

# ENVISIONING THE FUTURE OF EPSCoR



## ENGAGE. ENRICH. EXPAND. EMPOWER.

A coordinated national response is required to meet the challenge of increased global leadership in the scientific enterprise and to grow the number of students pursuing degrees in science, technology, engineering, and mathematics (STEM).

NSF EPSCoR was created to grow research and education capacity to address national and global challenges requiring significant funding in research and infrastructure. By supporting geographic diversity, the program distributes federal funding more equitably to jurisdictions receiving less funding in terms of research and infrastructure.



### NSF EPSCoR has the following goals:



- **Catalyze research capability across and among jurisdictions;**
- **Establish STEM professional development pathways;**
- **Broaden participation of diverse groups/institutions in STEM;**
- **Effect engagement in STEM at national and global levels; and**
- **Impact jurisdictional economic development.**

Beginning in March 2021, the Committee on Equal Opportunities in Science and Engineering (CEOSE), formed a subcommittee that embarked on a visioning process to examine the results of NSF EPSCoR and provide recommendations for improvement. The subcommittee found that NSF EPSCoR facilitated collaboration in areas of high national STEM priority (e.g., artificial intelligence, advanced manufacturing, climate resilience).

## ENHANCING GEOGRAPHIC DIVERSITY

To support research and innovation across the nation, NSF EPSCoR provides support to states and territories that traditionally receive less research funding. In 2022, 28 jurisdictions (25 states and three territories) are eligible for EPSCoR support.

These collaborations resulted in increased NSF research funding and, as a result, increased number of faculty hired and retained in EPSCoR jurisdictions. The evidence supporting NSF EPSCoR's successes is strong. Additionally, the report highlights several novel strategies to enhance support of the achievement of EPSCoR goals. The full EPSCoR report can be accessed at [nsf.gov/epscor](https://www.nsf.gov/epscor).



## THE REPORT INCLUDES THE FOLLOWING RECOMMENDATIONS FOR NSF EPSCoR:

1. **Ecosystem Approach to Investments:** Leverage partnerships with other federal agencies to ensure capacity and support for basic science questions, commercialization, job creation, and workforce support. **Expand internal funding mechanism and encourage collaboration between EPSCoR and non-EPSCoR jurisdictions.**
2. **Increased Integration of NSF EPSCoR:** Support greater integration of NSF EPSCoR across the Foundation and develop internal programs that more effectively **leverage the unique strengths and priorities of EPSCoR jurisdictions.**
3. **Diverse Talent Recruitment and Retention:** Grow the critical mass of highly competitive and capable faculty, technical staff, and students and develop new grant programs to **encourage nationally competitive, sustainable research** and promote collaboration within NSF EPSCoR jurisdictions and beyond.
4. **Physical and Administrative Infrastructure:** Invest in constructing and/or modernizing research infrastructure, critical for building the research infrastructure for sustainable research and economic competitiveness in NSF EPSCoR jurisdictions.
5. **Programs to Promote Intra- and Inter-jurisdictional Research, Education, and Workforce Development:** Explore opportunities to **fund collaborative proposals across multiple jurisdictions** to broaden impacts well beyond what single jurisdictions can accomplish.
6. **Support for Workforce, Including Those with Diverse Career Pathways:** Expand research and collaboration opportunities for individuals at different career stages, especially **pre-tenure and pre-promotion mid-career faculty.**
7. **Proactive Inclusion Strategies:** Provide opportunities for EPSCoR researchers, particularly those **from underrepresented groups**, to participate and offer input on NSF panels and advisory committees, **including all pre- and post-award facets of the EPSCoR program.**
8. **Access and Opportunity:** Provide greater support in research administration, funding of brick-and-mortar research facilities, research collaborations, and innovative mentoring partnerships **at Minority-Serving Institutions (MSIs), Primarily Undergraduate Institutions (PUIs), and Two-Year Colleges (TYCs).**

## CATALYZING SCIENCE, DISCOVERY AND INNOVATION

NSF EPSCoR is a fundamental part of NSF's strategy to reach the "Missing Millions," people who would be engaged in the STEM workforce if those areas reflected the makeup of the general population in terms of racial, ethnic and gender diversity. STEM leaders from underrepresented groups, including Black or African American, Hispanic or Latino American, American Indian, Alaska Native, persons with disabilities, and women, provide perspectives necessary to catalyze science, discovery, and innovation in EPSCoR jurisdictions and across the U.S.