# AT A GLANCE

Performance Audit of Incurred Costs – Education Development Center  
Report No. OIG 22-1-008  
June 28, 2022

## AUDIT OBJECTIVE

The National Science Foundation Office of Inspector General engaged Cotton & Company Assurance and Advisory, LLC (C&C) to conduct a performance audit of costs that the Education Development Center (EDC) incurred on 38 NSF awards from each award’s inception date through September 2, 2021. The auditors tested more than $775,000 of the approximately $59.6 million of costs claimed to NSF. The audit objective was to determine if costs claimed by EDC on NSF awards were allowable, allocable, reasonable, and in compliance with NSF award terms and conditions and federal financial assistance requirements. A full description of the audit’s objective, scope, and methodology is attached to the report as Appendix B.

## AUDIT RESULTS

The report highlights concerns about EDC’s compliance with certain federal and NSF award requirements, NSF award terms and conditions, and EDC policies. The auditors questioned $88,089 of costs claimed by EDC during the audit period. Specifically, the auditors found $74,645 in unallowable expenses and $13,444 of inappropriate Award Cash Management Service (ACM$) drawdowns. The auditors also identified two compliance related findings for which there were no questioned costs: non-compliance with EDC policies and insufficient controls related to the application of negotiated rates. C&C is responsible for the attached report and the conclusions expressed in it. NSF OIG does not express any opinion on the conclusions presented in C&C’s audit report.

## RECOMMENDATIONS

The auditors included 4 findings in the report with associated recommendations for NSF to resolve the questioned costs and to ensure EDC strengthens administrative and management controls.

## AUDITEE RESPONSE

EDC disagreed with the majority of the findings in the report. EDC’s response is attached in its entirety as Appendix A.

## FOR FURTHER INFORMATION, CONTACT US AT OIGPUBLICAFFAIRS@NSF.GOV.
MEMORANDUM

DATE: June 28, 2022

TO: Dale Bell
   Director
   Division of Institution and Award Support

Jamie French
Director
Division of Grants and Agreements

FROM: Mark Bell
Assistant Inspector General
Office of Audits

SUBJECT: Audit Report No. 22-1-008, Education Development Center

This memorandum transmits the Cotton & Company Assurance and Advisory, LLC (C&C) report for the audit of costs charged by the Education Development Center (EDC) to its sponsored agreements with the National Science Foundation on 38 NSF awards from each award’s inception date through September 2, 2021. The audit encompassed more than $775,000 of the approximately $59.6 million of costs claimed to NSF during the period. The audit objective was to determine if costs claimed by EDC on NSF awards were allowable, allocable, reasonable, and in compliance with NSF award terms and conditions and federal financial assistance requirements. A full description of the audit’s objective, scope, and methodology is attached to the report as Appendix B.

Please coordinate with our office during the 6-month resolution period, as specified by OMB Circular A-50, to develop a mutually agreeable resolution of the audit findings. The findings should not be closed until NSF determines that all recommendations have been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

OIG Oversight of the Audit

C&C is responsible for the attached auditors’ report and the conclusions expressed in this report. We do not express any opinion on the conclusions presented in C&C’s audit report. To fulfill our responsibilities, we:
• reviewed C&C’s approach and planning of the audit;
• evaluated the qualifications and independence of the auditors;
• monitored the progress of the audit at key points;
• coordinated periodic meetings with C&C, as necessary, to discuss audit progress, findings, and recommendations;
• reviewed the audit report prepared by C&C; and
• coordinated issuance of the audit report.

We thank your staff for the assistance that was extended to the auditors during this audit. If you have any questions regarding this report, please contact Billy McCain at 703.292.7100 or OIGpublicaffairs@nsf.gov.

Attachment

c:  
Stephen Willard   Karen Marrongelle   Charlotte Grant-Cobb   Ken Lish
Dan Reed         Christina Sarris     Allison Lerner          Billy McCain
Victor McCrary   Teresa Grancorvitz  Lisa Vonder Haar         Jennifer Kendrick
John Veysey      Alex Wynnyk          Ken Chason              Louise Nelson
Ann Bushmiller   Rochelle Ray        Dan Buchtel             Karen Scott
EXECUTIVE SUMMARY

The Cotton & Company audit team determined Education Development Center (EDC) needs improved oversight of the allocation and documentation of expenses charged to NSF awards to ensure costs claimed are reasonable, allocable, and allowable in accordance with all federal and NSF regulations, NSF award terms and conditions, and EDC policies. Specifically, the audit report includes four findings and a total of $88,089 in questioned costs.

AUDIT OBJECTIVES

The National Science Foundation Office of Inspector General engaged Cotton & Company Assurance and Advisory, LLC to conduct a performance audit of costs EDC incurred on 38 awards that either ended or were close to the end of their periods of performance. The audit objectives included evaluating EDC’s award management environment to determine whether any further audit work was warranted and performing additional audit work, as determined appropriate. We have attached a full description of the audit’s objectives, scope, and methodology as Appendix B.

AUDIT CRITERIA

The audit team assessed EDC’s compliance with relevant federal regulations (i.e., 2 Code of Federal Regulations [CFR] 200 and 2 CFR 230); NSF Proposal and Award Policies and Procedures Guides (PAPPGs) 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, and 19-1; NSF award terms and conditions; and EDC policies and procedures. The audit team included references to relevant criteria within each finding and defined key terms within the Glossary located in Appendix E. We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards (GAGAS) issued by the Comptroller General of the United States.

AUDIT FINDINGS

As summarized in Appendix C, the auditors identified and questioned $88,089 of direct and indirect costs that EDC inappropriately claimed during the audit period, including:

- $74,645 of unallowable expenses
- $13,444 of inappropriate Award Cash Management Service (ACMS) drawdowns

The audit report also includes two compliance-related findings for which the auditors did not question any costs:

- Non-compliance with EDC policies
- Insufficient controls related to the application of negotiated rates

RECOMMENDATIONS

The audit report includes 12 recommendations for NSF’s Director of the Division of Institution and Award Support related to resolving the $88,089 in questioned costs and ensuring EDC strengthens its award management environment, as summarized in Appendix D.

AUDITEE RESPONSE

EDC disagreed with the majority of the findings included in the audit report. Specifically, although EDC agreed to reimburse NSF for $21,819 in questioned costs, it disagreed with the remaining $66,270. EDC’s response is attached in its entirety to the report as Appendix A.
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Abbreviations

ACM$       Award Cash Management Service
AV         Audio and Visual
CFR        Code of Federal Regulations
EDC       Education Development Center
FY         Fiscal Year
GAGAS      Generally Accepted Government Auditing Standards
GL         General Ledger
NICRA      Negotiated Indirect Cost Rate Agreement
NSF       National Science Foundation
OIG        Office of Inspector General
PAPPG      Proposal and Award Policies and Procedures Guide
BACKGROUND

The National Science Foundation is an independent federal agency created “to 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). NSF funds research and education in science and engineering by awarding grants and contracts to educational and research institutions throughout the United States.

Most federal agencies have an Office of Inspector General that provides independent oversight of the agency’s programs and operations. Part of NSF OIG’s mission is to conduct audits and investigations to prevent and detect fraud, waste, and abuse. In support of this mission, NSF OIG may conduct independent and objective audits, investigations, and other reviews to promote the economy, efficiency, and effectiveness of NSF programs and operations, as well as to safeguard their integrity. NSF OIG may also hire a contractor to provide these audit services.

NSF OIG engaged Cotton & Company Assurance and Advisory, LLC (referred to as “we”) to conduct a performance audit of costs incurred by Education Development Center (EDC). EDC, based in Waltham, Massachusetts, is a global nonprofit that advances solutions to improve education, promote health, and expand economic opportunity. In fiscal year 2020, EDC reported approximately $145.48 million in award revenue and program income, with $119.55 million received from federal sources—including NSF—as illustrated in Figure 1.

Figure 1: EDC’s FY 2020 Support and Revenue

Source: The chart data is supported by EDC’s 2020 Single Audit Report available on the Federal Audit Clearinghouse website.¹

AUDIT SCOPE

This performance audit—conducted under Order No. 140D0421F0609—was designed to meet the objectives identified in the Objectives, Scope, and Methodology section of this report (Appendix B) and was conducted in accordance with Generally Accepted Government Auditing Standards, issued by the Comptroller General of the United States.

The objectives of this performance audit were to evaluate EDC’s award management environment, determine whether any further audit work was warranted, and perform any additional audit work, as determined appropriate. Appendix B provides detailed information regarding the audit scope and methodology used for this engagement.

As illustrated in Figure 2, EDC provided general ledger (GL) data to support the $59.6 million in expenses it claimed on 38 NSF awards from each award’s inception date through September 2, 2021.

![Figure 2: Costs EDC Claimed on 38 NSF Awards](image)

Source: Auditor analysis of accounting data EDC provided, illustrating the total costs ($59,636,628) by expense type, using financial information to support costs incurred on NSF awards during the audit period.

We judgmentally selected 43 transactions totaling $775,604 (see Table 1) and evaluated supporting documentation to determine whether the costs claimed on the NSF awards were allocable, allowable, and reasonable, and whether they were in conformity with NSF award terms and conditions, organizational policies, and applicable federal financial assistance requirements.

2 The total award-related expenses EDC reported in its GL exceeded the $59,635,058 reported in NSF’s Award Cash Management Service (ACM$). Although the amount of the variance between the claimed expenses and the expenses reported in the GL documentation is minimal, variances by award resulted in a finding. Refer to Finding 2 Inappropriate ACM$ Drawdown and the Objectives, Scope, and Methodology section of this report for additional details.

3 The $775,604 represents the total value of the 43 transactions selected for transaction-based testing; it does not represent the dollar base of the total costs reviewed during the audit.
Table 1: Summary of Selected Transactions

<table>
<thead>
<tr>
<th>Budget Category</th>
<th>Transaction Count</th>
<th>Expense Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subawards</td>
<td>4</td>
<td>$344,944</td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>9</td>
<td>168,713</td>
</tr>
<tr>
<td>Participant Support Costs</td>
<td>9</td>
<td>113,829</td>
</tr>
<tr>
<td>Consultant Services</td>
<td>2</td>
<td>43,875</td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>8</td>
<td>32,910</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>2</td>
<td>29,092</td>
</tr>
<tr>
<td>Computer Services</td>
<td>2</td>
<td>15,854</td>
</tr>
<tr>
<td>Travel</td>
<td>4</td>
<td>13,181</td>
</tr>
<tr>
<td>Materials and Supplies</td>
<td>2</td>
<td>6,799</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>1</td>
<td>6,407</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>$775,604</strong></td>
</tr>
</tbody>
</table>

*Source: Auditor summary of selected transactions.*

AUDIT RESULTS

We identified and questioned $88,089 in costs that EDC charged to nine NSF awards. We also identified expenses EDC charged to four NSF awards that did not result in questioned costs, but did result in non-compliance with federal, NSF, or EDC-specific policies. See Table 2 for a summary of questioned costs by finding area, Appendix C for a summary of questioned costs by NSF award, and Appendix D for a summary of all recommendations.

Table 2: Summary of Questioned Costs by Finding Area

<table>
<thead>
<tr>
<th>Finding Description</th>
<th>Questioned Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unallowable Expenses</td>
<td>$74,645</td>
</tr>
<tr>
<td>Inappropriate Award Cash Management $service (ACM$) Drawdowns</td>
<td>13,444</td>
</tr>
<tr>
<td>Non-Compliance with EDC Policies</td>
<td>-</td>
</tr>
<tr>
<td>Insufficient Controls Related to the Application of Negotiated Rates</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$88,089</strong></td>
</tr>
</tbody>
</table>

*Source: Auditor summary of findings identified.*

We made 12 recommendations for NSF’s Director of the Division of Institution and Award Support related to resolving the $88,089 in questioned costs and ensuring EDC strengthens its administrative and management procedures for monitoring federal funds. We communicated the results of our audit and the related findings and recommendations to EDC and NSF OIG. We included EDC’s response to this report in its entirety in Appendix A.

4 The expense amounts reported represent the total dollar value of the transactions selected for our sample; they do not include the total fringe benefits or indirect costs applied to the sampled transactions. However, we tested the fringe benefits and indirect costs for allowability.
**FINDING 1: UNALLOWABLE EXPENSES**

EDC charged seven NSF awards a total of $74,645 in expenses incurred for participant support, conferences, and consultant travel that were unallowable under federal regulations and NSF Proposal and Award Policies and Procedures Guides (PAPPGs).

*Unallowable Participant Support Expenses*

EDC used participant support cost funds awarded on four NSF awards to cover $68,525 in non-participant expenses which is not allowable per federal regulations, NSF guidance, or EDC policy, as illustrated in Table 3.

**Table 3: Unallowable Participant Support Expenses**

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Participant Funds Used</th>
<th>Participant Funds Used to Cover</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2017</td>
<td></td>
<td>$32,045</td>
<td>Conference Room and Audio and Visual (AV) Rentals</td>
<td>a</td>
</tr>
<tr>
<td>September 2017</td>
<td></td>
<td>11,743</td>
<td>Unidentified Conference Expenses</td>
<td>b</td>
</tr>
<tr>
<td>September 2018</td>
<td></td>
<td>227</td>
<td>EDC Employee Lodging</td>
<td>c</td>
</tr>
<tr>
<td>September 2019</td>
<td></td>
<td>2,255</td>
<td>Non-Participant Conference Meals</td>
<td>d</td>
</tr>
<tr>
<td>December 2019</td>
<td></td>
<td>22,255</td>
<td>Conference Room and AV Rentals</td>
<td>e</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exceptions.*

a] In July 2017, EDC used participant support funds awarded on NSF Award No. to cover $32,045 in non-participant costs incurred for conference room and AV rentals.

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5 According to 2 Code of Federal Regulations (CFR) 230, Appendix A, Sections A.2., and A.3., as well as 2 CFR § 200.403 (a) and (g), for a cost to be allowable it must be adequately documented, necessary, and reasonable for the performance of the federal award. See Appendix E of this report for additional factors affecting the allowability of costs. Additionally, 2 CFR § 200.302(b)(3) and 2 CFR § 215.21(b)(2) and (7) state that a recipient's financial management system will provide records that identify the source and application of funds and accounting records that are supported by source documentation.

6 According to NSF PAPPGs 13-1, 15-1, and 16-1, Part II, Chapter V, Section A, and 17-1 and 18-1, Part II, Chapter X, Section A, Basic Considerations, expenditures under NSF cost-reimbursement grants are governed by the federal cost principles and must conform to NSF policies, grant special provisions, and grantee internal policies. Grantees should ensure that costs claimed under NSF grants meet the requirements of the cost principles, grant terms and conditions, and other specific requirements of both the award notice and the applicable program solicitation.

7 According to 2 CFR § 200.75, participant support costs are 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.

8 NSF PAPPG 17-1 and 18-1 Part I, Chapter II, Section C.2.g.(v) state that participant supports costs are stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection NSF-sponsored conference or training projects. Further, NSF PAPPG 17-1 and 18-1 Part I, Chapter II, Section C.2.g.(v) states that participant support costs must be specified, itemized, and justified in the budget justification section of the proposal.

9 EDC's Participant Support Policy references the 2 CFR 200 definition of participant support costs and states that costs that cannot be specifically identified to a participant, such as room rental and AV expenses, are not participant support costs.
b) In September 2017, EDC used participant support funds awarded on NSF Award No. [redacted] to cover $11,743 in costs EDC was unable to support as allowable participant expenses.

c) In September 2018, EDC used participant support funds awarded on NSF Award No. [redacted] to cover $227 in non-participant lodging provided to an EDC employee.

d) In September 2019, EDC used participant support funds awarded on NSF Award No. [redacted] to cover $2,255 in conference meals purchased for individuals that did not participate in the NSF award-sponsored conference.  

e) In December 2019, EDC used participant support funds awarded on NSF Award No. [redacted] to cover $22,255 in non-participant costs incurred for conference room and AV rentals.

**Unallowable Conference Expenses**

EDC charged two NSF awards for $4,128 in unallowable conference expenses, as illustrated in Table 4.

<table>
<thead>
<tr>
<th>Table 4: Unallowable Conference Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense Date</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>February 2014</td>
</tr>
<tr>
<td>June 2016</td>
</tr>
</tbody>
</table>

Source: Auditor summary of identified exceptions.

a) In February 2014, EDC charged NSF Award No. [redacted] for $2,403 in conference registration fees for an EDC employee whose attendance at the conference did not appear to contribute to or benefit this NSF award, as the employee did not charge any salary to the award and was not listed in the award’s annual reports.

b) In June 2016, EDC charged NSF Award No. [redacted] for $1,725 it incurred to sponsor a conference hosted by [redacted]. Although EDC noted that it sponsored the conference to obtain access to a network of schools and teachers for recruitment efforts to support the award, because the sponsorship appears to represent an unallowable advertising expense, and as EDC was already paying for access to the same network of professionals under a consulting agreement, the sponsorship fee is unallowable.

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10 EDC charged the award for 206 conference meals, or $18,580; however, only 181 participants attended the conference. As the cost per-person was $90.19 ($18,580/206 participants), we are questioning the difference between $18,580 and $16,325 ($90.19 * 181), or $2,255.

11 According to 2 CFR § 200.421(b)(1)-(4), the only allowable advertising costs are costs for the recruitment of personnel required by the non-federal entity for the performance of the award, procurement of goods and services, disposal of scrap or surplus materials acquired in the performance of the award, and program outreach.
**Unallowable Consultant Travel**

EDC charged one NSF award for $1,992 in consultant travel expenses that were not supported as allowable in accordance with federal regulations\(^\text{12}\) as illustrated in Table 5.

**Table 5: Unallowable Consultant Travel**

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Amount</th>
<th>Unallowable Expenses Associated With:</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2017</td>
<td></td>
<td>$1,992</td>
<td>Consultant Travel</td>
<td>a</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exceptions.*

a) In July 2017, EDC charged NSF Award No. [redacted] for $1,992 in travel costs claimed by a [consultant] which were not supported as allowable per the consultant’s service agreement.

**Conclusion**

EDC did not have sufficient policies and procedures or internal controls in place to ensure it only charged allowable costs to NSF awards. Specifically, EDC’s procedures did not always ensure that participant support funds were spent on allowable participant support costs, consistent with NSF award budgets; that only allowable conference costs were charged to NSF awards; or that consultants were only reimbursed for costs allowable per the consultant’s contract.

We are therefore questioning $74,645 of unallowable expenses charged to seven NSF awards. EDC concurred with $8,375 of the questioned costs but disagreed with the remaining $66,270, as illustrated in Table 6.

**Table 6: Finding 1 Summary: Unallowable Expenses**

<table>
<thead>
<tr>
<th>NSF Award No.</th>
<th>Description</th>
<th>Fiscal Year(s)</th>
<th>Questioned Costs</th>
<th>EDC Agreed to Reimburse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>July 2017 Conference Room and AV Rentals</td>
<td>2017</td>
<td>$32,045</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td>September 2017 Unidentified Conference Expenses</td>
<td>2017</td>
<td>11,743</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>September 2018 EDC Employee Lodging</td>
<td>2018</td>
<td>227</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>September 2019 Non-Participant Conference Meals</td>
<td>2019</td>
<td>2,255</td>
<td>2,255</td>
</tr>
</tbody>
</table>

\(^{12}\) According to 2 CFR § 200.459(a), costs of professional and [consultant services] are allowable when reasonable in relation to the services rendered. Further, per 2 CFR § 200.459(b)(8) the adequacy of the contractual agreement for the service is a relevant factor to consider when determining the allowability of professional service costs.
<table>
<thead>
<tr>
<th>NSF Award No.</th>
<th>Description</th>
<th>Fiscal Year(s)</th>
<th>Questioned Costs</th>
<th>EDC Agreed to Reimburse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>December 2019 Conference Room and AV Rentals</td>
<td>2020</td>
<td>22,255</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>February 2014 Conference Registration Fee</td>
<td>2014</td>
<td>1,800</td>
<td>603</td>
</tr>
<tr>
<td></td>
<td>June 2016 Conference Sponsorship</td>
<td>2016</td>
<td>1,250</td>
<td>475</td>
</tr>
<tr>
<td></td>
<td>July 2017 Consultant Travel</td>
<td>2017</td>
<td>1,447</td>
<td>545</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$73,022</strong></td>
<td><strong>$1,623</strong></td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exceptions.*

**Recommendations**

We recommend that NSF’s Director of the Division of Institution and Award Support:

1.1. Resolve the $66,270 in questioned participant support for which EDC has not agreed to reimburse NSF and direct EDC to repay or otherwise remove the sustained questioned costs from its NSF award.

1.2. Direct EDC to provide documentation supporting that it has reimbursed or otherwise credited the $8,375 in questioned participant support, conference, and consultant travel costs for which it has agreed to reimburse NSF.

1.3. Direct EDC to establish clear guidance regarding the allowable uses of participant support cost funding. This guidance should address how to segregate, identify, and account for costs that are covered with participant support cost funding. Specifically, this guidance should address how EDC verifies it does not use participant support costs to cover non-participant or other unallowable costs, such as costs budgeted for within non-participant support costs budget categories, costs incurred for EDC employees, and expenses associated with no-show participants.

1.4. Direct EDC to strengthen its administrative and management processes related to the approval of conference registration fees. Updated processes should require EDC to verify that individuals either have dedicated or will be dedicating effort to an NSF award prior to allowing their conference registration fees to be charged to the NSF award.

1.5. Direct EDC to strengthen its administrative and management processes to ensure advertising costs associated with sponsoring conferences are not charged to federal awards unless specifically approved by the award sponsor.
1.6. Direct EDC to strengthen its policies and procedures for creating and retaining documentation, including introducing additional controls to help ensure that it appropriately creates and maintains all documentation necessary to support the allowability of costs claimed by consultants. Updated procedures could include:

- Requiring consultant agreements to specifically note whether the consultant is permitted to invoice EDC for travel costs incurred as a result of performing the requested consulting services.

- Requiring invoice approvers to review consulting agreements to determine the allowability of travel expense reimbursement submitted by consultants prior to approving consultant travel expenses.

EDC Response: EDC agreed to reimburse NSF for $8,375 of the unallowable costs identified but disagreed with the remaining $69,940 in questioned costs. Specifically:

- **Unallowable Participant Support Costs:** EDC agreed to reimburse NSF for the $2,255 questioned for September 2019 non-participant conference meals, but disagreed with the remaining $66,270 in questioned participant support costs. Specifically:
  
  o With regard to the $32,045 in questioned July 2017 conference room and AV rental expenses charged to NSF Award No. [xxx] EDC noted that the expenses were inadvertently charged to a participant support expense code, but believes these costs should be allowable as they were allocable, reasonable, and necessary to host the conference.

  o With regard to the $11,743 in questioned September 2017 unidentified conference expenses charged to NSF Award No. [xxx] EDC believes the participant support costs should be allowable as the expenses were supported by documentation provided during the audit and as the costs were charged to the NSF grant consistent with the agreement between [xxx] and NSF.

  o With regard to the $227 in questioned September 2018 EDC employee lodging charged to NSF Award No. [xxx] EDC noted that the expenses were inadvertently charged to a participant support expense code, but believes these costs should be allowable as they were allocable, reasonable, and necessary to host the conference.

  o With regard to the $22,255 in questioned December 2019 conference room and AV rental expenses charged to NSF Award No. [xxx] EDC noted that the expenses were inadvertently charged to a participant support expense code, but believes these costs should be allowable as they were allocable, reasonable, and necessary to host the conference.
• **Unallowable Conference Expenses**: EDC agreed to reimburse NSF for the $4,128 in questioned conference expenses.

• **Unallowable Subawardee Indirect Costs**: EDC disagreed with the $3,670 in questioned subawardee indirect costs included in the draft report, noting that it was able to provide the subawardee’s 2017 Negotiated Indirect Cost Rate Agreement (NICRA) which supports the 8 percent indirect cost rate the subawardee applied.

• **Unallowable Consultant Travel**: EDC agreed to reimburse NSF for the $1,992 in questioned consultant travel expenses.

**Auditors’ Additional Comments**: Although EDC provided additional documentation to support the allowability of $3,670 in subawardee indirect costs we had previously questioned on NSF Award No. our position regarding the remaining findings has not changed. Specifically:

• **Unallowable Participant Support Costs**: As EDC used participant support cost funds to cover non-participant expenses, or expenses we could not verify represented allowable participant support costs, our position regarding this finding has not changed. Specifically:
  - With regard to the $32,045 questioned on NSF Award No. while EDC noted its use of participant support costs to cover these costs was inadvertent, because EDC used participant support costs to cover these non-participant expenses, our position regarding this exception has not changed.
  - With regard to the $11,743 questioned on NSF Award No. while EDC noted that the costs were charged to the NSF grant consistent with the agreement between and NSF, because EDC did not identify which costs within the invoice were covered by the NSF award, we are unable to verify these funds were used to cover allowable participant support costs. Accordingly, our position regarding this exception has not changed.
  - With regard to the $227 questioned on NSF Award No. while EDC noted its use of participant support costs to cover these costs was inadvertent, because EDC used participant support costs to cover these non-participant expenses, our position regarding this exception has not changed.
  - With regard to the $2,255 questioned on NSF Award No. as EDC agreed to reimburse these funds, our position regarding this exception has not changed.
  - With regard to the $22,255 questioned on NSF Award No. while EDC noted its use of participant support costs to cover these costs was
inadvertent, because EDC used participant support costs to cover these non-participant expenses, our position regarding this exception has not changed.

- **Unallowable Conference Expenses**: As EDC agreed to reimburse NSF for the $4,128 in questioned conference expenses, our position regarding this exception has not changed.

- **Unallowable Subawardee Indirect Costs**: As EDC provided a Department of Education memo to support the $3,670 in subawardee indirect costs we had previously questioned, we removed the unallowable subawardee indirect cost exception that was included in our original draft report.

- **Unallowable Consultant Travel**: As EDC agreed to reimburse NSF for the $1,992 in questioned consultant travel expenses, our position regarding this exception has not changed.

**FINDING 2: INAPPROPRIATE AWARD CASH MANAGEMENT SERVICE (ACM$) DRAWDOWNS**

During the audit period, EDC inappropriately drew down $13,444 in funding from NSF’s ACM$ on two NSF Awards, as illustrated in Table 7.13

### Table 7: ACM$ Drawdowns Processed

<table>
<thead>
<tr>
<th>Drawdown Date</th>
<th>NSF Award No.</th>
<th>Amount Drawn</th>
<th>Amount that Should have been Drawn</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2020</td>
<td></td>
<td>$319</td>
<td>$0</td>
<td>a</td>
</tr>
<tr>
<td>April 2020</td>
<td></td>
<td>13,125</td>
<td>-</td>
<td>b</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exceptions.*

a) Although EDC intended to draw down funding to cover costs incurred for NSF Award No. it erroneously drew down the funding on NSF Award No.

b) Although EDC intended to draw down funding to cover costs incurred for NSF Award No. it erroneously drew down funding on NSF Award No.

**Conclusion**

EDC did not have sufficient policies and procedures or internal controls in place to ensure it drew down expenses on the proper awards when performing its ACM$ draws. We are

---

13 According to 2 CFR § 200.305 (b) (1), advance payments to a non-federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-federal entity in carrying out the purpose of the approved program or project.
therefore questioning $13,444 in costs EDC inappropriately drew down on two NSF awards, which EDC agreed to reimburse, as illustrated in Table 8.

Table 8: Finding 2 Summary: Inappropriate ACM$ Drawdowns

<table>
<thead>
<tr>
<th>Description</th>
<th>NSF Award Nos.</th>
<th>Fiscal Year(s)</th>
<th>Questioned Costs</th>
<th>EDC Agreed to Reimburse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inappropriate ACM$ Drawdown</td>
<td></td>
<td>2020</td>
<td>$319</td>
<td>$319</td>
</tr>
<tr>
<td>Inappropriate ACM$ Drawdown</td>
<td></td>
<td>2020</td>
<td>13,125</td>
<td>13,125</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$13,444</strong></td>
<td><strong>$13,444</strong></td>
</tr>
</tbody>
</table>

Source: Auditor summary of identified exceptions.

**Recommendations**

We recommend that NSF’s Director of the Division of Institution and Award Support:

2.1. Direct EDC to provide documentation that it has repaid or otherwise credited the $13,444 in questioned drawdowns for which it has agreed to reimburse NSF.

2.2. Direct EDC to strengthen its policies and procedures and internal controls to ensure it draws down funds on the correct NSF award when requesting funds through NSF’s Award Cash Management Service.

**EDC Response:** Although EDC did not state that it agreed with this finding, its formal response noted that it processed ACM$ drawdown corrections for NSF Award Nos. and in November 2021.

**Auditors’ Additional Comments:** Our position regarding this finding has not changed.

**FINDING 3: NON-COMPLIANCE WITH EDC POLICIES**

EDC did not always comply with its travel and procurement policies when incurring costs charged to NSF awards.

**Non-Compliance with EDC Travel Policy**

We identified one instance in which EDC did not comply with its travel policy which requires that employees use a Deltek Expense Report Summary when requesting travel reimbursement, as illustrated in Table 9.

Table 9: Non-Compliance with EDC Travel Policy

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Travel Policy Compliance Exception</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2019</td>
<td></td>
<td>Non-Compliance with EDC’s Travel Policy</td>
<td>a</td>
</tr>
</tbody>
</table>

Source: Auditor summary of identified exception.

---

14 According to EDC’s Travel Policy and Guidelines, travelers requesting reimbursement for lodging, whether per diem or actual costs, must submit the original receipts with the Deltek System Expense Report Summary.
In December 2019, EDC charged NSF Award No. [redacted] for $4,769 for travel claimed by an EDC employee via a non-employee reimbursement form rather than a Deltek Expense Report Summary.

**Non-Compliance with EDC Procurement Policy**

We identified one instance in which EDC did not comply with its procurement policy, which requires EDC to document Professional Service Agreements when procuring consultant services, as illustrated in Table 10.

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Consultant Policy Compliance Exception</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2020</td>
<td>[redacted]</td>
<td>Non-Compliance with EDC's Procurement Policy</td>
<td>a</td>
</tr>
</tbody>
</table>

Source: Auditor summary of identified exception.

In October 2020, EDC charged NSF Award No. [redacted] for a $5,000 honorarium it paid a consultant with whom it had not established a Professional Service Agreement.

**Conclusion**

EDC did not have adequate procedures in place to ensure that it consistently complied with or documented its compliance with its travel and consultant policies and procedures. Because these instances of non-compliance did not directly result in EDC charging unallowable costs to NSF awards, we are not questioning any costs related to these exceptions. However, we are noting compliance exceptions for the two instances in which EDC did not comply with its internal policies when charging costs to two NSF awards, as illustrated in Table 11.

<table>
<thead>
<tr>
<th>NSF Award No.</th>
<th>Compliance Exception Identified</th>
<th>Fiscal Year(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>[redacted]</td>
<td>Non-Compliance with EDC’s Travel Policy</td>
<td>2020</td>
</tr>
<tr>
<td>[redacted]</td>
<td>Non-Compliance with EDC’s Procurement Policy</td>
<td>2021</td>
</tr>
</tbody>
</table>

Source: Auditor summary of identified exceptions.

**Recommendations**

We recommend that NSF’s Director of the Division of Institution and Award Support:

3.1. Direct EDC to strengthen its administrative and management procedures for travel reimbursements to ensure that its employees utilize the Deltek Expense Report Summary for travel reimbursements.

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15 EDC’s *Procurement Policy* states that EDC issues Professional Services Agreements to procure consultant services.
3.2. Direct EDC to strengthen its administrative and management procedures to ensure that payments are only made to consultants with Professional Service Agreements.

**EDC Response:** EDC did not state whether it agreed or disagreed with this finding but provided additional justifications for each exception. Specifically:

- With regard to the December 2019 non-compliance with EDC’s travel policy exception, EDC noted that the Project Director paid for all conference related expenses using their EDC corporate credit card and that both EDC’s Chief Financial Officer and Controller approved the expense.

- With regard to the October 2020 non-compliance with EDC’s procurement policy, EDC noted that the consulting fee was erroneously charged as an honorarium and agreed that a Professional Service Agreement should have been saved in its files.

**Auditors’ Additional Comments:** As EDC did not provide additional documentation to support it complied with the policies referenced in this finding, our position regarding this finding has not changed.

**Finding 4: Insufficient Controls Related to the Application of Negotiated Rates**

EDC did not have sufficient controls in place to ensure it, or its subawardees, consistently applied negotiated indirect or fringe benefit rates consistent with each organization’s NICRA or negotiated award budget, as required by federal and NSF guidance.

**Insufficient Controls Related to the Application of Subawardee Indirect Cost Rate**

As illustrated in Table 12, EDC allowed its subawardees to apply indirect costs using rates that differed from the rates that were in effect at the time the subaward agreements were issued.

<table>
<thead>
<tr>
<th>Table 12: Subawardee Indirect Cost Rate Not Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense Date</td>
</tr>
<tr>
<td>January 2019</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exception.*

---

16 According to 2 CFR § 200.331, subrecipients can apply either an approved, federally recognized indirect cost rate negotiated between the subrecipient and the federal government or a rate negotiated between the pass-through entity and the subrecipient.

17 According to 2 CFR § 200.331, all pass-through entities must be monitored to ensure that the subaward is used for authorized purposes; is in compliance with federal statutes, regulations, and the terms and conditions of the subaward; and the subaward performance goals are achieved.

18 According to NSF PAPPG 17-1 Part I, Chapter II, Section C.2.g.(viii), federal agencies are required to use the negotiated rates that are in effect at the time of the initial award throughout the life of the sponsored agreement.
In January 2019, EDC charged NSF Award No. [redacted] for subaward costs invoiced by the Department of Education using a 2.90 percent indirect cost rate rather than using the 3.00 percent budgeted rate included in the subaward agreement.

**Insufficient Controls Related to the Application of Fringe Rate**

EDC applied fringe benefits to one salary transaction using a fringe benefit rate included in a previous NICRA, as illustrated in Table 13.

<table>
<thead>
<tr>
<th>Table 13: Inappropriately Applied Fringe Benefit Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expense Date</strong></td>
</tr>
<tr>
<td>July 2017</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exception.*

In July 2017, EDC charged NSF Award No. [redacted] for fringe benefits that were inappropriately applied using a rate of 29.69 percent rather than the 29.75 percent fringe benefit rate in effect at the time the salary was earned.

**Conclusion**

EDC did not have sufficient internal controls surrounding the application and monitoring of indirect and fringe benefit rates applied to direct costs charged to NSF awards. Specifically, EDC did not appropriately monitor indirect costs invoiced by subawardees or the application of its fringe benefit rates to ensure rates were applied consistent with relevant NICRAs or subaward budgets.

As the rates applied by EDC and its subawardee were lower than the allowable rates, we are not reporting any questioned costs for this finding. However, as EDC’s current process could cause it to charge unallowable costs to NSF awards if rates were to decrease in future NICRAs, we are noting two compliance exceptions related to two NSF awards where we determined negotiated rates were not appropriately applied, as illustrated in Table 14.

<table>
<thead>
<tr>
<th>Table 14: Finding 4 Summary: Insufficient Controls Related to the Application of Negotiated Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NSF Award Number</strong></td>
</tr>
<tr>
<td>Insufficient Controls Related to the Application of Subawardee Indirect Costs</td>
</tr>
<tr>
<td>Insufficient Controls Related to the Application of Fringe Benefit Rates</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exceptions.*

<sup>19</sup> EDC’s NICRA dated September 2, 2015, established a provisional fringe benefit rate of 29.69 percent for salary earned from October 1, 2014, until amended. EDC’s NICRA dated January 30, 2017, established a provisional fringe benefit rate of 29.75 percent for salary earned from October 1, 2015, until amended.

<sup>20</sup> In FY 2017, 29.75 percent was the provisional fringe benefit rate in effect at the time the salary was earned; however, a final negotiated rate of 29.76 percent was established in EDC’s NICRA dated January 2, 2020. Although the 29.75 percent rate was the rate in effect at the time the salary was earned, the rate required adjustment to 29.76 percent following the issuance of the NICRA date January 2, 2020.
Recommendations

We recommend that NSF’s Director of the Division of Institution and Award Support:

4.1 Direct EDC to update its current practices for approving invoices submitted by NSF award subrecipients. The updated approval process should require that EDC ensure subrecipients apply indirect costs consistent with their negotiated indirect cost rate agreement and/or with their approved budget.

4.2 Direct EDC to develop and implement a control that ensures that EDC applies fringe benefits using the negotiated fringe benefit rates in effect at the time salary expenses are incurred.

EDC Response: EDC did not state whether it agreed or disagreed with this finding but noted that it believes it is appropriate for organizations to use lower overhead and fringe benefit rates than those included in negotiated agreements. Specifically:

- With regard to the unsupported subawardee indirect cost rate exception, EDC noted that its cost regulations only prohibit charging more than the approved rate because EDC believes it appropriate for an organization to use an overhead rate that is less than the provisional rate stated in its NICRA.

- With regard to the inappropriately applied fringe benefit rate exception, EDC noted that its cost regulations only prohibit charging more than the approved rate because EDC believes it appropriate for an organization to use a fringe rate that is less than the rate stated in their NICRA.

Auditors’ Additional Comments: As EDC did not provide documentation to support that it has sufficient internal controls in place to ensure that staff are verifying that indirect costs are being applied using a rate equal to or below the approved NICRA rate, our position regarding this finding has not changed.

COTTON & COMPANY ASSURANCE AND ADVISORY, LLC

Megan Mesko, CPA, CFE
Partner
June 27, 2022
June 13, 2022

To Whom it may concern:
Please find below EDC’s formal responses to the audit conducted by Cotton & Company.

EDC Responses

We disagree with Cotton & Company’s general statement in the Executive Summary that EDC needs improved oversight of the allocation and documentation of expenses charged to NSF awards. EDC has comprehensive policies and applies rigorous procedures to ensure that costs claimed are reasonable, allocable, and allowable in accordance with federal regulations, each agency/sponsors’ regulations, and the terms of each award. We believe this is evident in the fact that the total disallowed costs (to which we agree) were $8,375 out of an audit of 38 awards totaling $52 million. Human error can occur even given the most rigorous policies, procedures, and training. The following tables list EDC’s responses to each of the auditor’s findings.

Finding 1: Unallowable Expenses

<table>
<thead>
<tr>
<th>Participant Support Expenses</th>
<th>EDC Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense Date</td>
<td>NSF Award No.</td>
</tr>
<tr>
<td>July 2017</td>
<td>$32,045</td>
</tr>
<tr>
<td>September 2017</td>
<td>11,743</td>
</tr>
<tr>
<td>September 2018</td>
<td>227</td>
</tr>
<tr>
<td>September 2019</td>
<td>2,255</td>
</tr>
<tr>
<td>December 2019</td>
<td>22,255</td>
</tr>
</tbody>
</table>
Conference Expenses

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Unallowable Total</th>
<th>EDC Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 2014</td>
<td>$2,403</td>
<td></td>
<td>EDC agrees and will refund NSF.</td>
</tr>
<tr>
<td>June 2016</td>
<td>$1,725</td>
<td></td>
<td>EDC agrees and will refund NSF.</td>
</tr>
</tbody>
</table>

Subawardee Indirect Cost

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Unallowable Total</th>
<th>EDC Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2017</td>
<td>$3,670</td>
<td></td>
<td>EDC disagrees with this finding and maintains that the costs are allowable. The Negotiated Indirect Cost Agreement (NICRA) from the year 2017 states that the rate is 8%. Please refer to the attachment, “2017 NICRA”.</td>
</tr>
</tbody>
</table>

Unallowable Consultant Travel

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Unallowable Total</th>
<th>EDC Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2017</td>
<td>$1,992</td>
<td></td>
<td>EDC agrees and will refund NSF.</td>
</tr>
</tbody>
</table>

Finding 2: Inappropriate Award Cash Management Service (ACMS) Drawdowns

ACMS Drawdowns Processed

<table>
<thead>
<tr>
<th>NSF Award No.</th>
<th>Amount Drawn</th>
<th>Amount should have been Drawn</th>
<th>EDC Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>$319</td>
<td>$0</td>
<td></td>
<td>EDC processed the drawdown corrections on November 2, 2021; transaction ID# 295847.</td>
</tr>
<tr>
<td>0</td>
<td>319</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,125</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>13,125</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Finding 3: Non-Compliance with EDC Policies

Non-Compliance with EDC Travel Policy

In December 2019, EDC charged NSF Award No. 1844719 for $4,769 for travel claimed by an EDC employee via a non-employee reimbursement form rather than a Deltek Expense Report Summary.

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Fiscal Year</th>
<th>Travel Policy Compliance Exception</th>
<th>EDC Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2019</td>
<td></td>
<td>2020</td>
<td>Non-Compliance with EDC’s Travel Policy</td>
<td>The Project Director paid for all conference related expenses, including the related travel for two EDC employees using EDC corporate credit card. Both EDC’s CFO and Controller provided approval of this payment which is documented along with the supporting details for all charges.</td>
</tr>
</tbody>
</table>
In October 2020, EDC charged NSF Award No. 1933698 for a $5,000 honorarium it paid a consultant with whom it had not established a Professional Service Agreement.

<table>
<thead>
<tr>
<th>Expense Date</th>
<th>NSF Award No.</th>
<th>Fiscal Year</th>
<th>Consultant Policy Compliance Exception</th>
<th>EDC Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2020</td>
<td></td>
<td>2021</td>
<td>Non-Compliance with EDC's Procurement Policy</td>
<td>The consulting fee was erroneously charged to honorarium. We agree a PSA should have been in the files.</td>
</tr>
</tbody>
</table>

Finding 4: Insufficient Controls Related to the Application of Negotiated Rates

**Subawardee Indirect Cost Rates Not Supported**

<table>
<thead>
<tr>
<th>NSF Award Number</th>
<th>Transaction Date</th>
<th>Rate Applied</th>
<th>Rate per auditor</th>
<th>EDC Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/28/2019</td>
<td>2.90%</td>
<td>3.00%</td>
<td>EDC maintains that is appropriate for an organization to use an overhead rate that is less than the provisional rate stated in the NICRA. The cost regulations prohibit charging more than the approved rate, but not less than the approved rate.</td>
</tr>
</tbody>
</table>

**Inappropriately Applied Fringe Benefit Rates**

<table>
<thead>
<tr>
<th>NSF Award Number</th>
<th>Transaction FY</th>
<th>Rate Applied</th>
<th>Rate per auditor</th>
<th>EDC Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>29.69%</td>
<td>29.75%</td>
<td>EDC maintains that is appropriate for an organization to use a fringe rate that is less than the provisional rate stated in the NICRA. The cost regulations prohibit charging more than the approved rate, but not less than the approved rate.</td>
</tr>
</tbody>
</table>

Very truly yours,

Cheryl Hoffmann-Bray

Chief Financial & Compliance Officer, SVP, Treasurer

EDC 300 Fifth Avenue, Suite 2010, Waltham, MA 02451 USA 617-969-7100 edc.org
OBJECTIVES
The NSF OIG Office of Audits engaged Cotton & Company Assurance and Advisory, LLC (referred to as “we”) to conduct an audit of all the costs that EDC claimed on 38 NSF awards. The objectives of the audit were to evaluate EDC’s award management environment; to determine if costs claimed are allowable, allocable, reasonable, and in compliance with NSF award terms and conditions and applicable federal financial assistance requirements; and to determine whether any extraordinary circumstances existed that would justify further audit work beyond the original 40 to 50 transactions.

SCOPE
The audit population included approximately $59.6 million in expenses EDC claimed on the following 38 NSF awards from each award’s inception date through September 2, 2021.

METHODOLOGY
After obtaining NSF OIG’s approval for our audit plan, we performed each of the approved audit steps. Generally, these steps included:

- Assessing the reliability of the GL data EDC provided by comparing the costs charged to NSF awards per EDC’s accounting records to the reported net expenditures reflected in the Award Cash Management Service (ACM$) drawdown requests.

  - Our work required us to rely on computer-processed data obtained from EDC and NSF OIG. NSF OIG provided award data EDC reported through ACM$ during our audit period.

    - We assessed the reliability of the GL data that EDC provided by: (1) comparing the costs charged to NSF awards per EDC’s accounting records to the reported net expenditures reflected in the ACM$ drawdown requests that EDC submitted to NSF during the audit period of performance; and (2) reviewing the parameters that EDC used to extract transaction data from its accounting systems. We identified several discrepancies between the amounts supported by
EDC’s GL and the amounts that EDC claimed per NSF’s ACM$ system. These discrepancies resulted in Finding 2: Inappropriate ACM$ Drawdown; however, we found EDC’s computer-processed data to be sufficiently reliable for the purposes of the audit. We did not identify any issues with the parameters that EDC used to extract the accounting data.

- We found NSF’s computer-processed data to be sufficiently reliable for the purposes of this audit. We did not review or test whether the data contained in NSF’s databases or the controls over NSF’s databases were accurate or reliable; however, the independent auditor’s report on NSF’s financial statements for FY 2020 found no reportable instances in which NSF’s financial management systems did not substantially comply with applicable requirements.

  - EDC provided detailed transaction-level data to support $59,636,628 in costs charged to NSF awards during the period, which was greater than the $59,635,058 EDC claimed in ACM$ for the 38 awards. This data resulted in a total audit universe of $59,636,628 in expenses claimed on 38 NSF awards.

- Obtaining and reviewing all available accounting and administrative policies and procedures, external audit reports, desk review reports, and other relevant information EDC and NSF OIG provided, as well as any other relevant information that was available online.

- Summarizing our understanding of federal, NSF, and EDC-specific policies and procedures surrounding costs budgeted for or charged to NSF awards and identifying the controls in place to ensure that costs charged to sponsored projects were reasonable, allocable, and allowable.

  - In planning and performing this audit, we considered EDC’s internal controls within the audit’s scope solely to understand the directives or policies and procedures EDC has in place to ensure that charges against NSF awards complied with relevant federal regulations, NSF award terms, and EDC policies.

- Providing EDC with a list of 43 transactions that we selected based on the results of our data analytics and requesting that EDC provide documentation to support each transaction.
• Reviewing the supporting documentation EDC provided and requesting additional documentation as necessary to ensure we obtained sufficient, appropriate evidence to assess the allowability of each sampled transaction under relevant federal,\textsuperscript{21} NSF,\textsuperscript{22} and EDC policies.\textsuperscript{23}

• Holding virtual interviews and walkthroughs with EDC in January and February 2022 to discuss payroll (including effort reporting), fringe benefits, travel, participant support costs, procurement, \textit{equipment} (including an inventory check), Graduate Research Fellowship Program, other direct costs (e.g., patent, relocation, recruiting, interest, advertising/public relations, \textit{entertainment}, fundraising, lobbying, selling/marketing, and training costs), grant close-out procedures, subawards, ACM$ processing, indirect costs, and other general policies (e.g., pre- and post-award costs, program income, whistle-blower information, research misconduct, and conflict of interest policies).

• Summarizing the results of our fieldwork and confirming that we did not identify any extraordinary circumstances that justified the need for a second audit phase.\textsuperscript{24}

At the conclusion of our fieldwork, we provided a summary of our results to NSF OIG personnel for review. We also provided the summary to EDC personnel to ensure EDC was aware of each of our findings and did not have additional documentation to support the questioned costs.

We conducted this performance audit in accordance with \textit{Generally Accepted Government Auditing Standards}, issued by the Comptroller General of the United States. 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 based on our audit objectives.


\textsuperscript{22} We assessed EDC's compliance with NSF PAPPGs 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, and 19-1 and with NSF award-specific terms and conditions, as appropriate.

\textsuperscript{23} We assessed EDC's compliance with internal EDC policies and procedures surrounding costs budgeted for or charged to NSF awards.

\textsuperscript{24} Based on the areas of elevated risk of noncompliance identified during the initial phase, we determined that there was no need for any expanded audit phase.
### Appendix C, Table 1: Schedule of Questioned Costs by Finding

<table>
<thead>
<tr>
<th>Finding</th>
<th>Description</th>
<th>Unsupported</th>
<th>Unallowable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Unallowable Expenses</td>
<td>$0</td>
<td>$74,645</td>
<td>$74,645</td>
</tr>
<tr>
<td>2</td>
<td>Inappropriate ACM$ Drawdowns</td>
<td>-</td>
<td>13,444</td>
<td>13,444</td>
</tr>
<tr>
<td>3</td>
<td>Non-Compliance with EDC Policies</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Insufficient Controls Related to the Application of Negotiated Rates</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$0</td>
<td>$88,089</td>
<td>$88,089</td>
</tr>
</tbody>
</table>

*Source: Auditor summary of questioned costs by finding.*
### Appendix C, Table 2: Summary of Questioned Costs by NSF Award Number

<table>
<thead>
<tr>
<th>NSF Award No.</th>
<th>No. of Transaction Exceptions</th>
<th>Questioned Direct Costs</th>
<th>Questioned Indirect Costs</th>
<th>Questioned Total</th>
<th>EDC Agreed to Reimburse</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>$1,800</td>
<td>$603</td>
<td>$2,403</td>
<td>$2,403</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1,250</td>
<td>475</td>
<td>1,725</td>
<td>1,725</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>34,300</td>
<td>-</td>
<td>34,300</td>
<td>2,255</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>227</td>
<td>-</td>
<td>227</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1,447</td>
<td>545</td>
<td>1,992</td>
<td>1,992</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>11,743</td>
<td>-</td>
<td>11,743</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>22,255</td>
<td>-</td>
<td>22,255</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>319</td>
<td>-</td>
<td>319</td>
<td>319</td>
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<tr>
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<td>2</td>
<td>13,125</td>
<td>-</td>
<td>13,125</td>
<td>13,125</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>$86,466</strong></td>
<td><strong>$1,623</strong></td>
<td><strong>$88,089</strong></td>
<td><strong>$21,819</strong></td>
</tr>
</tbody>
</table>

*Source: Auditor summary of questioned costs by NSF award number.*
### Appendix C, Table 3: Summary of Questioned Costs by NSF Award Number and Expense Description

<table>
<thead>
<tr>
<th>Finding No.</th>
<th>NSF Award No.</th>
<th>Description</th>
<th>Fiscal Year(s)</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
<th>EDC Agreed to Reimburse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Unallowable Expenses</td>
<td></td>
<td>July 2017 Conference Room and AV Rentals</td>
<td>2017</td>
<td>$32,045</td>
<td>-</td>
<td>$32,045</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>September 2017 Unidentified Conference Expenses</td>
<td>2017</td>
<td>11,743</td>
<td>-</td>
<td>11,743</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>September 2018 EDC Employee Lodging</td>
<td>2018</td>
<td>227</td>
<td>-</td>
<td>227</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>September 2019 Non-Participant Conference Meals</td>
<td>2019</td>
<td>2,255</td>
<td>-</td>
<td>2,255</td>
<td>2,255</td>
</tr>
<tr>
<td></td>
<td></td>
<td>December 2019 Conference Room and AV Rentals</td>
<td>2020</td>
<td>22,255</td>
<td>-</td>
<td>22,255</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>February 2014 Conference Registration Fee</td>
<td>2014</td>
<td>1,800</td>
<td>603</td>
<td>2,403</td>
<td>2,403</td>
</tr>
<tr>
<td></td>
<td></td>
<td>June 2016 Conference Sponsorship</td>
<td>2016</td>
<td>1,250</td>
<td>475</td>
<td>1,725</td>
<td>1,725</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 2017 Consultant Travel</td>
<td>2017</td>
<td>1,447</td>
<td>545</td>
<td>1,992</td>
<td>1,992</td>
</tr>
<tr>
<td>2) Inappropriate ACM$ Drawdowns</td>
<td></td>
<td>Inappropriate ACM$ Drawdown</td>
<td>2020</td>
<td>319</td>
<td>-</td>
<td>319</td>
<td>319</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inappropriate ACM$ Drawdown</td>
<td>2020</td>
<td>13,125</td>
<td>-</td>
<td>13,125</td>
<td>13,125</td>
</tr>
<tr>
<td>3) Non-Compliance with EDC Policies</td>
<td></td>
<td>Non-Compliance with EDC’s Travel Policy</td>
<td>2020</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-Compliance with EDC’s Procurement Policy</td>
<td>2021</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4) Insufficient Controls Related to the Application of Negotiated Rates</td>
<td></td>
<td>Insufficient Controls Related to the Application of Subawardee Indirect Costs</td>
<td>2019</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insufficient Controls Related to the Application of Fringe Benefit Rates</td>
<td>2017</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$86,466</strong></td>
<td><strong>$1,623</strong></td>
<td><strong>$88,089</strong></td>
<td><strong>$21,819</strong></td>
</tr>
</tbody>
</table>

*Source: Auditor summary of identified exceptions.*
APPENDIX D: SUMMARY OF RECOMMENDATIONS AND CONSIDERATIONS
We recommend that NSF’s Director of the Division of Institution and Award Support:

1.1. Resolve the $66,270 in questioned participant support for which EDC has not agreed to reimburse NSF and direct EDC to repay or otherwise remove the sustained questioned costs from its NSF award.

1.2. Direct EDC to provide documentation supporting that it has reimbursed or otherwise credited the $8,375 in questioned participant support, conference, and consultant travel costs for which it has agreed to reimburse NSF.

1.3. Direct EDC to establish clear guidance regarding the allowable uses of participant support cost funding. This guidance should address how to segregate, identify, and account for costs that are covered with participant support cost funding. Specifically, this guidance should address how EDC verifies it does not use participant support costs to cover non-participant or other unallowable costs, such as costs budgeted for within non-participant support costs budget categories, costs incurred for EDC employees, and expenses associated with no-show participants.

1.4. Direct EDC to strengthen its administrative and management processes related to the approval of conference registration fees. Updated processes should require EDC to verify that individuals either have dedicated or will be dedicating effort to an NSF award prior to allowing their conference registration fees to be charged to the NSF award.

1.5. Direct EDC to strengthen its administrative and management processes to ensure advertising costs associated with sponsoring conferences are not charged to federal awards unless specifically approved by the award sponsor.

1.6. Direct EDC to strengthen its policies and procedures for creating and retaining documentation, including introducing additional controls to help ensure that it appropriately creates and maintains all documentation necessary to support the allowability of costs claimed by consultants. Updated procedures could include:

   - Requiring consultant agreements to specifically note whether the consultant is permitted to invoice EDC for travel costs incurred as a result of performing the requested consulting services.

   - Requiring invoice approvers to review consulting agreements to determine the allowability of travel expense reimbursement submitted by consultants prior to approving consultant travel expenses.

2.1. Direct EDC to provide documentation that it has repaid or otherwise credited the $13,444 in questioned drawdowns for which it has agreed to reimburse NSF.
2.2. Direct EDC to strengthen its policies and procedures and internal controls to ensure it draws down funds on the correct NSF award when requesting funds through NSF’s Award Cash Management Service.

3.1. Direct EDC to strengthen its administrative and management procedures for travel reimbursements to ensure that its employees utilize the Deltek Expense Report Summary for travel reimbursements.

3.2. Direct EDC to strengthen its administrative and management procedures to ensure that payments are only made to consultants with Professional Service Agreements.

4.1 Direct EDC to update its current practices for approving invoices submitted by NSF award subrecipients. The updated approval process should require that EDC ensure subrecipients apply indirect costs consistent with their negotiated indirect cost rate agreement and/or with their approved budget.

4.2 Direct EDC to develop and implement a control that ensures that EDC applies fringe benefits using the negotiated fringe benefit rates in effect at the time salary expenses are incurred.
APPENDIX E: GLOSSARY
**Allocable cost.** A cost is allocable to a particular federal award or other cost objective if the goods or services involved are chargeable or assignable to that federal award or cost objective in accordance with relative benefits received. This standard is met if the cost:

(a) Is incurred specifically for the federal award.

(b) Benefits both the federal award and other work of the non-federal entity and can be distributed in proportions that may be approximated using reasonable methods.

(c) Is necessary to the overall operation of the non-federal entity and is assignable in part to the federal award in accordance with the principles in this subpart. (2 CFR § 200.405).

**Return to the term’s initial use.**

**Factors affecting allowability of costs.** The tests of allowability of costs under these principles are: they must be reasonable; they must be allocable to sponsored agreements under the principles and methods provided herein; they must be given consistent treatment through application of those generally accepted accounting principles (GAAP) appropriate to the circumstances; and they must conform to any limitations or exclusions set forth in these principles or in the sponsored agreement as to types or amounts of cost items. (2 CFR 230, Appendix A, Section A.2.) and (2 CFR § 200.403).

**Return to the term’s initial use.**

**Allowable cost.** Except where otherwise authorized by statute, costs must meet the following general criteria in order to be allowable under federal awards:

(a) Be necessary and reasonable for the performance of the federal award and be allocable thereto under these principles.

(b) Conform to any limitations or exclusions set forth in these principles or in the federal award as to types or amount of cost items.

(c) Be consistent with policies and procedures that apply uniformly to both federally-financed and other activities of the non-federal entity. (2 CFR 230, Appendix A, Section A.2.) and (2 CFR § 200.403).

**Return to the term’s initial use.**

**Consultant Services (Professional Service costs).** This refers to costs of professional and consultant services rendered by persons who are members of a particular profession or possess a special skill, and who are not officers or employees of the non-federal entity, which are allowable, subject to paragraphs (b) and (c) when reasonable in relation to the services rendered and when not contingent upon recovery of the costs from the federal government.
In determining the allowability of costs in a particular case, no single factor or any special combination of factors is necessarily determinative; however, the following factors are relevant:

1) The nature and scope of the service rendered in relation to the service required.

2) The necessity of contracting for the service, considering the non-federal entity’s capability in the particular area.

3) The past pattern of such costs, particularly in the years prior to federal awards.

4) The impact of federal awards on the non-federal entity’s business.

5) Whether the proportion of federal work to the non-federal entity’s total business is such as to influence the non-federal entity in favor of incurring the cost, particularly where the services rendered are not of a continuing nature and have little relationship to work under federal awards.

6) Whether the service can be performed more economically by direct employment rather than contracting.

7) The qualifications of the individual or concern rendering the service and the customary fees charged, especially on non-federally funded activities.

8) Adequacy of the contractual agreement for the service (e.g., description of the service, estimate of time required, rate of compensation, and termination provisions). (2 CFR § 200.459).

**Entertainment.** Costs of entertainment, including amusement, diversion, and social activities and any associated 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. (2 CFR § 200.438).

**Equipment.** Tangible personal property—including information technology (IT) systems—having a useful life of more than 1 year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-federal entity for financial statement purposes, or $5,000. (2 CFR § 200.33).

**Fringe Benefits.** Allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe benefits include, but are not limited to, the costs of leave (vacation, family-related, sick, or military), employee insurance, pensions, and unemployment benefit plans. Except as provided elsewhere in
these principles, the costs of fringe benefits are allowable provided that the benefits are reasonable and are required by law, non-federal entity-employee agreement, or an establishment policy of the non-federal entity.

Leave is the cost of fringe benefits in the form of regular compensation paid to employees during periods of authorized absences from the job, such as for annual leave, family-related leave, sick leave, holidays, court leave, military leave, administrative leave, and other similar benefits, are allowable if all of the following criteria are met:

1) They are provided under established written leave policies.

2) The costs are equitably allocated to all related activities, including federal awards.

3) The accounting basis (cash or accrual) selected for costing each type of leave is consistently followed by the non-federal entity or specified grouping of employees. (2 CFR § 200.431).

**Return to the term’s initial use.**

**Indirect (F&A) Costs.** This refers to 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. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a number of pools of indirect (F&A) costs. Indirect (F&A) cost pools must be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived. (2 CFR § 200.56).

**Return to the term’s initial use.**

**Negotiated Indirect Cost Rate.** Generally charged to federal awards through the development and application of an indirect cost rate. In order to recover indirect costs related to federal awards, most organizations must negotiate an indirect cost rate with the federal agency that provides the preponderance of funding, or Health and Human Services (HHS) in the case of colleges and universities. (NSF Office of Budget, Finance, and Award Management).

**Return to the term’s initial use.**

**Participant Support Costs.** This refers to 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. (2 CFR § 200.75).

**Return to the term’s initial use.**

**Period of Performance (POP).** The time during which the non-federal entity may incur new obligations to carry out the work authorized under the federal award. The federal awarding agency or pass-through entity must include start and end dates of the POP in the federal award. (2 CFR § 200.77).
Proposal & Award Policies & Procedures Guide (PAPPG). Comprises documents relating to NSF’s proposal and award process for the assistance programs of NSF. The PAPPG, in conjunction with the applicable standard award conditions incorporated by reference in award, serve as the NSF’s implementation of 2 CFR § 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. If the PAPPG and the award conditions are silent on a specific area covered by 2 CFR § 200, the requirements specified in 2 CFR § 200 must be followed. (NSF PAPPG 19-1).

Reasonable Cost. A reasonable cost is a cost that, in its nature and amount, does not exceed that which would have been incurred by a prudent person under the circumstances prevailing at the time the decision to incur the cost was made. (2 CFR § 200.404).

Salaries and Wages. Compensation for personal services includes all remuneration, paid currently, or accrued, for services of employees rendered during the POP under the federal award, including but not necessarily limited to wages and salaries. Costs of compensation are allowable to the extent that they satisfy the specific requirements of this Part, and that the total compensation for individual employees:

1. Is reasonable for the services rendered and conforms to the established written policy of the non-federal entity consistently applied to both federal and non-federal activities.

2. Follows an appointment made in accordance with a non-federal entity’s laws or rules or written policies and meets the requirements of federal statute, where applicable.

3. Is determined and supported as provided in Standards for Documentation of Personnel Expenses, when applicable. (2 CFR § 200.430).

Subawards. An award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract. (2 CFR § 200.92).

Travel costs. Expenses for transportation, lodging, subsistence, and related items incurred by employees who are in travel status on official business of the non-federal entity. Such costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an
entire trip and not to selected days of the trip, and results in charges consistent with those normally allowed in like circumstances in the non-federal entity's non-federally funded activities and in accordance with non-federal entity's written travel reimbursement policies. Notwithstanding the provisions of § 200.444 General costs of government, travel costs of officials covered by that section are allowable with the prior written approval of the federal awarding agency or pass-through entity when they are specifically related to the federal award. (2 CFR § 200.474).

Return to the term’s initial use.
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