NATIONAL SCIENCE FOUNDATION (NSF)
ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCOR)
REPORT TO CONGRESS FOR FISCAL YEAR 2024

This report summarizes fiscal year (FY) 2024 NSF funding to institutions and entities in EPSCoR jurisdictions, as required by the following enacted legislation:

- Public Law 111-358 – America COMPETES Reauthorization Act of 2010 Sec. 517 (42 U.S.C. 1862p-9), as amended by:
- Public Law 114-329 - American Innovation and Competitiveness Act (AICA) Sec. 103(d)(1)(D) and
- Public Law 117-167 - Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act Title III Sec. 10325 (a)(3)(F) (42 U.S.C. 19014)

Specifically, report details responsive to the AICA include:

(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 jurisdiction, under EPSCoR;
  (B) the total amount of agency funding made available to all institutions and entities within each EPSCoR jurisdiction;
  (C) the efforts and accomplishments to more fully integrate the EPSCoR jurisdictions in major agency activities and initiatives;
  (D) the percentage of EPSCoR reviewers from EPSCoR jurisdictions;
  (E) the number of programs or large collaborator awards involving a partnership of organizations and institutions from EPSCoR and non-EPSCoR jurisdictions; 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.

Report details responsive to the CHIPS and Science Act include:

(1) the Foundation's implementation of Sec. 10325(a)(3);
(2) progress in building research capacity, including both infrastructure and personnel, in EPSCoR jurisdictions, including at Historically Black Colleges and Universities, Tribal Colleges or Universities, minority-serving institutions, and emerging research institutions; and
(3) if the Foundation does not meet the requirement described in subparagraph (A), an explanation relating thereto and a plan for compliance in the following fiscal year and remediation.

American Innovation and Competitiveness Act (P.L. 114-329)

1. <u>EPSCoR Strategies and Objectives (42 USC 1862p-9(d)(1)</u>

EPSCoR's strategies and objectives in FY 2024 were aligned with its mission and programmatic goals, as described in the FY 2023 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."

In FY 2024, EPSCoR used three investment strategies in pursuit of its goal to strengthen research capacity and competitiveness in eligible jurisdictions. These investment strategies were: (i) Research Infrastructure Improvement (RII) awards that support physical, human, and cyberinfrastructure development; (ii) Co-Funding in partnership with NSF directorates and offices that support individual investigators and groups within EPSCoR jurisdictions; and (iii) 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.

Research Infrastructure Improvement (RII)
In FY 2024, EPSCoR RII programs were instrumental in helping to build jurisdictional capability and capacity. In FY 2024, EPSCoR RII programs spanned five active funding opportunities.

- EPSCoR RII Program: Track-1: The RII Track-1 program was archived in FY 2024, with the final cohort of awards made in May 2024. Awards provided up to $4 million per year for up to five years. They were 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 jurisdiction's science and technology initiative or plan.
- EPSCoR RII Program: EPSCoR Collaborations for Optimizing Research Ecosystems (E-CORE): E-CORE responds directly to input from recent national studies and legislation with a focus on the transformation of a jurisdiction's research ecosystem.[1,2,3] In FY 2024, E-CORE supported the strengthening of jurisdiction-wide research ecosystems by fostering interconnected networks and building research infrastructure to promote research capacity and competitiveness aligned with jurisdictional priorities. These awards provided up to $8 million for up to four years, with a renewal opportunity for up to an additional $8 million over up to four years.
- EPSCoR RII Program: EPSCoR Research Incubators for STEM Excellence (E-RISE): E-RISE supported the incubation of research teams and products in a scientific topical area that links to research priorities identified in a jurisdiction's approved Science and Technology (S&T) Plan. In FY 2024, E-RISE encouraged collaborative, hypothesis-driven research and workforce development to improve competitiveness in a selected STEM field. These awards provided up to $7 million for up to four years, with a renewal opportunity for up to an additional $4.5 million over up to three years.

  Together, E-CORE and E-RISE replaced the archived RII Track-1 program and provided expanded opportunities for STEM capacity-building activities in EPSCoR jurisdictions.

- EPSCoR RII Focused EPSCoR Collaborations (FEC) Program: FEC (formerly known as EPSCoR RII Track-2) built interjurisdictional collaborative teams of EPSCoR investigators in scientific focus areas consistent with NSF and national research priorities. FY 2024 awards provided up to $1 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.
- EPSCoR RII: EPSCoR Research Fellows (ERF): ERF (formerly known as EPSCoR RII Track-4) provided 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 in FY 2024, Fellows learned new techniques, benefited from access to unique equipment and facilities, and shifted their research toward transformative new directions. The experience gained through the fellowship is intended to provide a foundation for research collaborations that span the

[1] Envisioning the Future of NSF EPSCoR report, https://new.nsf.gov/funding/initiatives/epscor/future-nsf-epscor
[2] Government Accountability Report, https://www.gao.gov/assets/gao-22-105043.pdf
[3] Exploratory analysis and conceptual framework for examining research competitiveness, https://nsf-gov-resources.nsf.gov/2022-06/EPSCoR%20Base%20Period%20Final%20Report%20-%20%28508%20Compliant%29.pdf

recipient's entire career. These benefits to the Fellows are also expected to, in turn, enhance the research capacity of their institutions and jurisdictions.

Co-funding

The EPSCoR co-funding mechanism seeks to supplement support for researchers and institutions in EPSCoR jurisdictions through partially funding some meritorious proposals submitted to NSF programs. Proposals selected for co-funding have been merit reviewed and recommended for award but could not be funded without the combined support of the funding directorate(s) and EPSCoR co-funding. FY 2024 co-funding leveraged EPSCoR investment and facilitated participation of EPSCoR scientists and engineers in NSF-wide programs and initiatives.

Workshops and Outreach

In FY 2024, EPSCoR also funded 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, communication, cyberinfrastructure, evaluation, and other areas of importance to EPSCoR jurisdictions. In addition, EPSCoR supported outreach travel that enabled NSF staff from all directorates and offices to work with the EPSCoR research community on NSF opportunities, priorities, programs, and policies. This travel better acquainted NSF staff with the science and engineering accomplishments, ongoing activities and new directions and opportunities in research and education in EPSCoR jurisdictions.

EPSCoR Strategic Data

In FY 2024, EPSCoR launched the EPSCoR Data Outcomes Collection System (EDOCS), which helps track project and programmatic progress in relation to EPSCoR's goals and objectives. EDOCS also helps the program to standardize the depth and breadth of information collected from funded EPSCoR RII projects and will be used to measure capacity-building efforts within the research competitiveness evaluation framework for the program. This system collected data for RII Track-1 and RII FEC in FY 2024.

2. Awards Made in Previous Fiscal Year (42 U.S.C. 1862p-9(d)(2))

NSF Funding Made Available, by Jurisdiction, under EPSCoR (42 U.S.C. 1862p-9(d)(2)(A)).

In FY 2024, NSF EPSCoR invested a total of $268.24 million in support of its programmatic activities. Within total FY 2024 funding, $201.22 million (75.0 percent) was directed to 180 new RII awards, $66.64 million (24.8 percent) to 298 co-funded awards, and $381,000 (0.1 percent) to outreach activities and two workshop awards. The table below details the investments from EPSCoR resources and EPSCoR investments in co-funding actions.

FY 2024 EPSCoR Funding by Jurisdiction

(Dollars in Millions)

EPSCoR Jurisdiction	RII Program	Outreach & Workshops	EPSCoR Co-funding	EPSCoR Total
AK	$4.74	-	$0.82	$5.56
AL	11.35	-	4.93	16.27
AR	3.62	-	1.71	5.33
DE	2.02	0.10	3.42	5.54
GU	3.52	-	-	3.52
HI	6.37	-	1.41	7.78
IA	7.27	-	3.63	10.90
ID	8.88	-	2.92	11.80
KS	1.98	-	3.32	5.30
KY	11.21	-	2.51	13.72
LA	19.72	-	5.71	25.44
ME	12.15	-	0.55	12.70
MS	10.78	-	4.11	14.88
MT	10.16	-	3.57	13.72
ND	5.67	-	0.57	6.24
NE	2.38	-	4.26	6.64
NH	4.51	-	1.28	5.80
NM	16.13	-	2.15	18.29
NV	8.56	-	2.26	10.82
OK	7.21	-	3.16	10.36
PR	3.58	-	1.27	4.85
RI	5.03	-	1.11	6.14
SC	7.26	-	5.00	12.26
SD	10.08	0.20	1.62	11.90
VI	-	-	-	-
VT	6.29	-	0.99	7.29
WV	5.05	-	2.40	7.46
WY	1.36	-	1.96	3.33
Admin	4.33	0.08	-	4.42
Total	**$201.22**	**$0.38**	**$66.64**	**$268.24**

Total NSF Funding Made Available in all EPSCoR Jurisdictions (42 U.S.C. 1862p-9(d)(2)(B)).
In FY 2024, NSF invested a total of $1,306.13 million in support of EPSCoR jurisdictions. The table below details NSF investments in EPSCoR jurisdictions including research support, STEM Education, and major research equipment funding.

FY 2024 NSF Funding
(Dollars in Millions)

EPSCoR Jurisdiction	NSF Funding
AK	$48.14
AL	95.81
AR	33.10
DE	61.75
GU	4.17
HI	60.23
IA	66.67
ID	41.73
KS	60.79
KY	48.01
LA	87.03
ME	32.73
MS	67.57
MT	40.15
ND	36.63
NE	52.80
NH	33.06
NM	64.40
NV	39.57
OK	44.79
PR	19.85
RI	57.35
SC	114.67
SD	24.42
VI	2.54
VT	21.23
WV	28.00
WY	18.97
Total	**$1,306.13**

Integration of EPSCoR Jurisdictions in Major Activities and Initiatives of the Foundation (42 U.S.C. 1862p-9(d)(2)(C)).

In FY 2024, all EPSCoR programmatic activities targeted integration and assimilation of EPSCoR jurisdictions into the research and education programs of the Foundation. RII awards promoted the coordination and integration of recipient jurisdictions into major NSF programmatic activities. Additionally, EPSCoR consulted and engaged 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 assisted in the identification of reviewers for RII merit review panels, served as site visit and RSV observers, and provided knowledge about the ongoing activities within the

directorate that could be leveraged to sustain RII efforts after the performance period of the EPSCoR award.

In FY 2024, National, regional, and jurisdictional meetings of the EPSCoR community facilitated 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 were also vital to this integration.

Outreach to EPSCoR jurisdictions by NSF staff promoted integration of the EPSCoR community into mainstream NSF programs, as did co-funding of awards with the disciplinary programs of the Foundation. Through the EPSCoR outreach investment strategy, EPSCoR facilitated opportunities for researchers and educators from EPSCoR jurisdictions to meet with NSF staff. In these meetings, the EPSCoR participants were provided with information on NSF strategic priorities, funding opportunities, and major Foundation activities and initiatives.

In FY 2024, EPSCoR promoted engagement of the EPSCoR community in NSF and other national activities. Examples are:

- Hosted the 2024 EPSCoR Annual Principal Investigator (PI) Meeting on May 20-21, where the EPSCoR community and NSF staff shared effective practices in research, strategic planning, communication, evaluation, and other areas of importance to EPSCoR jurisdictions and NSF. In addition to plenary presentations, the meeting included program-specific breakout sessions for PIs and an NSF Open House showcasing activities and funding opportunities in all eight NSF disciplinary directorates, the NSF Policy Office, and the Division of Grants and Agreements. Every EPSCoR jurisdiction was represented at this meeting, which had nearly 300 non-NSF participants (in-person and virtual).
- Encouraged researchers, faculty, and other stakeholders in EPSCoR jurisdictions to participate in NSF committee and review panels across NSF (e.g., advisory committees, committee of visitors, site visits, merit review panels). For example, in FY 2024, 24.2 percent of membership on NSF advisory committees were from EPSCoR jurisdictions.
- Invested $47.02 million in FY 2024 funding for the inaugural E-RISE and E-CORE awardees. Together, these awards encompass 58 funded institutions, including 37 emerging research institutions, 29 primarily undergraduate institutions, and 14 minority-serving institutions.
- Supported fourteen new RII Focused EPSCoR Collaborations (FEC) awards. FY 2024 awards represent a total EPSCoR investment of approximately $78 million over the four-year award duration.
- Supported 63 RII EPSCoR Research Fellows (ERF) awards, representing a total EPSCoR investment of $16.74 million over the two-year award duration.
- Launched the EPSCoR Graduate Fellowship Program (EGFP) to enhance the capacity and competitiveness of EPSCoR jurisdictions by providing funding to support graduate students in EPSCoR jurisdictions. EGFP leveraged the NSF Graduate Fellowship Program (GRFP) by providing funding for applicants who received the distinction of GRFP Honorable Mention to obtain financial support to pursue their graduate education at an institution in an EPSCoR jurisdiction.
- Invested approximately $4.1 million in support of Campus Cyberinfrastructure (CC*) awards to EPSCoR jurisdictions. The CC* program invested in coordinated campus-level networking and cyberinfrastructure improvements, innovation, integration, and engineering for science

applications and distributed research projects.
- Committed $1.85 million to fund 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 $21.82 million for 71 CAREER awards for early-career faculty in EPSCoR jurisdictions. The NSF CAREER program in FY 2024 supported 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.
- Hosted an "Exploring EPSCoR Ecosystems" workshop, bringing together approximately 300 EPSCoR stakeholders to discuss strategies for further developing their jurisdictional STEM capacity through the new E-RISE RII and E-CORE RII programs, and the role of the jurisdictional science and technology committees within this framework.
- Convened two meetings with the EPSCoR Interagency Coordinating Committee (EICC) to share relevant program information and identify opportunities for maximizing jurisdictional impact.
- Funded a Workshop for Artificial Intelligence-powered Materials Discovery, leveraging AI to address critical societal challenges like global food shortages and climate change. This workshop brought together approximately 200 researchers from nine EPSCoR jurisdictions and 40 key leaders in AI, engineering, materials science, physical science, and data science.

EPSCoR Reviewers (42 U.S.C. 1862p-9(d)(2)(D)).
EPSCoR collects demographics of all reviewers who evaluate proposals submitted to EPSCoR RII programs. In FY 2024, there were 455 reviewers. Of these, 123, or 27 percent were from EPSCoR jurisdictions.

EPSCoR Collaborations and Partnerships (42 U.S.C. 1862p-9(d)(2)(E)).
All RII awards involved collaborations among scientists and engineers in EPSCoR jurisdictions. EPSCoR collected data on RII Track-1 and FEC awardees' partnerships and collaborations via the EPSCoR Data Outcomes Collection System (EDOCS) in FY 2024. EDOCS modules for E-CORE, E-RISE, and ERF were developed in FY 2024 and data on their outcomes, including collaborations and partnerships, will be available in FY 2025. In FY 2024, RII Track-1 and FEC participants developed 767 institutional collaborations within EPSCoR jurisdictions; 702 institutional collaborations between EPSCoR jurisdictions and non-EPSCoR jurisdictions; and 221 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 and FEC projects. Of these 1,690 catalyzed partnerships, 50 (3.0 percent) were with national laboratories and 60 (3.6 percent) were with industry partners.

Among the 298 awards co-funded by EPSCoR in FY 2024, 269 involved collaborative research between multiple institutions. Of those 269 collaborative awards, 126 (46.8 percent) were collaborations between investigators from institutions in EPSCoR and non-EPSCoR jurisdictions.

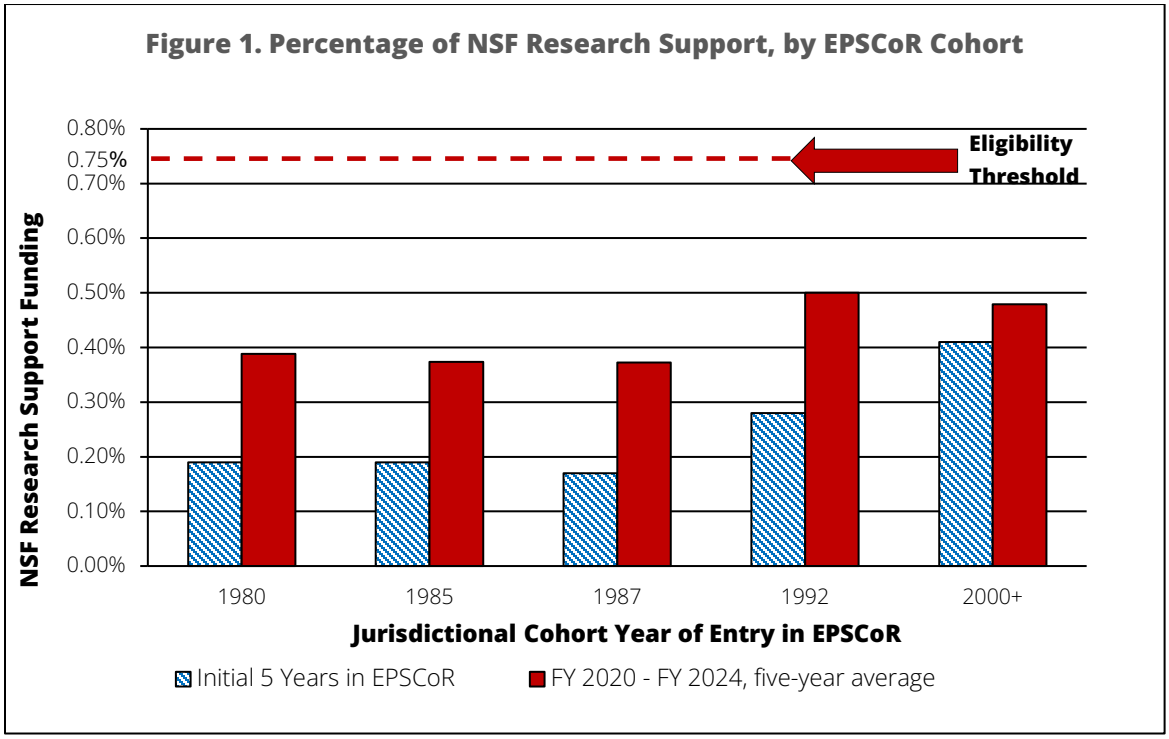
3. Analysis of Gains Over Last 5 Years

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 (42 U.S.C. 1862p-9(d)(3)).
The CHIPS and Science Act of 2022 (P.L. 117-167, Sec.10325(a)(3)(H)(i)) suspended inclusion of new or graduation of existing EPSCoR jurisdictions through FY 2027. However, EPSCoR continued to collect data related to eligibility as a measure of a jurisdiction's ability to obtain NSF funding. Historically, a

jurisdiction was eligible to participate in EPSCoR programs if its level of NSF funding was 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 were 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 2024.

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



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 a 104 percent increase in NSF research funding over the past 44 years of EPSCoR activity. The 1985 cohort (Alabama, Kentucky, Nevada, North Dakota, Oklahoma, Puerto Rico, Vermont, and Wyoming) demonstrates a 97 percent increase during its 39 years of EPSCoR participation. The 1987 cohort (Idaho, Louisiana, Mississippi, and South Dakota) shows a 119 percent increase over the past 37 years, whereas the 1992 cohort (Kansas and Nebraska) has a 79 percent increase in competitiveness over its 32 years of EPSCoR involvement. In general, 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 17 percent increase in research funding.

Percentage of NSF Funding, by Jurisdiction and EPSCoR Cohort

	Initial 5 Years in EPSCoR[1]	Most Recent 5 Year Period (FY 2020-2024)[2]	Percent Change Over Time
1980 Cohort	0.19%	0.39%	104%
Arkansas	0.10%	0.34%	240%
Maine	0.27%	0.26%	-4%
Montana	0.13%	0.44%	238%
South Carolina	0.41%	0.68%	66%
West Virginia	0.07%	0.22%	214%
1985 Cohort	0.19%	0.37%	97%
Alabama	0.33%	0.91%	176%
Kentucky	0.22%	0.40%	82%
Nevada	0.14%	0.39%	179%
North Dakota	0.06%	0.24%	300%
Oklahoma	0.30%	0.48%	60%
Puerto Rico	0.15%	0.23%	53%
Vermont	0.10%	0.14%	40%
Wyoming	0.20%	0.20%	0%
1987 Cohort	0.17%	0.37%	119%
Idaho	0.08%	0.36%	350%
Louisiana	0.36%	0.64%	78%
Mississippi	0.16%	0.32%	100%
South Dakota	0.09%	0.17%	89%
1992 Cohort	0.28%	0.50%	79%
Kansas	0.34%	0.52%	53%
Nebraska	0.22%	0.48%	118%
2000+ Cohort	0.41%	0.48%	17%
Alaska	0.55%	0.65%	18%
Delaware	0.41%	0.55%	34%
Guam	0.02%	0.01%	-50%
Hawaii	0.56%	0.64%	14%
Iowa	0.71%	0.73%	3%
New Hampshire	0.44%	0.39%	-11%
New Mexico	0.58%	0.65%	12%
Rhode Island	0.70%	0.65%	-7%
Virgin Islands	0.00%	0.04%	400%

[1] Percentages based on eligibility guidelines at the time of entry into the EPSCoR program.

[2] Percentages based on current eligibility guidelines.

Additional EPSCoR Impacts – FY 2024

This section provides FY 2024 EPSCoR RII Track-1 and FEC science and technology outputs of academic research capacity, human resource development, and the demographics of participants.

The following table demonstrates quantifiable outputs of NSF EPSCoR's RII Track-1 and FEC programs in FY 2024. 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 2024 RII Track-1 and Track-2 Aggregate of EPSCoR Outputs[1]

	Track-1	FEC	Total
Number of Active Awards	31*	68*	99
Publications	1,049	1,057	2,106
Grants Awarded	391	377	768
Value of Grants Awarded (Dollars in Millions)	$312.00	$566.52	$878.52
Patents Awarded	4	2	6
Patents pending	24	3	27

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

* Some jurisdictions have multiple RII Track-1 awards, since there is an allowable 6-month overlap for expiring and new awards. Of the 68 active RII FEC awards, one had not yet submitted data for the reporting period.

The table below indicates EPSCoR's ongoing support of human resources in STEM in the RII Track-1 and FEC 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 2024 RII Track-1 and RII FEC Human Resource Development[1]

	Track-1	FEC	Total
Faculty Supported	1,215	685	1,900
Post-Docs Supported	130	157	287
Graduate Students Supported	880	686	1,566
Undergraduates Supported	841	416	1,257
New Faculty Hired	29	9	38
Graduate Degrees Conferred	116	82	198
Undergraduate Degrees Conferred	102	80	182

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

Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act (P.L. 117-167)

The CHIPS and Science Act reiterated the ongoing importance of investments in EPSCoR jurisdictions and encouraged the development of new programs throughout NSF responsive to EPSCoR jurisdictions' and the Nation's discovery, innovation, and training goals. NSF activities in response to the CHIPS and Science Act will have sustainable positive impact, which will be reflected in each future EPSCoR annual report.

1. Foundation's implementation of Sec. 10325(a)(3)

In FY 2024, NSF's implementation strategy of the provisions in Section 10325(a)(3) of the CHIPS and Science Act was multi-faceted and organized around two strategies aligned with the intent of the legislation of "prioritizing funding and activities that enable sustainable growth in the competitiveness of EPSCoR jurisdictions". The strategies were as follows:

1. Develop or grow NSF funding opportunities that support new or enhanced research capacity building approaches to promote sustainable research infrastructure advancements at institutions in EPSCoR jurisdictions.
2. Enhance and track EPSCoR-relevant knowledge sharing within NSF and expand external outreach to institutions and organizations in EPSCoR jurisdictions.

To implement the provisions in Sec 10325(a)(3), a cross-cutting leadership and management structure was used. At the agency level, NSF's executive leadership team provided strategic direction in activities and efforts to support implementation of the two aforementioned strategies. Additionally, the NSF EPSCoR Strategy, Engagement, and Consultation (ESEC) Working Group, comprised of representatives from NSF's directorates and offices, coordinated the agencywide implementation plan process for directorates and offices. NSF has created internal resources available to all NSF staff to monitor the agency's progress toward achieving annual spending targets.

2. Building Research Capacity in EPSCoR jurisdictions at Minority-serving Institutions and Emerging Research Institutions

For FY 2024, NSF's progress in building research capacity at minority-serving institutions (MSIs), including Historically Black colleges and universities (HBCUs) and tribal colleges and universities, as well as emerging research institutions (ERIs) in EPSCoR jurisdictions is provided in the table below.

NSF's FY 2024 Support of Emerging Research Institutions and Minority-Serving Institutions in EPSCoR Jurisdictions[1,2]

(Dollars in Millions)

	FY 2024 Award Funding	Proposals Evaluated	Awards Funding	Funding Rate
All Institutions of Higher Education (IHE)[3]	$6,753.27	35,324	9,443	27%
All EPSCoR IHEs[3]	$1,193.72	5,335	1,661	31%
All ERIs	$1,233.04	9,116	2,300	25%
All MSIs	$1,173.77	6,190	1,636	26%
All HBCUs	$141.05	686	210	31%
All Tribal Colleges	$25.60	34	18	53%
ERIs in EPSCoR Jurisdictions	$271.51	1,215	381	31%
MSIs in EPSCoR Jurisdictions	$189.50	665	232	35%
HBCUs in EPSCoR Jurisdictions	$42.43	173	63	36%
Tribal Colleges in EPSCoR Jurisdictions	$18.55	22	11	50%

[1] Figures sourced from *NSF by the Numbers* - https://new.nsf.gov/about/about-nsf-by-the-numbers

[2] Data retrieved on January 7, 2025

[3] IHEs filter excludes: federal, individuals, industry, other, and small business.

3. Foundation's Compliance with EPSCoR Funding Targets from CHIPS and Science Act
   For FY 2024, NSF had two CHIPS and Science Act directed funding targets:
   - 16 percent "of the amounts appropriated to the Foundation for research and related activities, and science, mathematics, and engineering education and human resources programs, excluding those amounts made available for polar research and operations support (and operations and maintenance of research facilities), shall be awarded to EPSCoR institutions."
   - 18 percent "of the amounts appropriated to the Foundation for scholarships (including at community colleges), graduate fellowships and traineeships, and postdoctoral awards shall be used to support EPSCoR institutions."

NSF's EPSCoR funding targets for total award funding and scholarships, fellowships, traineeships, and postdoctoral awards are calculated using a consistent and replicable methodology that will enhance NSF's ability to monitor and provide oversight in the agency's progress to meeting the funding targets in a given fiscal year.

As previously noted in the report, NSF's total FY 2024 funding to EPSCoR jurisdictions was $1,306.13 million representing an EPSCoR jurisdiction investment rate of 19.6 percent. This exceeds NSF's FY 2024 CHIPS and Science Act funding target of 16.0 percent. The investments include the one-time funding provided for implementation of the Research and Development, Competition, and Innovation Act that was available for obligation in FYs 2023 and 2024.

With regard to the funding target of 18 percent for scholarships, fellowships, traineeships and postdoctoral awards, NSF exceeded this target and achieved an investment rate of 18.6 percent in FY 2024. This target is based on NSF's programs where NSF controls funding for scholarships, graduate fellowships and traineeships, and postdoctoral awards.