

**Supporting Statement for Paperwork Reduction Submission
Grantee Reporting Requirements for Prediction of and Resilience against Extreme
Events (PREEVENTS) (3145-NEW)**

A. Justification

A.1. Circumstances Requiring the Collection of Data

The NSF Prediction of and Resilience against Extreme Events (PREEVENTS) program is one element of the NSF-wide Risk and Resilience activity, which has the overarching goal of improving predictability and risk assessment, and increasing resilience, in order to reduce the impact of extreme events on our life, society, and economy. PREEVENTS provides an additional mechanism to support research and related activities that will improve our understanding of the fundamental processes underlying natural hazards and extreme events in the geosciences.

PREEVENTS seeks projects that will (1) enhance understanding of the fundamental processes underlying natural hazards and extreme events on various spatial and temporal scales, as well as the variability inherent in such hazards and events, and (2) improve our capability to model and forecast such hazards and events. All projects requesting PREEVENTS support must be primarily focused on these two targets. In addition, PREEVENTS projects will improve our understanding of the impacts of such events and will enable development, with support by other programs and organizations, of new tools to enhance societal preparedness and resilience against such impacts. PREEVENTS focuses on natural hazards and extreme events, not purely technological or deliberately human-caused events and/or processes, or events/processes that lack a significant impact on natural phenomena.

PREEVENTS is intended to encourage new scientific directions in the domains of natural hazards and extreme events, and will consider proposals for conferences (“Track 1” proposals) that will foster development of interdisciplinary or multidisciplinary communities required to address complex questions surrounding natural hazards and extreme events. In order to ensure that PREEVENTS Track 1 conferences provide a basis for advancing knowledge in natural hazards and extreme events, and to ensure that the lessons learned from

PREEVENTS conferences reach the broadest audience possible, the Principal Investigator (PI) for each Track 1 award will be required to submit to NSF a conference report to be made public from the NSF Web site. These reports will summarize the conference activities, attendance, and outcomes; describe scientific and/or technical challenges that remain to be overcome in the areas discussed during the conference; and identify specific next steps to advance knowledge in the areas of natural hazards and extreme events that were considered during the conference.

A.2. Purpose and Use of Data

The conference reports will summarize the conference activities, attendance, and outcomes; describe scientific and/or technical challenges that remain to be overcome in the areas discussed during the conference; and identify specific next steps to advance knowledge in the areas of natural hazards and extreme events that were considered during the conference. Collecting this information, and making it publicly available from the NSF Web site, will inform individuals who were unable to participate in the conference of the results of the conference. It will also enable the growth of new communities to tackle novel scientific directions identified during the conferences. Electronic submission and distribution will maximize efficiency for the PIs, NSF, and those who access the workshop reports.

The reports will be used to:

- Inform interested parties of the outcomes of each PREEVENTS conference and enable new collaborations to explore novel scientific topics
- Inform NSF leadership and other interested groups of the outcomes from PREEVENTS conferences
- Revise future program solicitations to include new research directions identified during PREEVENTS conferences

A.3. Use of Automation

All reports are submitted electronically via e-mail to the cognizant program officer or via the NSF research.gov report submission tools.

A.4. Efforts to Identify Duplication

No other federal agencies or organization within NSF collects the same data submitted in PREEVENTS conference reports.

A.5. Small Business Consideration

N/A

A. 6. Consequences of Less Frequent Collection

N/A, because only one conference report is required per PREEVENTS Track 1 award.

A.7. Special Circumstances for Collection

N/A

A. 8. Federal Register Notice and Outside Consultation

The agency’s notice, as required by 5 CFR 1320.8(d), was published in the *Federal Register* on July 12, 2016, at 81 FR 45183, and no comments were received.

A. 9. Gifts or Remuneration

N/A

A.10. Confidentiality provided to respondents

PIs for all Track 1 awards will be required to submit to NSF a public report that summarizes the conference activities, attendance, and outcomes; describes scientific and/or technical challenges that remain to be overcome in the areas discussed during the conference; and identifies specific next steps to advance knowledge in the areas of natural hazards and extreme events that were considered during the conference. These reports will be made publicly available via the NSF Web site, and this is in the program solicitation (included).

A. 11. Questions of a Sensitive Nature

No questions of a sensitive nature are used.

A. 12. Estimate of Burden

The reporting requirement applies to the lead PI of each PREEVENTS Track 1 award. NSF anticipates making up to 20 such awards per year, each with a single report. Based on experience with preparing similar conference reports, NSF estimates that preparing the average report should require 80 hours or approximately \$4,000 per awardee. The overall burden time is estimated to be 1,600 hours, with an overall cost of \$80,000.

A. 13. Capital/Startup Costs

N/A

A. 14. Annualized Cost to the Federal Government

The cognizant program officer for each PREEVENTS Track 1 award will review the report and work with NSF publications staff to ensure that the report is published on NSF's Web site. NSF estimates this will require approximately four hours per report for the program officer and for the publications staff member; assuming salaries of \$80/hour for program officers and \$25/hour for publications staff, the cost would be \$420/report. Given 20 such reports per year, the annualized estimated cost is \$8,400.

A. 15. Changes in Burden

Not applicable; this is a new request

A. 16 Publication of Collection

PIs for all Track 1 awards will be required to submit to NSF a public report that summarizes the conference activities, attendance, and outcomes; describes scientific and/or technical challenges that remain to be overcome in the areas discussed during the conference; and identifies specific next steps to advance knowledge in the areas of natural hazards and extreme events that were considered during the conference. These reports will be made publicly available via the NSF Web site. Further details will be provided by the cognizant Program Officers and in the award document.

A. 17 Approval to Not Display OMB Expiration Date

N/A

A. 18 Exception to Item 19 of OMB Form 83-I Certification Statement

N/A

B. STATISTICAL METHODS

N/A