

# 1 SUPPORTING STATEMENT A FOR PAPERWORK REDUCTION ACT SUBMISSION

## Next Generation Volcano Hazards Assessment (NGVHA) OMB Control Number 1028-NEW

**Terms of Clearance:** Not Applicable - New Collection.

### Justification

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

The Next Generation Volcano Hazards Assessment (NGVHA) project, currently funded within the USGS Volcano Hazards Program, aims to produce a next-generation of comprehensive volcanic hazard assessments (VHAs) for high-priority U.S. volcanoes. NGVHA is a framework for creating up-to-date, actionable volcano hazards assessments for high-priority U.S. volcanoes. These assessments are based on multidisciplinary research and modeling and incorporate the best practices of user-centered design. The NGVHA framework will result in a portfolio of hazards products and data for each volcano or region addressed, tailored not only to the volcano itself but to the needs of USGS partners in preparedness: the agencies, decision-makers, governments, and other stakeholders who will be the primary users of USGS products.

The Next Generation Volcanic Hazard Assessments project (NGVHA) fulfills multiple mission goals and recommendations of several science strategy documents. In particular, NGVHA work, both ongoing and proposed, can fulfill all of the Strategic Actions for the Future in Goal 3 of the Natural Hazards Science Strategy (CC-1383):

*Goal 3: Improved Assessment Products and Services: Strategic Actions for the Future*

*Improve the formulation of assessments, in particular, by ensuring there is a process to update assessments with the most current understanding, methodology, and observations.*

*Evaluate the accuracy, use, validity, and effectiveness of assessments, working with social and behavioral scientists and assessment users, in order to improve future assessments and demonstrate the value of USGS assessments.*

Because the *usefulness* and *usability* of USGS volcano hazards assessments depend on input from the audiences for which they are produced, it is necessary to incorporate user needs elicitation into the hazard assessment creation process. A core strategy of NGVHA projects is stakeholder engagement and usability studies, through collecting user needs and involving stakeholders in the actual process of creating hazard products. This addresses goals set out in both the USGS 21st-Century Science Strategy (CC-1476) and the Science for a Risky World report (CC-1444):

*... a high emphasis on early stakeholder engagement to understand and anticipate their future needs and on developing predictive capabilities that provide information in advance of when it is needed. (CC-1476)*

*... every effort requires the USGS to ensure that the translation of its science into products that fulfill the needs of decision makers and that the best available science is used. (CC-1476)*

**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.**

User needs information will be used by USGS scientists (including social scientists) to make informed decisions about the most crucial information needed by our partners in volcanic hazard response, and how to best deliver it. The systemic, carefully considered collection of this information by those with the expertise to extract both quantitative and qualitative data will result in a significant improvement of both the volcano hazard products and associated services provided by the VHP.

**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.**

In-person or remote data collection will be completed using semi-structured interviews, participatory workshops (e.g. for iterative design purposes), and participant observation. These open-ended ethnographic data collection methods will allow for deep data collection, to include nuances in experiences across different demographics. Most of these methods can be completed in part or fully remotely (via phone or video calls or online meetings). In addition, broader stakeholder and community surveys can be conducted via virtual methods (online surveys, social media) in order to reduce the paperwork burden and more efficiently analyze data. The USGS VHP already has a strong presence on social media and web, which enables us to reach a wide audience without placing an undue burden on any particular group.

**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.**

Ad hoc collections of similar stakeholder needs information do exist within the VHP and will be used as much as possible during the NGVHA usability assessment process. However, these collections are usually specific to groups which no longer exist, products which have been superseded by later scientific research, or hazard mitigation practices which are no longer in use. In addition, they reflect the state of user needs at the time collected, which may be years or even decades in the past. In addition, these collections were not made in accordance with research and ethical best practices which are standard in the social science and usability fields of today, and are not suitable for publication or dissemination.

New technologies and means of information transfer have vastly changed USGS partner/user needs, including a strong focus on electronic and/or digital means of accessing hazard information. In addition, these collections were not made with the intention of external publication; current PRA and ethical best practices stipulate that any ethnographic research conducted by scientists must be conducted with the full knowledge and consent of the participants for future publication and dispersal as research results, best practices documentation, and/or templates for future USGS use.

**5. If the collection of information impacts small businesses or other small entities,**

**describe any methods used to minimize burden.**

The collection of this information may present a small burden on the time of small business owners, who are considered partners/stakeholders under the umbrella of affected communities; however, participation in these methods of data collection is entirely voluntary and can be completed through a proxy (i.e., meetings or events in which the business already participates). The majority of the burden of data collection will fall on the USGS researchers.

**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.**

Because partner/user needs evolve and change over time, it is necessary to have a mechanism in place to regularly evaluate and re-evaluate the usability and overall success of VHP products and services. If data collection about user and partner needs is not collected as part of the NGVHA, the resulting volcano hazards assessments will not only integrate poorly with existing hazard mitigation structures and partner practices, but will also lack the buy-in and investment of partner effort. Buy-in from partners is crucial for maintaining effective working relationships between the USGS VHZ and other entities involved in volcano hazards mitigation and response.

**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.

On September 15, 2023, we published a 60-Day *Federal Register* notice (88 FR 63600). We did not receive any comments in response to that notice.

In addition to the *Federal Register* notice, we consulted with the [3] individuals identified in Table 8.1 who are familiar with this collection of information in order to validate our time burden estimates and asked for comments on the questions below:

**Table 8.1**

<b>Organization</b>	<b>Title</b>
USGS Natural Hazards Mission Area	Social Scientist
USGS Natural Hazards Mission Area	Risk Project Team Lead
USGS Geologic Hazards Science Center	Social Scientist
Michigan Technological University	Professor of Anthropology

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

We will not provide payments or gifts to respondents.

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

We do not provide any assurances of confidentiality; however, the Department of the Interior is required under Section 208 of the E-Government Act of 2002 (Public Law 107-347, 44 U.S.C. Chapter 36) to conduct a Privacy Impact Assessment (PIA) before developing or initiating new information collections that use information technology that collects, maintains, or disseminates

personally identifiable information (PII). After reviewing the PIA submitted for the experimental population data collection, the Service Privacy Act Officer determined that a Systems of Records Notice is not required for this collection. The collection is not considered to be a Privacy Act system of records because it is not keyed to individuals and because of the limited nature of the PII collected and its limited use in the conduct of program operations (copy of PIA attached in ROCIS). The information collected is protected in accordance with the Privacy Act of 1974 and the Freedom of Information Act. We collect the name, email, and phone number of the reporting party in order to have this information in case we have follow-up questions regarding the reports of species covered in 50 CFR 17.84.

**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.**

We do not ask questions of a sensitive nature.

**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.**

We estimate that there will be approximately 400 individual respondents and approximately 670 responses annually, totaling 1035 annual burden hours. The completion time for each information collection varies as shown in Table 12.1 below.

We estimate the total dollar value of the annual burden hours for this collection to be \$56,466 (rounded). We used the Bureau of Labor Statistics news release [USDL-23-1971](#), September 12, 2023, Employer Costs for Employee Compensation—June 2023, to calculate the total annual burden. Table 1 lists the hourly rates for all workers as:

- Individuals – \$43.26, including benefits.
- Private Sector – \$41.03, including benefits.
- Government – \$58.25, including benefits.

**Table 12.1**

Respondent	Activity	Annual No. of Respondents	Number of Submissions Each	Total Annual Responses	Avg. Time per Response (hours)	Total Annual Burden Hours*	Hourly Labor Costs Incl. Benefits	Dollar Value of Annual Burden Hours
Individuals	Paper survey	100	1	100	0.5	50	43.26	2163.00
State, Local, Tribal	Online survey	140	1	140	0.5	70	58.25	4077.5
Private sector Community groups	Online survey	10	1	10	0.5	5	43.26	216.30
Individuals	Online survey	200	1	200	0.5	100	43.26	4326.00
State, Local, Tribal	Direct interview	80	1	80	1	80	58.25	4660
Individuals	Focus groups	50	1	50	2.0	100	43.26	4326.00
State, Local, Tribal	Workshops	15	1	15	8.0	120	58.25	34,950.00
State, Local, Tribal	Visual exercises	15	1	15	2.0	30	58.25	1,747.50
<b>Totals:</b>		670		670		1035		56,466.30

**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, 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 not identified any non-hour cost burden associated with this collection.

**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.**

We estimate the total annual cost to the Federal Government to administer this information collection is \$120,255 (\$114,255 for salary/benefits and \$6,000 for costs related to data collection, including travel, materials, and software licenses).

To determine average annual salary costs, we used the Office of Personnel Management Salary Tables [2023-SF](#) and [2023-POR](#) to determine the annual salary costs for staff involved in reviewing and processing the information collected as shown below. The benefits rate was calculated from Bureau of Labor Statistics News Release [USDL-23-1971](#), September 12, 2023, Employer Costs for Employee Compensation—June 2023. We multiplied the annual salaries by 1.38 to account for benefits, in accordance with USDL-23-1971.

Position/Grade	Annual Salary	Annual Salary (Inc. Benefits)	Time Spent on Collection	Total Annual Salary Costs
Research geophysicist, GS-12/01	\$ 88,907	\$121,250	50%	\$60,625
Research geologist, GS-13/05	139,374	196,397	20%	39,279
Geographer, GS-12/03	100,140	143,507	10%	14,351
<b>Total</b>	<b>\$328,421</b>			<b>\$114,255</b>

**Other - \$6,000, includes:**

- \$3,000 – travel funds for researchers to visit participants in the data collection (reduces burden to participants)
- \$3,000 – costs for purchase of software licenses associated with data collection (i.e. eye tracking) and analysis (i.e. response coding).

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

This is a new collection.

**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.**

The results of the data collection will be published in external academic journals subject to both internal USGS peer review and external academic peer review, in accordance with ethnographic research and ethical standards accepted by the broader social science community. Data analysis, primarily qualitative interpretive thematic analysis, will be conducted via the NVivo software package. Conclusions from data analysis will also be published through a USGS Publication Series (i.e., Scientific Investigations Report, Professional Paper, Open-File Report, as appropriate). The raw data will be published via a USGS Data Release.

The project timeline is as follows:

- March 2024 – Project team begins data collection from federal audiences
- October 2024 – Project team collects data from other audiences

January 2025 – PI begins data analysis

March – September 2025 – Project team prepares journal and internal USGS publications and submits for internal/external review

October – December 2025 – Project team submits publications to journal / USGS Publications Group

**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 appropriate materials.

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

There are no exceptions to the certification statement.