

Performance Audit of Incurred Costs – BSCS Science Learning

REPORT PREPARED BY COTTON & COMPANY ASSURANCE AND
ADVISORY, LLC

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL

June 28, 2022
OIG 22-1-009





AT A GLANCE

Performance Audit of Incurred Costs – BSCS Science Learning
Report No. OIG 22-1-009
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 BSCS Science Learning (BSCS) incurred on 12 awards as of September 2, 2021. The auditors tested more than \$355,000 of the approximately \$16.7 million of costs claimed to NSF. The audit objective was to determine if costs claimed by BSCS 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 BSCS's compliance with certain federal and NSF award requirements, NSF award terms and conditions, and BSCS policies. The auditors questioned \$158,050 of costs claimed by BSCS during the audit period. Specifically, the auditors found \$117,804 of unallowable expenses, \$39,912 of inadequately supported expenses, and \$334 of inappropriately allocated salary expenses. The auditors also identified two compliance-related findings for which there were no questioned costs: non-compliance with federal requirements for pass-through entities and non-compliance with BSCS policies. C&C is responsible for the attached report and the conclusions expressed in this report. NSF OIG does not express any opinion on the conclusions presented in C&C's audit report.

RECOMMENDATIONS

The auditors included 5 findings in the report with associated recommendations for NSF to resolve the questioned costs and to ensure BSCS strengthens administrative and management controls.

AUDITEE RESPONSE

BSCS concurred with the findings, but did not agree to reimburse NSF for any of the questioned costs. BSCS's response is attached in its entirety to the report as Appendix A.

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



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

MEMORANDUM

DATE: June 28, 2022

TO: Dale Bell
Director
Division of Institution and Award Support

Jamie French
Director
Division of Grants and Agreements

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

SUBJECT: Audit Report No. 22-1-009, BSCS Science Learning

This memorandum transmits the Cotton & Company Assurance and Advisory, LLC (C&C) report for the audit of costs charged on 12 awards by BSCS Science Learning (BSCS) to its sponsored agreements with the National Science Foundation as of September 2, 2021. The audit encompassed more than \$355,000 of the approximately \$16.7 million claimed to NSF during the period. The audit objective was to determine if costs claimed by BSCS 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 Office of Management and Budget 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 Jae Kim at 703.292.7100 or OIGpublicaffairs@nsf.gov.

Attachment

cc:

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Dan Reed	Christina Sarris	Allison Lerner	Jae Kim
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John Veysey	Alex Wynnyk	Ken Chason	Louise Nelson
Ann Bushmiller	Rochelle Ray	Dan Buchtel	Karen Scott

EXECUTIVE SUMMARY

The Cotton & Company audit team determined that BSCS Science Learning (BSCS) 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 BSCS policies. Specifically, the audit report includes five findings and a total of \$158,050 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 that BSCS incurred on 12 awards that either ended or were close to the end of their periods of performance. The audit objectives included evaluating BSCS'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 BSCS'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) 14-1, 15-1, 16-1, 17-1, 18-1, 19-1, and 20-1; NSF award terms and conditions; and BSCS 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 \$158,050 of direct and indirect costs that BSCS inappropriately claimed during the audit period, including:

- \$117,804 of unallowable expenses
- \$39,912 of inadequately supported expenses
- \$334 of inappropriately allocated salary expenses

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

- Non-compliance with federal requirements for pass-through entities
- Non-compliance with BSCS policies

RECOMMENDATIONS

The audit report includes 16 recommendations for NSF's Director of the Division of Institution and Award Support related to resolving the \$158,050 in questioned costs and ensuring BSCS strengthens its award management environment, as summarized in [Appendix D](#).

AUDITEE RESPONSE

Although BSCS concurred with the majority of the findings throughout the audit report, it did not agree to reimburse any of the \$158,050 in questioned costs. BSCS's response is attached, in its entirety, to the report as [Appendix A](#).

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Abbreviations

ACM\$	Award Cash Management Service
BSCS	BSCS Science Learning
CFR	Code of Federal Regulations
FY	Fiscal Year
GAGAS	Generally Accepted Government Auditing Standards
GL	General Ledger
MTDC	Modified Total Direct Costs
NSF	National Science Foundation
OIG	Office of Inspector General
[REDACTED]	[REDACTED]
PAPPG	Proposal and Award Policies and Procedures Guide

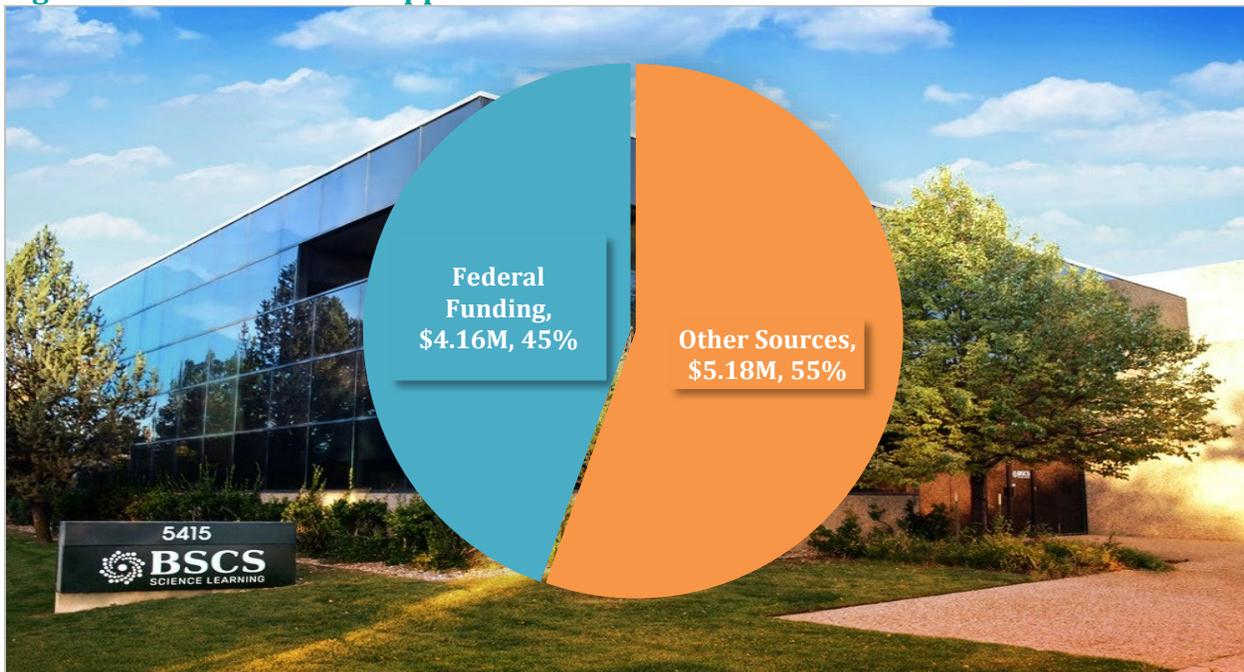
BACKGROUND

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 BSCS Science Learning (BSCS). BSCS is a science educational center located in Colorado Springs, Colorado. In fiscal year (FY) 2020, BSCS reported approximately \$9.34 million in non-operating revenue, with \$4.16 million received from federal sources—including NSF—as illustrated in Figure 1.

Figure 1: BSCS’s FY 2020 Support and Revenue



Source: The chart data is available on BSCS’s website ([https://media.bscs.org/bcsmw/financials/audits/bcscs science learning 2020 financial statements and uniform guidance compliance audit.pdf](https://media.bscs.org/bcsmw/financials/audits/bcscs%20science%20learning%202020%20financial%20statements%20and%20uniform%20guidance%20compliance%20audit.pdf)). The photo of BSCS is publicly available on BSCS’s website (<https://bscs.org/resources/educator-resource-center/>).

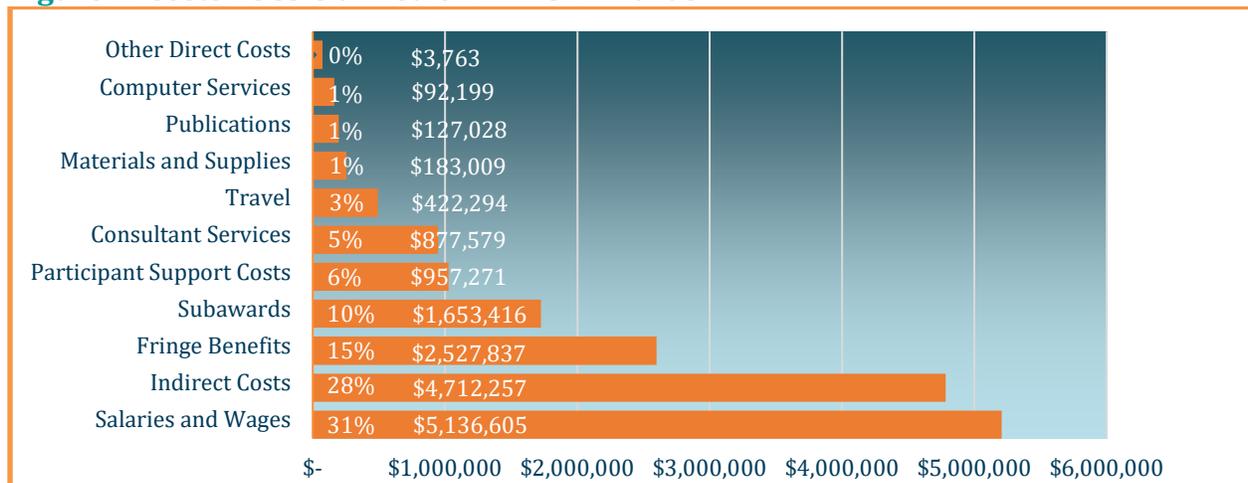
AUDIT SCOPE

This performance audit—conducted under Order No. 140D0421F0622—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 BSCS’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, BSCS provided general ledger (GL) data to support the approximately \$16.7 million in expenses it claimed on 12 NSF awards from each award’s inception through September 2, 2021.

Figure 2: Costs BSCS Claimed on 12 NSF Awards¹



Source: Auditor analysis of accounting data BSCS provided, illustrating the total costs (\$16,693,258) by expense type, using financial information to support costs incurred on NSF awards during the audit period.

We judgmentally selected 40 transactions totaling \$355,688² (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.

¹ The total award-related expenses that BSCS reported in its GL exceeded the \$16,630,213 reported in NSF’s Award Cash Management Service (ACM\$). However, because BSCS was able to provide justifications to support all reconciliation discrepancies identified, we determined that the GL data was appropriate for the purposes of this engagement.

² The \$355,688 represents the total value of the 40 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

Budget Category	Transaction Count	Expense Amount ³
Subawards	3	\$115,027
Participant Support Costs	6	71,311
Consultant Services	7	63,846
Salaries and Wages	10	37,539
Materials and Supplies	6	22,338
Computer Services	1	18,503
Indirect Costs	1	12,183
Publications	2	7,588
Travel	3	5,765
Fringe Benefits	1	1,588
Total	<u>40</u>	<u>\$355,688</u>

Source: Auditor summary of selected transactions.

AUDIT RESULTS

We identified and questioned \$158,050 in costs that BSCS charged to 10 NSF awards. We also identified expenses that BSCS charged to five NSF awards that did not result in questioned costs, but resulted in non-compliance with federal, NSF, or BSCS-specific policies and procedures. 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

Finding Description	Questioned Costs
Unallowable Expenses	\$117,804
Inadequately Supported Expenses	39,912
Inappropriately Allocated Salary Expenses	334
Non-Compliance with Federal Requirements for Pass-Through Entities	-
Non-Compliance with BSCS Policies	-
Total	<u>\$158,050</u>

Source: Auditor summary of findings identified.

We made 16 recommendations for NSF's Director of the Division of Institution and Award Support related to resolving the \$158,050 in questioned costs and ensuring BSCS strengthens its administrative and management procedures for monitoring federal funds. We communicated the results of our audit and the related findings and recommendations to BSCS and NSF OIG. We included BSCS's response to this report, in its entirety, in [Appendix A](#).

³ 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

BSCS charged 10 NSF awards a total of \$117,804 in expenses incurred for indirect costs, **travel costs**, and gift card incentives that are unallowable under federal regulations⁴ and **NSF Proposal and Award Policies and Procedures Guides (PAPPGs)**.⁵

Unallowable Indirect Costs

BSCS charged 10 NSF awards for \$110,596 in indirect costs that are not allowable per federal regulations, as illustrated in Table 3.

Table 3: Unallowable Indirect Costs

Expense Date	NSF Award No.	Amount	Unallowable Expenses Associated With:	Notes
May 2016 to July 2021	1502571	\$46,851	Subawardee Claiming a Non-Negotiated Indirect Cost Rate Above the De Minimis Rate	a
January 2018 to December 2018	[REDACTED]	575	Provisional Indirect Cost Rate Not Appropriately Updated	b
		946		
		13,511		
		6,919		
		13,931		
		4,349		
		9,437		
		10,801		
		1,186		
		2,090		

Source: Auditor summary of identified exceptions.

- a) From May 2016 to July 2021, BSCS charged NSF Award No. [REDACTED] for \$140,553 in indirect costs claimed by a subawardee, [REDACTED] ([REDACTED]). [REDACTED] claimed these indirect costs at a rate of 15 percent. However, BSCS was unable to support that the 15 percent rate was either (1) an approved federally recognized indirect cost rate negotiated between the subrecipient and the federal government or (2) a negotiated, justified rate between BSCS and the subawardee.⁶ As such, we

⁴ According to 2 Code of Federal Regulations (CFR) 230, Appendix A, Section A.2. and 2 CFR § 200.403, *Factors affecting allowability of costs*, 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.

⁵ According to NSF PAPPGs 14-1, 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.

⁶ According to the BSCS *Policy and Procedures for Subaward Administration and Budget Expenditure Monitoring* policy, if indirect costs are included in the potential subrecipient budget, the subrecipient must provide a copy of the most current Indirect Cost Agreement to the BSCS Director of Operations & Finance for verification of the indirect cost rate used in the budget.

are questioning \$46,851⁷ as the difference between the 15 percent rate charged in the subawardee’s invoices and the 10 percent de minimis rate allowable without a negotiated rate per federal regulations.⁸

- b) From January through December 2018, BSCS applied its 52.35 percent provisional indirect cost rate to the modified total direct costs (MTDCs) it accumulated on 10 NSF awards. Although it was appropriate for BSCS to apply the 52.35 percent rate before it received its final FY 2018 negotiated indirect cost rate agreement on November 8, 2018, BSCS should have processed an indirect cost adjustment to retroactively apply the 48.73 percent negotiated rate approved for FY 2018 after it received the final agreement. Because BSCS did not post an adjustment to reduce the amount of indirect costs claimed on its FY 2018 MTDCs in accordance with its final indirect cost rate agreement, it charged 10 NSF awards for \$63,745⁹ in unallowable indirect costs.¹⁰

Unallowable Travel Allowances

BSCS charged two NSF awards for \$7,183 in unallowable travel allowances, as illustrated in Table 4.

Table 4: Unallowable Travel Costs

Expense Date	NSF Award No.	Amount	Unallowable Expenses Associated With:	Notes
February 2018		\$2,912	Travel Allowance	a
August 2019		2,352	Travel Allowance	b
August 2019		1,919	Travel Allowance	c

Source: Auditor summary of identified exceptions.

⁷ We calculated the questioned costs as the difference between \$140,553 (the amount applied to the subaward invoices, which used a 15 percent indirect cost rate) and the allowable amount of \$93,702 (calculated using the de minimis rate of 10 percent), for a total of \$46,851 in unallowable indirect costs.

⁸ According to 2 CFR § 200.331 (a)(4), *Requirements for pass-through entities*, all pass-through entities must obtain the required information, including an approved federally recognized indirect cost rate negotiated between the subrecipient and the Federal government or, if no such rate exists, either a rate negotiated between the pass-through entity and the subrecipient (in compliance with this part), or a de minimis indirect cost rate. 2 CFR § 200.414 (f) states that any non-Federal entity that has never received a negotiated indirect cost rate may elect to charge a de minimis rate of 10% of MTDC which may be used indefinitely.

⁹ Between January 1 and December 31, 2018, BSCS applied \$921,833 of indirect costs to MTDC using an indirect cost rate of 52.35 percent rather than its 2018 final negotiated rate of 48.73 percent to apply \$858,088 in indirect costs. As such, BSCS overcharged the 10 awards by \$63,745 in indirect costs.

¹⁰ According to 2 CFR 230, Appendix A, Section E.1.e, *Negotiation and Approval of Indirect Cost Rates*, provisional rate means a temporary indirect cost rate applicable to a specified period which is used for funding, interim reimbursement, and reporting indirect costs on awards pending the establishment of a final rate for the period. Additionally, 2 CFR § 200, Appendix III, Section C.6, *Provisional and Final Rates for Indirect Costs*, states, to prevent substantial overpayment or underpayment, the provisional rate may be adjusted by the cognizant agency for indirect costs during the institution’s fiscal year. If a provisional rate is not replaced by a predetermined or fixed rate prior to the end of the institution’s fiscal year, a final rate will be established and upward or downward adjustments will be made based on the actual allowable costs incurred for the period involved.

- a) In February 2018, BSCS charged NSF Award No. [REDACTED] for \$2,912 paid to a remote employee as a travel allowance. Because the employee’s appointment letter stated that the travel allowance was intended to cover travel outside of the sponsored program, the travel allowance is not an allowable expense on this award.¹¹
- b) In August 2019, BSCS charged NSF Award No. [REDACTED] for \$2,352 paid to a remote employee as a travel allowance. Because the employee’s appointment letter stated that the travel allowance was intended to cover travel outside of the sponsored program, the travel allowance is not an allowable expense on this award.¹²
- c) In August 2019, BSCS charged NSF Award No. [REDACTED] for \$1,919 paid to a remote employee as a travel allowance. Because the employee’s appointment letter stated that the travel allowance was intended to cover travel outside of the sponsored program, the travel allowance is not an allowable expense on this award.¹³

Unallowable Gift Card Expenses

BSCS did not appropriately process a credit¹⁴ to remove \$25 in unallowable gift card expenses from one NSF award, as illustrated in Table 5.

Table 5: Unallowable Gift Card Expenses

Expense Date	NSF Award No.	Amount	Unallowable Expenses Associated With:	Notes
October 2017	[REDACTED]	\$25	Gift Card Fees Not Appropriately Reimbursed	a

Source: Auditor summary of identified exception.

- a) In October 2017, BSCS charged NSF Award No. [REDACTED] for \$1,599 in costs incurred to purchase \$75 gift cards it anticipated providing to students for participating in the award’s interactive learning program. Because BSCS only distributed 15 of the 20 gift cards purchased, it processed a \$375 credit to remove the cost of the 5 unused gift cards. However, this credit did not appropriately include \$25 in gift card

¹¹ BSCS paid the annual \$8,160 travel allowance in two equal installments of \$4,080 in 2018. Based on the effort **allocation** at the time of the payment, BSCS charged NSF Award No. [REDACTED] for a travel allowance of \$1,958 (48 percent effort * \$4,080). As such, we are questioning a total of \$2,912 (\$1,958 plus \$954 [\$1,958 * 48.73 percent indirect cost rate that BSCS should have applied in 2018]).

¹² BSCS paid the annual \$8,323 travel allowance in two equal installments of \$4,162 in 2019. Based on the effort allocation at the time of the payment, BSCS charged NSF Award No. [REDACTED] for a travel allowance of \$1,581 (38 percent * \$4,162). As such, we are questioning a total of \$2,352 (\$1,581 plus \$771 [\$1,581 * 48.73 percent indirect cost rate]).

¹³ BSCS paid the annual \$8,323 travel allowance in two equal installments of \$4,162 in 2019. Based on the effort allocation at the time of the payment, BSCS charged NSF Award No. [REDACTED] for a travel allowance of \$1,290 (31 percent * \$4,162). As such, we are questioning a total of \$1,919 (\$1,290 plus \$629 [\$1,290 * 48.73 percent indirect cost rate]).

¹⁴ According to 2 CFR § 200.406 (a), *Applicable credits*, applicable credits refer to those receipts or reduction-of-expenditure transactions that offset or reduce expense items allocable to the federal award as direct or indirect costs.

fees (\$4.95 per card).

Conclusion

BSCS did not have sufficient policies and procedures or internal controls in place to ensure it only charged allowable costs to NSF awards. Specifically, BSCS's procedures did not always ensure that it **negotiated indirect cost rates** with subawardees, adjusted provisional indirect cost rates when it received final negotiated rates, restricted travel allowances to non-sponsored funding, or appropriately reimbursed NSF awards for unused gift cards consistent with federal guidance, NSF award terms and conditions, and BSCS policies and procedures.

We are therefore questioning \$117,804 of unallowable expenses charged to 10 NSF awards, as illustrated in Table 6.

Table 6: Finding 1 Summary: Unallowable Expenses

NSF Award No.	Description	Fiscal Year(s)	Questioned Costs			
			Direct	Indirect	Total	BSCS Agreed to Reimburse
██████	Subawardee Non-Negotiated Indirect Cost Rate Above the De Minimis Rate	2016 - 2021	\$0	\$46,851	\$46,851	\$0
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	575	575	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	946	946	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	13,511	13,511	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	6,919	6,919	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	13,931	13,931	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	4,349	4,349	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	9,437	9,437	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	10,801	10,801	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	1,186	1,186	-
██████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	2,090	2,090	-
██████	February 2018 Travel Allowance	2018	1,958	954	2,912	-

NSF Award No.	Description	Fiscal Year(s)	Questioned Costs			BSCS Agreed to Reimburse
			Direct	Indirect	Total	
	August 2019 Travel Allowance	2019	1,581	771	2,352	-
	August 2019 Travel Allowance	2019	1,290	629	1,919	-
	October 2017 Gift Card Fees	2017	25	-	25	-
Total			<u>\$4,854</u>	<u>\$112,950</u>	<u>\$117,804</u>	<u>\$0</u>

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 \$117,804 in questioned indirect costs, travel allowances, and gift card expenses for which BSCS has not agreed to reimburse NSF and direct BSCS to repay or otherwise remove the sustained questioned costs from its NSF award.
- 1.2. Direct BSCS to strengthen its monitoring procedures and internal control processes for applying indirect costs to federal awards. Updated procedures could include:
 - Documenting the negotiation of indirect cost rates applied by subawardees that do not have federally negotiated indirect cost rates.
 - Establishing a process to manually adjust the application of indirect cost rates at the time BSCS receives a final negotiated rate for that period.
- 1.3. Direct BSCS to identify all NSF awards impacted by its incorrect usage of its provisional indirect cost rate in fiscal year 2018 that were not included within the audit scope and provide NSF with evidence supporting its calculation of the total amount of indirect costs it over-applied to those NSF awards in FY 2018.
- 1.4. Direct BSCS to identify and remove all unquestioned travel allowances charged to the sampled NSF awards, up through the discontinuation of the travel allowance program.
 - Upon identifying these travel allowances, BSCS should provide its analysis and the amount of the reimbursement to NSF's Resolution and Advanced Monitoring team.
- 1.5. Direct BSCS to strengthen its administrative and management procedures surrounding the reimbursement of unused gift cards to ensure that it appropriately

credits the original funding source(s) charged for all costs associated with unused gift cards.

BSCS Science Learning Response: Although BSCS did not agree to reimburse NSF for any of the costs questioned within this finding, it noted that it concurred with the unallowable indirect cost and unallowable gift card exceptions, and that it did not concur with the unallowable travel allowance exceptions. Specifically:

- **Unallowable Indirect Costs:** Although BSCS concurred with these exceptions, it did not agree to reimburse NSF for the \$110,596 in unallowable indirect costs. Specifically:
 - Although BSCS concurred with the exception related to unallowable subawardee indirect costs, it did not agree to reimburse NSF for the \$46,851 in questioned costs. BSCS noted that, although it had a policy in place to verify subawardees were appropriately applying indirect costs, it did not have a process in place to validate that BSCS personnel had performed this verification. Accordingly, BSCS stated that it is currently adjusting its subaward process to require BSCS personnel to document negotiated indirect cost rate agreements for subawardees on an annual basis.
 - Although BSCS concurred with the exception related to FY 2018 unadjusted provisional indirect cost rates, it did not agree to reimburse NSF for the \$63,745 in questioned costs. BSCS stated that, as soon as it learned of the oversight, it identified all NSF projects that were active both in FY 2018 and now and credited \$35,683 to five active NSF projects to correct the issue. BSCS also noted that it intends to implement a process to ensure that, in the future, it accurately adjusts its indirect cost recovery amounts at the time it receives the final rate agreements.
- **Unallowable Travel Allowances:** BSCS did not concur with the finding or with the \$7,183 in questioned unallowable travel costs. Specifically, BSCS contends that these exceptions occurred because BSCS's appointment letters incorrectly used the phrase "travel allowance" to describe funds that BSCS did not consider to be a travel allowance. BSCS noted that, although the appointment letters identified the funds as a "travel allowance," the funds were actually bi-annual salary supplements to enable remote employees to travel to BSCS headquarters, as evidenced by the payments being subject to salary withholding. Further, BSCS stated that staff were not obligated to spend these payments on travel costs and that BSCS was not accountable for monitoring how the employees spent the funds, consistent with the BSCS Employee Handbook, which states that remote employees are expected to travel to BSCS headquarters a minimum of six times per year.
- **Unallowable Gift Card Expenses:** Although BSCS concurred with this exception, it did not agree to reimburse NSF for the \$25 in questioned costs. Specifically, BSCS

acknowledged it overlooked the \$25 in gift card fees as a result of an accounting oversight when it was processing the \$375 credit for the unused gift cards.

Auditors' Additional Comments: Our position regarding this finding has not changed. Specifically, because BSCS agreed with the unallowable indirect cost and unallowable gift card expense findings, our position regarding these findings has not changed. However, because BSCS's calculation of unallowable unadjusted FY 2018 indirect costs includes awards outside the scope of our audit, we have included one additional recommendation in the audit report (Recommendation 1.3).

With respect to the unallowable travel allowance finding, although BSCS believes the "travel allowances" should be allowable as salary supplements, because the Compensation Policies included within BSCS's Accounting and Finance Manual note that staff members living outside commuting distance from Colorado may be given an allowance to help defray the costs of regular travel to the BSCS office, consistent with the language used in the finding above, our position regarding this finding has not changed.

FINDING 2: INADEQUATELY SUPPORTED EXPENSES

BSCS did not provide adequate documentation to support the allocability, allowability, and reasonableness of \$39,912 in expenses charged to two NSF awards during the audit period, as required for the costs to be allowable, per federal regulations¹⁵ and NSF PAPPGs.¹⁶

Inadequately Supported Consultant Service Expenses

BSCS did not provide adequate documentation to support \$39,872 in **consultant services** charged to one NSF award, as required by federal regulations¹⁷ and NSF PAPPGs,¹⁸ as illustrated in Table 7.

¹⁵ According to 2 CFR 230, Appendix A, Section A.2., and 2 CFR § 200.403, *Factors affecting allowability of costs*, for a cost to be allowable, it must be allocable and reasonable for the performance of the federal award. Additionally, according to 2 CFR 230, Appendix A, Section A.4., and 2 CFR § 200.405, *Allocable Costs*, a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to the cost objective in accordance with the relative benefits received. A cost is allocable to a sponsored agreement if it is incurred solely to advance the work under the sponsored agreement or federal award. Lastly, 2 CFR § 200.302, *Financial Management*, states that a non-federal entity must have records that adequately identify the source and application of funds for federally funded activities. Furthermore, this section states that non-federal entities' financial management systems must be sufficient to permit funds tracing to a level of expenditures to adequately establish that the entities used the funds according to federal statutes, regulations, and the federal award terms and conditions.

¹⁶ According to NSF PAPPGs 14-1, Part II, Chapter V, Section A, and 17-1, Part II, Chapter X, Section A, *Basic Considerations*, grantees should ensure that costs claimed under NSF grants are necessary, reasonable, allocable, and allowable under the applicable cost principles, NSF policy, or the program solicitation. Additionally, the grantee organization is responsible for ensuring that all costs charged to NSF awards meet the requirements of the grant terms and conditions.

¹⁷ According to 2 CFR § 200.459 (b), *Professional service costs*, (b), the adequacy of the contractual agreement for the service (e.g., description of the service, estimate of time required, rate of compensation, and termination provisions) is relevant when determining the allowability of consultant costs.

¹⁸ According to NSF PAPPG 17-1, Part I, Chapter II, Section C.2.g (vi)(c), *Consultant Services*, anticipated consulting services must be justified and information furnished on each individual's expertise, primary organizational affiliation, normal daily compensation rate, and number of days of expected service.

Table 7: Inadequately Supported Consultant Services Expenses

Expense Date	NSF Award No.	Amount	Insufficient Documentation to Support the Allowability of:	Notes
December 2017	██████████	\$39,872	Consultant Services	a

Source: Auditor summary of identified exception.

- a) In December 2017, BSCS charged NSF Award No. ██████████ for \$39,872 in costs incurred to obtain consultant services from April 2016 to December 2017. Although BSCS provided copies of contracts it held with this consultant in other years, neither BSCS nor the consultant could provide a contract to support the services or the rates applicable during the invoice period.

Inadequately Supported Participant Support Expenses

BSCS did not provide adequate documentation to support that it used \$40 in **participant support** gift cards charged to one NSF award to benefit NSF award participants, as illustrated in Table 8.

Table 8: Inadequately Supported Participant Support Expenses

Expense Date	NSF Award No.	Amount	Insufficient Documentation to Support the Allowability of:	Notes
May 2018	██████████	\$40	Participant Support Gift Cards	a

Source: Auditor summary of identified exception.

- a) In May 2018, BSCS charged NSF Award No. ██████████ for \$1,740 in costs incurred to purchase gift cards for teachers who participated in a series of online assessments. Although BSCS provided a register of recipients to support \$1,700 of this amount, it was unable to provide documentation that identified the individuals who received the remaining \$40 in gift cards and/or that supported how BSCS used those gift cards to benefit the award.

Conclusion

BSCS did not have appropriate policies, procedures, or internal controls in place to ensure that it received and maintained adequate documentation to support the allowability of all costs charged to federal awards. Specifically, BSCS's policies, procedures, and internal controls did not ensure that it established or maintained consultant service contracts in support of the services provided, or that it appropriately tracked the distribution of all purchased gift cards.

We are therefore questioning \$39,912 charged to two NSF awards that BSCS did not support represented reasonable, allocable, or allowable expenses, as illustrated in Table 9.

Table 9: Finding 2 Summary: Inadequately Supported Expenses

NSF Award No.	Description	Fiscal Year(s)	Questioned Costs			BSCS Agreed to Reimburse
			Direct	Indirect	Total	
██████████	December 2017 Consultant Services	2017	\$26,808	\$13,064	\$39,872	\$0
██████████	May 2018 Participant Support Costs	2018	40	-	40	-
Total			<u>\$26,848</u>	<u>\$13,064</u>	<u>\$39,912</u>	<u>\$0</u>

Source: Auditor summary of identified exceptions.

Recommendations

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

- 2.1. Resolve the \$39,912 in questioned inadequately supported consultant and participant support expenses for which BSCS has not agreed to reimburse NSF and direct BSCS to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 2.2. Direct BSCS 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 expenses charged to sponsored programs. Updated procedures could include:
 - Requiring confirmation that an active consultant service agreement is in place before paying a consultant service invoice.
 - Establishing tracking documentation for gift cards charged as participant support costs. This documentation would include the information necessary to identify who received the gift cards and when.

BSCS Science Learning Response: Although BSCS concurred with this finding, it did not agree to reimburse NSF for the \$39,912 of inadequately supported consultant service and participant support cost expenses. Specifically:

- **Inadequately Supported Consultant Service Expenses:** BSCS concurred with this exception, acknowledging that it did not extend a one-year agreement with the consultant. However, BSCS did not agree to reimburse NSF for the questioned costs because the consultant continued to work on the NSF award and because BSCS personnel reviewed and approved the consultant’s invoices in accordance with BSCS policy.

- **Inadequately Supported Participant Support Expenses:** BSCS concurred with this exception, acknowledging that it did not appropriately document the expenses. However, BSCS did not agree to reimburse NSF for the questioned costs.

Auditors' Additional Comments: Our position regarding this finding has not changed. Specifically, because BSCS agreed with this finding, our position regarding this finding has not changed.

- **Inadequately Supported Consultant Service Expenses:** Although BSCS stated that these costs should be allowable because BSCS personnel reviewed and approved the consultant's invoices in compliance with BSCS policy, because BSCS did not have a contract in place to support the agreed-upon compensation rate(s) or service(s), we do not have sufficient documentation to determine the allowability or reasonableness of the costs charged on the approved invoices. Accordingly, our position regarding this finding has not changed.
- **Inadequately Supported Participant Support Expenses:** Because BSCS agreed with the finding and did not provide a justification as to why these costs should be allowable, our position regarding this finding has not changed.

FINDING 3: INAPPROPRIATELY ALLOCATED SALARY EXPENSE

BSCS did not appropriately allocate **salary expenses** to an NSF award based on the relative benefits the award received, as required by both federal regulations¹⁹ and NSF PAPPGs.²⁰ As a result, BSCS inappropriately allocated \$334 in salary, fringe, and indirect expenses to one NSF award, as illustrated in Table 10.

Table 10: Salary Not Allocated Consistent with Effort

Expense Date	NSF Award No.	Percent Charged	Amount Charged	Percent Allocable	Amount Allocable	Amount Inappropriately Allocated	Notes
January 2019	██████████	54%	\$3,607	49%	\$3,273	\$334	a

Source: Auditor summary of identified exception.

- a) In January 2019, BSCS charged NSF Award No. ██████████ for \$334 in inappropriately allocated salary costs. Specifically, BSCS charged the NSF award for 54 percent of the

¹⁹ According to 2 CFR § 200.405, *Allocable Costs*, (a), a cost is allocable to a particular cost objective (i.e., a specific function, project, sponsored agreement, department, or the like) if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received (or other equitable relationship). Additionally, 2 CFR § 200.430, *Compensation-personal services*, states that the cost of compensation is allowable to the extent that the total compensation for individual employees is determined and supported by the Standards for Documentation of Personnel Expenses.

²⁰ NSF PAPPG 17-1, Part II, Chapter X, Section A, *Basic Considerations*, states that grantees should ensure all costs charged to NSF awards meet the requirements of the applicable federal cost principles, grant terms and conditions, and any other specific requirements of both the award notice and the applicable program solicitation.

employee’s effort when the employee’s timesheet only supported that 49 percent of their effort was allocable to the NSF award.²¹

Conclusion

BSCS did not have sufficient policies and procedures or internal controls in place to ensure that it allocated salary costs consistent with the effort supported by employee timesheets.

We are therefore questioning \$334 of salary expenses that BSCS inappropriately allocated to one NSF award, as illustrated in Table 11.

Table 11: Finding 3 Summary: Inappropriately Allocated Salary Expenses

NSF Award No.	Description	Fiscal Year(s)	Questioned Costs			BSCS Agreed to Reimburse
			Direct	Indirect	Total	
██████████	January 2019 Salary	2019	\$225	\$109	\$334	\$0
Total			<u>\$225</u>	<u>\$109</u>	<u>\$334</u>	<u>\$0</u>

Source: Auditor summary of identified exception.

Recommendations

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

- 3.1. Resolve the \$334 in questioned salary expenses for which BSCS has not agreed to reimburse NSF and direct BSCS to repay or otherwise remove the sustained questioned costs from its NSF award.
- 3.2. Direct BSCS to strengthen its administrative and management procedures and internal controls to ensure it allocates salary costs in a manner that is consistent with the employee’s effort report. Updated procedures could include verifying the amount allocated to each award is explicitly supported by the percentage allocation on the effort report.

BSCS Science Learning Response: Although BSCS concurred with this finding, it did not agree to reimburse NSF for the \$334 in questioned costs. BSCS stated that this exception appeared to be the result of a clerical error and that it has already modified its payroll processes to prevent similar issues from occurring in the future. Specifically, BSCS noted that it has implemented a new payroll system that requires staff to enter their own time and effort information, thereby eliminating the possibility of data entry errors by accounting staff.

²¹ Total salary, fringe, and indirect costs for the pay period equaled \$6,679, based on BSCS’s indirect cost rate of 48.73 percent. Of this amount, BSCS allocated 54 percent, or \$3,607, to NSF Award No. ██████████. However, the timesheet only supported an allocation of 49 percent, or \$3,273, for a difference of \$334.

Auditors' Additional Comments: Our position regarding this finding has not changed. Specifically, because BSCS agreed with this finding and did not provide a justification as to why these costs should be allowable, our position regarding this finding has not changed.

FINDING 4: NON-COMPLIANCE WITH FEDERAL REQUIREMENTS FOR PASS-THROUGH ENTITIES

BSCS policies did not comply with all federal requirements for BSCS and its pass-through entities, which resulted in BSCS not appropriately issuing or monitoring subawards as required by federal regulations. Specifically, BSCS did not provide documentation to support that it appropriately issued or monitored two subawards, as illustrated in Table 12.²²

Table 12: Instances of Non-Compliance with Federal Requirements for Pass-Through Entities

NSF Award No.	Subaward Effective Date	Subawardee	Notes
██████████	May 2016	██████████ (██████████)	a
██████████	March 2019	University ██████████	b

Source: Auditor summary of identified exceptions.

- a) From May 2016 to July 2021, BSCS charged NSF Award No. ██████████ for \$1,077,573 in subaward costs claimed by ██████████. Although the subaward benefitted the award, BSCS did not provide documentation to support that it performed an assessment of the subawardee’s risk, periodic monitoring of the subawardee, a suspension/ debarment review, a **Single Audit** review, and a review and approval of the indirect cost rate.
- b) From March to December 2019, BSCS charged NSF Award No. ██████████ for \$42,047 in subaward costs claimed by the University ██████████. Although the subaward benefitted the award, BSCS did not provide documentation to support that it

²² According to 2 CFR §200.331, *Requirements for pass-through entities*, “All pass-through entities must: ... (b) Evaluate each subrecipient’s risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate subrecipient monitoring... (c) Consider imposing specific subaward conditions upon a subrecipient if appropriate as described in §200.207 Specific conditions. (d) Monitor the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward; and that subaward performance goals are achieved. (e) Depending upon the pass-through entity’s assessment of risk posed by the subrecipient (as described in paragraph (b) of this section), the following monitoring tools may be useful for the pass-through entity to ensure proper accountability and compliance with program requirements and achievement of performance goals: (1) Providing subrecipients with training and technical assistance on program-related matters; and (2) Performing on-site reviews of the subrecipient’s program operations; (3) Arranging for agreed-upon-procedures engagements as described in §200.425 Audit services. (f) Verify that every subrecipient is audited as required by Subpart F— Audit Requirements of this part when it is expected that the subrecipient’s Federal awards expended during the respective fiscal year equaled or exceeded the threshold set forth in §200.501 Audit requirements. (g) Consider whether the results of the subrecipient’s audits, on-site reviews, or other monitoring indicate conditions that necessitate adjustments to the pass-through entity’s own records.”

performed an assessment of the subawardee risk, a suspension/debarment review, or a Single Audit review.

Conclusion

BSCS did not have sufficient policies and procedures or internal controls in place to ensure it complied with all federal requirements established for pass-through entities when issuing subawards.

Because these instances of non-compliance did not directly result in BSCS charging unallowable costs to NSF awards, we are not questioning any costs related to these exceptions. However, we are noting compliance findings for the two instances in which BSCS did not comply with federal requirements for pass-through entities, as illustrated in Table 13.

Table 13: Finding 4 Summary: Non-Compliance with Federal Requirements for Pass-Through Entities

NSF Award No.	Description	Fiscal Year(s)	Questioned Costs			
			Direct	Indirect	Total	BSCS Agreed to Reimburse
██████████	2016 ██████████ Subaward	2016	\$0	\$0	\$0	\$0
██████████	2019 University ██████████ Subaward	2019	-	-	-	-
Total			<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

Source: Auditor summary of identified exceptions.

Recommendations

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

- 4.1. Direct BSCS to strengthen its administrative and management procedures and internal controls regarding the requirements for issuing subawards to ensure compliance with federal regulations. Updated procedures could include:
 - Revising its policies to require personnel to evaluate subawardee risk of non-compliance in accordance with 2 Code of Federal Regulations 200.331, *Requirements for pass-through entities*.
 - Performing a risk assessment of subawardees before executing a subaward agreement, including periodically updating the original risk assessment.
 - Performing continuous monitoring of the subawardee based on the established level of risk determined in the latest risk assessment.

- Performing a suspension/debarment review before executing a subaward agreement.
- Reviewing the subawardee’s annual Single Audit in support of the risk assessment and continuous monitoring.
- Reviewing and approving the subawardee’s indirect cost rate prior to the subawardee beginning work.

4.2. Direct BSCS to ensure that (1) it has performed risk evaluations for all subawards issued between December 2014 and November 2019 and (2) these risk evaluations remain active, to validate the agreements in accordance with federal regulations.

BSCS Science Learning Response: BSCS concurred with this finding and noted that it is implementing new procedures to ensure it complies with all federal requirements established for pass-through entities when issuing subawards in the future.

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

FINDING 5: NON-COMPLIANCE WITH BSCS POLICIES

BSCS did not always comply with its procurement, travel, and cost transfer policies and procedures when incurring costs charged to NSF awards.

Non-Compliance with BSCS Procurement Policy

We identified four instances in which BSCS did not comply with its internal procurement policies, including policies related to justifying non-competitive bidding²³ and policies requiring the Director of Operations and Finance to review all expenses²⁴ and the Executive Director to approve expenses that exceed \$50,000,²⁵ as summarized in Table 14.

Table 14: Non-Compliance with BSCS Procurement Policy

Expense Date	NSF Award No.	Procurement Policy Compliance Exception	Notes
October 2016	██████	Purchase Not Competitively Bid	a
March 2017	██████	Non-Compliance with BSCS Policies for Director Review of Expenses	b
April 2019	██████	Non-Compliance with BSCS Policies for Director Review of Expenses	c

²³ According to the BSCS *Accounting and Finance Manual* supplies or services may be procured on a non-competitive basis under the following circumstances: only one responsible source and no other supplies and services will satisfy the requirement or unusual or compelling urgency.

²⁴ According to the BSCS *Accounting and Finance Manual* BSCS operates by distributing leadership and authorization approval levels throughout the organization, and the Director of Operations and Finance reviews all purchase activity.

²⁵ According to the BSCS *Accounting and Finance Manual* authorization of general expenditures or invoices that exceed \$50,000 require the authorization of the Executive Director and one other signer.

Expense Date	NSF Award No.	Procurement Policy Compliance Exception	Notes
August 2018	██████████	Non-Compliance with BSCS Policies for Executive Director Review of Expenses	d

Source: Auditor summary of identified exceptions.

- a) In October 2016, BSCS charged NSF Award No. ██████████ for \$14,554 in costs invoiced by a consultant that BSCS did not select in compliance with its non-competitive bidding policy.
- b) In March 2017, BSCS charged NSF Award No. ██████████ for \$1,420 in participant travel costs. However, BSCS was unable to support that its Director of Operations and Finance had appropriately reviewed the costs.
- c) In April 2019, BSCS charged NSF Award No. ██████████ for \$3,700 in **publication costs**. However, BSCS was unable to support that its Director of Operations and Finance had appropriately reviewed the costs.
- d) In August 2018, BSCS charged NSF Award No. ██████████ for \$60,435 in stipend expenses. However, BSCS was unable to support that its Executive Director had approved the expenses.

Non-Compliance with BSCS Travel Policy

We identified one instance in which BSCS did not comply with its internal travel policies and procedures, which require the BSCS Director of Operations or the Executive Director to approve travel not previously identified in the project budget, as illustrated in Table 15.²⁶

Table 15: Non-Compliance with BSCS Travel Policy

Expense Date	NSF Award No.	Travel Policy Compliance Exception	Notes
July 2017	██████████	Unapproved Unbudgeted Travel	a

Source: Auditor summary of identified exception.

- a) In July 2017, BSCS charged NSF Award No. ██████████ for \$2,050 in unbudgeted travel costs. BSCS was unable to support that its Director of Operations and Finance or Executive Director had appropriately approved the costs.

Non-Compliance with BSCS Cost Transfer Policy

We identified one instance in which BSCS did not comply with its internal cost transfer policies and procedures, which define a cost transfer justification as required

²⁶ According to the BSCS travel policies and procedures, *Travel Policies and Procedures*, travel not specifically provided for in project or organizational budgets must be approved by the Director of Operations or the Executive Director.

documentation that must be available at the time of the transfer, as illustrated in Table 16.²⁷

Table 16: Non-Compliance with BSCS Cost Transfer Policy

Expense Date	NSF Award No.	Cost Transfer Policy Compliance Exception	Notes
July 2021	██████████	Lack of Justification for Cost Transfers	a

Source: Auditor summary of identified exception.

- a) In July 2021, BSCS processed a cost transfer to move \$12,600 in consultant costs to NSF Award No. ██████████ without documenting a justification for the transfer. BSCS did not document a justification until we requested it as part of our audit.

Conclusion

BSCS did not have adequate procedures in place to ensure that it consistently complied with, or documented its compliance with, its procurement, travel, and cost transfer policies and procedures. Because these instances of non-compliance did not directly result in BSCS charging unallowable costs to NSF awards, we are not questioning any costs related to these exceptions. However, we are noting compliance findings for the six instances in which BSCS did not comply with its internal policies when charging costs to four NSF awards, as illustrated in Table 17.

Table 17: Finding 5 Summary: Non-Compliance with BSCS Policies

NSF Award No.	Compliance Exceptions Identified	Fiscal Year(s)
██████████	Non-Compliance with BSCS Policies for Competitive Bidding	2016
██████████	Non-Compliance with BSCS Policies for Director Review of Expenses	2017
██████████	Non-Compliance with BSCS Policies for Director Review of Expenses	2019
██████████	Non-Compliance with BSCS Policies for Executive Director Review of Expenses	2018
██████████	Non-Compliance with BSCS Policies for Travel	2017
██████████	Non-Compliance with BSCS Policies for Cost Transfers	2021

Source: Auditor summary of identified exceptions.

Recommendations

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

- 5.1. Direct BSCS to strengthen its administrative and management procedures for procurement to ensure that it either acquires services on a competitive basis,

²⁷ According to the BSCS Policy and Procedures for Budget Expenditure Monitoring, when seeking a cost transfer, personnel must provide justification to the Director of Operations and Finance, including a detailed explanation that justifies the need to transfer an expense that had been previously approved on another account. Copies of all supporting documentation must be provided to the Director of Operations and Finance at the time of the request.

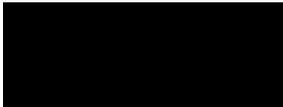
consistent with its internal policies and procedures, or documents that competitive bidding requirements do not apply.

- 5.2. Direct BSCS to strengthen its administrative and management procedures to ensure the Director of Operations and Finance reviews all purchases.
- 5.3. Direct BSCS to strengthen its administrative and management procedures to ensure that the Executive Director issues and documents approval for all expenses that exceed \$50,000.
- 5.4. Direct BSCS to strengthen its administrative and management procedures to ensure that the Director of Operations and Finance or the Executive Director properly approves all unbudgeted travel prior to the first day of travel.
- 5.5. Direct BSCS to create and maintain documentation to support that it properly documents all cost transfers, including justifications, before performing the transfer.

BSCS Science Learning Response: BSCS concurred with the finding and noted that it is implementing new procedures to ensure it adheres to its policies for review and approval of procurements, expenses, travel, and cost transfers.

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

COTTON & COMPANY ASSURANCE AND ADVISORY, LLC



Megan Mesko, CPA, CFE
Partner
June 23, 2022

APPENDIX A: BSCS'S RESPONSE

June 3, 2022

Cotton & Company
Attention: Megan Mesko, CPA, CFE
333 John Carlyle Street, Suite 500
Alexandria, VA 22314

Dear Ms. Mesko,

BSCS Science Learning (BSCS) appreciates the opportunity to work with the National Science Foundation Office of Inspector General and Cotton & Company, LLC to examine its accounting practices and controls. BSCS takes its obligations to administer NSF awards in compliance with all regulations, laws, policies, and requirements that apply. We have found the findings and recommendations in the report to be helpful, and we are committed to using them to improve our controls and practices. We look forward to working with the Office of the Inspector General during the resolution process.

We have reviewed the findings, and I have attached our response to each finding. Of the questioned costs, we do not concur with \$47,055 of them.

I appreciate the expertise displayed by your team through the audit process, and I thank you for the consideration you showed our staff.

Sincerely yours,



Daniel C. Edelson, Ph.D.
Executive Director

Finding 1: Unallowable Expenses/Unallowable Indirect Costs

- a) From May 2016 to July 2021, BSCS charged NSF Award No. [REDACTED] for \$140,553 in indirect costs claimed by a subawardee, [REDACTED] ([REDACTED], [REDACTED]) claimed these indirect costs at a rate of 15 percent. However, BSCS was unable to support that the 15 percent rate was either (1) an approved federally recognized indirect cost rate negotiated between the subrecipient and the federal government or (2) a negotiated, justified rate between BSCS and the subawardee. As such, we are questioning \$46,851 as the difference between the 15 percent rate charged in the subawardee's invoices and the 10 percent de minimis rate allowable without a negotiated rate per federal regulations.

Response: BSCS concurs with this finding. At the time, we had a policy in place to verify the indirect cost rate charged by subawardees, but we did not have a process to insure that this was done. We are changing our subaward process to require documentation of a current, negotiated federal indirect cost rate on an annual basis for all subawardees.

- b) From January through December 2018, BSCS applied its 52.35 percent provisional indirect cost rate to the modified total direct costs (MTDCs) it accumulated on 10 NSF awards. Although it was appropriate for BSCS to apply the 52.35 percent rate before it received its final FY 2018 negotiated indirect cost rate agreement on November 8, 2018, BSCS should have processed an indirect cost adjustment to retroactively apply the 48.73 percent negotiated rate approved for FY 2018 after it received the final agreement. Because BSCS did not post an adjustment to reduce the amount of indirect costs claimed on its FY 2018 MTDCs in accordance with its final indirect cost rate agreement, it charged 10 NSF awards for \$63,745 in unallowable indirect costs.

Response: BSCS concurs with this finding. As soon as we learned about this oversight, we identified all NSF-funded projects that were active in FY 2018 and are still active today, and we credited each of them with the difference between the amount of indirect costs that were charged during FY 2018 and the appropriate amount under the final rate (48.73%) that was approved in 2019. This resulted in a net credit to five projects of \$35,683 in February 2022. We are instituting a process to insure that we correctly and completely adjust indirect cost recovery amounts once we have received a final rate for a fiscal year.

Finding 1: Unallowable Expenses/Unallowable Travel Allowances

- a) In February 2018, BSCS charged NSF Award No. [REDACTED] for \$2,912 paid to a remote employee as a travel allowance. Because the employee's appointment letter stated that the travel allowance was intended to cover travel outside of the sponsored program, the travel allowance is not an allowable expense on this award.
- b) In August 2019, BSCS charged NSF Award No. [REDACTED] for \$2,352 paid to a remote employee as a travel allowance. Because the employee's appointment letter stated that the travel allowance was intended to cover travel outside of the sponsored program, the travel allowance is not an allowable expense on this award.

- c) In August 2019, BSCS charged NSF Award No. [REDACTED] for \$1,919 paid to a remote employee as a travel allowance. Because the employee's appointment letter stated that the travel allowance was intended to cover travel outside of the sponsored program, the travel allowance is not an allowable expense on this award.

Response: BSCS does not agree with this finding. This finding is based on an interpretation of the language in staff member's appointment letter that does not reflect BSCS's intent or practices at the time. BSCS acknowledges that the use of the term "travel allowance" in our appointment letters contributed to this interpretation, and that the phrase was poorly chosen. At the time, all remote employees were provided with a salary supplement that was paid twice a year in recognition of the fact that our policies for remote employees required them to travel to BSCS's headquarters in Colorado Springs multiple times per year at personal expense. This supplement was paid as salary, it was subject to withholding as salary, and it was eligible for retirement benefits as salary. Staff were not obligated to spend it on travel, and they were not accountable in any way for how they spent it.

The following is the relevant portion of the Employee Handbook during this time period:

Remote employees are required to travel to BSCS periodically to meet and work face-to-face with colleagues. The frequency and length of these visits depends on the individual employee's job role and responsibilities. It is the responsibility of the employee to establish a schedule of visits in consultation with their supervisor and the project leads for their projects. Most remote employees are expected to travel to BSCS for 3-4 days a minimum of 6 times a year. Remote employees may be required to travel to BSCS on specific occasions to attend organizational and project events such as advisory board meetings, project meetings, board of director meetings, and writing conferences. Remote employees are also encouraged to schedule trips to BSCS around community events, such as All Staff meetings and the annual Susan Loucks-Horsley staff appreciation dinner. In the event of disagreements about a remote employee's travel schedule that cannot be resolved otherwise, the Executive Director will make the final decision.

To enable remote employees to meet the requirements for travel to BSCS, remote employees receive a supplemental travel allowance as part of their annual compensation. The amount of the travel allowance is determined by the number of expected trips to Colorado Springs, by the cost of travel to and from the employee's location, and the employee's full-time or part-time status. The travel allowance is not a cost reimbursement; it is an allowance to defray expenses. Because allowances are considered to be additional compensation by the IRS, travel allowances are dispersed through the payroll system, are subject to tax withholding, and are included on the employee's W-2 form. Remote employees should consult their tax advisor for information about tax deductions for travel, home offices, and other business expenses associated with the requirements of remote employees.

The cost of this salary component was divided among the project and internal accounts that the staff had worked on in the previous six months in proportion to their time spent.

Finding 1: Unallowable Expenses/Unallowable Gift Card Expenses

- a) In October 2017, BSCS charged NSF Award No. [REDACTED] for \$1,599 in costs incurred to purchase \$75 gift cards it anticipated providing to students for participating in the

award's interactive learning program. Because BSCS only distributed 15 of the 20 gift cards purchased, it processed a \$375 credit to remove the cost of the 5 unused gift cards. However, this credit did not appropriately include \$25 in gift card fees (\$4.95 per card).

Response: BSCS concurs with this finding. In the course of appropriately crediting \$375 back to a grant account for unused gift cards, we overlooked \$25 in gift card fees as a result of an accounting oversight.

Finding 2: Inadequately Supported Expenses/Consultant Service Expenses

- a) In December 2017, BSCS charged NSF Award No. [REDACTED] for \$39,872 in costs incurred to obtain consultant services from April 2016 to December 2017. Although BSCS provided copies of contracts it held with this consultant in other years, neither BSCS nor the consultant could provide a contract to support the services or the rates applicable from April 2016 to December 2017, which were charged on the consultant's invoice.

Response: BSCS concurs with the finding that the expenses were inadequately supported. We failed to extend a one-year agreement with a consultant and continued to reimburse invoices submitted by the consultant for work completed after the agreement had expired. We are implementing new processes to insure that contracts that require renewal are renewed promptly and that no payments are issued for work performed on expired contracts. We do not agree with the conclusion that these expenses should be treated as not allocable, allowable, and reasonable. The work was conducted by the consultant, and the individual invoices submitted by the consultant were reviewed and approved prior to payment in accordance with BSCS's policies.

Finding 2: Inadequately Supported Expenses/Participant Support Expenses

- a) In May 2018, BSCS charged NSF Award No. [REDACTED] for \$1,740 in costs incurred to purchase gift cards for teachers who participated in a series of online assessments. Although BSCS provided a register of recipients to support \$1,700 of this amount, it was unable to provide documentation that identified the individuals who received the remaining \$40 in gift cards and/or that supported how BSCS used those gift cards to benefit the award.

Response: BSCS concurs with the finding that \$40 in participant support expenses were not properly documented. We are committed to full documentation of all expenses and to educating all staff about the importance of tracking gift cards in particular.

Finding 3: Inappropriately Allocated Salary Expense

- a) In January 2019, BSCS charged NSF Award No. [REDACTED] for \$334 in inappropriately allocated salary costs. Specifically, BSCS charged the NSF award for 54 percent of the employee's effort when the employee's timesheet only supported that 49 percent of their effort was allocable to the NSF award.

Response: BSCS concurs with the finding, and notes that we had already modified our payroll processes to prevent this from occurring prior to the audit. This appears to be the result of a clerical error in

entering information into the payroll system by accounting staff. Since this time, BSCS implemented a new payroll system in which staff directly enter their time and effort information into the payroll system, eliminating the possibility of data entry errors by accounting staff.

Finding 4: Non-Compliance With Federal Requirements For Pass-Through

- a) From May 2016 to July 2021, BSCS charged NSF Award No. [REDACTED] for \$1,077,573 in subaward costs claimed by [REDACTED]. Although the subaward benefitted the award, BSCS did not provide documentation to support that it performed an assessment of the subawardee's risk, periodic monitoring of the subawardee, a suspension/debarment review, a Single Audit review, and a review and approval of the indirect cost rate.
- b) From March to December 2019, BSCS charged NSF Award No. [REDACTED] for \$42,047 in subaward costs claimed by the University [REDACTED]. Although the subaward benefitted the award, BSCS did not provide documentation to support that it performed an assessment of the subawardee risk, a suspension/debarment review, or a Single Audit review.

Response: BSCS concurs with the finding. BSCS is implementing new procedures to ensure we comply with all Uniform Guidance requirements established for pass-through entities when issuing subawards.

Finding 5: Non-Compliance With BSCS Policies

- a) In October 2016, BSCS charged NSF Award No. [REDACTED] for \$14,554 in costs invoiced by a consultant that BSCS did not select in compliance with its non-competitive bidding policy.
- b) In March 2017, BSCS charged NSF Award No. [REDACTED] for \$1,420 in participant travel costs. However, BSCS was unable to support that its Director of Operations and Finance had appropriately reviewed the costs.
- c) In April 2019, BSCS charged NSF Award No. [REDACTED] for \$3,700 in publication costs. However, BSCS was unable to support that its Director of Operations and Finance had appropriately reviewed the costs.
- d) In August 2018, BSCS charged NSF Award No. [REDACTED] for \$60,435 in stipend expenses. However, BSCS was unable to support that its Executive Director had approved the expenses.
- a) In July 2017, BSCS charged NSF Award No. [REDACTED] for \$2,050 in unbudgeted travel costs. BSCS was unable to support that its Director of Operations and Finance or Executive Director had appropriately approved the costs.
- a) In July 2021, BSCS processed a cost transfer to move \$12,600 in consultant costs to NSF Award No. [REDACTED] without documenting a justification for the transfer. BSCS did not document a justification until we requested it as part of our audit.

Response: BSCS concurs with the finding and notes that all expenses were allowable, allocable, reasonable, and benefitted the project. BSCS is implementing new procedures to ensure we adhere to our policies for review and approval of procurement, expenses, travel, and cost transfers.

APPENDIX B: OBJECTIVES, SCOPE, AND METHODOLOGY

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 BSCS claimed on 12 NSF awards. The objectives of the audit were (1) to evaluate BSCS’s award management environment to determine if costs claimed were allowable, allocable, reasonable, and in compliance with NSF award terms and conditions and applicable federal financial assistance requirements, and (2) to determine whether any extraordinary circumstances existed that would justify further audit work beyond the original samples of 40 to 50 transactions.

SCOPE

The audit population included approximately \$16.7 million in expenses supported by BSCS’s GL related to the approximately \$16.6 million in expenses it claimed on the following 12 NSF awards from each award’s inception date through September 2, 2021.

NSF Award Numbers			

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 that BSCS provided by comparing the costs charged to NSF awards per BSCS’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 BSCS and NSF OIG. NSF OIG provided award data that BSCS reported through ACM\$ during our audit period.
 - We assessed the reliability of the GL data that BSCS provided by (1) comparing the costs charged to NSF awards per BSCS’s accounting records to the reported net expenditures reflected in the ACM\$ drawdown requests that BSCS submitted to NSF during the audit **period of performance**; and (2) reviewing the parameters that BSCS used to extract transaction data from its accounting systems. We found BSCS’s computer-processed data to be sufficiently reliable for the purposes of the audit. We did not identify any exceptions with the parameters that BSCS 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 2021 found no reportable instances in which NSF's financial management systems did not substantially comply with applicable requirements.

- BSCS provided detailed transaction-level data to support \$16,693,258 in costs charged to NSF awards during the period, which was greater than the \$16,630,213 BSCS claimed in ACM\$ for the 12 awards. This data resulted in a total audit universe of \$16,693,258 in expenses claimed on 12 NSF awards.²⁸
- Obtaining and reviewing all available accounting and administrative policies and procedures, external audit reports, desk review reports, and other relevant information that BSCS and NSF OIG provided, as well as any other relevant information that was available online.
- Summarizing our understanding of federal, NSF, and BSCS-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 BSCS's internal controls, within the audit's scope, solely to understand the directives or policies and procedures BSCS has in place to ensure that charges against NSF awards complied with relevant federal regulations, NSF award terms, and BSCS policies.
- Providing BSCS with a list of 40 transactions that we selected based on the results of our data analytics and requesting that BSCS provide documentation to support each transaction.
- Reviewing the supporting documentation BSCS 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,²⁹ NSF,³⁰ and BSCS policies.³¹

²⁸ Although the costs recorded within BSCS's GL exceeded the \$16,630,213 it reported in ACM\$, because BSCS was able to justify all reconciliation discrepancies identified, we determined that the GL data was appropriate for the purposes of this engagement.

²⁹ We assessed BSCS's compliance with 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, and 2 CFR Part 230, Cost Principles for Non-Profit Organizations (Office of Management and Budget Circular A-122), as appropriate.

³⁰ We assessed BSCS's compliance with NSF PAPPGs 14-1, 15-1, 16-1, 17-1, 18-1, 19-1, and 20-1 and with NSF award-specific terms and conditions, as appropriate.

³¹ We assessed BSCS's compliance with internal BSCS policies and procedures surrounding costs budgeted for or charged to NSF awards.

- Holding virtual interviews and walkthroughs with BSCS in January and February 2022 to discuss payroll (including effort reporting), fringe benefits, travel, participant support costs, procurement, **equipment** (including an inventory check), Graduate Research Fellowship Program, other direct costs (e.g., patent, relocation, recruiting, interest, advertising/public relations, **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.³²

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 BSCS personnel to ensure that BSCS was aware of each of our findings and that it did not have additional documentation to support the questioned costs.

We conducted this performance audit in accordance with *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.

³² Based on the areas of elevated risk of noncompliance identified during the initial phase, we determined that there was no need for the expanded audit phase.

APPENDIX C: SUMMARY OF QUESTIONED COSTS

Appendix C, Table 1: Schedule of Questioned Costs by Finding

Finding	Description	Questioned Costs		Total
		<i>Unsupported</i>	<i>Unallowable</i>	
1	Unallowable Expenses	\$0	\$117,804	\$117,804
2	Inadequately Supported Expenses	-	39,912	39,912
3	Inappropriately Allocated Salary Expenses	-	334	334
4	Non-Compliance with Federal Requirements for Pass-Through Entities	-	-	-
5	Non-Compliance with BSCS Policies	-	-	-
Total		<u>\$0</u>	<u>\$158,050</u>	<u>\$158,050</u>

Source: Auditor summary of questioned costs by finding.

Appendix C, Table 2: Summary of Questioned Costs by NSF Award Number

NSF Award No.	No. of Transaction Exceptions	Questioned Direct Costs	Questioned Indirect Costs	Questioned Total	BSCS Agreed to Reimburse
██████████	1	\$0	\$575	\$575	\$0
██████████	2	40	946	986	-
██████████	6	1,983	61,316	63,299	-
██████████	2	26,808	19,983	46,791	-
██████████	6	2,871	15,331	18,202	-
██████████	2	-	4,349	4,349	-
██████████	3	225	9,546	9,771	-
██████████	1	-	10,801	10,801	-
██████████	2	-	1,186	1,186	-
██████████	1	-	2,090	2,090	-
Total	<u>26</u>	<u>\$31,927</u>	<u>\$126,123</u>	<u>\$158,050</u>	<u>\$0</u>

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

Finding No.	NSF Award No.	Description	Fiscal Year(s)	Direct	Indirect	Total	BSCS Agreed to Reimburse
1) Unallowable Expenses	██████████	Subawardee Non-Negotiated Indirect Cost Rate Above the De Minimis Rate	2016 - 2021	\$-	\$46,851	\$46,851	\$-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	575	575	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	946	946	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	13,511	13,511	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	6,919	6,919	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	13,931	13,931	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	4,349	4,349	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	9,437	9,437	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	10,801	10,801	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	1,186	1,186	-
	██████████	2018 Unadjusted Provisional Indirect Cost Rate	2018	-	2,090	2,090	-
	██████████	February 2018 Travel Allowance	2018	1,958	954	2,912	-
	██████████	August 2019 Travel Allowance	2019	1,581	771	2,352	-
	██████████	August 2019 Travel Allowance	2019	1,290	629	1,919	-
	██████████	October 2017 Gift Card Fees	2017	25	-	25	-
2) Inadequately Supported Expenses	██████████	December 2017 Consultant Services	2017	26,808	13,064	39,872	-
	██████████	May 2018 Participant Support Costs	2018	40	-	40	-

Finding No.	NSF Award No.	Description	Fiscal Year(s)	Direct	Indirect	Total	BSCS Agreed to Reimburse
3) Inappropriately Allocated Salary Expenses	██████	January 2019 Salary	2019	225	109	334	-
4) Non-Compliance with Pass Through Entity Requirements	██████	2016 ██████████ Subaward	2016	-	-	-	-
	██████	2019 University ██████████ Subaward	2019	-	-	-	-
5) Non-Compliance with BSCS Policies	██████	Non-Compliance with BSCS Policies for Competitive Bidding	2016	-	-	-	-
	██████	Non-Compliance with BSCS Policies for Director Review of Expense	2017	-	-	-	-
	██████	Non-Compliance with BSCS Policies for Director Review of Expense	2019	-	-	-	-
	██████	Non-Compliance with BSCS Policies for Executive Director Review of Expense	2018	-	-	-	-
	██████	Non-Compliance with BSCS Policies for Travel	2017	-	-	-	-
	██████	Non-Compliance with BSCS Policies for Cost Transfers	2021	-	-	-	-
Grand Total				<u>\$31,927</u>	<u>\$126,123</u>	<u>\$158,050</u>	<u>\$0</u>

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 \$117,804 in questioned indirect costs, travel allowances, and gift card expenses for which BSCS has not agreed to reimburse NSF and direct BSCS to repay or otherwise remove the sustained questioned costs from its NSF award.
- 1.2. Direct BSCS to strengthen its monitoring procedures and internal control processes for applying indirect costs to federal awards. Updated procedures could include:
 - Documenting the negotiation of indirect cost rates applied by subawardees that do not have federally negotiated indirect cost rates.
 - Establishing a process to manually adjust the application of indirect cost rates at the time BSCS receives a final negotiated rate for that period.
- 1.3. Direct BSCS to identify all NSF awards impacted by its incorrect usage of its provisional indirect cost rate in fiscal year 2018 that were not included within the audit scope and provide NSF with evidence supporting its calculation of the total amount of indirect costs it over-applied to those NSF awards in fiscal year 2018.
- 1.4. Direct BSCS to identify and remove all unquestioned travel allowances charged to the sampled NSF awards, up through the discontinuation of the travel allowance program.
 - Upon identifying these travel allowances, BSCS should provide its analysis and the amount of the reimbursement to NSF's Resolution and Advanced Monitoring team.
- 1.5. Direct BSCS to strengthen its administrative and management procedures surrounding the reimbursement of unused gift cards to ensure that it appropriately credits the original funding source(s) charged for all costs associated with unused gift cards.
- 2.1. Resolve the \$39,912 in questioned inadequately supported consultant and participant support expenses for which BSCS has not agreed to reimburse NSF and direct BSCS to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 2.2. Direct BSCS 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 expenses charged to sponsored programs. Updated procedures could include:

- Requiring confirmation that an active consultant service agreement is in place before paying a consultant service invoice.
 - Establishing tracking documentation for gift cards charged as participant support costs. This documentation would include the information necessary to identify who received the gift cards and when.
- 3.1. Resolve the \$334 in questioned salary expenses for which BSCS has not agreed to reimburse NSF and direct BSCS to repay or otherwise remove the sustained questioned costs from its NSF award.
 - 3.2. Direct BSCS to strengthen its administrative and management procedures and internal controls to ensure it allocates salary costs in a manner that is consistent with the employee's effort report. Updated procedures could include verifying the amount allocated to each award is explicitly supported by the percentage allocation on the effort report.
 - 4.1. Direct BSCS to strengthen its administrative and management procedures and internal controls regarding the requirements for issuing subawards to ensure compliance with federal regulations. Updated procedures could include:
 - Revising its policies to require personnel to evaluate subawardee risk of non-compliance in accordance with 2 Code of Federal Regulations 200.331, *Requirements for pass-through entities*.
 - Performing a risk assessment of subawardees before executing a subaward agreement, including periodically updating the original risk assessment.
 - Performing continuous monitoring of the subawardee based on the established level of risk determined in the latest risk assessment.
 - Performing a suspension/debarment review before executing a subaward agreement.
 - Reviewing the subawardee's annual Single Audit in support of the risk assessment and continuous monitoring.
 - Reviewing and approving the subawardee's indirect cost rate prior to the subawardee beginning work.
 - 4.2. Direct BSCS to ensure that (1) it has performed risk evaluations for all subawards issued between December 2014 and November 2019 and (2) these risk evaluations remain active, to validate the agreements in accordance with federal regulations.

- 5.1. Direct BSCS to strengthen its administrative and management procedures for procurement to ensure that it either acquires services on a competitive basis, consistent with its internal policies and procedures, or documents that competitive bidding requirements do not apply.
- 5.2. Direct BSCS to strengthen its administrative and management procedures to ensure the Director of Operations and Finance reviews all purchases.
- 5.3. Direct BSCS to strengthen its administrative and management procedures to ensure that the Executive Director issues and documents approval for all expenses that exceed \$50,000.
- 5.4. Direct BSCS to strengthen its administrative and management procedures to ensure that the Director of Operations and Finance or the Executive Director properly approves all unbudgeted travel prior to the first day of travel.
- 5.5. Direct BSCS to create and maintain documentation to support that it properly documents all cost transfers, including justifications, before performing the transfer.

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.

Allocation. *Allocation* means the process of assigning a cost, or a group of costs, to one or more cost objective(s), in reasonable proportion to the benefit provided or other equitable relationship. The process may entail assigning a cost(s) directly to a final cost objective or through one or more intermediate cost objectives. (2 CFR § 200.4).

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).

[Return to the term's initial use.](#)

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).

[Return to the term's initial use.](#)

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).

[Return to the term's initial use.](#)

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.](#)

MTDC. This refers to all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward (regardless of the period of performance (POP) of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs. (2 CFR § 200.68).

[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).

[Return to the term's initial use.](#)

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 18-1).

[Return to the term's initial use.](#)

Publication Costs. Costs for electronic and print media, including distribution, promotion, and general handling, are allowable. If these costs are not identifiable with a particular cost objective, they should be allocated as indirect costs to all benefiting activities of the non-federal entity.

Page charges for professional journal publications are allowable where:

- (1) The publications report work supported by the federal government.
- (2) The charges are levied impartially on all items published by the journal, whether or not under a federal award.
- (3) The non-federal entity may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the POP of the federal award. (2 CFR § 200.461).

[Return to the term's initial use.](#)

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).

Return to the term's initial use.

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).

Return to the term's initial use.

Single Audit. A non-Federal entity that expends \$750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with §200.514 Scope of audit except when it elects to have a program-specific audit conducted in accordance with paragraph (c) of this section. (2 CFR § 200.501).

Return to the term's initial use.

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).

Return to the term's initial use.

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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