

Performance Audit of Incurred Costs – University of Maine

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL

June 1, 2022
OIG 22-1-005





At a Glance

Performance Audit of Incurred Costs – University of Maine

Report No. OIG 22-1-005

June 1, 2022

AUDIT OBJECTIVE

The objective of this audit was to determine whether costs the University of Maine (UMaine) claimed on NSF awards were allowable, allocable, reasonable, and in conformity with NSF award terms and conditions and applicable federal financial assistance requirements. The audit scope included approximately \$9.7 million of costs UMaine claimed from NSF on 27 selected awards as of September 2, 2020.

AUDIT RESULTS

We identified no questioned costs charged to NSF awards during the analysis of 15 judgmentally selected transactions. There is one finding related to UMaine guidance for monitoring indirect cost rates on three awards with no associated questioned costs. Specifically, UMaine did not have proper controls in place to ensure it applied the indirect cost rates in effect as of the award date as required by federal regulations and NSF guidance.

RECOMMENDATIONS

The report includes one recommendation for NSF to ensure UMaine strengthens its policies and controls related to indirect cost rates.

AWARDEE RESPONSE

UMaine concurred it did not always apply the indirect cost rates in effect at award date and, under certain circumstances, applied the rate in effect at the date of proposal submission. However, UMaine said that this was not due to a lack of controls, but because of a university decision to charge the rate in effect at submission because it was lower than the award date rate. UMaine also asserted it has proper controls in place to ensure it applies the award date rate should approved rates decrease between the proposal and date of award.

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



National Science Foundation • Office of Inspector General

2415 Eisenhower Avenue, Alexandria, Virginia 22314

MEMORANDUM

DATE: June 1, 2022

TO: Dale Bell
Director
Division of Institution and Award Support

Jamie French
Director
Division of Grants and Agreements

FROM: Mark Bell 
Assistant Inspector General
Office of Audits

SUBJECT: Report No. OIG 22-1-005, *Performance Audit of Incurred Costs – University of Maine*

Attached is the final report for the audit of costs charged by the University of Maine (UMaine) to its sponsored agreements with the National Science Foundation. This report includes one recommendation. We have included UMaine's response to the report as an appendix.

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 finding. The finding should not be closed until NSF determines that the recommendation has been adequately addressed and the proposed correction actions have been satisfactorily implemented.

We appreciate the courtesies and assistance that was extended during this audit. If you have questions, please contact Jennifer Miller, Audit Director, at 703.292.7100 or oigpublicaffairs@nsf.gov.

cc: Dan Reed	Alex Wynnyk	Lisa Vonder Haar	Holly Snow
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Table of Contents

Background	1
Audit Scope	1
Results of Audit	2
Transaction Testing Results.....	2
Finding 1: Insufficient Controls Related to the Application of Indirect Cost Rates	3
Appendix A: UMaine’s Response	6
Appendix B: Objective, Scope, and Methodology	8
Appendix C: Summary of Recommendations	10
Appendix D: Glossary	11

Abbreviations

F&A	Facilities and Administrative
UMaine	University of Maine
UMS	University of Maine System



Background

The National Science Foundation is an independent federal agency created “to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense” (Pub. L. No. 81-507). NSF funds research and education in science and engineering by awarding grants and contracts to educational and research institutions in all parts of the United States.

Our office provides independent oversight of NSF’s programs and operations. This oversight includes audits of NSF awardees, which must follow federal and NSF award regulations and guidance in administering NSF awards.

The University of Maine (UMaine) is in Orono, Maine, and is the state’s only public research university. UMaine is one of the seven universities that make up the University of Maine System. In its 2020 Research Report, UMaine reported that in FY 2020, NSF was the university’s second largest source of research funding behind the U.S. Department of Defense, and 17.23 percent of UMaine’s total \$125.2 million in research funding came from NSF.

Audit Scope

We selected 27 NSF awards with a total of approximately \$9.7 million in costs that UMaine claimed as of September 2, 2020. Costs claimed refer to expenditures that UMaine filed with NSF for cost reimbursement on payment requests submitted to NSF. We judgmentally selected 15 transactions, totaling \$60,854 (see Table 1), and evaluated supporting documentation to determine if costs claimed on NSF awards were allowable, allocable, reasonable, and in conformity with NSF award terms and conditions and applicable federal financial assistance requirements (refer to Appendix B for more information about our objective, scope, and methodology).



Table 1. Summary of Selected Transactions

UMaine Expense Account Description	Transaction Count	Expense Amount*
Subawards	3	\$18,401
Equipment	2	\$16,742
Salary and Wages	3	\$8,599
Travel	3	\$5,263
Consultant Services	1	\$5,080
Materials and Supplies	2	\$4,940
Publication Costs	1	\$1,829
Grand Total	15	\$60,854

*The expense amounts reported represent the total dollar value of the transactions selected for our sample and do not include the total fringe benefit or indirect costs applied to the sampled transactions, however, these amounts were also reviewed during the audit.

Source: OIG-developed summary of transaction selections. Unless otherwise noted, all amounts in this report are rounded to the nearest dollar.

Results of Audit

We reviewed all costs claimed on 27 awards as of September 2, 2020. In our testing of 15 judgmentally selected transactions, we identified no questioned costs charged to NSF awards. However, there is one finding related to UMaine guidance for monitoring indirect cost rates on NSF awards. UMaine did not have proper controls in place to ensure it applied the indirect cost rates in effect as of the award date as required by federal regulations and NSF guidance.

Transaction Testing Results

We gained an understanding of UMaine controls significant to our audit objective (see Appendix B for more details) and reviewed supporting documentation for 15 judgmentally selected transactions. Except for the internal control issue described in Finding 1, we did not identify any other deficiencies in UMaine’s internal controls and did not identify any unallowable, unsupported, or unreasonable costs or costs that did not conform with NSF award terms and conditions and applicable federal financial assistance requirements. Therefore, we concluded that additional transaction testing was not necessary.



Finding 1: Insufficient Controls Related to the Application of Indirect Cost Rates

UMaine did not have proper controls in place to ensure it applied the indirect cost rates in effect as of the award date, as required by federal regulations¹ and NSF guidance.² We identified three awards where UMaine applied indirect cost rates in effect when the respective proposals were submitted rather than the rates in effect on the award date.

The indirect cost rates listed in each proposal were correct at the time of proposal. However, a new Negotiated Indirect Cost Rate Agreement (NICRA) went into effect prior to the award dates of each of the three awards. Table 2 shows the rates at the time of the proposal date and award date for each of the awards in question.

Table 2. Summary of Indirect Cost Rates

Award Number	Rate at the Time of Proposal	Rates on NICRA in Effect on Award Date
[REDACTED]	42.8%	44-46%
[REDACTED]	42.8%	44-46%
[REDACTED]	42.8%	44-46%

Source: OIG-developed summary of indirect cost rates listed on UMaine’s NICRAs dated 5/28/15 through 9/14/16

UMaine Guidance for Monitoring Indirect Cost Rates on NSF Awards

Although federal regulations require universities to apply indirect cost rates in effect on the award date, NSF allows award recipients to charge a lower time-of-proposal rate if institutional policy allows and if the institution has controls in place to ensure it applies the award date rate should approved rates decrease between the proposal and date of award. For each of the three awards discussed above, the rate at the time of proposal was lower than the award date rate; thus, UMaine claimed lower costs to NSF than otherwise were allowable.

Although we are not questioning costs, indirect costs charged to the three awards may conflict with University of Maine System (UMS) and UMaine policy. According to UMS’s

¹ According to 2 CFR 200, Appendix III, Section C.7. Fixed Rates for the Life of the Sponsored Agreement, federal agencies must use the negotiated rates in effect at the time of the initial award throughout the life of the federal award.

² NSF PAPPG 16-1, Part I, Chapter V, Section D.1.b. states that the awarded indirect cost rate is generally based upon a grantee’s current federally negotiated indirect cost rate agreement.



Administrative Practice Letter on Cost Sharing, “Generally the UMS expects to recover the full amount of F&A costs consistent with its negotiated rates and allowable under the specific guidelines of the grant/contact program.” Additionally, UMaine’s F&A Guidance, issued by the Office of Research Administration, states, “The University of Maine’s ... policy is to request and recover full Facilities and Administrative (‘F&A’, ‘indirect’, or ‘overhead’) costs, whenever possible.” The F&A Guidance also states:

Requests to waive any or all of the applicable F&A ... will not be approved by ORA [the Office of Research Administration]. Any reduction in the applicable F&A rate requires advanced approval by the Vice President for Research and Dean of the Graduate School.

Since applicable regulations require use of rates in effect on the award date, applying a lower rate in effect on the proposal date is an effective reduction in applicable F&A costs.

UMaine does not have the proper controls in place to ensure the correct rate is identified and applied to prevent higher than allowable indirect cost rate from being charged to NSF awards. Furthermore, charging rates in effect on the proposal date that are lower than the rates in effect on the award date may conflict with UMS’s Administrative Practice Letter on Cost Sharing and UMaine’s F&A Guidance. Without updated policies and procedures in place to ensure that it applies the correct indirect cost rate, UMaine may charge its NSF awards for excessive indirect costs or indirect costs that do not conform to institutional policy.

Recommendation

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

- 1.1 Direct UMaine to strengthen policies and controls to ensure UMaine is identifying the correct rates in effect at the time of award and in accordance with institutional policy.

UMaine’s Response

UMaine concurred that it did not always apply the indirect cost rates in effect on the award date and, under certain circumstances, applied the rate in effect at the date of submission. However, UMaine disagreed with the audit team’s conclusion that this was due to a lack of controls. In its response, UMaine said it made a university-wide decision to charge the indirect rate in effect at the time of the proposal because it was lower than the NICRA rate in effect at the time of the award and asserted that UMaine had proper



controls in place to ensure it applied the award date rate should approved rates decrease between the proposal and date of award. UMaine explained that all awards go through multiple review processes, including a final review and approval by the UMS Controller's Office, which includes a review of the award's scope to ensure that the correct indirect cost rate is applied. UMaine also indicated in its response that it will evaluate and improve its procedures and documented decision process and will provide training in the areas identified. UMaine's full response is included in Appendix A.

OIG Comments

While UMaine does have a review and approval process, we could not find evidence that the process included procedures to ensure that reviewers identify and document decisions to use the submission rate if it was different than the NICRA rate in effect at the time of award.

Additionally, UMaine could not provide support for the university-wide decision to charge the indirect cost rate in effect at the time of the proposal if it was lower than the NICRA rate in effect at the time of the award, and this decision appeared to conflict with UMS and UMaine policy. As a result, our position regarding this finding has not changed.



Appendix A: UMaine's Response

Office of Research
Administration



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May 23, 2022

Mark Bell
Assistant Inspector General
Office of Audits

Dear Mr. Bell,

The University of Maine (UMaine) appreciated the opportunity to work with the National Science Foundation Office of Inspector General in the examination of costs claimed on NSF awards for allowability, allocability, reasonableness, and conformity with NSF award terms and conditions and applicable federal financial assistance requirements. As the state's only public research university, UMaine is committed to financial stewardship and obligations to administer funding per applicable laws, regulations, policies, and requirements.

We have thoroughly reviewed the auditors' finding and recommendation. Although we do not agree with the determination that UMaine does not have proper controls in place to ensure it applied the indirect cost rates in effect as of the award date, as required by federal regulations and NSF guidance, we welcome the audit process as a mechanism to validate and enhance our internal controls and to identify areas requiring enhancements.

Finding 1: Insufficient Controls Related to the Application of Indirect Cost Rates

UMaine concurs that it did not always apply the indirect cost rates in effect as to the award date and, under certain circumstances, applied the rate in effect at the date of submission. However, we disagree that this was due to a lack of controls. In order to reduce the financial impact on university research faculty, UMaine made a university wide decision to charge the indirect rate in effect at the time of the proposal because it was lower than the NICRA rate in effect at the time of the award. UMaine has proper controls in place to ensure it applies the award date rate should approved rates decrease between the proposal and date of award.

Maine's Land Grant and Sea Grant University
A Member of the University of Maine System



All external awards go through multiple review processes, including a final review and approval by the University of Maine System Controller's Office (System Office), prior to the creation of a project which allows the award funding to be accessed by the PI. This final System Office approval includes a review of the award's scope to ensure that the correct function is selected and, in turn, that the correct indirect cost rate is applied based on the period of performance of the award.

However, UMaine will evaluate and improve our procedures, documented decision process and will provide training in the areas identified.

Best Regards,

Christopher

Boynton, Director

Christopher Boynton

Director, Office of Research Administration

Digitally signed by
Christopher Boynton, Director
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-04'00'



Appendix B: Objective, Scope, and Methodology

Audit Objective

We conducted a performance audit of costs UMaine claimed on NSF awards. The audit objective was to determine whether costs claimed were allowable, allocable, reasonable, and in conformity with NSF award terms and conditions and applicable federal financial assistance requirements.

Audit Scope

The audit population included 27 awards to UMaine effective after July 15, 2016. Our audit included assessing the allowability, allocability, and reasonableness of 15 transactions judgmentally selected from a population of 10,486 transactions provided by UMaine.

Audit Methodology

We conducted this performance audit from September 2020 to March 2022 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 objective.

Internal Control Assessment

In planning and performing our audit, we gained an understanding of controls significant to our audit objective and performed testing to the extent necessary to address the audit objective. Specifically, we:

- reviewed UMaine, UMS, and NSF policy and Office of Management and Budget guidance;
- conducted interviews and system and process walkthroughs with UMaine personnel;
- tested a sample of 15 expenditures, selected judgmentally, for compliance with grant terms and conditions;



- requested and reviewed supporting documentation from UMaine for each sample item to ensure validity and compliance with grant requirements; and
- reviewed prior audits and reports and did not identify any deficiencies significant to our audit objective.

Data Reliability Assessment

We relied on UMaine and NSF data to complete this audit. UMaine provided transaction data to support costs charged to NSF awards during the audit period, and we obtained NSF award data by directly accessing NSF's data systems. To assess the reliability of the data, we conducted basic reasonableness checks, including reconciliations and analytic testing procedures; conducted system and process walkthroughs; and traced the sample of 15 transactions to source documentation. We did not identify any obvious problems with the accuracy or completeness of the data and determined that the data were sufficiently reliable for the purposes of this report.

Criteria

We reviewed supporting documentation for the 15 transactions selected for testing to determine the allowability, allocability, and reasonableness of these expenditures in accordance with NSF award documentation; NSF, UMS, and UMaine policy; Office of Management and Budget *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (2 CFR pt. 200); and NSF Award Specific Terms and Conditions.

When necessary, we obtained additional support or explanations from UMaine to determine whether the transactions were valid.

We reported the results and findings within the body of this performance audit report.

OIG Staff Acknowledgments

Jennifer Miller, Director, Compliance Analytics; Holly Snow, Audit Manager; Jeremy Hall, Audit Manager; Elizabeth Argeris Lewis, Executive Officer/Communications Analyst; and Kelly Stefanko, Independent Report Referencer, made key contributions to this report.



Appendix C: Summary of Recommendations

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

- 1.1 Direct UMaine to strengthen polices and controls to ensure UMaine is identifying the correct rates in effect at the time of award and in accordance with institutional policy.



Appendix D: Glossary

Allocable cost. A cost is allocable to a particular Federal award or other cost objective if the goods or services involved are chargeable or assignable to that Federal award or cost objective in accordance with relative benefits received. This standard is met if the cost:

- (1) Is incurred specifically for the Federal award;
- (2) Benefits both the Federal award and other work of the non-Federal entity and can be distributed in proportions that may be approximated using reasonable methods; and
- (3) Is necessary to the overall operation of the non-Federal entity and is assignable in part to the Federal award in accordance with the principles in this subpart.
(2 CFR § 200.405)

Indirect (facilities & administrative (F&A) Costs means those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a number of pools of indirect (F&A) costs. Indirect (F&A) cost pools must be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived (2 CFR § 200.56).

Reasonable costs. A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost. The question of reasonableness is particularly important when the non-Federal entity is predominantly federally funded. In determining reasonableness of a given cost, consideration must be given to:

- a) Whether the cost is of a type generally recognized as ordinary and necessary for the operation of the non-Federal entity or the proper and efficient performance of the Federal award.
- b) The restraints or requirements imposed by such factors as: sound business practices; arm's-length bargaining; Federal, state, local, tribal, and other laws and regulations; and terms and conditions of the Federal award.
- c) Market prices for comparable goods or services for the geographic area.
- d) Whether the individuals concerned acted with prudence in the circumstances considering their responsibilities to the non-Federal entity, its employees, where



applicable its students or membership, the public at large, and the Federal Government.

- e) Whether the non-Federal entity significantly deviates from its established practices and policies regarding the incurrence of costs, which may unjustifiably increase the Federal award's cost (2 CFR § 200.404).



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