

## SUPPORTING STATEMENT

### A. Justification

#### **1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection.**

Collecting data on the nation's transportation system is an important component of BTS's responsibility to the transportation community and is authorized in BTS statutory authority (49 USC 111(c)(1) and (2) and 49 USC 111(c)(5) (j)). BTS and the Federal Railroad Administration (FRA) share a common interest in promoting rail safety based on better data. To that end, FRA's Office of Research and Development (ORD) has been conducting research and demonstration projects focused on organizational safety performance (OSP) and human behavioral issues that contribute to accidents and incidents arising from the operation of a railroad carrier (accidents), including employee injuries in the railroad workplace. The ORD has an OSP Program, which emphasizes proactive, risk management approaches to accident prevention: collecting and analyzing precursor data in order to manage the risk of accidents, instead of collecting and analyzing data on actual accidents. The Confidential Close Call Reporting System (C<sup>3</sup>RS) project is one of the research and demonstration projects in the OSP Program.

The C<sup>3</sup>RS is a multi-year research study aiming at improving safety in the rail industry by using information on potential root causes of close calls and near misses. The proposed research is being done in alignment with the DOT goal of safety and it is included in the Secretary's Rail Safety Action Plan.

A close call represents a situation in which an ongoing sequence of events was stopped from developing further, preventing the occurrence of potentially serious safety-related consequences. This might include the following: (1) events that happen frequently, but have low safety consequences; (2) events that happen infrequently but have the potential for high consequences (e.g., a train in dark territory proceeds beyond its authority); (3) events that are below the FRA reporting threshold (e.g., an event that causes a minor injury); and (4) events that are reportable to FRA but have the potential for a far greater accident than the one reported (e.g., a slow speed collision with minor damage to the equipment and no injuries.)

Union Pacific Railroad (UP) through a Memorandum of Understanding with FRA has agreed to participate in this research effort which eventually, as funding becomes available, will include several pilot sites. The first pilot site will be UP's Service Unit in North Platte, Nebraska and will include all employees assigned to yard and rail operations.

BTS has agreed to accept, store, process, analyze data reported to the C<sup>3</sup>RS, and assist in collecting data for the evaluation of this research effort while assuring the data's confidentiality. BTS will develop a data warehouse (C<sup>3</sup>RS data warehouse) to store close call reports and other

data pertinent to this research effort. The C<sup>3</sup>RS data warehouse will serve to both capture data that would otherwise not be reported to either the railroad carriers (carriers) or the FRA as well as provide the carriers and the FRA with opportunities to identify safety issues that require corrective action.

Because of the innovative nature of this program, the FRA is implementing an evaluation to determine whether the program is succeeding, how it can be improved, and what is needed to implement the program through out the railroad industry. BTS has agreed to assist FRA in survey data collection. Specifically, the data collection requested in this submission is necessary in order to obtain baseline data needed to carry out the evaluation of the C<sup>3</sup>RS demonstration project. Through this submission, BTS is requesting clearance to conduct a survey of managers and employees at the pilot site prior to the deployment of the C<sup>3</sup>RS. Collecting baseline survey data prior to implementation of C<sup>3</sup>RS is critical to measuring changes in employee attitudes and behavior about safety climate as a result of the C<sup>3</sup>RS.

**2. Indicate how, by whom, and for what purpose the information is to be used. Indicate the actual use the agency has made of the information received from the current collection.**

While close call (or near miss) reporting has worked in other settings, like the Aviation industry, its effectiveness in the unique context of railroads is unknown. Rigorous evaluation is needed to determine that effectiveness, and if warranted, to build a business case for wide-spread deployment in the entire railroad industry. The survey data will be used by staff from BTS and the Volpe National Transportation Systems Center (Volpe Center), along with other types of information, to develop a comprehensive evaluation and assessment of the C<sup>3</sup>RS demonstration study.

To provide useful feedback to the FRA and management of pilot railroad carriers, three interconnected types of evaluation are necessary: summative evaluation, formative evaluation, and sustainability evaluation. “Summative evaluation” assesses the impact of an innovation. It answers three questions – assuming that the program worked as intended: 1) Did it have the intended consequences? 2) Did it have noteworthy unintended consequences? 3) Did it have negative consequences? “Formative evaluation” analyzes program implementation and operation in order to address the critical assumption stated above: Did the program work as intended? Formative evaluation also addresses two important subsidiary questions. If the program was not implemented as intended, were the changes appropriate? What aspects of program functioning can be considered the key operative factors in explaining why the program had whatever impact that was observed? A vital aspect of formative evaluation is its ability to provide quick feedback to planners and managers in order to inform mid-course corrections. “Sustainability evaluation” determines the conditions under which a successful program can sustain its operations over time.

Underlying all these dimensions of evaluation is the ability to establish the status of a program at its inception. Specifically, information collected through this questionnaire will establish the baseline for the overall project evaluation.

**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 submissions 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.**

In developing the reporting requirements, we have attempted to ensure that the form and format of the survey questionnaire are designed to minimize the burden of the respondents while increasing the confidence and trust in the evaluation process. Due to the unique working conditions at the UP facility in North Platte, electronic submission of responses was deemed infeasible and was rejected as an option by the participating stakeholders (this includes UP management as well as labor leadership at the pilot site.) In order to minimize respondent burden, railroad workers will be asked to fill out the evaluation survey questionnaire while attending a town hall meeting on the implementation of the confidential close calls reporting program. In order to accommodate shift schedules and provide an opportunity for every employee to attend, four town hall meetings will be offered in the course of one week. At the end of each town hall meetings, a BTS employee assigned to the C<sup>3</sup>RS project will be responsible for collecting the questionnaires and mailing them back to BTS.

**4. Describe efforts to identify duplication. Show specifically why similar information already available cannot be used or modified for use for the purposes described in Item 2 above.**

C<sup>3</sup>RS is an innovative research program within the railroad industry. Evaluation of the C<sup>3</sup>RS requires specific data and specialized data collection. No such data have ever been collected by UP or any other railroad carrier.

**5. If the collection of information impacts small businesses or other small entities, describe efforts to minimize burden.**

This does not apply to the C<sup>3</sup>RS evaluation survey data collection because Union Pacific Railroad is the only business entity (not a small business) participating in this research study at this time.

**6. Describe the consequence to the Federal Program or policy activities if the collection were not collected or conducted less frequently.**

Implementing a reporting system such as the C<sup>3</sup>RS in the entire railroad industry without information on a complete and thorough program evaluation could have disastrous consequences ranging from losing trust and cooperation of key stakeholders in rail safety to wasting federal resources on an ineffective intervention program. The evaluation survey will assess critical processes and outcome variables with respect to the operations and impact of C<sup>3</sup>RS. Without these data it will be impossible to make a determination as to whether voluntary reporting of close calls in the railroad industry could lead to an effective safety intervention program or how a program like C<sup>3</sup>RS could be scaled-up at other railroads.

**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, government contracts, grant-in-aid, or tax records for more than 3 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 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 secrets, 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.**

There are no special circumstances that pertain to this data collection.

**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 the notice and describe actions taken by the agency in response to these comments.**

The notice was published on April 27, 2006 in 71 FR 24913. No comments were received.

**9. Explain any decision to provide any payment or gift to respondents, other than re-enumeration of contractors or grantees.**

No payment or gift of any kind is being made to any respondents.

**10. Describe any assurances of confidentiality provided to respondents.**

The confidentiality of C<sup>3</sup>RS evaluation data is protected under the BTS confidentiality statute (49 U.S.C. 111 (k) and the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) of 2002 (Public Law 107-347, Title V). In accordance with these confidentiality statutes, only statistical and non-identifying data will be made publicly available through reports. Further, BTS will not release to FRA or any other public or private entity any information that might reveal the identity of individuals or organizations mentioned in the evaluation survey questionnaires.

**11. Are there any questions of a sensitive nature?**

There are no questions of a sensitive nature. The respondents will not be asked to identify themselves.

**12. Provide estimates of reporting burden.**

Number of Respondents	1200.0
Frequency of Response	1.0
Burden Per Response	20 minutes
Annual burden hours	400.0 hours

We believe the actual burden time will be no more than 20 minutes. Reported time to complete the questionnaire based on seven responses ranged from 11 minutes to 17 minutes.

Annualized cost is estimated to be: **\$10,173.46** ( $333.3 \times 24.80 + 66.7 \times 28.60 = 10,173.46$ ) (The annualized cost is estimated based on 333.3 burden hours for workers and 66.7 burden hours for

managers participating in the C<sup>3</sup>RS demonstration project and earning an average of \$24.80 and \$28.60 per hour respectively.)

**13. Provide an estimate of cost to the respondents. Do not include the cost of any hour burden shown in items 12 and 14. General estimates should not include purchase of equipment or services or portions thereof made prior to October, 1995.**

The entire cost of this data collection is imbedded in the hourly burden. There is no additional cost to the respondent.

**14. Provide estimates of annualized cost to the Federal Government.**

Federal Costs

Overhead & Miscellaneous Expenses	\$8,000 (3,750 O. & 5,250 ME)
Manpower	\$15,000 (1/8 FTE @ \$120K)
Contract support	<u>\$38,200</u>
Total Government Cost	\$61,200

**15. Explain the reasons for any program changes or adjustments in Items 13 or 14 of OMB 83-I.**

This does not apply. This is a baseline data collection for the sole purpose of conducting the evaluation of a research study on voluntary reporting of close calls in the Service Unit of Union Pacific railroad in North Platte, ND.

**16. Is the information received published?**

No. The information received through this data collection will be used as baseline data to evaluate the effectiveness of a research/demonstration project on voluntary reporting of close calls in the Service Unit of Union Pacific railroad in North Platte, ND. If funding is available, the evaluation survey will be repeated at the end of the C<sup>3</sup>RS demonstration project at this pilot site. BTS will seek a separate OMB clearance to conduct the post C<sup>3</sup>RS project evaluation survey. Data collected from the baseline and post-project evaluation surveys will be used by BTS staff to conduct a pre- and post-C<sup>3</sup>RS analysis for the evaluation report on the C<sup>3</sup>RS demonstration project.

**17. Is the agency seeking approval not to display the expiration date for OMB approval?**

No.