

May 25, 2016

Suzanne H. Plimpton
Reports Clearance Officer
National Science Foundation
4201 Wilson Boulevard, Suite 1265
Arlington, VA 22230

RE: *Federal Register* notice dated April 8, 2016, for the National Science Foundation's Higher Education Research and Development (HERD) Survey and Federally-Funded Research and Development Center (FFRDC) Research and Development Survey (OMB Number: 3145-0100)

Dear Ms. Plimpton:

The Bureau of Economic Analysis (BEA) strongly supports the continued collection of data by the National Science Foundation (NSF) on two survey instruments: the *Higher Education Research and Development (HERD) Survey* and the *FFRDC Research and Development Survey*. The data collected on these forms are crucial to key components of BEA's economic statistics, particularly in BEA's estimates of investment and output of research and development (R&D).

BEA's National Income and Product Accounts (NIPAs), Industry Economic Accounts (IEAs), and gross domestic product (GDP) by state estimates rely on data from the HERD and FFRDC surveys. Expenditures for R&D were recognized as fixed investment in the calculation of GDP in the following major BEA updates: the 2013 Comprehensive Revision of the NIPAs, the 2014 Comprehensive Revision of the IEAs, and the 2014 Comprehensive Revision of GDP by State. Academic R&D expenditures from NSF are the starting point for estimating investment in intangible R&D assets for private nonprofit universities and for public universities. A list of items BEA uses and a description of their use are in Attachment 1.

Though the U.S. Census Bureau is BEA's primary source of data for the benchmark input-output accounts, it does not survey private non-profit universities or public universities. Consequently, these NSF surveys are BEA's main source of output measures for these significant performers of R&D. This survey is extremely important to BEA. To make it more useful, we request that the list of suggested changes, presented in Attachment 2, be incorporated for future surveys of universities and colleges.

In addition to the requests in Attachment 2 for universities and colleges, BEA requests that similar detail be collected for FFRDCs. The same issues described above for universities and colleges apply to FFRDCs.

Please keep BEA informed about any modifications to the university and college and FFRDC surveys. We are particularly interested in any modifications proposed during the form's approval process that would substantially affect our use of data generated by the form.

For additional information, please contact Tiffany Burrell, Source Data Coordinator, at 301-278-9618 or by email at Tiffany.Burrell@bea.gov. Should you need assistance in justifying this form to the Office of Management and Budget, please do not hesitate to contact BEA.

Sincerely,



Dennis J. Fixler
Chief Economist

Attachments

Attachment 1

Items Used by BEA from R&D surveys for Universities and Colleges and FFRDCs

Universities and Colleges:	Description of BEA's Use:
Question 1 – Current funds expenditures, by source of funds	Used to estimate research and development output by funder
Question 3 – R&D funding by type of agreement	Used to understand the level of R&D funding by type of agreement
Question 8 – R&D expenditures passed through to sub-recipients	Used to avoid double-counting of performer-based estimates
Questions 9A – 10 – R&D expenditures funded by federal agency sources	Used to gain information on the federal government agency composition of R&D funding
Question 13 – R&D expenditures by type of cost	To develop price measures to estimate the real volume of output
Questions 15A – 15K – Expenditures on equipment by science and engineering field	Total is used to separate equipment expenditures from gross output of research and development activity
Detail for above items on sources of funding, type of institution (private, public, federal), geographic location	To allocate expenditures to industry sectors and to states
FFRDCs:	Description of BEA's Use:
Question 1 – Current funds expenditures, by source of funds	Used to estimate research and development output by funder
Question 4 – R&D expenditures by type of cost	To develop price measures to estimate the real volume of output

Attachment 2

Items BEA Requests Collected in Future Issues of R&D surveys for Universities and Colleges and FFRDCs

Universities and Colleges:	Description of BEA's Use:
Prices for R&D capital (structures, equipment, software)	To estimate depreciation.
Detail on purchases and receipts from R&D contracts and grants, by source of funds	To understand the composition of R&D funding, particularly the distribution of federal R&D grants vs. contracts.
Receipts universities receive from the sale of R&D with sale date	To allocate university-performed R&D to the entity that owns it. Estimate the amount of university-performed R&D that is market output and the service life. Using the Business R&D and Innovation survey as an example, the survey for higher education could ask about when funding for a particular project started and when funding concluded. Those types of questions could help BEA develop a service life for academic R&D (public institutions).