

## MEMORANDUM

Date: July 16, 2008

To: Shelly Wilkie Martinez, Desk Officer  
Office of Management and Budget

From: Lynda T. Carlson, Director  
Science Resources Statistics Division

Via: Suzanne Plimpton, Clearance Officer  
National Science Foundation (NSF)

Subject: Notification of data collection under generic clearance

The purpose of this memorandum is to inform you of NSF's plan to conduct a brief screening survey under the generic clearance for survey improvement projects (OMB #3145-0174). This activity is associated with the redesign of the NSF Survey of Research and Development Expenditures at Universities and Colleges.

### **Background**

The Survey of Research and Development Expenditures at Universities and Colleges has been conducted annually since 1973. The survey collects information on the amount of research and development (R&D) expenditures at colleges and universities in the United States. In the spring of 2007, NSF began a three-year effort to evaluate and redesign the survey. The goals of the redesign are to update the survey to ensure NSF is obtaining the most valid and reliable measurements of the amount of academic research activity in science and engineering fields in the U.S, and to evaluate the need to expand the scope of data collected beyond that of R&D expenditures. We have already conducted a data user workshop, expert panel, and a series of institution visits in order to receive input on possible changes to the survey.

One of the possible changes we are considering is to the scope of the population. Currently the survey only includes institutions granting bachelor's degrees or higher. The expert panel participants asked NSF to consider including community colleges in the survey to determine the amount of R&D being conducted at this type of institution. We have already conducted informal phone interviews with no more than 5 large community colleges in an effort to learn more about what types of research, if any, are conducted at community colleges. The most common response to these interviews was that very little R&D was being done, unless it was student and faculty collaborative research which furthered their primary instructional mission. We would now like to conduct a brief screening survey of community colleges across the U.S. to determine the extent that R&D is being performed in these locations. The draft survey is provided in Appendix A. Specifically, we will provide a definition and descriptions of typical R&D activities, and

then ask the colleges several questions about any R&D that may be performed at their institutions.

This survey will be in the form of an email questionnaire to be sent to approximately 349 community colleges across the country. The list of 2-year institutions was compiled using data from the National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS) Finance survey and NSF's Survey of Federal Science and Engineering Support to Universities, Colleges, and Nonprofits (FSS). The total population of 2-year institutions within these two data sources is 2,119. For the first stratum we plan to include all 2-year institutions in the IPEDS 2005 dataset who reported non-zero research expenses, as well as all 2-year institutions in the FSS 2005 dataset who received any amount of funding designated as research from federal agencies. The combined and unduplicated total from these two sources is 209 institutions. NSF plans to survey all of these institutions because very few, if any, are expected to report R&D expenditures based on our findings from the previous interviews. It will also enable NSF to evaluate the effectiveness of using FSS and IPEDS research totals as inputs in any future screening process.

Also, to ensure total coverage of the population of community colleges, we plan to include a sample of the remaining 1,910 2-year institutions. Since these institutions do not report any research expenses to IPEDS and also are not identified as receiving federal funds for R&D from the FSS, we expect to find very few institutions within this population who have R&D expenditures. A sample of 140 of these institutions will be selected, assuming a 75% response rate to yield an effective sample size of 105 institutions. The effective sample size of 105 was chosen to ensure 95% confidence that the number of institutions with R&D is less than or equal to 50, if this sample fails to identify any institutions with R&D.

The results from this survey of 349 community colleges will be used as the basis for deciding whether to expand the Academic R&D survey population to regularly include community colleges.

### **Data Collection Instrument**

A draft of questionnaire is provided in Appendix A.

### **Data Collection Procedures**

As soon as clearance is obtained, we will email the questionnaire to the presidents' offices of the 349 community colleges with a request for response within two weeks. After two weeks a followup email with another copy of the questionnaire will be sent in order to increase the response rate. Data collection activities are expected to begin in early August 2008.

**Burden Information**

The expected 75% percent response rate to the email questionnaire would yield 262 responses. This is based on the response rate obtained within 2 months to the FY 2007 Academic R&D population screening email, sent to 107 institutions with potential R&D expenditures who were not currently in the survey. The FY 2007 Survey of R&D Expenditures at Universities and Colleges obtained an overall response rate of 97 percent. We expect each survey response to require 30 minutes. Therefore, we estimate a total of approximately 131 hours of respondent burden.

**Incentive Payments**

There are no incentive payments.

**Contact Information**

The contact person for questions regarding this data collection is:

Ronda Britt  
Survey Manager  
Survey of Research and Development Expenditures at Universities and Colleges  
Science Resources Statistics Division  
National Science Foundation  
703-292-7765  
[rbritt@nsf.gov](mailto:rbritt@nsf.gov)

Attachments

cc: Fran Featherston