

**1 Supporting Statement B for
Paperwork Reduction Act Submission**

OMB Control Number 1028-NEW

**Assessment of the Business Requirements and
Benefits of Enhanced National Elevation Data**

- 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 organizations (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.**

The sample for this collection will consist largely of day-to-day professional users of elevation data. The data will be collected electronically through an on-line questionnaire.

Respondent Universe

The respondent population for the on-line survey will be selected from State, local and tribal governmental agencies currently using elevation data. USGS Geospatial Liaisons will work with their state, local and tribal counterparts to provide a list of employees using elevation data. For purposes of this study, 420 employees will be chosen to complete the on-line survey (see Table 1 below). Each respondent will be contacted via email and given the instruction for completing the survey.

Because this will be an attentive, knowledgeable, and highly motivated sample, we anticipate a response rate of no less than 80% for the on-line survey.

Table 1. Organizations in respondent universe for Survey and Interviews

Surveys			
Organization	Number of Organizations	Average Expected Survey respondents per Organization	Total Respondents
U.S. States	50	8	400
U.S. Territories	5	2	10
Tribal Governments	10	1	10
Total			420

- 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 respondent sample will be comprised of a known population of elevation data users based upon a confirmed list (n=420). Representatives from each state, local and tribal government organizations will be contacted and asked to participate in this study. The sample will not be stratified because the population is known by USGS as contacts and through working relationships.

The data collected from the on-line survey will be coded directly into a computerized database using Survey Monkey™. Data analysis will include several phases. The first will consist of frequency distributions of responses to each question. These will be reported as percentages for each of the respondent organizations. The second will include cross-tabulation and analysis of variance to compare responses between groups of users.

Descriptive statistics will be used to describe current uses within the programs of the organizations represented within the sample. Because the USGS is interested in determining ways to improve the availability of enhanced elevation data, it is important to gather baseline information concerning current requirements and to determine any information gaps or unmet needs.

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.

Several steps will be taken to maximize response rate and ensure an accurate and reliable sample. We predict that the response rate of at least 80% will be met due to the highly technical nature of the respondents and support of the USGS Geospatial Liaisons.

We are using this web based survey as a strategy to decrease costs, increase the speed of data collection, increase response rates by providing additional modes for response, and decrease the amount of non-response error. The Tailored Design Method for mail and internet surveys will be followed to help ensure a high response rate and representative sample. As a part of this process we will:

1. request participation in advance.
2. use the following information to introduce the survey
the purpose of the survey.

the reason for participation.

the terms of anonymity and how the results will be used.
3. allow enough time to complete the survey. With Survey Monkey we will be able to allow the respondent to begin the survey and return at a later time if needed.
4. provide survey Instructions - Explain how to navigate through and submit the survey plus clear instructions will be included for each section when applicable.
5. provide a survey that is easy to follow with clear and direct questions/instructions.
6. send reminders during the survey period for those that have not completed the survey.

Addressing potential non-response bias

If necessary, a telephone follow-up will be made to a random subsample of non-respondents to test for non-response bias. Assuming a 70% response rate (n=294) we will select 20% of the non-respondents (n=25) to participate in the non-response analysis. This non-response analysis will contain a subset of 3 key questions from the original survey designed to be completed in less than 5 minutes. Results from the non-response bias check will be compared to the respondent sample to identify potential non-response bias.

The following three questions (from the on-line survey) will serve as the non-response bias test for this collection.

1. *Do you have requirements for topographic data? Yes or No*
 2. *Do you have requirements for bathymetric data? Yes or No*
 - if “yes” ask question 3
 - if “no” end the survey here and thank the respondent for their participation
 3. *What are your operation benefits from bathymetric data?*
- 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.**

The initial questions for this collection were subject to internal USGS review, as well as extensive reviews by its external partners including the National Oceanic and Atmospheric Administration, Natural Resources Conservation Service, Federal Emergency Management Agency, and the Iowa Department of Natural Resources. The review and pre-testing of the survey was performed to provide comments concerning the overall structure, sequence and clarity of questions. Individuals were also asked to estimate the time burden of the survey. Comments and suggestions provided by reviewers and pre-test participants were evaluated and used to revise the survey instrument where appropriate. Comments that improved clarity and comprehension of survey content were also incorporated.

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.**

Consultants:

Collection and analysis agency:

Holly M. Miller, Social Scientist
Lynne Koontz, Economist
Natalie Sexton, Social Scientist
Policy Analysis and Science Assistance Branch
Fort Collins Science Center
U.S. Geological Survey
2150 Centre Ave, Building C
Fort Collins, CO
Phone: 970-226-9313