

Supporting Statement
U.S. Department of Commerce
National Institute of Standards and Technology
Generic Clearance for Community Resilience Data Collections
OMB CONTROL NO. 0693-XXXX

A. JUSTIFICATION

This is a new request for approval.

1. Explain the circumstances that make the collection of information necessary.

In the United States, there are always communities working to recover from a disaster. Although communities cannot stop natural hazards and have only limited ability to prevent technological and human-caused hazards, they can minimize disastrous consequences. Some communities are well on their way to achieving resilience. These communities incorporate continuity planning, risk management, and long-term community resilience goals. But many others can do more to improve their resilience to hazards by incorporating more comprehensive and purposeful planning that engages a broad set of stakeholders. Communities that do not prepare well are more likely to be overwhelmed when hazard events strike. Communities are often not prepared to recover from hazard events, as evidenced by the number of Presidential Disaster Declarations for the period from January 2000 to January 2011. Between 45 and 81 declarations were made every year for floods, hurricanes, tornadoes, earthquakes, fire events, and severe storms. Poor performance may result from aging infrastructure, dependencies between physical systems, poor siting, poor planning, or lack of maintenance.

Community resilience includes the time to recovery of community functions after a hazard event, and the ultimate outcome depend upon the nature and severity of the event as well as the community's preparedness to prevent incidents, mitigate risk, protect assets, respond in a timely and coordinate way, and recover community functions. However, little data is collected following hazard events at the community scale that documents damage to the physical infrastructure and impacts on social and economic systems. When data is available, it is often collected for other purposes than support of community functions, and is often evaluated on an annual scale. Dependencies and cascading effects are not evaluated, or the type and frequency of data collection is inadequate.

To advance the ability of communities to improve their resilience, data to support science-based tools and metrics is needed. Tools that are currently available tend to be qualitative in nature, such as checklists with rankings of 1 to 5 to indicate degree, or suggested topics for consideration. The collection of the proposed data will support the development of improved science-based tools and metrics for communities.

In accordance with the Office of Management and Budget’s (OMB) regulations at 5 CFR 1320 - implementing the Paperwork Reduction Act, the Government Performance and Results Act (GPRA) of 1993, Executive Order 12862 - Setting Customer Service Standards, the National Performance Review, good management practices, and its mission,

“To strengthen the U.S. economy and improve the quality of life by working with industry to develop and apply technology, measurements, and standards”

the National Institute of Standards and Technology (NIST), a non-regulatory agency of the Department of Commerce, proposes to conduct a number of surveys and other empirical data collections related to NIST efforts to better understand community resilience, related planning processes, and sustainability in the built environment under this generic collection.

These surveys, both quantitative and qualitative, are designed to determine information and feedback that strengthens the understanding of community resilience against potential hazard events. Under such acts as the National Construction Safety Team Act and the NIST Organic Act, among others, as well as the President's Climate Action Plan (2013)¹, NIST conducts research and develops guidance and other related tools to ensure and enhance the safety and well-being of people in the face of a hazard event.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

NIST proposes to conduct a number of data collection efforts within the topic areas of disaster and failure studies and community resilience, including studies of specific disaster events (e.g., wildfire, urban fire, structure collapse, hurricane, earthquake, tornado, and flood events), assessments of community resilience and sustainability, and evaluations of the usability and utility of NIST guidance or other products. For example, one study may assess user perceptions and applications of the NIST “Community Resilience Planning Guide for Buildings and Infrastructure Systems” as well as adherence to codes and standards in community resilience planning. Another example may include the study of disaster impacts to community members due to a large-scale wildfire event. These data collections efforts may be either qualitative or quantitative in nature, or may consist of mixed methods. Additionally, data may be collected via a variety of means, including but not limited to electronic or social media, direct or indirect observation (i.e., in person, video and audio collections), interviews, questionnaires, and focus groups. NIST will limit its inquiries to data collections that solicit voluntary responses. The results of the data collected will be used in research efforts aimed to decrease negative impacts of

¹ The President’s Climate Action Plan (2013) is available at: <https://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf> . On page 13 it is noted explicitly that “the National Institute of Standards and Technology will convene a panel on disaster-resilience standards to develop a comprehensive, community-based resilience framework and provide guidelines for consistently safe buildings and infrastructure – products that can inform the development of private-sector standards and codes.”

hazards on society, and, in turn, to increase community resilience within the U.S. communities. Steps will be taken to ensure anonymity of respondents in each activity covered by this request.

For each proposed request using the generic clearance, NIST will submit the actual collection instrument and related documents (letters, emails to respondents, scripts, etc.), as well as proposed statistical methods to be employed to OMB along with responses to the following questions, which will be considered an abbreviated supporting statement:

- 1. Explain who will be surveyed and why the group is appropriate to survey.**
- 2. Explain how the survey was developed including consultation with interested parties, pretesting, and responses to suggestions for improvement.**
- 3. Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.**
- 4. Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.**

In general, the data collected will be used by NIST researchers to better understand community resilience, related planning processes, and sustainability in the built environment and impacted social and economic systems, in addition to plan the direction of future research and guidelines. The surveys and other empirical data collections may include involvement from the following members of the public: individuals or households; first responders; businesses or other for-profit organizations; not-for-profit institutions; state, local or tribal government; federal government; standards-making bodies; and universities.

The data collected will not be directly disseminated to the public in raw form, but aspects or portions of the information collected may be used to support research published in various journals papers, reports, and conferences.

Data collected from individual collections under this umbrella submission may be categorized as Human Subjects research. In such cases, individual collection efforts will need to be vetted through and approved by the NIST Human Subjects Protection Office (HSPO) as needed or required. The frequency of data collection efforts will be on an as-needed basis.

This information collection and dissemination will comply with the NIST Chief Information Officer (CIO) Information Quality Guidelines and Standards. Quality will be ensured and established at levels appropriate to the nature and timeliness of the information to be disseminated and will include all pre-dissemination reviews, as required by the Information Quality Guidelines and Standards.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

Whenever possible, information technology will be used to reduce burden on solicited individuals. In addition to traditional data collection methods, NIST will, whenever appropriate, offer electronic response options via the NIST Internet website.

The planned use of transactional and electronic web site surveys will substantially contribute to the number of projected responses and associated burden hours.

4. Describe efforts to identify duplication.

NIST has an internal review process that will examine each survey or data collection effort to be conducted under the generic clearance—to prevent internal duplication of effort and to ensure that appropriate data collection instruments are developed. By examining its three-year, NIST-wide requirements and combining those requirements into a generic clearance request, NIST is, to the greatest extent possible, centralizing the administration of its customer data collections. This will provide for a more consistent and comprehensive approach. While there may be other surveys or data collections that become the subject of separate clearance requests, NIST is confident that the procedures in place ensure that there will be no duplication within NIST-directed research.

The surveys and other empirical data collections may include involvement from the following members of the public: individuals or households; first responders; businesses or other for-profit organizations; not-for-profit institutions; state, local or tribal government; federal government; standards-making bodies; and/or universities. These entities should only respond to questionnaires once when the data to be collected will constitute a cross-sectional data set.

Given the nature of resilience and the long timeframe associated with community resilience planning there may be some duplication of responses when a longitudinal study is undertaken. Such studies will serve to provide valuable insights to the understanding of the recovery process, which is intricately linked to resilience planning.

Individuals participating in these types of data collection efforts may be asked to sign an informed consent document (meaning participants are informed of the data collection and are providing their consent to participate). Longitudinal studies may require that an individual be surveyed more than once for a given tool over a period pre- or post-disaster event. NIST will provide an example of the consent form that will be provided to each possible respondent. This consent form will be provided as a supplemental document for the submission package.

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

Some small business and other small entities may be involved in these efforts; however, NIST will keep the burden to them as well as on any business, organization or individual at a minimum by asking for opinions on a strictly voluntary basis and by asking for the minimum amount of information needed to evaluate the future direction and scope of NIST research.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

If NIST does not conduct the proposed data collection to support this research, progress on community resilience, sustainability and reducing the impact of disasters will be greatly diminished. Additionally, results from these data collections may lead to further research that could result in changes to, or enhancements of, the delivery of products, services, and information, as well as identifying high-priority items for improvement or inclusion in the suite of products, services and programs NIST provides for community resilience and hazard mitigation. Specific examples include change to building codes and standards as well as improved guidance and tools on community resilience.

If these surveys and other data collections were conducted less frequently or not conducted, NIST researchers would lack important information that may hinder the future direction and scope of NIST research as well as achieving NIST's mission. Outputs from these studies are likely to lead to a reduction in costs incurred to U.S. community stakeholders due the benefits to the U.S. public, such as more effective and efficient community resilience and recovery planning processes.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

The data collection conducted under this generic clearance will be conducted in accordance with the guidelines in 5 CFR 1320.5.

8. Provide a copy of the PRA Federal Register notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the 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.

A 60-day Federal Register Notice (FRN) soliciting public comments was published on Tuesday, February 17, 2016 (Vol. 81, Issue 31, pages 8045-8046). No comments were received.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

NIST will not provide any payment or gift to respondents for any written, verbal, electronic, or other survey participation and responses.

However, if respondents must leave their home or place of business to travel to a specific location, to participate in an information collection conducted in a “laboratory” type-setting or an office-setting (such as in-depth interviews, and usability testing, etc.) under this clearance may receive a small stipend to offset the cost of travel expenses.

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

Individuals will be assured of confidentiality to the extent permitted by law, including the Freedom of Information Act (FOIA).

All surveys and, therefore, information provided by respondents will be completely voluntary.

The Privacy Act (5 U.S.C. § 552a (3)) only requires a Privacy Act Statement when collecting personal information that will be placed or stored in a system of records. If a determination is made to collect Personally Identifiable Information (PII), under each individual information collection request, NIST will describe the appropriate System of Records Notice (SORN).

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.

Not applicable, no sensitive data will be collected.

12. Provide an estimate in hours of the burden of the collection of information.

The total estimated number of possible respondents for the three-year period is 5,000 and the estimated number of burden hours is 5,625 (1,250 to 10,000) per year.

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in #12 above).

There are no costs to the respondents.

14. Provide estimates of annualized cost to the Federal government.

This is an umbrella submission. This Generic Clearance will involve 5 NIST employees that will devote a portion of their time, aside from normal duties, to plan, coordinate, administer, or monitor the overall types of individual information collections to be conducted. NIST estimates that it would involve an annual estimated total of 560 hours and an estimated cost of \$125,000 per year.

NIST will describe individual cost estimates for each individual information collection request made. For example, if NIST determines that a Contractor will be involved in the collection efforts, those specific costs will be described.

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

This is a new collection of information.

16. For collections whose results will be published, outline the plans for tabulation and publication.

The results of these data collections will help to further and improve guidance on community resilience and ways in which to reduce the impacts of hazards on communities. Findings will be used in technology transfer as applicable through changes in building codes and standards. Results may be used in papers published in research journals and presented at conferences. Findings from the data collection activities may also be published in books, compendiums, and NIST publications. Results may be disseminated to NIST staff, key policy and management officials, and both public and private stakeholders. There will be no attribution to individuals in the analyzed data.

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

All written and electronic material will display the OMB Control # and current expiration date of the OMB approval. All written and electronic surveys (with the exception of transactional

surveys in the form of business reply cards where space will not permit) will display the following notification:

OMB Control #0693-XXXX

Expiration date: XX/XX/XXXX

This collection of information contains Paperwork Reduction Act (PRA) requirements approved by the Office of Management and Budget (OMB). Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number. Public reporting burden for this collection is estimated to be between 15 and 120 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the National Institute of Standards and Technology, Attn: Jennifer Helgeson, Economist, NIST, 100 Bureau Drive, MS 8603, Gaithersburg, MD 20899-1710, telephone 301-975-6133, or via email to jennifer.helgeson@nist.gov.

18. Explain each exception to the certification statement.

Not applicable. NIST does not require any exceptions.