SUPPORTING STATEMENT FOR CENSUS OF FATAL OCCUPATIONAL INJURIES

OMB CONTROL NO. 1220-0133

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

Due to difficulties in producing reliable and detailed estimates for fatal occupational injuries from a sample survey, the Bureau of Labor Statistics (BLS) compiles the Census of Fatal Occupational Injuries (CFOI) using multiple administrative data sources, primarily solicited from Federal and state agencies, as well as other publicly available sources. States match source documents to ensure that each recorded fatal injury is work-related and is counted only once. Collection for the CFOI has been conducted annually since 1992. However, the CFOI collection does not use traditional survey/sample collection and, therefore, response rates are not applicable for this collection.

The BLS received information for approximately 5,700 fatalities (injuries plus illnesses) annually over the 5 years of 2016-2020 nationwide. About 3 percent of the fatalities need to have a follow-back questionnaire sent either to be substantiated as work-related or to obtain missing information needed to compile the data.

- 2. Describe the procedures for the collection of information including:
 - Statistical methodology for stratification and sample selection,
 - Estimation procedure,
 - Degree of accuracy needed for the purpose described in the justification,
 - Unusual problems requiring specialized sampling procedures, and
 - Any use of periodic (less frequent than annual) data collection cycles to reduce burden.

The Census of Fatal Occupational Injuries (CFOI) is a Federal/State cooperative program. State partners may include states, cities, or U.S. Territories and are collectively referred to as state partners. The state partners:

- Arrange with the various state agencies involved to obtain, on a flow basis, source documents on all occupational fatalities in the state during the reference year
- Use multiple source documents to verify if an injury is work-related and to obtain detailed information on the circumstances of that injury
- Ensure that each fatality is counted only once
- Conduct follow-back on fatalities identified by only one source document as being work related and fatalities for which work-relationship is questionable
- Clarifies data with employers when certain information is missing or inconsistent between source documents
- Code data elements
- Enter the data into the BLS online application.

Attachment 2A contains the introductory letter which is sent with the structured questionnaire (BLS CFOI-1) for the follow-back.

BLS trains state CFOI staff and provides a procedural manual with periodic updates via technical memoranda for program operation. These documents establish processing standards to ensure comparability among state data and to generate verifiable nationwide counts of fatal workplace injuries. To ensure accuracy in the CFOI data, the operations guide and technical memoranda detail the following quality assurance measures:

- Each fatal injury will be substantiated by two or more independent sources or a source document and a follow-back questionnaire.
- Data are entered using a BLS online application that includes standardized edits to ensure valid entries and consistency between data elements.
- BLS has an annual Data Acceptance Program that includes inspection of the state data.

BLS obtains source documents from several federal agencies and distributes them to state partners to further identify and validate occupational fatalities. These agencies include the Office of Workers' Compensation Programs (OWCP), National Highway Traffic Safety Administration (NHTSA), U.S. Coast Guard, Occupational Safety and Health Administration (OSHA), Federal Railroad Administration (FRA), and the National Transportation Safety Board (NTSB). BLS has begun to explore the use machine learning techniques to link OSHA records to the CFOI case file to improve linkage accuracy and efficiency.

Additionally, BLS has created a webscraping tool called the CFOI Public Data Management System (CPDMS) to identify, index, and store information from publicly available articles on workplace fatalities. This tool provides state partners with a searchable compilation of online data sources that is used to further substantiate fatal work injury information.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

The CFOI is not a survey, but rather uses administrative data from multiple sources to compile a census of fatal occupational injuries. Therefore, response rates common of a traditional survey do not apply to this collection. With the use of diverse data sources and the follow-back questionnaire, the CFOI compiles the most complete count of fatal occupational injuries possible.

When a second source document is unavailable to substantiate that the fatal injury is work-related or if certain important data regarding the injury are missing, a follow-back questionnaire will often be sent to the employer, the informant named on the death certificate, or the certifying physician or coroner/medical examiner. A telephone follow-up is conducted when the questionnaire has not been returned or is incomplete. If repeated attempts to reach a contact fail, the state agency tries to reach an alternative person named on the source documents to obtain needed information.

At the end of the data collection cycle, BLS reviews available documentation for unsubstantiated cases¹ (around 1 percent of the file) and, together with the state partner, determines whether to include the case on the database. This procedure ensures that all legitimate work-related injury fatalities are included in the fatality counts each year.

4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of test may be submitted for approval separately or in combination with the main collection of information.

The CFOI data collection process achieves the following program objectives:

- Accuracy: Work-related fatal injuries are substantiated by two or more independent source documents or a source document and follow-back questionnaire. System edits identify potential data errors or inconsistencies among collected and coded data, which must be resolved by state partners to ensure data accuracy.
- Timeliness: States follow established procedures for quick access to source documents to ensure availability of current data to users. Data are published approximately twelve months after the reference period.
- Usefulness: The database contains information useful for understanding fatal work injuries and developing injury prevention strategies, including characteristics of the incident, the employer, and the deceased.

¹ Unsubstantiated cases refer to cases where only one source document was found to verify the case. In counting single-source document cases, all OSHA reports appearing on a case are counted as one source document.

- Completeness: Diverse data sources are used to compile a complete roster of fatal work injuries, including those to private and public sector employees and the self-employed.
- Confidentiality: Work-related fatal injury data are collected under a pledge of confidentiality that requires BLS to prevent disclosure of identifying decedent information.

BLS updates the CFOI state operating manual and computer system periodically to incorporate state and user recommendations for more efficient data collection as well as additional edits to improve data quality.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

The data collection is a complete census of fatal work injuries and is not probability based. Organizations involved in various aspects of occupational safety and health—statistics, research, injury prevention—were consulted about the data collection design. Xingyou Zhang (202-691-6082), Division Chief of the Statistical Methods Group in the Office of Compensation and Working Conditions, is the contact person at BLS for the CFOI design.

One agency in each of the state partners is designated the data collection organization for the CFOI. A list of participating state partners and agency contacts is available on request.