

OMB Clearance Package

NSF Survey of Nonprofit Research Activities (NPRA)

SF-83-I Supporting Statement

for

2016 Pilot Survey of Nonprofit Research Activities and Debriefing Interviews

Submitted by:

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Attachments

- A. [2016 Pilot Survey of Nonprofit Research Activities](#)
- B. [Pilot Survey Correspondence](#)
- C. [Comment Letter from Andrew Reamer, George Washington University](#)
- D. [Debriefing Interview Protocols](#)
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A. Justification

The National Center for Science and Engineering Statistics (NCSES) of the National Science Foundation (NSF) serves as a clearinghouse for the collection, interpretation, analysis, and dissemination of objective data on science, engineering, technology, and research and development (R&D) for use by policymakers, practitioners, researchers, and the public. One component of this activity is NCSES's sponsorship of the Nonprofit Research Activities Survey (NPRA), which is planned to collect information periodically on research- and development-related activities performed or funded by nonprofit organizations in the United States.

This clearance request is for two projects in the design of the Nonprofit Research Activities Survey: (1) the Fiscal Year (FY) 2016 NPRA Pilot Survey of 3,640 nonprofit organizations, and (2) Debriefing Interviews of 20 respondents and 20 non-respondents. The interviews will be conducted at the conclusion of the pilot test to inform its evaluation.

A.1 Need for Data Collection and Legislative Authorization

The nonprofit sector is one of four major sectors ([1] business, [2] government, [3] higher education, and [4] nonprofit organizations) of the economy that perform and/or fund R&D. Historically, NSF has combined nonprofit sector data with the other three sectors' data to estimate total national R&D expenditures via the annual *National Patterns of R&D Resources* report. The other sectors are surveyed annually; however, it has been more than 18 years since NSF last collected R&D data from nonprofit organizations.

While in the past the nonprofit sector has been viewed as a small contributor to the U.S. economy as a whole, it has actually been one of the most consistent in its growth since the 1970s. As Salamon (2015) presented from his research in the Committee on National Statistics workshop, *Measuring Research and Development Expenditures in the U.S. Nonprofit Sector: Conceptual and Design Issues*, nonprofit sector revenue has grown 53% (by approximately \$457 billion) from 1997 to 2007, compared to private sector growth of 32%. Although a majority of this growth occurred in the nonprofit health field (53%), other fields such as education, research, and social services also grew by 50% or more.

The primary objective of the new survey is to fill data gaps in the *National Patterns of R&D Resources* in such a way that the data are compatible with data collected on the other sectors of the U.S. economy and appropriate for international comparisons. Since the last survey of research and development activity in the nonprofit sector took place more than 18 years ago, and because of the more than 21% growth of nonprofit organizations that registered with the IRS between 2001 and 2011, it is important that a new survey of nonprofit R&D be fielded to update existing national estimates for the nonprofit sector. Before that can take place, the survey must first be pilot tested to evaluate the quality and effectiveness of the frame, questionnaire, and contact strategies.

Approval to conduct the NPRA Pilot Survey is being requested under the America COMPETES Reauthorization Act of 2010 §505, codified in the National Science Foundation Act of 1950 (NSF

Act), as amended, at 42 U.S.C. §1862, that under paragraph “b” directs the Foundation through NCSES to

- 1) collect, acquire, analyze, report, and disseminate statistical data related to the science and engineering enterprise in the U.S. and other nations that is relevant and useful to practitioners, researchers, policymakers, and the public, including statistical data on
 - (a) research and development trends;
 - (b) the science and engineering workforce;
 - (c) U.S. competitiveness in science, engineering, technology, and research and development.

The NPRA Survey pilot will provide essential data on the research and development activities performed and funded by nonprofit organizations in the U.S. The pilot survey will allow NCSES to better understand the current range of nonprofits and help determine the most effective data collection questions and sampling protocols necessary to gather the nonprofit R&D expenditure data. The results of the pilot survey will be another step toward producing valid and reliable estimates of nonprofit R&D activity in the U.S. that will be collected during the full implementation of the survey.

A.2 How, by Whom, and for What Purpose the Information Is to Be Used

The proposed pilot data collection will yield vital information through the sample frame methodology, the survey methodology, and the subsequent evaluation of the pilot. These insights will help determine the feasibility of moving forward with full implementation of the survey. Ultimately, the results from the full implementation of the survey will provide the first updated, valid, and reliable estimates of nonprofit R&D activity in the U.S. since the late 1990s, as well as a better understanding of the scope and nature of R&D in the nonprofit sector.

Federal Uses

We anticipate the pilot data collection will interest a number of federal agencies, including the Bureau of Economic Analysis, the Office of Science and Technology Policy, the Congressional Budget Office and the Congressional Research Service. Policy officials and R&D proponents will be interested in the data collected during the pilot to see whether it answers questions about economic growth in the U.S. overall and specifically in the nonprofit R&D sector.

While the pilot data collection will only be useful for federal agencies in determining the utility of the data, the full implementation of the NPRA Survey planned for 2017 will provide a key understanding of the R&D activities and expenditures in the nonprofit sector. These data will help federal agencies develop long-range plans and policies for R&D funding opportunities and the nonprofit sector as a whole.

Professional Associations Uses

Data from the pilot will not be reported publically, but the pilot survey methodology will be reported, and we believe that professional associations may review the methodological results to advocate for a broader survey sample and more extensive surveying of their constituents. With the full implementation, these organizations will probably use the results to enhance awareness of their member organizations' R&D. Likely users in this category include, but are not limited to, the Science Philanthropy Alliance, Association of Independent Research Institutes, Health Research Alliance, Consortium of Social Science Associations, American Educational Research Association, Center on Nonprofits and Philanthropy, Association for Research on Nonprofit Organizations and Voluntary Action, Social & Economic Sciences Research Center, and the Council on Foundations.

International Uses

While we will not be releasing the results of the pilot study to the public, we would expect the Organization for Economic Cooperation and Development (OECD) to be interested in our methodological findings. We anticipate a request from OECD for NCSES to provide NPRA Survey data from the full implementation for use in its periodic publications and for international comparisons of R&D efforts.

A.3 Use of Automated, Electronic, Mechanical or Other Technological Collection Techniques

The NPRA Pilot Survey will be a web-based data collection effort. The website will include a link to download a PDF and print a paper version of the questionnaire (see Attachment A). The web instrument simplifies certain aspects of the survey process for the respondents, such as automatically skipping questions that do not apply based on previous answers, performing arithmetical operations, and edit checks that will help to limit certain types of respondent errors (such as providing totals that do not match a total previously reported). The web version of the survey will have a real-time monitoring system that allows NCSES to monitor data, response status, and comments from respondents. From the perspective of the respondents, a web version of the survey is more convenient and simplifies the survey (e.g., by automatically calculating totals). NCSES benefits from the use of the web version by receiving improved data quality.

The primary form of communication and response with nonprofit organizations will be electronic. With the exception of a prenotification letter and mailed reminder [postcard/letter], all other correspondence will be sent electronically or organizations will be contacted by telephone (see Attachment B).

A.4 Efforts to Avoid Duplication

The data collected through NPRA have not been collected in over 18 years and are not available through administrative data. IRS Form 990, Return of Organization Exempt from Income Tax, IRS Form 990-EZ, Short Form Return of Organization Exempt from Income Tax, and IRS Form 990-PF, Return of Private Foundation collect information from nonprofit organizations. However,

these forms do not specifically collect R&D expenditures and other information included in the NPRA Survey.

There is the potential for some overlap with nonprofit hospitals affiliated with universities and colleges where data may be collected through the NSF Higher Education Research and Development (HERD) survey. Once the sample is drawn for NPRA, we will compare it with the institutions surveyed through HERD and remove any duplication. We will also ask the sampled organizations to let us know if they are part of a university or other higher education institution in order to eliminate any component units of universities not easily identified and removed during the initial sample de-duplication (Attachment B, Contacts 1 and 2).

A.5 Collection of Data From Small Businesses or Other Small Entities

This pilot survey of nonprofit organizations may have an impact on small entities choosing to provide the requested data. We intentionally designed the survey to be brief to reduce the burden and to be easy to complete. The survey will be offered over the web, which participants in exploratory interviews indicated was their preferred mode. A web-based instrument also allows branching logic that reduces the number of questions that need responses for entities engaged in only funding or only performing R&D. In addition, representatives from the smaller nonprofits interviewed during cognitive testing indicated minimal difficulty providing the requested financial information. We will pay close attention during the debriefing interviews to any difficulties small organization participants may have had completing the survey.

A.6 Consequences of Less Frequent Data Collection

The current request is for the pilot study of a new survey effort on research and development activities of the U.S. nonprofit economic sector. No similar project has been conducted in the past 18 years. During that time, NSF has extrapolated the R&D expenditures for the nonprofit sector using statistical modeling. Because the number of nonprofit organizations filing IRS nonprofit Form 990 (EZ, PF) has increased by over 20% in this timeframe, we believe that the statistical modeling based on the previous version of the survey is out of date and, therefore, may be producing imprecise estimates for R&D expenditures. Conducting a new survey of nonprofit research activities will provide more accurate national estimates of R&D and provide better support for economic policy decisions. While the current request is for a pilot study of 3,640 nonprofit organizations and 40 debriefing interviews, this pilot is the first stage of being able to more accurately gauge research and development in the nonprofit sector. If this pilot is deemed successful, a separate request will be submitted for the full implementation of the survey.

A.7 Special Circumstances

This information collection will be conducted in a manner consistent with Office of Management and Budget (OMB) guidelines and there are no special circumstances.

A.8 Federal Register Notice and Consultation with Persons Outside the Agency

Federal Register Notice

On January 11, 2016, NSF published a notice in the Federal Register (81 FR 1233 - <https://federalregister.gov/a/2016-229>) inviting the general public and other federal agencies to comment on NSF's plans to submit this request. One comment came from Andrew Reamer, Research Professor in the George Washington Institute of Public Policy at George Washington University (Attachment C). He expressed support for the survey and wanted a copy of the questionnaire and methodology. The questionnaire was provided to him immediately and he agreed to wait until the methodological summary was finalized before receiving a copy.

Consultation With Persons Outside the Agency

Many people and organizations have been consulted in order to develop the questionnaire. In 2014, the Committee for National Statistics convened a steering committee on measuring R&D expenditures in the U.S. nonprofit sector. Two workshops were held in February and June 2014 that included experts in survey methodology and nonprofit R&D. During the February workshop, NCSES presented background information about the 1996–1997 survey, the tasks and timeline for the new NPRA Survey, and information about the target population and sample design for the survey. The definition of R&D expenditures and its relevance for a nonprofit sector survey were discussed. In June, the second workshop focused on providing a profile of the nonprofit sector in the U.S. (including short presentations by nonprofits), understanding R&D within this sector, approaches to survey and sample design, suggestions about the question design and survey implementation. Potential data users who observed the workshops included academics, government employees, and other stakeholders.

During the summer of 2014, NCSES (through its contractor) conducted 23 exploratory interviews with representatives of nonprofit organizations in Atlanta, GA; Austin, TX; Boston, MA; and Seattle, WA. During these interviews, staff gathered information about how nonprofits are organized, the types of work they performed or funded, their familiarity with the terms “research” and “development,” types of financial data they maintain that are specific to R&D, benefits and barriers to participating in an NSF-sponsored survey, and possible topics to include in a new survey.

In September 2014, the contractor convened an expert panel to help NCSES shape the content and coverage of data related to R&D in the nonprofit sector. Information was garnered to gain a better understanding of the similarities and differences among nonprofit sectors, learn about the needs of data users, and obtain advice on priorities and strategies for content to be included in the survey.

Using the information from the Committee on National Statistics, exploratory interviews, and the expert panel, NCSES and its contractor developed the NPRA instrument and accompanying communications. In the summer of 2015, 28 cognitive tests were conducted with representatives of nonprofit organizations that perform and/or fund R&D. Participants in the cognitive interviews were asked to provide feedback on the prenotification letter, a handout that will be included with the letter, and the survey instrument. These materials were tested in an iterative fashion over 4 months.

A.9 Payments to Respondents

No payments will be made to NPRA Pilot Survey respondents.

A.10 Assurance of Confidentiality

No items on the NPRA Survey are deemed confidential. While data from the pilot survey will not be published, it is NSF's intention to publish detailed results of the full implementation of the NPRA Survey with tables showing R&D funding and expenditures for the nonprofit organizations surveyed.

A.11 Sensitive Questions

The NPRA Survey has no sensitive questions. During the cognitive interviews, no respondents said that they found the questions to be sensitive. NPRA is a voluntary survey, and no persons are required to respond to it. The voluntary aspect of the survey is stated clearly in the introduction.

A.12 Estimates of Response Burden

The FY 2015 Pilot Survey of Nonprofit Research Activities will collect data from 3,640 nonprofits. The expected response rate for the pilot survey is 65% or 2,365 organizations. Of those, we expect approximately 400 to be organizations that fund and/or perform research. On the basis of the cognitive interviews, we estimate that the survey will require approximately 10 hours (on average) to review the materials and complete the questionnaire for organizations that perform or fund research. For those that do not perform or fund research, we expect the survey to take less than 1 hour. Therefore, we estimate the total response burden hours for the survey to be 5,965 (4,000 hours for the 400 performers and funders; 1,965 hours for the remainder of the sample).

In addition, debriefings of 20 respondents and 20 non-respondents will be conducted (see Attachments D and E, Debriefing Interview Protocols and Debriefing Interview Correspondence, respectively). Debriefing interviews for respondents will last no more than 60 minutes per organization; interviews with non-respondents should be approximately 30 minutes. We estimate a total of 30 burden hours for the debriefing interviews. The combined burden for the survey and debriefing interviews is estimated at 5,995 hours (5,965 hours for the questionnaire and 30 hours for the debriefing interviews).

During the exploratory interviews and cognitive tests, we were consistently told that the prenotification letter and e-mail invitation should be sent to the President/Chief Executive Officer/Executive Director of each nonprofit organization. At an estimated cost of \$76.12 per hour (based on the Bureau of Labor Statistics May 2014 average hourly wages for "Top Executives" within NAICS Sector 54 - Professional, Scientific, and Technical Services),¹ Table A.12.1 shows the annual burden estimates for the pilot survey and debriefing interviews.

¹ Cost per hour is based on BLS 2014 average hourly wages for "Top Executives" in NAICS Sector 54. Estimate is \$76.12 per hour. Available at http://www.bls.gov/oes/current/naics3_541000.htm. Accessed on November 16, 2015.

Table A.12.1: Annual Burden Estimates for 2016 Pilot Survey and Debriefing Interviews

Category	Respondent Burden (hours)	Estimated # of Responses	Total Burden Hours	Total Cost Burden	Cost per Respondent (average)
Survey NPO Performer/ Funder	10	400	4,000	\$304,480	\$761.20
Survey NPO Non-Performer/ Funder	1	1,965	1,965	\$149,576	\$76.12
Respondent Debriefing Interviews	1	20	20	\$1,522	\$76.12
Non-respondent Debriefing Interviews	0.5	20	10	\$761	\$38.06
Total Annual Burden		2,405	5,995	\$456,339	

A.13 Estimate for the Total Annual Cost Burden to Respondents or Recordkeepers

Not applicable. Respondents are not expected to incur any capital and start-up costs, or systems maintenance costs in responding.

A.14 Annualized Estimates of Cost to the Federal Government

The total estimated cost to the federal government for the NPRA Pilot Survey is approximately \$1,893,614 over a period of 36 months, for an annualized cost of \$789,944.

A.15 Changes in Burden

Not applicable. The NPRA Pilot Survey is new because the nonprofit sector and the survey itself have changed substantially since the last survey was conducted 18 years ago.

A.16 Plans for Tabulation and Publication

This pilot survey is being conducted (1) to test the survey procedures across different types of nonprofit organizations (including the quality of the sampling frame); (2) to gain additional knowledge about the eligibility rates in different classes of nonprofits; and (3) to test the survey instrument. Because this is a pilot survey, a report that focuses on an evaluation of the survey methodology will be prepared. While there are no plans to tabulate and publish the results either in aggregate or individual form, NCSES may use the data to improve the model to derive our national estimates of nonprofit research spending in National Patterns of R&D Resources, as well as prepare papers, articles and/or presentations on the pilot survey methodology.

A.17 Approval to Not Display Expiration Date

Not applicable. The survey will display the expiration date for OMB approval of the information collection.

A.18 Exceptions to the Certification Statement

Not applicable. No exceptions to the certification statement are being sought.