

**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 2020**

This report summarizes fiscal year (FY) 2020 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 itemizes

- (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.

## **Introduction**

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 Strategies and Objectives (Sec. 103(d)(1)).c**

EPSCoR's strategies and objectives in FY 2020 remain the same as those described in the FY 2019 report. Specifically, the mission of EPSCoR is "to enhance research competitiveness of targeted jurisdictions (states, territories, commonwealths) by strengthening Science, Technology, Engineering and Math (STEM) capacity and capability." Thus, 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 effect 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.

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

In FY 2020, NSF EPSCoR invested a total of \$191.57 million in support of its programmatic activities. Of this, \$148.57 million (77.6 percent) was directed to RII, \$41.85 million (21.8 percent) to co-funding, and \$1.76 million (0.6 percent) to outreach activities and workshops. Within the FY 2020 EPSCoR co-funding total, \$1.25 million of support was provided through the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) (P.L. 116-136). The table below details the investments from EPSCoR resources and EPSCoR investments in co-funding actions.

#### FY 2020 EPSCoR Funding by Jurisdiction

(Dollars in Millions)

EPSCoR Jurisdiction	RII Program	Outreach & Workshops	EPSCoR Co-Funding	EPSCoR Co-Funding CARES Act	EPSCoR Total
AK	\$0.75	-	\$0.69	-	\$1.44
AL	8.52	0.10	2.89	0.15	11.66
AR	6.67	0.05	1.42	-	8.14
DE	4.64	-	5.43	-	10.07
GU	4.14	-	-	-	4.14
HI	4.33	-	1.50	-	5.83
IA	0.29	-	1.69	0.18	2.16
ID	6.34	-	1.71	0.06	8.11
KS	5.44	-	2.28	0.07	7.79
KY	11.82	-	2.55	0.11	14.48
LA	7.21	-	2.04	0.15	9.40
ME	9.47	0.70	0.68	-	10.85
MS	4.09	-	1.29	-	5.38
MT	5.18	-	1.29	-	6.47
ND	5.88	-	0.92	-	6.80
NE	4.15	-	0.80	-	4.95
NH	10.41	-	1.27	-	11.68
NM	4.19	-	0.90	0.09	5.18
NV	1.03	-	1.09	-	2.12
OK	5.35	-	2.12	0.07	7.54
PR	3.07	-	0.74	-	3.81
RI	0.36	-	1.15	0.10	1.61
SC	4.32	-	2.35	0.22	6.89
SD	8.45	0.10	0.41	0.05	9.01
VI	5.38	-	-	-	5.38
VT	6.42	-	1.56	-	7.98
WV	3.27	-	0.95	-	4.22
WY	4.81	-	0.61	-	5.42
Admin	2.59	0.20	0.27	-	3.06
<b>Total</b>	<b>\$148.57</b>	<b>\$1.15</b>	<b>\$40.60</b>	<b>\$1.25</b>	<b>\$191.57</b>

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

In FY 2020, NSF invested a total of \$982.64 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 2020 NSF Funding  
Made Available to All EPSCoR  
Jurisdictions**  
(Dollars in Millions)

EPSCoR Jurisdiction	NSF Funding
AK	\$61.17
AL	69.10
AR	27.03
DE	44.31
GU	4.49
HI	49.02
IA	51.74
ID	25.43
KS	44.24
KY	41.42
LA	46.39
ME	29.24
MS	19.83
MT	38.54
ND	19.93
NE	25.17
NH	42.90
NM	59.65
NV	26.78
OK	37.21
PR	23.62
RI	51.05
SC	55.75
SD	19.57
VI	8.15
VT	17.36
WV	17.22
WY	26.33
<b>Total</b>	<b>\$982.64</b>

**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, 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 2020, EPSCoR staff promoted engagement of the EPSCoR community in NSF and other national activities. Examples are:

- Communicated extensively regarding the Office of Management and Budget's (OMB) and NSF guidelines about COVID-19 flexibilities for funded awards.
- Hosted its 2020 EPSCoR Annual Principal Investigator (PI) Meeting virtually during the week of May 18-22. The EPSCoR community and NSF program officers shared best 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 was a poster session that showcased jurisdictional gains in the areas of academic research competitiveness. The agenda also included open houses for PIs to meet with Program Officers from all NSF Directorates to discuss program-specific funding opportunities. There were approximately 350 participants, almost three times the usual attendance for the annual meeting.
- Encouraged proposal submissions from EPSCoR jurisdictions for mid-scale research infrastructure projects through targeted emails and a community webinar.
- Committed \$4.5 million in co-funding support towards a new \$18 million Materials Research Science and Engineering Center (MRSEC) led by the University of Delaware. The Center for Hybrid, Active, and Responsive Materials (CHARM) intends to harness the integrated power of computational design, innovative synthetic and manufacturing processes, and nanoscale characterization to unlock the substantial promise of complex synthetic materials.
- Provided \$1.5 million in support of new awards under the Louis Stokes Alliances for Minority Participation (LSAMP) program. These projects, based in Arkansas, Kentucky, Puerto Rico, and South Carolina, will help diversify the STEM workforce by increasing the number of STEM baccalaureate and graduate degrees awarded to populations historically underrepresented in these disciplines.
- Continued to support physical research infrastructure nationwide via co-funding support for the Major Research Instrumentation (MRI) program. A total of \$2.8 million of EPSCoR funds were committed in FY 2020 to support MRI projects nationwide.
- Granted \$500,000 in late-year co-funding support for two Future Manufacturing Seed projects that will catalyze activities in this priority area at Iowa State University and Montana State University.
- Provided co-funding for 25 COVID-19 RAPID awards, using both CARES Act funds (\$1.25 million) as well as around \$1 million of EPSCoR regular appropriations. These awards enabled researchers in EPSCoR jurisdictions to pursue research on a variety of topics focused on understanding and

responding to the COVID-19 pandemic.

- Partnered with NSF INCLUDES to introduce the NSF INCLUDES First2 Network Alliance, which endeavors to improve the college enrollment rates and success of undergraduate STEM students, with emphasis on rural, first generation students by providing STEM research experiences, peer mentoring and student advocacy. It is particularly focused on students in EPSCoR states. This project is funded by NSF INCLUDES with co-funding from EPSCoR.
- Co-funded a collaborative research project with NSF INCLUDES: Cultivating Indigenous Research Communities for Leadership in Education and STEM (CIRCLES). The alliance is a partnership between six states in the western half of the U.S. (Idaho, Montana, New Mexico, North Dakota, South Dakota, and Wyoming) to address the under representation of American Indian and Alaska Native (AI/AN) students in STEM disciplines and workforce.
- Encouraged EPSCoR-supported faculty to participate in NSF committee and review panels across NSF (e.g., COVs, site visits, and merit review panels).
- Continued the RII Track-2: Focused EPSCoR Collaborations (RII Track-2 FEC) solicitation. RII Track-2 FEC builds interjurisdictional collaborative teams of EPSCoR investigators in scientific focus areas consistent with NSF priorities. In addition, these awards have a particular focus on the development of early career/junior faculty. In FY 2020, proposals were invited on the topic of “Harnessing big data to solve problems of national importance,” aligned with NSF’s Harnessing the Data Revolution Big Idea.
- Continued the RII Track-4, EPSCoR Research Fellows solicitation, which provides opportunities for early career researchers to further develop their individual research potential through extended collaborative visits to the Nation’s premier private, governmental, or academic research centers. Proposals in all areas of science and engineering supported by NSF were invited.
- Convened two meetings with the EPSCoR Interagency Coordinating Committee (EICC) to share relevant program information and identify opportunities for coordination.
- Presented at EPSCoR PI meetings for Department of Defense and National Aeronautics and Space Administration (NASA) awardees. Attending and presenting at these meetings helps to increase NSF EPSCoR visibility and to capitalize on federal agency investments in EPSCoR, providing opportunities for interactions between NSF EPSCoR and cross-agency grantees.

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

Demographics of all reviewers who evaluated EPSCoR proposals or the program in FY 2020 are as follows: of the 184 reviewers, 22 percent were underrepresented minorities, 40 percent were female, 13 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. Additionally, RII awards require institutional collaborations, which are defined as collaborations between researchers at a RII awardee or sub-awardee and those at institutions not receiving any RII funds.

In FY 2020, there were 377 institutional collaborations within EPSCoR jurisdictions; 539 institutional collaborations between EPSCoR jurisdictions and other EPSCoR and non-EPSCoR jurisdictions; and 212 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 projects.

Among the 220 awards co-funded by EPSCoR in FY 2020, 162 involved collaborative research between multiple institutions. Of those 162 collaborative awards, 90 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 research funds. Currently, a jurisdiction is eligible to participate in EPSCoR programs if its level of NSF research support 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.

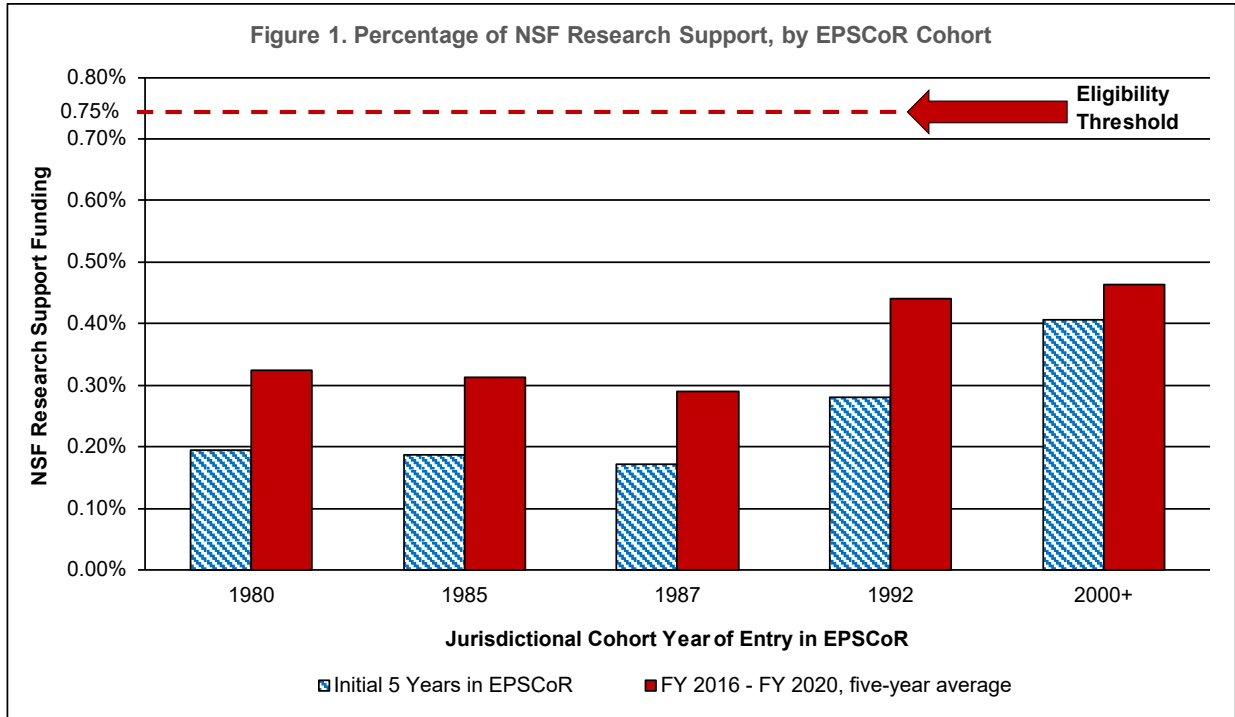
Given EPSCoR's aim to stimulate research that is fully competitive in NSF's disciplinary and multidisciplinary research programs, increases in the ability to capture NSF research funds serve as a proxy for gains in research competitiveness. In FY 2019, both Iowa and New Mexico, which had both been ineligible in FY 2018, fell back below the 0.75 percent eligibility threshold and were eligible to compete in FY 2020 RII competitions.

In FY 2019, EPSCoR re-examined its eligibility methodology and implemented changes to ensure that it is simple, transparent, fair, and stable. These changes incorporate stakeholder feedback and are supported by robust data analyses. The new eligibility methodology was announced at the EPSCoR National Conference in FY 2020 and is effective for the FY 2021 EPSCoR competitions.

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 the NSF EPSCoR Program. A cohort is defined as the group of states or jurisdictions that entered the EPSCoR program within a given fiscal year. For example, the 1980 cohort consists of the initial five states that qualified for EPSCoR: Arkansas, Maine, Montana, South Carolina, and West Virginia. 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: Alaska, Delaware, Guam, Hawaii, Iowa, New Hampshire, New Mexico, Rhode Island, and the U.S. Virgin Islands. Former EPSCoR jurisdictions Missouri, Tennessee, and Utah are excluded because they were not EPSCoR-eligible in FY 2020.

Each cohort shows an increase in competitiveness over the periods of participation. For example, the 1980 cohort shows a 66 percent increase in NSF research funding over the past 40 years of EPSCoR activity. The 1985 cohort (Alabama, Kentucky, Nevada, North Dakota, Oklahoma, Puerto Rico, Vermont, and Wyoming) demonstrates a 68 percent increase during its 35 years of participation in EPSCoR. The 1987 cohort (Idaho, Louisiana, Mississippi, and South Dakota) shows a 69 percent increase over the past 33 years, while the 1992 cohort (Kansas and Nebraska) has a 57 percent increase in competitiveness over its 28 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, there has been a small, yet demonstrable 14 percent increase in research funding.

Figure 1. Percentage of NSF Research Support Funding by EPSCoR Cohort



**Percentage of NSF Funding,  
by Jurisdiction and EPSCoR Cohort**

	Initial 5 Years in EPSCoR*	Most Recent 5 Year Period (FY 2016-2020)**
<b>1980 Cohort</b>	0.19%	0.32%
Arkansas	0.10%	0.25%
Maine	0.27%	0.26%
Montana	0.13%	0.37%
South Carolina	0.41%	0.58%
West Virginia	0.07%	0.16%
<b>1985 Cohort</b>	0.19%	0.31%
Alabama	0.33%	0.72%
Kentucky	0.22%	0.38%
Nevada	0.14%	0.28%
North Dakota	0.06%	0.17%
Oklahoma	0.30%	0.40%
Puerto Rico	0.15%	0.20%
Vermont	0.10%	0.12%
Wyoming	0.20%	0.23%
<b>1987 Cohort</b>	0.17%	0.29%
Idaho	0.08%	0.27%
Louisiana	0.36%	0.49%
Mississippi	0.16%	0.26%
South Dakota	0.09%	0.14%
<b>1992 Cohort</b>	0.28%	0.44%
Kansas	0.34%	0.48%
Nebraska	0.22%	0.40%
<b>2000+ Cohort</b>	0.41%	0.46%
Alaska	0.55%	0.65%
Delaware	0.41%	0.45%
Guam	0.02%	0.01%
Hawaii	0.56%	0.61%
Iowa***	N/A	0.72%
New Hampshire	0.44%	0.46%
New Mexico	0.58%	0.64%
Rhode Island	0.70%	0.61%
Virgin Islands	-	0.03%

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

\*\*Percentages based on current eligibility guidelines.

\*\*\*Iowa reentered EPSCoR eligibility in FY 2019; data for the initial five years not available.

The following tables demonstrates the quantifiable outputs of NSF EPSCoR's RII Track-1 and RII Track-2 programs over the last five fiscal years. This information elucidates the gains in academic research quality over time, as defined by publications, leveraged grants, and patents. The number and valuation of grants awarded encompass all federal, private industry, and private foundation awards across the U.S. in a given fiscal year for all active projects. Please note, NSF EPSCoR began collecting and tracking data on participant involvement and project outcomes for RII Track-2 awards in FY 2015. Though it may appear that there are increasing totals of aggregate outputs and human resources over time, this is not the case.



**RII Track-1 Aggregate of EPSCoR Outputs**

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Total</b>
Number of Active Awards*	30	27	28	27	26	
Publications	1,336	985	1,044	732	638	<b>4,735</b>
Grants Awarded	675	455	505	451	326	<b>2,412</b>
Value of Grants Awarded (Dollars in Millions)	\$379.10	\$492.10	\$269.13	\$214.40	\$146.87	<b>\$1,501.60</b>
Patents Awarded	14	17	8	17	10	<b>66</b>
Patents pending	34	29	15	44	38	<b>160</b>

\*The outputs for the active RII Track-1 awards are not comparable from year-to-year due to the influx of new and expiring awards over the time period.

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

**RII Track-2 Aggregate of EPSCoR Outputs**

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Total</b>
Number of active awards*	16	27	35	44	54	
Partial Support Publications	84	191	371	404	334	<b>1,384</b>
Grants Awarded	48	87	159	175	113	<b>582</b>
Value of Grants Awarded (Dollars in Millions)	\$29.30	\$70.76	\$129.22	\$213.67	\$119.23	<b>\$562.18</b>
Patents Awarded	-	3	3	5	4	<b>15</b>
Patents pending	6	17	13	13	11	<b>60</b>

\*The number of active RII Track-2 awards in a given fiscal year for which data was available. Outputs are not comparable from year-to-year due to the influx of new and expiring awards over the time period.

Data is self-reported by each project through the RII Track-2 Data Outcomes Portal, as part of their annual reporting requirement.

The tables below indicate EPSCoR’s ongoing support of human resource development over the last five fiscal years in the RII Track-1 and RII Track-2 programs. The number of faculty and students involved in these projects signifies a strong commitment by NSF and the jurisdictions in strengthening jurisdictional human capital in science and engineering research and education.

**RII Track-1 Human Resource Development**

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Total</b>
Faculty Supported	1,552	1,183	1,126	1,062	891	<b>N/A*</b>
Post-Docs Supported	200	156	179	165	170	<b>N/A*</b>
Graduate Students Supported	1,332	1,056	1,128	992	834	<b>N/A*</b>
Undergraduates Supported	1,861	1,220	1,187	1,168	870	<b>N/A*</b>
New Faculty Hired	84	54	27	40	35	<b>240</b>
Graduate Degrees Conferred	258	254	262	202	166	<b>1,142</b>
Undergraduate Degrees Conferred	404	634	357	297	183	<b>1,875</b>

\* The number of faculty and students supported are not summed because many of them remain tied to their respective projects for the duration of the award and would, therefore, be double-counted over time.

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

**RII Track-2 Human Resource Development**

	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Total</b>
Faculty Supported	264	393	505	675	710	<b>N/A*</b>
Post-Docs Supported	64	100	138	167	172	<b>N/A*</b>
Graduate Students Supported	240	481	623	751	761	<b>N/A*</b>
Undergraduates Supported	185	404	628	781	732	<b>N/A*</b>
Graduate Degrees Conferred	11	25	43	69	39	<b>187</b>
Undergraduate Degrees Conferred	18	58	74	80	24	<b>254</b>

\* The number of faculty and students supported are not summed because many of them remain tied to their respective projects for the duration of the award and would, therefore, be double-counted over time.

Data is self-reported by each project through the RII Track-2 Data Outcomes Portal, as part of their annual reporting requirement.

The Committee of Visitors (COV) for NSF's EPSCoR met virtually in 2020 to review NSF EPSCoR for the period spanning FY 2015 to FY 2019. This review focused on (1) the integrity and efficiency of the program's processes and management practices, including quality and effectiveness of merit review processes, selection of reviewers, portfolio of awards, and management of the program; and (2) other aspects of the program structure and management, including EPSCoR's responsiveness to recommendations from previous COVs and other external evaluations. The report prepared by the COV reflects careful examination and insightful evaluation of the program. The COV found no significant programmatic gaps or needs for significant improvement. However, the Committee did provide four specific recommendations for how EPSCoR could further improve its performance, and EPSCoR is taking actions on those recommendations. The full COV report and EPSCoR's responses to the recommendations are available on the NSF COV website.<sup>1</sup>

In FY 2020, EPSCoR established a memorandum of understanding with NASA EPSCoR with the goal of providing a new NSF/NASA track within the existent RII Track-4: EPSCoR Research Fellows program. This new opportunity, RII Track-4 Fellows Advancing in Science and Technology (RII Track-4 FAST) is intended to allow non-tenured PIs to further develop their individual research potential through extended collaborative visits to NASA research facilities located at NASA Centers throughout the United States. This solicitation targets faculty at minority-serving institutions, women's colleges, and primarily undergraduate institutions. Through this opportunity, the RII Track-4: FAST Fellows will learn new techniques, initiate new collaborations or advance existing partnerships, benefit from access to unique equipment and facilities, and/or shift their research toward potentially transformative new directions in NASA-related research. The experiences gained through the fellowships are intended to have lasting impacts that will enhance the

<sup>1</sup> [www.nsf.gov/od/oia/activities/cov/covs.jsp#oia](http://www.nsf.gov/od/oia/activities/cov/covs.jsp#oia)

Fellows' research trajectories and skills well beyond the award period. In turn, these benefits to the Fellows are also expected to improve the research capacity of their institutions and jurisdictions more broadly.

NSF EPSCoR is continuing to refine and implement a cohesive research competitiveness evaluation framework for the program. This evaluation, completed in 2020, helps to address the legislative objective of increasing the research competitiveness of jurisdictions receiving EPSCoR funding by (1) developing a flexible framework to explore, define, and measure research competitiveness in relation to each unique jurisdictional context, and (2) using evidence of jurisdictional progress toward research competitiveness over time for strategic program improvement. The evaluation builds on the findings and recommendations from the EPSCoR retrospective evaluation completed by the Science and Technology Policy Institute (STPI) in 2012. This activity has been underway since 2017. Key activities to date include descriptive and correlational analyses, development of a logic model for the research competitiveness framework, and refinement of a high-level theory of change model for the EPSCoR program. Further planned activities include:

- Developing briefing summaries for use by jurisdictional stakeholders to enhance their jurisdictional research competitiveness.
- Working with the Evaluation and Assessment Capability (EAC) section to address learning agenda questions in NSF's evidence building plan:
  - What are the most appropriate and useful implementation and performance indicators for monitoring progress of EPSCoR jurisdictions? How might a monitoring data system be developed leveraging easily accessible existing information and minimizing burden on jurisdictions?
  - How do EPSCoR funding strategies (infrastructure, co-funding, and outreach) contribute to increasing academic research competitiveness (ARC) across jurisdictions?
- Hosting a focused stakeholder meeting to (1) help identify potential impactful programmatic changes with respect to achieving the overall mission and increasing academic research competitiveness, (2) Produce a revised set of strategic priorities and an implementation plan that will leverage the current staffing capacity, and (3) Complement ongoing efforts with EAC and the ARC framework.

