

# Audit of NSF's Established Program to Stimulate Competitive Research Awards

NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL

August 13, 2021  
OIG 21-2-004





## AT A GLANCE

### Audit of NSF Established Program to Stimulate Competitive Research Awards

Report No. OIG 21-2-004  
August 13, 2021

#### WHY WE DID THIS AUDIT

We performed this audit to determine if NSF has sufficient procedures and guidance to help ensure awardees comply with NSF and federal requirements in the administration of awards for the Established Program to Stimulate Competitive Research (EPSCoR). EPSCoR supports projects in states and territories that have historically received a small share of NSF grant dollars. EPSCoR's mission is to develop research competitiveness in these jurisdictions by strengthening their science, technology, engineering, and mathematics capabilities.

#### WHAT WE FOUND

NSF has procedures and guidance to help ensure EPSCoR awardees comply with NSF and federal requirements. For example, NSF conducts site visits, reviews budget and subaward requests, and educates awardees through outreach activities to help ensure they comply with NSF and federal requirements.

However, NSF could improve program guidance and outreach for its largest EPSCoR awards, especially those that include subrecipients. For example, at the time of our audit, NSF did not provide specific guidance and outreach to prime recipients about assessing and monitoring risk for inexperienced subrecipients. NSF also did not have sufficient guidance on participant support, promotional expenses, and entertainment costs typically associated with EPSCoR-funded education, outreach, and diversity programs. Additionally, NSF could improve its monitoring of EPSCoR awardees when the awardees update their accounting systems. NSF acknowledged these concerns and is taking steps to strengthen its oversight of EPSCoR awards.

#### WHAT WE RECOMMEND

We made six recommendations to improve NSF's ability to ensure awardees are complying with NSF and federal requirements in the administration of EPSCoR awards.

#### AGENCY RESPONSE

NSF agreed with all six recommendations. NSF's response is included in its entirety in Appendix A.

FOR FURTHER INFORMATION, CONTACT US AT [OIGPUBLICAFFAIRS@NSF.GOV](mailto:OIGPUBLICAFFAIRS@NSF.GOV).



**National Science Foundation • Office of Inspector General**  
2415 Eisenhower Avenue, Alexandria, Virginia 22314

**MEMORANDUM**

**DATE:** August 13, 2021

**TO:** Suzanne Iacono  
Office Head  
Office of Integrative Activities

Teresa Grancorvitz  
Chief Financial Officer and Office Head  
Office of Budget, Finance, and Award Management

**FROM:** Mark Bell ✓ [REDACTED]  
Assistant Inspector General  
Office of Audits

**SUBJECT:** Final Report, No. OIG 21-2-004, *Audit of NSF's Established Program to Stimulate Competitive Research Awards*

Attached is the final report on the subject audit. We have included NSF's response to the draft report as an appendix.

This report contains six recommendations aimed at improving NSF's administration of its Established Program to Stimulate Competitive Research (EPSCoR) awards. NSF concurred with all of our recommendations. In accordance with Office of Management and Budget Circular A-50, Audit Followup, please provide a written corrective action plan to address the report recommendations. In addressing the report's recommendations, this corrective action plan should detail specific actions and associated milestone dates. Please provide the action plan within 60 calendar days.

We appreciate the courtesies and assistance NSF staff provided during the audit. If you have any questions, please contact Kelly Stefanko, Audit Manager, at 703.292.7100 or [oigpublicaffairs@nsf.gov](mailto:oigpublicaffairs@nsf.gov).

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## ABBREVIATIONS

ACM\$	Award Cash Management Service
BFA	Office of Budget, Finance and Award Management
EPSCoR	Established Program to Stimulate Competitive Research
PAPPG	<i>Proposal and Award Policies and Procedures Guide</i>
RII	Research Infrastructure Improvement
STEM	science, technology, engineering, and math
Uniform Guidance	Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards



## Background

The National Science Foundation is an independent federal agency created by Congress in 1950 “[t]o promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes” (Pub. L. No. 81-507). With an annual budget of \$8.5 billion (FY 2021), NSF funds approximately 25 percent of all federally supported basic research conducted by America's colleges and universities. In fields such as mathematics, computer science, and the social sciences, NSF is the major source of federal funding. In all its activities and programs, NSF is committed to expanding efforts to increase participation from underrepresented groups and diverse institutions throughout the United States.

### EPSCoR Mission and Goals

The National Science Board founded NSF’s Established Program to Stimulate Competitive Research<sup>1</sup> (EPSCoR) program by resolution in 1978 and Congress formally established the program by statute in 1988.<sup>2</sup> EPSCoR supports projects in states, commonwealths and territories (jurisdictions) that have historically received a small share of NSF grant dollars. The program’s mission is to enhance research competitiveness in targeted jurisdictions by strengthening science, technology, engineering, and math (STEM) capability and capacity. EPSCoR envisions its jurisdictions as recognized contributors to the national and global STEM research enterprise. Program goals include:

- Catalyzing research capability across and among jurisdictions;
- Establishing STEM professional development pathways;
- Broadening participation of diverse groups and institutions in STEM;
- Effecting engagement in STEM at national and global levels; and
- Impacting jurisdictional economic development.

Jurisdictions are eligible to participate in NSF’s EPSCoR program if their most recent 5-year level of total NSF funding is less than or equal to 0.75 percent of the total NSF budget. In FY 2020, Congress directed NSF to invest \$190 million in EPSCoR.

NSF uses three major investment strategies to achieve program goals: Research Infrastructure Improvement (RII) awards, co-funding, and workshops. RII Track-1 awards — NSF’s largest EPSCoR awards — provide up to \$20 million total over 5 years. Awardees must provide additional funding toward total project costs (cost sharing), and an eligible jurisdiction may only submit one proposal. We focused on the administration of RII Track-1 awards for this audit. For a summary of EPSCoR investment strategies, including the four RII award tracks, please see Appendix B.

All EPSCoR RII awards encourage broadening participation of underrepresented groups in science and engineering. For example, the RII Track-1 program solicitation specifically encourages activities that facilitate the entry of women, underrepresented minorities, and persons with disabilities into the STEM

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<sup>1</sup> It was originally named the *Experimental* Program to Stimulate Competitive Research

<sup>2</sup> Pub. L. 114-329, January 6, 2017, *The American Innovations and Competitiveness Act* §103 reaffirms EPSCoR.



pipeline and broadening participation in STEM to students who are in the first generation of their family to attend college, or those from economically disadvantaged or rural populations.

### **Administration of EPSCoR Awards**

NSF's *Proposal and Award Policies and Procedures Guide (PAPPG)* provides guidance on proposal submission and award management for EPSCoR awards. NSF implements the *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance)*<sup>3</sup> through the PAPPG and NSF's Grant General Conditions. If the PAPPG and NSF Grant Conditions do not address a specific area covered by the Uniform Guidance, the requirements specified in the Uniform Guidance must be followed.

As the federal awarding agency, NSF must manage and administer federal awards "... in a manner so as to ensure that Federal funding is expended and associated programs are implemented in full accordance with U.S. statutory and public policy requirements...."<sup>4</sup> Each EPSCoR awardee is responsible for complying with all requirements of the federal award. It has full responsibility for activity supported under the award and the results achieved.

### **Subaward Agreements**

Many EPSCoR-funded objectives are achieved through subawards with other organizations, or subrecipients, who perform a portion of the activity required under the prime award. NSF encourages EPSCoR awardees to include inexperienced institutions by funding research through such subaward agreements. An awardee that subawards a portion of its award to another organization is deemed a pass-through entity or prime recipient. The Uniform Guidance requires pass-through entities to identify and monitor subrecipients, as well as evaluate each subrecipient's risk of noncompliance with laws and regulations to determine an appropriate level of monitoring. Per NSF's PAPPG, no portion of the proposed activity may be subawarded or transferred to another organization without prior written NSF authorization.

### **Audit Objective**

The objective of this audit was to determine if NSF has sufficient procedures and guidance to help ensure awardees comply with NSF and federal requirements in the administration of EPSCoR awards. To accomplish this objective, we judgmentally selected 10 EPSCoR awardees, assessed how the awardees charged costs to the awards, and interviewed NSF and awardee staff responsible for administering the awards. From the 10 awardees, we judgmentally selected two for complete audits, the results of which we shared in prior reports.<sup>5</sup> Please see Appendix D for more information about our objective, scope, and methodology.

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<sup>3</sup> 2 CFR Pt. 200

<sup>4</sup> 2 CFR Pt. 200.300(a)

<sup>5</sup> NSF OIG Report No. 21-1-001, NSF OIG Report No. OIG 21-1-003



## Results of Audit

NSF has procedures and guidance to help ensure EPSCoR awardees comply with NSF and federal requirements. However, NSF could improve program guidance and outreach for its largest EPSCoR awards, especially those that include subrecipients. For example, at the time of our audit, NSF did not provide specific guidance and outreach to prime recipients about assessing and monitoring risk for inexperienced subrecipients. NSF also did not have sufficient guidance on participant support, promotional expenses, and entertainment costs typically associated with EPSCoR-funded education, outreach, and diversity programs. Additionally, NSF could improve its monitoring of EPSCoR awardees when the awardees update their accounting systems. NSF acknowledged these concerns and is taking steps to strengthen its oversight of EPSCoR awards.

### **NSF Has Procedures to Help Ensure Financial and Programmatic Compliance**

NSF conducts site visits, reviews budget and subaward requests, and conducts outreach activities to help ensure EPSCoR awardees comply with NSF and federal requirements. NSF's EPSCoR Section, within NSF's Office of Integrative Activities, works with other NSF offices to manage and administer the awards. Specifically:

- EPSCoR program officers, who are subject matter experts in both technical and programmatic areas, conduct merit review of proposals, recommend which projects NSF should fund, and oversee awardees' achievement of scientific objectives. Program officers conduct two site visits to evaluate the project's progress relative to project goals per EPSCoR RII Track-1 award. They also review required annual and final project reports.
- NSF's Division of Institution and Award Support, within NSF's Office of Budget, Finance and Award Management (BFA), conducts pre-award reviews on EPSCoR RII awards.
- NSF's Division of Grants and Agreements, within BFA, reviews the initial budget and approves requests for subawards.

NSF also engages in outreach activities, such as grants conferences, to educate the award community about funding opportunities and help prospective awardees submit more competitive proposals. Outreach activities also include information about policies and procedures to help ensure financial and programmatic compliance with NSF and federal requirements.

### **NSF Could Help Ensure EPSCoR Awardees Better Assess and Monitor Subrecipient Risk**

The Uniform Guidance requires awardees to evaluate each subrecipient's risk of noncompliance with federal statutes, regulations, and the terms and conditions of the subaward to determine the appropriate level of subrecipient monitoring the pass-through entity must conduct. Because EPSCoR awardees are encouraged to broaden impacts by funding research at inexperienced institutions through subaward agreements, it is especially important that prime recipients conduct proper risk assessments of those institutions and subsequently provide a sufficient level of monitoring.



Neither of the two awardees we audited properly assessed risk nor implemented an appropriate monitoring plan for their inexperienced subrecipients. For example, one prime recipient assessed a subrecipient with no experience managing a federal subaward as “medium risk” but did not provide additional monitoring or ensure the subrecipient had the procedures, accounting systems, and staff to adequately administer federal funds. As a result, we questioned all costs (more than \$117,000) the subrecipient charged.

Similarly, the other prime recipient assessed a subrecipient as a “low-risk” institution even though it had limited experience administering federal awards. The prime recipient did not identify, for example, that the subrecipient was using budget estimates instead of actual expenses and was not maintaining support for costs it charged to the subaward, leading us to question all costs (\$515,000) the subrecipient charged to one award. In total, we questioned nearly \$883,000 the subrecipient charged to EPSCoR awards.

At the time of our audit, NSF did not conduct specific outreach activities to help educate prime recipients about assessing subrecipient risk or developing sufficient monitoring plans for inexperienced subrecipients.

We alerted NSF to these prime recipients’ challenges with assessing subrecipient risk. In response, NSF suggested BFA could participate in EPSCoR Section-led site visits, which currently focus on technical aspects of the program. This would give BFA an opportunity to review awardees’ assessments of subrecipient risk and oversight plans for high-risk subrecipients. It would also help EPSCoR jurisdictions build their award management capacity.

## **NSF Could Improve Guidance on Participant Support Costs for EPSCoR-Funded Programs**

According to the Uniform Guidance, participant support costs are direct costs paid in connection with a conference or training project, such as registration fees.<sup>6</sup> NSF’s award terms and conditions also identify other categories of participant support costs, such as gifts and souvenirs. Per NSF’s award terms and conditions, indirect costs<sup>7</sup> are not allowed on items categorized as participant support costs. In addition, costs must be treated consistently to be allowable on federal awards.

Based on our audits of two awardees, we concluded NSF did not have sufficient guidance on participant support costs typically associated with education, outreach, and diversity programs. Both awardees charged unallowable indirect costs on expenses involved with residential summer research programs that they did not appropriately identify as participant support. For example, one awardee used NSF funds to pay for participants’ supplies such as backpacks and school supplies, but it did not account for the supplies as participant support costs; therefore, we questioned the associated indirect costs as unallowable charges.

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<sup>6</sup> Per 2 CFR Pt. 200.1, participant support costs means “direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with conferences, or training projects.”

<sup>7</sup> Per 2 CFR Pt. 200.1, “Indirect (facilities & administrative (F&A)) costs means those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved....”





One awardee told us the definition of participant support costs included in NSF’s PAPPG does not include supplies. However, NSF’s definition does not exclude it. When we asked for clarification about participant support and summer research programs, NSF’s Division of Institution and Award Support told us participant support costs would be dependent on each institution’s internal controls and policies. According to NSF:

... allowability of participant support costs is determined by the facts and circumstances of the award and whether the costs are necessary to complete the goals and objectives .... Additionally, the allocability and allowability of the costs must be determined through assessment of the specific award’s terms and conditions and the awardee’s policies and procedures for participant support costs, which should align with the terms and conditions, NSF PAPPG, and the Uniform Guidance.

Further, NSF and other federal agencies provided one awardee with different interpretations of what is considered participant support; the awardee told us it would welcome clarification. Clarification on identifying participant support costs associated with EPSCoR-funded programs could help NSF ensure awardees comply with financial requirements and meet award objectives. It could also help ensure that NSF identifies participant support costs consistently for all awardees, rather than on an award-by-award basis.

## **NSF Could Improve Guidance about Promotional Expenses for EPSCoR-Funded Programs**

Costs of promotional items are not allowable per the Uniform Guidance.<sup>8</sup> However, NSF’s PAPPG allows awardees to use funding for gifts and souvenirs if they are justified in the budget justification and are scrutinized by NSF. According to NSF’s grants and agreements officials and EPSCoR Section officials, certain expenses that appear promotional are sometimes allowable because of their programmatic purpose. For example, NSF may allow the purchase of t-shirts with EPSCoR program logos for K-12 participants because the t-shirts could help ensure the safety of the children in a crowd. One of the awardees we audited charged tote bags used for recruitment at conferences and associated indirect costs to its EPSCoR awards. According to NSF, this example would align with EPSCoR program objectives to broaden participation in STEM within recipient jurisdictions by attracting and exciting K-12 students.

However, NSF did not have sufficient guidance to explain the difference between the Uniform Guidance, which strictly prohibits promotional items, and when NSF will allow such items. Clarifying NSF’s guidance about allowability of costs charged to EPSCoR-funded awards that have programmatic purposes but that would otherwise appear to be promotional could help NSF ensure awardees comply with financial requirements and meet award objectives.

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<sup>8</sup> 2 CFR Pt. 200.421 (e) states unallowable advertising and public relations costs include “(3) [c]osts of promotional items and memorabilia, including models, gifts, and souvenirs[.]”



## NSF Could Improve Guidance on Entertainment Expenses for EPSCoR-Funded Programs

According to the Uniform Guidance, entertainment costs are unallowable, except where specific costs that might otherwise be considered entertainment have a programmatic purpose and are authorized either in the approved budget for the federal award or with prior written approval of the federal awarding agency.<sup>9</sup> NSF award terms and conditions<sup>10</sup> also allow NSF to approve entertainment costs if they have a programmatic purpose. According to NSF, “Many entertainment-like activities align with EPSCoR program objectives...” such as broadening participation of diverse groups in STEM. For example, one awardee used NSF funds to take high school students participating in a summer-long program on various field trips.

However, NSF’s PAPPG<sup>11</sup> does not mention the exception for entertainment costs that have a programmatic purpose. This inconsistency may result in awardees not submitting allowable expenses for approval or not properly requesting approval. For example, one awardee we audited charged entertainment expenses and associated indirect costs to its EPSCoR awards without disclosing the expenses’ programmatic purpose in its proposal or requesting NSF’s prior written approval, resulting in questioned costs.

Clarifying NSF’s guidance about allowability of costs charged to EPSCoR-funded awards that have programmatic purposes but that would otherwise be considered entertainment could help NSF ensure awardees comply with financial requirements and meet award objectives.

## NSF Could Improve Financial Monitoring of EPSCoR Awardees

As part of our audit, we analyzed the expenditures of 10 awardees and found that four of the 10 had errors attributed to updates in their accounting system, totaling approximately \$634,000 of questioned costs or funds returned to NSF as described in Appendix C.<sup>12</sup> Two of the four institutions were identified because their financial records did not reconcile to amounts reported in ACM\$.

According to NSF, staff from the Division of Institution and Award Support reconcile ACM\$ balances during desk reviews and site visits (if a desk review has not been performed within 5 years) and follow up on corrective actions. BFA also performs a number of monitoring activities that can reveal potential financial anomalies; inaccurate expenditure reporting; or evidence of a possible misunderstanding of, or non-compliance with, federal cash management requirements or NSF guidelines.

<sup>9</sup> 2 CFR Pt. 200, Section 200.438, *Entertainment costs*

<sup>10</sup> NSF’s *Cooperative Agreement Financial & Administrative Terms and Conditions* (CA-FATC), effective October 5, 2020, Appendix A, Prior Approval Matrix

<sup>11</sup> NSF *Proposal Award Policy and Procedures Guide* (PAPPG) states, “Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as tickets to shows or sporting events, meals, lodging, rentals, transportation and gratuities) are unallowable.”

<sup>12</sup> NSF was not responsible for approving changes to these awardees’ accounting systems as this was the responsibility of the cognizant agency that negotiates the awardees’ indirect cost rate agreements.



While an EPSCoR awardee may be selected for DIAS desk review or site visit, BFA does not traditionally take part in EPSCoR Section-led site visits. As a result of our audit, NSF suggested that BFA could begin to participate in those site visits, which would provide an additional opportunity for NSF to determine whether an awardee has undergone a financial system update. BFA's participation would also add financial award administration expertise to the reviews. If BFA determines the risk of accounting errors is high, it could determine if the awardee has taken steps to mitigate the risk. BFA could also attempt to reconcile the awardee's latest EPSCoR award records against ACM\$ at that time instead of waiting for the next desk review.

## Recommendations

We recommend that NSF's Chief Financial Officer:

1. Provide outreach to EPSCoR RII Track-1 awardees on assessing subrecipient risk, particularly for inexperienced subrecipients, that includes requirements and examples of implementing additional oversight of subrecipients based on the risk assessment process.
2. Review awardees' assessment of subrecipient risk and oversight plans for high-risk subrecipients as part of the EPSCoR Section's required site visits. This review should be documented in the EPSCoR Section site visit policies and procedures.
3. Clarify NSF's guidance on participant support costs associated with EPSCoR-funded education, outreach, and diversity programs.
4. Clarify NSF's guidance about allowability of costs charged to EPSCoR-funded awards that have programmatic purposes but would otherwise be considered promotional. Ensure NSF policies and procedures and award terms and conditions align with federal guidance.
5. Clarify NSF's guidance about allowability of costs charged to EPSCoR-funded awards that have programmatic purposes but would otherwise be considered entertainment. Ensure NSF policies and procedures and award terms and conditions align with federal guidance.
6. Include BFA in EPSCoR Section-led site visits to strengthen the award management capacity of EPSCoR RII Track-1 awardees. If an awardee recently implemented a significant accounting system change, NSF will request additional information to determine if the grantee has assessed whether the system changes are working as intended.

## OIG Evaluation of Agency Response

NSF agreed with all six of our recommendations. We have included NSF's response to this report in its entirety in Appendix A.



## Appendix A: Agency Response



National Science Foundation

### MEMORANDUM

**Date:** August 11, 2021

**To:** Mark Bell, Assistant Inspector General, Office of Audits

**From:** Teresa Grancorvitz, Chief Financial Officer and Head, BFA  
Suzanne Iacono, Ph.D., Head, Office of Integrative Activities

8/11/21

**Subject:** Official Draft Report, *Audit of NSF's Established Program to Stimulate Competitive Research (EPSCoR) Awards*

The National Science Foundation (NSF) appreciates the opportunity to review the OIG's draft report. We acknowledge the OIG's rigorous audit work, which encompassed NSF-internal audit work as well as audits and reviews of EPSCoR recipient institutions. The OIG's approach resulted in the identification of opportunities for improvement in EPSCoR programmatic activities, outreach, and oversight.

NSF agrees with all six of the OIG's recommendations. NSF has already taken responsive actions related to outreach to EPSCoR participants. Last May, as facilitated by EPSCoR Program, BFA's Division of Grants and Agreements and Division of Institution and Award Support led a discussion at the 2021 NSF EPSCoR Annual Principal Investigator (PI) Meeting, highlighting resources for awardees, key aspects of proposal budgets, and common audit findings. In addition, the Division of Grants and Agreements is also working with EPSCoR Program to clarify information about allowable costs in award solicitations.

On behalf of the NSF staff participating in the engagement, we acknowledge the OIG for their diligence and commitment to improving NSF's oversight of EPSCoR recipient institutions' implementation of award terms and conditions. We look forward to receiving the final report. If you have any questions, please contact Teresa Grancorvitz at [tgrancor@nsf.gov](mailto:tgrancor@nsf.gov) (703-292-8200).



## Appendix B: Summary of EPSCoR Investment Strategies

EPSCoR uses three major investment strategies: Research Infrastructure Improvement (RII) awards, co-funding, and workshops and outreach.

### RII Awards

In FY 2020, EPSCoR's RII program included four tracks:

- RII Track-1 awards provide up to \$20 million total over a 5-year period to support physical, human capital, and cyber infrastructure improvements critical to a jurisdiction's science and technology plan.
- RII Track-2 (Focused EPSCoR Collaborations) awards provide up to \$1.5 million per year for up to 4 years to support the establishment of interjurisdictional teams working collaboratively on NSF priority research topics.
- RII Track-3 (Building Diverse Communities) awards provide up to \$750,000 per award for an award period of up to 5 years, with projects serving as a "testbed" for building approaches to broaden participation of underrepresented groups in STEM.
- RII Track-4 (EPSCoR Research Fellows) awards provide up to \$300,000 over a 2-year period for non-tenured investigators to further develop their individual research potential through extended collaborative visits to the nation's premier private, governmental, or academic research centers.

### Co-Funding of Disciplinary and Multidisciplinary Research

EPSCoR co-invests with NSF directorates and offices in the support of meritorious proposals from individual investigators, groups, and centers in EPSCoR jurisdictions that are submitted to the NSF's research and education programs and crosscutting initiatives. These proposals have been merit reviewed and recommended for award but could not be funded without the combined, leveraged support of EPSCoR and the Research and Education directorates.

### Workshops and Outreach

EPSCoR solicits requests for support of workshops, conferences, and other community-based activities designed to explore opportunities in emerging areas of science and engineering, and to share best practices in planning and implementation in strategic planning, diversity, communication, cyberinfrastructure, evaluation, and other areas of importance to EPSCoR jurisdictions. EPSCoR also supports outreach travel that enables NSF staff from all directorates and offices to work with the EPSCoR research community regarding NSF opportunities, priorities, programs, and policies.



## Appendix C: Summary of Variances Attributed to Updating Awardees' Accounting Systems

In February and March 2019, we notified 10 institutions that we had selected their most recently closed EPSCoR Track-1 Award as part of our audit and requested each provide us with a summary of costs incurred since the beginning of the award. We found that four of the 10 awardees (40 percent) had questioned costs attributed to updates to their accounting systems.

- We calculated a variance of \$166,336 between the expenditure report received from an awardee and the amounts identified in ACM\$. The awardee said that their legacy accounting system and an administrative error caused indirect costs to be mistakenly allocated against participant support expenses. It repaid all \$166,336 to NSF. Additionally, it identified and corrected other misapplied indirect expenses, totaling \$334,631, on other NSF awards.
- We calculated a variance of \$83,388 between the expenditure report received from an awardee and the amounts identified in ACM\$. The awardee did not have expenses to support these costs charged to its EPSCoR award and agreed to refund this amount to NSF. The awardee said the variance was caused by the implementation of a new accounting system.
- We identified that an awardee incorrectly allocated \$34,195 of indirect costs to participant support expenditures on three NSF awards (one new EPSCoR and two non-EPSCoR). When we shared this information with the awardee, it told us it was aware of the issue and should not have charged the costs to the NSF awards. The awardee said it had initiated corrective action to remove the improper charges and had updated their accounting system to remove participant support costs from the list of expenditure types receiving indirect cost allocation.
- An awardee inappropriately charged \$15,854 in indirect costs paid to its subrecipients of its open Track-1 award. The awardee stated this occurred because the expense account “Subcontractor F&A” was incorrectly mapped in its new financial system, causing it to misapply indirect costs. The awardee acknowledged the issue and said it put a corrective action plan in place to identify all project costs on the account, remove the incorrect indirect costs assessed, and offset its January 2020 draw-down from ACM\$ to adjust for the indirect costs it erroneously assessed.



## Appendix D: Objective, Scope, and Methodology

The objective of this performance audit was to determine if NSF has sufficient procedures and guidance to help ensure awardees comply with NSF and federal requirements in the administration of EPSCoR awards. To accomplish this objective, we assessed NSF's management of 10 judgmentally selected EPSCoR awardees.

We reviewed a judgmental sample of 10 jurisdictions from the universe of 21 jurisdictions that had active EPSCoR RII Track 1 awards when we initiated our audit. For each of those awardees, we reviewed a summary of incurred costs on its most recent EPSCoR RII Track 1 award, including amounts claimed by and paid to subrecipients. We met with awardee personnel to discuss the institutions' policies and procedures, as well as any direction received from NSF in the areas of award administration, cost share, property and equipment, and subrecipient selection and management. We also examined each state's EPSCoR steering committee and project selection.

Following this initial work, we conducted a complete audit of the Track-1 RII EPSCoR awards of two awardees, which we judgmentally selected from the initial 10 awardees. These audits included costs claimed and mandatory cost share contributions. We relied on the results of these two audits for this report.

We obtained computer-processed data from the awardees during our audit. We assessed the reliability of this data by interviewing knowledgeable staff and performing a reconciliation of the data. We obtained NSF data by directly accessing NSF's various data systems. We corroborated the NSF data with other sources and determined that the data were sufficiently reliable for the purposes of this audit.

We gained an understanding of the internal control structure applicable to the scope of this audit through interviewing NSF staff, reviewing policies and procedures, reviewing a summary of incurred costs on EPSCoR awards, and conducting the audits of two awardees.

We conducted this performance audit between February 2019 and March 2021 in accordance with *Generally Accepted Government Auditing Standards*. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions.

Key contributors to this report include: Elizabeth Kearns, Director, Audit Execution; Kelly Stefanko, Audit Manager; Philip Emswiler, Senior Program Analyst; Jeanette Hyatt, Senior Auditor; Ken Lish, Director, Contract Grant Audits; Emma Bright, Senior Data Analyst; Brittany Moon, Project Manager; Jennifer Miller, Director, Compliance Analytics; Dan Buchtel, Deputy Assistant Inspector General for Audits; Elizabeth Argeris Lewis, Executive Officer and Communications Analyst; and Darrell Drake, Independent Report Referencer.



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