities are not conducted, FRA will lose a unique opportunity to study the issue of fatigue and how it affects an essential segment of railroad employees, namely T&E employees, who play a critical role in the day-to-day safe operation of trains. Without this proposed collection of information, FRA will be unable to determine if there are patterns of work or sleep activities by T&E employees that could contribute to or cause levels of fatigue that result in either greater numbers of rail accidents/incidents, or that result in more numerous and more severe work-related injuries to railroad employees. By undertaking this study, FRA will also have an opportunity to examine the level of alertness reported by T&E employees over various work schedules and to see how these work schedules relate to the reported levels of alertness.

Without this collection of information, FRA will be considerably hindered in making recommendations or suggestions to both rail management and rail labor groups that might improve rail safety by reducing levels of fatigue experienced by T&E employees due to poor work schedules, overwork, unnecessary/avoidable stress on the job, or inadequate/poor sleep habits.

Without this collection of information, the annual number of rail accidents/incidents and the number and severity of casualties both to railroad workers and others (passengers, train crews, motor vehicle operators, and pedestrians) might be greater than they need to be because no one looked at the role of fatigue and work/sleep activities, and whether rail worker fatigue either caused or contributed to collisions, derailments, malfunctioning equipment, and other untoward events that could have been prevented if ameliorating steps had been taken to reduce job-related fatigue.

In recent years worker fatigue, particularly among train and engine service employees, has received necessary and deserved attention; however, a scientifically determined characterization of the work/rest patterns of this group of safety-critical railroad workers is lacking. With the information that the proposed survey will provide, FRA can determine the extent to which the work/sleep patterns of this group of railroad employees

are compromising their ability to work safely and, if so, make necessary recommendations to rail management and labor that will quickly correct such harmful practices/patterns.

**7. EXPLAIN ANY SPECIAL CIRCUMSTANCES THAT WOULD CAUSE AN INFORMATION COLLECTION TO BE CONDUCTED IN A MANNER:**

- **REQUIRING RESPONDENTS TO REPORT INFORMATION TO THE AGENCY MORE OFTEN THAN QUARTERLY;**
- **REQUIRING RESPONDENTS TO PREPARE A WRITTEN RESPONSE TO A COLLECTION OF INFORMATION IN FEWER THAN 30 DAYS AFTER RECEIPT OF IT;**
- **REQUIRING RESPONDENTS TO SUBMIT MORE THAN AN ORIGINAL AND TWO COPIES OF ANY DOCUMENT;**
- **REQUIRING RESPONDENTS TO RETAIN RECORDS, OTHER THAN HEALTH, MEDICAL, GOVERNMENT CONTRACT, GRANT-IN-AID, OR TAX RECORDS FOR MORE THAN THREE YEARS;**
- **IN CONNECTION WITH A STATISTICAL SURVEY, THAT IS NOT DESIGNED TO PRODUCE VALID AND RELIABLE RESULTS THAT CAN BE GENERALIZED TO THE UNIVERSE OF STUDY;**
- **REQUIRING THE USE OF A STATISTICAL DATA CLASSIFICATION THAT HAS NOT BEEN REVIEWED AND APPROVED BY OMB;**
- **THAT INCLUDES A PLEDGE OF CONFIDENTIALITY THAT IS NOT SUPPORTED BY AUTHORITY ESTABLISHED IN STATUTE OR REGULATION, THAT IS NOT SUPPORTED BY DISCLOSURE AND DATA SECURITY POLICIES THAT ARE CONSISTENT WITH THE PLEDGE, OR WHICH UNNECESSARILY IMPEDES SHARING OF DATA WITH OTHER AGENCIES FOR COMPATIBLE CONFIDENTIAL USE; OR**
- **REQUIRING RESPONDENTS TO SUBMIT PROPRIETARY TRADE SECRET, OR OTHER CONFIDENTIAL INFORMATION UNLESS THE AGENCY CAN DEMONSTRATE THAT IT HAS INSTITUTED PROCEDURES TO PROTECT THE INFORMATION'S CONFIDENTIALITY TO THE EXTENT PERMITTED BY LAW.**

This will be a one-time data collection effort. Participating T&E employees will complete a background survey, and will keep a log of their work and sleep times for 14 consecutive days. Studies of work and sleep patterns require data from at least a one week period. Data for two weeks is preferable, especially for individuals who do not

work a regular schedule, which is the case for the vast majority of T&E employees.

The survey instructions will specify that data collection should begin following a rest day. Because railroading is a seven-days-a-week job, not everyone works a Monday to Friday work schedule. The start of a railroader's work cycle can be any day of the week. In addition, most road freight jobs do not have a regular work schedule with fixed work days and start times. To facilitate collection and analysis of the data, it is desirable that this limited flexibility in start date be allowed. (The signalman, MOW employee, and dispatcher studies used this procedure.) Also, because this study is concerned with work schedules and sleep patterns, collection of data during a vacation period will not serve the purposes of the study. During the signalmen survey, several signalmen called Foster-Miller for clarification as to whether or not they should record the data during a vacation period. In addition, several survey respondents did record data for a vacation period. For this reason, this point was included in the instructions for the MOW and dispatcher studies, and survey participants complied by recording data only during non-vacation periods. Similar wording is part of the instructions for the proposed T&E survey.

Respondents will return only the original survey and daily log in a postage paid envelope. There is no requirement to make or return multiple copies.

FRA and its contractor, Foster-Miller, Inc., will treat the source of the data as confidential. A unique ID number will be assigned to each participant. Only Foster-Miller will know the names of the participants and their corresponding ID numbers. The ID number will allow each diary to be paired with its corresponding background survey for purposes of data analysis. Once the participants have been compensated for their participation and the data is coded, the list of participant names and their corresponding ID numbers will be destroyed. At the same time, the page of each diary containing the individual's survey compensation selection and name will be destroyed. Only aggregate results will be reported. No data will be reported by individual or by railroad.

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

- 8. IF APPLICABLE, PROVIDE A COPY AND IDENTIFY THE DATE AND PAGE NUMBER OF PUBLICATION IN THE FEDERAL REGISTER OF THE AGENCY'S NOTICE, REQUIRED BY 5 CFR 1320.8(d), SOLICITING COMMENTS ON THE INFORMATION COLLECTION PRIOR TO SUBMISSION TO OMB. SUMMARIZE PUBLIC COMMENTS RECEIVED IN RESPONSE TO THAT NOTICE AND DESCRIBE ACTIONS TAKEN BY THE AGENCY IN RESPONSE TO THOSE COMMENTS. SPECIFICALLY ADDRESS COMMENTS RECEIVED ON COST AND HOUR BURDEN.**

**DESCRIBE EFFORTS TO CONSULT WITH PERSONS OUTSIDE THE AGENCY TO OBTAIN THEIR VIEWS ON THE AVAILABILITY OF DATA, FREQUENCY OF COLLECTION, THE CLARITY OF INSTRUCTIONS AND RECORDKEEPING, DISCLOSURE, OR REPORTING FORMAT (IF ANY), AND ON THE DATA ELEMENTS TO BE RECORDED, DISCLOSED, OR**

**REPORTED.**

**CONSULTATION WITH REPRESENTATIVES OF THOSE FROM WHOM INFORMATION IS TO BE OBTAINED OR THOSE WHO MUST COMPILE RECORDS SHOULD OCCUR AT LEAST ONCE EVERY 3 YEARS--EVEN IF THE COLLECTION OF INFORMATION ACTIVITY IS THE SAME AS IN PRIOR PERIODS. THERE MAY BE CIRCUMSTANCES THAT MAY PRECLUDE CONSULTATION IN A SPECIFIC SITUATION. THESE CIRCUMSTANCES SHOULD BE EXPLAINED.**

As required by the Paperwork Reduction Act of 1995, FRA published a notice in the *Federal Register* on August 23, 2007, soliciting comment on the proposed information collection. See 72 FR 48315. FRA received two comments in response to this notice.

The first comment was submitted by Donald M. Hahs, National President, on behalf of the Brotherhood of Locomotive Engineers and Trainmen (BLET), who expressed whole hearted support for the proposed study. The BLET is a Division of the Rail Conference of the International Brotherhood of Teamsters, and is the duly designated and recognized collective bargaining representative for the craft or class of Locomotive Engineer employed on all Class I railroads. BLET also represents operating and other employees on numerous Class II and Class III railroads. In his letter, Mr. Hahs remarked:

. . . The proposed activity will involve the participation of BLET members, and I am pleased to support the activity and strongly urge its approval by OMB.

The BLET has long been in the forefront of efforts to combat fatigue among its members and operating crews. Our activities include numerous cooperative ventures with the nation's railroad carriers and with FRA, as well as proposing and advocating legislative remedies designed to combat fatigue. We have followed previous FRA studies – involving other crafts – with interest and have found the results of those studies helpful to our endeavors.

Moreover, we fully support and have actively provided assistance in designing the proposed activity. In our opinion, the activity has significant scientific validity and will produce meaningful data for use in future fatigue-mitigation efforts by BLET and all railroad industry stakeholders. We are satisfied that adequate safeguards are in place to protect all legitimate confidentiality interests, and we look forward to OMB approval and implementation of the information collection.

The second comment was submitted by Paul C. Thompson, International President, on behalf of the United Transportation Union (UTU), who completely endorsed the proposed study. The UTU represents approximately 65,000 railroad employees who work in the operating crafts on the nation's railroads today. In his letter, Mr. Thompson noted:

. . . This FRA proposed study will focus on train and engine service employees, which consists of locomotive engineers, conductors, remote control operators, and switchmen. Fatigue is a major safety concern for our operating crews today, and UTU fully supports this study 'to develop an understanding of the work schedule-related fatigue issues that affect these operating

crafts.’

This study will be very similar in both method and scope to the recently completed studies of railroad signalmen, maintenance of way employees, and train dispatchers.

In response to the Federal Register Notice and request for comments published on August 23, 2007, UTU files the following supportive comments:

- The proposed collection of information is necessary to assist the Department in furthering its understanding of work-schedule related fatigue issues affecting railroad train and engine employees. This information will provide the Department with the means to evaluate the overall impact of work/rest scheduling practices in the railroad industry.
- The collected information will have practical utility to the Department in its ongoing effort to analyze and combat work-schedule related fatigue within the railroad industry.
- The methodology proposed for this information collection activity is suitable and appropriate for the study and the respondent population, and will facilitate the collection of high quality data with high utility.
- The proposed information collection activity has been designed to be minimally burdensome on respondents. The proposed information collection activity is of limited duration and is compatible with the work environment where the data will be recorded by respondents.

It should also be noted that the FRA and its contractor, Foster-Miller, Inc., have been in contact with representatives of the Brotherhood of Locomotive Engineers and Trainmen (BLET) and the United Transportation Union (UTU) from the inception concerning the need for this survey and the proposed procedures. BLET and UTU have made several useful suggestions, which have been incorporated into the design of this study. The BLET and the UTU are active participants in the study but are not receiving any funding from either FRA or Foster-Miller for their contributions.

**9. EXPLAIN ANY DECISION TO PROVIDE ANY PAYMENT OR GIFT TO RESPONDENTS, OTHER THAN REMUNERATION OF CONTRACTORS OR GRANTEES.**

As with the earlier approved Railroad Signalmen Study (*OMB No. 2130-0558*), Maintenance of Way Employee Study (*OMB No. 2130-0561*), and Dispatcher Study (*OMB No. 2130-0570*), survey participants who voluntarily take part in the pilot T&E study will receive a \$75 gift certificate from Foster-Miller, Inc., to a retail establishment. Survey participants who voluntarily take part in the larger (14-day) study will receive from Foster-Miller, Inc., the same compensation. To be eligible for the gift certificate, participants must return a completed background survey and daily log. Both groups of respondents will record data on their own time. In consideration of the effort involved, to motivate consistent and complete data recording, and to have an adequate response rate, participants are being awarded the aforementioned gift certificate. In addition, to



encourage participation in the survey, the survey package that goes to each potential participant in the full survey will include a \$5 bill.

**10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS AND THE BASIS FOR THE ASSURANCE IN STATUTE, REGULATION, OR AGENCY POLICY.**

FRA fully complies with all laws pertaining to confidentiality, including the Privacy Act of 1974. Thus, information obtained or acquired by FRA's contractor, Foster-Miller, Inc., from T&E employees will be used exclusively for statistical purposes, or in this case to study the issue of work schedules, sleep patterns, and their relationship to fatigue. None of the information obtained that might be identifying will be disseminated or disclosed in any way. Moreover, the survey cover letter from the participant's labor organization, the Brotherhood of Locomotive Engineers and Trainmen (BLET) or the United Transportation Union (UTU), will assure participants **that their personal information will be kept private and that the data will be used to compile information for the group.** This letter will also explain that the list of participants and any identifying information will be destroyed once all of the surveys and daily logs have been coded and accounted for. No micro-level data will be released to the public; only tabular data will be publicly available. Any tabular data will be aggregated in a manner that prevents identification of a specific individual. The survey will not ask participants for the name of the railroad that they work for, so reporting of the data by railroad will not be possible. **A copy of the disclosure statement that will be a part of the background survey and the daily log that accompanies this submittal.**

**11. PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A SENSITIVE NATURE, SUCH AS SEXUAL BEHAVIOR AND ATTITUDES, RELIGIOUS BELIEFS, AND OTHER MATTERS THAT ARE COMMONLY CONSIDERED PRIVATE. THIS JUSTIFICATION SHOULD INCLUDE THE REASONS WHY THE AGENCY CONSIDERS THE QUESTIONS NECESSARY, THE SPECIFIC USES TO BE MADE OF THE INFORMATION, THE EXPLANATION TO BE GIVEN TO PERSONS FROM WHOM THE INFORMATION IS REQUESTED, AND ANY STEPS TO BE TAKEN TO OBTAIN THEIR CONSENT.**

Participation in this study by T&E employees is completely voluntary. Thus, only those consenting to participate in the survey will do so. The background survey will ask participants questions relating to demographics and work history. The list of survey questions includes items such as age, sex, general health, marital status, and number of dependents. There are also questions relating to life events, such as personal or family illness, marital difficulties, death of a family member, and financial difficulties, and questions relating to stress at work. These questions call upon respondents to indicate if any major stressful events occurred in their life in the past six months, and are necessary - and will be used - to qualify the data in the corresponding daily log. If a participant has experienced one of these events *and* his/her sleep data indicate difficulty sleeping, the researchers may decide to disqualify the data from the analysis. The purpose of this

study is to assess work schedule-related fatigue. The presence of other factors that interfere with sleep would confound the analysis. FRA will not use the life event data for any other purpose. The technical report describing the survey procedures and results will explain the reasons for any data that were disqualified.

As mentioned earlier in response to question ten, the cover letter accompanying the survey will assure the confidentiality of the data that they provide. This letter will also explain that the list of participants and any identifying information will be destroyed once all of the surveys and daily logs have been coded and accounted for. In addition, both the background survey and the daily log will contain a statement regarding assurance of privacy.

**12. PROVIDE ESTIMATES OF THE HOUR BURDEN OF THE COLLECTION OF INFORMATION. THE STATEMENT SHOULD:**

- **INDICATE THE NUMBER OF RESPONDENTS, FREQUENCY OF RESPONSE, ANNUAL HOUR BURDEN, AND AN EXPLANATION OF WHY THE BURDEN WAS ESTIMATED. UNLESS DIRECTED TO DO SO, AGENCIES SHOULD NOT CONDUCT SPECIAL SURVEYS TO OBTAIN INFORMATION ON WHICH TO BASE HOUR BURDEN ESTIMATES. CONSULTATION WITH A SAMPLE (FEWER THAN 10) OF POTENTIAL RESPONDENTS IS DESIRABLE. IF THE HOUR BURDEN ON RESPONDENTS IS EXPECTED TO VARY WIDELY BECAUSE OF DIFFERENCES IN ACTIVITY, SIZE, OR COMPLEXITY, SHOW THE RANGE OF ESTIMATED HOUR BURDEN, AND EXPLAIN THE REASONS FOR THE VARIANCE. GENERALLY, ESTIMATES SHOULD NOT INCLUDE BURDEN HOUR FOR CUSTOMARY AND USUAL BUSINESS PRACTICES.**
- **IF THIS REQUEST FOR APPROVAL COVERS MORE THAN ONE FORM, PROVIDE SEPARATE HOUR BURDEN ESTIMATES FOR EACH FORM AND AGGREGATE THE HOUR BURDENS IN ITEMS 13 OF OMB FORM 83-I.**
- **PROVIDE ESTIMATES OF ANNUALIZED COST TO RESPONDENTS FOR THE HOUR BURDENS FOR COLLECTIONS OF INFORMATION, IDENTIFYING AND USING APPROPRIATE WAGE RATE CATEGORIES. THE COST OF CONTRACTING OUT OR PAYING OUTSIDE PARTIES FOR INFORMATION COLLECTION ACTIVITIES SHOULD NOT BE INCLUDED HERE. INSTEAD, THIS COST SHOULD BE INCLUDED IN ITEM 14.**

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<b>Form</b>	<b>Number of Respondents</b>	<b>Number of Responses per Respondent</b>	<b>Time per Response</b>	<b>Total Burden in Hours</b>	<b>Cost*</b>
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FRA F 6180.127 Train & Engine Service Employee Background Survey	340	1	15 min	85	\$2,504
FRA F 6180.128 Train & Engine Service Employee Daily Log	340	14	10 min	793	\$23,361

\*at \$29.46 per hour (includes average hourly wage of \$24.35 plus 20.99 percent Railroad Retirement tax liability. Average hourly wage based on STB's Statement No. A-300 for 2006 )

Data will be collected only once for a 14-day period. There will be no data collection in subsequent years. Participants will fill out a brief background data form. This should take no more than 15 minutes, probably less. Each day, participants will make entries in a daily log. Daily entries in the log will be done several times over the course of a day, and should require no more than 10 minutes in total.

Total estimated burden for this entire information collection then is 878 hours.

**13. PROVIDE AN ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS OR RECORDKEEPERS RESULTING FROM THE COLLECTION OF INFORMATION. (DO NOT INCLUDE THE COSTS OF ANY HOUR BURDEN SHOWN IN ITEMS 12 AND 14).**

- **THE COST ESTIMATES SHOULD BE SPLIT INTO TWO COMPONENTS: (A) A TOTAL CAPITAL AND START-UP COST COMPONENT (ANNUALIZED OVER IT EXPECTED USEFUL LIFE); AND (B) A TOTAL OPERATION AND MAINTENANCE AND PURCHASE OF SERVICES COMPONENT. THE ESTIMATES SHOULD TAKE INTO ACCOUNT COSTS ASSOCIATED WITH GENERATING, MAINTAINING, AND DISCLOSING OR PROVIDING THE INFORMATION. INCLUDE DESCRIPTIONS OF METHODS USED TO ESTIMATE MAJOR COSTS FACTORS INCLUDING SYSTEM AND TECHNOLOGY ACQUISITION, EXPECTED USEFUL LIFE OF CAPITAL EQUIPMENT, THE DISCOUNT RATE(S), AND THE TIME PERIOD OVER WHICH COSTS WILL BE INCURRED. CAPITAL AND START-UP COSTS INCLUDE, AMONG OTHER ITEMS, PREPARATIONS FOR COLLECTING INFORMATION SUCH AS PURCHASING COMPUTERS AND SOFTWARE; MONITORING, SAMPLING, DRILLING AND TESTING EQUIPMENT; AND RECORD STORAGE FACILITIES.**

- **IF COST ESTIMATES ARE EXPECTED TO VARY WIDELY,**

**AGENCIES SHOULD PRESENT RANGES OF COST BURDENS AND EXPLAIN THE REASONS FOR THE VARIANCE. THE COST OF PURCHASING OR CONTRACTING OUT INFORMATION COLLECTION SERVICES SHOULD BE A PART OF THIS COST BURDEN ESTIMATE. IN DEVELOPING COST BURDEN ESTIMATES, AGENCIES MAY CONSULT WITH A SAMPLE OF RESPONDENTS (FEWER THAN 10), UTILIZE THE 60-DAY PRE-OMB SUBMISSION PUBLIC COMMENT PROCESS AND USE EXISTING ECONOMIC OR REGULATORY IMPACT ANALYSIS ASSOCIATED WITH THE RULEMAKING CONTAINING THE INFORMATION COLLECTION, AS APPROPRIATE.**

- **GENERALLY, ESTIMATES SHOULD NOT INCLUDE PURCHASES OF EQUIPMENT OR SERVICES, OR PORTIONS THEREOF, MADE (1) PRIOR TO OCTOBER 1, 1995, (2) TO ACHIEVE REGULATORY COMPLIANCE WITH REQUIREMENTS NOT ASSOCIATED WITH THE INFORMATION COLLECTION, (3) FOR REASONS OTHER THAN TO PROVIDE INFORMATION OR KEEP RECORDS FOR THE GOVERNMENT, OR (4) AS PART OF CUSTOMARY AND USUAL BUSINESS OR PRIVATE PRACTICES.**

There will be no additional cost burden to survey respondents. They will be provided with a postage paid envelope for returning the data collection instruments.

- 14. PROVIDE ESTIMATES OF ANNUALIZED COST TO THE FEDERAL GOVERNMENT. ALSO, PROVIDE A DESCRIPTION OF THE METHOD USED TO ESTIMATE COSTS, WHICH SHOULD INCLUDE QUANTIFICATION OF HOURS, OPERATIONAL EXPENSES SUCH AS EQUIPMENT, OVERHEAD, PRINTING, AND SUPPORT STAFF, AND ANY OTHER EXPENSE THAT WOULD NOT HAVE BEEN INCURRED WITHOUT THIS COLLECTION OF INFORMATION. AGENCIES ALSO MAY AGGREGATE COST ESTIMATES FROM ITEMS 12, 13, AND 14 IN A SINGLE TABLE.**

The total cost to the Federal Government totals \$272,200, which breaks down as follows:

Contractor Expenses

Preparation (including pilot survey)	\$ 53,900
Field Data Collection	\$ 78,900
Data Coding and Analysis	\$ 92,200
Reporting	\$ 47,200
<u>Total Contractor Cost</u>	\$ 272,200

*Note:* The above estimate includes the following items:

Printing and postage	\$ 2,600
Compensation for participants	\$ 33,900
Travel	\$ 5,000

Additional Cost to the Federal Government

An agency Engineering Psychologist (GS-14, Step 9)\* will spend approximately one hour per month on this project for a period of 30 months, or a total of 30 hours. Thus, the Federal Government will incur an additional cost of \$2,400.

\*(Comes to an hourly rate of \$79.72 or \$80 rounded, based on 2007 OPM Salary table; 40 percent overhead costs are included.)

**15. EXPLAIN THE REASONS FOR ANY PROGRAM CHANGES OR ADJUSTMENTS REPORTED IN ITEMS 13 OR 14 OF THE OMB FORM 83-I.**

These are new information collection requirements for a one-time survey. Therefore, there are no program changes or adjustments at this time.

**16. FOR COLLECTIONS OF INFORMATION WHOSE RESULTS WILL BE PUBLISHED, OUTLINE PLANS FOR TABULATION, AND PUBLICATION. ADDRESS ANY COMPLEX ANALYTICAL TECHNIQUES THAT WILL BE USED. PROVIDE THE TIME SCHEDULE FOR THE ENTIRE PROJECT, INCLUDING BEGINNING AND ENDING DATES OF THE COLLECTION OF INFORMATION, COMPLETION OF REPORT, PUBLICATION DATES, AND OTHER ACTIONS.**

Analysis of the survey data will include descriptive statistics, simple bi- and multi-variate tables. Regression analysis will be used to identify variables that are predictors of subjective fatigue. The results of this survey will be presented in a FRA technical report. A summary of the results may also be presented at technical meetings, such as the annual meeting of the Transportation Research Board, and the annual meeting of the International Association of Railroad Operating Officers. The Brotherhood of Locomotive Engineers and Trainmen (BLET) will also publish a summary of the study results in its monthly publication, *Locomotive Engineers and Trainmen News*. Similarly, the United Transportation Union (UTU) will publish a summary in *UTU News*, its bimonthly publication.

The planned project schedule, shown below, assumes that FRA will receive OMB approval for the survey by the end of January 2008 and that the pilot study will be completed by that time.

Activity	Date
Preparation	August 2007 – February 2008

Pilot Study	December 2007
Field Data Collection	March 2008 – June 2008
Data Analysis	June 2008 – October 2008
Preliminary Result Briefing	October 2008
Final Briefing	December 2008
Draft Final Report	February 2009
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*Note:* Respondents will be asked to begin data collection following a rest day. This will give reasonable assurance that the T&E employee is rested at the start of the data collection. Most T&E employees do not work a regular schedule due to the nature of freight railroading. Assuming that they have at least one rest day every seven days, in a worst case scenario, the individual would not begin data collection until seven days after receipt of the survey materials, and the materials would be returned to Foster-Miller approximately three weeks after receipt by the study participant. Participants will be instructed to return their survey materials promptly upon completion of the 14-day data collection period.

**17. IF SEEKING APPROVAL TO NOT DISPLAY THE EXPIRATION DATE FOR OMB APPROVAL OF THE INFORMATION COLLECTION, EXPLAIN THE REASONS THAT DISPLAY WOULD BE INAPPROPRIATE.**

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

**18. EXPLAIN EACH EXCEPTION TO THE CERTIFICATION STATEMENT IDENTIFIED IN ITEM 19, “CERTIFICATION FOR PAPERWORK REDUCTION ACT SUBMISSIONS,” OF OMB FORM 83-I.**

No exceptions are taken at this time.

## Meeting Department of Transportation (DOT) Strategic Goals

This information collection supports the top DOT strategic goal, namely transportation safety. Without this collection of information, FRA would lose a unique opportunity to help reduce the number and severity of railroad accident/incidents, and the number and severity of railroad worker casualties that occur each year because of fatigue or fatigue-related factors. By closely examining the work and sleep patterns of train and engine service employees that contribute to or cause levels of fatigue that either result in greater numbers of rail accidents/incidents or more numerous and/or more severe work-related injuries/fatalities, this collection of information provides the means for gaining a better understanding of fatigue that can be used by the various parties concerned with rail safety to implement corrective measures. Specifically, the insight gained from this study will enable FRA to offer concrete recommendations that can be used by both rail management and rail labor to alter those policies or those practices that detrimentally affect the conditions or circumstances under which train and engine service employees work every day. Although the number of rail accidents/incident and rail-related casualties has been declining over the last several years, FRA believes these numbers can be further improved. This collection of information offers another tool that FRA and the rail industry can use to improve the day-to-day rail environment and to further reduce -- to the lowest possible number -- accidents/incidents and rail-related deaths and injuries.

In sum, this collection of information supports FRA's mission, which is to promote and enhance rail safety throughout the United States. As always, FRA seeks to do its utmost to fulfill DOT Strategic Goals and to be an integral part of One DOT.