

Merit Review Process

Fiscal Year 2023 Digest

November 2024



About the Evaluation and Assessment Capability Section

The Evaluation and Assessment Capability (EAC) Section bolsters the National Science Foundation's (NSF) efforts to make informed decisions and promote a culture of evidence. Located in the Office of Integrative Activities of the Office of the Director, EAC provides centralized technical support, tools, and resources to conduct evidence-building activities and to build capacity for evidence generation and use across the agency. EAC is led by NSF's Chief Evaluation Officer.

Acknowledgments

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About This Report

The National Science Foundation's Merit Review Process: FY 2023 Digest (Merit Review Digest) provides statistical information on proposals awarded and declined in fiscal year (FY) 2023 based on a snapshot of NSF's transactional databases taken on October 1, 2023. The purpose of the Merit Review Digest is to provide summary annual statistics that characterize the annual merit review work of NSF and the individuals and organizations submitting proposals and receiving awards. It makes no conclusions or recommendations about NSF's merit review policies, processes, or outcomes. The statistical information included is relevant to agency leadership and stakeholders in the science and engineering (S&E) enterprise.

This report is prepared in response to a National Science Board (NSB) policy, endorsed in 1977 and amended in 1984, 2017, and 2019, requesting that the NSF Director submit an annual report on the NSF merit review process.

Data in this report are organized into the following sections:

- Competitive Proposals and Awards Overall proposal and award trends, methods of proposal review, time to decision, diversity of Principal Investigators (PIs), and geographic and institutional participation.
- Characteristics of Research Awards Award size and duration, PI collaboration, PI funding rate and career stage, and people supported on research awards.

¹ NSF also publishes statistical and funding information through an interactive dashboard, *NSF by the Numbers* (https://new.nsf.gov/about/about-nsf-by-the-numbers). *NSF by the Numbers* is updated periodically, so small differences between the dashboard and the Merit Review Digest may exist due to data corrections or changes made after the Merit Review Digest snapshot was produced.

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I. Introduction

The National Science Foundation Act of 1950 directs the Foundation "to initiate and support basic scientific research and programs to strengthen scientific research potential and science education programs at all levels." NSF is the only U.S. federal agency whose mission is to invest in fundamental, basic research and education across the full spectrum of science, technology, engineering, and mathematics (STEM) disciplines, except for medical sciences. NSF achieves its unique mission by making merit-based awards to around 1,900 colleges, universities, businesses, informal science organizations and other research organizations throughout the U.S.

NSF Organization

NSF is divided into directorates and offices that support science and engineering research and education. In FY 2023, NSF had the following directorates: Biological Sciences (BIO); Computer and Information Science and Engineering (CISE); Engineering (ENG); Geosciences (GEO); Mathematical and Physical Sciences (MPS); Social, Behavioral and Economic Sciences (SBE); STEM Education (EDU);² and Technology, Innovation and Partnerships (TIP). Within NSF's Office of the Director, the Office of Integrative Activities (OIA) and the Office of International Science and Engineering (OISE) also support research and researchers. Program divisions or offices within directorates are responsible for the scientific, technical, and programmatic review and evaluation of proposals and for recommending that proposals be declined or awarded. Other sections of NSF are devoted to financial management, proposal and award policy, award processing and monitoring, legal affairs, outreach, and other functions. The Office of Inspector General examines the Foundation's work and reports to the National Science Board (NSB) and Congress.

Distribution of Awards

NSF funds projects primarily using grants, cooperative agreements, and contracts awarded through a competitive proposal evaluation process, referred to as the merit review process. Most NSF projects support or stimulate scientific and engineering research and education and are funded using grants or cooperative agreements. A grant may be funded as either a standard or continuing award. Standard grants are provided full funding for the duration of the project, generally 1-5 years, at the time NSF makes the initial award. Continuing grants receive funding incrementally, usually annually, subject to NSF's judgment of satisfactory progress, availability of funds, and receipt and approval of required annual and final project reports. The use of standard and continuing grants allows NSF flexibility in balancing current and future obligations. Cooperative agreements are used when the project requires substantial agency involvement during the project performance period (e.g., research centers and multi-user facilities). Contracts, which are excluded from the Merit Review Digest, are most often used to

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² In FY 2022, the Directorate for Education and Human Resources (EHR) was renamed the Directorate for STEM Education (EDU). EHR proposal and award statistics presented for fiscal years prior to FY 2022 are referenced under EDU.

acquire products, services, and studies (e.g., program evaluations) required for NSF or other government use.

Merit Review Process

Organizations submit proposals for new projects to NSF, which are then evaluated using two NSB-approved criteria: Intellectual Merit and Broader Impacts.³ The Intellectual Merit criterion encompasses the potential to advance knowledge. The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes. Proposal solicitations may contain additional NSF-specified review criteria particular to the goals and objectives of the program.

NSF program officers, who are knowledgeable experts in both technical and programmatic areas, lead the merit review of proposals and recommend which projects should be funded by NSF. The merit review process also relies on knowledgeable external experts to help evaluate proposals against the merit review criteria. Most proposals are reviewed by 3 to 5 external reviewers chosen for their specific expertise in areas needed to evaluate the proposed project. Each reviewer contributes their diverse experiences and unique point of view. Reviewers provide written reviews that describe the strengths and weaknesses of proposals in the context of the merit review criteria.

NSF programs obtain the input of external reviewers by three principal methods: (1) "ad hoconly," (2) "panel-only," and (3) "ad hoc + panel" review. NSF policy also allows internal review for some types of proposals, including proposals for EArly-concept Grants for Exploratory Research (EAGER), Rapid Response Research (RAPID), Research Advanced by Interdisciplinary Science and Engineering (RAISE), planning, and small proposals for travel and conferences. ^{4, 5} EAGER is a type of proposal used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches. RAPID is a type of proposal used when there is a severe urgency regarding availability of, or access to, data, facilities, or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events. RAISE is a type of proposal used for interdisciplinary projects whose scientific advances lie outside the scope of a single program or discipline, promises transformational advances, and whose prospective discoveries reside at the interfaces of disciplinary boundaries.

In the "ad hoc-only" review method, reviewers are asked to submit their written reviews to NSF. "Panel-only" refers to the process of soliciting reviews from panelists who also convene in person or virtually to discuss their reviews and provide advice as a group to the program officer. Many proposals submitted to NSF are reviewed using a combination of these two processes to ensure appropriate rigorous review by a variety of experts.

³ For more information, see https://www.nsf.gov/bfa/dias/policy/merit_review/phase2.jsp#review

⁴ For more information, see https://new.nsf.gov/policies/pappg/23-1/ch-2-proposal-preparation

⁵ Tables 2 and 3 present EAGER and RAPID proposals, awards, and funding rates from FY 2014 to FY 2023. RAISE received six proposals in FY 2023.

NSF program officers consider the input of reviewers as one of several factors when making funding recommendations to award or decline proposals. Since NSF receives more highly rated proposals than can be funded each year, program officers strive to build a portfolio of awarded projects that invests in diverse ideas, funds a mix of experienced and early career researchers, supports research across the entirety of the nation, builds research capacity at institutions that have historically received less federal research funding, or achieves other agency and federal priorities.

The merit review process is overseen by the cognizant division director, or other appropriate NSF official, who reviews program officer funding recommendations before they are finalized. ⁶ Large awards may receive additional levels of review, up to and including review by the NSB.

II. Year in Review

In FY 2023, NSF received \$9.4 billion in its annual congressional appropriation to fund the agency's programmatic activities. ⁷ This represents an increase of \$1.0 billion from FY 2022, which includes over \$1.0 billion from the Disaster Relief Supplemental Appropriations Act and \$25 million from the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act of 2022. The CHIPS and Science Act of 2022 addresses several NSF priorities: creating a diverse STEM workforce, building partnerships, and increasing research security.

NSF's Strategic Plan for FYs 2022–2026 aims to "empower STEM talent to fully participate in science and engineering." One strategic objective under this goal is to ensure accessibility and inclusivity. In FY 2023, the agency took several concrete steps to achieve this objective. As part of its Equity Ecosystem framework, the agency created the Chief Diversity and Inclusion Officer position to oversee implementation of the Diversity, Equity, Inclusion, and Accessibility Strategic Plan 2022–2024. Updates to the *Proposal & Award Policies & Procedures Guide* (PAPPG) require that proposals include a plan to create safe and inclusive work environments for research taking place off-campus or off-site. This demonstrates a commitment to retaining diverse STEM talent by removing barriers of discriminatory work environments to create an environment conducive to research. NSF established a new Sexual Assault and

⁶ If the funding recommendation is to award the proposal, further processing takes place within the Office of Budget, Finance and Award Management (BFA) before an award is issued by NSF.

⁷ NSF's total appropriation was \$9.9 billion. Programmatic activities are funded from three appropriations accounts (Research and Related Activities, STEM Education, and Major Research Equipment and Facilities Construction). The total funding appropriated to these accounts was \$9.4 billion. https://www.nsf.gov/pubs/2024/nsf24002/pdf/nsf24002.pdf

⁸ Leading the World in Discovery and Innovation, STEM Talent Development and the Delivery of Benefits from Research: NSF Strategic Plan for Fiscal Years 2022-2026. https://www.nsf.gov/about/performance/strategic_plan.jsp

⁹ FY 2023 Agency Financial Report. <u>https://www.nsf.gov/pubs/2024/nsf24002/pdf/nsf24002.pdf</u>

¹⁰ Proposal and Award Policies and Procedures Guide. https://nsf-gov-resources.nsf.gov/2022-10/nsf23 1.pdf

Harassment Prevention and Response Office to streamline the process for addressing harassment in the academic community. ¹¹

Another strategic goal from NSF's Strategic Plan for FYs 2022–2026 is to impact society by moving from knowledge to solutions. NSF's proposed strategy for this effort includes fostering partnerships between academia, governments, nonprofit foundations, and industry as a tool to strengthen research.¹² To that end, several NSF actions in FY 2023 focused on partnerships. Funding from the CHIPS and Science Act was used in FY 2023 to advance public-private partnerships in pursuit of research on semiconductors.¹³ In FY 2023, NSF began the NSF Regional Innovation Engines program to support partnerships between researchers and stakeholders to accelerate technological advances across geographic regions.¹⁴

NSF's merit review practices are governed by the policies established by the NSB and the agency's policy guidance to proposers, awardees, and staff, which are documented in the PAPPG and the *Proposal and Award Manual* (PAM). ¹⁵ In FY 2023, NSF issued revisions to the PAPPG ¹⁶ that included several new proposal certifications and a new requirement that concept outlines be submitted for RAPID, EAGER, and RAISE proposals prior to submission of full proposals. The primary purpose of a concept outline is to ensure the concept being proposed by a PI is appropriate for the proposal type or funding opportunity, and to help reduce the administrative burden associated with the submission of a full proposal.

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¹¹ FY 2023 Agency Financial Report. https://www.nsf.gov/pubs/2024/nsf24002/pdf/nsf24002.pdf

¹² Leading the World in Discovery and Innovation, STEM Talent Development and the Delivery of Benefits from Research: NSF Strategic Plan for Fiscal Years 2022-2026. https://www.nsf.gov/about/performance/strategic_plan.jsp

¹³ FY 2023 Agency Financial Report. https://www.nsf.gov/pubs/2024/nsf24002/pdf/nsf24002.pdf

¹⁴ FY 2023 Agency Financial Report. https://www.nsf.gov/pubs/2024/nsf24002/pdf/nsf24002.pdf

¹⁵ The PAM is a compendium of NSF internal policies and procedures and complements the PAPPG. The PAM provides instructional guidance to NSF staff related to the review and processing of proposals and administration of assistance awards.

¹⁶ Proposal and Award Policies and Procedures Guide. https://nsf-gov-resources.nsf.gov/2022-10/nsf23 1.pdf

Summary Merit Review Statistics

During FY 2023, NSF evaluated 38,340 competitive proposals and awarded 11,056 new competitive awards, for an overall funding rate of 29%. ^{17, 18, 19} This was a 1% increase (87) in awards and a 1-percentage point increase in the funding rate compared with FY 2022. As shown in Figure 1, the overall funding rate generally increased from FY 2014 to FY 2023.

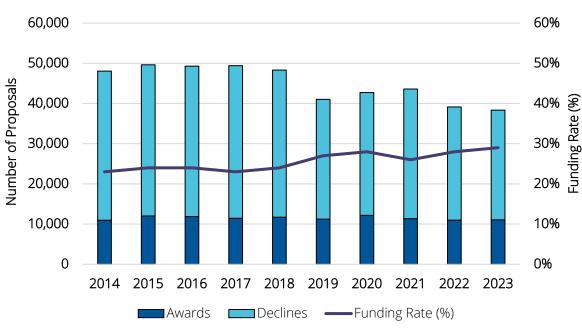


Figure 1 – Overall Award, Decline, and Funding Rate Trends

Source: Table 1 - Overall Proposals, Awards, and Funding Rate

Many potentially fundable proposals are declined each year. As shown in Figure 2, \$3.8 billion was requested by PIs for the over 3,900 declined proposals that received ratings at least as high as the average rating (4.0 out of 5.0) for all awarded proposals, and \$147 million was

¹⁷ Competitive proposals include full proposals for new projects, renewals, and accomplishment-based renewals, as well as interagency agreements that are externally reviewed. It excludes concept outlines, preliminary proposals, contracts, Intergovernmental Personnel Act (IPA) agreements, continuing grant increments, supplemental funding requests, Graduate Research Fellowship applications, and similar categories.

¹⁸ Funding rate refers to the proportion of evaluated proposals that were awarded in a fiscal year. For example, if a directorate or office evaluated 8,000 proposals in the year, making 2,000 awards and declining the remaining 6,000, the funding rate for that directorate or office in that year would be 25%.

¹⁹ Interactive dashboards with statistical and funding information are also available through *NSF by the Numbers* (https://new.nsf.gov/about/about-nsf-by-the-numbers). Slight differences in the data may exist due to the timing of when data for the Merit Review Digest were exported for analysis, but these do not change the overall observations.

requested for the over 200 proposals that received a rating of "Excellent" but were not funded. ^{20, 21}

\$30 \$25 \$25 \$20 \$15 \$15 \$10 \$5 = Excellent \$5 = Excellent \$10 \$5 = Exc

Figure 2 – Cumulative Requested Amounts in FY 2023 for Declined Proposals, by Average Reviewer Rating

Source: NSF Enterprise Information System, accessed 10/1/2023.

In FY 2023, 84% of competitive proposals were research proposals. The remaining 16% were for centers and facilities projects, equipment, instrumentation, conferences and symposia, the Small Business Innovation Research (SBIR) program, and education and training. The funding rate for research proposals was 27%, 2 percentage points lower than the funding rate for all competitive proposals (see Tables 1 and 18).

²⁰ Input received from reviewers is used by NSF, along with other factors, to make a funding decision. When NSF is developing a portfolio of funded projects, it may consider additional factors such as funding diverse ideas, making awards to experienced and early-career researchers, supporting research across the entirety of the nation, building research capacity at institutions that have historically received less federal research funding, or achieving other agency and federal priorities.

²¹ Proposal reviewers assign a rating of Excellent, Very Good, Good, Fair, or Poor. For quantitative analysis, these are mapped to 5, 4, 3, 2, and 1, respectively.

As shown in Table 22, the funding rate for PIs submitting research proposals across the last three years (which is the average duration for a research grant) was 43%. That is, among all PIs who submitted one or more research proposals between FY 2021 and FY 2023, 43% received an award in that period. The PI funding rate increased consistently between the FY 2012–2014 and FY 2020–2022 time periods, before a slight decrease of 1 percentage point during the FY 2021–2023 time period.

NSF reimburses organizations for the direct and indirect costs of conducting the project, including for salary and other expenses associated with senior personnel (e.g., Pls and co-Pls), post-doctoral researchers, students, and technical staff working on the project. As shown in Table 19, in FY 2023, the mean annualized amount awarded per research grant was about \$211,000. Table 24 shows that research awards funded by NSF in FY 2023 requested funding in proposal budgets to support an estimated 48,300 senior personnel, 4,400 post-doctoral researchers, and 28,700 graduate students. ^{22, 23}

III. Data Tables

A. Competitive Proposals and Awards

Competitive proposals include full proposals for new projects, renewals, and accomplishment-based renewals, as well as interagency agreements that are externally reviewed. Concept outlines, preliminary proposals, contracts, Intergovernmental Personnel Act (IPA) agreements, continuing grant increments, supplemental funding requests, Graduate Research Fellowship applications, and similar categories are not included. Funding rate refers to the proportion of proposals acted on in a fiscal year that resulted in awards. For example, if a directorate or office processed 8,000 proposals in the year, making 2,000 awards and declining the remaining 6,000, the funding rate for that directorate or office in that year would be 25%.

²² These estimates exclude direct support provided through other award categories, such as individual post-doctoral fellowships, NSF Graduate Research Fellowship awards, and other individual awards to graduate students.

²³ Personnel estimates are based on budgeted amounts in the original proposals and not actual expenditures.

Overall Proposals, Awards, and Funding Rate

Table 1 Series – Overall Proposals, Awards, and Funding Rate

NSF										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	48,051	49,620	49,285	49,415	48,321	41,024	42,723	43,606	39,140	38,340
Awards	10,958	12,007	11,877	11,447	11,702	11,243	12,168	11,344	10,969	11,056
Funding Rate	23%	24%	24%	23%	24%	27%	28%	26%	28%	29%
BIO										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	4,784	5,119	5,206	5,005	4,765	3,110	3,783	3,959	4,234	4,206
Awards	1,272	1,379	1,330	1,142	1,190	1,046	1,369	1,174	1,130	1,012
Funding Rate	27%	27%	26%	23%	25%	34%	36%	30%	27%	24%
CISE										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	7,434	8,032	8,299	8,722	9,150	8,616	7,932	7,247	6,473	6,401
Awards	1,680	1,886	1,918	1,819	2,098	2,009	1,971	1,739	1,787	1,847
Funding Rate	23%	23%	23%	21%	23%	23%	25%	24%	28%	29%
EDU				<u>, </u>						,
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	4,049	4,242	4,423	4,294	4,160	3,781	4,337	4,550	3,986	3,641
Awards	701	830	915	899	892	842	996	925	954	968
Funding Rate	17%	20%	21%	21%	21%	22%	23%	20%	24%	27%
ENG	204.4	2045	2046	2047	2040	2040	2020	2024	2022	2022
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals Awards	11,878 2,145	12,326	12,570	13,028	13,092	9,024 2,379	9,181	11,325	6,486	6,007
Funding Rate	18%	2,504 20%	2,499 20%	2,455 19%	2,458 19%	2,379	2,406 26%	2,283 20%	1,577 24%	1,504 25%
GEO	1070	2070	2070	1 5 70	1 3 70	2070	2070	2070	2470	2370
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	5,790	5,812	4,999	4,793	3,775	4,099	3,721	3,702	3,296	2,951
Awards	1,487	1,463	1,526	1,520	1,407	1,534	1,552	1,673	1,367	1,308
Funding Rate	26%	25%	31%	32%	37%	37%	42%	45%	41%	44%
MPS										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	8,855	9,133	9,199	8,848	8,803	8,045	8,612	8,114	7,192	7,581
Awards	2,343	2,593	2,432	2,334	2,593	2,415	2,552	2,422	2,415	2,479
Funding Rate	26%	28%	26%	26%	29%	30%	30%	30%	34%	33%
OIA										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	78	91	102	117	211	200	482	481	404	559
Awards	29	36	30	54	68	89	172	131	96	136
Funding Rate	37%	40%	29%	46%	32%	45%	36%	27%	24%	24%

OISE

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Proposals	677	582	313	298	235	416	428	272	222	286	
Awards	307	275	236	194	53	58	74	79	66	71	
Funding Rate	45%	47%	75%	65%	23%	14%	17%	29%	30%	25%	
SBE											
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Proposals	4,506	4,283	4,174	4,310	4,130	3,733	4,247	3,956	3,502	3,303	
Awards	994	1,041	991	1,030	943	871	1,076	918	770	754	
Funding Rate	22%	24%	24%	24%	23%	23%	25%	23%	22%	23%	
TIP ¹											
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Proposals									3,345	3,405	
Awards									807	977	
Funding Rate									24%	29%	

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

EAGER and RAPID Proposals, Awards, and Funding Rate

Table 2 Series – EAGER Proposals, Awards, and Funding Rate

NSF

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
Proposals	537	743	765	681	666	454	1					
Awards			518	493								
	462	585				323		283		210		
Funding Rate	86%	79%	68%	72%	75%	71%	84%	75%	80%	78%		
BIO	ВІО											
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
Proposals	80	117	44	40	81	64	65	37	41	18		
Awards	77	104	40	37	68	38	57	34	35	14		
Funding Rate	96%	89%	91%	93%	84%	59%	88%	92%	85%	78%		
CISE												
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
Proposals	193	209	257	239	161	166	104	64	91	108		
Awards	159	163	176	129	136	109	100	59	66	75		
Funding Rate	82%	78%	68%	54%	84%	66%	96%	92%	73%	69%		
EDU										_		
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023		
Proposals	50	81	72	54	16	10	28	32	1	6		
Awards	37	45	43	39	15	10	26	30	0	5		
Funding Rate	74%	56%	60%	72%	94%	100%	93%	94%	0%	83%		

¹ In FY 2022, NSF established the new Directorate for Technology, Innovation and Partnerships (TIP). NSF realigned a number of programs from ENG and OIA into the new directorate, including NSF Innovation Corps (I-Corps™), Partnerships for Innovation, Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and the NSF Convergence Accelerator. Proposal and award statistics from FY 2021 and prior years for ENG and OIA have not been restated.

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Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	108	258	273	220	260	130	128	54	90	73
Awards	96	203	155	176	153	84	108	53	70	63
Funding Rate	89%	79%	57%	80%	59%	65%	84%	98%	78%	86%
GEO										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	47	27	48	54	45	60	88	44	42	38
Awards	46	26	45	51	41	59	65	41	40	29
Funding Rate	98%	96%	94%	94%	91%	98%	74%	93%	95%	76%
MPS										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	20	21	28	39	79	18	62	32	21	19
Awards	19	17	27	27	69	18	51	31	18	17
Funding Rate	95%	81%	96%	69%	87%	100%	82%	97%	86%	89%
OD										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	0	0	0	0	0	0	17	2	0	0
Awards	0	0	0	0	0	0	8	2	0	0
Funding Rate	N/A	N/A	N/A	N/A	N/A	N/A	47%	100%	N/A	N/A
SBE										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	39	30	43	35	24	6	18	110	3	5
Awards	28	27	32	34	16	5	12	33	2	5
Funding Rate	72%	90%	74%	97%	67%	83%	67%	30%	67%	100%
TIP ¹										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals									1	2
Awards									1	2
Funding Rate									100%	100%
Table Corine Course	. D/ 2022 pro	anacale an	d awarde a	ra fram NC	C Enterprise	Informatio	on Custom	accordad 1	0/1/2022 D	

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

¹ In FY 2022, NSF established the new Directorate for Technology, Innovation and Partnerships (TIP). NSF realigned a number of programs from ENG and OIA into the new directorate, including NSF Innovation Corps (I-Corps™), Partnerships for Innovation, Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and the NSF Convergence Accelerator. Proposal and award statistics from FY 2021 and prior years for ENG and OIA have not been restated.

Table 3 Series – RAPID Proposals, Awards, and Funding Rate

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	127	238	155	182	276	195	957	137	121	140
Awards	117	207	145	176	216	142	869	118	117	133
Funding Rate	92%	87%	94%	97%	78%	73%	91%	86%	97%	95%
BIO										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	17	38	25	22	58	15	136	33	21	12
Awards	13	29	19	22	38	13	125	23	20	8
Funding Rate	76%	76%	76%	100%	66%	87%	92%	70%	95%	67%
CISE										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	3	37	5	18	16	12	163	5	0	8
Awards	3	27	5	18	12	4	157	3	0	8
Funding Rate	100%	73%	100%	100%	75%	33%	96%	60%	N/A	100%
EDU										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	3	21	27	7	10	3	71	6	12	4
Awards	3	21	26	7	8	2	56	6	12	4
Funding Rate	100%	100%	96%	100%	80%	67%	79%	100%	100%	100%
ENG										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	35	41	24	38	42	73	203	22	20	30
Awards	34	34	21	36	33	38	188	19	19	27
Funding Rate	97%	83%	88%	95%	79%	52%	93%	86%	95%	90%
GEO										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	51	55	45	60	91	76	62	51	45	72
Awards	51	55	45	57	87	74	61	49	44	72
Funding Rate	100%	100%	100%	95%	96%	97%	98%	96%	98%	100%
MPS										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	1	6	0	1	3	2	75	2	2	0
Awards	1	6	0	1	2	2	61	2	2	0
Funding Rate	100%	100%	N/A	100%	67%	100%	81%	100%	100%	N/A
OD										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	0	0	1	0	0	0	13	0	0	0
Awards	0	0	1	0	0	0	13	0	0	0
Funding Rate	N/A	N/A	100%	N/A	N/A	N/A	100%	N/A	N/A	N/A
SBE										
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	17	40	28	36	56	14	234	18	21	14
Awards	12	35	28	35	36	9	208	16	20	14
Funding Rate	71%	88%	100%	97%	64%	64%	89%	89%	95%	100%

 TIP^1

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals									0	0
Awards									0	0
Funding Rate									N/A	N/A

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Methods of Proposal Review

Table 4 – FY 2023 Methods of Proposal Review, by Directorate or Office

Directorate/	Total	Ad hoc +	Ad hoc +	Ad hoc-	Ad hoc-	Panel-	Panel-	Internally	Internally
Office	Proposals	Panel	Panel	Only	Only	Only	Only	Reviewed	Reviewed
		Proposals	Percent	Proposals	Percent	Proposals	Percent	Proposals	Percent
NSF	38,340	8,395	22%	2,129	6%	26,155	68%	1,661	4%
BIO	4,206	1,865	44%	72	2%	2,151	51%	118	3%
CISE	6,401	355	6%	73	1%	5,670	89%	303	5%
EDU	3,641	264	7%	100	3%	3,194	88%	83	2%
ENG	6,007	420	7%	203	3%	5,170	86%	214	4%
GEO	2,951	1,818	62%	540	18%	376	13%	217	7%
MPS	7,581	1,333	18%	649	9%	5,338	70%	261	3%
OIA	559	131	23%	59	11%	341	61%	28	5%
OISE	286	8	3%	3	1%	274	96%	1	<1%
SBE	3,303	1,959	59%	147	4%	1,010	31%	187	6%
TIP	3,405	242	7%	283	8%	2,631	77%	249	7%

Source: NSF Enterprise Information System, accessed 10/1/2023.

Notes: The "Internally Reviewed" category includes proposals that were reviewed by NSF program officers but did not receive external reviews.

¹ In FY 2022, NSF established the new Directorate for Technology, Innovation and Partnerships (TIP). NSF realigned a number of programs from ENG and OIA into the new directorate, including NSF Innovation Corps (I-Corps™), Partnerships for Innovation, Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and the NSF Convergence Accelerator. Proposal and award statistics from FY 2021 and prior years for ENG and OIA have not been restated.

Table 5 – FY 2023 Number of External Reviews, by Method and Directorate or Office

Directorate/ Office	Total Reviews	Ad hoc + Panel	Ad hoc-Only	Panel-Only
NSF	144,164	39,411	8,301	96,452
BIO	17,458	9,499	302	7,657
CISE	24,226	1,707	251	22,268
EDU	14,711	1,332	359	13,020
ENG	21,947	1,878	737	19,332
GEO	10,962	7,571	2,052	1,339
MPS	25,721	5,694	2,813	17,214
OIA	2,033	640	256	1,137
OISE	1,026	32	13	981
SBE	13,904	9,838	534	3,532
TIP	12,176	1,220	984	9,972

Source: NSF Enterprise Information System, accessed 10/1/2023.

Notes: Total reviews includes only reviews written by individuals and excludes panel summaries. Panel summaries are written by the panel based on the panel discussion. The panel discussions may include the input of reviewers who have read the proposal but have not been asked to provide a separate written review. The number of external reviews, therefore, underestimates the amount of external reviewer input for the "Ad hoc + Panel" and "Panel-Only" methods.

Table 6 – FY 2023 Mean Number of External Reviews per Proposal, by Directorate or Office

Directorate/ Office	All Methods	Ad hoc + Panel	Ad hoc-Only	Panel-Only
NSF	3.9	4.7	3.9	3.7
BIO	4.3	5.1	4.2	3.6
CISE	4.0	4.8	3.4	3.9
EDU	4.1	5.0	3.6	4.1
ENG	3.8	4.5	3.6	3.7
GEO	4.0	4.2	3.8	3.6
MPS	3.5	4.3	4.3	3.2
OIA	3.8	4.9	4.3	3.3
OISE	3.6	4.0	4.3	3.6
SBE	4.5	5.0	3.6	3.5
TIP	3.9	5.0	3.5	3.8

Source: NSF Enterprise Information System, accessed 10/1/2023.

Notes: Excludes proposals that were internally reviewed.

Time to Decision

Time to decision or "dwell time" is the amount of time that passes between receipt of a proposal and notification to the PI about the funding decision. NSF established a goal in the early 2000s to inform applicants about whether their proposals were declined or recommended for funding within six months of receipt.

Table 7 – Dwell Time

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Percentage of										
Proposals	72%	76%	77%	71%	72%	61%	68%	65%	66%	70%
Processed Within	72%	70%	7 7 %0	7 1 %0	7290	01%	00%	65%	00%	70%
Six Months										

Source: FY 2023 proposals are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Notes: "Dwell time" is the amount of time that passes between receipt of a proposal and notification to the PI about the funding decision.

Diversity of PIs

This section provides data on proposals, awards, and funding rates by PI characteristics. Gender, disability, ethnic, and racial data are based on self-reported information.

Table 8 Series – Proposals, Awards, and Funding Rates, by Pl Gender

NSF PIs

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	48,051	49,620	49,285	49,415	48,321	41,024	42,723	43,606	39,140	38,340
Awards	10,958	12,007	11,877	11,447	11,702	11,243	12,168	11,344	10,969	11,056
Funding Rate	23%	24%	24%	23%	24%	27%	28%	26%	28%	29%

Female Pls

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	11,142	11,444	11,598	11,322	10,858	10,291	11,096	11,868	11,266	11,713
Awards	2,669	3,007	3,032	2,962	2,943	3,281	3,656	3,679	3,412	3,646
Funding Rate	24%	26%	26%	26%	27%	32%	33%	31%	30%	31%

Male PIs

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	31,625	32,411	31,528	30,046	28,180	25,781	26,523	26,290	24,364	24,936
Awards	7,286	7,810	7,512	6,930	6,884	7,265	7,828	7,080	6,922	6,993
Funding Rate	23%	24%	24%	23%	24%	28%	30%	27%	28%	28%

Unknown / Do Not Wish to Provide

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	5,284	5,765	6,159	8,047	9,283	4,952	5,104	5,448	3,510	1,691
Awards	1,003	1,190	1,333	1,555	1,875	697	684	585	635	417
Funding Rate	19%	21%	22%	19%	20%	14%	13%	11%	18%	25%

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs. Prior to FY 2019, Pls reported demographic data in FastLane. In FY 2019, Pls began using Research.gov instead of FastLane to report demographic data to NSF. In FY 2021, NSF made system changes to improve the collection of demographic data, which resulted in a reduction in non-response. In order to provide the most accurate data available, FYs 2019-2021 have been restated based on PI-reported data as of February 21, 2023.

Table 9 Series – FY 2023 Proposals, Awards, and Funding Rate, by Directorate or Office and PI Gender

Ν	S	F
I٧	2	Г

NSF			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	11,713	24,936	1,691
Awards	3,646	6,993	417
Funding Rate	31%	28%	25%
BIO			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,699	2,356	151
Awards	450	528	34
Funding Rate	26%	22%	23%
CISE			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,483	4,644	274
Awards	464	1,318	65
Funding Rate	31%	28%	24%
EDU			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,890	1,610	141
Awards	535	394	39
Funding Rate	28%	24%	28%
ENG			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,453	4,323	231
Awards	419	1,040	45
Funding Rate	29%	24%	19%

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GEO			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,049	1,795	107
Awards	508	760	40
Funding Rate	48%	42%	37%
MPS			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,646	5,637	298
Awards	579	1,818	82
Funding Rate	35%	32%	28%
OIA			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	168	368	23
Awards	56	74	6
Funding Rate	33%	20%	26%
OISE			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	89	189	8
Awards	26	42	3
Funding Rate	29%	22%	38%
SBE			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	1,521	1,611	171
Awards	369	351	34
Funding Rate	24%	22%	20%
TIP			
			Unknown / Do
Category	Female	Male	Not Wish to
			Provide
Proposals	715	2,403	287
Awards	240	668	69
Funding Rate	34%	28%	24%

Table Series Source: NSF Enterprise Information System, accessed 10/1/2023.

Table 10 Series – Proposals, Awards, and Funding Rates, by PI Ethnicity

NSF

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	48,051	49,620	49,285	49,415	48,321	41,024	42,723	43,606	39,140	38,340
Awards	10,958	12,007	11,877	11,447	11,702	11,243	12,168	11,344	10,969	11,056
Funding Rate	23%	24%	24%	23%	24%	27%	28%	26%	28%	29%

Hispanic or Latino

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	1,921	2,053	1,950	1,993	2,106	1,724	1,898	2,094	2,006	2,123
Awards	411	495	459	460	534	503	565	632	567	626
Funding Rate	21%	24%	24%	23%	25%	29%	30%	30%	28%	29%

Not Hispanic or Latino

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	38,840	39,993	39,606	38,441	36,471	32,376	33,374	33,635	31,348	32,323
Awards	9,035	9,860	9,725	9,129	9,109	9,441	10,213	9,509	9,135	9,448
Funding Rate	23%	25%	25%	24%	25%	29%	31%	28%	29%	29%

Unknown / Do Not Wish to Provide

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	7,290	7,574	7,729	8,981	9,744	6,924	7,451	7,877	5,786	3,894
Awards	1,512	1,652	1,693	1,858	2,059	1,299	1,390	1,203	1,267	982
Funding Rate	21%	22%	22%	21%	21%	19%	19%	15%	22%	25%

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs. Prior to FY 2019, Pls reported demographic data in FastLane. In FY 2019, Pls began using Research.gov instead of FastLane to report demographic data to NSF. In FY 2021, NSF made system changes to improve the collection of demographic data, which resulted in a reduction in non-response. In order to provide the most accurate data available, FYs 2019–2021 have been restated based on PI-reported data as of February 21, 2023.

Note: Prior to the FY 2021 Merit Review Digest, detailed data were not published on the number of PIs identifying as "Not Hispanic or Latino" or for whom ethnicity was unknown. Data for FY 2014-2020 have been recalculated for inclusion in the current Merit Review Digest. This led to slight differences relative to the data reported in the Merit Review Digests for FYs 2014, 2015, 2016, and 2018. Differences are fewer than five proposals or awards in those years and do not change the reported funding rate.

Table 11 Series – FY 2023 Proposals, Awards, and Funding Rates, by Directorate or Office and PI Ethnicity

N	ICI	г
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Category	Hispanic or Latino	Not Hispanic or Latino	Unknown / Do Not Wish to Provide
Proposals	2,123	32,323	3,894
Awards	626	9,448	982
Funding Rate	29%	29%	25%

BIO

Category	Hispanic or Latino	Not Hispanic or Latino	Unknown / Do Not Wish to Provide
Proposals	333	3,526	347
Awards	95	843	74
Funding Rate	29%	24%	21%

CISE

Catagony	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	222	5,528	651
Awards	58	1,617	172
Funding Rate	26%	29%	26%

EDU

Category	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	308	3,019	314
Awards	90	803	75
Funding Rate	29%	27%	24%

ENG

Catagony	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	286	5,176	545
Awards	84	1,317	103
Funding Rate	29%	25%	19%

GEO

Catagon	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	151	2,545	255
Awards	68	1,140	100
Funding Rate	45%	45%	39%

MPS

Catagon	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	390	6,508	683
Awards	132	2,139	208
Funding Rate	34%	33%	30%

OIA

Category	Hispanic or Latino	Not Hispanic or Latino	Unknown / Do Not Wish to Provide
Proposals	27	471	61
Awards	6	111	19
Funding Rate	22%	24%	31%

OISE

Category	Hispanic or	Not Hispanic or	Unknown / Do Not
category	Latino	Latino	Wish to Provide
Proposals	23	236	27
Awards	4	61	6
Funding Rate	17%	26%	22%

SBE

Catagony	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	199	2,702	402
Awards	44	625	85
Funding Rate	22%	23%	21%

TIP

Catagon	Hispanic or	Not Hispanic or	Unknown / Do Not
Category	Latino	Latino	Wish to Provide
Proposals	184	2,612	609
Awards	45	792	140
Funding Rate	24%	30%	23%

Table Series Source: NSF Enterprise Information System, accessed 10/1/2023.

Table 12 Series – Proposals, Awards, and Funding Rates, by PI Race

ادוו															
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	48,051	49,620	49,285	49,415	48,321	41,024	42,723	43,606	39,140	38,340					
Awards	10,958	12,007	11,877	11,447	11,702	11,243	12,168	11,344	10,969	11,056					
Funding Rate	23%	24%	24%	23%	24%	27%	28%	26%	28%	29%					
American Indian	or Alask	a Native													
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	103	104	99	134	112	95	114	112	93	110					
Awards	36	D	29	39	29	36	51	42	31	35					
Funding Rate	35%	D	29%	29%	26%	38%	45%	38%	33%	32%					
Asian															
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	10,538	11,148	11,623	11,552	11,362	10,417	10,616	10,966	10,375	11,021					
Awards	1,925	2,256	2,168	2,166	2,127	2,378	2,702	2,518	2,596	2,894					
Funding Rate	18%	20%	19%	19%	19%	23%	25%	23%	25%	26%					
Black or African American															
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	1,123	1,102	1,134	1,135	1,159	1,054	1,195	1,360	1,332	1,291					
Awards	204	233	264	266	262	289	326	389	351	378					
Funding Rate	18%	21%	23%	23%	23%	27%	27%	29%	26%	29%					
Native Hawaiian			slander												
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	30	30	41	30	30	43	25	24	22	29					
Awards	5	D	7	5	5	16	7	6	8	10					
Funding Rate	17%	D	17%	17%	17%	37%	28%	25%	36%	34%					
White	· ·														
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	29,624	30,099	29,031	27,804	25,744	22,748	23,435	22,959	21,046	21,102					
Awards	7,390	7,902	7,748	7,170	7,138	7,263	7,751	7,006	6,622	6,476					
Funding Rate	25%	26%	27%	26%	28%	32%	33%	31%	31%	31%					
Multiracial	-														
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals	425	495	508	550	550	573	630	710	670	754					
Awards	114	151	124	143	154	173	191	253	211	232					
Funding Rate	27%	31%	24%	26%	28%	30%	30%	36%	31%	31%					
Other ¹		-				- 1	- 1								
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023					
Proposals						187	268	384	447	506					
Awards						58	74	104	93	131					
Funding Rate						31%	28%	27%	21%	26%					

Unknown / Do Not Wish to Provide

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	6,208	6,642	6,849	8,210	9,364	5,907	6,440	7,091	5,155	3,527
Awards	1,284	1,438	1,537	1,658	1,987	1,030	1,066	1,026	1,057	900
Funding Rate	21%	22%	22%	20%	21%	17%	17%	14%	21%	26%

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs. Prior to FY 2019, Pls reported demographic data in FastLane. In FY 2019, Pls began using Research.gov instead of FastLane to report demographic data to NSF. In FY 2021, NSF made system changes to improve the collection of demographic data, which resulted in a reduction in non-response. In order to provide the most accurate data available, FYs 2019–2021 have been restated based on PI-reported data as of February 21, 2023.

Table 13 Series – FY 2023 Proposals, Awards, and Funding Rates, by Directorate or Office and PI Race

NSF

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	645	11,021	1,291	21,102	754	3,527
Awards	176	2,894	378	6,476	232	900
Funding Rate	27%	26%	29%	31%	31%	26%

BIO

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	63	634	116	2,960	137	296
Awards	14	113	30	762	27	66
Funding Rate	22%	18%	26%	26%	20%	22%

CISE

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	101	2,998	123	2,473	71	635
Awards	31	833	44	759	15	165
Funding Rate	31%	28%	36%	31%	21%	26%

EDU

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	92	585	374	2,188	95	307
Awards	29	147	112	569	25	86
Funding Rate	32%	25%	30%	26%	26%	28%

D = suppressed to avoid disclosure of confidential information.

¹ Beginning in FY 2019, NSF began allowing PIs to self-identify with another racial identity. These responses have been grouped into a single category for reporting purposes labeled "Other."

ENG	
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Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	115	2,581	169	2,586	69	487
Awards	26	575	47	725	25	106
Funding Rate	23%	22%	28%	28%	36%	22%

GEO

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	37	432	45	2,143	84	210
Awards	16	177	18	973	41	83
Funding Rate	43%	41%	40%	45%	49%	40%

MPS

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	78	2,265	158	4,375	128	577
Awards	23	650	50	1,540	40	176
Funding Rate	29%	29%	32%	35%	31%	31%

OIA and OISE¹

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	15	279	36	411	19	85
Awards	3	52	14	112	6	20
Funding Rate	20%	19%	39%	27%	32%	24%

SBE

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	66	501	112	2,201	82	341
Awards	15	85	23	540	24	67
Funding Rate	23%	17%	21%	25%	29%	20%

TIP

Category	American Indian / Alaskan Native / Native Hawaiian / Pacific Islander / Other*	Asian	Black or African American	White	Multiracial	Unknown / Do Not Wish to Provide
Proposals	78	746	158	1,765	69	589
Awards	19	262	40	496	29	131
Funding Rate	24%	35%	25%	28%	42%	22%

Table Series Source: NSF Enterprise Information System, accessed 10/1/2023.

Table 14 Series – Proposals, Awards, and Funding Rates, by PI Disability Status

NSF

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	48,051	49,620	49,285	49,415	48,321	41,024	42,723	43,606	39,140	38,340
Awards	10,958	12,007	11,877	11,447	11,702	11,243	12,168	11,344	10,969	11,056
Funding Rate	23%	24%	24%	23%	24%	27%	28%	26%	28%	29%

PIs with a Disability

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	468	562	496	491	453	521	583	622	666	745
Awards	99	120	110	120	114	150	176	156	151	182
Funding Rate	21%	21%	22%	24%	25%	29%	30%	25%	23%	24%

Pls without a Disability

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	33,302	34,633	34,158	33,292	31,826	34,794	35,584	35,851	33,569	34,555
Total Awards	7,692	8,515	8,281	7,811	7,884	10,101	10,900	10,183	9,796	10,106
Funding Rate	23%	25%	24%	23%	25%	29%	31%	28%	29%	29%

Unknown / Do Not Wish to Provide

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	14,281	14,425	14,631	15,632	16,042	5,709	6,556	7,133	4,905	3,040
Total Awards	3,167	3,372	3,486	3,516	3,704	992	1,092	1,005	1,022	768
Funding Rate	22%	23%	24%	22%	23%	17%	17%	14%	21%	25%

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs. Prior to FY 2019, PIs reported demographic data in FastLane. In FY 2019, PIs began using Research.gov instead of FastLane to report demographic data to NSF. In FY 2021, NSF made system changes to improve the collection of demographic data, which resulted in a reduction in non-response. In order to provide the most accurate data available, FYs 2019–2021 have been restated based on PI-reported data as of February 21, 2023.

Note: Prior to the FY 2021 Merit Review Digest, detailed data were not published on the number of PIs without a reported disability or for whom disability status was unknown. Data for FYs 2014–2020 were previously recalculated for inclusion in the FY 2021 Merit Review Digest. This led to slight differences relative to the data reported in the Merit Review Digests for FYs 2014, 2015, and 2016. These differences do not change the reported funding rate.

¹ These cells have been combined to minimize the risk of revealing information that is confidential, sensitive, or otherwise protected.

^{*} Beginning in FY 2019, NSF began allowing PIs to self-identify with another racial identity. These responses have been grouped into a single category for reporting purposes labeled "Other."

Table 15 Series – FY 2023 Proposals, Awards, and Funding Rates, by Directorate or Office and PI Disability Status

NSF

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	745	34,555	3,040
Awards	182	10,106	768
Funding Rate	24%	29%	25%

BIO

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	95	3,836	275
Awards	D	938	D
Funding Rate	D	24%	D

CISE

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	84	5,840	477
Awards	25	1,702	120
Funding Rate	30%	29%	25%

EDU

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	125	3,202	314
Awards	36	847	85
Funding Rate	29%	26%	27%

ENG

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	80	5,560	367
Awards	17	1,416	71
Funding Rate	21%	25%	19%

GEO

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	55	2,701	195
Awards	20	1,213	75
Funding Rate	36%	45%	38%

MPS

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	111	6,986	484
Awards	25	2,317	137
Funding Rate	23%	33%	28%

OIA and OISE¹

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	10	766	69
Awards	D	186	D
Funding Rate	D	24%	D

SBE

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	88	2,839	376
Awards	22	648	84
Funding Rate	25%	23%	22%

TIP

Category	Pls with a Disability	Pls without a Disability	Unknown / Do Not Wish to Provide
Proposals	97	2,825	483
Awards	20	839	118
Funding Rate	21%	30%	24%

Table Series Source: NSF Enterprise Information System, accessed 10/1/2023.

D = suppressed to avoid disclosure of confidential information.

¹ These cells have been combined to minimize the risk of revealing information that is confidential, sensitive, or otherwise protected.

Table 16 Series – Proposals, Awards, and Funding Rates, by PI Experience with NSF

New Pls

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	17,405	18,276	18,348	18,757	18,596	15,654	16,221	17,345	15,585	14,652
Awards	3,108	3,320	3,510	3,319	3,257	3,252	3,473	3,453	3,417	3,412
Funding Rate	18%	18%	19%	18%	18%	21%	21%	20%	22%	23%

Prior Pls

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	30,646	31,344	30,937	30,658	29,725	25,370	26,502	26,261	23,555	23,688
Awards	7,850	8,687	8,367	8,128	8,445	7,991	8,695	7,891	7,552	7,644
Funding Rate	26%	28%	27%	27%	28%	31%	33%	30%	32%	32%

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Note: A new PI is an individual who has not served as the PI or co-PI on any award from NSF (excluding as a PI or co-PI for doctoral dissertation awards, graduate or post-doctoral fellowships, research planning grants, or conferences, symposia and workshop grants).

Geographic Participation

Table 17 provides data on proposal, award, and funding rates by the state or U.S. jurisdiction of the awardee institution. Twenty-five states, the Commonwealth of Puerto Rico, Guam, and the U.S. Virgin Islands were eligible to participate in aspects of the NSF Established Program to Stimulate Competitive Research (EPSCoR) program in FY 2023. EPSCoR was designed for those jurisdictions that have historically received lesser amounts of NSF Research and Development funding.

Additional information about the EPSCoR program can be found at https://new.nsf.gov/funding/initiatives/epscor. Additional state-level statistical and funding details are available and published by NSF in the Budget Internet Information System, https://dellweb.bfa.nsf.gov/AwdLst2/default.asp.

Table 17 – FY 2023 Proposals, Awards, and Funding Rate, by State or U.S. Jurisdiction

State or Jurisdiction	Proposals	Awards	Funding Rate
NSF Total	38,340	11,056	29%
EPSCoR Total ^a	6,018	1,711	28%
Alabama	582	154	26%
Alaska	126	49	39%
Arkansas	178	53	30%
Delaware	233	72	31%
Hawaii	157	68	43%
Idaho	185	47	25%
lowa	429	108	25%
Kansas	288	84	29%
Kentucky	247	54	22%
Louisiana	357	78	22%
Maine	147	43	29%
Mississippi	244	65	27%
Montana	118	42	36%
Nebraska	258	64	25%
Nevada	242	69	29%
New	194	54	28%
Hampshire New Mexico	205	0.0	
North Dakota	295 115	88 35	30%
Oklahoma	330	86	30% 26%
Puerto Rico	94	31	33%
Rhode Island	297	125	42%
South Carolina	464	120	26%
South Dakota	100	32	32%
Vermont	96	23	24%
Virgin Islands	9	4	44%
West Virginia	141	40	28%
Wyoming	92	23	25%
Non-EPSCoR Total ^b	32,265	9,328	29%
Arizona	888	224	25%
California	4,152	1,263	30%
Colorado	959	309	32%
Connecticut	469	116	25%
District of Columbia	422	148	35%
Florida	1,650	382	23%

State or Jurisdiction	Proposals	Awards	Funding Rate
Georgia	1,085	326	30%
Illinois	1,445	452	31%
Indiana	965	257	27%
Maryland	870	283	33%
Massachusetts	2,250	684	30%
Michigan	1,360	420	31%
Minnesota	440	161	37%
Missouri	647	166	26%
New Jersey	990	322	33%
New York	2,717	792	29%
North Carolina	1,205	340	28%
Ohio	1,030	245	24%
Oregon	436	154	35%
Pennsylvania	1,894	540	29%
Tennessee	594	141	24%
Texas	2,783	723	26%
Utah	483	131	27%
Virginia	1,303	337	26%
Washington	674	225	33%
Wisconsin	554	187	34%
Other ^c	57	17	30%

Source: NSF Enterprise Information System, accessed 10/1/2023.

^a Institutions in Guam were eligible to participate in EPSCoR in FY 2023 but are not included in "EPSCoR Total." They are included in the "Other" category to minimize the risk of revealing information that is confidential, sensitive, or otherwise protected.

^b Institutions in Northern Mariana Islands were not eligible to participate in EPSCoR in FY 2023 but are not included in "Non-EPSCoR Total." They are included in the "Other" category to minimize the risk of revealing information that is confidential, sensitive, or otherwise protected.

^c "Other" includes institutions in Guam (eligible to participate in EPSCoR in FY 2023), Northern Mariana Islands (not eligible to participate in EPSCoR in FY 2023), and a small number of entries coded as "other" for the state name. These have been combined to minimize the risk of revealing information that is confidential, sensitive, or otherwise protected.

B. Characteristics of Research Awards

"Research award" is a term used by NSF to represent a typical research award, particularly with respect to the award size. Not included in this category are awards such as operations costs for centers and facilities, grants for equipment, instrumentation, conferences, and symposia, awards in the SBIR program, and education and training grants.

These data are based on proposal budget and award data at the time of the initial award and do not include post-award changes such as extensions of the period of performance or funding supplements.

Research Proposals, Awards, and Funding Rate

Table 18 – Research Proposals, Awards, and Funding Rate

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	38,885	40,869	41,034	40,678	40,364	33,613	35,115	35,787	32,287	32,129
Awards	7,926	8,993	8,782	8,553	9,043	8,580	9,665	9,132	8,735	8,535
Funding Rate	20%	22%	21%	21%	22%	26%	28%	26%	27%	27%

Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Research Award Size and Duration

Table 19 Series – Annualized Award Amount per Research Project (in Thousands)

Nominal Dollars

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$133	\$130	\$133	\$133	\$140	\$147	\$150	\$150	\$150	\$154
Mean	\$172	\$171	\$173	\$169	\$178	\$189	\$194	\$198	\$202	\$211

Constant (FY 2023) Dollars (i.e., adjusted for inflation)

			,							
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$170	\$164	\$166	\$163	\$168	\$172	\$174	\$168	\$157	\$154
Mean	\$218	\$215	\$216	\$207	\$214	\$222	\$225	\$222	\$212	\$211

Table Series Source: FY 2023 awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs. Office of Management and Budget Historical Table 10.1 Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2028,

https://www.whitehouse.gov/omb/budget/historical-tables/. Constant (FY 2023) dollars use FY 2023 as a baseline. Note: This analysis is focused on projects, which count multi-institutional collaborative submissions as a single project.

Table 20 Series – Annualized Award Amount per Research Project, by Directorate or Office (Nominal Dollars, in Thousands)

BIO										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$178	\$186	\$200	\$198	\$197	\$215	\$200	\$222	\$227	\$234
Mean	\$217	\$237	\$243	\$223	\$226	\$263	\$243	\$260	\$278	\$288
CISE										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$166	\$161	\$155	\$156	\$166	\$167	\$166	\$167	\$172	\$200
Mean	\$199	\$187	\$198	\$187	\$199	\$210	\$203	\$224	\$228	\$238
EDU*										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median								\$167	\$168	\$180
Mean								\$275	\$274	\$274
* These data	were only rep	ported for	this directo	orate begin	ining in FY	2021.				
ENG										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$112	\$103	\$102	\$107	\$113	\$117	\$125	\$119	\$130	\$136
Mean	\$131	\$122	\$124	\$125	\$131	\$135	\$148	\$141	\$163	\$174
GEO										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$141	\$144	\$150	\$150	\$166	\$155	\$167	\$172	\$185	\$186
Mean	\$201	\$183	\$185	\$190	\$216	\$224	\$225	\$230	\$252	\$236
MPS										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$120	\$125	\$122	\$120	\$123	\$130	\$130	\$137	\$135	\$136
Mean	\$141	\$149	\$142	\$138	\$146	\$151	\$166	\$164	\$159	\$170
OIA										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$171	\$713	\$156	\$152	\$150	\$948	\$710	\$721	\$693	\$100
Mean	\$173	\$554	\$514	\$260	\$262	\$817	\$655	\$616	\$945	\$388
OISE										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$49	\$82	\$83	\$84	\$100	\$101	\$100	\$100	\$125	\$100
Mean	\$142	\$149	\$102	\$318	\$161	\$167	\$163	\$148	\$237	\$237
SBE										
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median	\$109	\$112	\$117	\$119	\$123	\$129	\$144	\$135	\$141	\$145
Mean	\$134	\$138	\$136	\$146	\$141	\$155	\$154	\$174	\$168	\$174

TIP1

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Median									\$50	\$50
Mean									\$116	\$202

Table Series Source: FY 2023 awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Note: This analysis is focused on projects, which count multi-institutional collaborative submissions as a single project. Only lead proposals for new projects were included in this analysis.

¹ In FY 2022, NSF established the new Directorate for Technology, Innovation and Partnerships (TIP). NSF realigned a number of programs from ENG and OIA into the new directorate, including NSF Innovation Corps (I-Corps™), Partnerships for Innovation, Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and the NSF Convergence Accelerator. Proposal and award statistics from FY 2021 and prior years for ENG and OIA have not been restated.

Table 21 – Mean Award Duration (Research Awards)

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Duration (Years)	3.0	2.9	2.9	2.9	3.0	3.0	2.8	3.1	3.1	3.1

Source: FY 2023 awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

PI Funding Rate

Table 22 – PI Funding Rate (Research Awards)

Category	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-	2020-	2021-
Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pls Applied	53,390	53,893	54,237	54,648	54,595	52,574	51,700	50,806	50,799	50,312
Pls Awarded	19,113	19,875	20,647	21,055	21,232	20,697	21,814	21,880	22,180	21,489
PI Funding Rate	36%	37%	38%	39%	39%	39%	42%	43%	44%	43%

Source: FY 2021–FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Note: PI funding rate is the number of unique PIs receiving a research award divided by the total number of unique PIs submitting proposals in the same three-year window.

PI Career Stage

Table 23 Series – Early and Later Career Pls (Research Awards)

Early Career Pls

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	14,902	15,762	16,097	16,299	16,254	13,470	13,993	14,046	12,667	12,554
Awards	2,710	3,091	3,131	3,053	3,211	3,192	3,499	3,393	3,294	3,284
Funding Rate	18%	20%	19%	19%	20%	24%	25%	24%	26%	26%

Later Career Pls

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Proposals	23,955	25,070	24,913	24,341	24,080	20,135	21,117	21,738	19,617	19,574
Awards	5,208	5,896	5,649	5,500	5,830	5,388	6,166	5,739	5,441	5,251
Funding Rate	22%	24%	23%	23%	24%	27%	29%	26%	28%	27%

Table Series Source: FY 2023 proposals and awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Note: An early career PI is defined as someone within 10 years of receiving their last degree at the time of award. Prior to FY 2020, NSF defined an early career PI as someone within seven years of receiving their last degree at the time award. The definition was changed to align with the National Center for Science and Engineering Statistics (NCSES) Early Career Doctorates Survey (ECDS) and the 2021 "Women, Minorities, and Persons with Disabilities in Science and Engineering" reports. The table restates the data using the new definition.

Graduate Student, Post-doctoral Researcher, and Senior Personnel Funding Support

This section estimates direct NSF support provided to graduate students, post-doctoral researchers, and senior personnel on research proposals that are subsequently awarded. ²⁴ NSF-funded research awards directly support these personnel by reimbursing the award institution for salary and other expenses. Estimates exclude other categories of personnel that may be included in the award budget, such as technicians, programmers, and undergraduate students. These estimates also exclude direct support provided through other award categories, such as individual post-doctoral fellowships, NSF Graduate Research Fellowship awards, and other individual awards to graduate students. Estimates are based on budgeted amounts in the original proposals and not actual expenditures. Budget details are extracted for research grants active in the year indicated. Award budgets include the amount of funding requested and a count of individuals by personnel category.

Table 24 – Estimated Number of People Budgeted on Successful Research Awards, by Year

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Graduate Students	26,317	26,882	27,099	26,693	26,997	27,159	29,043	30,292	29,224	28,673
Post-doctoral Researchers	4,286	4,586	4,460	4,442	4,516	4,230	4,672	5,008	4,714	4,398
Senior Personnel	31,650	33,831	35,326	33,296	35,870	33,529	38,865	44,564	42,180	48,310

Source: FY 2023 awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

Note: The numbers reflect the expected number of people supported by the grant as specified in the yearly award budget.

²⁴ Senior personnel include PIs, co-PIs, and other individuals designated on the proposal budget as senior personnel.

Table 25 – Average Annual Budgeted Support for Graduate Students and Post-Doctoral Researchers on Successful Research Awards, per Award (Nominal Dollars)

Fiscal Year	Average Annual Budgeted Graduate Student Support on Research Awards with Graduate Students	Average Annual Budgeted Post-Doctoral Researcher Support on Research Awards with Post-Doctoral Researchers
2014	\$29,381	\$34,142
2015	\$29,875	\$35,889
2016	\$30,657	\$36,339
2017	\$30,766	\$36,700
2018	\$31,182	\$35,861
2019	\$32,743	\$39,633
2020	\$30,413	\$35,526
2021	\$34,368	\$38,743
2022	\$35,184	\$42,390
2023	\$36,902	\$42,004

Source: FY 2023 awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs. Notes: Amounts do not represent an average stipend amount paid per student or post-doctoral researcher. This table shows the average annual amount of graduate student support or post-doctoral researcher support requested in the proposal budgets for research awards divided, respectively, by the subset of research awards that requested funding for graduate students and by the subset of research awards that requested funding for post-doctoral researchers.

Table 26 – Average Number of Months of Budgeted PI/co-PI Salary Support, per Research Award, by Directorate or Office

Directorate/ Office	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
NSF	0.8	0.8	0.7	0.7	0.7	0.6	0.5	0.6	0.6	0.6
BIO	1.0	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.6	0.5
CISE	0.7	0.6	0.6	0.6	0.6	0.5	0.4	0.5	0.5	0.5
EDU	0.9	0.8	0.7	0.8	0.8	0.8	0.7	0.8	1.0	0.9
ENG	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
GEO	1.1	1.0	1.0	0.9	1.3	0.7	0.6	0.7	1.0	1.0
MPS	1.0	0.9	0.8	0.8	0.8	0.7	0.5	0.7	0.6	0.6
OIA	0.8	0.8	0.5	0.5	1.2	1.2	1.1	1.1	0.3	1.8
OISE	0.5	0.7	0.7	0.6	1.0	0.6	0.5	0.3	0.2	0.2
SBE	1.2	1.3	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.6
TIP ¹									0.5	0.8

Source: FY 2023 awards are from NSF Enterprise Information System, accessed 10/1/2023. Previous Merit Review Digests include data access dates for prior FYs.

¹ In FY 2022, NSF established the new Directorate for Technology, Innovation and Partnerships (TIP). NSF realigned a number of programs from ENG and OIA into the new directorate, including NSF Innovation Corps (I-Corps™), Partnerships for Innovation, Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR), and the NSF Convergence Accelerator. Proposal and award statistics from FY 2021 and prior years for ENG and OIA have not been restated.

IV. Appendix

A. Acronyms

BFA Office of Budget, Finance and Award Management

BIO Directorate for Biological Sciences

CISE Directorate for Computer and Information Science and Engineering

COV Committee of Visitors
DD Division Director

EAGER EArly-concept Grants for Exploratory Research

EDU Directorate for STEM Education ENG Directorate for Engineering EIS Enterprise Information System

EPSCoR Established Program to Stimulate Competitive Research

FY Fiscal Year (October 1–September 30)

GDP Gross Domestic Product
GEO Directorate for Geosciences

IPA Temporary employees hired through the Intergovernmental Personnel Act

MPS Directorate for Mathematical and Physical Sciences

MSI Minority-Serving Institution
NSB National Science Board
NSF National Science Foundation

OD Office of the Director

OIA Office of Integrative Activities

OISE Office of International Science and Engineering

PAM Proposal and Award Manual

PAPPG Proposal and Award Policies and Procedures Guide

PI Principal Investigator

RAISE Research Advanced by Interdisciplinary Science and Engineering

RAPID Grants for Rapid Response Research

SBE Directorate for Social, Behavioral and Economic Sciences

SBIR Small Business Innovative Research

STEM Science, Technology, Engineering and Mathematics
TIP Directorate for Technology, Innovation and Partnerships

U.S. United States

B. Data Sources and Notes

The data tables in this report were produced using data from NSF's Enterprise Information System (EIS). EIS is an internal NSF system used for reporting. It is a compilation of data from NSF's transactional administrative systems that manage the proposal submission, review, and award process. At the end of the most recent fiscal year of the report, a data extract is saved for all proposals that were awarded or declined in the fiscal year. A proposal is included in a given fiscal year based on whether the action to award or decline the proposal was taken by NSF that year, not whether the proposal was received in that year.

Constant (i.e., inflation-adjusted) dollars were calculated using the Office of Management and Budget's Historical Table 10.1 Gross Domestic Product and Deflators Used in the Historical Tables: 1940–2028. FY 2023 is the reference year (i.e., one constant dollar equals one FY 2023 dollar): https://www.whitehouse.gov/omb/budget/historical-tables/, accessed on 10/2023.

Directorate- or office-level details reflect the NSF organization structure in FY 2023.

To minimize the risk of revealing information that is confidential, sensitive, or otherwise protected (such as privacy-protected data and information about declined proposals), the Merit Review Digest combines or suppresses table cells with a small number of proposals or awards. If a table cell is suppressed, then at least one complementary cell is suppressed to avoid logical deduction of the primary cell. This rule does not apply to cell sizes of zero because there is no proposal or award data to keep confidential in those instances.

NSF collects demographic data from PIs to better understand who is submitting proposals and receiving awards. NSF collects data on gender, ethnicity, race, and disability status as part of the PI's personal profile in Research.gov. ²⁵ The demographic data collected are confidential and used for aggregate statistical reporting. They are not included in the proposal or shared with reviewers.

Racial and ethnic categories reported are those mandated by the Office of Management and Budget (OMB) in the 1997 Standards for the Classification of Federal Data on Race and Ethnicity (OMB Statistical Policy Directive No. 15). The standards have five categories for race: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. There are two categories for data on ethnicity: "Hispanic or Latino" and "Not Hispanic or Latino."

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²⁵ Before the implementation of account management functions in Research.gov in FY 2019, demographic data were collected in FastLane.