Supporting Statement A for
Paperwork Reduction Act Submission

OMB Control Number: 1028-NEW

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

Terms of Clearance: None

A. Justification

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

The U.S. Geological Survey (USGS) in partnership with member agencies of the National Digital Elevation Program (NDEP) is considering an expanded program to significantly improve the availability and consistency of enhanced elevation data for the United States and its territories, including the coastline. Enhanced elevation data refers to precise three-dimensional measurements of the terrain, built-up features, vegetation structure, submerged near-shore topography, and potential other attributes as may be obtained primarily from Light Detection and Ranging (LiDAR) technologies. LiDAR data are collected by Federal, State, local, and tribal governments to meet a wide range of mission critical government needs, from flood mapping to hazards assessments, resource management and climate science. While many of these data collection projects are completed by multiple partners, they are not coordinated as a national program or adequately funded to complete and manage a national dataset for multiple uses. An assessment is needed to determine if it would be more cost effective for the Government to manage and extend the benefits of these activities within the context of a national program. An assessment is also needed to determine what additional national or agency benefits could be derived from such a strategy and the approximate costs involved in collecting all or most of the U.S. over a 4-7 year timeframe.

The USGS will use the Assessment to refine requirements and identify implementation alternatives and associated benefits and costs for a national enhanced elevation program designed to meet many Federal, State, and other national business needs. The USGS has lead-agency responsibility for maintaining national elevation data under authority of the Office of Management and Budget (OMB) Circular A-16, and leads the NDEP. The NDEP was established to be the coordinating body for geospatial elevation data collection and management activities among Federal and State agencies. This Assessment is sponsored by the NDEP and funded by member agencies including the USGS, the Federal Emergency Management Agency (FEMA), the Natural Resources Conservation Service, and the National Geospatial-Intelligence Agency (NGA). The USGS will manage the Assessment including the information collection process and provide the final report to the NDEP, the Federal Geographic Data Committee (FGDC), the OMB and other officials and interested stakeholders.

It is expected that the Assessment will establish a baseline of national business needs and associated benefits for LiDAR. This information will be used to enhance the responsiveness of USGS elevation programs and inform the development of an enhanced future program that balances requirements, benefits and costs at the national scale.

This information collection supports USGS' mandates and programmatic requirements related to its role as the lead civil mapping agency and other core science responsibilities. Specifically, this surveying effort will provide information required by the following laws, regulations, policies and statutes:

- OMB Circular A-16
- Executive Order 12906 - Coordinating Geographic Data Access
- Organic Act of March 3, 1879

2. Indicate how, by whom, and for what purpose the information is to be used. Be specific. If this collection is a form or a questionnaire, every question needs to be justified.

As leading Federal agency cooperating in this project, the USGS is responsible for the coordination of Federal surveying, mapping, and related spatial data activities that are financed in whole or in part by Federal funds. In response to the increasing national demand for more accurate and current elevation and geospatial data the USGS will use a survey to collect information about current and future Federal, State and other national business uses for elevation data and the current and expected benefits from their use.

Business uses are defined as those mission critical activities of Federal and State agencies that require enhanced elevation data, e.g., flood risk mapping as performed by FEMA; coastal mapping as performed by NOAA, USACE, and some States; forest inventory and monitoring as performed by the USFS and private timber companies; conservation planning as performed by the NRCS, etc. The business uses and benefits will be used in benefit-cost analyses to develop optimal programmatic approaches for more fully meeting national needs for enhanced elevation data.

Questions on …	**Provide information about …**	**Which is used to …**
Demographic characteristics (name, organization, job title, etc,)	Factors influencing participation and demand	Provides contact information for follow-up with respondents in completing questionnaires
Business Uses	The categories of applications provide the highest benefits	Plan and develop programs to effectively meet the most and highest priority requirements possible
Functional Activities	User data needs in the context of their specific job function	Plan and develop programs that address key agency mission functions
Quality Level Requirements	Details of user data requirements to do their job. Includes elevation data density, accuracy, etc., to satisfy Functional Activities and Business Uses	Ensure that proposed programs are planned to provide the highest possible data quality
Geographical Area Requirements	Geographic areas for which elevation data, by Quality Level, are needed	Ensure that proposed programs are tuned to address requirements that may vary by region
Benefits of Enhanced Elevation Data	Operational, customer service, and other public/societal benefits of elevation	Ensure that proposed programs balance costs and benefits

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 submission 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 [and specifically how this collection meets Government Paperwork Elimination Act requirements].

Information will be collected electronically through an on-line questionnaire. All respondents will receive an e-mail message providing a URL link to the survey. We will follow the most up-to-date methods for conducting a web-based survey. All instruction and the survey instrument will be available on-line. We will use Survey Monkey™ to develop, serve, collect, store, and analyze the information collected during this study. Data collection methods will follow Dillman (2007) for web-based surveys

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

Requirements and benefits information for elevation data have not been collected at a national level. This data will be complementary to other surveys that are more limited in scope, and no duplication will occur.

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

We have made effort to keep the amount of information requested to a minimum for all respondents by developing an on-line survey. This collection is not expected to have a significant impact on small business or small entities. The information requested from all respondents is limited to the minimum necessary to understand the requirements and benefits for elevation data. .

6. **Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.**

Failure to collect the information would make it difficult for the USGS to adequately understand and respond to the business uses and needs of Federal, State and other national customers who rely on elevation data. USGS has limited information about current and future enhanced elevation needs which limits its ability to effectively evolve its programs to increase the benefits of elevation data, and to expand partnerships for collecting and sharing data for multiple uses.

There are no technical or legal obstacles to reducing burden for this collection.

7. **Explain any special circumstances that would cause an information collection to be conducted in a manner: (i) requiring respondents to report more often than quarterly, (ii) requiring respondents prepare written responses in fewer than 30 days after receipt, (iii) requiring respondents to submit more than an original and two copies of any document, (iv) retain records for more than 3 years; (v) in connection with a statistical survey, that is not designed to produce valid and reliable results that can be generalized to the universe of Assessment; (vi) the use of a statistical data classification that has not been reviewed and approved by OMB; (vii) that includes a pledge of confidentiality not supported by authority established in statute or regulation; requiring respondents to submit proprietary trade secrets or other confidential information.**

This request contains no special circumstances that would require this information collection to be conducted in a manner that is inconsistent with OMB guidelines.

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 that notice [and in response to the PRA statement associated with the collection over the past three years] and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported. [Please list the names, titles, addresses, and phone numbers of persons contacted.]

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years — even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

On May 4, 2010, we published a 60-day Federal Register notice (75 FR 23797) announcing that we would submit this information request to OMB for approval. In that notice we solicited public comments for 60 days, ending July 6, 2010. We did not receive any comments in response to that notice.

In addition to our Federal Register notice, we solicited comments from four users of LiDAR data. We asked them to provide feedback about the clarity of instruction and the estimated time to complete a prototype of an on-line version of the questionnaire. The individuals provided comments concerning the structure and approximate length of time it would take to complete the survey; they also concurred with our estimated burden time for the application to be about 1 hour or less. We made minor editorial changes to the final version survey based on the reviewer suggestions.

Table 1. Names and contact Information of individuals consulted with outside the agency.

1. Kirk Waters National Oceanic and Atmospheric Administration Coastal Services Center 2234 South Hobson Avenue Charleston, SC, 29405-2413 (843) 740-1227 Kirk.Waters@NOAA.GOV,	2. Steven Nechero Natural Resources Conservation Service Technology Applications Team Leader 501 West Felix Street FWFC Building 23 Fort Worth, Texas 76115 817 509 3366 http://www.ncgc.nrcs.usda.gov

3. Paul Rooney Federal Emergency Management Agency Risk Analysis Division 99 High St. – 6th Floor Boston, MA 02110 617-832-4719 paul.rooney@dhs.gov	4. Chris Ensminger Iowa Department of Natural Resources, GIS Section (515) 281-4216 Chris.Ensminger@dnr.iowa.gov

9. Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

There are no payments or gift giving associated with this collection.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

Names and contact information (e.g. email address, address and phone number) will be maintained only for the purpose of follow-up contact to clarify responses. Our primary purpose for collecting contact information is to follow-up with the respondents to verify the submission as a valid and reliable entry. Respondent names or e-mail addresses in any of our reports.

The records for this collection will be maintained in accordance to Privacy Act System of Records identified as Computer Registration System. (INTERIOR/USGS-20) published at 74 FR 23430 (May 19, 2009).

11. Provide additional justification for any questions of a sensitive nature such as: sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

No questions of a sensitive nature will be asked.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included**

here. Instead, this cost should be included in Item 14.

We estimate that there will be approximately 445 responses completing this one-time survey, totaling 422 burden hours. The completion times for each information collection vary substantially depending on the complexity and scope of the responses.

We estimate the total dollar value of the annual burden hours for this collection to be $21,708 (rounded). We calculated hourly wages using the Bureau of Labor Statistics Bulletin 2738 "National Compensation Survey: Occupational Earnings in the United States, 2009," (http://www.bls.gov/ncs/ncswage2009.htm#Wage_Tables), released in June 2010. We calculated benefits in accordance with the Bureau of Labor Statistics news release USDL 10-1241 entitled "Employer Costs for Employee Compensation—June 2010" (http://www.bls.gov/news.release/pdf/ecec.pdf), released on September 8, 2010.

To estimate the average hourly wage and calculate benefits for:

- **State/local/tribal Government** - We used the wage and salary costs for State and local government workers from Table 5 of the Bureau of Labor Statistics Bulletin 2738, which states an hourly rate for environmental engineers of $34.29. For this collection, we have assumed that the rate for tribal government workers is identical to the rate for State/local government workers. To calculate an hourly rate that includes benefits, we multiplied the hourly rate by 1.5. The hourly rate including benefits is $51.44.

Table 2. Estimated Dollar Value of Annual Burden Hours

	Estimated Number of Responses	Average Respondent Time (hours)	Total Annual Burden Hours	Dollar Value of Burden Hour Including Benefits	Value Of Respondent Burden Hours
Survey *State/Local/ Tribal Governments*	420	1	420	$51.44	$21,605
Non Response Bias Test	25	5 minutes	2	$51.44	$103
	445				$21,708

13. Provide an estimate of the total annual (non-hour) cost burden to respondents or record keepers resulting from the collection of information.

There are no non-hour burden costs.

14. Provide estimates of annualized cost to the Federal government

We estimate that the total cost to the Federal Government for processing and reviewing completed surveys and preparing reports as a result of this collection of information is $385,977 (rounded). This cost includes Federal employee salaries and benefits. The table below shows Federal staff and grade levels performing various tasks associated with this information collection. We used the Office of Personnel Management Salary Table 2010-DCB (http://www.opm.gov/flsa/oca/10tables/pdf/dcb_h.pdf) to determine the hourly

rate. We multiplied the hourly rate by 1.5 to account for benefits (as implied by the BLS news release USDL-10-0283).

Table 3. Federal Employee Salaries and Benefits

Position	Grade/ Step	Hourly Rate	Hourly Rate incl. benefits (1.5 x hourly pay rate)	Estimated time (hours) per task	Annual Cost
Project Manager	14/9	63.85	95.78	80	$7,662
Senior Project Advisor	15/10	74.51	111.77	80	$8,942
Partnerships and external coordination	15/6	69.18	103.77	80	$8,302
Geospatial Liaison Coordinator	13/3	45.51	68.27	120	$8,192
Project Support	12/4	39.46	59.19	80	$4,735
Geospatial Liaisons (Forty individuals at 120 hours each)	13/5	48.35	72.53	4800	$348,144
Total				5240	$385,977

15. Explain the reasons for any program changes or adjustments.

This is a new request.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

Data collected during this study will be coded directly in to the Survey Monkey ™. The software will automatically provide statistics like percents, response totals, and response averages. Data analysis will include frequency distributions, cross tabulation and multivariate analysis to report the findings from the survey. The reports will also synthesize business uses, requirements and benefits for each organization participating in the study. A summary report will be made publically available in electronic form.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

We will display the OMB control number and expiration date on the information collection instruments.

18. Explain each exception to the certification statement "Certification for Paperwork Reduction Act Submissions".

There are no exceptions to the certification statement.