# NATIONAL SCIENCE FOUNDATION (NSF) ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCOR) CONGRESSIONAL REPORT IN COMPLIANCE WITH PUBLIC LAW 114-329: AMERICAN INNOVATION AND COMPETITIVENESS ACT, SEC. 103 (D) (1-3) FISCAL YEAR 2022

This report summarizes fiscal year (FY) 2022 NSF funding to institutions and entities in EPSCoR jurisdictions, as required by the American Innovation and Competitiveness Act Sec. 103(d)(1-3). Specifically, the report details:

- (1) a description of the program strategy and objectives;
- (2) a description of the awards made in the previous fiscal year including:
  - (A) the total amount made available, by state, under EPSCoR;
  - (B) the total amount of agency funding made available to all institutions and entities within each EPSCoR state;
  - (C) the efforts and accomplishments to more fully integrate the EPSCoR states in major agency activities and initiatives;
  - (D) the percentage of EPSCoR reviewers from EPSCoR states;
  - (E) the number of programs or large collaborator awards involving a partnership of organizations and institutions from EPSCoR and non-EPSCoR states; and
- (3) an analysis of the gains in academic research quality and competitiveness, and in science and technology human resource development, achieved by the program over the last 5 years.

## EPSCoR Strategies and Objectives (Sec. 103(d)(1)).c

EPSCoR's strategies and objectives in FY 2022 remain the same as those described in the FY 2021 report. Specifically, the mission of EPSCoR is "to enhance research competitiveness of targeted jurisdictions (states, territories, commonwealths) by strengthening Science, Technology, Engineering and Mathematics (STEM) capacity and capability." EPSCoR's goals are:

- To catalyze the development of research capabilities and the creation of new knowledge that expands jurisdictions' contributions to scientific discovery, innovation, learning, and knowledge-based prosperity.
- To establish sustainable STEM education, training, and professional development pathways that advance jurisdiction-identified research areas, NSF focus areas, and workforce development.
- To broaden direct participation of diverse individuals, institutions, and organizations in the project's science and engineering research and education initiatives.
- To affect sustainable engagement of project participants and partners, the jurisdiction, the national research community, and the general public through data-sharing, communication, outreach, and dissemination.
- To impact research, education, and economic development beyond the project at academic, government, and private sector levels.

EPSCoR uses three investment strategies in pursuit of its goal to strengthen research capacity and competitiveness in eligible jurisdictions. These investment strategies are: (1) Research Infrastructure Improvement (RII) awards that support physical, human, and cyberinfrastructure development; (2) Co-Funding in partnership with NSF directorates and offices that support individual investigators and groups within EPSCoR jurisdictions; and (3) Outreach activities and workshops that bring EPSCoR

jurisdiction investigators together with program staff from across the Foundation to explore opportunities in emerging areas of science and engineering aligned with NSF strategic priorities and with jurisdictional science and technology goals.

EPSCoR's RII programs are instrumental in helping to build jurisdictional capability and capacity. RII Track-1 awards provide up to \$4.0 million per year for up to five years. They are intended to improve the research competitiveness of jurisdictions by improving their academic research infrastructure in areas of science and engineering supported by NSF and critical to the particular jurisdiction's science and technology initiative or plan. RII Track-2 Focused EPSCoR Collaborations awards provide up to \$1.0 million per year for up to four years as collaborative awards between two EPSCoR jurisdictions or up to \$1.5 million per year for up to four years to a consortium of three or more EPSCoR jurisdictions. These awards build interjurisdictional collaborative teams of EPSCoR investigators in scientific focus areas consistent with NSF priorities. RII Track-4: EPSCoR Research Fellows provides opportunities for early career, non-tenured, and tenured assistant/associate professor faculty to further develop their individual research potential through extended collaborative visits to the nation's premier private, governmental, or academic research centers. Through these visits, the EPSCoR Research Fellows learn new techniques, benefit from access to unique equipment and facilities, and shift their research toward transformative new directions. The experience gained through the fellowship is intended to provide a foundation for research collaborations that span the recipient's entire career. These benefits to the Fellows are also expected to in turn enhance the research capacity of their institutions and jurisdictions.

EPSCoR often co-funds proposals submitted to other NSF programs if the applicant is located in an EPSCoR jurisdiction. The proposals selected for this funding have been merit reviewed and recommended for award but could not be funded without the combined support of EPSCoR and the co-funding directorates. Co-funding leverages EPSCoR investment and facilitates participation of EPSCoR scientists and engineers in NSF-wide programs and initiatives.

EPSCoR also funds workshops, conferences, and other community-based activities to explore opportunities in emerging areas of science and engineering, and to share best practices in strategic planning, diversity, communication, cyberinfrastructure, evaluation and other areas of importance to EPSCoR jurisdictions. In addition, EPSCoR supports outreach travel that enables NSF staff from all directorates and offices to work with the EPSCoR research community on NSF opportunities, priorities, programs, and policies. This travel better acquaints NSF staff with the science and engineering accomplishments, ongoing activities and new directions and opportunities in research and education in EPSCoR jurisdictions.

In FY 2022, EPSCoR completed a year-long visioning activity led by a subcommittee of the Committee on Equal Opportunities in Science and Engineering (CEOSE). The subcommittee's report, *Envisioning the Future of NSF EPSCoR*<sup>1</sup>, builds on extensive programmatic data as well as prolonged engagement with EPSCoR's external stakeholders to better understand the impacts of the program's investment strategies and identify new opportunities for increased success. This process provided an opportunity for NSF EPSCoR and its stakeholder community to deeply and collaboratively assess how the NSF program can work most effectively with its jurisdictional partners to achieve their shared goals in the context of the nation's changing STEM research landscape.

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<sup>&</sup>lt;sup>1</sup> CEOSE. 2022. Envisioning the Future of NSF EPSCoR. Alexandria, VA: National Science Foundation.

### NSF Funding Made Available, by Jurisdiction, under EPSCoR (Sec. 103(d)(2)(A)).

In FY 2022, NSF EPSCoR invested a total of \$231.74 million in support of programmatic activities. Funding consisted of \$215.06 million in FY 2022 regular appropriations, and \$16.68 million in supplemental appropriations provided through the American Rescue Plan of 2021 (P.L. 117-2). Within the FY 2022 total, \$162.83 million (70.3 percent) was directed to 99 RII awards, \$52.11 million (22.5 percent) to 191 co-funded awards, \$16.69 million (7.2 percent) to American Rescue Plan programs (18 awards), and \$110,000 (<0.1 percent) to outreach activities and one workshop. The table below details the investments from EPSCoR resources and EPSCoR investments in co-funding actions.

**FY 2022 EPSCoR Funding by Jurisdiction** 

(Dollars in Millions)

EPSCoR	DII Drogram	Outreach &	EPSCoR	American	EPSCoR
Jurisdiction	RII Program	Workshops	Co-funding	Rescue Plan	Total
AK	\$4.11	-	\$0.39	-	\$4.50
AL	8.84	-	3.30	3.16	15.30
AR	11.06	-	0.71	-	11.77
DE	2.51	-	3.50	1.09	7.10
GU	3.95	-	-	-	3.95
HI	4.90	-	2.80	1.40	9.10
IA	1.57	-	1.16	-	2.73
ID	5.49	-	10.98	-	16.47
KS	8.96	-	1.39	1.00	11.35
KY	7.47	-	2.34	0.99	10.80
LA	8.02	-	1.85	-	9.87
ME	14.91	-	1.36	0.98	17.25
MS	2.67	0.10	3.11	-	5.88
MT	5.19	-	3.44	-	8.63
ND	1.50	-	0.22	-	1.72
NE	10.68	-	1.98	1.00	13.66
NH	7.58	-	1.58	-	9.16
NM	5.77	-	1.16	-	6.93
NV	4.69	-	1.03	0.42	6.14
OK	9.53	-	2.54	2.14	14.21
PR	3.44	-	1.00	-	4.44
RI	1.17	-	1.55	-	2.72
SC	1.23	-	0.67	1.00	2.90
SD	10.71	-	1.55	2.00	14.26
VI	4.21	-	-	1.50	5.71
VT	1.92	-	1.00	-	2.92
WV	1.51	-	0.49	-	2.00
WY	4.19	-	0.15	-	4.34
Admin	5.05	0.01	0.86	0.01	5.93
Total	\$162.83	\$0.11	\$52.11	\$16.69	\$231.74

## Total NSF Funding Made Available in all EPSCoR Jurisdictions (Sec. 103 (d)(2)(B)).

In FY 2022, NSF invested a total of \$1,116.01 million in support of EPSCoR jurisdictions. The table below details NSF investments in EPSCoR jurisdictions including research support funding, education and human resources, and major research equipment.

FY 2022 NSF Funding
Made Available to All EPSCoR
Jurisdictions

(Dollars	in	Mil	lions)
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EPSCoR NSF					
Jurisdiction	Funding				
AK	\$52.22				
AL	79.29				
AR	42.37				
DE	46.36				
GU	4.82				
HI	48.78				
IA	58.91				
ID	42.17				
KS	47.93				
KY	41.60				
LA	64.91				
ME	37.97				
MS	27.97				
MT	42.73				
ND	20.48				
NE	55.81				
NH	38.41				
NM	54.54				
NV	36.97				
OK	51.65				
PR	18.91				
RI	45.09				
SC	68.22				
SD	28.45				
VI	9.63				
VT	13.45				
WV	16.27				
WY	20.10				
Total	\$1,116.01				

# Integration of EPSCoR Jurisdictions in Major Activities and Initiatives of the Foundation (Sec. 103 (d)(2)(C)).

All EPSCoR programmatic activities target integration and assimilation of EPSCoR jurisdictions into the research and education programs of the Foundation's disciplinary directorates. RII awards promote the coordination and integration of recipient jurisdictions into major NSF programmatic activities. Additionally, EPSCoR consults and engages NSF disciplinary program officers (POs) in merit review processes and post-award evaluations, such as site visits and reverse site visits (RSVs). Site visits and RSVs are intended to provide additional project oversight by allowing jurisdictions to report on the progress of their RII projects in relation to their stated goals and the programmatic terms and conditions. Disciplinary POs assist in the identification of reviewers for RII merit review panels, serve as site visit and RSV observers, and provide knowledge about the ongoing activities within the directorate that could be leveraged to sustain RII efforts after the performance period of the EPSCoR award.

National, regional, and jurisdictional meetings of the EPSCoR community facilitate grantee interactions with NSF leadership to learn about the Foundation's strategic priorities and funding opportunities. Participation by EPSCoR researchers and educators in the merit review process across all disciplinary domains of the Foundation, in Committees of Visitors (COV) activities, in external advisory (Federal Advisory Committee Act) committees, and in disciplinary workshops that shape new activities is also vital to this integration.

Outreach to EPSCoR jurisdictions by NSF staff promotes integration of the EPSCoR community into mainstream NSF programs, as does co-funding of awards with the disciplinary programs of the Foundation. There is also an effort to promote in-reach, whereby EPSCoR facilitates opportunities for researchers and educators from EPSCoR jurisdictions to meet with NSF staff. In these meetings, the EPSCoR participants are provided with information on NSF strategic priorities and funding opportunities.

In FY 2022, EPSCoR staff promoted engagement of the EPSCoR community in NSF and other national activities. Examples are:

- Hosted its 2022 EPSCoR Annual Principal Investigator (PI) Meeting virtually during the third week
  of May. The EPSCoR community and NSF POs shared effective practices in research, strategic
  planning, diversity, communication, evaluation, and other areas of importance to EPSCoR
  jurisdictions and NSF. In addition to presentations and breakout sessions, there were Trackspecific roundtables that offered valuable insight to PIs. The agenda also included sessions for PIs
  to meet with POs from other federal EPSCoR programs and NSF directorates to discuss programspecific funding opportunities. Every EPSCoR jurisdiction was represented at this meeting, which
  had approximately 300 participants.
- Encouraged EPSCoR-supported faculty to participate in NSF committee and review panels across NSF (e.g., COVs, site visits, and merit review panels).
- Maintained investment in RII Track-2: Focused EPSCoR Collaborations (RII Track-2 FEC). In FY 2022, proposals were invited on the topic of "Advancing research toward Industries of the Future to ensure economic growth for EPSCoR jurisdictions," aligned with NSF's emerging industries initiative. Six awards were made in FY 2022, representing a total EPSCoR investment of \$34.0 million over their four-year award duration.
- Continued RII Track-4: EPSCoR Research Fellows, with 32 awards made, representing a total

- EPSCoR investment of \$6.30 million over their two-year award duration.
- Continued Track-4 Fellows: Advancing Science and Technology (FAST), a collaboration with NASA-EPSCoR. Track-4: FAST allows for PIs from MSIs to further develop their individual research potential through extended collaborative visits to NASA research facilities located at NASA Centers throughout the United States. One of the 32 awards made for the FY 2022 RII Track-4 competition was made through the Track-4: FAST mechanism.
- Funded \$10.50 million in support to the RII Bridging EPSCoR Communities (BEC) initiative, which was primarily funded by American Rescue Plan resources. The RII-BEC initiative seeks to enable institutions in EPSCoR jurisdictions to set up bridge programs to facilitate the transitions of groups affected by COVID (e.g., women, groups traditionally underrepresented in STEM, research trainees, and graduate fellows) from one stage of STEM training to the next, with particular focus on providing support for individuals from groups underrepresented in STEM and those transitioning from or to minority-serving institutions (MSIs) within EPSCoR jurisdictions.
- Invested \$6.70 million in support of Campus Cyberinfrastructure (CC\*) awards to EPSCoR jurisdictions through the American Rescue Plan funding. The CC\* program invests in coordinated campus-level networking and cyberinfrastructure improvements, innovation, integration, and engineering for science applications and distributed research projects.
- Contributed \$2.20 million in co-funding towards the MonArk Quantum Foundry, a collaboration between Montana State University and the University of Arkansas to accelerate the development of layered two-dimensional (2D) materials and devices for applications in quantum sensing, communication, and computing.
- Committed \$3.10 million to fund 14 awards related to acquisition of major research instrumentation and equipment. These fundamental infrastructure-building awards will help to build STEM capacity in EPSCoR jurisdictions.
- Provided \$13.90 million for 46 CAREER awards for early-career faculty in EPSCoR jurisdictions. The
  NSF CAREER program supports early-career faculty who have the potential to serve as academic
  role models in research and education and to lead advances in the mission of their department
  or organization.
- Convened two meetings with the EPSCoR Interagency Coordinating Committee (EICC) to share relevant program information and identify opportunities for maximizing jurisdictional impact. Representatives from the EICC also presented information on their programs at a panel session during the annual PI meeting for PIs interested in learning more about leveraging funding opportunities.
- NSF funded three Mid-scale Research Infrastructure Track 1 (Mid-scale RI-1) awards (\$21.30 million) in EPSCoR jurisdictions, which leveraged \$9.70 million in EPSCoR Co-funding resources. Mid-scale RI-1 supports the design and implementation of research infrastructure including equipment, cyberinfrastructure, large-scale datasets and personnel whose total project costs exceed NSF's Major Research Instrumentation program but are under \$20.0 million.

## EPSCoR Reviewers (Sec. 103(d)(2)(D)).

EPSCoR collects demographics of all reviewers who evaluate EPSCoR proposals. In FY 2022, 235 out of 306 reviewers self-identified their demographics. Of those 235 reviewers, 40.5 percent were female, 19.6 percent were from groups traditionally underrepresented in STEM, 0.7 percent were disabled, and 20.9 percent were from EPSCoR jurisdictions.

#### EPSCoR Collaborations and Partnerships (Sec. 103(d)(2)(E)).

All RII awards involve collaborations among scientists and engineers in EPSCoR jurisdictions. Though funding is awarded to a primary institution, there are always several subaward institutions involved in RII Track-1 and Track-2 awards. Subaward funding is not reflected in the tables provided earlier in this report but does help to enhance jurisdictional competitiveness. Data on research progress and outcomes are collected from subawards as well as the primary institution. In addition to subaward partnerships, RII awards require institutional collaborations, which are defined as collaborations among researchers at a RII awardee or sub-awardee and those at institutions not receiving any RII funds. These institutional collaborations and partnerships help to drive economic development and catalyze technology transfer within and across jurisdictions.

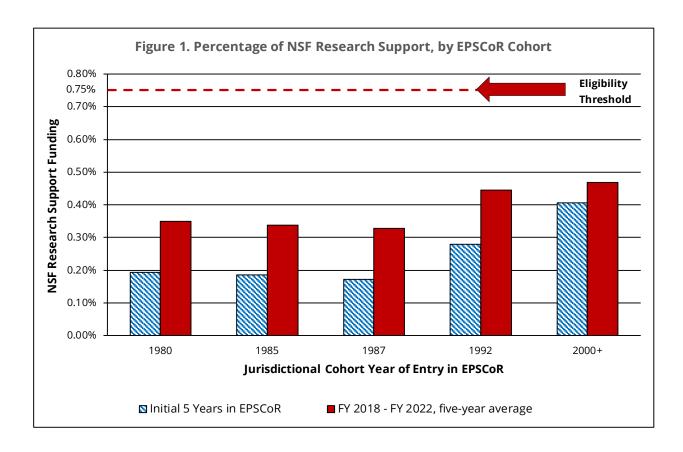
In FY 2022, RII Track-1 participants developed 490 institutional collaborations within EPSCoR jurisdictions; 599 institutional collaborations between EPSCoR jurisdictions and non-EPSCoR jurisdictions; and 150 collaborations between institutions in EPSCoR jurisdictions and in foreign countries. These collaborative efforts highlight the vast network of institutional involvement among EPSCoR jurisdictions and their partners in RII Track-1 projects. Of these 1,239 collaborations, 82 (6.6 percent) were with national laboratories and 137 (11.1 percent) were with industry partners.

Among the 191 awards co-funded by EPSCoR in FY 2022, 135 involved collaborative research between multiple institutions. Of those 135 collaborative awards, 106 (78.5 percent) were collaborations between investigators from institutions in EPSCoR and non-EPSCoR jurisdictions.

An analysis of the gains in academic research quality and competitiveness, and in science and technology human resource development, achieved by the program over the last 5 fiscal years (Sec. 103(d)(3)).

Eligibility to participate in NSF EPSCoR programmatic activities is based upon the jurisdictions' demonstrated ability to obtain NSF funding. Currently, a jurisdiction is eligible to participate in EPSCoR programs if its level of NSF funding is equal to or less than 0.75 percent of the total NSF budget over the most recent five-year period, excluding NSF funding to other federal agencies and EPSCoR RII and workshop/conference funding. Jurisdictions above 0.75 percent but less than 0.80 percent are allowed to remain EPSCoR-eligible for up to five years. Given EPSCoR's aim to stimulate research that is fully competitive in NSF's disciplinary and multidisciplinary research programs, increases in the ability to capture NSF research funds serve as a proxy for gains in research competitiveness.

Figure 1 (below) shows the average annual amount of NSF research funds given to each cohort for the initial five years (hatched bars) and the most recent five years (solid bars) of their participation in NSF EPSCoR. A cohort is defined as the group of states or jurisdictions that entered EPSCoR within a given fiscal year. For example, the 1980 cohort consists of the initial five states that qualified for EPSCoR at that time. For this summary, the 2000+ cohort consists of jurisdictions that entered EPSCoR in FY 2000 or later and are still EPSCoR-eligible for RII competitions. Former EPSCoR jurisdictions Missouri, Tennessee, and Utah are excluded because they were not EPSCoR-eligible in FY 2022.



Each cohort shows an increase in competitiveness over the periods of participation. For example, the 1980 cohort (Arkansas, Maine, Montana, South Carolina, West Virginia) shows an 80 percent increase in NSF research funding over the past 42 years of EPSCoR activity. The 1985 cohort (Alabama, Kentucky, Nevada, North Dakota, Oklahoma, Puerto Rico, Vermont, and Wyoming) demonstrates an 81 percent increase during its 37 years of participation in EPSCoR. The 1987 cohort (Idaho, Louisiana, Mississippi, and South Dakota) shows a 91 percent increase over the past 35 years, whereas the 1992 cohort (Kansas and Nebraska) has a 59 percent increase in competitiveness over its 30 years of EPSCoR involvement. Currently eligible jurisdictions participating in EPSCoR since FY 2000 entered into the program at a higher level of NSF research funding than the previous cohorts. For the 2000+ cohort (Alaska, Delaware, Guam, Hawaii, Iowa, New Hampshire, New Mexico, Rhode Island, and the Virgin Islands), there has been a small, yet demonstrable 15 percent increase in research funding.

# Percentage of NSF Funding, by Jurisdiction and EPSCoR Cohort

	Most Recent 5						
	Initial 5 Years	Year Period	Percent Change				
	in EPSCoR*	(FY 2018-2022)**	Over Time				
1980 Cohort	0.19%	0.35%	80%				
Arkansas	0.10%	0.31%	223%				
Maine	0.27%	0.27%	-1%				
Montana	0.13%	0.42%	223%				
South Carolina	0.41%	0.57%	41%				
West Virginia	0.07%	0.18%	165%				
1985 Cohort	0.19%	0.34%	81%				
Alabama	0.33%	0.77%	133%				
Kentucky	0.22%	0.40%	86%				
Nevada	0.14%	0.35%	146%				
North Dakota	0.06%	0.17%	174%				
Oklahoma	0.30%	0.43%	44%				
Puerto Rico	0.15%	0.22%	47%				
Vermont	0.10%	0.13%	33%				
Wyoming	0.20%	0.23%	17%				
1987 Cohort	0.17%	0.33%	91%				
Idaho	0.08%	0.32%	316%				
Louisiana	0.36%	0.57%	58%				
Mississippi	0.16%	0.27%	72%				
South Dakota	0.09%	0.15%	65%				
1992 Cohort	0.28%	0.45%	59%				
Kansas	0.34%	0.46%	35%				
Nebraska	0.22%	0.43%	97%				
2000+ Cohort	0.41%	0.47%	15%				
Alaska	0.55%	0.67%	21%				
Delaware	0.41%	0.50%	22%				
Guam	0.02%	0.01%	-50%				
Hawaii	0.56%	0.62%	11%				
lowa***	N/A	0.69%	N/A				
New Hampshire	0.44%	0.42%	-5%				
New Mexico	0.58%	0.63%	9%				
Rhode Island	0.70%	0.63%	-10%				
Virgin Islands	-	0.04%	N/A				

<sup>\*</sup>Percentages based on eligibility guidelines at the time of entry into the EPSCoR program.

<sup>\*\*</sup>Percentages based on current eligibility guidelines.

<sup>\*\*\*</sup>lowa reentered EPSCoR eligibility in FY 2019; data for the initial five years not available.

#### Additional EPSCoR Impacts - FY 2022

This section provides FY 2022 EPSCoR RII Tracks 1 and 2 science and technology outputs of academic research capacity, human resource development, and the demographics of participants. FY 2022 data is provided, as EPSCoR's data reporting infrastructure is being enhanced in FY 2023 to ensure greater consistency in jurisdictional reporting including for project outcomes and impacts. Therefore, beginning with the FY 2023 report, NSF will begin showing multi-year gains and impacts, which will eventually result in a five-year data presentation.

The following table demonstrates quantifiable outputs of NSF EPSCoR's RII Track-1 and Track-2 programs in FY 2022. This information clarifies the gains in academic research capacity and competitiveness, as defined by publications, leveraged grants, and patents, all strong indicators of economic development. The number and valuation of grants awarded encompass all federal, private industry, and private foundation awards across the U.S. for all active projects. These leveraged grants help to build on EPSCoR-funded research and drive academic capacity and capability across EPSCoR jurisdictions.

FY 2022 RII Track-1 and Track-2 Aggregate of EPSCoR Outputs

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	Track-1	Track-2	Total
Number of Active Awards	25	43	68
Publications	765	190	955
Grants Awarded	374	119	493
Value of Grants Awarded	\$246.95	\$127.94	\$374.89
(Dollars in Millions)	\$240.93	\$127.54	\$374.09
Patents Awarded	18	1	19
Patents pending	19	14	33

Data is self-reported by each project through annual reports and aggregated for the program, by year.

The table below indicates EPSCoR's ongoing support of human resources in STEM in the RII Track-1 and Track-2 program. The number of faculty and students involved in these projects signifies strong commitment by NSF and the jurisdictions in strengthening jurisdictional human capital in science and engineering research and education.

FY 2022 RII Track-1 and Track-2 Human Resource Development

	Track-1	Track-2	Total
Faculty Supported	1,025	543	1,568
Post-Docs Supported	194	123	317
Graduate Students Supported	1,089	471	1,560
Undergraduates Supported	1,175	360	1,535
New Faculty Hired	28	N/A	28
Graduate Degrees Conferred	141	42	183
Undergraduate Degrees Conferred	230	41	271

Data is self-reported by each project through annual reports and aggregated for the program, by year.

Along with EPSCoR, broadening participation is one of NSF's major initiatives. EPSCoR's goals reflect the efforts to broaden direct participation of diverse individuals, institutions, and organizations in

funded projects' STEM research and education activities. To that end, EPSCoR collects demographic data of project participants. The tables below reflect EPSCoR's ongoing support of FY 2022 broadening participation efforts in the RII Track-1 and Track-2 programs.

Out of over 4,000 project participants across the RII Track-1 projects, 90.7 percent self-identified their demographics. Of those, 46.9 percent were female, 24.6 percent were from one or more group traditionally underrepresented in STEM, and 1.2 percent were disabled. Out of over 1,600 project participants across the RII Track-2 projects, 90.0 percent self-identified their demographics. Of those, 42.7 percent were female, 18.2 percent were from one or more group traditionally underrepresented in STEM, and 1.9 percent were disabled.

**RII Track-1 Broadening Participation** 

			-			
Total*	Malo	Eamala	African	Hispanic	Other	
Total	iviaic	Terriale	American	or Latinx	Ethnic	Disabled
1,025	673	321	44	45	60	15
209	108	87	8	11	12	1
363	86	219	29	23	40	5
194	112	74	6	6	19	1
1,089	564	430	66	90	94	12
1,175	411	594	95	125	130	11
4,055	1,954	1,725	248	300	355	45
	209 363 194 1,089 1,175	1,025 673 209 108 363 86 194 112 1,089 564 1,175 411	1,025 673 321 209 108 87 363 86 219 194 112 74 1,089 564 430 1,175 411 594	Total*         Male         Female         American           1,025         673         321         44           209         108         87         8           363         86         219         29           194         112         74         6           1,089         564         430         66           1,175         411         594         95	Total*         Male         Female         American         or Latinx           1,025         673         321         44         45           209         108         87         8         11           363         86         219         29         23           194         112         74         6         6           1,089         564         430         66         90           1,175         411         594         95         125	Total*         Male         Female         American         or Latinx         Ethnic           1,025         673         321         44         45         60           209         108         87         8         11         12           363         86         219         29         23         40           194         112         74         6         6         19           1,089         564         430         66         90         94           1,175         411         594         95         125         130

<sup>\*</sup> Aggregate demographics may not add to Total due to project participants who chose not to identify in one or more categories

**RII Track-2 Broadening Participation** 

				•			
	Total*	Male	Female	African	Hispanic	Other	
	Total	iviale	remaie	American	or Latinx	Ethnic	Disabled
Senior Researchers	293	190	85	7	21	22	3
Early-career Researchers	250	135	101	11	16	13	1
Post-Docs Supported	115	70	33	4	9	2	5
Graduate Students Supported	473	264	173	31	30	22	9
Undergraduates Supported	348	126	159	22	24	12	7
Other Project Participants	136	48	69	12	4	3	3
Total	1,615	833	620	87	104	74	28

<sup>\*</sup> Aggregate demographics may not add to Total due to project participants who chose not to self-identify in one or more categories.

Additionally, out of the 191 projects co-funded by EPSCoR, 70 percent of the Pls self-identified their demographics. Of those, 56 awards (32.2 percent) went to female Pls and 15 (7.8 percent) went to Pls from groups traditionally underrepresented in STEM.

NSF EPSCoR is continuing to refine and implement a cohesive research competitiveness evaluation framework for the program. The framework draws upon recommendations from a study completed

Note: Demographic data available for 37 out of 43 active RII Track-2 awards in FY 2022.

in FY 2020<sup>2</sup> that helped to develop a flexible framework to explore, define, and measure research competitiveness. The evaluation framework will also be informed by the Envisioning the Future of NSF EPSCoR report, published in 2022.

The evaluation framework, undergirded by the 2020 study and Future of NSF EPSCoR report, will: (1) help identify potential programmatic changes with respect to achieving the overall mission and increasing academic research competitiveness, and (2) produce a revised set of strategic priorities and an implementation plan that will leverage the current staffing capacity.

Additionally, EPSCoR secured a contract in FY 2022 to develop a new data collection system, which will help track project and programmatic progress in relation to EPSCoR's goals and objectives. This system builds upon the data collection efforts already in place. It will help the program to standardize the depth and breadth of information collected from all funded EPSCoR RII projects and will be used to measure capacity-building efforts within the research competitiveness evaluation framework for the program.

<sup>&</sup>lt;sup>2</sup> Meek, Caroline, and Nisar, Hiram. 2020. Study of the Established Program to Stimulate Competitive Research (EPSCoR). Alexandria, VA: National Science Foundation.