7555-01-P

NATIONAL SCIENCE FOUNDATION

Notice of Intent to Renew a Current Information Collection

AGENCY: National Science Foundation; National Center for Science and Engineering Statistics.

ACTION: Notice and request for comments.

SUMMARY: The National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation (NSF) is announcing plans to request renewal of the Survey of Graduate Students and Postdoctorates in Science and Engineering (OMB Control Number 3145-0062). In accordance with the requirements of the Paperwork Reduction Act of 1995, NSF is providing opportunity for public comment on this action. After obtaining and considering public comments, NSF will prepare the submission requesting that OMB approve clearance of this collection for three years.

DATES: Written comments on this notice must be received by [INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER] to be assured of consideration. Comments received after that date will be considered to the extent practicable. Send comments to the address below.

FOR FURTHER INFORMATION CONTACT: Suzanne H. Plimpton, Reports Clearance Officer, National Science Foundation, 2415 Eisenhower Avenue, Suite E7400, Alexandria, Virginia 22314; telephone (703) 292–7556; or send email to *splimpto@nsf.gov.* Individuals who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339, which is accessible 24 hours a day, 7 days a week, 365 days a year (including Federal holidays).

SUPPLEMENTARY INFORMATION:

Title of Collection: Survey of Graduate Students and Postdoctorates in Science and Engineering.

OMB Control Number: 3145–0062.

Expiration Date of Current Approval: August 31, 2023.

Type of Request: Intent to seek approval to extend an information collection for three years.

Abstract: Established within NSF by the America COMPETES Reauthorization Act of 2010 § 505, codified in the National Science Foundation Act of 1950, as amended, the National Center for Science and Engineering Statistics (NCSES) serves as a central Federal clearinghouse for the collection, interpretation, analysis, and dissemination of objective data on science, engineering, technology, and research and development for use by practitioners, researchers, policymakers, and the public.

The Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS), sponsored by the NCSES within NSF and the National Institutes of Health, is designed to comply with legislative mandates by providing information on the characteristics of academic graduate enrollments in science, engineering, and health fields. The GSS, which originated in 1966 and has been conducted annually since 1972, is a census of all departments in science, engineering, and health (SEH) fields within academic institutions with graduate programs in the United States. This request to extend the information collection for three years is to cover the 2023, 2024, and 2025 GSS survey cycles. The information collected by the GSS is solicited under the authority of the National Science Foundation Act of 1950, as amended and the America COMPETES Reauthorization Act of 2010. Data collection starts each fall in October and data

are obtained primarily through a Web survey. All information will be used for statistical purposes only. Participation in the survey is voluntary.

The expected frame for the 2023 GSS includes 709 institutions comprising 797 schools with 876 total Coordinators. The GSS is the only national survey that collects information on the characteristics of graduate enrollment and postdoctoral appointees (postdocs) for specific SEH disciplines at the department level. It collects information on:

1) Master's and doctoral students' ethnicity and race, citizenship, gender, source and mechanism of financial support (e.g., fellowships, traineeships, assistantships) and enrollment status.
2) Postdocs' ethnicity and race, citizenship, gender, source and mechanism of financial support, type of doctoral degree, and degree origin (U.S. or foreign); and
3) Other doctorate-holding non-faculty researchers' gender and type of doctoral degree.

To improve coverage of postdocs, the GSS periodically collects information on postdocs employed in Federally Funded Research and Development Centers (FFRDCs) by ethnicity and race, gender, citizenship, source and mechanism of financial support, and field of research. This survey of postdocs at FFRDCs will be conducted as part of the 2023 and 2025 GSS survey cycles. In these years, there will be an additional 43 coordinators contacted to respond to GSS.

The initial GSS data request is sent to a designated respondent, the School Coordinator, at each academic institution in the fall. The School Coordinators gather the data for all of the reporting units at the institution. Reporting units are comprised of the departments, programs, research centers, and health care facilities at each institution. The School Coordinator may upload a file with the

requested data on the GSS Website, which will automatically aggregate the data and populate the cells of the Web survey instrument for each of the reporting units. This method of data provision is called Electronic Data Interchange (EDI). The School Coordinator also may upload partial data (e.g., student enrollment information) and delegate the provision of other data (e.g., financial support information) to the appropriate reporting units at their institution (unit respondents). Institutions that do not want to use EDI will be able to complete the survey through manual entry of data (i.e., typing the data for each response item on every unit) in the Web survey instrument as in the past.

Data are disseminated annually on the NCSES website https://www.nsf.gov/statistics/srvygradpostdoc in the form of 93 data tables, a 3 to 5 page InfoBrief, and public use files (https://www.nsf.gov/statistics/srvygradpostdoc/pub_data.cfm). In addition, current and historical data are available via the NCSES Integrated Data Tool (https://ncsesdata.nsf.gov/ids/?utm_source=Main&utm_medium=Main&utm_campaign=Main).The Data Tool combines GSS data with academic sector data from both NCSES and the National Center of Education Statistics and allows for custom querying.

Use of the Information: The GSS data are routinely provided to Congress and other Federal agencies. The GSS institutions themselves are major users of the GSS data. Professional societies such as the American Association of Universities, the Association of American Medical Colleges, and the Carnegie Foundation are also major users. Graduate enrollment and postdoc data are often used in reports by the national media. With the help of the aforementioned NCSES Data Tool, NSF reviews changing enrollment levels to assess the effects of NSF initiatives, track graduate student support patterns, and analyze

participation in science and engineering fields for targeted groups by discipline and for selected groups of institutions. GSS data are also used in two congressionally mandated NCSES publications: *Women, Minorities, and Persons with Disabilities in Science and Engineering* (https://ncses.nsf.gov/wmpd/) and the National Science Board's *Science and Engineering Indicators* (https://ncses.nsf.gov/indicators). In addition, the National Institutes of Health (NIH) publish GSS data annually in the NIH Data Book https://report.nih.gov/nihdatabook/ .

Expected Respondents: The GSS is an annual census of all eligible academic institutions in the U.S. with graduate programs in science, engineering and health fields. The response rate is calculated based on the number of reporting units (departments, programs, research centers, and health care facilities) that respond to the survey. For reference, in 2021, the GSS population consisted of 21,365 reporting units at 699 academic institutions. Based on recent cycles, NCSES expects the annual response rate to be around 99 percent.

Estimate of Burden: For each GSS survey cycle, both School Coordinators and reporting-unit respondents (URs) are asked to provide an estimate of how long it took them to complete the data collection. Coordinators at FFRDCs are also asked about the hours required complete the Web instrument. In the past three GSS cycles (2019-2021 data collections), the average burden per coordinator was 19.7 hours per cycle. However, burden varies considerably across respondents. The amount of time it takes to complete the GSS data depends to a large degree on the extent to which the school's records are centrally stored and computerized. It also depends on whether the institution uses manual data entry or EDI to provide the GSS data, the number of SEH

reporting units that need to be reported by the institution, and the degree to which URs within the institution are used to collect and report data.

To estimate burden for the next three GSS data collection survey cycles (2023, 2024, and 2025), the GSS frame is split by response method (EDI or manual entry) and the number of reporting units reported by the institution (more than 15 units are large reporters and 15 or fewer units are small reporters). Table 1 presents burden estimates based on observed the size of the institution and burden estimates collected from the 2019-21 GSS survey cycles. Average burden is weighted by year and the proportion of institutions that utilize URs in reporting data to GSS.

The use of URs has a large impact on GSS burden as it requires multiple individuals at the school to respond to the survey. To address the variance between schools that use URs and those that do not, UR burden was calculated and included with the coordinator's burden when applicable. This calculation is necessary because when a school utilizes URs, the coordinators' burden is minimal while the response burden falls to individual URs. Average UR burden was applied to all units at schools utilizing URs and was then added to the coordinator's burden.

Table 1. GSS 2019-2021 Total Burden by Institutional Reporting Size, Data Provision Me

Unit Respondent Status

Table 1. GSS 2019-2021 Total Burden by Institutional Reporting Size, Data Provision Method, and Unit Respondent Status

Institution Type	Do Not Use URs		Uses URs		All Coordinators		
	Avg.	Year-Weighted	Avg.	Year-Weighted	Avg.	Year-Weighted	Avg. Per Cycle

	Coordinators per year	Avg. Burden (hours)	Coordinators per year	Avg. Burden (hours)	Coordinators per year	Avg. Burden (hours)	Burden (hours)
More than 15 units, EDI	314	29.9	19	179.2	332	38.3	12,716
More than 15 units, Manual data entry	24	24.7	8	152.8	32	58.1	1,859
15 or fewer units, EDI	350	9.9	5	28.8	354	10.1	3,575
15 or fewer units, Manual data entry	149	7.4	14	22.1	164	8.7	1,427
Average Estimated Total	836	17.4	46	110.2	882	22.2	19,603

The expected frame for the 2022 GSS includes 704 institutions comprising 792 schools with 871 total School Coordinators (some institutions utilize multiple School Coordinators based on how they are organized). To estimate the burden for the 2023-2025 GSS survey cycles, we assume a steady state in terms of the use of EDI but based on recent cycles we expect the number of School Coordinators to increase by five each cycle. New schools tend to have small numbers of eligible units and students, so the five coordinators are added to the small school manual data entry category. Thus, we expect to have 876 coordinators in 2023, 881 in 2024 and 886 in 2025. The estimated burden per respondent is approximately 22 hours per School Coordinator; the exact number is based on the distributions shown in Table 1, adjusted for the additional coordinators. Given the historically high levels of participation, a 100 percent school response rate is used in these estimates. Since the FFRDC postdoc data

collection will take place in 2023 and 2025, the estimated burden for those years will increase by 90 hours from 43 FFRDCs (based on 100 percent response rate in 2021 survey with the average burden of 2.1 hours per FFRDC).

Table 2. GSS Estimated Response Burden

Category	Respondents (# of School Coordinators)	Total burden (hours)
Total burden for 2023	919	19,442
GSS institutions	876	19,352
FFRDCs	43	90
Total burden for 2024	881	19,396
Total burden for 2025	929	19,529
GSS institutions	886	19,439
FFRDCs	43	90
Potential future methodological studies (across all 3 survey cycles)	--	2,000
Total estimated burden	2,729	60,367
Estimated average annual burden	910	20,123

The total estimated respondent burden of the GSS, including 2,000 hours for potential methodological studies to improve the survey procedures, will be 60,367 hours over the three-cycle survey clearance period. NCSES may review and revise this burden estimate based on completion time data collected during the 2022 GSS survey cycle, which is ongoing.

Comments: Comments are invited on: (a) whether the proposed collection of information is necessary for the proper performance of the functions of NSF, including whether the information shall have practical utility; (b) the accuracy of NSF's estimate of the burden of the proposed collection of information; (c) ways to enhance the quality, use, and clarity of the information on respondents, including through the use of automated collection techniques or other forms of information technology; and (d) ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Dated: February 13, 2023.

Suzanne H. Plimpton,

Reports Clearance Officer,

National Science Foundation.

[FR Doc. 2023-03352 Filed: 2/16/2023 8:45 am; Publication Date: 2/17/2023]