

**Supporting Statement B for  
Paperwork Reduction Act Submission<sup>1</sup>**

**Survey of Participants in OSHRC Settlement Part Program**

- 1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method 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.**

This is a one-time data collection that will be conducted by Indiana University (IU) pursuant to its contract with OSHRC. The universe for sampling is approximately 300 participants comprised of employers and Department of Labor personnel, Authorized Employee Representatives and their representatives, including attorneys, who have personally participated in the Settlement Part program from February 15, 2011 through February 14, 2012. No sampling or other respondent selection method will be used. Because this is a new information collection, we do not have direct estimates of response rates for this survey.

IU has recently taken steps to “clean the data” in the data provided by OSHRC to reconcile OSHRC’s estimate that up to 750 individuals participated in settlement part cases. After separating prospective survey participants into separate mailings (Participants in Settlement Part cases will receive a separate survey from participants in the contemplated second survey of select conventional proceedings where between \$50,000 and \$99,999 is involved), IU found that the available data showed a total of about 491 settlement part case related records. After IU recently removed duplicates (several cases involved multiple docket numbers that involved the same settlement part participants) and made other data corrections, the settlement part survey mailing list prepared by IU presently shows about 251 identifiable participants. Any edits to the original list were done to ensure that all individuals have the same probability of selection. Further data cleaning by IU may cause some heretofore unidentified participants to be added, but IU does not expect the total mailing of this survey to exceed 300. This sample size is manageable from the standpoint of pursuing follow up and maximizing response rates. IU will seek to achieve, but cannot guarantee a 70% response rate for a voluntary survey.

Estimated number of All participants in the Settlement Part Program between February 15, 2011 through February 14, 2012	Targeted Response Rate <sup>2</sup>	Number of Responses
300	70%	210

<sup>1</sup> This submission supersedes OSHRC’s earlier submission of March 13, 2012.

<sup>2</sup> Every effort will be made to maximize the response rate. Although we are hopeful that our efforts will achieve a 70% response, there is no way to guarantee this with a voluntary survey.

**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.**

**Projected Response Rate**

The survey will be of the estimated 300 participants in the Settlement Part program from February 15, 2011 through February 14, 2012. No stratification or sampling or other respondent selection method will be used. There is no issue with the degree of accuracy as the survey will be sent to all identifiable participants. There are no unusual problems requiring specialized sampling procedures. There will not be any use of a periodic data collection.

IU will make every effort to achieve a higher response rate of 70% for this survey as described in more detail below. Given the mixed method approach being used by IU in its study, IU is confident that it can obtain useful information from this survey even if a lower response rate than 70% is achieved. It is also cost effective for OSHRC to conduct this survey. Significantly more value will be realized by OSHRC through the conduct of this survey, whatever the response rate, than without it.

Preliminarily, the best way to minimize non-response bias is to achieve the highest possible response rate. IU will employ the most recent strategies recommended by Dillman.<sup>3</sup> Specifically, the initial mailing will include a cover letter on IU letterhead, a brief letter from OSHRC, the survey instrument printed on paper of a different color, and a postage paid preaddressed envelope to facilitate returns. The survey cover letter explains the research objectives, emphasizes the importance and voluntary nature of the survey, and addresses confidentiality in detail. [*See attached* sample IU cover letter]. The assurance of confidentiality (to the fullest extent possible) is also considered important to achieving the highest possible response rate. To further maximize response rate, IU requests that respondents return completed surveys within one week. The cover letters are addressed to individual participants and include original signatures in blue ink. A separate brief letter from the agency is also part of the original mailing to encourage responses. The survey instrument is light blue in color and is designed so that it is easy to follow. It is as brief as practical to obtain the information relevant to the analysis. Up to two reminder post cards will be sent. The first reminder post card will be sent if a response is not received after 7 days. After 10 days a reminder email will be sent in instances where we have current email addresses.

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<sup>3</sup> See Dillman, Don, Jolene Smyth, and Leah Melani Christian (2009). *Internet, Mail, and Mixed-Mode Surveys: The Tailored Design Method*. Hoboken, NJ: John Wiley & Sons.

## Non-Response Bias Analyses

Even with IU's best attempts to maximize returns, we do not expect to achieve a 100% response rate. Because the unit response rate is likely to be below 80% and the item response rate may be below 70% for some items on the survey, IU will also conduct a non-response bias analysis in accordance with OMB guidelines 1.3.4 and 1.3.5 (Office of Management and Budget Standards and Guidelines for Statistical Surveys, September 2006: 8). IU will report on and address two distinct non-response categories: unit non-responses and item non-responses.

Unit non-responses arise when entire survey instruments are not returned and item non-responses arise when survey instruments are returned, but are not entirely completed. For unit non-responses, IU will attempt to obtain as much information as possible about non-responders. For example, IU will report on the similarities between late responders, or those who respond only after follow ups, and unit non-responders as there is some evidence that there is a common source for reluctance of late responders and non-responders. IU will also compare characteristics of responders and non-responders to check for evidence of non-response bias. IU has already obtained information for this purpose including participant type (*i.e.* attorney for Department of Labor, labor union representatives, company representative, business owner, etc. ) and case characteristics (*e.g.* total dollar amount of penalty, days in the settlement part process, citation types, region where disputed). Differences in non-response rates across sub-groups of the population provide possible evidence of bias. This additional information also provides the basis for statistical tests for bias and bias corrections. Item non-responses are also reported for each question. In the case of item non-responses, partially completed responses will allow IU to control for possible differences between responders and item non-responders and to compute unbiased estimates.

In addition, IU is aware of the various calculations for un-weighted unit and weighted unit response rates (RRU & RRW). IU is also familiar with the numerous statistical techniques for non-response bias correction; including weighting, imputing data, and maximum likelihood. In the final report to OSHRC, we expect that IU will report on overall response rates, unit non-response rates and item non-response rates. IU will clarify the related implications and also report results of the various correction techniques.

### **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 survey will be distributed by mail. Participation is voluntary. The completed surveys are to be returned to the contractor by the postage-paid envelopes included with surveys. See response to question no. 2, above, for additional detail on all steps to maximize response and techniques to check for, test, report on, and correct any non-response bias.

#### *Validity*

In designing the survey, we worked closely with IU to ensure that empirical measures reflect the real meaning of concepts. We also helped to design questions to precisely target aspects of the settlement program we want to better understand. We also vetted the questions with all key

OSHRC personnel to help establish that participants would be likely to interpret the question to mean what we intended. IU established construct validity mainly by relying on the literature. Construct validity refers to the degree to which the questions and measures tie to theoretical relationships. For example, we included several questions on participants' perception of the settlement part process because they have a strong basis in the literature on procedural justice.

### *Reliability*

Reliability in research specifically refers to the quality of measurement method. The main idea is that the method should yield the same results when repeated. A yes/no- type question in the survey is expected to yield higher reliability than a question that prompts an answer of "how-many times." However, the questions about the number of times something occurred will also potentially provide responses that are more meaningful for improving the Settlement Process. IU also took a number of steps to achieve reliability in the design of the questions and will continue to establish reliability in the coding of the responses. Questions were designed to yield responses that were both mutually exclusive and exhaustive. IU's efforts to achieve reliability will continue in the coding of responses. IU will use objective criteria for the coding task itself. Also because the coding task is by its nature one of clerical recording, IU will take steps to eliminate errors in recording. IU will also perform random checks of codes that are input using multiple coders. In the analysis, IU will report coefficients to show IU achieved acceptable levels of inter-coder reliability.

#### **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 tests may be submitted for approval separately or in combination with the main collection of information.**

Most survey questions have been pretested in a previous survey by IU. Other questions are standard in the literature on dispute resolution. All questions have been vetted with key OSHRC personnel.

In addition to the tests for non-response bias described above, IU will also perform tests to refine collections of information. For example, IU typically uses statistical methods to determine if responses are internally consistent to see if they can be combined into a single measure (*e.g.* Cronbach's alpha). For tests of inter-coder agreement and reliability (described above) IU also performs statistical tests to report levels of agreement among coders and also to report the role of chance agreement among coders. The main test gives a statistic called a Cohen's kappa.

IU also employs regression methods to answer questions such as: Is the type of case associated with the participant's level of satisfaction with the outcome? The specific method will depend on the level of measurement for each question being examined. Based on the types of questions in the settlement part survey, IU can expect to use logit analysis (when looking at factors that lead to yes/no answers) and ordinal logit (when looking at factors that lead to ordinal type responses/ level of satisfaction or agreement).

**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 individuals directly responsible for information collection, analysis, and report writing are:

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Attachments  
Survey IU cover letter  
Reminder Post Card