

Performance Audit of Incurred Costs – Oregon State University

REPORT PREPARED BY COTTON & COMPANY LLP

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL

September 13, 2019
OIG 19-1-017





AT A GLANCE

Performance Audit of Incurred Costs – Oregon State University

Report No. OIG 19-1-017

September 13, 2019

AUDIT OBJECTIVE

The National Science Foundation Office of Inspector General engaged Cotton & Company LLP (C&C) to conduct a performance audit of incurred costs at Oregon State University (OSU) for the period March 1, 2015, to February 28, 2018. The auditors tested more than \$10.8 million of the \$147.5 million of costs claimed to NSF. The objective of the audit was to determine if costs claimed by OSU during this period were allocable, allowable, reasonable, and in conformity with NSF award terms and conditions and applicable Federal financial assistance requirements.

AUDIT RESULTS

The report highlights concerns about OSU's compliance with certain Federal, NSF, and/or OSU regulations and policies when allocating expenses to NSF awards. The auditors questioned \$369,532 of costs claimed by OSU during the audit period. Specifically, the auditors found \$169,950 of unallowable consulting and subaward payments made to an OSU employee; \$78,153 of expressly unallowable expenses; \$65,153 of inappropriately applied indirect costs; \$31,319 of expenses inappropriately charged at the end of NSF awards; \$10,574 of expenses not appropriately allocated to NSF awards; \$8,820 of unreasonable honorarium payments; and \$5,563 of costs that exceeded the allowable per diem amounts. The auditors also identified 2 findings related to non-compliance with OSU internal policies and incorrect application of proposed indirect cost rates for which there were no questioned costs. 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 9 findings in the report with associated recommendations for NSF to resolve the questioned costs and to ensure OSU strengthens administrative and management controls.

AUDITEE RESPONSE

OSU expressed varying levels of agreement and disagreement with the findings throughout the report. OSU's response is attached to the report in its entirety as Appendix B.

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



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

MEMORANDUM

DATE: September 13, 2019

TO: Dale Bell
Director
Division of Institution and Award Support

Jamie French
Director
Division of Grants and Agreements
[REDACTED]

FROM: Mark Bell
Assistant Inspector General
Office of Audits

SUBJECT: Audit Report No. 19-1-017, Oregon State University

This memorandum transmits the Cotton & Company LLP (C&C) report for the audit of costs charged by Oregon State University (OSU) to its sponsored agreements with the National Science Foundation during the period March 1, 2015, to February 28, 2018. The audit encompassed more than \$10.8 million of the \$147.5 million claimed to NSF during the period. The objective of the audit was to determine if costs claimed by OSU on NSF awards were allowable, allocable, reasonable, and in conformity with NSF award terms and conditions and Federal financial assistance requirements.

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 Ken Lish at 703.292.7100 or OIGpublicaffairs@nsf.gov.

Attachment

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OREGON STATE UNIVERSITY

**PERFORMANCE AUDIT OF INCURRED COSTS FOR
NATIONAL SCIENCE FOUNDATION AWARDS
FOR THE PERIOD MARCH 1, 2015, TO FEBRUARY 28, 2018**

**NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL**

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**NATIONAL SCIENCE FOUNDATION
PERFORMANCE AUDIT OF INCURRED COSTS
OREGON STATE UNIVERSITY**

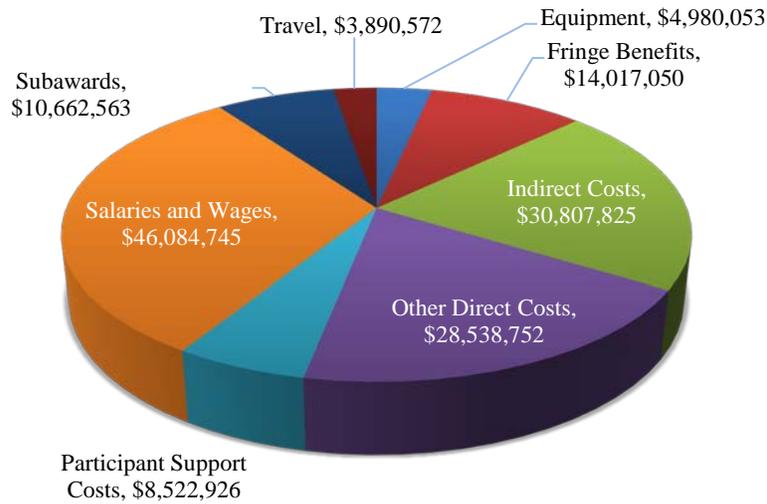
I. BACKGROUND

The National Science Foundation (NSF) is an independent Federal agency whose mission is to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. Through grant awards, cooperative agreements, and contracts, NSF enters into relationships with non-Federal organizations to fund research and education initiatives and to assist in supporting its internal financial, administrative, and programmatic operations.

Most Federal agencies have an Office of Inspector General (OIG) 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 LLP (referred to as "we") to conduct a performance audit of costs incurred by Oregon State University (OSU). OSU is a public research university that reported \$204 million in grant and contract revenue earned from Federal sources in fiscal year (FY) 2018. As illustrated in Figure 1, OSU's general ledger supported more than \$147 million in expenses claimed on 569 NSF awards during our audit period of performance (POP), or March 1, 2015, through February 28, 2018. Figure 1 also shows costs claimed by budget category based on the accounting data that OSU provided.

Figure 1. Costs Claimed by NSF Budget Category, March 1, 2015, through February 28, 2018



Source: Auditor analysis of accounting data provided by OSU.

This performance audit, conducted under Order No. D17PB00320, was designed to meet the objectives identified in the Objectives, Scope, and Methodology (OSM) section of this report (Appendix C) and was conducted in accordance with *Generally Accepted Government Auditing Standards* (GAGAS), issued by the U.S. Government Accountability Office. We communicated the results of our audit and the related findings and recommendations to OSU and NSF OIG. We have included OSU's full response to this report in its entirety in Appendix B.

II. AUDIT RESULTS

We tested 300 transactions, which represented \$10,847,983 in costs that OSU claimed during the audit period. Based on the results of our testing, we determined that OSU needs improved oversight of the allocation and documentation of expenses charged to NSF awards to ensure that OSU is able to support that costs claimed are reasonable, allocable, and allowable in accordance with all Federal and NSF regulations and OSU policies.

As a result, we identified and questioned \$369,532 of direct and indirect costs that OSU inappropriately claimed during the audit period:

- \$169,950 of unallowable consulting and subaward payments made to an OSU employee.
- \$78,153 of expressly unallowable expenses.
- \$65,153 of inappropriately applied indirect costs.
- \$31,319 of expenses inappropriately charged at the end of NSF awards.
- \$10,574 of expenses not appropriately allocated to NSF awards.
- \$8,820 of unreasonable honorarium payments.
- \$5,563 of costs that exceeded the allowable per diem amounts.

We also identified two compliance-related findings:

- Non-compliance with OSU internal policies.
- Incorrect application of proposed indirect cost rates.

We provide a breakdown of the questioned costs by finding in Appendix A of this report.

Finding 1: Unallowable Personal Services Contract and Subaward Agreements

OSU inappropriately entered into a personal services contract and two subaward agreements with an OSU employee. Specifically, OSU awarded the personal services contract and subaward agreements to [REDACTED], where [REDACTED], an OSU employee, serves as the [REDACTED] and [REDACTED]. As a result, OSU charged NSF for \$169,950 in unallowable direct and indirect consulting and subaward expenses.

- ***Personal Services Contract***

In March [REDACTED], OSU charged NSF Award No. [REDACTED] for \$16,200 in costs incurred for [REDACTED] to conduct a one-day training workshop in the final year of the award. Although [REDACTED] was an OSU employee, OSU elected to pay [REDACTED] for these services through a personal services contract awarded to [REDACTED] rather than through OSU's payroll. Because OSU policy does not permit OSU to award a personal services contract to an OSU employee,¹ payments to [REDACTED] are not allowable under this contract.

In addition, OSU did not base the amount of the personal services contract on [REDACTED] institutional base salary (IBS);² instead it used a rate that the Principal Investigator (PI) determined to be reasonable based on "the extensive training and unique experience this specific consultant could provide."

- ***Subaward Agreements***

From December 20 [REDACTED] through July 20 [REDACTED], OSU charged NSF Award Nos. [REDACTED] and [REDACTED] for subaward payments that OSU made to [REDACTED] for work to be performed by, and under the supervision of, [REDACTED]. These subaward payments totaled \$82,000 and \$71,750, respectively. Because [REDACTED] was a co-PI³ on these NSF awards, [REDACTED] would have been involved in the selection, award, and administration of the subawards.

¹ OSU Policy 402-006, *Personal Services Contracts* (effective at the time of this award), states that OSU may not issue personal services contracts to OSU employees, State of Oregon employees, or Federal employees. OSU removed this language from the current version of OSU Policy 402-006 in response to our audit.

² According to 2 CFR Part 220, Appendix A, Section J.10.d.(1), charges for work performed on sponsored agreements are allowable at the base salary rate.

³ [REDACTED] was listed as a co-PI in the application for NSF Award No. [REDACTED] and was the PI of the subaward to [REDACTED] on both NSF awards.

OSU therefore should not have awarded the subawards to an organization for which [REDACTED] served as the [REDACTED] and [REDACTED].⁴

In addition, because OSU did not base the subaward amounts on either [REDACTED] IBS⁵ or [REDACTED] salary at [REDACTED], OSU charged the two NSF awards different rates for [REDACTED] salary during the period in question (i.e., \$11,000 per month⁶ on NSF Award No. [REDACTED] and \$9,478 per month⁷ on NSF Award No. [REDACTED]).

Further, although OSU awarded the subawards as cost-reimbursable contracts, [REDACTED] based its invoices on a billing schedule that was included in the subaward agreements, rather than basing the invoices on the actual costs incurred.

OSU stated that it believes these costs are allowable, as it does not have a typical employer-employee relationship with [REDACTED].⁸ However, [REDACTED] is an OSU employee and was involved in awarding a contract and subawards to a company for which [REDACTED] is also an employee. The [REDACTED] contract and subawards are therefore not in compliance with OSU's procurement policies.

OSU does not have proper controls in place to ensure that its personnel comply with its procurement policies, or that costs claimed by subawardees on cost-reimbursable contracts are reasonable and based on actual costs incurred. As a result, OSU inappropriately awarded a personal services contract and two subawards to [REDACTED]. We are therefore questioning \$169,950 of unallowable direct and indirect consulting and subaward expenses.

⁴ OSU's Procurement and Contract Services Manual, *Purchasing from or Contracting with OSU Employees, Relatives of OSU Employees or Members of the OSU Employee's Household* (101-002), states that OSU may only contract with OSU employees if the employee is not involved in the selection, award, or administration of the contract.

⁵ According to 2 CFR Part 200, § 200.430 (h)(2), organizations may charge work that faculty members perform on Federal awards using the faculty member's IBS rate.

⁶ The budget for NSF Award No. [REDACTED] and OSU Subaward [REDACTED] included \$66,000 to support 6 months of [REDACTED] salary, or \$11,000 per month, during the NSF award's POP of September 15, 20[REDACTED] to August 31, 20[REDACTED].

⁷ The budget for NSF Award No. [REDACTED] and OSU Subaward [REDACTED] included \$85,299 to support 9 months of [REDACTED] salary, or \$9,478 per month, during the NSF award's POP of September 15, 20[REDACTED] to August 31, 20[REDACTED].

⁸ OSU noted that [REDACTED] appointment differs from a typical faculty appointment, as [REDACTED] holds OSU's minimum full-time equivalent appointment of 0.01 percent [REDACTED] does not have an office at OSU, and does not serve on any department committees.

Table 1. Unallowable Personal Services Contract and Subaward Agreements

Description	NSF Award No.	Fiscal Year	Questioned Costs
Unallowable Personal Services Contract Payment			\$16,200
Unallowable Subaward Payments			82,000
Unallowable Subaward Payments			71,750
Total Questioned Costs			<u>\$169,950</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$169,950 in questioned consulting and subaward costs and direct OSU to repay or otherwise remove the sustained questioned costs from its NSF awards.
2. Direct OSU to establish a policy to ensure that OSU employees are not paid as both employees and independent contractors. We noted that OSU updated OSU Policy 402-006, *Personal Services Contracts*, in response to our audit; however, we determined that OSU’s revision does not sufficiently address cases such as the one described in this finding.
3. Direct OSU to strengthen its administrative and management procedures over awarding subawards to ensure that:
 - a. Personnel who receive, or work for an organization that receives, a subaward contract are not involved in selecting or awarding it, or in performing administrative services for it.
 - b. Cost-reimbursable subaward agreements do not include billing schedules.
 - c. Subawardees submit budgets with accurate information on each employee’s salary, if the subawardees will submit invoices on a cost-reimbursable basis and OSU will charge these costs to a Federal award.

Oregon State University Response: OSU stated that it understands why the auditors questioned the transactions, given the policy in place at the time and [REDACTED] .01 full-time equivalent appointment in the system; however, it disagreed with the auditors’ assessment, as it believes that the expenses charged to the projects were directly allocable, allowable, and reasonable. OSU asserted that [REDACTED] appointment was not necessary and that there was no employment relationship between OSU and [REDACTED]. OSU noted that [REDACTED] appointment structure was not typical and that OSU would address the issue going forward to ensure that appointments align with OSU policy. OSU further stated that it will review its subaward process to identify any areas that could be strengthened, in accordance with the auditors’ recommendation, and will review its policies and procedures related to personal services contracts, subawards, and

employees to ensure that the policies and procedures comply with Federal guidance and best practices.

Auditors' Additional Comments: Our position regarding this finding does not change.

Finding 2: Unallowable Expenses

OSU charged ten NSF awards a total of \$78,153 for expenses that are expressly unallowable under Federal and NSF regulations and/or OSU policies.

- ***Equipment Purchased Outside the Scope of the Award***

In March 2017, OSU charged NSF Award No. [REDACTED] for \$33,575 to purchase components to build equipment that was not included in the original scope of the award.⁹ The PI had previously submitted a “Significant Change in Methods/Procedures” request form in May 2016 to request NSF’s approval to build a centrifuge under this award, but NSF did not approve the request. We therefore determined that these costs are unallowable.¹⁰

- ***Consultant Expenses Billed Prior to Incurring the Expenses***

In July 2015, OSU charged NSF Award No. [REDACTED] for \$18,980 in consulting services. OSU had identified the consultant as an award participant; however, OSU paid the consultant the full amount of the contract (\$13,000 awarded to support 130 hours of work at a rate of \$100 per hour) only 5 days after signing the contract. Because the consultant did not submit detailed invoices as required by the contract, and because OSU paid the consultant before the consultant provided the services, we determined that these costs are unallowable.¹¹

- ***Salary Expenses Charged to an Expired Award***

In September 2015, OSU charged NSF Award No. [REDACTED] for \$15,352 in salary and fringe benefit expenses incurred in September 2015, the month after the award expired.¹² We therefore determined that these costs are unallowable.¹³

⁹ The emails that OSU provided to support the transaction indicate that the PI requested NSF’s approval to re-allocate program funds to expand the scope of the project.

¹⁰ NSF Proposal and Award Policies and Procedures Guide (PAPPG) 15-1, Part II, Chapter II, Section B.1.a., *Changes in Objectives or Scope*, states that the PI may not change either the phenomena under study or the objectives identified in the project proposal without first obtaining NSF’s approval.

¹¹ The personal services contract between OSU and the contractor states that OSU shall only pay for work performed and that the contractor must submit detailed invoices before OSU will issue payment.

¹² NSF Award No. [REDACTED] had a POP from August 1, 2011, through August 31, 2015.

¹³ NSF PAPPG 11-1, Part II, Chapter V, Section A.2.c. states that organizations may not expend NSF funds after the award has expired, except to liquidate valid commitments that the organization made on or before the award’s expiration date.

- ***General-Purpose Equipment Expenses***

In December 2015, OSU charged NSF Award No. [REDACTED] for \$3,320 incurred to purchase general-purpose equipment. Because OSU did not clearly disclose and justify this equipment in the proposal budget, and because NSF did not include the equipment in the award budget, we determined that these costs are unallowable.¹⁴

- ***Travel Expenses***

OSU inappropriately charged three NSF awards a total of \$4,157 in unallowable travel expenses.

- In June 2015, OSU charged NSF Award No. [REDACTED] for \$2,549 in unallowable travel expenses.
 - \$1,986 in duplicative expenses related to a flight from [REDACTED] to [REDACTED]. Because OSU had already charged this flight to the NSF award, the duplicative charge is unallowable.
 - \$563 in flight change fees incurred to allow a student to fly to [REDACTED] early to meet with the U.S. Consulate to renew the student's U.S. visa. Visa-related fees are unallowable.¹⁵
- From August to September 2015, OSU charged NSF Award No. [REDACTED] for \$874 in unallowable travel expenses.
 - \$48 in fees related to personal travel protection. Because personal travel protection fees are not approved reimbursable expenses per OSU's travel policies, this charge is unallowable.¹⁶
 - \$826 in additional costs incurred because the traveler elected to travel by train when the train was not the most suitable and economical form of transportation. These costs are therefore unallowable.¹⁷
- In May 2016, OSU charged NSF Award No. [REDACTED] for \$734 in unallowable travel expenses.

¹⁴ NSF PAPPG 15-1, Part I, Chapter II, Section C.2.g.(iii) states that any request for funding to purchase general-purpose equipment must be clearly disclosed and justified in the proposal budget and included in the NSF award budget.

¹⁵ NSF PAPPG 11-1, Part II, Chapter VI, Section G.4 states that NSF is not responsible for securing any passports or visas that individuals may require in order to participate in an NSF-supported project.

¹⁶ OSU Policy 411-09, *Non-Reimbursable Expenses*, states that OSU does not typically reimburse expenses associated with personal travel, including personal travel insurance, unless OSU specifically identifies these expenses as reimbursable.

¹⁷ OSU Policy 411-02, *Ground Transportation*, states that OSU personnel may travel by train if they provide a justification demonstrating that the train is the most suitable and economical mode of transportation.

- \$579 in airfare expenses. Because OSU was unable to provide documentation verifying that the costs related solely to allowable economy-class airfare, the costs are unallowable.¹⁸
 - \$155 in costs incurred to rent a full-size car and purchase personal accident insurance. These expenses are both unallowable.¹⁹
- ***Rebudgeting of Participant Support Costs (PSCs)***

OSU used \$1,770 of its PSC funding to pay for costs that were outside the original scope of the PSC budget without first obtaining approval from an NSF Program Officer (PO).²⁰

- In November 2017, OSU charged NSF Award No. [REDACTED] for \$1,462 in meal plan expenses incurred for a graduate student who participated in the award’s Research Experience for Undergraduates (REU) program. Because OSU’s proposal for the award indicated that OSU would use the funding to host a summer REU site for undergraduate student participants,²¹ OSU should have obtained the NSF PO’s approval before using PSC funding to pay expenses for a graduate student participant. The costs are therefore unallowable.
- In August 2017, OSU charged NSF Award No. [REDACTED] for \$308 in lodging costs incurred for two participants to stay an extra night after attending a grant-sponsored conference. Because OSU requested the award funding to support the participants’ attendance at the conference, OSU should have obtained the NSF PO’s approval before using PSC funding to pay lodging expenses incurred after the conference ended. The costs are therefore unallowable.

- ***Vacation Leave Payout***

In December 2016, OSU charged NSF Award No. [REDACTED] for \$999 in vacation leave payout expenses without first obtaining approval from OSU’s Office for Sponsored Research and Award Administration (OSRAA), as required by OSU’s policies. These expenses are therefore unallowable.²²

¹⁸ According to 2 CFR Part 220, Appendix A, Section J.53.c.(1) and NSF PAPPG 11-1, Part II, Chapter V: Section B.4.b., airfare in excess of standard commercial economy-class airfare is unallowable. Further, OSU Fiscal Operations Manual, 411: *Travel* states that OSU will only reimburse regular, coach-class fares for air travel.

¹⁹ OSU Policy 411-02, *Ground Transportation*, states that OSU personnel must rent compact cars whenever possible while traveling. The policy also states that personnel should decline personal accident insurance, as it is not a reimbursable expense.

²⁰ NSF PAPPG 16-1, Part II, Chapter V, Section A.3.b. states that PIs must obtain written approval from the cognizant NSF Program Officer before reallocating funds provided for PSCs.

²¹ NSF 13-542, *Research Experiences for Undergraduates (REU) Sites and Supplements*, states that the program is designed specifically for undergraduate students.

²² OSU Policy 209-01B, *Vacation Leave Pay-Off*, states that personnel must request vacation leave payouts from OSRAA and obtain OSRAA’s approval before charging the expense. The department/unit must cover the cost of any vacation leave payout that OSRAA does not approve.

Table 2. Unallowable Expenses

Description	NSF Award No.	Fiscal Year	Questioned Costs
March 2017 Unallowable Equipment Expenses		2017	\$33,575
July 2015 Unallowable Consultant Expenses		2016	18,980
September 2015 Unallowable Salary Expenses		2016	15,352
December 2015 Unallowable General-Purpose Equipment Expenses		2016	3,320
June 2015 Unallowable Travel Expenses		2015	2,549
August-September 2015 Unallowable Travel Expenses		2016	874
May 2016 Unallowable Travel Expenses		2016	734
November 2017 Unallowable Rebudgeting of PSCs		2018	1,462
August 2017 Unallowable Rebudgeting of PSCs		2018	308
December 2016 Unallowable Vacation Leave Payout		2017	999
Total			<u>\$78,153</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$78,153 in questioned equipment, consultant, salary, travel, participant support, and leave payout costs and direct OSU to repay or otherwise remove the sustained questioned costs from its NSF awards.
2. Direct OSU to strengthen its administrative and management procedures for obtaining NSF’s approval before making changes to an award’s scope. Procedures could include verifying that the sponsor approved the change in scope before allowing PIs to charge awards for expenses that are inconsistent with the scope of the original award.
3. Direct OSU to strengthen its administrative and management procedures for allocating salary and associated accumulated leave expenses to sponsored projects. Procedures could include:
 - a. Updating award close-out procedures to require personnel to review all payroll charged to an award after the award’s POP has ended, to verify that OSU incurred the expenses during the award’s POP.
 - b. Updating its procedures for the approval of vacation leave payout to ensure that departments/units obtain OSRAA’s approval before charging payouts to sponsored awards.
4. Direct OSU to strengthen its administrative and management procedures for allocating travel expenses to sponsored projects. Procedures could include:

- a. Performing periodic reviews of expense reports that OSU personnel submit under NSF awards to ensure that all costs charged comply with Federal and NSF regulations and OSU policies and procedures.
 - b. Conducting annual training for individuals responsible for reviewing and approving expense reports.
5. Direct OSU to strengthen its administrative and management procedures for allocating equipment or general-purpose equipment expenses to sponsored projects. Procedures could include requiring that PIs request specific approval from NSF before charging general-purpose equipment to NSF awards.
 6. Direct OSU to strengthen its administrative and management procedures over the use of PSC funding under NSF awards. Processes could include requiring an annual review of all costs charged to PSC accounts to verify that the PI incurred the expenses for the purpose(s) outlined in the award budget.

Oregon State University Response: OSU agreed that \$18,528 of the questioned costs associated with travel expenses and salary allocation were not allowable and stated that it will reimburse NSF for these costs.²³ OSU disagreed with the remaining \$59,625 in questioned costs and stated that it believes the costs were allowable, allocable, and reasonable, as follows:

- With regard to the \$33,575 in questioned equipment expenses charged to NSF Award No. [REDACTED], OSU stated that, although the PI had submitted a “Significant Change in Methods/Procedures” request form to NSF in May 2016, OSU had subsequently determined that the change was solely a shift of project funds, rather than a significant change that required NSF approval. OSU therefore re-budgeted project funds for this expense, in accordance with its allowed re-budgeting authority.
- With regard to the \$18,980 in questioned consultant expenses charged to NSF Award No. [REDACTED], OSU stated that, although the vendor had been unable to provide adequate information regarding the dates of service, OSU had identified the consultant in the grant budget, and the consultant had provided input on the research and performed necessary services over the life of the contract. However, OSU stated that it would provide the campus community with ongoing education regarding documentation standards.
- With regard to the \$3,320 in questioned general-purpose equipment expenses charged to NSF Award No. [REDACTED], OSU stated that it believes the expense was allowable because the computer purchased was dedicated to the project, and because OSU had included the purchase in the minor equipment budget.

²³ Specifically, OSU agreed to reimburse the \$15,352 of questioned salary expenses charged to NSF Award No. [REDACTED], the \$2,549 of questioned travel costs charged to NSF Award [REDACTED], the \$48 of questioned personal travel protection costs charged to NSF Award No. [REDACTED], and the \$579 of questioned airfare expenses charged to NSF Award No. [REDACTED].

- With regard to the \$874 and \$734 in questioned travel expenses charged to NSF Award Nos. [REDACTED] and [REDACTED], respectively, OSU agreed that \$48 and \$579, respectively, were unallowable. OSU disagreed with the remaining \$981 in questioned costs (\$826 charged to Award No. [REDACTED] and \$155 charged to Award No. [REDACTED]). OSU stated that the \$826 incurred for train fare and lodging was allowable, as it represented alternate travel arrangements based on the traveler's medical needs. In addition, OSU stated that the \$155 in costs incurred to rent a full-size car and purchase personal accident insurance represented only the allowable portion of the rental costs, which totaled \$466.
- With regard to the \$1,462 and \$308 in questioned PSCs charged to NSF Award Nos. [REDACTED] and [REDACTED], respectively, OSU stated that it was not required to obtain NSF's approval to re-budget the \$1,462 in PSCs related to meal plan expenses incurred for a graduate student, as OSU had listed the graduate student as a REU participant in the award's final report and the graduate student was eligible for the full benefits of the program. OSU stated that it believes the \$308 in lodging costs incurred for two participants to stay an extra night after attending a grant-sponsored conference is allowable because it enabled the participants to attend meetings that were within the scope and purpose of the project.
- With regard to the \$999 in questioned vacation leave payout expenses charged to NSF Award No. [REDACTED], OSU stated that because 100 percent of the individual's effort related to this award, it believes that the vacation leave payout is allowable.

OSU further stated that it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices.

Auditors' Additional Comments: Our position regarding this finding does not change. Specifically:

- With regard to the \$33,575 in questioned equipment expenses charged to NSF Award No. [REDACTED], because OSU originally requested NSF's permission to incur these costs as a significant change in methods/procedures and NSF did not grant this permission, our position regarding this finding does not change.
- With regard to the \$18,980 in questioned consultant expenses charged to NSF Award No. [REDACTED], because OSU was unable to provide an invoice for this payment despite the contractual requirement for invoices, and because OSU processed the full payment shortly after signing the contract, our position regarding this finding does not change.
- With regard to the \$3,320 in questioned general-purpose equipment expenses charged to NSF Award No. [REDACTED], we reviewed the award budget and noted that OSU had budgeted funding for minor equipment; however, the budget did not provide any further detail regarding the equipment included in this line item. Because the applicable NSF Proposal and Award Policies and Procedures Guide (PAPPG) indicates that awardees

must clearly disclose and justify any general-purpose equipment, our position regarding this finding does not change.

- With regard to the \$874 in questioned travel expenses charged to NSF Award No. [REDACTED], because OSU was unable to provide documentation supporting its statement that the additional expenses represented alternate travel arrangements based on the traveler's medical needs, our position regarding this finding does not change.
- With regard to the \$734 in questioned travel expenses charged to NSF Award No. [REDACTED], although OSU only charged NSF for a portion of the total car rental fee, the fee would have been lower if OSU had followed OSU Policy 411-02, *Ground Transportation*; i.e., had the traveler rented a compact/economy car and refrained from purchasing personal accident insurance. Because this charge did not comply with OSU policy, our position regarding this finding does not change.
- With regard to the \$1,462 in questioned PSCs charged to NSF Award No. [REDACTED], because the student participated in the REU program despite being a graduate student rather than an undergraduate student, our position regarding this finding does not change.
- With regard to the \$308 in questioned PSCs charged to NSF Award No. [REDACTED], because the conference ended before the travelers incurred the additional lodging expenses, the lodging expenses do not appear to benefit the award. As such, our position regarding this finding does not change.
- With regard to the \$999 in questioned vacation leave payout expenses charged to NSF Award No. [REDACTED], because OSU was unable to provide documentation supporting that OSRAA had approved the payout, as required by OSU policy, our position regarding this finding does not change.

Finding 3: Inappropriate Application of Indirect Costs

OSU inappropriately applied \$65,153 of indirect costs to expenses that it should have excluded from its Modified Total Direct Cost (MTDC) base, in accordance with the Negotiated Indirect Cost Rate Agreement(s) (NICRAs) that were in effect when NSF awarded the grants.

- ***Indirect Costs Inappropriately Applied to Equipment Expenses***

Equipment expenses are not allowable in OSU's MTDC base;²⁴ however, OSU inappropriately applied \$60,826 of indirect costs to equipment expenses.

²⁴ According to 2 CFR Part 220, Appendix A, Section G.2; 2 CFR Part 200, §200.68; and OSU's NICRAs published on August 11, 2010, and October 3, 2014, OSU should exclude equipment and capital expenditures from its MTDC base. According to 2 CFR Part 200, §200.33 and 2 CFR §215.2(l), equipment is defined as tangible personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit.

- From October 2012 through April 2015, OSU charged NSF Award No. [REDACTED] for \$18,958 of indirect costs that it applied to equipment rental expenses. Because OSU is not allowed to include either equipment expenses or rental costs in its MTDC base,²⁵ it should not have applied indirect costs to these expenses.
- In March 2015, OSU charged NSF Award No. [REDACTED] for \$729 of indirect costs that it applied to materials purchased to upgrade a computer cluster. OSU had budgeted these materials as equipment, and during the purchasing process, the PI noted that OSU should account for the materials as equipment. In addition, the materials materially increased the value of a capital asset worth more than \$5,000. OSU should therefore have accounted for the materials as equipment and should not have applied indirect costs to these expenses.²⁶
- In September 2015, OSU charged NSF Award No. [REDACTED] for \$2,300 of indirect costs that it applied to materials purchased to install a computing cluster. These materials materially increased the value of a capital asset worth more than \$5,000. OSU therefore should have accounted for the materials as equipment and should not have applied indirect costs to these expenses.
- In February 2016, OSU charged NSF Award No. [REDACTED] for \$3,252 of indirect costs that it applied to materials purchased to replace a piece of equipment (i.e., a fishing reel) that was lost or damaged during its initial use. Although the cost of each individual item was less than \$5,000, OSU purchased the materials for use as components in building a piece of equipment that, when assembled, had an acquisition cost of more than \$5,000. OSU therefore should have accounted for these materials as equipment and should not have applied indirect costs these expenses.²⁷
- In June 2016, OSU charged NSF Award No. [REDACTED] for \$3,760 of indirect costs that it applied to expenses incurred to purchase two multiparameter sondes.²⁸ OSU had identified the sondes as equipment in the award budget. In addition, although the acquisition cost of each individual item was less than \$5,000, the components needed to make each sonde usable for the purposes of the project had a combined acquisition cost of more than \$5,000.²⁹ OSU therefore should have

²⁵ According to OSU's NICRA published on August 11, 2010, OSU should exclude equipment and rental costs from its indirect cost base.

²⁶ According to 2 CFR Part 220, Appendix A, Section J.18.a.(1), capital expenditures include expenditures to make improvements to capital assets that materially increase the assets' value or useful life.

²⁷ According to NSF PAPPG 15-1, Part I, Chapter II, Section C.2.g.(iii), the acquisition cost of equipment includes the cost of modifications, attachments, and accessories necessary to make the property usable for the purpose for which the organization acquired the property.

²⁸ A sonde is an instrument that transmits data about the physical conditions of its surroundings.

²⁹ According to 2 CFR Part 220, Appendix A, Section J.18.a.(1), and NSF PAPPG 14-1 Part II, Chapter V: Section B.2.b.(i), the acquisition cost for equipment is defined as the net invoice price of the equipment, including the cost of any modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment usable for the purposes for which the organization acquired the equipment.

accounted for the sonde components as equipment and should not have applied indirect costs to these expenses.

- In August 2016, OSU charged NSF Award No. [REDACTED] for \$4,057 of indirect costs that it applied to expenses incurred to purchase a heating element for a mass spectrometer. We noted that the acquisition cost of the item was more than \$5,000. In addition, the PI identified the item as equipment in the award budget and noted that the heating element was required to make the instrument usable for its intended purpose. OSU therefore should have accounted for this item as equipment and should not have applied indirect costs to these expenses.
- In September 2016, OSU charged NSF Award No. [REDACTED] for \$3,380 of indirect costs that it applied to expenses incurred to purchase risk analysis software. The acquisition cost of the software was more than \$5,000, and the software had a useful life greater than one year. OSU therefore should have accounted for the software as equipment and should not have applied indirect costs to these expenses.³⁰
- In February 2017, OSU charged NSF Award No. [REDACTED] for \$5,852 of indirect costs that it applied to materials purchased to increase the functionality of grant-related equipment. The PI had stated that the materials were necessary to make the equipment usable for its intended purpose. OSU therefore should have accounted for these materials as equipment and should not have applied indirect costs to these expenses.
- In February 2017, OSU charged NSF Award No. [REDACTED] for \$6,068 of indirect costs that it applied to software the PI had purchased to run a server that hosts telepresence data. The acquisition cost of the software was more than \$5,000, and the software has a useful life greater than one year. OSU therefore should have accounted for the software as equipment and should not have applied indirect costs to these expenses.
- In April 2017, OSU charged NSF Award No. [REDACTED] for \$4,720 of indirect costs that it applied to software purchased to run the high-precision machining needed to collect project-related data. The acquisition cost of the software was more than \$5,000, and the software had a useful life greater than one year. As a result, OSU should have accounted for the software as equipment and therefore should not have applied indirect costs to these expenses.
- In May 2017, OSU charged NSF Award No. [REDACTED] for \$7,750 of indirect costs that it applied to wave generation and analysis software that the PI purchased to perform grant-related research. The acquisition cost of the software was more

³⁰ According to 2 CFR Part 200, §200.33, equipment includes information technology systems, and 2 CFR Part 200, §200.58 states that information technology systems include software. Because NSF funded Award No. [REDACTED] incrementally, the funding awarded for the expenses included in this finding falls under the Uniform Guidance.

than \$5,000, and the software had a useful life greater than one year. As a result, OSU should have accounted for the software as equipment and therefore should not have applied indirect costs to these expenses.

- ***Indirect Costs Inappropriately Applied to PSCs***

PSCs are not allowable in OSU's MTDC base;³¹ therefore, OSU inappropriately applied \$1,691 of indirect costs to PSCs.

- In March 2015, OSU charged NSF Award No. [REDACTED] for lodging expenses incurred for 44 individuals, including both employees and participants, to attend an award-related workshop. Although OSU performed a number of cost transfers in an attempt to segregate the participant lodging expenses in a separate account that would not automatically apply indirect costs to the expenses, OSU did not succeed in appropriately segregating all of the participant lodging costs.³² As a result, OSU inappropriately charged the NSF award for \$1,691 of indirect costs related to PSCs.

- ***Indirect Costs Inappropriately Applied to Tuition Remission Expenses***

Tuition remission expenses are not allowable in OSU's MTDC base,³³ and OSU inappropriately applied \$2,636 of indirect costs to tuition remission expenses.

- In July 2016, OSU inappropriately charged tuition remission expenses to a salary account. As a result of this error, OSU inappropriately charged NSF Award No. [REDACTED] for \$2,636 of indirect costs related to tuition remission expenses.

OSU evaluated whether it should capitalize expenses based on the guidance available in its internal policies, rather than on the guidance established in relevant NSF and Federal criteria.³⁴ In addition, OSU did not appropriately consider whether component items purchased were necessary for the functionality of the related assets. Further, OSU's payroll system does not contain sufficient controls to ensure that OSU appropriately segregates tuition remission expenses from payroll costs. As a result, we are questioning \$65,153 of indirect costs applied to expenses that OSU should have excluded from its MTDC base.

³¹ NSF PAPPG 10-1, Part I, Chapter II, Section C.2.g.(v), states that NSF generally does not allow indirect costs on PSCs.

³² When calculating the total amount of PSCs to move to the segregated account, OSU did not appropriately identify all conference participants. In addition, OSU used the currency conversion rate that was applicable on the date of the cost transfer, rather than the rate that was applicable on the date that OSU incurred the expense.

³³ According to OSU's NICRA, published on August 11, 2010, OSU should exclude tuition remission expenses from its MTDC base.

³⁴ OSU's Property Management Manual 002, *Definitions*, revised on April 18, 2017, states that a fixed asset must have a unit value of \$5,000 or more (unless OSU purchased the item as an attachment to an existing asset and capitalized the item in the same year as the parent asset) and a useful life that exceeds one year. In addition, the asset cannot be consumed over the normal course of business.

Table 3. Inappropriate Application of Indirect Costs

Description	NSF Award No.	Fiscal Year	Questioned Costs
October 2012 through April 2015 Indirect Costs (IDCs) Applied to Equipment	██████████	2013-2015	\$18,958
March 2015 IDCs Applied to Equipment	██████████	2015	729
September 2015 IDCs Applied to Equipment	██████████	2016	2,300
February 2016 IDCs Applied to Equipment	██████████	2016	3,252
June 2016 IDCs Applied to Equipment	██████████	2016	3,760
August 2016 IDCs Applied to Equipment	██████████	2017	4,057
September 2016 IDCs Applied to Equipment	██████████	2017	3,380
February 2017 IDCs Applied to Equipment	██████████	2017	5,852
February 2017 IDCs Applied to Equipment	██████████	2017	6,068
April 2017 IDCs Applied to Equipment	██████████	2017	4,720
May 2017 IDCs Applied to Equipment	██████████	2017	7,750
March 2015 IDCs Applied to PSCs	██████████	2015	1,691
July 2016 IDCs Applied to Tuition Remission Expenses	██████████	2017	<u>2,636</u>
Total Questioned Costs			<u>\$65,153</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$65,153 in questioned indirect costs and direct OSU to repay or otherwise remove the sustained questioned costs from its NSF awards.
2. Direct OSU to strengthen its administrative and management procedures for applying indirect costs to Federal awards. Processes could include:
 - a. Requiring that personnel manually review materials/supplies and software purchases to evaluate whether OSU should account for the items as equipment. Specifically, OSU should consider whether the items purchased either cost more than \$5,000 or are necessary for the use of an asset that would have a total value of more than \$5,000.
 - b. Implementing an annual review process for travel costs charged to awards that include funding for PSCs to ensure that OSU is appropriately segregating PSCs in accounts that OSU has excluded from the MTDC base.
 - c. Updating its tuition remission policies and procedures to ensure that it does not charge tuition expenses to a salary account that is included in the MTDC base.

Oregon State University Response: OSU agreed that the \$2,636 in questioned indirect costs caused by an inadvertent coding error was unallowable and stated that it would reimburse NSF

for this amount. OSU disagreed with the remaining \$62,517 in questioned costs and stated that it believed the costs were allowable, allocable, and reasonable, as follows:

- With regard to the \$19,950 in questioned indirect costs applied to equipment expenses on NSF Award Nos. [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], and [REDACTED], OSU stated that the items in question are not considered to be equipment under OSU policy and therefore would not be capitalized; as such, the items are eligible for indirect costs.
- With regard to the \$21,918 in questioned indirect costs charged to NSF Award Nos. [REDACTED], [REDACTED], and [REDACTED], OSU stated that it purchased the software prior to July 1, 2018, when it implemented the Uniform Guidance procurement standards; it therefore treated the purchase in accordance with the OSU procurement policy that was in effect at the time of the purchase.
- With regard to the \$18,958 in questioned indirect costs charged to NSF Award No. [REDACTED], OSU stated that, although its indirect cost rate agreement for the MTDC excludes “rental costs” in accordance with the language in Office of Management and Budget (OMB) Circular A-21 and the Uniform Guidance, OSU’s Facilities and Administrative (F&A) rate implementation memorandum specifies that “rental costs” only includes building and land rental costs. As such, OSU believes that equipment rental and services are allowable in its indirect cost base.
- With regard to the \$1,691 in questioned indirect costs charged to NSF Award No. [REDACTED], OSU stated that it had paid the lodging costs in advance and had redistributed the expenses after finalizing the attendee list. OSU noted that it had adjusted the indirect costs as part of the redistribution.

OSU further stated that it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices.

Auditors’ Additional Comments: Our position regarding this finding does not change. Specifically:

- With regard to the \$19,950 in questioned indirect costs applied to equipment expenses on NSF Award Nos. [REDACTED], [REDACTED], [REDACTED], [REDACTED], [REDACTED], and [REDACTED], although OSU would not consider the items to be equipment under its procurement policy, the purchased items either (1) increased the value of the related equipment such that the value of the equipment exceeds the Federal equipment threshold, or (2) were vital to enable the related equipment to function properly. As such, our position regarding this finding does not change.
- With regard to the \$21,918 in questioned indirect costs charged to NSF Award Nos. [REDACTED], [REDACTED], and [REDACTED], because the criteria that OSU cited as the basis for this issue are not related to procurements (for the definition of equipment for Federal

procurement purposes, see 2 CFR §200.33, §200.58, and §200.68), our position regarding this finding does not change.

- With regard to the \$18,958 in questioned indirect costs charged to NSF Award No. [REDACTED], although OSU's F&A rate implementation memorandum specifies that the term "rental costs" only includes rental costs related to buildings and land, OSU's NICRA with the Federal Government does not indicate that the term "rental costs" only applies to specific rental costs. Further, the NICRA expressly lists equipment as a cost that OSU should exclude from its MTDC base. As such, our position regarding this finding does not change.
- With regard to the \$1,691 in questioned indirect costs charged to NSF Award No. [REDACTED], because OSU was unable to provide documentation to support its assertion that it had fully redistributed the indirect costs, and because OSU did not redistribute all PSC expenses, our position regarding this finding does not change.

Finding 4: Unallocable End-of-Award Expenses

OSU allowed personnel to charge NSF awards for \$31,319 in expenses that the PIs incurred near the end of the award's POP and that do not appear to have been reasonable or necessary to achieve the objective(s) of the NSF awards charged.

o Supplies and Equipment Purchased in the Final Month of an Award's POP

OSU charged two NSF awards a total of \$15,988 in supplies/equipment expenses that OSU did not appear to have allocated based on the relative benefit that each award received, as required under Federal regulations.³⁵

- o In November 2015, OSU charged NSF Award No. [REDACTED] for \$3,266 in general-purpose laboratory supplies. OSU ordered these supplies on August 21, 2015, approximately one month before the NSF award expired. Because OSU purchased laboratory supplies that were not specific to the award shortly before the award expired, OSU does not appear to have used the supplies solely to benefit this award.³⁶ OSU may have used the supplies in performing award-related research during the final month of the award's POP; however, the PI appears to have ordered the supplies to re-stock the laboratory because the award had unspent funding available at the end of its POP.
- o In February 2017, OSU charged NSF Award No. [REDACTED] for \$12,722 in supplies. OSU ordered these supplies on February 17, 2017, 11 days before the NSF award expired. The PI stated during our audit that the supplies were

³⁵ According to 2 CFR Part 220, Appendix A, Section C.4, organizations should allocate costs to a particular cost objective in accordance with the relative benefits received.

³⁶ According to 2 CFR Part 220, Appendix A, Section J.31.c., organizations may only charge those materials and supplies actually used for the performance of a sponsored agreement as direct costs under that agreement.

necessary to validate the award results; however, based on the original documentation provided by OSU, the PI appears to have requested the supplies upon determining that the funds remaining on the award would expire shortly.³⁷ Because the PI purchased these supplies only 11 days before the end of the award's POP, these costs do not appear to be allocable to this award.

o ***Travel Taken in the Final 90 Days of an Award's POP***

OSU charged five NSF awards a total of \$15,331 in travel expenses that did not appear to be necessary, reasonable, or allocable to the NSF awards charged, as required under Federal regulations.³⁸

- o In May 2015, less than three months before NSF Award No. [REDACTED] expired, OSU charged the award for \$4,015 in travel expenses incurred for a graduate student to attend a conference in [REDACTED]. The award's budget did not include funding to support foreign travel, and the annual report for the award did not mention the traveler. In addition, the paper that the traveler presented at the conference did not denote NSF support, and the traveler did not certify that any effort was allocable to this award. These expenses therefore do not appear to be allocable to this award.

OSU stated that the traveler did contribute to the research under this award; however, OSU appears to have charged the traveler's expenses to NSF Award No. [REDACTED] rather than to other applicable funding sources because NSF Award No. [REDACTED] had unspent funding available at the end of its POP.

- o In August 2015, the final month of the POP for NSF Award No. [REDACTED], OSU charged the award for \$2,966 in travel expenses that the PI incurred to travel to [REDACTED] to meet with the award's external evaluator. The evaluator was an employee at the University [REDACTED]; the PI stated that that [REDACTED] chose to meet [REDACTED] in [REDACTED] because the evaluator was in [REDACTED] to attend a conference at the only time the PI was available to meet before the award expired later that month. However, the award's budget did not include any funding for travel, and the PI met with the evaluator for only 7 hours of the 5-day trip. It also does not appear to have been necessary for the PI to meet with the external evaluator in person. It therefore does not appear to have been reasonable for the PI to incur these travel expenses during the final month of the award's POP.

OSU stated that the PI had planned this trip as part of the project's scope of work; however, the PI did not make the travel arrangements until the final month of the

³⁷ The documentation that OSU provided to support this purchase included the following statement from the PI: [REDACTED]

³⁸ According to 2 CFR Part 220, Appendix A, Section C.4.a, organizations should allocate costs to a particular cost objective in accordance with the relative benefits received.

award, then chose to meet the evaluator in a city in which both parties were performing non-award-related activities. The trip to [REDACTED] therefore does not appear to have been reasonable, and it appears the PI incurred the expenses because NSF Award No. [REDACTED] had unspent funding available at the end of its POP.

- In September 2015, one month before the expiration of NSF Award No. [REDACTED], [REDACTED], OSU charged the award for \$1,802 in lodging expenses at the [REDACTED]. However, because the objective of Award No. [REDACTED] was to support research in the [REDACTED], these lodging expenses do not appear to be allocable to the award.

OSU stated that it believed these costs should be allocable to the award because the award related to a collaborative program. However, we noted that OSU had other funding sources available that included funding to support research in the [REDACTED]. OSU therefore appears to have charged these expenses to NSF Award No. [REDACTED] rather than to the other funding sources because NSF Award No. [REDACTED] had unspent funding available at the end of its POP.

- In June 2016, less than 3 months before NSF Award No. [REDACTED] expired, OSU charged the award for \$4,436 in travel expenses that the PI incurred to attend a conference in [REDACTED]. The award's budget did not include funding to support foreign travel, and the paper the PI presented did not denote that the research was supported by this NSF award. In addition, the PI specifically stated that [REDACTED] did not perform any international travel related to this award. The travel expenses related to this trip therefore do not appear to be allocable to this award.

OSU stated that it believed these costs should be allowable because the topic of the PI's presentation related to the scope of the NSF award. However, the PI confirmed that his paper was not directly supported by the NSF award. The PI therefore appears to have charged these travel expenses to NSF Award No. [REDACTED] rather than to the project(s) that sponsored the paper because NSF Award No. [REDACTED] had unspent funding available at the end of its POP.

- In July 2017, the final month of the POP for NSF Award No. [REDACTED], OSU charged the award for \$2,112 in travel expenses that an OSU employee incurred to meet with a colleague at the University [REDACTED]. The PI identified the traveler as a participant on the award in the original budget proposal; however, the traveler did not allocate any effort to NSF Award No. [REDACTED] during the final year of its POP, when the trip occurred, and OSU did not identify the traveler as a participant in its final report under the award. Because the traveler was receiving funding from other sources at the time this trip occurred and the final report for NSF Award No. [REDACTED] did not mention this trip, the colleague visited, or the

University [REDACTED], these travel expenses do not appear to be allocable to this award.

OSU stated that it believes these costs should be allowable because the trip was necessary to validate the data published for NSF Award No. [REDACTED]. However, because OSU did not mention either the University [REDACTED] or the collaborator visited by the traveler in the annual reports for this award, and because OSU did not pay the traveler under NSF Award No. [REDACTED] during the year of the trip, we are unable to corroborate that this expense was allocable to this award.

OSU does not have sufficient policies and procedures in place to ensure that costs charged to NSF awards within the final months of an award’s POP are allocable to the award charged. As a result, OSU inappropriately charged unallocable supplies, equipment, and travel expenses to NSF awards. We are therefore questioning \$31,319 of unallowable direct and indirect expenses.

Table 4. Unallocable End-of-Award Expenses

Description	NSF Award No.	Fiscal Year	Questioned Costs
November 2015 General Supply Purchases	[REDACTED]	2016	\$3,266
February 2017 Materials & Supplies Purchase	[REDACTED]	2017	12,722
May 2015 Conference Travel	[REDACTED]	2015	4,015
August 2015 Evaluator Travel	[REDACTED]	2016	2,966
September 2015 Forest Lodging	[REDACTED]	2016	1,802
June 2016 Conference Travel	[REDACTED]	2016	4,436
July 2017 Collaborator Travel	[REDACTED]	2018	<u>2,112</u>
Total			<u>\$31,319</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$31,319 in questioned supplies, equipment, and travel costs and direct OSU to repay or otherwise remove the sustained questioned costs from its NSF awards.
2. Direct OSU to strengthen its administrative and management procedures for purchasing equipment and materials/supplies at the end of a project’s POP. Processes could include requiring OSRAA to review all equipment and materials/supplies purchased within the final 90 days of a sponsored award’s POP to evaluate whether the costs charged appear to be reasonable, allocable to, and allowable under the award charged.
3. Direct OSU to strengthen its administrative and management procedures for travel taken within the final 90 days of an award’s POP. Processes could include updating travel

policies and procedures to require that OSRAA pre-approve all travel taken on sponsored projects within the final 90 days of an award's POP.

Oregon State University Response: OSU agreed that the \$3,266 in questioned indirect costs associated with general-purpose laboratory supplies was unallowable because OSU had not maintained documentation of the supplies' allowability; as such, OSU stated that it would reimburse NSF for this amount. OSU disagreed with the remaining \$28,053 in questioned costs and stated that it believes the costs were allowable, allocable, and reasonable, as follows:

- With regard to the \$12,722 in questioned materials and supplies expenses charged to NSF Award No. [REDACTED], OSU stated that the PI had notified the vendor of the upcoming expiration of the award funding in order to expedite the purchase, and that the supplies were necessary to validate the results of the project data and complete the project.
- With regard to the \$4,015 in questioned travel expenses charged to NSF Award No. [REDACTED], OSU stated that the graduate student had attended the conference because the PI was unable to do so, and that the graduate student's presentation benefited the project. However, OSU agreed that it should have included the graduate student's travel and contributions in the technical report that it submitted to NSF.
- With regard to the \$2,966 in questioned travel expenses charged to NSF Award No. [REDACTED], OSU stated that the PI's meeting with the external evaluator was included in the scope of work. Because the PI and the evaluator were in the same location at the same time, the PI took the opportunity to meet with the evaluator to finalize the project. OSU further stated that during this trip, the PI presented the results of the project evaluation and met with a program participant, both of which directly related to the project.
- With regard to the \$1,802 in questioned travel expenses charged to NSF Award No. [REDACTED], OSU stated that the expense is allocable to the award because it relates to a long-term collaborative program that includes various sites in the [REDACTED], particularly those linked with the [REDACTED]. OSU noted that the award documentation references this collaboration multiple times.
- With regard to the \$4,436 in questioned travel expenses charged to NSF Award No. [REDACTED], OSU stated that, although it agrees that this award did not directly support the paper the PI presented at the conference, the topic of the paper related to the scope of work for this award, and the conference enabled the PI to gain knowledge that benefited this project.
- With regard to the \$2,112 in questioned travel expenses charged to NSF Award No. [REDACTED], OSU stated that the traveler served as a [REDACTED] on this project, and that OSU had included the traveler in the proposal budget submitted to NSF. OSU further stated the travel was necessary to validate the project data.

OSU further stated that it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices. Moreover, OSU will endeavor to provide PIs with additional communication and guidance regarding activity that occurs toward the end of an award's POP to ensure that the activity is in accordance with all requirements.

Auditors' Additional Comments: Our position regarding this finding does not change. Specifically:

- With regard to the \$12,722 in questioned materials and supplies expenses charged to NSF Award No. [REDACTED], because OSU was previously aware of the issues that necessitated the equipment purchase and the PI purchased the equipment only 11 days before the end of the award's POP, it appears that the PI was trying to expend excess funding before the award expired. As such, our position regarding this finding does not change.
- With regard to the \$4,015 in questioned travel expenses charged to NSF Award No. [REDACTED], because the graduate student did not acknowledge NSF support in the paper presented at the conference and OSU did not include the conference and paper in the annual report for the grant, our position regarding this finding does not change.
- With regard to the \$2,966 in questioned travel expenses charged to NSF Award No. [REDACTED], because (1) it does not appear to have been essential for the PI to meet with the evaluator in person, (2) the trip included five nights, and (3) the PI spent one day of the trip meeting with a former program participant that OSU did not include in the annual reports for this grant, our position regarding this finding does not change.
- With regard to the \$1,802 in questioned travel expenses charged to NSF Award No. [REDACTED], because OSU had more appropriate funding sources available to support research related to the forest in question and appears to have charged these expenses to NSF Award No. [REDACTED] solely because the award had unspent funding available at the end of its POP, our position regarding this finding does not change.
- With regard to the \$4,436 in questioned travel expenses charged to NSF Award No. [REDACTED], because the paper that the PI presented at the conference did not denote support from this NSF award and OSU did not include this trip in the annual report for the grant, our position regarding this finding does not change.
- With regard to the \$2,112 in questioned travel expenses charged to NSF Award No. [REDACTED], because OSU (1) did not use grant funding to pay the traveler, (2) did not discuss travel to visit the collaborator or institution in the annual report, and (3) did not provide documentation to corroborate its assertion that the expense was allowable or allocable to the grant, our position regarding this finding does not change.

Finding 5: Expenses Not Appropriately Allocated to NSF Awards

OSU did not allocate expenses to NSF awards based on the relative benefits the awards received, as required by Federal regulations³⁹ and NSF PAPPGs.⁴⁰ Specifically, OSU inappropriately allocated a total of \$10,574 in expenses to five NSF awards.

- In January 2016, OSU charged NSF Award No. [REDACTED] for \$2,409 in costs incurred to publish a paper in a [REDACTED] publication. The published paper identified the PI of NSF Award No. [REDACTED] as one of the authors; however, because the published paper stated that the research was sponsored by NSF Award Nos. [REDACTED] and [REDACTED], these costs do not appear to be allocable to NSF Award No. [REDACTED].
- In May 2016, OSU charged NSF Award No. [REDACTED] for \$1,437 in allowable travel expenses, or 100 percent of the allowable expenses that an OSU employee incurred to relocate to [REDACTED]. However, the employee only allocated 80 percent of [REDACTED] effort to NSF Award No. [REDACTED] during the initial 12 months of [REDACTED] employment. OSU therefore should not have allocated 20 percent of the employee's moving expenses, or \$287, to this award.
- In June 2016, OSU charged NSF Award No. [REDACTED] for \$3,800 in allowable travel expenses, or 95 percent of the \$4,000 in allowable expenses that an OSU employee incurred to relocate to [REDACTED]. However, the employee only allocated 74 percent of [REDACTED] effort to NSF Award No. [REDACTED] during the initial 12 months of [REDACTED] employment. OSU therefore should not have allocated 21 percent of the moving expense, or \$840, to this award.
- In May 2017, OSU charged NSF Award No. [REDACTED] for \$1,900 in expenses that the PI incurred to purchase a laptop, or 43.83 percent of the laptop's \$4,334 purchase price. However, the PI indicated that only 30 percent of the expense was allocable to this award. OSU therefore should not have allocated 13.83 percent of the laptop expense, or \$599, to this award.
- In February 2017, OSU charged NSF Award No. [REDACTED] for \$1,285 in travel expenses that OSU incurred to allow a graduate student to attend a training program in [REDACTED]. The award's budget did not include funding to support travel to training events,

³⁹ According to 2 CFR Part 220, Appendix A, Section C.4.a and 2 CFR Part 200, §200.405(a), organizations should allocate costs to a particular cost objective in accordance with the relative benefits received.

⁴⁰ NSF PAPPGs 11-1 and 13-1, Part II, Chapter V, Section A state that grantees should ensure that costs claimed under NSF grants are necessary, reasonable, allocable, and allowable under the applicable cost principles, NSF policy, and/or the program solicitation. NSF PAPPG 14-1, Part II, Chapter V, Section A states that grantees should ensure that all costs charged to NSF awards meet the requirements of the applicable cost principles, grant general terms and conditions, and any other specific requirements of both the award notice and the applicable program solicitation. NSF PAPPGs 15-1 and 16-1, Part II, Chapter V, Section A state that grantees should ensure that all costs charged to NSF awards meet the requirements of the cost principles contained in 2 CFR §200, Subpart E, grant terms and conditions, and any other specific requirements of both the award notice and the applicable program solicitation.

and OSU did not discuss the training program or travel related to the program in the award’s annual reports. In addition, the traveler did not assign any effort to NSF Award No. [REDACTED] during the period in which the travel took place. OSU therefore should not have allocated these expenses to this award.

- In June 2017, OSU charged NSF Award No. [REDACTED] for \$5,154 in postage expenses that OSU stated it should not have allocated to this award. OSU agreed to reimburse NSF for these expenses.

OSU does not have proper controls in place to ensure that it consistently allocates costs to sponsored awards based on the relative benefits that the awards receive. As a result, OSU charged NSF awards for expenses that it should have allocated to alternative funding sources. We are therefore questioning \$10,574 of inappropriately allocated direct and indirect expenses.

Table 5. Expenses Not Appropriately Allocated to NSF Awards

Description	NSF Award No.	Fiscal Year	Questioned Costs
January 2016 Publication	[REDACTED]	2016	\$2,409
May 2016 Moving Expenses	[REDACTED]	2016	287
June 2016 Moving Expenses	[REDACTED]	2016	840
May 2017 Laptop	[REDACTED]	2017	599
February 2017 Travel	[REDACTED]	2017	1,285
June 2017 Postage	[REDACTED]	2017	5,154
Total			<u>\$10,574</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$10,574 in questioned unallocable costs and direct OSU to repay or otherwise remove the sustained questioned costs from its NSF awards.
2. Direct OSU to strengthen its administrative and management controls and processes for allocating expenses to sponsored projects. Processes could include requiring PIs or other designated staff to document the allocation methodology used to charge expenses to sponsored projects, and to provide a detailed justification for using that methodology.
3. Direct OSU to encourage PIs to identify all award participants and report all award-related travel in the annual reports submitted to NSF.

Oregon State University Response: OSU agreed that it had incorrectly allocated two of the questioned expenses, and that as a result, \$5,753 of the questioned unallocable costs were unallowable. OSU stated that it will reimburse NSF for this amount. OSU disagreed with the

remaining \$4,821 in questioned costs and stated that it believes the costs were allowable, allocable, and reasonable, as follows:

- With regard to the \$2,409 in questioned publication expenses charged to NSF Award No. [REDACTED], OSU stated that the failure to cite the award in the final published paper was an oversight and that OSU had incurred the expense to disseminate research performed under the award. OSU noted that the PI attempted to correct the error but was unable to do so.
- With regard to the \$287 and \$840 in questioned moving expenses charged to NSF Award No. [REDACTED], OSU stated that at the time it hired the two individuals and incurred the questioned moving expenses, it had intended for the individuals to allocate 100 percent of their effort to this award; however, the individuals ultimately provided support to multiple other research cruises funded by NSF. OSU noted that the individuals charged their effort proportionately to the projects.
- With regard to the \$1,285 in questioned travel expenses charged to NSF Award No. [REDACTED], OSU stated that the PI's decision to change the training conference was appropriate and benefited the project. In addition, OSU noted that, although it did not pay the graduate research assistant (GRA) using funding under this award, the NSF award under which OSU paid the GRA was managed by the same PI and related to NSF Award No. [REDACTED] and the training the GRA received benefited both awards.

OSU further stated that it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices. Moreover, OSU will endeavor to provide PIs with additional communication and guidance.

Auditors' Additional Comments: Our position regarding this finding does not change. Specifically:

- With regard to the \$2,409 in questioned publication expenses charged to NSF Award No. [REDACTED], because the PI is responsible for verifying that the data in the report is correct, our position regarding this finding does not change.
- With regard to the \$287 and \$840 in questioned moving expenses charged to NSF Award No. [REDACTED], although OSU may have intended for the newly hired individuals to charge 100 percent of their effort to NSF Award No. [REDACTED], it should have corrected the allocation once it became clear that the individuals would also support other projects. As such, our position regarding this finding does not change.
- With regard to the \$1,285 in questioned travel expenses charged to NSF Award No. [REDACTED], because OSU acknowledged that it did not use funding from this NSF award to pay the student in question during the period in which the training took place, our position regarding this finding does not change.

Finding 6: Unreasonable Honorarium Payment

In January 2018, OSU charged NSF Award No. [REDACTED] for a \$14,700 honorarium paid to a not-for-profit partner for two years' participation in an NSF award-related program.⁴¹ Although the award's budget included funding to support partner participation, it only included an annual amount of \$2,940 for each participant, and OSU was unable to provide documentation to support that the \$14,700 payment was reasonable.⁴²

OSU's current policies include guidance for documenting honorarium payments made to foreign nationals; however, the policies do not include any requirements or guidance for honorarium payments made to domestic organizations. As a result, OSU did not maintain documentation supporting that it had entered into a formal agreement with the not-for-profit partner regarding its participation in this program.

OSU stated that the not-for-profit partner provided expanded activities that warranted the higher honorarium; however, OSU was unable to provide documentation to support the existence or terms of its agreement with the not-for-profit partner. As a result, we were unable to determine what type of activities OSU expected the partner to provide, or how OSU determined that the amount of the honorarium was reasonable. We are therefore questioning \$8,820, the amount by which the honorarium paid to the not-for-profit partner exceeded the \$5,880 budgeted for two years of participation in this program.

Table 6. Unreasonable Honorarium Payment

Description	NSF Award No.	Fiscal Year	Questioned Costs
January 2018 Unreasonable Honorarium Payment	[REDACTED]	2018	<u>\$8,820</u>
Total Questioned Costs			<u>\$8,820</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$8,820 in questioned honorarium costs and direct OSU to repay or otherwise remove the sustained questioned costs from the NSF award.
2. Direct OSU to strengthen its administrative and management procedures for honorarium payments. Procedures could include addressing specifically how to document honorarium payments.

⁴¹ The payment request form that OSU provided to support the honorarium payment indicated that OSU provided the payment for 2 years of participation in the program; however, the PI stated that OSU had provided the payment for 3 years of participation in the program, including expanded activities in years 2 and 3.

⁴² According to 2 CFR Part 200, §200.403, *Factors affecting allowability of costs*, and NSF PAPPG 15-1, Part I, Chapter II, Section C.2.g., costs must be reasonable to be allowable.

Oregon State University Response: OSU disagreed with this finding, stating that its original budget for the honorarium was \$2,000 per year for years one through three of the project, and that it had incurred the additional costs as a result of expanding the engagement in years two and three.

OSU further stated that it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices.

Auditors' Additional Comments: Because OSU was unable to provide documentation to support the expanded engagement, our position regarding this finding does not change.

Finding 7: Inappropriately Claimed Lodging and M&IE Per Diem Expenses

OSU charged NSF for \$5,563 in lodging and Meals & Incidental Expenses (M&IE) costs that exceeded the per diem rates allowed under OSU policies.

- ***Inappropriately Claimed Lodging***

OSU inappropriately charged four NSF awards a total of \$4,223 in lodging expenses that exceeded the allowable lodging rates:⁴³

- In October 2015, OSU charged NSF Award No. [REDACTED] for \$1,495 in lodging expenses that exceeded the allowable lodging rate.⁴⁴

OSU stated that it believed these costs should be allowable because no rooms were available at the listed conference rate when the PI made the travel arrangements; however, the lodging expense was \$399 per night, which is significantly higher than the single room rate of \$229 per night that was supported by the conference documentation and was therefore reasonable and allowable under OSU's written policy.

- From August to September 2015, OSU charged NSF Award No. [REDACTED] for \$330 in lodging expenses that exceeded the allowable lodging rate.

OSU stated that it believed these costs should be allowable because no rooms were available at the listed conference rate when the PI made the travel arrangements; however, the advertised conference rate was lower than OSU's

⁴³ OSU Policy 411-03, *Lodging*, revised on August 1, 2016, states that OSU will reimburse all lodging at actual cost up to the current per diem rates, unless a Portland metropolitan area, conference lodging, or lodging per diem exception applies.

⁴⁴ OSU Policy 411-03, *Lodging*, revised on August 1, 2016, states that OSU will reimburse conference lodging at actual and reasonable lodging rates that exceed the allowable lodging per diem rate if the individual provides documentation to support the claim. The policy states that appropriate documentation for the conference lodging rate should include a copy of the conference registration documentation that shows the location and dates of the conference, the conference hotel(s), and the single room rate.

allowable per diem rate. As a result, the actual rate paid by the traveler was higher than both the advertised conference rate and OSU's allowable per diem rate.

- In March 2016, OSU charged NSF Award No. [REDACTED] for \$57 in lodging expenses that exceeded the allowable per diem rate.

OSU stated that it believed these costs should be allowable because the rate at which it reimbursed the traveler was lower than the conference rate, as the traveler did not stay at the conference hotel. However, because the conference lodging exception did not apply, the traveler was only eligible for reimbursement up to the per diem rate. In addition, using a non-conference hotel caused the traveler to incur taxi fees that exceeded the cost savings recognized by using the non-conference hotel.

- From May through June 2017, OSU charged NSF Award No. [REDACTED] for \$2,341 in lodging expenses that exceeded the allowable per diem rate.⁴⁵ The traveler(s) paid these expenses using an OSU purchasing card (PCard).

OSU stated that it believed the lodging expenses should be allowable because the PCard logs support that the PI had approved these expenses. However, these lodging expenses were not eligible for any of the exceptions that would have allowed OSU to reimburse the travelers at a rate above the per diem rate. The costs are therefore unallowable.

- ***Inappropriately Claimed M&IE***

OSU inappropriately charged three NSF awards for a total of \$1,340 in M&IE costs using rates that exceeded the allowable per diem rates.

- In May 2015, OSU charged NSF Award No. [REDACTED] for \$469 of unallowable M&IE.
 - \$431 in per diem reimbursed to an individual for 4 days of travel that the individual incurred before becoming an OSU employee.⁴⁶
 - \$38 in per diem reimbursed at the rate applicable to the traveler's home location, rather than at the rate applicable to the traveler's destination.⁴⁷

⁴⁵ OSU Policy 411-03, *Lodging*, revised on August 1, 2016, states that travelers may use pre-paid OSU PCards to pay for lodging expenses within per diem rates.

⁴⁶ According to 2 CFR Part 220, Appendix A, Section J.53.a, travel costs are defined as expenses incurred by employees who are on travel status to perform official business of the institution.

⁴⁷ OSU Policy 411-04, *Meals*, revised on May 23, 2016, states that M&IE per diem rates are determined by the traveler's overnight lodging location.

- In August 2015, OSU charged NSF Award No. [REDACTED] for \$700 of unallowable M&IE.⁴⁸
 - \$400 for per diem that exceeded the allowable amounts. Specifically, OSU GRAs claimed the full M&IE amount for the day without deducting meals that the PI had purchased for the group and then expensed the costs to OSU, which OSU charged to the award.
 - \$167 for meals on the GRAs’ hotel receipt, although the PI had purchased meals for the group and then expensed those costs to OSU, which OSU charged to the award.⁴⁹
 - \$133 for per diem that exceeded the allowable amounts. Specifically, the PI claimed the full M&IE per diem amount without making appropriate deductions for meals that he had expensed to OSU, which OSU charged to the award.
- In July 2016, OSU charged NSF Award No. [REDACTED] for \$171 of unallowable M&IE.
 - \$115 for per diem that exceeded the allowable amounts. Specifically, the traveler claimed the full daily M&IE per diem amount when the traveler was only eligible to receive M&IE for dinner expenses, based on the traveler’s departure time.⁵⁰
 - \$56 for per diem that the traveler inappropriately claimed using the rate applicable to [REDACTED] when the traveler actually lodged in [REDACTED] and [REDACTED].

OSU does not have sufficient controls in place to ensure that (1) employees appropriately document exceptions that would allow OSU to reimburse travel expenses at a rate that exceeds the allowable lodging per diem rate, and (2) employees appropriately claim, and OSU appropriately reimburses, M&IE per diem. As a result, OSU charged NSF awards for lodging and M&IE expenses that exceeded the allowable per diem amounts. We are therefore questioning \$5,563 of inappropriately claimed lodging and M&IE expenses.

⁴⁸ OSU Policy 411-04, *Meals*, revised on May 23, 2016, allows travelers sharing a meal to request reimbursement for the meal based on either M&IE per diem rates or actual costs; however, if one individual pays for another individual’s portion of the meal, the second individual must deduct the meal from the daily M&IE per diem.

⁴⁹ Because we were unable to determine which meal(s) OSU reimbursed each day, we questioned the amount included on the hotel receipts, rather than the per diem amounts the GRAs claimed on those dates.

⁵⁰ OSU Policy 411-04, *Meals*, revised on May 23, 2016, restricts M&IE per diem to dinner expenses if the traveler departs after 1:00 PM on the initial travel day.

Table 7. Inappropriately Claimed Lodging and M&IE Per Diem Expenses

Description	NSF Award No.	Fiscal Year	Questioned Costs
October 2015 Lodging Inappropriately Claimed Above Per Diem	██████████	2016	\$1,495
August-September 2015 Lodging Inappropriately Claimed Above Per Diem	██████████	2016	330
March 2016 Lodging Inappropriately Claimed Above Per Diem	██████████	2016	57
May and June 2017 Lodging Inappropriately Claimed Above Per Diem	██████████	2017	2,341
May 2015 Inappropriately Claimed M&IE	██████████	2015	469
August 2015 Inappropriately Claimed M&IE		2016	700
July 2016 Inappropriately Claimed M&IE		2017	<u>171</u>
Total			<u>\$5,563</u>

Source: Auditor summary of questioned transactions.

Recommendations

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

1. Resolve the \$5,563 in questioned lodging and M&IE costs and direct OSU to repay or otherwise remove the sustained questioned costs from the NSF award.
2. Direct OSU to strengthen its administrative and management procedures for reimbursing M&IE expenses. Processes could include:
 - a. Requiring employees to use the same meal reimbursement method throughout an entire trip, rather than determining the method on a meal-by-meal basis.
 - b. Performing periodic reviews of M&IE per diem reimbursements to validate that the rates claimed correspond to the rates applicable to the traveler’s location.
3. Direct OSU to strengthen its administrative and management procedures for reimbursing lodging expenses claimed at a rate that exceeds the allowable per diem rate. Processes could include:
 - a. Requiring travelers on sponsored projects to request approval from OSRAA when they anticipate incurring lodging expenses that exceed the allowable per diem rate.
 - b. When applicable, maintaining documentation to support that the rates offered by the conference lodging provider were not available at the time the traveler booked the lodging.

Oregon State University Response: OSU agreed that \$209 in questioned costs associated with per diem reimbursements were not allowable and stated that it will reimburse NSF for this amount. OSU disagreed with the remaining \$5,354 in questioned costs and stated that it believes the costs were allowable, allocable, and reasonable, as follows:

- With regard to the \$1,495 and \$330 in questioned lodging expenses charged to NSF Award Nos. [REDACTED] and [REDACTED], respectively, OSU stated that the lower-priced rooms listed in the conference program were already booked when the traveler made the travel arrangements, and that OSU policy allows travelers staying at a conference hotel to use a higher lodging rate if necessary.
- With regard to the \$57 in questioned lodging expenses charged to NSF Award No. [REDACTED], OSU stated that, although the traveler did not stay at the conference hotel and the amount reimbursed was higher than the per diem rate, the rate reimbursed to the traveler was lower than the conference hotel rate.
- With regard to the \$2,341 in questioned lodging expenses charged to NSF Award No. [REDACTED], OSU stated that, although the lodging rate exceeded the per diem rate, the PI was authorized to approve reasonable exceptions to this rate, and that the PI had documented approval of the questioned exception.
- With regard to the \$469 in questioned M&IE expenses charged to NSF Award No. [REDACTED], OSU agreed that the \$38 reimbursed at the rate applicable to the traveler's home location rather than at the rate applicable to the traveler's destination was incorrect and unallowable. OSU noted that it will reimburse NSF for this amount. OSU disagreed with the remaining \$431 in questioned M&IE expenses related to per diem reimbursed to an individual for 4 days of travel that the individual incurred before becoming an OSU employee, stating that OSU is allowed to reimburse non-OSU employees for travel expenses.
- With regard to the \$700 in questioned M&IE expenses charged to NSF Award No. [REDACTED], OSU stated that, although it had not clearly documented the adjustments it made to per diem for those itemized meals that OSU had paid directly, it had reduced the amount of per diem that the travelers received to compensate for these meals, and the amount that OSU actually reimbursed the travelers was lower than the amount eligible for reimbursement.

OSU further stated that it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices.

Auditors' Additional Comments: Our position regarding this finding does not change. Specifically:

- With regard to the \$1,495 and \$330 in questioned lodging expenses charged to NSF Award Nos. [REDACTED] and [REDACTED], respectively, although OSU policy does include an exception for conference rates, the rate the traveler charged was 74 percent higher than the rates listed in the conference program. Because the amount by which the rate charged exceeded the allowable per diem rate is unreasonable, our position regarding this finding does not change.
- With regard to the \$57 in questioned lodging expenses charged to NSF Award No. [REDACTED] although OSU policy does include an exception for conference rates, because the traveler did not stay at the conference hotel, this exception does not apply. Because the rate charged was higher than the allowable per diem, our position regarding this finding does not change.
- With regard to the \$2,341 in questioned lodging expenses charged to NSF Award No. [REDACTED], these expenses were not eligible for any of the exceptions that would have allowed OSU to reimburse the travelers at a rate above the per diem rate. In addition, travelers may only use PCards to pay for lodging expenses that are within per diem rates. As such, our position regarding this finding does not change.
- With regard to the \$431 in questioned lodging expenses charged to NSF Award No. [REDACTED], we maintain that the CFR indicates that entities may only reimburse travel expenses for employees and must reimburse the expenses at the correct rate. As such, our position regarding this finding does not change.
- With regard to the \$700 in questioned M&IE expenses charged to NSF Award No. [REDACTED], because OSU was unable to provide documentation to support that it had adjusted the per diem amounts to avoid double-claiming meals, our position regarding this finding does not change.

Finding 8: Non-Compliance with OSU Internal Policies

OSU either did not comply with its own internal policies and procedures when incurring costs charged to NSF awards or was unable to provide support demonstrating its compliance. Because these instances of non-compliance did not directly result in OSU charging unallowable costs to NSF awards, we are only noting compliance exceptions for these issues.

- ***Non-Compliance with OSU Travel Policies***

We identified seven instances in which OSU employees did not comply with OSU's travel policies. Specifically:

- In May 2015, OSU charged NSF Award No. [REDACTED] for \$4,015 in expenses incurred for a graduate student to travel to a conference in [REDACTED] OSU was

unable to provide support demonstrating that the student had obtained pre-approval from OSRAA, as required by OSU policy.⁵¹

- In May 2015, OSU charged NSF Award No. [REDACTED] for \$907 in mileage expenses. OSU was unable to provide support demonstrating that it had performed a cost comparison to verify that driving was the most economical form of travel, as required by OSU policy.⁵²
- In June 2015, OSU charged NSF Award No. [REDACTED] for \$191 in train fare for the PI to travel to a conference. The PI extended his trip by two days due to personal travel. However, OSU was unable to provide support demonstrating that it had performed a cost comparison to verify that the PI's personal travel did not increase the cost of the trip and that the train was the most economical form of travel, as required by OSU policy.⁵³
- In August 2015, OSU charged NSF Award No. [REDACTED] for \$1,345 in lodging and meal expenses incurred for an OSU professor to travel to [REDACTED] to perform grant-related research. OSU was unable to provide support demonstrating that this traveler had obtained pre-approval from OSRAA, as required by OSU policy.⁵⁴
- In May 2016, OSU charged NSF Award No. [REDACTED] for \$2,172 in relocation expenses that an employee had submitted for reimbursement after the 60-day reimbursement period permitted under OSU's policy.⁵⁵
- In February 2017, OSU charged NSF Award No. [REDACTED] for \$732 in airfare expenses incurred to allow a graduate student to attend an award-related training program; the graduate student then took personal leave before returning. OSU was unable to provide support demonstrating that it performed a cost comparison to verify that the student's personal travel did not increase the cost of the trip, as required by OSU policy.⁵⁶
- In May 2017, OSU charged NSF Award No. [REDACTED] for \$6,552 in expenses that an employee submitted for reimbursement after the 60-day reimbursement period

⁵¹ OSU Fiscal Operations Manual, 411: *Travel*, revised on August 1, 2016, states that OSRAA must pre-approve all international travel on grant funds.

⁵² OSU Fiscal Operations Manual, 411: *Travel*, revised on August 1, 2016, states that travelers must select travel options that are the most efficient and economical to the university.

⁵³ OSU Fiscal Operations Manual, 411-02: *Ground Transportation*, revised on August 1, 2016, states that travelers may use trains if they provide a justification showing that trains are the most economical options.

⁵⁴ OSU Fiscal Operations Manual, 411: *Travel*, revised on August 1, 2016, states that OSRAA must pre-approve all international travel on grant funds.

⁵⁵ OSU Fiscal Operations Manual, 411-07: *Travel Reimbursements*, revised on August 1, 2016, states that employees must submit requests for reimbursement within 60 days of completing a trip.

⁵⁶ OSU Fiscal Operations Manual, 411-01: *Air Transportation*, revised on May 23, 2016, states that employees may take travel that contains a personal leg if the travel does not increase the costs of the trip. The manual also notes that travelers must provide comparisons of the costs related to personal trips and the costs related to business trips.

permitted under OSU policy. Further, the employee did not settle the travel advance within 45 days of completing the trip, as required by OSU policy.⁵⁷

- ***Non-Compliance with OSU Procurement Policies***

We identified three instances in which OSU employees did not comply with OSU's procurement policies. Specifically:

- In April 2016, OSU charged NSF Award No. [REDACTED] for \$5,779 in maintenance services; however, OSU was unable to provide support demonstrating that it had appropriately signed the agreement for these services, as required by OSU policy.⁵⁸
- In February 2016, OSU entered into a \$45,000 agreement with a consultant under NSF Award No. [REDACTED] however, OSU was unable to provide support demonstrating that it had verified that the consultant was not suspended or debarred from receiving Federal funds, as required by OSU policy.⁵⁹
- From June 2016 to January 2018, OSU charged NSF Award No. [REDACTED] for \$52,717 in expenses incurred to use a laboratory facility in [REDACTED]; however, OSU was unable to provide a purchase order or other form of written agreement to support these expenses, as required by OSU policy.⁶⁰

- ***Non-Compliance with OSU PSC Policies***

We identified two instances in which OSU employees did not comply with OSU's PSC policies.

- In April 2016, OSU charged NSF Award No. [REDACTED] for \$2,000 in incentive payments to senior citizens; however, OSU charged these payments to an account that was set up to accumulate payments made to OSU students.⁶¹

⁵⁷ OSU Fiscal Operations Manual, 407-08: *Travel Advances*, revised on February 15, 2013, states that employees must settle travel advances within 45 days of completing the trips.

⁵⁸ OSU Procurement and Contract Services Manual, 404-004: *Signature Prior to Commencement*, revised on February 28, 2018, states that service contracts must be signed by an individual with contract signature authority before commencing work.

⁵⁹ OSU Procurement and Contract Services Manual, 301-011: *Purchases or Contracts Using Federal Funds*, revised on December 18, 2014, states that if purchases are at or above \$25,000 and use Federal funds, OSU may not make the purchases from entities or vendors that are debarred, suspended, or otherwise excluded from Federal assistance programs.

⁶⁰ OSU Procurement and Contract Services Manual, 401-002: *Contract Form*, revised on June 14, 2017, states that, in order to acquire goods or services, the parties should enter into some form of written contract, such as a purchase order, use agreement, or rental agreement, regardless of the dollar value of the acquisition.

⁶¹ OSU Fiscal Operations Manual, 410-32: *Participant Support Costs*, revised on March 14, 2016, states that the 551XX series of account codes, which OSU used for this transaction, is designated for paying or reimbursing students registered with OSU, including research fellows.

- In August 2017, OSU charged NSF Award No. [REDACTED] for \$4,312 in participant lodging expenses for a workshop at OSU; however, OSU charged these expenses to the wrong account.⁶²

- ***Non-Compliance with OSU Effort Certification Policies***

The PI of NSF Award No. [REDACTED] certified two Personnel Activity Reports (PARs) after the 60-day period allowed by OSU policy.⁶³ Specifically, the PI did not certify her PAR reports for the periods from October through December 2015 and January through March 2016 until September 2018, in response to our audit.

- ***Non-Compliance with OSU Cost Transfer Policies***

On April 20, 2017, OSU processed a cost transfer to move \$12,861 of participant housing costs that it had originally posted in September 2016 to NSF Award No. [REDACTED]; however, OSU was unable to provide support demonstrating that the personnel had submitted a Cost Transfer Justification Form to OSRAA, as required by OSU policy.⁶⁴

- ***Non-Compliance with OSU Fellowship Appointment Policies***

In May 2015, OSU charged NSF Award No. [REDACTED] for a \$7,333 stipend payment made to a postdoctoral fellow; however, OSU was unable to provide support demonstrating that it had obtained OSRAA's approval before making the appointment, as required by OSU policy.⁶⁵

- ***Non-Compliance with OSU Currency Exchange Policies***

We identified two instances in which OSU did not use the appropriate currency conversion rate.⁶⁶

- In March 2015, OSU charged NSF Award No. [REDACTED] for \$11,469 in expenses incurred to host a grant-related conference. Although the conversion rate that OSU initially applied to these expenses appeared to be appropriate, when OSU transferred a portion of these costs to a PSC account, it used the conversion rate

⁶² OSU Fiscal Operations Manual, 410-32: *Participant Support Costs*, revised on March 14, 2016, states that OSU should not use the 2863x account codes to pay conference expenses; however, OSU used the 2863x account codes for this transaction. Personnel should use the conference expense account codes ([REDACTED]) for organized conferences and workshops sponsored by OSU when there are persons from outside OSU in attendance.

⁶³ OSU *Guidelines for Completing Personnel Activity Report (PAR) Forms*, revised on July 1, 2016, states that employees must certify and file PAR forms no later than 60 days after the forms are generated.

⁶⁴ OSU *Guidelines for Cost Transfers on Sponsored Awards* states that if a cost transfer occurs more than 90 days after the end of the month in which the department/unit posted the charge, the department/unit must submit a Cost Transfer Justification Form to OSRAA.

⁶⁵ OSU *Postdoctoral Fellow Appointment Process* states that OSRAA must review and approve postdoctoral fellow appointment forms before OSU enters the appointment into its financial system.

⁶⁶ OSU Fiscal Operations Manual, 411-08: *Receipt Requirements*, revised on August 1, 2016, states that employees must include proof of currency conversion when applicable, whether in the form of a receipt, a credit card statement, or a printout from a bank.

applicable at the time of the cost transfer, rather than the rate used to calculate the original expense.

- o In May 2017, OSU charged NSF Award No. [REDACTED] for \$29,893 in expenses incurred to purchase software from a vendor in [REDACTED]; however, OSU was unable to support the currency exchange rate that it used to convert the expense from [REDACTED] to U.S. dollars, as required by OSU policy.

Although the compliance issues identified above did not result in any questioned costs, we are noting a compliance exception because OSU does not have sufficient procedures in place to ensure that its employees consistently comply with its internal policies. Specifically, we identified 17 instances in which OSU’s lack of sufficient procedures resulted in non-compliance with OSU policies.

Table 8. Non-Compliance with OSU Internal Policies

NSF Award No.	Compliance Issue Identified
[REDACTED]	Foreign Travel Not Pre-Approved
[REDACTED]	Lack of Documentation of Travel Cost Comparison
[REDACTED]	Lack of Documentation of Travel Cost Comparison
[REDACTED]	Foreign Travel Not Pre-Approved
[REDACTED]	Reimbursement Request Not Submitted within 60 Days
[REDACTED]	Lack of Documentation of Travel Cost Comparison
[REDACTED]	Reimbursement Request Not Submitted within 60 Days and Travel Advance Not Settled within 45 Days
[REDACTED]	Maintenance Agreement Not Signed
[REDACTED]	Lack of Documentation of Vendor Suspension/Debarment Verification
[REDACTED]	Lack of Written Contract for Services
[REDACTED]	PSCs Charged to Incorrect Account
[REDACTED]	PSCs Charged to Incorrect Account
[REDACTED]	Personnel Activity Reports Not Certified within 60 Days
[REDACTED]	Lack of Cost Transfer Justification
[REDACTED]	Fellowship Appointment Not Approved
[REDACTED]	Inappropriate Conversion Rate Used for a Cost Transfer
[REDACTED]	Lack of Proof of Currency Conversion

Source: Auditor summary of identified instances of non-compliance.

Recommendation

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

1. Direct OSU to strengthen its administrative and management procedures for travel, procurement, PSCs, effort certifications, cost transfers, fellowship appointments, and currency conversions on sponsored awards. Procedures could include:

- a. Requiring periodic training for PIs and other personnel responsible for making travel arrangements, purchasing services, charging PSCs, certifying effort reports, processing cost transfers, and appointing fellows on sponsored awards.
- b. Implementing controls that would prevent OSU personnel from traveling or appointing fellows on sponsored projects without first obtaining OSRAA's approval.
- c. Requiring award participants to provide cost comparisons for all travel requests that include personal or train travel before OSU approves travel related to federally sponsored projects.
- d. Implementing controls that would prevent OSU personnel from submitting travel reimbursement requests or advance reconciliations outside the allowable periods without justification and specific approval.
- e. Implementing controls that would prevent OSU personnel from processing service expenses without a purchase order or approved agreement.
- f. Implementing controls that would prevent OSU personnel from processing purchases at or above \$25,000 on federally sponsored projects without documenting that the vendor was not suspended or debarred from receiving Federal funds.
- g. Implementing controls that would prevent OSU personnel from processing cost transfers more than 90 days after originally posting the expense without submitting a Cost Transfer Justification Form.
- h. Implementing controls that would prevent OSU personnel from processing transactions involving foreign currency without documenting the exchange rate.

Oregon State University Response: OSU agreed with this finding, stating that, although it believes that none of the errors are systemic in nature, it views the administrative and management procedural recommendations as an opportunity to improve its policies and procedures to ensure that the policies and procedures sufficiently clarify and communicate Federal guidance and best practices.

Auditors' Additional Comments: Our position regarding this finding does not change.

Finding 9: Incorrect Application of Proposed Indirect Cost Rates

OSU applied incorrect indirect cost rates to direct expenses accumulated on four NSF awards. For each of these awards, OSU applied the NICRA rate that was in effect at the time it submitted the award proposal, rather than the rate that was in effect as of the effective date of the NSF

award, contrary to applicable Federal⁶⁷ and NSF guidance.⁶⁸ As a result, OSU applied indirect costs at a rate that was lower than the approved NICRA rate as of the effective date of the award.

OSU did not have sufficient policies and procedures in place to ensure that it calculated indirect costs using the NICRA rates in effect as of the effective date of the NSF awards, rather than the rates in effect as of the date that OSU submitted its grant proposal or received the grant award. As a result, OSU applied inappropriate indirect cost rates to direct expenses accumulated on the awards.

Table 9. Incorrect Application of Proposed Indirect Cost Rates

NSF Award No.	Award Effective Date	Appropriate Rate	Rate Applied
	9/1/2016	47.00%	46.00%
	9/1/2015	46.50%	46.00%
	8/1/2015	46.50%	46.00%
	7/15/2015	46.50%	46.00%

Source: Auditor summary of identified instances of non-compliance.

This issue did not result in any questioned costs; however, without policies and procedures in place to ensure that OSU uses the correct indirect cost rate, it is possible that OSU may overcharge sponsoring organizations for indirect costs in the future. We are therefore noting a compliance exception.

Recommendation

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

1. Direct OSU to strengthen its administrative and management procedures for establishing indirect cost rates for Federal awards to ensure that it applies costs at the rates in effect as of the effective date of the award.

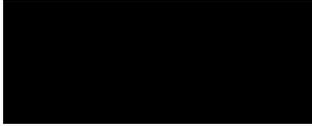
Oregon State University Response: OSU agreed with this finding, noting that by charging NSF the lower indirect cost rate in effect at the time of the proposal, rather than the higher rate that was in effect as of the date of the award, it believed that it assisted incoming PIs in maintaining consistent budgets, as OSU absorbed the higher costs. OSU stated that it has updated its policies and procedures to ensure that it consistently applies the indirect cost rate in effect as of the date of the award, and that it will continue to focus on improving its controls over the application of indirect cost rates.

⁶⁷ According to 2 CFR Part 200, Appendix III, Section C.7, when identifying and computing indirect costs at Institutions of Higher Education (IHE), Federal agencies must use the negotiated rates in effect at the time of the initial award throughout the life of the award.

⁶⁸ NSF also requires IHEs to use the negotiated indirect cost rate in effect at the time the award was made throughout the life of the award. See NSF PAPPs 15-1, and 16-1, Part I, Chapter II, Section C.2.g.(viii).

Auditors' Additional Comments: Our position regarding this finding does not change. As OSU has updated its policies and procedures for applying indirect cost rates, we have no further recommendations.

COTTON & COMPANY LLP



Michael W. Gillespie, CPA, CFE
Partner
September 12, 2019

APPENDIX A: SCHEDULE OF QUESTIONED COSTS BY FINDING

NATIONAL SCIENCE FOUNDATION
ORDER # D17PB00320
PERFORMANCE AUDIT OF COSTS CLAIMED ON NSF AWARDS
OREGON STATE UNIVERSITY

SCHEDULE OF QUESTIONED COSTS BY FINDING

Finding	Description	Questioned Costs		Total
		Unsupported	Unallowable	
1	Unallowable Personal Services Contract and Subaward Agreements	\$0	\$169,950	\$169,950
2	Unallowable Expenses	0	78,153	78,153
3	Inappropriate Application of Indirect Costs	0	65,153	65,153
4	Unallocable End-of-Award Expenses	0	31,319	31,319
5	Expenses Not Appropriately Allocated to NSF Awards	0	10,574	10,574
6	Unreasonable Honorarium Payment	0	8,820	8,820
7	Inappropriately Claimed Lodging and M&IE Per Diem Expenses	0	5,563	5,563
8	Non-Compliance with OSU Internal Policies	0	0	0
9	Incorrect Application of Proposed Indirect Cost Rates	0	0	0
Total		<u>\$0</u>	<u>\$369,532</u>	<u>\$369,532</u>

APPENDIX B: OREGON STATE UNIVERSITY RESPONSE



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September 3, 2019

Cotton & Company, LLP
Attn: Michael W. Gillespie, CPA, CFE - Partner
635 Slaters Lane
4th Floor
Alexandria, VA 22314

Dear Mr. Gillespie,

Oregon State University (OSU) appreciates the opportunity the National Science Foundation Office of Inspector General (NSF OIG) has given the university to examine its research accounting practices. OSU is committed to administering and conducting its research enterprise with the utmost integrity and in compliance with all federal laws, policies and requirements. As a result of this NSF OIG process, OSU recognizes that additional opportunities exist to improve its research accounting practices. We are confident in the university's ability to ensure compliance with National Science Foundation (NSF) policy and award requirements.

Upon review, OSU believes the isolated incidents of questioned compliance noted in this report do not rise to the level of a material weakness or significant deficiency in internal controls. While these incidents do not reflect a systemic concern, the university considers the exceptions highlighted as an opportunity to review and improve processes and procedures. OSU, as a steward of public funds, has a responsibility to promptly address any control deficiency. In response to this review, OSU will enhance the university's existing policies, processes and educational practices.

Summary

The scope of the review covered over \$147 million in expenses on 569 NSF awards for the period of March 1, 2015, through February 28, 2018. OSU reviewed each compliance finding and does not contest the recommendations to review and improve university policies and communication. Meanwhile, OSU does not concur with all questioned costs noted in the audit report.

OSU concurs with \$30,392 of the \$369,532 in questioned costs. OSU believes the remaining \$339,140 in questioned costs are reasonable, allowable and allocable under OMB A-21 and the Code of Federal Regulations - 2 CFR Part 200 (Uniform Guidance), NSF policies and the terms and conditions of the awards. Regarding those questioned costs OSU believes are reasonable, allowable and allocable, the university has included a summary response as part of this document. OSU had previously provided the university's detailed responses as part of the audit process. The university welcomes the opportunity to discuss the questioned costs further and provide any requested additional support to NSF.

Summary Response

OSU has reviewed the NSF OIG draft audit report received August 13, 2019, and as requested, provides the following responses to the findings and recommendations listed in the draft report.

Finding 1: Unallowable Personal Services Contract and Subaward Agreements - \$169,950 questioned costs

OSU Response:

OSU disagrees with the finding questioning these costs and believes they are directly allocable, allowable and reasonable expenses for the projects. While the university understands why these transactions were questioned given the policy in place at the time as well as the 0.01 FTE appointment in the system, we believe that the appointment was not necessary and there was no employment relationship. The services provided benefited the project and were necessary in order to meet the objectives in accordance with the planned scope of work.

This appointment structure is not typical and will be addressed going forward to ensure it aligns with OSU policy. OSU also will look for areas to strengthen its subaward process as recommended. In addition, OSU views this as an opportunity to conduct a review of our policies and procedures relative to personal services contracts, subawards and employees to ensure activities are in accordance with Uniform Guidance, NSF requirements and best practices.

Finding 2: Unallowable Expenses - \$78,153 questioned costs

OSU Response:

OSU partially agrees with this finding. The university agrees that \$18,528 in costs associated with travel expenses and salary allocation were not allowable and will be refunded to NSF. Evidence of the refunded amount will be provided to NSF as part of the audit resolution process.

OSU believes the remaining \$59,625 in questioned costs were allowable, allocable, and reasonable expenses. OSU previously provided the university's detailed responses to each questioned cost. The following table summarizes the detailed responses for those questioned costs OSU disagrees with:

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████████	\$33,575	<i>OSU believes that the cost for this equipment was allowable, as approval from NSF was not required. While initially submitted for approval to NSF as a "Significant Change in Methods/Procedures," it was subsequently determined to be a shift of project funds. As such, OSU re-budgeted project funds in accordance with our re-budgeting authority allowed under NSF's Proposal & Award Policies and Procedures Guide (PAPPG) and the Research Terms and Conditions (RTC).</i>

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████████	\$18,980	<i>OSU believes this expense is allowable to the project. The consultant was identified in the grant budget and provided input on the research objectives described in the proposal. OSU recognizes the vendor provided inadequate information relative to the dates of service in this instance; however, the services were provided over the life of the contract and the work was necessary to complete project objectives. Ongoing education of documentation standards will be provided to the campus community.</i>
██████████	\$3,320	<i>OSU believes this purchase of a computer was allowable as it was dedicated to the project and was not general purpose. The cost was included as part of the minor equipment budget and met the criteria within the NSF proposal guide in effect at the time of the proposal (NSF 14-1 PAPPG).</i>
██████████	\$826	<i>OSU believes these questioned travel costs were allowable. The \$826 for train fare and lodging was allowable as alternate travel arrangements based on the traveler's medical needs and the \$155 was an allowable expense for a rental car. While the traveler's rental of a full-size vehicle and payment of the personal accident insurance totaled \$465.92, the traveler was only reimbursed (and the NSF award charged), \$155.31.</i>
██████████	\$155	
██████████	\$1,462	<i>OSU believes both of these costs are allowable as Participant Support Costs (PSCs) on both awards. The \$1,462 was for expenses for a graduate student listed on the final report as a graduate student Research Experience for Undergraduates participant and eligible for the full benefits of the program. There was no need to request a re-budget for the student's participation. The \$308 was for an extra night of travel for two participants that allowed for completion of project meetings within the scope and purpose of the project.</i>
██████████	\$308	
1232396	\$999	<i>OSU believes the payout at termination for 16 hours of accrued vacation leave for the ██████████ is allowable. The ██████████ was only paid from this award and the associated vacation payout was directly applicable to this award.</i>

We look forward to discussing these costs and providing any requested additional supporting information to NSF as part of the resolution process.

OSU views the administrative and management procedural recommendations as an opportunity to improve the university's policies and procedures to ensure there is sufficient clarity and communication related to Uniform Guidance and NSF requirements as well as best practices.

Finding 3: Inappropriate Application of Indirect Costs - \$65,153 questioned costs

OSU Response:

OSU partially agrees with this finding. The university agrees that \$2,636 in indirect costs were charged as a result of an inadvertent coding error and will be refunded to NSF.

Evidence of the refunded amount will be provided to NSF as part of the audit resolution process.

OSU believes the remaining \$62,517 in questioned costs were allowable, allocable, and reasonable expenses. OSU previously provided the university's detailed responses to each questioned cost. The following table summarizes the detailed responses for those questioned costs OSU disagrees with:

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████	\$4,057	<i>OSU believes the indirect costs charged for these equipment expenses were appropriately applied as these purchases did not meet the definition of a fixed asset at OSU. These purchases consisted of items (e.g., replacement parts, items that did not increase the value of the equipment, or were not complete in itself) that are not capitalized under OSU policy.</i>
██████	\$729	
██████	\$5,852	
██████	\$3,760	
██████	\$3,252	
██████	\$2,300	
██████	\$3,380	<i>OSU believes the indirect costs charged for these software purchases were appropriate as they were made prior to the Uniform Guidance (UG) procurement standards implementation at OSU on July 1, 2018. These purchases were treated consistent with OSU procurement policy in effect at the time of the purchase which required capitalization only when costs exceeded \$100,000.</i>
██████	\$6,068	
██████	\$7,750	
██████	\$4,720	
██████	\$18,958	<i>OSU believes the indirect costs charged for this equipment rental is allowable and allocable to the project. OSU's indirect cost rate agreement language for the Modified Total Direct Cost (MTDC) base and exclusions list matches OMB A-21 and the Uniform Guidance (UG), including reference to "rental costs." OSU's F&A rate implementation memo specifies this to include only "building and land rental costs." Equipment rental and services are not excluded from OSU's indirect cost base and this is consistent with interpretation of A-21 and UG at other institutions of higher education.</i>
██████	\$1,691	<i>OSU believes the indirect costs charged for these lodging expenses were appropriate. OSU prepaid the lodging costs and redistribution of expenses was processed once the attendee list was finalized. The indirect costs were also adjusted as part of the redistribution.</i>

We look forward to discussing these costs and providing any requested additional supporting information to NSF as part of the resolution process.

OSU views the administrative and management procedural recommendations as an opportunity to improve our policies and procedures to ensure there is sufficient clarity and communication related to Uniform Guidance and NSF requirements as well as best practices.

Finding 4: Unallocable End-of-Award Expenses - \$31,319 questioned costs**OSU Response:**

OSU partially agrees with this finding. The university acknowledges a log was not maintained to document the allocability of supplies expenses in the amount of \$3,266 and the amount will be refunded to NSF. Evidence of the refunded amount will be provided to NSF as part of the audit resolution process.

OSU believes the remaining \$28,053 in questioned costs were allowable, allocable, and reasonable expenses. OSU previously provided the university's detailed responses to each questioned cost. The following table summarizes the detailed responses for those questioned costs OSU disagrees with:

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████████	\$12,722	OSU believes this expense was allocable to the project. The supplies purchased were necessary and part of the solution needed to validate the results of the project data and complete the project. OSU acknowledges the PI did note to the vendor that the project funds were expiring; however, this was done to expedite the vendor's participation in identifying a solution to the issue given the timeline to complete the work.
██████████	\$4,015	OSU believes this expense was allowable and allocable to the project. The graduate student, while paid by OSU funds, contributed to the NSF project and was an author on the paper being presented. When the PI was not able to attend the conference to present the paper, the graduate student attended and presented the paper in accordance with the ██████████ policy. OSU agrees that the travel and contributions by the graduate student should have been included in the technical report submitted to NSF; however, OSU believes the purpose of the travel was a direct benefit to the project.
██████████	\$2,966	OSU believes this expense was allowable and allocable to this project. The work with the external evaluator was included as part of the scope of work. As the evaluator and PI were both in the same location at the same time, they met up to finalize the project. This travel also included the PI presenting project evaluation results and meeting with a program participant. All of the activities were directly related to the completion of the project's objectives.
██████████	\$1,802	OSU believes this expense was allocable to the award. This is a long-term, collaborative program that includes work among and between various ██████████ sites in the ██████████, particularly those linked to the ██████████. The collaboration is referenced multiple times within the original proposal and one amendment specifically identifies that ██████████ funds were included in the award.

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████	\$4,436	<i>OSU believes this expense was allowable and allocable to the project. The conference travel allowed the PI to gain knowledge that was beneficial to the work on this project. OSU agrees that the paper presented by the PI at the conference was not directly supported by this award; however, the topic was related to the scope of work for this award.</i>
██████	\$2,112	<i>OSU believes this expense was allowable and allocable to the project. The traveler was a micropaleontologist on the project and identified on the proposal budget submitted to NSF. This travel was necessary to obtain expert consultation on project data to ensure erroneous results were not published, a critical quality assurance step.</i>

We look forward to discussing these costs and providing any requested additional supporting information to NSF as part of the resolution process. OSU views the administrative and management procedural recommendations as an opportunity to improve our policies and procedures to ensure there is sufficient clarity and communication related to Uniform Guidance and NSF requirements as well as best practices.

In addition, OSU will review opportunities to provide additional communication and guidance for PI's relative to activity towards the end of the award's POP to ensure activity is in accordance with requirements.

Finding 5: Expenses Not Appropriately Allocated to NSF Awards - \$10,574 questioned costs

OSU Response:

OSU partially agrees with this finding. The university agrees that errors were made in the allocability calculations for two expenses totaling \$5,753 and the amount has been/will be refunded. Evidence of the refunded amount will be provided to NSF as part of the audit resolution process.

OSU believes the remaining \$4,821 in questioned costs were allowable, allocable, and reasonable expenses. OSU has previously provided the university's detailed responses to each questioned cost. The following table summarizes the detailed responses for those questioned costs OSU disagrees with:

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████	\$2,409	<i>OSU believes this publication expense was allowable and allocable to this award as the expense was incurred in support of the dissemination of the research that was funded by the award. OSU acknowledges an oversight occurred in the failure to cite this award in the final published paper. The PI attempted to correct but was unable to do so within the Research.gov system.</i>

██████████	\$287	OSU believes these travel expenses incurred by two employees to relocate to ██████████ were allowable and allocable to the project. At the time of both hires and incurring these costs, the intention was for these positions to fully support the activity on this project. The employees ultimately provided effort and support to multiple other research cruises funded by NSF and the employees' effort was proportionately charged to those projects.
	\$840	
██████████	\$1,285	OSU believes these expenses were allowable and allocable to the award. The project's budget included funds for graduate research assistant (GRA) travel to a training conference. OSU acknowledges that the training conference attended changed from the original intent; however, this was determined by the PI to be (and was) appropriate given the benefit to the project. The university also acknowledges that the GRA was paid from a different NSF project but that project is under the same PI and related to the research completed under this award. The training received by the GRA was necessary for work completed on both NSF projects.

We look forward to discussing these costs and providing any requested additional supporting information to NSF as part of the resolution process.

OSU views the administrative and management procedural recommendations as an opportunity to improve our policies and procedures to ensure there is sufficient clarity and communication related to Uniform Guidance and NSF requirements as well as best practices.

In addition, OSU will review opportunities to provide additional communication and guidance for PI's that includes best practices identified as part of this review.

Finding 6: Unreasonable Honorarium Payment - \$8,820 questioned costs

OSU Response:

OSU disagrees with these questioned costs and believe they are directly allocable, allowable and reasonable expenses for the project. OSU has previously provided the university's detailed response to this questioned cost. The following table summarizes the detailed response for this questioned cost that OSU disagrees with:

NSF Award No	Amount	OSU Response
██████████	\$8,820	OSU believes this expense is allowable and allocable to the award. The honorarium was budgeted for \$2,000 per year for years one through three of the project. The additional costs were a result of the partner providing expanded engagement in years two and three.

We look forward to discussing these costs and providing any requested additional supporting information to NSF as part of the resolution process.

OSU views the administrative and management procedural recommendations as an opportunity to improve our policies and procedures to ensure there is sufficient clarity and

communication related to Uniform Guidance and NSF requirements as well as best practices.

Finding 7: Inappropriately Claimed Lodging and M&IE Per Diem Expenses - \$5,563 questioned costs

OSU Response:

OSU partially agrees with this finding. The university agrees that \$209 in incorrect per diem reimbursements were unallowable and will reimburse NSF. Evidence of the refunded amount will be provided to NSF as part of the audit resolution process.

OSU believes the remaining \$5,354 in questioned costs were allowable, allocable and reasonable expenses. OSU has previously provided the university's detailed responses to each questioned cost. The following table summarizes the detailed responses for those questioned costs OSU disagrees with:

<i>NSF Award No</i>	<i>Amount</i>	<i>OSU Response</i>
██████	\$1,495	<i>OSU believes these lodging expenses were appropriate for the awards. OSU agrees that the room rate paid was higher than the rate listed in the conference program; however, all of the lower priced rooms were booked when the travel arrangements were made. The PIs stayed at one of the conference hotels and OSU policy allows for a higher lodging rate when that is all that is available at a conference hotel.</i>
██████	\$330	
██████	\$57	<i>OSU believes these lodging expenses were appropriately charged to the project. OSU acknowledges that the traveler did not stay at the conference hotel and that the amount reimbursed was higher than the per diem rate. However, the lodging rate reimbursed to the PI was less than the conference hotel rate.</i>
██████	\$2,341	<i>OSU believes these lodging expenses were appropriately charged to the project. OSU agrees that the lodging exceeded the per diem rate; however, the marine superintendent (PI) has the authority to approve reasonable exceptions and this approval was documented.</i>
██████	\$431	<i>OSU believes these per diem expenses were appropriate for the project as non-OSU employees are allowed to receive reimbursement for travel expenses.</i>
██████	\$700	<i>OSU believes this was an appropriate expense for the award. OSU acknowledges that the documentation to support these expenses did not clearly document the adjustments to per diem for those itemized meals paid directly by OSU. However, the per diem was reduced and the amounts actually reimbursed to the travelers were lower than the amounts for which they were eligible.</i>

We look forward to discussing these costs and providing any requested additional supporting information to NSF as part of the resolution process.

OSU views the administrative and management procedural recommendations as an opportunity to improve our policies and procedures to ensure there is sufficient clarity and communication related to Uniform Guidance and NSF requirements as well as best practices.

Finding 8: Non-Compliance with OSU Internal Policies

OSU Response:

OSU agrees with this compliance finding. While OSU believes none of the errors were systemic in nature or represented a material weakness or significant deficiency, we view these administrative and management procedural recommendations as an opportunity to improve university policies and procedures to ensure there is sufficient clarity and communication related to Uniform Guidance and NSF requirements as well as best practices. OSU, as a steward of public funds, has a responsibility to promptly address any control deficiency.

Finding 9: Incorrect Application of Proposed Indirect Cost Rates

OSU Response:

OSU agrees with this finding. The university has since updated its policies and procedures to ensure the indirect cost rate in effect as of the date of the award is applied consistently for all awards. OSU will continue to focus on improving the controls over the application of the indirect cost rates to ensure appropriate costs are charged to the awards and agree to use the rate in effect as of the date of the award. OSU agrees that for the four awards identified, OSU charged NSF the lower indirect cost rate in effect at the time of proposal rather than the higher rate in place as of the date of the award. The university believes this helped to foster the success of incoming PIs who were able to maintain consistency with their budgets and the higher costs were absorbed by the university.

In closing, we appreciate this opportunity to respond to the NSF Performance Audit of Incurred Costs. Oregon State University has a strong commitment to integrity and stewardship and takes the audit process seriously. We believe the results of this audit will help assist OSU in strengthening its sponsored programs administrative management policies and procedures.

Sincerely,



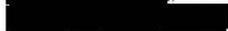
Irene Y. Turner
Vice President for Research, Interim
Oregon State University



Michael J. Green
Vice President for Finance and Administration
Oregon State University

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Kenneth Irving Lish, National Science Foundation Office of Inspector General

Cotton & Company, September 3, 2019

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Darrell R. Drake, National Science Foundation Office of Inspector General
Keith S. Nackerud, National Science Foundation Office of Inspector General
[REDACTED], Oregon State University
[REDACTED], Oregon State University
[REDACTED], Oregon State University

APPENDIX C: OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVES, SCOPE, AND METHODOLOGY

The NSF OIG Office of Audits engaged Cotton & Company LLP (referred to as “we” in this report) to conduct a performance audit of costs that OSU incurred on NSF awards for the period from March 1, 2015, to February 28, 2018. The objective of the audit was to determine if costs claimed by OSU during this period were allocable, allowable, reasonable, and in conformity with NSF award terms and conditions and applicable Federal financial assistance requirements.

Our work required us to rely on computer-processed data obtained from OSU and NSF OIG. NSF OIG provided award data that OSU reported through ACM\$ during our audit period. OSU provided detailed transaction-level data to support all costs charged to NSF awards during the period. This data resulted in a total audit universe of \$147,504,487 in costs claimed on 569 NSF awards.

We assessed the reliability of the data provided by OSU by (1) comparing costs charged to NSF award accounts within OSU’s accounting records to reported net expenditures, as reflected in OSU’s ACM\$ drawdown requests submitted to NSF for the corresponding periods; and (2) reviewing the parameters that OSU used to extract transaction data from its accounting records and systems.

Based on our assessment, we found OSU’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, or the controls over, NSF’s databases were accurate or reliable; however, the independent auditor’s report on NSF’s financial statements for FY 2017 found no reportable instances in which NSF’s financial management systems did not substantially comply with applicable requirements.

OSU management is responsible for establishing and maintaining effective internal controls to help ensure that it uses Federal award funds in compliance with laws, regulations, and award terms. In planning and performing our audit, we considered OSU’s internal controls solely to understand the policies and procedures relevant to the financial reporting and administration of NSF awards to evaluate OSU’s compliance with laws, regulations, and award terms applicable to the items selected for testing, but not to express an opinion on the effectiveness of OSU’s internal controls over award financial reporting and administration. Accordingly, we do not express an opinion on the effectiveness of OSU’s internal controls over its award financial reporting and administration.

After confirming the accuracy of the data provided but before performing our analysis, we reviewed all available accounting and administrative policies and procedures, relevant documented management initiatives, previously issued external audit reports, and desk review reports to ensure that we understood the data and that we had identified any possible weaknesses within OSU’s system that warranted focus during our testing.

We began our analytics process by reviewing the transaction-level data that OSU provided and used IDEA software to combine it with the NSF OIG-provided data. We conducted data mining and data analytics on the entire universe of data provided and compiled a list of transactions that represented anomalies, outliers, and aberrant transactions. We reviewed the results of each of our

data tests and judgmentally selected transactions for testing based on criteria including, but not limited to, large dollar amounts, possible duplications, indications of unusual trends in spending, descriptions indicating potentially unallowable costs, cost transfers, expenditures outside of an award's period of performance, and unbudgeted expenditures.

We identified 250 transactions for testing and requested that OSU provide documentation to support each transaction. We reviewed this supporting documentation to determine if we had obtained sufficient, appropriate evidence to support the allowability of the selected expenditures. When necessary, we requested and reviewed additional supporting documentation and obtained explanations and justifications from PIs and other knowledgeable OSU personnel until we had sufficient support to assess the allowability, allocability, and reasonableness of each transaction.

We discussed the results of our initial fieldwork and our recommendations for expanded testing with NSF OIG personnel. Based on the results of this discussion, we used IDEA software to select an additional judgmental selection of 50 transactions. We requested and received supporting documentation for the additional transactions and summarized the results in our final fieldwork summary.

At the conclusion of our fieldwork, we provided a summary of our results to NSF OIG personnel for review. We also provided the summary of results to OSU personnel to ensure that they were aware of each of our findings and that no additional documentation was available to support the questioned costs.

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



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