Supporting Statement for Paperwork Reduction Act Submission for the USGS Earthquake Hazards Program (EHP) Research and Monitoring Annual Assistance Announcement OMB Control Number 1028-0051 Current Expiration Date: 2/28/2013

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. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

The Earthquake Hazards Reduction Act of 1977, Public Law 95-124 (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 the 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. Less than 15 small businesses submit final technical reports each year. (The majority of applicants and awardees are universities.) 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: (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 study; (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.

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 3 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 October 31, 2012, we published a Federal Register Notice (77 FR 65903) announcing that we would submit this information request to OMB for approval. In that notice we solicited comments for 60 days, ending December 31, 2012. No comments were received in response to this notice.

In additional 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 multistep process to upload proposals into Grants.gov.

Egill Hauksson, California Institute of Technology, Seismological Laboratory 12200 E California Blvd, Pasadena, CA 91125 (626) 395-6919

Chris Wills, California Geological Survey 801 K Street, Sacramento, CA 95814 (916) 322-1080

Ivan Wong, Seismic Hazards Group, URS Corporation 1333 Broadway, Suite 800, Oakland, CA 94612 (510) 874-3014

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.

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.

Our estimates, in Table 1 below, are based on our own knowledge plus the outreach described in item 8.

Narrative/Proposal Preparation: We anticipate that it will take each applicant 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).

This is a minor change that represents an adjustment in progress and final reporting averages based on our experience in administering this collection, our recent number of awards per year, and on the respondent feedback described in item 8 above. The minimal reporting requirements increased the burden from a total of 1080 hours to a total of 1200 hours.

We estimate that the total burden for this collection will be 12,450 hours, as shown in Table 1 below (first 4 columns).

To estimate the dollar values of burden hours in Table 1, we used data from http://www.bls.gov/news.release/pdf/ocwage.pdf, Table 1 Geoscientist mean hourly wages (\$46.97) 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 \$66.76. We calculated the benefits in accordance with BLS news release USDL: 12-2404 of December 11, 2012.

Table 1. Estimated Dollar Value of Annual Burden Hours

Activity	Annual 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	\$67.64	\$760,950
Final Reports (or annual progress report*)	100	12 hours	1200	\$67.64	\$81,168
Total	350		12,450		0118

^{*}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 record keepers resulting from the collection of information.

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.

The estimated annual cost to the Federal Government is \$510,225 as itemized in Table 2, below. The table shows Federal Staff and grade level performing various tasks associated with this collection of information and time spent processing and reviewing information received as a result of this collection. Primary USGS staff involved are the Contracting Officer, External Support Manager, and Program Analyst for developing the program announcement, organizing the proposals, completing all logistics for the peer panel meetings to review proposals, notifying recipients of awards, preparing requisitions, making awards, and requesting and reviewing required reports. Grade levels, time, and annual costs for each of the three individuals are provided below. On average each year ten USGS Regional or Topical Coordinators assist with developing the program announcement, review proposals, manage the peer review panel meetings, and provide technical support to the awarded projects for an average of 120 hours per year per coordinator; an aggregate grade level and annual cost for the coordinators' involvement are provided below. Several USGS scientific staff also serves as panel members; these panel members spend 44 hours on average per person for reviews, meeting participation, and travel. We have provided an aggregated grade level and annual cost below for USGS panel members.

We used the Office of Personnel Management Salary Table 2012-DCB (http://www.opm.gov/flsa/oca/12tables/html/dcb_leo_h.asp) to determine the hourly rate. We multiplied the hourly rate by 1.5 to account for benefits (as implied by the previously referenced BLS news release).

In addition to the salaries and benefits, we estimate that \$40,000 for holding the proposal review panel meetings required each fiscal year for transportation and per diem for outside peer reviewers and USGS staff (no salaries or stipends are paid to non-federal personnel that participate on the panel reviews). USGS facilities are used for panel meetings, so no room rental fees are incurred.

Table 2. Total Annual Cost to the Federal Government

Position	Grade/ Step	Hourly Rate	Hourly Rate Incl. Benefits (1.5 X Hourly Pay Rate)	Total Annual Hours	Annual Cost		
Physical Scientist/ External Support Manager	GS 14/10	\$65.53	\$98.30	1,700	\$167,110		
Program Analyst	GS 9/7	\$30.51	\$45.77	1,700	\$77,809		
Contracting Officer	GS 13/10	\$55.46	\$83.19	900	\$74,871		
Subtotal	4,300	0					
10 Regional Topical Coordinators							
2 Geologists (120 total annual hours each)	GS 13/6	\$49.77	\$74.66	240	\$17,918		

4 Geologists (120 total annual hours each)	GS 14/6	\$58.81	\$88.22	480	\$42,346	
4 Geologists (120 total annual hours each)	GS 15/6	\$69.18	\$103.77	480	\$49,810	
Subtotal	1,200	\$110,074				
10 Panel members						
2 Geologists (44 total annual hours each)	GS 13/6	\$49.77	\$74.66	88	\$6,570	
4 Geologists (44 total annual hours each)	GS 14/6	\$58.81	\$88.22	176	\$15,527	
4 Geologist (44 total annual hours each)	GS 15/6	\$69.18	\$103.77	176	\$18,264	
Subtotal					040,361	
Federal Employee Salaries and		\$470,225				
Travel and per diem Costs		\$40,000				
Total Annual Cost to the Feder		\$510,225				

15. Explain the reasons for any program changes or adjustments

We estimate that there will be 350 responses totaling 12,450 burden hours. This represents an increase of 120 hours for final technical/annual progress reports due to adjustments in both the number of reports per year as well as hours per report based on recent history and on feedback as noted above.

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 is planned for this information.

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.

Not applicable.

18. Explain each exception to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I.

Not applicable. No exceptions to the certification are being made.