

1 Supporting Statement A

Earthquake Hazards Program Research and Monitoring

OMB Control Number 1028-0051

Terms of Clearance: None

Justification

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

The Earthquake Hazards Reduction Act of 1977, 42 USC 7701 et. seq., most recently amended as Public Law 108-360, authorizes the U. S. Geological Survey (USGS) to support research and regional earthquake monitoring networks through assistance (grants and cooperative agreements). The USGS's Earthquake Hazards Program (EHP) supports research in earthquake hazards, the physics of earthquakes, and earthquake occurrence in order to provide earth science data and information essential to mitigate earthquake losses and supports operations and maintenance performed by regional monitoring networks as part of EHP's Advanced National Seismic System (ANSS). The assistance application instructions, specific objectives, and reporting requirements are identified in program announcements posted to Grants.gov.

- 2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection. Be specific. If this collection is a form or a questionnaire, every question needs to be justified.**

Approximately 250 research scientists and engineers from educational institutions, and profit and non-profit organizations submit proposals to acquire funding to support research related to earthquake hazards assessments, earthquake causes and effects and earthquake monitoring. The EHP will continue to use the requested information to determine the eligibility of the applicants and as the basis for approval or disapproval of proposed research or network operations. This collection will ensure that sufficient and relevant information is available to evaluate and select applications for funding. Financial assistance will be awarded following the evaluation and ranking of applications by a review panel familiar with the objectives of the EHP.

The technical narrative of the proposal for assistance support is needed as the applicant describes the proposed research or network operations and management plan, and peer reviewers subsequently use the narrative to evaluate the research or operations against established EHP criteria. The application's uniform appearance and assembly are needed to minimize the time required by the bureau to determine applicant eligibility and for review and oversight. Reporting requirements are the minimum required by the OMB Circulars. Final technical reports and annual progress reports are needed for technical monitoring of the projects to assure consistency

with the objectives of the program's legislation. The technical reports have only general format requirements. Re-prints of peer-reviewed articles submitted for publication in journals have been accepted as final technical reports.

The maximum length of the application is 25 pages. The final technical reports are published in their entirety (maximum of 10 MB, including figures) on the EHP External Support office's website, part of the USGS website. The final technical report requirement was created in response to the requirement in Public Law 95-124, Section 2, paragraph (8), which states: "Improved mechanisms are needed to translate existing information and research findings into reasonable and usable specifications, criteria, and practices so that individuals, organizations, and governmental units may make informed decisions and take appropriate actions."

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 GPEA requirements.

All applications must be submitted electronically via Grants.gov (<http://www.grants.gov>). The progress and final reports will be submitted directly to the program office via e-mail (gd-erp-coordinator@usgs.gov) and are posted for public use at earthquake.usgs.gov/research/external.

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.

The information is used solely for the purpose of this program and is not duplicated. The subject matter of each application and report are unique to each applicant each year. There is no similar information available which could be used or modified for this purpose.

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

The information collection will not significantly impact small businesses or entities. Applicants generally include less than 20 small businesses per year. By using a digital submission process, small businesses are spared paper, printing, and mailing costs. We collect only the minimum information necessary to evaluate applications and ensure that projects are successful and meet the requirements of authorizing statutes and Federal regulations.

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.

Funding for the EHP is appropriated on a fiscal year basis as part of the USGS annual appropriation. The program priorities may change each year as directed by Congress. Consequently, the issuance of announcements and submission of applications must be scheduled no less frequently than annually.

- 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, medical, government contract, grant-in-aid, or tax records, for more than three 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 a 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 circumstances that require us to collect the information in a manner 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.

Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every three 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.

The 60-day FRN was published 02/01/2019 at 84 FR 1199.

The feedback we received was primarily about problems with getting Grants.gov to accept proposals. Most of these problems have been resolved with recent Grant.gov updates, but there remain problems with slow acceptance notifications once all proposal components have been submitted through Grants.gov. I did not receive any responses to the most recent FRN.

In addition to our Federal Register notice, we solicited ad hoc estimates of times to prepare reports and proposals and general comments on any problems encountered during the proposal submittal period from several past assistance proposers and recipients (see below) to obtain their views on the burden that the grant application and reporting imposes. The amounts of time needed are reflected in our burden times for reports and proposals. The feedback we received was primarily about minor problems with the multi-step process to upload proposals into Grants.gov.

Table 1: Collaboration on Design

California Institute of Technology Pasadena, CA	California Geological Survey Sacramento, CA
Lettis Consultants International, Inc. Walnut Creek, CA	

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

Except for the remuneration of grantees, no payments or gifts are provided to the respondents.

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

No assurance of confidentiality is provided. The research results and data will be published in scientific journals as stated in the announcement, but no information on this collection will be published or publicly available.

External Grants program does not internally collect, maintain or process PII. A SORN has not been required as we do not collect, maintain or process PII.

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 sensitive questions are 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.**

Our estimates, in Table 2 below, are based on our own knowledge plus previous outreach described in item 8.

Narrative/Proposal Preparation: We anticipate that it will take each of the 250 applicants approximately 45 hours to complete the project narrative and to provide any other relevant supporting documents as a proposal for assistance support (totaling 11,250 hours).

Final Report Preparation: Based on past averages and future projections for this activity, we anticipate awarding an average of 100 grants per year. The 100 award recipients are required to submit either a progress report or a final technical report. We estimate that it will take an average of 12 hours to complete the report (totaling 1,200 hours).

We estimate that the total burden for this collection will be 12,450 hours, as shown in Table 2 below.

To estimate the dollar values of burden hours in Table 2, we used the most recently available data from <http://www.bls.gov/oes/current/oes192042.htm> (Occupational Employment and Wages, May 2017: 19-2042 Geoscientists, Except Hydrologists and Geographers.) Geoscientist mean hourly wages were used (\$50.88) to account for individuals in the private sector. To account for benefits, we multiplied the mean hourly rate by 1.44, for a total of \$73.27. We calculated the benefits in accordance with BLS News Release USDL-18-045, dated March 20, 2018.

Table 2. Responder Burden

Activity	Number of Responses	Estimated Completion Time per Respondent	Total Annual Burden Hours	Dollar Value of Burden Hour [Including Benefits]	Total Dollar Value of Annual Burden Hours
Narrative/ Proposal Preparation	250	45 hours	11,250	\$73.27	\$824,288
Final Reports (or annual progress report*)	100	12 hours	1,200	\$73.27	\$87,924
Total	350		12,450		\$912,212

*For awards of 2-5 years, at the end of each funded year the PI must submit a progress report to receive subsequent funding for the following year.

13. Provide an estimate of the total annual non-hour cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden already reflected in item 12.)

- * The cost estimate should be split into two components: (a) a total capital and start-up cost component (annualized over its expected useful life) and (b) a total operation and maintenance and purchase of services component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information (including filing fees paid for form processing). Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
- * If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden

estimate. In developing cost burden estimates, agencies may consult with a sample of respondents (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.

- * Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

We have identified no reporting and recordkeeping “non-hour cost” burdens associated with this proposed collection of information.

14. Provide estimates of annualized cost to the Federal government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), and any other expense that would not have been incurred without this collection of information.

The total annual cost to the Federal Government is \$339,602. This includes salary and benefits for three federal employees’ salaries and travel to process and manage the responses. We used the Office of Personnel Management Salary Table 2018-DCB (<http://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/2018/general-schedule/>) to determine the hourly rate (Table 3). Federal salaries are based upon the labor rates provided by Office of Personnel Management for the Washington-Baltimore area. We multiplied the hourly rate by 1.6 to account for benefits (as implied by the BLS news release USDL-18-045).

Table 3: Federal Labor Table

Position	Grade /Step	Hourly Rate	Annual Hrs by Fed	Fully Loaded Hr Rate (x 1.6)	Total Labor Value
Physical Scientist/ Program Manager	14/4	\$60.30	1,700	\$96.48	\$164,016
Program Analyst	11/6	\$34.56	1,700	\$55.30	\$94,010
Contracting Officer	14/2	\$56.65	900	\$90.64	\$81,576
		TOTALS	4,300		\$339,602

15. Explain the reasons for any program changes or adjustments in hour or cost burden.

The number of responses and burden hours have not changed from our 2016 application.

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.

This is an on-going information collection without an ending date. No statistical analysis, tabulation, or publication of the information collection data is planned.

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 as required.

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

No exceptions to the certification are being made.