

**INFORMATION COLLECTION  
FEDERAL RAILROAD ADMINISTRATION**

**SUPPORTING JUSTIFICATION  
ELECTRONIC DEVICE DISTRACTION: TEST OF PEER TO PEER INTERVENION  
COMBINED WITH SOCIAL MARKETING; OMB No. 2130-NEW  
SUPPORTING JUSTIFICATION – Part A**

Summary of Submission

- This submission is a **new** collection of information.
- The total number of burden **hours requested** for this submission is **40 hours**.
- Total number of **responses requested** for this submission is **80**.
- **\*\*The answer to question number 12 itemizes the hourly burden associated with each requirement of this rule (See p. 7).**

**1. Circumstances that make collection of the information necessary.**

The Federal Railroad Administration (FRA) has statutory responsibility to ensure the safety of railroad operations. See the Federal Rail Safety Act of 1970 (formerly 45 U.S.C. 421; now 49 U.S.C. 20101-20103). This responsibility requires that the FRA remain vigilant for emerging risks to the public due to railroad operations, and to take steps to mitigate those risks. One such emerging risk is “electronic device distraction”. In this context an “electronic device” can be defined as “anything with a keyboard, screen, microphone or speaker that requires visual and or auditory attention that can divert attention from operating machinery”. Examples include cell phones, tablet and other computers, game consoles, music and DVD players.

Electronic device distraction is a threat to safety across all transportation modes, and railroad operations are no exception. In September, 2008, a westbound Southern California Regional Rail Authority Metrolink train collided head-on with eastbound Union Pacific Railroad freight train near Chatsworth, CA. The collision resulted in 25 fatalities and damages of \$112 million. It was determined that the Metrolink engineer failed to observe and respond to the red signal because he was engaged in the prohibited use of a wireless device, specifically text messaging.<sup>1</sup>

A May 2002 collision between two BNSF freight trains near Clarendon, , was found to be partially attributed to the improper use of electronic devices. The coal train engineer was

---

<sup>1</sup> <http://www.nts.gov/doclib/reports/2010/RAR1001.pdf>

using a cell phone at the time of the accident, causing him to be unaware that he needed to prepare his train to stop. All four crew members on board were injured, one fatally.<sup>2</sup> Across other transportation modes, research has been conducted to determine prevalence, causes, and effects of electronic device distraction. A study sponsored by the Federal Motor Carrier Safety Administration found that text messaging creates a crash risk 23 times worse than driving while not distracted.<sup>3</sup>

In addition to these publically reported examples, private conversations with FRA personnel and others in the industry indicate that electronic device distraction is known to be, or suspected to be, an important contributing cause to many other accidents.

In light of the seriousness of the problem, the Federal Railroad Administration and the Railroad Industry are endeavoring to develop effective programs to combat EDD. One such program is an FRA-sponsored project at the Norfolk Southern Railway (NS) to increase worker's ability to recognize EDD-related dangerous behaviors and to use peer-to-peer feedback to minimize those behaviors. A pilot program is under way, and there is a need to evaluate that program. The data are needed to provide guidance on program implementation and what is needed to scale up such programs over time. This additional agency effort to obtain more information regarding EDD is in keeping with the high priority that former Secretary LaHood has placed on reducing/eliminating the risks and often tragic consequences of Electronic Device Distraction across all transportation modes in the United States.

Because of the voluntary nature of participation, we realize that the method of recruiting respondents is likely to skew the sample in the direction of people who think well of the program. Thus it would be inappropriate to rely on this data for any kind of objective estimate of effectiveness or efficiency. What we will get is qualitative information about the perceived effectiveness of the program, as judged by personnel with an interest in the activities and success of the program. Our experience with the evaluation of the Confidential Close Call Reporting System is that such opinion is relevant and useful for understanding how programs like this operate, and how they might be improved. Also, while it is true that the procedure will attract those who think well of the program, our experience is that it most certainly does bring in a fair share of vocal and articulate skeptics.

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

This is a new collection of information that seeks to combine peer-to-peer conversations with an effort to change the culture with respect to the acceptability of EDD. It is completely voluntary. There will be five sets of users of the information that is gathered.

---

<sup>2</sup> <http://www.nts.gov/doclib/reports/2003/rar0301.pdf>

<sup>3</sup> <http://www.distraction.gov/research/PDF-Files/Driver-Distraction-Commercial-Vehicle-Operations.pdf>

Personnel who are implementing the program. This group of users will use the data in a continuous process improvement mode.

Personnel within the FRA's Office of Safety. This group of users need the information in order to obtain a better understanding of the nature and scope of Electronic Device Distraction among railroad employees. They will use the information to be collected to develop a suite of regulations, educational programs, public relations messaging, and collaborative programs with industry that will combine to effectively minimize the risk of Electronic Device Distraction.

FRA's Office of Research Program Development. This group of users will use the data to be collected to set a research agenda in support of minimizing the amount of electronic device distraction and the great risks associated with such use. Results from the face-to-face interviews will help to provide keen insight into the rationale and psychology behind railroad workers use of electronic devices that is currently not available.

Railroad management and railroad employees. This group of users in the industry are vitally concerned with electronic device distraction, and the impact that it has on daily operations and overall rail safety. The railroad industry needs data to develop effective policies and programs to minimize a growing problem. Railroad employees need to better understand the risks and dangers of being distracted by the use of electronic devices while on the job. Data that railroad workers themselves provide might make them more receptive to the nature and scope of the problem in their industry and to employers efforts -- through training/other measures -- to reduce/eliminate electronic device use while on the job.

The general public The general public represents a constituency that has an overwhelming interest in knowing the various risks that they are exposed to when traveling by rail, and the effectiveness of efforts to minimize those risks. The dangers of Electronic Device Distraction have been highly publicized by former Secretary LaHood and the Department of Transportation over the last several years. The Chatsworth, California, accident brought home to the nation the great danger of Electronic Device Distraction. Efforts by DOT/FRA and the rail industry to reduce/eliminate this serious problem can help to reassure the public that traveling by rail is very safe indeed.

### **3. Extent of automated information collection.**

Data collection will take place by means of in-person or telephone interviews. Only in this manner can FRA and its contractors obtain the rich in-depth information needed to inform future efforts to change the acceptability of the use of electronic devices in the railroad industry. This is also the only way to quickly obtain information needed to help program implementers while they are still in the process of implementing the program.

Two other data collection methods are possible: (1) fixed-choice surveys, and (2) open ended written surveys. Neither of these is desirable.

Option #1: fixed choice survey. This approach has two disadvantages. First, any such survey would require a considerable amount of pretesting for validation. This would not only increase the total respondent burden, but it would also extend the time needed to deploy the instrument. Second, such a survey would not provide the flexibility to use question probes and follow-ups in an effective manner. Such flexibility is needed because one purpose of the data collection is to understand a program which is not fixed at the beginning. Rather, it will evolve to fit local needs. In fact, the process of this evolution is precisely one of the major dynamics that the evaluation is designed to understand. On the basis of experience with programs like this, we can be confident in our estimate of how long the interviews will take (30 minutes or less). We also know the major questions that will be included. However, we cannot define *all* the questions and probes in advance, hence making a valid fixed-choice survey impossible.

Option #2: open ended written survey. Data collection methods like this place an enormous burden on respondents. People are exceedingly resistant to answering these kinds of questions.

#### **4. Efforts to identify duplication.**

To FRA's knowledge, the information to be collected is not available anywhere else. Because of the contracting team's relationship with the leadership of FRA and Norfolk Southern (NS), we know that no other similar data collection is taking place at the NS pilot site.

The team is working collaboratively with relevant labor and industry groups, all of whom welcome FRA's efforts because they do not have the data. Although there is quite a bit of research on electronic device distraction in other transportation modes, thorough literature reviews have revealed no data focusing on the railroad industry or particular segments within it.

There is no similar data from any other source.

#### **5. Efforts to minimize the burden on small businesses.**

There is no small business involvement in the proposed study. Respondents will be individual Norfolk Southern (NS) employees who voluntarily participate in implementing and managing the pilot at the Harrisburg Yard. Thus, Norfolk Southern is the only entity from which data will be collected. According to the definition used by FRA under 5 U.S.C. 601, it is not a small business.

Again, it should be noted that the total burden associated with this proposed collection of information is extremely minimal.

**6. Impact of less frequent collection of information.**

The data collection being requested is carefully calibrated to provide valid and useful information about the peer to peer program that is being implemented for the purpose of minimizing electronic device distraction in the railroad industry. Less data would not suffice to explain why the program is (or is not) working, and what impact it had. Thus if the information were not collected, or collected less frequently, FRA, railroad management, and labor would not have the knowledge they need to design and implement effective programs to combat electronic distraction. Such programs are needed to reduce the number and severity of rail accidents/incidents throughout the country caused by railroad employees being distracted from effectively and safely performing their jobs. As the recent loss of life in the Chatsworth, CA, accident so well illustrates, minimizing electronic distraction is truly a matter of life or death.

The Secretary of Transportation has made it a top Departmental priority to reduce/eliminate EDD across all modes of transportation. Minimizing the risks associated with electronic device distraction among railroad workers is an equally important industry and public safety concern. EDD data is vitally needed to understand the nature and scope of the problem.

FRA and the railroads need first-hand information from those engaging in inappropriate/unsafe use of electronic devices to develop policies, programs, and procedures to counteract such use/misuse. Also, those implementing such programs need rapid feedback on their actions in order to guide their implementation work. The peer-to-peer program being tested has worked in other settings for a variety of safety problems, but is unproven as an approach to reducing EDD in a railroad setting. Thus, there is a known intervention that is yet unproven, but which shows great promise. Data will be of considerable use to FRA, Norfolk Southern, and the railroad industry at large in designing effective countermeasures to address a growing problem.

**7. Special circumstances.**

Data collection will be in real time as each interview is conducted. Data will be recorded by the interviewer. Interviewees will not be asked to record any information themselves.

Data collection will take place by means of in-person or telephone interviews. Only in this manner can the FRA and its contractors obtain the rich in-depth information needed to inform future efforts to change the acceptability of the use of electronic devices in the railroad industry. This is also the only way to quickly obtain information needed to help program implementers while they are still in the process of implementing the program.

Other options for data collection, and the considerable drawbacks of each, are discussed in the answer to question #3.

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

**8. Compliance with 5 CFR 1320.8.**

In accordance with the Paperwork Reduction Act of 1995, Pub.L. No.104-13, § 2, 109 Stat. 163 (1995) (codified as revised at 44 U.S.C. §§ 3501-3520), and its implementing regulations, 5 CFR 1320, FRA published a notice in the Federal Register on May 17, 2013, soliciting public comments on these information collection requirements and associated burden. See 78 FR 29202. FRA received no comments in response to this notice.

**Background**

The evaluation of this program is being designed and conducted in close collaboration with the FRA, management of Norfolk Southern (NS), and the labor unions at NS whose employees will be involved in the peer-to-peer pilot. The entire team is in agreement on what data needs to be collected, and how often. Because the program will only last about a year, long term consultation for new data collection is not needed.

**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.**

FRA fully complies with all laws pertaining to confidentiality, including the Privacy Act of 1974. Data collection will be done by the evaluation contractor (Fulcrum Corporation) who will not record the names of respondents. FRA personnel themselves will not be involved in any of the interviews.

Information obtained during this effort will be used exclusively to compile data to describe the use/misuse of electronic devices among railroad workers, to determine future steps to address reducing/eliminating EDD among railroad employees and to guide the implementation of the pilot peer to peer anti-EDD project. Any and all reporting of findings will be based on common themes across multiple responses.

No data will be reported that could be attributed to any given individual.

With respect to the privacy of data, we propose to begin each interview with an introduction that is modeled after the introductory statement we use for the evaluation of

the Confidential Close Call Reporting System, and which has been approved by the OMB. This statement will also serve the purpose of providing the respondent with knowledge of the length of the interview. The statement will read as follows:

The objective of this interview is to develop knowledge about how effective peer to peer programs can be developed to combat electronic device distraction. To protect privacy we are not recording any names. All we need is a general description of each respondent, such as: “BLET member, more than 10 years’ experience.” In addition, no quotations will be reported that might reveal anyone’s identity. The interview will last about half an hour. Thanks for being willing to help us.

**11. Justification for any questions of a sensitive nature.**

Federal regulations and company policies exist that bar the use of electronic devices during work hours. Frank discussion of such use is one aspect of the interviewing. For this reason, great care is taken not to ask for people’s names or any other descriptive information that can identify individual respondents.

There are no questions of a sensitive or private nature regarding the proposed study.

**12. Estimate of burden hours for information collected.**

The evaluation team has members who overlap with the team that is currently evaluating FRA’s Confidential Close Call Reporting System (C3RS). Interviewing requirements for this program and C3RS are quite similar. We need a relatively small number of respondents to answer questions about how they see the program working and what would make it work better. We have asked these kinds of questions to a wide range of labor and management personnel at the Union Pacific Railroad, Amtrak, the Canadian Pacific Railroad, and New Jersey Transit. Parallel questions have been addressed to the DOT’s implementation team and to relevant FRA officials. In all cases, we have found that 30 minutes (at the outside) is sufficient time to collect the data we need.

Three respondent groups will be included in this study. Numbers of each and time demands are shown in the following table.

<b>Respondent group</b>	<b># of respondents</b>	<b>Time per response (hours)</b>	<b>Total Annual Burden Hours</b>
Pilot site personnel	50	0.5	25
Norfolk Southern personnel involved in implementing and managing the pilot.	15	0.5	7.5
Project team members	15	0.5	7.5

As shown above, total annual estimated burden amounts to 40 hours.

**13. Estimate of total annual costs to respondents.**

No capital investment is involved. There are no additional costs to respondents other than those listed in the answer to question number 12 above.

**14. Estimate of Cost to Federal Government.**

As shown in the table below, data costs for this project are \$17,600. Project costs for designing and implanting the program being evaluated are \$181,400. Total project costs are \$199,000.

<b>Data Collection</b>	<b>hours</b>	<b>\$</b>	<b>notes</b>
Develop questions with input from 9 key stakeholders)	10	\$1,200	With input from 9 key stakeholders
Conduct interviews	80	\$9,600	Based on outside estimate of: 1)30 minute interviews with 80 people( 50 NS labor, 15 NS corporate, 15 Implementation team.) 2) 30 minute set up and preparation per interview
Content analysis of interview data	40	\$4,800	
Travel for data collection	na	\$2,000	Destination = NS site in Harrisburg PA
Data Collection Total		\$17,600	
<b>Peer-to-Peer Program Development and Delivery</b>		\$181,400	
Project total		\$199,000	

Government costs were determined by means of an interview with the Contracting Officer’s Technical Representative. The table below represents all of the government’s costs. Because the project evaluation is so tightly integrated into the entire project, it is impossible to separate out work dedicated to the data collection.

<b>Item</b>	<b>Hours</b>	<b>\$ Fully Loaded per Hour</b>	<b>Total</b>
Grant Opening	30	\$120	\$3,600
Quarterly Reports	16	\$120	\$1,900
Site Visits	80	\$120	\$9,600
Close out	8	\$120	\$ 960



Total	134		\$16,060
-------	-----	--	----------

**15. Explanation of program changes and adjustments.**

This is a new collection of information. By definition, the entire submission is a **program change**.

**16. Publication of results of data collection.**

Project start will depend on negotiations going on between Norfolk Southern (NS) and relevant labor unions. The project is scheduled to end December 2014. Data analysis will involve standard methods of content analysis of open ended data. We do not expect any specialized content analysis techniques to be needed. The means of publicizing findings will be subject to discussions with FRA. Possibilities include Power Point presentations, "Research Briefs" on the FRA website, and longer reports. The decision will be based on FRA's beliefs about how to best serve the needs of their stakeholders with respect to Electronic Device Distraction (EDD).

**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.