

Promising Practices for NSF Award Management

REPORT PREPARED BY COTTON & COMPANY LLP

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL

January 21, 2022
OIG 22-6-002





AT A GLANCE

Promising Practices for NSF Award Management

Report No. OIG 22-6-002

January 21, 2022

WHY WE ISSUED THIS REPORT

Since September 2018, Cotton & Company LLP (C&C) has conducted 18 performance audits on behalf of our office of costs claimed by NSF award recipients. As part of those audits, C&C observed, identified, and cataloged strengths and opportunities for improvement within each recipient's award management environment. We then engaged C&C to write a capstone report communicating the most common audit findings, suggestions for how to improve compliance in those areas, and promising award management practices implemented by audited institutions. This report is intended to help members of the recipient community identify means to strengthen award management practices and improve the overall stewardship of federal funds across the NSF award recipient population. We are issuing this report as a routine activity.

OVERALL OBSERVATIONS

The most common audit findings related to unallowable expenses, inappropriately applied indirect costs, inadequately supported expenses, inappropriately allocated expenses, and non-compliance with policies and procedures. The report suggests that award recipients perform the following activities to improve the stewardship of federal funds: continually monitor and verify the allowability of high-risk expenses; strengthen controls over applying indirect cost rates; ensure recipients create and maintain sufficient, appropriate documentation; document and justify reasonable allocation methodologies; and regularly review and update grant management policies and procedures. Specifically, the report notes that strengthening controls in these areas could help recipients improve compliance in areas that often result in audit findings.

ADDITIONAL INFORMATION

The report also includes a description of the most common sub-findings within each finding category, examples of these sub-findings, suggestions for strengthening controls in those areas, promising practices being used by recipients that could help decrease the likelihood of non-compliance, and a glossary of federal and NSF criteria. Although this report contains suggestions for strengthening stewardship practices related to common findings and highlights promising practices for avoiding non-compliance, this report should not be construed as an all-encompassing analysis of best practices for the award recipient community. Rather, the report was written to be a reference for members of the award recipient community to consider when evaluating their own policies.

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




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

MEMORANDUM

DATE: January 21, 2022

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

FROM: Mark Bell 
Assistant Inspector General
Office of Audits

SUBJECT: Report No. 22-6-002, Promising Practices for NSF Award Management

This memorandum transmits the Cotton & Company LLP (C&C) capstone report related to promising practices for the management of NSF awards. Since September 2018, C&C has completed 18 performance audits on behalf of our office of costs claimed by NSF award recipients. As part of those audits, C&C observed, identified, and cataloged strengths and opportunities for improvement within each recipient's award management environment. We then engaged C&C to write a capstone report communicating the most common audit findings, suggestions for how to improve compliance in those areas, and promising award management practices implemented by audited institutions. This report is intended to help members of the recipient community identify means to strengthen award management practices and improve the overall stewardship of federal funds across the NSF award recipient population. We are issuing this report as a routine activity.

We provided a draft of this report to NSF management for review on November 18, 2021. NSF provided us with comments and suggestions on December 13, 2021, which we considered and incorporated into the report.

We thank your staff for the assistance that was extended to the auditors during this reporting process. 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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NSF OIG AUDITS BACKGROUND

Since September 2018, Cotton & Company has completed 18 task orders issued by the National Science Foundation Office of Inspector General to conduct performance audits of costs claimed by NSF award recipients.

As Cotton & Company was able to observe, identify, and catalog strengths and opportunities for improvement within each award recipient's award management environment as a result of these audits, the NSF OIG engaged Cotton & Company to write a capstone report summarizing promising practices and other suggestions for implementing a strong award management environment, as summarized in [Appendix I](#).

WHY WE WROTE THIS CAPSTONE

Cotton & Company identified the most common audit report findings, provided suggestions for how to ensure compliance in those areas, and identified promising practices implemented by audited institutions in an effort to assist the award recipient community and improve the stewardship of federal funds across the NSF award recipient population.

Although this report contains suggestions for strengthening stewardship practices related to common findings and highlights promising practices for avoiding non-compliance, this report should not be construed as an all-encompassing analysis of best practices for the award recipient community. Rather, the report was written to be a reference for the award recipient community to consider when evaluating its own policies.

REPORT FINDINGS AND SUGGESTIONS

The report suggests that award recipients perform the following activities to improve the stewardship of federal funds:

- Continually Monitor and Verify the Allowability of High-Risk Expenses
- Strengthen Controls Over Applying Indirect Cost Rates
- Ensure Award Recipients Create and Maintain Sufficient, Appropriate Documentation
- Document and Justify Reasonable Allocation Methodologies
- Regularly Review and Update Grant Management Policies and Procedures

Specifically, the report notes that strengthening controls in these areas could help award recipients ensure compliance related to the most common audit findings identified in the 18 referenced audit reports.

Common Findings	Percentage of Audit Reports with Finding
Unallowable Expenses	94%
Inappropriately Applied Indirect Costs	83
Inadequately Supported Expenses	67
Inappropriately Allocated Expenses	55
Non-Compliance with Policies and Procedures	50

ADDITIONAL INFORMATION

For additional context to support the auditors' observations and suggestions for stronger controls, the report also includes:

- A table identifying the common sub-findings within each Common Finding category above, as well as an indication of how many audit reports include each sub-finding within [Appendix II, Table 1](#).
- Examples of the sub-findings most often identified within audit reports and suggestions for strengthening controls in those areas within Sections [A](#), [B](#), [C](#), [D](#) and [E](#) of [Appendix II](#).
- Promising practices being used by auditees that could help decrease the likelihood of non-compliance with federal and NSF criteria within call-out boxes in [Appendix II](#).
- A glossary of cited federal and NSF criteria within [Appendix III](#).

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Abbreviations

ACM\$	Award Cash Management \$ervice
AICPA	American Institute of Certified Public Accountants
CFR	Code of Federal Regulations
COVID-19	Coronavirus Disease 2019
EPSCoR	Established Program to Stimulate Competitive Research
GRFP	Graduate Research Fellowship Program
I-Corps	Innovation Corps
IPA	Intergovernmental Personnel Act
ISP	Internal Service Provider
MTDC	Modified Total Direct Costs
NICRA	Negotiated Indirect Cost Rate Agreement
NSF	National Science Foundation
OIG	Office of Inspector General
OMB	Office of Management and Budget
PI	Principal Investigator

BACKGROUND

The National Science Foundation Office of Inspector General engaged Cotton & Company LLP (we) to complete 18 task orders under Contract No. 140D0418A0042 for performance audits of costs claimed by NSF award recipients. For seven of these engagements, we began by performing an audit survey to evaluate the strengths and weaknesses of the recipient's award management environment, then performed additional audit work, as determined necessary. For one of these engagements, we performed an audit to determine whether costs claimed by, or reported as cost share by, one award recipient on four Established Program to Stimulate Competitive Research (EPSCoR) awards were allowable, allocable, reasonable, and in compliance with NSF award terms and conditions. For the remaining 10 engagements, we gained an understanding of the recipient's award management environment as it related to spending under the flexibilities granted by the Office of Management and Budget (OMB) in response to the Coronavirus Disease 2019 (COVID-19) pandemic.¹

Based on our experience observing, identifying, and cataloging the strengths and opportunities for improvements of the recipients' award management environments, the NSF OIG engaged Cotton & Company to write a report summarizing promising practices and common areas for improvement that we have observed over the course of our audits.

SUGGESTIONS FOR IMPLEMENTING A STRONG AWARD MANAGEMENT ENVIRONMENT

To assist the award recipient community and improve the stewardship of federal funds across the NSF award recipient population, we have provided suggestions for implementing a strong award management environment. Specifically, in an effort to provide the most relevant suggestions, we included suggestions for strengthening internal controls in the areas where we commonly identify audit findings, as illustrated in Table 1:

Table 1: Suggestions for Implementing a Strong Award Management Environment

Common Findings	No. of Reports with Finding	Auditor Suggestions for Strengthening Controls
Unallowable Expenses	17/18	Continually Monitor and Verify the Allowability of High-Risk Expenses
Inappropriately Applied Indirect Costs	15/18	Strengthen Controls Over Applying Indirect Cost Rates
Inadequately Supported Expenses	12/18	Ensure Award Recipients Create and Maintain Sufficient, Appropriate Documentation
Inappropriately Allocated Expenses	10/18	Document and Justify Reasonable Allocation Methodologies
Non-Compliance with Policies and Procedures	9/18	Regularly Review and Update Grant Management Policies and Procedures

Source: Auditor's summary of the results of the audit reports for audits under Contract No. 140D0418A0042 and auditor suggestions.

¹ Cotton & Company conducted 10 limited-scope performance audits to determine whether NSF award recipients implemented the administrative flexibilities granted by OMB in response to the COVID-19 pandemic, and, if so, whether the award recipients complied with the associated guidelines.

CONTINUALLY MONITOR AND VERIFY THE ALLOWABILITY OF HIGH-RISK EXPENSES

Seventeen audit reports included findings that occurred because award recipients charged unallowable travel, participant support, salary, material/supply, fringe benefit, publication, consultant, and subaward costs to NSF awards. Although many of the recipients claimed that they would have identified the unallowable expenses during the grant's close-out process, we found that recipients were less likely to charge unallowable costs to NSF awards if they implemented processes for the continuous monitoring of high-risk expenses, rather than waiting until after the award expired to review the allowability of the expenses charged.

See [Appendix II, Section A](#), for a list of the most common findings related to unallowable costs by expense type, as well as suggestions for how to improve grant management practices in this area.

STRENGTHEN CONTROLS OVER APPLYING INDIRECT COST RATES

Fifteen audit reports included findings that occurred because award recipients did not apply indirect costs to the appropriate Modified Total Direct Cost (MTDC) base and/or did not apply indirect costs at the rates approved within the recipients' Negotiated Indirect Cost Rate Agreements (NICRAs). Although many of the recipients disagreed with these findings, stating that they had applied the indirect cost rates in a manner that was consistent with their interpretation of federal regulations and applicable NICRAs, we determined that most recipients would benefit from stronger controls designed to ensure the recipients appropriately charged indirect costs to NSF awards.

See [Appendix II, Section B](#), for a list of the most common findings related to the incorrect application of indirect costs, as well as suggestions for how to improve grant management practices in this area.

ENSURE AWARD RECIPIENTS CREATE AND MAINTAIN SUFFICIENT, APPROPRIATE DOCUMENTATION

Twelve audit reports included findings that occurred because award recipients did not produce or maintain sufficient, appropriate evidence to support that costs claimed in NSF's Award Cash Management Service (ACM\$), costs billed by internal service providers (ISPs), and/or travel, salary, and consultant costs charged to NSF awards were allowable per federal and/or NSF regulations. Although many of the recipients disagreed with these findings, stating that they believed they had provided sufficient documentation to support the allowability of the sampled expenses, we determined that recipients with more robust requirements for documentation creation and retention were more likely to maintain sufficient, appropriate documentation to support that expenses charged to NSF awards were reasonable, allocable, and allowable.

See [Appendix II, Section C](#), for a list of the most common findings related to inadequately supported expenses by expense type, as well as suggestions for how to improve grant management practices in this area.

DOCUMENT AND JUSTIFY REASONABLE ALLOCATION METHODOLOGIES

Ten audit reports included findings that occurred because award recipients inappropriately allocated travel, materials and supplies, publication, and/or student stipend or tuition costs to NSF awards. Although many of the recipients disagreed with these findings, stating that they believed they had appropriately allocated the expenses to the NSF awards, we determined that recipients that require personnel to document and justify reasonable allocation methodologies when purchasing goods and services were more likely to maintain sufficient documentation to support that they had allocated sampled expenses to NSF awards consistent with the relative benefits received by those awards.

See [Appendix II, Section D](#), for a list of the most common findings related to inappropriately allocated expenses by expense type, as well as suggestions for how to improve grant management practices in this area.

REGULARLY REVIEW AND UPDATE GRANT MANAGEMENT POLICIES AND PROCEDURES

Nine audit reports included findings that occurred because award recipients did not comply with, or did not document their compliance with, recipient and/or NSF program-specific policies and procedures. Many of the recipients agreed that they did not document compliance with the cited policies. We determined that most recipients would have benefited from reviewing and updating their award management practices on a regular basis, as many noted that the policies cited in the audit reports did not accurately reflect their current procedures or stated that they were already in the process of updating the cited policies and procedures.

See [Appendix II, Section E](#), for a list of the most common findings related to non-compliance with award recipient and/or NSF program-specific policies, as well as suggestions for how to improve grant management practices in this area.

CAPSTONE REPORT OBJECTIVES AND METHODOLOGY

Cotton & Company wrote this capstone report to communicate suggestions for improving the stewardship of federal funds across the NSF award recipient population and to share promising award recipient management practices, as described in [Appendix I](#).

This capstone report is not designed to represent an all-encompassing analysis of best practices for the award recipient community; instead, it highlights the most common findings identified and notes promising practices for avoiding similar findings. Accordingly, neither Cotton & Company nor the NSF OIG explicitly endorse the policies highlighted as promising practices in Appendix II. Instead, the inclusion of these references is meant solely to act as a resource for members of the recipient community when evaluating their own policies.

We performed this work under Order No. 140D0421F0607 and conducted it in accordance with the American Institute of Certified Public Accountants' (AICPA's) *Statements on Standards for Consulting Services*.

COTTON & COMPANY LLP

A handwritten signature in black ink that reads "M.P. Mesko". The letters are cursive and slightly slanted to the right.

Megan Mesko, CPA, CFE
Partner
January 10, 2022

APPENDIX I: CAPSTONE REPORT OBJECTIVES AND METHODOLOGY

CAPSTONE REPORT OBJECTIVES AND METHODOLOGY

Given that the global COVID-19 pandemic and other factors have caused unique oversight, financial administration, and operational challenges, the NSF OIG determined it was important to communicate observed best practices and common areas for improvement to the award recipient community to help improve stewardship of federal funds.

Because Cotton & Company has observed, identified, and/or cataloged the strengths and weaknesses of award recipients in 18 audit reports issued since 2018, the NSF OIG engaged us to write a report summarizing our observations. The results of each of these audits, as well as the objectives, scope, and methodologies used to complete each audit, are available for public review at the locations hyperlinked in Table 1 below.

Appendix I, Table 1: Results of Audits Considered in This Capstone Report

Report No.	Recipient
20-1-002	University of Connecticut (UConn)
20-1-005	University of Houston (UH)
20-1-007	Yale University (Yale)
21-1-002	Texas A&M University (Texas A&M)
21-1-004	University of Florida (UF)
21-1-005	University of Alaska Fairbanks (UAF)
21-1-006	University of Kentucky Research Foundation (UKRF)
21-1-009	University of New Mexico (UNM)
21-1-010	State University of New York at Stony Brook (SUNY)
21-1-011	Florida International University (FIU)
21-1-012	Florida State University (FSU)
21-1-013	University of Wisconsin – Madison (UW-Madison)
21-1-014	California Institute of Technology (Caltech)
21-1-015	University of Central Florida (UCF)
21-1-018	University of Michigan (UM)
21-1-007	Clemson University (Clemson)
21-1-020	University of California, San Francisco (UCSF)
22-1-001	University of Rhode Island EPSCoR Awards (URI)

Source: Auditor's summary of audited recipients.

This work was conducted in accordance with the AICPA's *Statements on Standards for Consulting Services*. This report is not to be construed as an all-encompassing analysis of best practices for the award recipient community; instead, it highlights general findings that would be valuable for NSF OIG to communicate to the award recipient community. Additionally, although we highlight promising practices from specific institutions in Appendix II, neither us nor the NSF OIG explicitly endorse these policies. Instead, the inclusion of these references is meant to act as a resource for members of the recipient community when evaluating their own policies.

APPENDIX II: AUDITOR SUGGESTIONS FOR IMPROVING GRANT MANAGEMENT ENVIRONMENTS

AUDITOR SUGGESTIONS FOR IMPROVING GRANT MANAGEMENT ENVIRONMENTS

To assist the award recipient community and improve its stewardship of federal funds, we identified the most common audit report findings/sub-findings (See Appendix II, Table 1), made suggestions for strengthening relevant grant management controls, and identified promising recipient grant management practices, as illustrated in Sections A through E below.

Appendix II, Table 1: Common Audit Report Findings and Sub-Findings

Common Findings	No. of Reports with Finding Type	Common Sub-Findings	No. of Reports with Sub-Finding
Unallowable Expenses	17/18	Travel	11
		Participant Support Costs	9
		Salary and Wages	8
		Materials and Supplies	8
		Fringe Benefits	5
		Publication	4
		Consultant	3
		Subawards	4
Insufficient Internal Controls For Indirect Cost Rate Application	15/18	Indirect Costs Applied Using Incorrect Rates	14
		Indirect Costs Applied to an Incorrect Base	12
Inadequately Supported Expenses	12/18	Costs Claimed in ACM\$	7
		Internal Service Providers	5
		Travel	4
		Salary and Wages	2
		Consultant	2
Inappropriately Allocated Expenses	10/18	Travel	8
		Materials and Supplies/Equipment	9
		Publication	6
		Student Stipends/Tuition Remission	5
Non-Compliance with Policies and Procedures	9/18	Non-Compliance with Award Recipient Policies	8
		Non-Compliance with NSF Program-Specific Policies	5

Source: Auditor's summary of the results of the audit reports for audits under Contract No. 140D0418A0042.

A. Continually Monitor and Verify the Allowability of High-Risk Expenses

Seventeen audit reports contained findings with questioned costs that occurred because the award recipients charged NSF awards for costs that did not appear to be allowable per [2 Code of Federal Regulations \(CFR\) § 200.403](#) or other applicable federal regulations, as cited below. Specifically, the audit reports identified the following types of unallowable costs:

1. Travel

Eleven of the audit reports included questioned costs that occurred because the award recipients charged NSF awards for travel expenses that did not appear to be allowable per [2 CFR § 200.474](#). For example, we identified the following unallowable travel costs:

i. Unjustified Upgraded Airfare Class

- Common Findings:** Award recipients often charged NSF for costs associated with upgraded airfare tickets (e.g., first class, business class) without either removing the difference between the cost of an equivalent economy-class ticket and the cost associated with the upgrade or providing a justification to support that the upgraded airfare expense was allowable per [2 CFR §200.474 \(d\)](#).
- Suggestion for Strengthening Controls:** Award recipients could require travelers with upgraded airfare tickets to provide documentation to support the cost of an equivalent economy-class ticket, thereby enabling the award recipient to remove the unallowable portion of the upgraded airfare, and/or provide a justification to support that the upgraded airfare expense was allowable.

Promising Practice

Per Texas A&M's [Travel Guidelines for Air Transportation](#), when travelers book non-standard airfare using its travel system, Concur, the system automatically creates an exception form that requires the traveler to justify the non-standard airfare.

ii. Lodging

- Common Findings:** Award recipients charged NSF for lodging costs that were unreasonable, that were associated with avoidable no-show expenses, or that did not benefit the awards charged.
- Suggestion for Strengthening Controls:** Award recipients could establish clear guidance regarding how to determine (i) whether lodging costs are reasonable, (ii) the allowability of costs associated with no-shows, and (iii) what percentage of shared travel costs are allowable on sponsored awards.

iii. Non-U.S. Flag Carriers

- Common Findings:** Award recipients charged NSF for airfare purchased from foreign airlines that had code-sharing agreements with U.S. flag carriers;

however, the airfare purchased did not relate to a code-sharing flight, as is required for the airfare to be allowable per the [Fly America Act](#).

- ***Suggestion for Strengthening Controls:*** Award recipients could implement processes for flagging airfare purchases booked using non-U.S. flag carriers. These processes could require travelers to document applicable Fly America Act exception(s) or verify that they will not charge the costs to federal awards.

Promising Practice

UConn uses a [Fly America Exception/Waiver Checklist](#) to document its determination regarding whether the traveler's use of a non-U.S. flag air carrier complies with the Fly America Act.

iv. Travel Outside Award Period of Performance

- ***Common Findings:*** Award recipients charged NSF for costs associated with travel scheduled to occur after the NSF award's period of performance had expired.
- ***Suggestion for Strengthening Controls:*** Award recipients could implement controls to flag any instances in which a traveler charges an award for airfare that includes travel dates outside of the award's period of performance.

v. Meal Expenses

- ***Common Findings:*** Award recipients charged NSF for meal expenses claimed using (i) meals & incidental expense (M&IE) per diem rates that were higher than the approved per diem rates for the location(s) visited or (ii) receipts that included costs incurred for alcoholic beverages or entertainment, which are expressly unallowable per [2 CFR § 200.423](#) and [2 CFR § 200.438](#).
- ***Suggestion for Strengthening Controls:*** Award recipients could provide personnel responsible for approving expense reports with annual training on the review process to ensure that the award recipient reimburses travelers based on the appropriate per diem rate(s) and only reimburses travelers for allowable expenses.

Promising Practice

The University of Wisconsin created an [Expense System Tutorials Reimbursement Website](#) that provides travelers with training materials that discuss how to complete expense reports and includes instructions for personnel responsible for approving the reports.

vi. Combining Business and Personal Travel

- ***Common Findings:*** Award recipients charged NSF for costs associated with personal travel and/or with travel by accompanying personnel and/or family members whose travel did not benefit the federal award charged, as required for the costs to be allowable per [2 CFR § 200.403](#).

- ***Suggestion for Strengthening Controls:*** Award recipients could require travelers to document the business purpose for each day of a planned trip prior to booking travel and evaluate what portion of the travel costs are associated with personal travel or with travel by accompanying personnel whose travel does not benefit the federal award charged.

Promising Practice

The University of Alaska's [Quick Traveler Guide](#) states that travelers must report personal travel days within the travel report header and notes that expenses accrued during or because of personal days are not reimbursable.

2. Participant Support Costs

Nine of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for expenses that were not allowable participant support costs per [2 CFR § 200.75](#). For example, the audit reports identified unallowable participant support cost expenses related to the following:

i. Non-Participant Expenses

- ***Common Findings:*** Award recipients used participant support cost funding to support employee participation at sponsored project events, obtain conference speakers, or purchase goods or services that were not specifically outlined and justified in the participant support cost budget and/or otherwise approved by NSF.

Promising Practice

UConn's [Participant Support Procedure](#) defines participant support, references NSF's policies, notes that separate accounts must be established to track and report participant support costs for each award, and emphasizes that participant support funding may not be used for other expense categories without prior written approval of the sponsor.

- ***Suggestion for Strengthening Controls:*** Award recipients could provide additional training and update their internal participant support cost policies to identify allowable uses of participant support cost funding. Further, the updated policy could note that, if the award recipient plans to use participant support cost funding to cover costs that may fall outside the [2 CFR § 200.75](#) definition of participant support costs, it should ensure those costs are justified in the budget detail (pre-award) or otherwise officially approved by the NSF Grants Officer (post-award).

ii. Re-Budgeting Without NSF Approval

- ***Common Findings:*** Award recipients used participant support cost funding to cover cost overruns in non-participant budget categories without requesting or receiving the approvals required per [NSF's Research Terms and Conditions, Appendix A: Prior Approval Matrix](#).

- ***Suggestion for Strengthening Controls:*** Award recipients could ensure that their participant support cost policies address when and how to request approval to re-budget participant support cost funding, as well as how to document that approval consistent with NSF policies.

3. Salary and Wages

Eight of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for salary expenses that were not allowable per **2 CFR § 200.430**. For example, the audit reports identified the following unallowable salary and wage expenses:

i. Effort Not Appropriately Certified

- ***Common Findings:*** Award recipients charged NSF for salary costs that employees did not certify in accordance with award recipient policies, as required for salary costs to be allowable per **2 CFR § 200.430**, as a result of processing off-cycle payroll or other manual cost transfers.
- ***Suggestion for Strengthening Controls:*** Award recipients could strengthen their controls surrounding the processing of manual payroll transactions to ensure they appropriately consider all relevant salary transactions when reviewing and certifying project-related effort, consistent with award recipient policies.

Promising Practice

Per UH's **Effort Reporting** procedures, employees with incorrect effort reports must notify the personnel responsible for processing payroll reallocations. UH will correct the payroll before generating a new effort report for the employee to certify.

ii. Salary Expenses Inconsistent with Certified Effort

- ***Common Findings:*** Award recipients charged NSF for salary costs using effort percentages that were not supported by the employee's certified effort report.
- ***Suggestion for Strengthening Controls:*** Award recipients could implement additional financial management system controls to ensure they update salary expense distributions based on the effort distributions certified within employee effort reports.

4. Materials and Supplies

Eight of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for materials and supplies that were not allowable per **2 CFR § 200.453**. For example, the audit reports identified the following unallowable material and supply expenses:

i. Purchases After Grant Expiration

- **Common Findings:** Award recipients used funds remaining after an NSF award had expired to purchase supplies they intended to use to support activities that would occur after the award's expiration.
- **Suggestion for Strengthening Controls:** Award recipients could strengthen procedures surrounding the approval of expenses charged to sponsored awards after the awards have expired.

Promising Practice

FIU's **Close Out of Sponsored Projects Procedures** states that the Principal Investigator (PI) must ensure that all project expenditures post to the project during the project performance dates, and that the PI may not charge new expenses to the project after its end date.

ii. Promotional Items

- **Common Findings:** Award recipients charged NSF for promotional supplies provided to event participants but did not include these supplies in the award budget or otherwise obtain NSF's approval.
- **Suggestion for Strengthening Controls:** Award recipients could conduct periodic reviews of costs charged to accounts established to accumulate costs of promotional and/or other advertising or public relation expenses. Further, award recipients could provide additional training to ensure that personnel responsible for charging costs to NSF projects are aware that these costs must be justified in the budget detail (pre-award) or otherwise officially approved by the NSF Grants Officer (post-award) to be allowable on an NSF grant.

5. Fringe Benefits

Five of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for fringe benefits that were not allowable per **2 CFR § 200.431**. For example, the audit reports identified the following unallowable fringe benefit expenses:

i. Fringe Benefits Applied to Expenses Not Eligible for Fringe Benefits

- **Common Findings:** Award recipients applied fringe benefit rates to participant support and/or other non-salary payments as a result of incorrectly including these payments in the salary and wage base.
- **Suggestion for Strengthening Controls:** Award recipients could strengthen the controls within their financial management systems to ensure they only apply fringe benefit rates to eligible salary and wage expenses, consistent with their federally approved Negotiated Indirect Cost Rate Agreements (NICRAs).

6. Publication Costs

Four of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for publication expenses that were not allowable per [2 CFR § 200.461](#). For example, the audit reports identified the following unallowable publication costs:

i. Publications That Did Not Reference Federal Awards

- **Common Findings:** Award recipients charged NSF for costs incurred to publish articles and research papers that did not recognize the NSF award(s) charged.
- **Suggestion for Strengthening Controls:** Award recipients could require appropriate personnel to verify that publications recognize the applicable federal awards prior to allowing personnel to charge the associated expenses to those awards.

7. Consultant Services

Three of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for consultant expenses that were not allowable per [2 CFR § 200.459](#). For example, the audit reports identified the following unallowable consultant expenses:

i. Inappropriately Procured Services

- **Common Findings:** Award recipients charged NSF for consultant expenses that the award recipients did not appropriately procure in accordance with award recipient policies and/or [2 CFR § 200.319](#).
- **Suggestion for Strengthening Controls:** Award recipients could strengthen their administrative and management controls and processes to ensure they procure goods and services consistent with all applicable award recipient and federal procurement policies.

Promising Practice

Clemson's [Subaward, Contractor, Consultant Instructions](#) note that Clemson must establish formal agreements with consultants prior to the initiation of effort. The instructions further note that Clemson must procure consultant services through the competitive bid process if the consultant is not specifically named in the proposal.

ii. Services Provided Outside of an Award's Period of Performance

- **Common Findings:** Award recipients charged NSF awards for all costs included within service agreements, including services scheduled to be provided after the award's period of performance expired.
- **Suggestion for Strengthening Controls:** Award recipients could require individuals responsible for approving service agreements to verify that the

consultant will provide all of the services charged during the award's period of performance before allowing personnel to charge the service expenses to a federal award.

8. Subawards

Four of the audit reports included findings with questioned costs that occurred because the award recipients charged NSF awards for subaward expenses that were not allowable per **2 CFR § 200.331**. Specifically, the audit reports identified the following unallowable subaward costs:

i. Transferring Award Research to Other Organizations

- ***Common Findings:*** When key personnel relocated from the audited university to another university during the award's period of performance, the audited university often issued a subaward to the university the key personnel transferred to in an effort to enable key personnel to continue performing on the grant without first requesting or receiving approval to do so from the NSF Grants Officer, per **NSF's Research Terms and Conditions Appendix A Prior Approval Matrix**.
- ***Suggestion for Strengthening Controls:*** Award recipients could establish post award procedures that require personnel to obtain the prior NSF approval using appropriate NSF electronic system(s) to submit a formal request to transfer any portion of project effort—before executing any subawards under an NSF grant.

B. Strengthen Controls Over Applying Indirect Cost Rates

Fifteen audit reports included findings with questioned costs and/or compliance findings that occurred because the award recipients did not apply indirect cost rates in a manner that was consistent with **2 CFR § 200.414** and/or other applicable guidance, as cited below. Specifically, the audit reports identified the following findings:

1. Indirect Costs Applied at Incorrect Rates

Fourteen audit reports included compliance findings that occurred because the award recipients did not have sufficient controls in place to ensure they applied indirect costs in accordance with **2 CFR 200, Appendix III, Section C.7**. For example, the audit reports determined that the award recipients had insufficient controls over indirect costs, which resulted in award recipients inappropriately applying incorrect rates, as follows:

i. Proposed Indirect Cost Rates

- ***Common Findings:*** Award recipients applied the indirect cost rates that were in effect on the date they submitted the award proposal without determining whether they needed to make adjustments to reflect the NICRA rate(s) in effect when NSF issued the award, as required by federal regulations.

- ***Suggestion for Strengthening Controls:*** Award recipients could develop and implement a control to identify when indirect cost rates change between the proposal submission date and the award date and take appropriate steps to avoid claiming unallowable (i.e., overcharging) indirect costs on awards.

Promising Practice

UH's [Sponsored Projects-Negotiated Indirect Rates website](#) provides relevant criteria, definitions, and examples to help staff determine which indirect cost rate(s) they should apply to expenditures recorded on sponsored programs.

ii. Provisional Indirect Cost Rates

- ***Common Findings:*** Award recipients that used the provisional indirect cost rates in effect as of the grant's award date often did not make adjustments to use the approved negotiated rates once the final NICRA was issued, as required by federal regulations.
- ***Suggestion for Strengthening Controls:*** Award recipients could establish clear guidance identifying the appropriate indirect cost rate(s) for sponsored projects awarded during provisional rate periods. The updated guidance could also require that award recipients make adjustments to use all negotiated rates identified in the NICRA that establishes the final rates for the period during which NSF awarded the sponsored project.

2. Indirect Cost Rate Applied to Incorrect Base

Twelve of the audit reports included findings with questioned costs that occurred because the award recipients applied indirect costs to expenses that they should have excluded from their modified total direct cost base (MTDC), per [2 CFR § 200.67](#) and the award recipients' NICRAs. For example, the audit reports identified unallowable indirect costs that occurred because the award recipient inappropriately applied indirect cost rates, as follows:

i. Equipment Expenses

- ***Common Findings:*** Award recipients applied indirect cost rates to costs incurred to purchase or ship attachments, accessories, or other auxiliary apparatuses (i.e., individual components that cost less than \$5,000 each) that the award recipient should have capitalized as part of the equipment's acquisition cost per [2 CFR § 200.2](#).

Promising Practice

UConn's Inventory [Control/Capitalization General Information Policy and Procedures](#) document states that when UConn enhances capital equipment to add additional functionality or to extend the useful life of the equipment, it must add the cost of the enhancement to the existing equipment.

- ***Suggestion for Strengthening Controls:*** Award recipients could require that personnel manually review material and supply purchases charged to federal awards to evaluate whether to account for the items as equipment. Specifically, the reviewer should consider whether the items purchased could be considered equipment per the institution's policies, are considered capital assets per **2 CFR § 200.12** and/or whether the items are necessary for the use of equipment and therefore should be capitalized as part of the equipment's acquisition cost per **2 CFR § 200.2**.

ii. Building Costs

- ***Common Findings:*** Award recipients applied indirect cost rates to expenditures incurred to make improvements, modifications, renovations, or alterations to buildings that should have been considered capital assets per **2 CFR § 200.12**, but were not because the expenditures did not meet the award recipient's building capitalization threshold.
- ***Suggestion for Strengthening Controls:*** Award recipients could perform periodic reviews of expenditures charged to facilities accounts to ensure that they capitalize expenditures incurred to make improvements, modifications, renovations, or alterations to buildings as part of the capital asset consistent with **2 CFR § 200.12**.

iii. Initial \$25,000 of Subaward Costs

- ***Common Findings:*** Award recipients did not appropriately segregate the first \$25,000 invoiced by subawardees within an account that accumulates MTDCs. As a result, they did not appropriately apply subaward expenses to the first \$25,000 invoiced by each subawardee. Specifically, award recipients (i) did not apply indirect costs to the first \$25,000 invoiced by subaward recipients and/or (ii) applied indirect costs to more than the first \$25,000 invoiced by subaward recipients that they had misclassified as vendors or consultants.
- ***Suggestion for Strengthening Controls:*** Award recipients could implement periodic reviews of expenses associated with consultants, vendors, and subawardees whose collective billings exceed \$25,000 to ensure that award recipients (i) do not misclassify subawardees as consultants or vendors and (ii) appropriately apply indirect costs to the first \$25,000 invoiced by each subawardee.

iv. Participant Support Costs

- ***Common Findings:*** Award recipients did not appropriately segregate participant support costs within accounts excluded from the MTDC base.

- ***Suggestion for Strengthening Controls:*** Award recipients could implement an annual review process in which the Principal Investigator (PI) or other designated personnel is required to review all expenses charged to awards that include funding for participant support costs and verify that the award recipient recorded all participant support costs in a unique participant support cost account that is excluded from the MTDC base.

v. Tuition Remission

- ***Common Findings:*** Award recipients erroneously charged tuition remission costs to accounts included within their MTDC base.
- ***Suggestion for Strengthening Controls:*** Award recipients could strengthen controls surrounding the charging of tuition remission costs to ensure that they accumulate tuition-related expenses within accounts that are excluded from the MTDC base.

C. Ensure Award Recipients Create and Maintain Sufficient, Appropriate Documentation

Twelve audit reports contained findings with questioned costs and/or compliance findings that occurred because award recipients did not maintain sufficient documentation to support the allowability of costs charged to NSF awards as required by [2 CFR § 200.403](#) and/or other applicable guidance, as cited below. Specifically, the audit reports often identified the following types of inadequately supported expenses:

1. Costs Claimed in NSF's ACM\$

Seven of the audit reports included findings with questioned costs that occurred because the award recipients did not have sufficient general ledger data to support all costs claimed in NSF's ACM\$ system, as required per [2 CFR § 200.302](#). For example, the audit reports included findings that occurred because the award recipients did not have sufficient documentation to support the following costs:

i. Expiring Appropriations

- ***Common Findings:*** Award recipients calculated final funding requests based on the amount of funding remaining on the award or the anticipated final award expenses, rather than limiting advance payment requests to the minimum amounts needed.
- ***Suggestion for Strengthening Controls:*** Award recipients could update their ACM\$ procedures for drawing down funds on awards with expiring appropriations to ensure personnel are validating and adequately documenting that any ACM\$ draws in excess of their actual expenses are timed to be in accordance with the actual, immediate cash requirements for carrying out the purpose of the approved program or project, in accordance with [2 CFR § 200.305\(b\)](#). For example, award recipients could request that PIs implement an

early stop spending date on awards with expiring appropriations which would allow the award recipient to accurately calculate reimbursement for actual expenses incurred before making their final ACM\$ draw on the expiring award.

ii. Credits Not Appropriately Returned

- **Common Findings:** Award recipients did not apply applicable credits to federal awards as cost reductions or cash refunds when drawing down funds in ACM\$.
- **Suggestion for Strengthening Controls:** Award recipients could update their administrative and management processes and internal control procedures surrounding the drawing down of funds in the ACM\$ system to ensure that they appropriately incorporate credits when calculating the total amount to draw down from, or return to, NSF, as required by [2 CFR § 200.406](#).

2. Internal Service Provider (ISP) Expenses

Five of the audit reports included findings with questioned costs that occurred because the award recipients did not maintain sufficient documentation to support that the costs of services provided by specialized or other service facilities were allowable per [2 CFR § 200.468](#). For example, the audit reports included the following findings:

i. ISP Rate Sheets Did Not Support the Rates the ISP Billed

- **Common Findings:** Award recipients charged NSF for goods and services that ISPs billed using rates that were not supported by formal rate schedules designed in compliance with [2 CFR § 200.468](#).
- **Suggestion for Strengthening Controls:** Award recipients could perform periodic reviews of ISP expenses charged to sponsored awards to ensure that the ISPs are billing for services using rates identified within the ISP's approved rate sheets.

ii. Insufficient Detail Included on ISP Invoices

- **Common Findings:** Award recipients charged NSF for goods and services that ISPs billed using invoices that did not contain sufficient detail to support that the ISP had appropriately billed the services in accordance with its approved rate sheets.
- **Suggestion for Strengthening Controls:** Award recipients could update their ISP invoicing processes to require that invoices identify the number of units or hours billed, as well as the rates used to calculate the invoiced amounts.

3. Travel Expenses

Four of the audit reports included findings with questioned costs that occurred because the award recipients did not maintain sufficient documentation to support that travel costs

were allowable per [2 CFR § 200.474](#). For example, the audit reports included findings that occurred because award recipients did not maintain adequate documentation to support the allowability of the following travel costs:

i. Combined Business and Personal Travel

- **Common Findings:** Award recipients did not maintain documentation to support that combining personal and business travel did not cause the travel costs to increase above the amount that the employee would have incurred had they only performed business-related travel.
- **Suggestion for Strengthening Controls:** Award recipients could develop policies and procedures outlining the requirements for documenting that a trip that combined personal and business travel did not cause the travel costs to increase above the amount that the employee would have incurred had they only performed business-related travel.

Promising Practice

UCF's [Travel Manual](#) states that travel reimbursement vouchers must require the traveler to provide a description of the business purpose of each day of a trip and that the vouchers should note "Personal" for dates and times the traveler was on personal business.

ii. Unidentified Airfare Travel Class

- **Common Findings:** Award recipients charged NSF for airfare without being able to support that the expenses represented allowable economy-class airfare.
- **Suggestion for Strengthening Controls:** Award recipients could strengthen controls surrounding the approval of expense reports to ensure that they maintain sufficient documentation to support the traveler's airfare class.

4. Salary and Wage Expenses

Two of the audit reports included findings with questioned costs that occurred because the award recipients did not maintain sufficient documentation to support that salary costs were allowable per [2 CFR § 200.430](#). For example, the audit reports included findings that occurred because the award recipients were unable to verify the allowability of the following:

i. Salary Payments Based on Hourly Rates

- **Common Findings:** Award recipients charged NSF for salaries paid to hourly employees for services performed outside of their normal duties using pay rates and/or hours that were not supported by salary agreements or timesheets.

Promising Practice

UNM created an [Extra Compensation Request Form](#) that employees must use to request salary for work performed outside of normal departmental duties.

- ***Suggestion for Strengthening Controls:*** Award recipients could strengthen controls related to establishing and documenting compensation rates and timekeeping requirements for individuals who provide services outside the scope of their regular duties to benefit sponsored projects.

5. Consultant Expenses

Two of the audit reports included findings with questioned costs that occurred because the award recipients did not maintain sufficient documentation to support that consultant costs were allowable per **2 CFR § 200.459**. For example, the audit reports included findings that occurred because the award recipients were unable to verify the allowability of the following:

i. Payments Made to Consultants Without Consulting Agreements

- ***Common Findings:*** Award recipients charged NSF for consultant costs that could not be verified as allowable because the amounts the consultant invoiced were not supported by a consulting agreement.
- ***Suggestion for Strengthening Controls:*** Award recipients could strengthen procurement and contract requirements for individuals responsible for reviewing and approving consultant expenses. For example, award recipients could require individuals to verify that a consulting agreement was appropriately documented, and require reviewers to document a comparison of the consulting contract/agreement terms and conditions to consultant invoice to support they verified the allowability of the costs invoiced by the consultant prior to payment.

D. Document and Justify Reasonable Allocation Methodologies

Ten audit reports contained findings with questioned costs and/or compliance findings that occurred because the award recipients did not create or maintain sufficient documentation to support that they had appropriately allocated the costs based on the relative benefits received, as required per **2 CFR § 200.405** and/or other applicable guidance, as cited below. Specifically, the audit reports often identified the following types of inappropriately allocated expenses:

1. Travel

Eight of the audit reports included findings with questioned costs that occurred because the award recipients did not appropriately allocate travel costs consistent with the benefits received. For example, the audit reports included findings related to the following types of inappropriately allocated travel costs:

i. Travel Benefiting Multiple Projects

- ***Common Findings:*** Award recipients charged NSF for costs incurred for employees to attend, or present papers at, conferences that benefited multiple awards, but allocated 100 percent of the travel costs to a single award.

- ***Suggestion for Strengthening Controls:*** Award recipients could develop and implement policies and procedures that define how costs should be allocated and how that allocation methodology should be documented. Further, award recipients could provide additional training to staff on how to ensure they are allocating costs in accordance with the established policy.

Promising Practice

Caltech's [Travel and Expense Guide](#) provides instructions for allocating travel expenses by percentage or by amount across multiple funding sources.

ii. Trip/Traveler/Collaborator Not Identified in Annual Reports

- ***Common Findings:*** Award recipients charged NSF for costs associated with trips, collaborators, and employees that the award recipients did not identify, either in the annual reports submitted to NSF or in other relevant documentation, to support that the individuals' travel benefited the awards charged.
- ***Suggestion for Strengthening Controls:*** Although NSF policies do not explicitly require award recipients to do so, award recipients could encourage PIs to document allocability by identifying all award-related travel within the annual reports submitted to NSF.

2. Materials and Supplies/ Equipment

Nine of the audit reports included findings with questioned costs that occurred because the award recipients did not appropriately allocate material and supplies and equipment costs consistent with the benefits received. For example, the audit reports included findings related to the following types of inappropriately allocated materials and supplies and equipment costs:

i. Purchases Near Grant Expiration

- ***Common Findings:*** Award recipients charged NSF for materials and supplies and equipment purchased near an award's expiration date when the award recipients had little to no time to use the purchases to benefit the awards.
- ***Suggestion for Strengthening Controls:*** Award recipients could implement additional procedures that require non-program personnel to review and approve material and supply expenses charged to NSF awards within the 90 days preceding the award's expiration. Specifically, the reviewer could only approve these costs if program personnel are able to provide a reasonable justification as to why the expenses should be allocable to the award considering [NSF's Post-End Date Costs policy](#).

ii. Insufficiently Documented Material Restocking Costs

- **Common Findings:** Award recipients charged NSF for costs associated with restocking general lab materials and supplies and did not have documentation to support that the quantity and types of materials restocked were consistent with the quantity and types of materials actually used to benefit the award charged.
- **Suggestion for Strengthening Controls:** Award recipients could develop and implement policies and procedures for creating, using, restocking, and charging inventoried materials to NSF grants.

iii. Inconsistently Allocated Materials and Supplies/Equipment

- **Common Findings:** When charging NSF for materials and supplies and equipment expenses, award recipients used methodologies that were not consistent with the methodologies outlined in the purchase order and/or other relevant documentation.
- **Suggestion for Strengthening Controls:** Award recipients could strengthen their administrative and management controls and processes for ensuring they allocate expenses in a manner that is consistent with the methodology outlined in the relevant supporting documentation.

3. Publication Costs

Six of the audit reports included findings with questioned costs that occurred because the award recipients did not allocate publication costs using a methodology that appeared to be reasonable and consistent with the sponsored funding sources recognized in the publication. For example, the audit reports included findings that occurred because award recipients inappropriately allocated publication costs as follows:

i. Inconsistent Number of Funding Sources Referenced

- **Common Findings:** Award recipients charged a single NSF award for 100 percent of the costs incurred to publish articles and research papers that recognized two or more sponsored funding sources.
- **Suggestion for Strengthening Controls:** Award recipients could require personnel to identify and allocate publication expenses to relevant funding sources based on a reasonable, documented methodology that is consistent with the sponsors identified in the publication before charging the expenses to the sponsored funding sources.

4. Student Stipends/Tuition

Five of the audit reports included findings with questioned costs that occurred because the award recipients did not appropriately allocate student stipends or tuition consistent with

the benefits received. For example, the audit reports included findings that occurred because award recipients inappropriately allocated stipend/tuition payments as follows:

i. Stipends/Tuition Inconsistent with Effort Certifications

- **Common Findings:** Award recipients charged a single NSF award for 100 percent of a student's stipend or tuition payment when the student certified spending effort on two or more projects during the relevant stipend/tuition period.
- **Suggestion for Strengthening Controls:** Award recipients could review all tuition and stipend payments charged to sponsored projects during each effort certification period after the students have certified their effort for the period to verify that they allocated the students' tuition and stipend expenses consistent with the students' certified effort.

E. Regularly Review and Update Grant Management Policies and Procedures

Nine audit reports included compliance findings that occurred because the award recipients did not comply with, or document their compliance with, applicable policies and procedures, as outlined in federal regulations and/or other applicable guidance, as cited below. Specifically, the audit reports identified exceptions related to the award recipients' non-compliance in the following areas:

1. Award Recipient Policies and Procedures

Eight of the audit reports included findings with questioned costs and/or compliance findings that occurred because the award recipients did not appropriately comply with, or did not document their compliance with, their internal grant management policies and procedures. For example, the audit reports included exceptions related to non-compliance with the following policies and procedures:

i. Salary and Wages

- **Common Findings:** Award recipients charged NSF for salary costs included on effort reports that the employees did not certify in accordance with the award recipients' effort reporting policies, as required by [2 CFR § 200.430](#).
- **Suggestion for Strengthening Controls:** Award recipients could implement positive and/or negative incentives, such as an inability to submit proposals or the removal of all uncertified effort from sponsored awards, for employees who do not certify their effort reports within the time period required per award recipient policies.

Promising Practice

UW-Madison implemented a [New Consequences for Failing to Complete Effort Certification](#) policy, which identifies the administrative consequences for not certifying effort within the effort certification period.

ii. Procurement

- **Common Findings:** Award recipients charged NSF for goods and services that the award recipients did not procure in accordance with their documented policies and procedures.
- **Suggestion for Strengthening Controls:** Award recipients could provide annual training to PIs and other personnel responsible for procuring goods and services charged to sponsored projects to ensure these personnel are aware of all current procurement requirements and competitive bidding thresholds.

iii. Subawards

- **Common Findings:** Award recipients approved subaward invoices without completing the forms and/or approval processes required per the award recipients' subaward policies and procedures.
- **Suggestion for Strengthening Controls:** Award recipients could strengthen their administrative and management procedures related to subaward expense processing to ensure personnel complete all required forms and approvals prior to approving subawardee invoices.

iv. Travel

- **Common Findings:** Award recipients charged NSF for travel costs associated with trips for which travelers did not complete all of the required pre-approvals and/or did not claim reimbursement consistent with award recipient policies and procedures.
- **Suggestion for Strengthening Controls:** Award recipients could conduct annual training for travelers that charge travel expenses to federally sponsored projects. This training could address how to obtain appropriate advance approvals and claim meal, lodging, and other travel costs consistent with award recipient policies.

2. NSF Program Solicitation Policies

Five of the audit reports included compliance findings that occurred because the award recipients did not appropriately comply with, or document their compliance with, NSF program-specific policies and procedures. For example, the audit reports included exceptions related to the award recipients' non-compliance with the following terms and conditions:

i. Innovation Corps (I-Corps) Awards

- **Common Findings:** Award recipients did not request approval to perform unbudgeted travel, as required by **I-Corps program solicitations**, and/or incorrectly applied a 10 percent indirect cost rate to program expenses.²
- **Suggestion for Strengthening Controls:** Award recipients could implement a control that flags all travel on I-Corps awards for further review to ensure that personnel either (i) included the travel in the award budget or (ii) obtained NSF's approval prior to undertaking unbudgeted travel, consistent with the program solicitation, and to ensure that they apply indirect costs using the rate(s) outlined in the solicitation.

ii. Graduate Research Fellowship Program (GRFP) Awards

- **Common Findings:** Award recipients charged NSF for GRFP stipends using rates that exceeded the allowable monthly stipend payment amounts set forth in the GRFP program solicitations.
- **Suggestion for Strengthening Controls:** Award recipients could implement periodic reviews of all stipend payments made on GRFP awards to ensure they appropriately calculated and distributed the stipends.

iii. Intergovernmental Personnel Act (IPA) Assignments

- **Common Findings:** Award recipients charged NSF for salary paid to employees with IPA assignments using the award recipient's base salary rate, rather than using the rate included in the employee's IPA agreement with NSF.
- **Suggestion for Strengthening Controls:** Award recipients could create formal procedures for establishing IPA assignments that ensure personnel charge NSF awards for salary costs in accordance with their approved IPA agreements, rather than in accordance with their previously established award recipient base salary.

² Award recipients often use a 10 percent indirect cost rate (e.g., \$5,000 indirect cost budget/\$50,000 total budget) instead of the appropriate 11.11 percent indirect cost rate (\$5,000 indirect cost budget/\$45,000 direct cost budget).

APPENDIX III: GLOSSARY

GLOSSARY

Fly America Act

All air travel and cargo transportation services funded by the federal government are required to use a “U.S flag” air carrier service (49. U.S.C 40118).

NSF’s Post-End Date Costs PAPPG Policy

NSF funds may not be expended subsequent to the end date of the grant, except to liquidate valid commitments that were made on or before the end date, e.g., commitment of project funds for subrecipient or contractor for services rendered during that award period but not billed to the grantee until after the grant ended. (See Chapter VIII.E.2.) Generally, the costs of equipment or materials and supplies ordered after the end date may not be charged to the project. In addition, the grantee typically should not purchase items of equipment, computing devices, or restock materials and supplies in anticipation of the end date of the grant where there is little or no time left for such items to be utilized in the actual conduct of the research. However, in accordance with 2 CFR § 200.461, Publication and Printing costs, award recipients may charge the NSF award before closeout for the costs of publication or sharing of research results, if the costs are not incurred during the period of performance of the award.

I-Corps program solicitations

- Budgetary Information
 - Cost Sharing Requirements:
 - Inclusion of voluntary committed cost sharing is prohibited.
 - Indirect Cost (F&A) Limitations:
 - Recovery of indirect costs (F&A) shall be limited to \$5,000. Each budget must include the correct indirect cost rate (i.e. $\$5,000 / \$45,000 = 11.11\%$). As such, this program does require mandatory cost sharing, and, therefore, is an exception to NSF's cost sharing policy.
 - I-Corps Teams Program Participation
 - All I-Corps team members are required to participate in the I-Corps Teams Program. This curriculum, now delivered exclusively in an online format, typically includes a Kick-off meeting with Entrepreneurial Immersion Training, a weekly training meeting and a Lessons Learned Closing Presentation. An I-Corps team includes the Entrepreneurial Lead, Technical Lead, and Industrial Mentor. More details on the I-Corps Teams Program can be found in the I-Corps Teams FAQs. Dates for upcoming cohorts will be posted on the NSF I-Corps Teams Program website.

The I-Corps Teams Program provides a real-world, hands-on, immersive learning experience to evaluate the commercial opportunity around the innovation. The main activity is customer discovery where the team "leaves the lab" to evaluate potential product-market fit and the wider business model. The team's progress in customer discovery will be shared with the entire cohort to facilitate group learning. At the end of the curriculum, teams are expected to have performed at least one hundred (100) interviews with potential customers and potential partners from their proposed target market(s) ecosystem.

NSF I-Corps teams are encouraged to travel to reach their customer discovery goals when feasible. Travel to customer discovery interviews typically does not need approval by NSF, however, teams must obtain written prior approval from their NSF I-Corps program officer for either international travel or travel to an academic conference. Additionally, teams must receive prior approval for any technical research and development (R&D) work done under the award.

2 CFR §200, Appendix III, Section C.7 Determination and Application of Indirect (F&A) Cost Rate or Rates

7. Fixed Rates for the Life of the Sponsored Agreement

- Federal agencies must use the negotiated rates except as provided in paragraph (e) of §200.414 Indirect (F&A) costs, must paragraph (b)(1) for indirect (F&A) costs in effect at the time of the initial award throughout the life of the Federal award. Award levels for Federal awards may not be adjusted in future years as a result of changes in negotiated rates. "Negotiated rates" per the rate agreement include final, fixed, and predetermined rates and exclude provisional rates. "Life" for the purpose of this subsection means each competitive segment of a project. A competitive segment is a period of years approved by the Federal awarding agency at the time of the Federal award. If negotiated rate agreements do not extend through the life of the Federal award at the time of the initial award, then the negotiated rate for the last year of the Federal award must be extended through the end of the life of the Federal award.
- Except as provided in §200.414 Indirect (F&A) costs, when an educational grantee does not have a negotiated rate with the Federal government at the time of an award (because the educational grantee is a new recipient or the parties cannot reach agreement on a rate), the provisional rate used at the time of the award must be adjusted once a rate is negotiated and approved by the cognizant agency for indirect costs.

2 CFR §200.12 Capital Assets

Capital Assets means tangible or intangible assets used in operations having a useful life of more than one year which are capitalized in accordance with GAAP. Capital assets include:

- (a) Land, buildings (facilities), equipment, and intellectual property (including software) whether acquired by purchase, construction, manufacture, lease-purchase, exchange, or through capital leases; and
- (b) Additions, improvements, modifications, replacements, rearrangements, reinstallations, renovations or alterations to capital assets that materially increase their value or useful life (not ordinary repairs and maintenance).

2 CFR §200.2 Acquisition Cost

Acquisition cost means the cost of the asset including the cost to ready the asset for its intended use. Acquisition cost for equipment, for example, means the net invoice price of the equipment, including the cost of any modifications, attachments, accessories, or auxiliary apparatus necessary to make it usable for the purpose for which it is acquired. Acquisition costs for software includes those development costs capitalized in accordance with generally accepted accounting principles (GAAP). Ancillary charges, such as taxes, duty, protective in transit insurance, freight, and installation may be included in or excluded from the acquisition cost in accordance with the non-Federal entity's regular accounting practices.

2 CFR § 200.67 Micro-purchase

Micro-purchase means a purchase of supplies or services using simplified acquisition procedures, the aggregate amount of which does not exceed the micro-purchase threshold. Micro-purchase procedures comprise a subset of a non-Federal entity's small purchase procedures. The non-Federal entity uses such procedures in order to expedite the completion of its lowest-dollar small purchase transactions and minimize the associated administrative burden and cost. The micro-purchase threshold is set by the Federal Acquisition Regulation at 48 CFR Subpart 2.1 (Definitions). It is \$3,000 except as otherwise discussed in Subpart 2.1 of that regulation, but this threshold is periodically adjusted for inflation.

200.75 Participant support costs.

Participant support costs means direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with conferences, or training projects.

2 CFR § 200.302 Financial management.

- (a) Each state must expend and account for the Federal award in accordance with state laws and procedures for expending and accounting for the state's own funds. In addition, the state's and the other non-Federal entity's financial management systems, including records documenting compliance with Federal statutes, regulations, and the terms and conditions of the Federal award, must be sufficient to permit the preparation of reports required by general and program-specific terms and conditions; and the tracing of funds to a level of expenditures adequate to

establish that such funds have been used according to the Federal statutes, regulations, and the terms and conditions of the Federal award. See also §200.450 Lobbying.

- (b) The financial management system of each non-Federal entity must provide for the following (see also §§200.333 Retention requirements for records, 200.334 Requests for transfer of records, 200.335 Methods for collection, transmission and storage of information, 200.336 Access to records, and 200.337 Restrictions on public access to records):
 - (1) Identification, in its accounts, of all Federal awards received and expended and the Federal programs under which they were received. Federal program and Federal award identification must include, as applicable, the CFDA title and number, Federal award identification number and year, name of the Federal agency, and name of the pass-through entity, if any.
 - (2) Accurate, current, and complete disclosure of the financial results of each Federal award or program in accordance with the reporting requirements set forth in §§200.327 Financial reporting and 200.328 Monitoring and reporting program performance. If a Federal awarding agency requires reporting on an accrual basis from a recipient that maintains its records on other than an accrual basis, the recipient must not be required to establish an accrual accounting system. This recipient may develop accrual data for its reports on the basis of an analysis of the documentation on hand. Similarly, a pass-through entity must not require a subrecipient to establish an accrual accounting system and must allow the subrecipient to develop accrual data for its reports on the basis of an analysis of the documentation on hand.
 - (3) Records that identify adequately the source and application of funds for federally-funded activities. These records must contain information pertaining to Federal awards, authorizations, obligations, unobligated balances, assets, expenditures, income and interest and be supported by source documentation.
 - (4) Effective control over, and accountability for, all funds, property, and other assets. The non-Federal entity must adequately safeguard all assets and assure that they are used solely for authorized purposes. See §200.303 Internal controls.
 - (5) Comparison of expenditures with budget amounts for each Federal award.
 - (6) Written procedures to implement the requirements of §200.305 Payment.
 - (7) Written procedures for determining the allowability of costs in accordance with Subpart E—Cost Principles of this part and the terms and conditions of the Federal award.

2 CFR § 200.305 Payment.

...

- (b) For non-Federal entities other than states, payments methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass-through entity and the disbursement by the non-Federal entity whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means. See also §200.302 Financial management paragraph (f). Except as noted elsewhere in this part, Federal agencies must require recipients to use only OMB-approved standard governmentwide information collection requests to request payment.

- (1) The non-Federal entity must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the non-Federal entity, and financial management systems that meet the standards for fund control and accountability as established in this part. Advance payments to a non-Federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-Federal entity in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-Federal entity for direct program or project costs and the proportionate share of any allowable indirect costs. The non-Federal entity must make timely payment to contractors in accordance with the contract provisions....

2 CFR § 200.319 Competition

- (a) All procurement transactions must be conducted in a manner providing full and open competition consistent with the standards of this section. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, and invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:
 - (1) Placing unreasonable requirements on firms in order for them to qualify to do business;
 - (2) Requiring unnecessary experience and excessive bonding;
 - (3) Noncompetitive pricing practices between firms or between affiliated companies;
 - (4) Noncompetitive pricing practices between firms or between affiliated companies;
 - (5) Organizational conflicts of interest;

(6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and

(7) Any arbitrary action in the procurement process.

(b) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state or local geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(c) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a “brand name or equivalent” description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(d) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods or services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.

2 CFR § 200.331 Requirements for pass-through entities.

All pass-through entities must: ...

(a) Ensure that every subaward is clearly identified to the subrecipient as a subaward and includes the following information at the time of the subaward and if any of these data elements change, include the changes in subsequent subaward modification. When some of this information is not available, the pass-through

entity must provide the best information available to describe the Federal award and subaward. Required information includes:

(1) Federal Award Identification.

- (i) Subrecipient name (which must match registered name in DUNS);
- (ii) Subrecipient's DUNS number (see §200.32 Data Universal Numbering System (DUNS) number);
- (iii) Federal Award Identification Number (FAIN);
- (iv) Federal Award Date (see §200.39 Federal award date);
- (v) Subaward Period of Performance Start and End Date;
- (vi) Amount of Federal Funds Obligated by this action;
- (vii) Total Amount of Federal Funds Obligated to the subrecipient;
- (viii) Total Amount of the Federal Award; (ix) Federal award project description, as required to be responsive to the Federal Funding Accountability and Transparency Act (FFATA);
- (x) Name of Federal awarding agency, pass-through entity, and contact information for awarding official,
- (xi) CFDA Number and Name; the pass-through entity must identify the dollar amount made available under each Federal award and the CFDA number at time of disbursement;
- (xii) Identification of whether the award is R&D; and (xiii) Indirect cost rate for the Federal award (including if the de minimis rate is charged per §200.414 Indirect (F&A) costs).

(2) All requirements imposed by the pass-through entity on the subrecipient so that the Federal award is used in accordance with Federal statutes, regulations and the terms and conditions of the Federal award.

(3) Any additional requirements that the pass-through entity imposes on the subrecipient in order for the pass-through entity to meet its own responsibility to the Federal awarding agency including identification of any required financial and performance reports;

(4) An approved federally recognized indirect cost rate negotiated between the subrecipient and the Federal government or, if no such rate exists, either a rate negotiated between the pass-through entity and the subrecipient (in compliance with this part), or a de minimis indirect cost rate as defined in §200.414 Indirect (F&A) costs, paragraph (b) of this part.

(5) A requirement that the subrecipient permit the pass-through entity and auditors to have access to the subrecipient's records and financial statements as necessary for the pass-through entity to meet the requirements of this section, §§200.300 Statutory and national policy requirements through 200.309 Period of performance, and Subpart F—Audit Requirements of this part; and

(6) Appropriate terms and conditions concerning closeout of the subaward.

(b) Evaluate each subrecipient's risk of noncompliance with Federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate subrecipient monitoring described in paragraph (e) of this section, which may include consideration of such factors as:

- (1) The subrecipient's prior experience with the same or similar subawards;
- (2) The results of previous audits including whether or not the subrecipient receives a Single Audit in accordance with Subpart F—Audit Requirements of this part, and the extent to which the same or similar subaward has been audited as a major program;
- (3) Whether the subrecipient has new personnel or new or substantially changed systems; and
- (4) The extent and results of Federal awarding agency monitoring (e.g., if the subrecipient also receives Federal awards directly from a Federal awarding agency).

(c) Consider imposing specific subaward conditions upon a subrecipient if appropriate as described in §200.207 Specific conditions.

(d) Monitor the activities of the subrecipient as necessary to ensure that the subaward is used for authorized purposes, in compliance with Federal statutes, regulations, and the terms and conditions of the subaward; and that subaward performance goals are achieved. Pass-through entity monitoring of the subrecipient must include:

- (1) Reviewing financial and programmatic reports required by the pass-through entity.
- (2) Following-up and ensuring that the subrecipient takes timely and appropriate action on all deficiencies pertaining to the Federal award provided to the subrecipient from the pass-through entity detected through audits, on-site reviews, and other means.
- (3) Issuing a management decision for audit findings pertaining to the Federal award provided to the subrecipient from the pass-through entity as required by §200.521 Management decision.

(e) Depending upon the pass-through entity's assessment of risk posed by the subrecipient (as described in paragraph (b) of this section), the following monitoring tools may be useful for the pass-through entity to ensure proper accountability and compliance with program requirements and achievement of performance goals:

- (1) Providing subrecipients with training and technical assistance on program-related matters; and
- (2) Performing on-site reviews of the subrecipient's program operations;

(3) Arranging for agreed-upon-procedures engagements as described in §200.425 Audit services.

(f) Verify that every subrecipient is audited as required by Subpart F— Audit Requirements of this part when it is expected that the subrecipient's Federal awards expended during the respective fiscal year equaled or exceeded the threshold set forth in §200.501 Audit requirements.

(g) Consider whether the results of the subrecipient's audits, on-site reviews, or other monitoring indicate conditions that necessitate adjustments to the pass-through entity's own records.

(h) Consider taking enforcement action against noncompliant subrecipients as described in §200.338 Remedies for noncompliance of this part and in program regulations.

2 CFR § 200.403 Factors affecting allowability of costs

Except where otherwise authorized by statute, costs must meet the following general criteria in order to be allowable under Federal awards:

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

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

(c) Be consistent with policies and procedures that apply uniformly to both federally-financed and other activities of the non-Federal entity.

(d) Be accorded consistent treatment. A cost may not be assigned to a Federal award as a direct cost if any other cost incurred for the same purpose in like circumstances has been allocated to the Federal award as an indirect cost.

(e) Be determined in accordance with generally accepted accounting principles (GAAP), except, for state and local governments and Indian tribes only, as otherwise provided for in this part.

(f) Not be included as a cost or used to meet cost sharing or matching requirements of any other federally-financed program in either the current or a prior period. See also §200.306 Cost sharing or matching paragraph (b).

(g) Be adequately documented. See also §§200.300 Statutory and national policy requirements through 200.309 Period of performance of this part.

2 CFR § 200.405 Allocable Costs

(a) 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 standards 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.
- (b) All activities which benefit from the non-Federal entity's indirect (F&A) cost, including unallowable activities and donated services by the non-Federal entity or third parties, will receive an appropriate allocation of indirect costs.
- (c) Any cost allocable to a particular Federal award under the principles provided for in this part may not be charged to other Federal awards to overcome fund deficiencies, to avoid restrictions imposed by Federal statutes, regulations, or terms and conditions of the Federal awards, or for other reasons. However, this prohibition would not preclude the non-Federal entity from shifting costs that are allowable under two or more Federal awards in accordance with existing Federal statutes, regulations, or the terms and conditions of the Federal awards.
- (d) Direct cost allocation principles. If a cost benefits two or more projects or activities in proportions that can be determined without undue effort or cost, the cost should be allocated to the projects based on the proportional benefit. If a cost benefits two or more projects or activities in proportions that cannot be determined because of the interrelationship of the work involved, then, notwithstanding paragraph (c) of this section, the costs may be allocated or transferred to benefitted projects on any reasonable documented basis. Where the purchase of equipment or other capital asset is specifically authorized under a Federal award, the costs are assignable to the Federal award regardless of the use that may be made of the equipment or other capital asset involved when no longer needed for the purpose for which it was originally required. See also §§200.310 Insurance coverage through 200.316 Property trust relationship and 200.439 Equipment and other capital expenditures.
- (e) If the contract is subject to CAS, costs must be allocated to the contract pursuant to the Cost Accounting Standards. To the extent that CAS is applicable, the allocation of costs in accordance with CAS takes precedence over the allocation provisions in this part.

2 CFR § 200.406 Applicable Credits

- (a) Applicable credits refer to those receipts or reduction-of-expenditure-type transactions that offset or reduce expense items allocable to the Federal award as direct or indirect (F&A) costs. Examples of such transactions are: purchase discounts, rebates or allowances, recoveries or indemnities on losses, insurance

refunds or rebates, and adjustments of overpayments or erroneous charges. To the extent that such credits accruing to other received by the non-Federal entity relate to allowable costs, they must be credited to the Federal award either as a cost reduction or cash refund, as appropriate.

- (b) In some instances, the amounts received from the Federal government to finance activities or service operations of the non-Federal entity should be treated as applicable credits. Specifically, the concept of netting such credit items (including any amounts used to meet cost sharing or matching requirements) should be recognized in determining the rates or amounts to be charged to the Federal award. (See §§200.436 Depreciation and 200.468 Specialized service facilities, for areas of potential application in the matter of Federal financing of activities.)

2 CFR § 200.414. Indirect (F&A) costs

- (a) *Facilities and Administration Classification.* For major IHEs and major nonprofit organizations, indirect (F&A) costs must be classified within two broad categories: “Facilities” and “Administration.” “Facilities” is defined as depreciation on buildings, equipment and capital improvement, interest on debt associated with certain buildings, equipment and capital improvements, and operations and maintenance expenses. “Administration” is defined as general administration and general expenses such as the director’s office, accounting, personnel and all other types of expenditures not listed specifically under one of the subcategories of “Facilities” (including cross allocations from other pools, where applicable). For nonprofit organizations, library expenses are included in the “Administration” category; for award recipients of higher education, they are included in the “Facilities” category. Major IHEs are defined as those required to use the Standard Format for Submission as noted in Appendix III to Part 200—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Award recipients of Higher Education (IHEs) paragraph C. 11. Major nonprofit organizations are those which receive more than \$10 million dollars in direct Federal funding.
- (b) *Diversity of nonprofit organizations.* Because of the diverse characteristics and accounting practices of nonprofit organizations, it is not possible to specify the types of cost which may be classified as indirect (F&A) cost in all situations. Identification with a Federal award rather than the nature of the goods and services involved is the determining factor in distinguishing direct from indirect (F&A) costs of Federal awards. However, typical examples of indirect (F&A) cost for many nonprofit organizations may include depreciation on buildings and equipment, the costs of operating and maintaining facilities, and general administration and general expenses, such as the salaries and expenses of executive officers, personnel administration, and accounting.
- (c) *Federal Agency Acceptance of Negotiated Indirect Rates.* (See also §200.306 Cost sharing or matching.)
 - (1) The negotiated rates must be accepted by all Federal awarding agencies. A Federal awarding agency may use a rate different from the negotiated rate for a

- class of Federal awards or a single Federal award only when required by Federal statute or regulation, or when approved by a Federal awarding agency head or delegated based on documented justification as described in paragraph (c)(3) of this section.
- (2) The Federal awarding agency head or delegate must notify OMB of any approved deviations
 - (3) The Federal awarding agency must implement, and make publicly available, the policies, procedures and general decision making criteria that their programs will follow to seek and justify deviations from negotiated rates.
 - (4) As required under §200.203 Notices of funding opportunities, the Federal awarding agency must include in the notice of funding opportunity the policies relating to indirect cost rate reimbursement, matching, or cost share as approved under paragraph (e)(1) of this section. As appropriate, the Federal agency should incorporate discussion of these policies into Federal awarding agency outreach activities with non-Federal entities prior to the posting of a notice of funding opportunity.
- (d) Pass-through entities are subject to the requirements in §200.331 Requirements for pass-through entities, paragraph (a)(4).
- (e) Requirements for development and submission of indirect (F&A) cost rate proposals and cost allocation plans are contained in Appendices III– VII as follows:
- (1) Appendix III to Part 200—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for
 - (2) Appendix IV to Part 200—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Nonprofit Organizations;
 - (3) Appendix V to Part 200—State/ Local Government and Indian Tribe-Wide Central Service Cost Allocation Plans;
 - (4) Appendix VI to Part 200—Public Assistance Cost Allocation Plans; and
 - (5) Appendix VII to Part 200—States and Local Government and Indian Tribe Indirect Cost Proposals.
- (f) In addition to the procedures outlined in the appendices in paragraph (e) of this section, any non-Federal entity that has never received a negotiated indirect cost rate, except for those non-Federal entities described in Appendix VII to Part 200—States and Local Government and Indian Tribe Indirect Cost Proposals, paragraph (d)(1)(B) may elect to charge a de minimis rate of 10% of modified total direct costs (MTDC) which may be used indefinitely. As described in §200.403 Factors affecting allowability of costs, costs must be consistently charged as either indirect or direct costs, but may not be double charged or inconsistently charged as both. If

chosen, this methodology once elected must be used consistently for all Federal awards until such time as a non-Federal entity chooses to negotiate for a rate, which the non-Federal entity may apply to do at any time.

- (g) Any non-Federal entity that has a federally negotiated indirect cost rate may apply for a one-time extension of a current negotiated indirect cost rates for a period of up to four years. This extension will be subject to the review and approval of the cognizant agency for indirect costs. If an extension is granted the non-Federal entity may not request a rate review until the extension period ends. At the end of the 4-year extension, the non-Federal entity must re-apply to negotiate a rate.

2 CFR § 200.423 Alcoholic Beverages

Costs of alcoholic beverages are unallowable.

2 CFR § 200.430 Compensation-personal services

- (a) *General.* Compensation for personal services includes all remuneration, paid currently or accrued, for services of employees rendered during the period of performance under the Federal award, including not but necessarily limited to wages and salaries. Compensation for personal services may also include fringe benefits which are addressed in §200.431 Compensation-fringe benefits. Costs of compensation are allowable to the extent that they satisfy the specific requirements of this part, and that they total compensation for individual employees:
 - (1) Is reasonable for the services rendered and conforms to the established written policy of the non-Federal entity consistently applied to both Federal and non-Federal activities:
 - (2) Follows an appointment made in accordance with a non-Federal entity's laws and/or rules or written policies and meets the requirements of Federal statute, where applicable; and
 - (3) Is determined and supported as provided in paragraph (i) of this section, Standards for Documentation of Personal Expenses, when applicable.
- (b) *Reasonableness.* Compensation for employees engaged in work on Federal awards will be considered reasonable to the extent that it is consistent with that paid for similar work in other activities of the non-Federal entity. In cases where the kinds of employees required for Federal awards are not found in the other activities of the non-Federal entity, compensation will be considered reasonable to the extent that it is comparable to that paid for similar work in the labor market in which the non-Federal entity competes for the kind of employees involved.
- (c) *Professional activities outside the non-Federal entity.* Unless an arrangement is specifically authorized by a Federal awarding agency, a non-Federal entity must follow its written non-Federal entity-wide policies and practices concerning the permissible extent of professional services that can be provided outside the non-Federal entity for non-organizational compensating. Where such non-Federal entity-

wide written policies do not exist or do not adequately define the permissible extent of consulting or other non-organizational activities undertaken for extra outside pay, the Federal government may require that the effort of professional staff on Federal awards be allocated between:

- (1) Non-Federal entity activities, and
 - (2) Non-organizational professional activities. If the Federal awarding agency considers the extent of non-organizational professional effort excessive or inconsistent with the conflict-of-interest terms and conditions of the Federal award, appropriate arrangements governing compensation will be negotiated on a case-by-case basis.
- (d) *Unallowable costs.* (1) Costs which are unallowable under other sections of these principles must not be allowable under this section solely on the basis that they constitute personnel compensation.
- (2) The allowable compensation for certain employees is subject to a ceiling in accordance with statute. For the amount of the ceiling for cost-reimbursement contracts, the covered compensation subject to the ceiling, the covered employees, and other relevant provisions, see 10 U.S.C 2324(e)(1)(P), and 41 U.S.C 1127 and 4304(a)(16). For other types of Federal awards, other statutory ceilings may apply.
- (e) *Special considerations.* Special considerations in determining allowability of compensation will be given to any change in a non-Federal entity's compensation policy resulting in a substantial increase in its employees' level of compensation (particularly when the change was concurrent with an increase in the ratio of Federal awards to other activities) or any change in the treatment of allowability of specific types of compensation due to changes in Federal policy.
- (f) *Incentive compensation.* Incentive compensation to employees based on cost reduction, or efficient performance, suggestion awards, safety awards, etc., is allowable to the extent that the overall compensation is determined to be reasonable and such costs are paid or accrued pursuant to an agreement entered into in good faith between the non-Federal entity and the employees before the services were rendered, or pursuant to an established plan followed by the non-Federal entity so consistently as to imply, in effect, an agreement to make such payment.
- (g) *Nonprofit organizations.* For compensation to members of nonprofit organizations, trustees, directors, associates, officers or the immediate families thereof, determination should be made that such compensation is reasonable for the actual personal services rendered rather than a distribution of earnings in excess of costs. This may include director's and executive committee member's fees, incentive awards, allowances for off-site pay, incentive pay, location allowances, hardship pay, and cost-of-living differentials.

(h) *Award recipients of higher education (IHE).* (1) Certain conditions require special consideration and possible limitations in determining allowable personnel compensation costs under Federal awards. Among such conditions are the following:

- i. Allowable activities. Charges to Federal awards may include reasonable amounts for activities contribution and directly related to work under an agreement, such as delivering special lectures about specific aspects of the ongoing activity, writing reports and articles, developing and maintaining protocols (human, animals, etc.), managing substances/chemicals, managing and securing project-specific data, coordinating research subjects, participating in appropriate seminars, consulting with colleagues and graduate students, and attending meetings and conferences.
- ii. Incidental activities. Incidental activities for which supplemental compensation is allowable under written grantee policy (at a rate not to exceed grantee base salary) need not be included in the records described in paragraph (h) (9) of this section to directly charge payments of incidental activities, such activities must either be specifically provided for the Federal award budget or receive prior written approval by the Federal awarding agency.

(2) *Salary basis.* Charges for work performed on Federal awards by faculty members during the academic year are allowable at the IBS rate. Except as noted in paragraph (h)(1)(ii.) of this section, in no event will charges to Federal awards, irrespective of the basis of computation, exceed the proportionate share of the IBS for that period. This principle applies to all members of faculty at a grantee. IBS is defined as the annual compensation paid by an IHE for an individual's appointment, whether that individual's time is spent on research, instruction, administration or other activities. IBS excludes any income an individual earns outside the duties performed for the IHE. Unless there is prior approval by the Federal awarding agency, charges of a faculty member's salary to a Federal award must not exceed the proportionate share of the IBS for the period during which the faculty member worked on the award.

(3) *Intra-Grantee of Higher Education (IHE) consulting.* Intra-IHE consulting by faculty is assumed to be undertaken as an IHE obligation requiring no compensation in addition to IBS. However, in unusual cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the faculty member is in addition to his or her regular responsibilities, any charges for such work representing additional compensation above IBS are allowable provided that such consulting arrangements are specifically provided for in the Federal award or approved in writing by the Federal award or approved in writing by the Federal awarding agency.

(4) *Extra Service Pay* normally represents overload compensation subject to grantee compensation policies for services above and beyond IBS. Where extra pay is a

result of Intra-IHE consulting, it is subject to the same requirements of paragraph (b) above. IT is allowable if all of the following conditions are met:

- (i) The non-Federal entity establishes consistent written policies which apply uniformly to all faculty members, not just those working on Federal awards.
- (ii) The non-Federal entity establishes a consistent written definition of work covered by IBS which is specific enough to determine conclusively when work beyond that level has occurred. This may be described in appointment letters or other documentation.
- (iii) The supplementation of amount paid is commensurate with the IBS rate of pay and the amount of additional work performed. See paragraph (h)(2) of this section.
- (iv) The salaries, as supplemented, fall within the salary structure and pay ranges established by and documented in writing or otherwise applicable to the non-Federal entity.
- (v) The total salaries charged to Federal awards including extra service pay are subject to the Standards of Documentation as described in paragraph (i) of this section.

(5) Periods outside the academic year. (i) Except as specified for teaching activity in paragraph (h)(5)(ii) of this section, charges for work performed by faculty members on Federal awards during periods not included in the base salary period will be at a rate not in excess of the IBS.

(ii) Charges for teaching activities performed by faculty members on Federal awards during periods not included in IBS period will be based on the normal written policy of the IHE governing compensation to faculty members for teaching assignments during such periods.

(6) *Part-time faculty.* Charges for work performed on Federal awards by faculty members having only part-time appointments will be determined at a rate not in excess of that regularly paid for part-time assignments.

(7) *Sabbatical leave costs.* Rules for sabbatical leave are as follows:

- i. Costs for leaves of absences by employees for performance of graduate work or sabbatical study, travel, or research are allowable provided the IHE has a uniform written policy on sabbatical leave for persons engaged in instruction and persons engaged in research. Such costs will be allocated on an equitable basis among all related activities of the IHE.
- ii. Where sabbatical leave is included in fringe benefits for which a cost is determined for assessment as a direct charge, the aggregate amount of such

assessments applicable to all work of the grantee during the base period must be reasonable in relation to the IHE's actual experience under its sabbatical leave policy.

(8) *Salary rates for non-faculty members.* Non-faculty full-time professional personnel may also earn "extra service pay" in accordance with the non-Federal entity's written policy and consistent with paragraph (h)(1)(i) of this section.

(i) *Standards for Documentation of Personnel Expenses* (1) Charges to Federal awards for salaries and wages must be based on records that accurately reflect the work performed. These records must:

(i) Be supported by a system of internal control which provides reasonable assurance that the charges are accurate, allowable, and properly allocated;

(ii) Be incorporated into the official records of the non-Federal entity;

(iii) Reasonably reflect the total activity for which the employee is compensated by the non-Federal entity, not exceeding 100% of compensated activities (for IHE, this per the IHE's definition of IBS);

(iv) Encompass both federally assisted and all other activities compensated by the non-Federal entity on an integrated basis, but may include the use of subsidiary records as defined in the non-Federal entity's written policy;

(v) Comply with the established accounting policies and practices of the non-Federal entity (See paragraph (h)(1)(ii) above for treatment of incidental work for IHEs.); and

(vi) [Reserved]

(vii) Support the distribution of the employee's salary or wages among specific activities or cost objectives if the employee works on more than one Federal award; a Federal award and non-Federal award; an indirect cost activity and a direct cost activity; two or more indirect activities which are allocated using different allocation bases; or an unallowable activity and a direct or indirect cost activity.

(viii) Budget estimates (i.e., estimates determined before the services are performed) alone do not qualify as support for charges to Federal awards, but may be used for interim accounting purposes, provided that:

(A) The system for establishing the estimates produces reasonable approximations of the activity actually performed;

(B) Significant changes in the corresponding work activity (as defined by the non-Federal entity's written policies) are identified and entered into the records in a timely manner. Short term (such as one or two months)

fluctuation between workload categories need not be considered as long as the distribution of salaries and wages is reasonable over the longer term; and

(C) The non-Federal entity's system of internal controls includes processes to review after-the-fact interim charges made to a Federal awards based on budget estimates. All necessary adjustment must be made such that the final amount charged to the Federal award is accurate, allowable, and properly allocated.

(ix) Because practices vary as to the activity constituting a full workload (for IHEs, IBS), records may reflect categories of activities expressed as a percentage distribution of total activities.

(x) It is recognized that teaching, research, service, and administration are often inextricably intermingled in an academic setting. When recording salaries and wages charged to Federal awards for IHEs, a precise assessment of factors that contribute to costs is therefore not always feasible, nor is it expected.

(2) For records which meet the standards required in paragraph (i)(1) of this section, the non-Federal entity will not be required to provide additional support or documentation for the work performed, other than that referenced in paragraph (i)(3) of this section.

(3) In accordance with Department of Labor regulations implementing the Fair Labor Standards Act (FLSA) (29 CFR part 516), charges for the salaries and wages of nonexempt employees, in addition to the supporting documentation described in this section, must also be supported by records indicating the total number of hours worked each day.

(4) Salaries and wages of employees used in meeting cost sharing or matching requirements on Federal awards must be supported in the same manner as salaries and wages claimed for reimbursement from Federal awards.

(5) For states, local governments and Indian tribes, substitute processes or systems for allocating salaries and wages to Federal awards may be used in place of or in addition to the records described in paragraph (1) if approved by the cognizant agency for indirect cost. Such systems may include, but are not limited to, random moment sampling, "rolling" time studies, case counts, or other quantifiable measures of work performed.

(i) Substitute systems which use sampling methods (primarily for Temporary Assistance for Needy Families (TANF), the Supplemental Nutrition Assistance Program (SNAP), Medicaid, and other public assistance programs) must meet acceptable statistical sampling standards including:

(A) The sampling universe must include all of the employees whose salaries and wages are to be allocated based on sample results except as provided in paragraph (i)(5)(iii) of this section;

(B) The entire time period involved must be covered by the sample; and

(C) The results must be statistically valid and applied to the period being sampled.

(ii) Allocating charges for the sampled employees' supervisors, clerical and support staffs, based on the results of the sampled employees, will be acceptable.

(iii) Less than full compliance with the statistical sampling standards noted in subsection (5)(i) may be accepted by the cognizant agency for indirect costs if it concludes that the amounts to be allocated to Federal awards will be minimal, or if it concludes that the system proposed by the non-Federal entity will result in lower costs to Federal awards than a system which complies with the standards.

(6) Cognizant agencies for indirect costs are encouraged to approve alternative proposals based on outcomes and milestones for program performance where these are clearly documented. Where approved by the Federal cognizant agency for indirect costs, these plans are acceptable as an alternative to the requirements of paragraph (i)(1) of this section.

(7) For Federal awards of similar purpose activity or instances of approved blended funding, a non-Federal entity may submit performance plans that incorporate funds from multiple Federal awards and account for their combined use based on performance-oriented metrics, provided that such plans are approved in advance by all involved Federal awarding agencies. In these instances, the non-Federal entity must submit a request for waiver of the requirements based on documentation that describes the method of charging costs, relates the charging of costs to the specific activity that is applicable to all fund sources, and is based on quantifiable measures of the activity in relation to time charged.

(8) For a non-Federal entity where the records do not meet the standards described in this section, the Federal government may require personnel activity reports, including prescribed certifications, or equivalent documentation that support the records as required in this section.

2 CFR §200.431 Compensation-fringe benefits

(a) Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe

benefits include, but are not limited to, the costs of leave (vacation, family-related, sick or military), employee insurance, pensions, and unemployment benefit plans. Except as provided elsewhere in these principles, the costs of fringe benefits are allowable provided that the benefits are reasonable and are required by law, non-Federal entity-employee agreement, or an established policy of the non-Federal entity.

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

- (1) They are provided under established written leave policies;
- (2) The costs are equitably allocated to all related activities, including Federal awards; and,
- (3) The accounting basis (cash or accrual) selected for costing each type of leave is consistently followed by the non-Federal entity or specified grouping of employees.
 - i. When a non-Federal entity uses the cash basis of accounting, the cost of leave is recognized in the period that the leave is taken and paid for. Payments for unused leave when an employee retires or terminates employment are allowable as indirect costs in the year of payment.
 - ii. The accrual basis may be only used for those types of leave for which a liability as defined by GAAP exists when the leave is earned. When a non-Federal entity uses the accrual basis of accounting, allowable leave costs are the lesser of the amount accrued or funded.

(c) The cost of fringe benefits in the form of employer contributions or expenses for social security; employee life, health, unemployment, and worker's compensation insurance (except as indicated in §200.447 Insurance and indemnification); pension plan costs (see paragraph (i) of this section); and other similar benefits are allowable, provided such benefits are granted under established written policies. Such benefits, must be allocated to Federal awards and all other activities in a manner consistent with the pattern of benefits attributable to the individuals or group(s) of employees whose salaries and wages are chargeable to such Federal awards and other activities, and charged as direct or indirect costs in accordance with the non-Federal entity's accounting practices.

(d) Fringe benefits may be assigned to cost objectives by identifying specific benefits to specific individual employees or by allocating on the basis of entity-wide salaries and wages of the employees receiving the benefits. When the allocation method is used, separate allocations must be made to selective groupings of employees, unless

the non-Federal entity demonstrates that costs in relationship to salaries and wages do not differ significantly for different groups of employees.

(e) *Insurance*. See also §200.447 Insurance and indemnification, paragraphs (d)(1) and (2).

1. Provisions for a reserve under a self-insurance program for unemployment compensation or workers' compensation are allowable to the extent that the provisions represent reasonable estimates of the liabilities for such compensation, and the types of coverage, extent of coverage, and rates and premiums would have been allowable had insurance been purchased to cover the risks. However, provisions for self-insured liabilities which do not become payable for more than one year after the provision is made must not exceed the present value of the liability.
2. Costs of insurance on the lives of trustees, officers, or other employees holding positions of similar responsibility are allowable only to the extent that the insurance represents additional compensation. The costs of such insurance when the non-Federal entity is named as beneficiary are unallowable.
3. Actual claims paid to or on behalf of employees or former employees for workers' compensation, unemployment compensation, severance pay, and similar employee benefits (e.g., post-retirement health benefits), are allowable in the year of payment provided that the non-Federal entity follows a consistent costing policy and they are allocated as indirect costs.

(f) *Automobiles*. That portion of automobile costs furnished by the entity that relates to personal use by employees (including transportation to and from work) is unallowable as fringe benefit or indirect (F&A) costs regardless of whether the cost is reported as taxable income to the employees.

(g) *Pension Plan Costs*. Pension plan costs which are incurred in accordance with the established policies of the non-Federal entity are allowable, provided that:

1. Such policies meet the test of reasonableness.
2. The methods of cost allocation are not discriminatory.
3. For entities using accrual based accounting, the cost assigned to each fiscal year is determined in accordance with GAAP.
4. The costs assigned to a given fiscal year are funded for all plan participants within six months after the end of that year. However, increases to normal and past service pension costs caused by a delay in funding the actuarial liability beyond 30 calendar days after each quarter of the year to which such costs are assignable are unallowable. Non-Federal entity may elect to follow

the “Cost Accounting Standard for Composition and Measurement of Pension Costs” (48 CFR 9904.412).

5. Pension plan termination insurance premiums paid pursuant to the Employee Retirement Income Security Act (ERISA) of 1974 (29 U.S.C. 1301–1461) are allowable. Late payment charges on such premiums are unallowable. Excise taxes on accumulated funding deficiencies and other penalties imposed under ERISA are unallowable.
6. Pension plan costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with established written policies of the non-Federal entity.
 - i. For pension plans financed on a pay-as-you-go method, allowable costs will be limited to those representing actual payments to retirees or their beneficiaries.
 - ii. Pension costs calculated using an actuarial cost-based method recognized by GAAP are allowable for a given fiscal year if they are funded for that year within six months after the end of that year. Costs funded after the six month period (or a later period agreed to by the cognizant agency for indirect costs) are allowable in the year funded. The cognizant agency for indirect costs may agree to an extension of the six month period if an appropriate adjustment is made to compensate for the timing of the charges to the Federal government and related Federal reimbursement and the non-Federal entity’s contribution to the pension fund. Adjustments may be made by cash refund or other equitable procedures to compensate the Federal government for the time value of Federal reimbursements in excess of contributions to the pension fund.
 - iii. Amounts funded by the non-Federal entity in excess of the actuarially determined amount for a fiscal year may be used as the non-Federal entity’s contribution in future periods.
 - iv. When a non-Federal entity converts to an acceptable actuarial cost method, as defined by GAAP, and funds pension costs in accordance with this method, the unfunded liability at the time of conversion is allowable if amortized over a period of years in accordance with GAAP.
 - v. The Federal government must receive an equitable share of any previously allowed pension costs (including earnings thereon) which revert or inure to the non-Federal entity in the form of a refund, withdrawal, or other credit.

(h) *Post-Retirement Health.* Post-retirement health plans (PRHP) refers to costs of health insurance or health services not included in a pension plan covered by paragraph (g) of this section for retirees and their spouses, dependents, and survivors. PRHP costs may be computed using a pay-as-you-go method or an acceptable actuarial cost method in accordance with established written policies of the non-Federal entity.

1. For PRHP financed on a pay-as-you-go method, allowable costs will be limited to those representing actual payments to retirees or their beneficiaries.
2. PRHP costs calculated using an actuarial cost method recognized by GAAP are allowable if they are funded for that year within six months after the end of that year. Costs funded after the six month period (or a later period agreed to by the cognizant agency) are allowable in the year funded. The Federal cognizant agency for indirect costs may agree to an extension of the six month period if an appropriate adjustment is made to compensate for the timing of the charges to the Federal government and related Federal reimbursements and the non-Federal entity's contributions to the PRHP fund. Adjustments may be made by cash refund, reduction in current year's PRHP costs, or other equitable procedures to compensate the Federal government for the time value of Federal reimbursements in excess of contributions to the PRHP fund.
3. Amounts funded in excess of the actuarially determined amount for a fiscal year may be used as the Federal government's contribution in a future period.
4. When a non-Federal entity converts to an acceptable actuarial cost method and funds PRHP costs in accordance with this method, the initial unfunded liability attributable to prior years is allowable if amortized over a period of years in accordance with GAAP, or, if no such GAAP period exists, over a period negotiated with the cognizant agency for indirect costs.
5. To be allowable in the current year, the PRHP costs must be paid either to:
 - i. An insurer or other benefit provider as current year costs or premiums, or
 - ii. An insurer or trustee to maintain a trust fund or reserve for the sole purpose of providing post-retirement benefits to retirees and other beneficiaries.
6. The Federal government must receive an equitable share of any amounts of previously allowed post-retirement benefit costs (including earnings

thereon) which revert or inure to the entity in the form of a refund, withdrawal, or other credit.

- (i) *Severance Pay.* (1) Severance pay, also commonly referred to as dismissal wages, is a payment in addition to regular salaries and wages, by non-Federal entities to workers whose employment is being terminated. Costs of severance pay are allowable only to the extent that in each case, it is required by (a) law, (b) employer-employee agreement, (c) established policy that constitutes, in effect, an implied agreement on the non-Federal entity's part, or (d) circumstances of the particular employment.
 - (2) Costs of severance payments are divided into two categories as follows: (i) Actual normal turnover severance payments must be allocated to all activities; or, where the non-Federal entity provides for a reserve for normal severances, such method will be acceptable if the charge to current operations is reasonable in light of payments actually made for normal severances over a representative past period, and if amounts charged are allocated to all activities of the non-Federal entity.
 - (ii) Measurement of costs of abnormal or mass severance pay by means of an accrual will not achieve equity to both parties. Thus, accruals for this purpose are not allowable. However, the Federal government recognizes its obligation to participate, to the extent of its fair share, in any specific payment. Prior approval by the Federal awarding agency or cognizant agency for indirect cost, as appropriate, is required.
 - (3) Costs incurred in certain severance pay packages which are in an amount in excess of the normal severance pay paid by the non-Federal entity to an employee upon termination of employment and are paid to the employee contingent upon a change in management control over, or ownership of, the non-Federal entity's assets, are unallowable.
 - (4) Severance payments to foreign nationals employed by the non-Federal entity outside the United States, to the extent that the amount exceeds the customary or prevailing practices for the non-Federal entity in the United States, are unallowable, unless they are necessary for the performance of Federal programs and approved by the Federal awarding agency.
 - (5) Severance payments to foreign nationals employed by the non-Federal entity outside the United States due to the termination of the foreign national as a result of the closing of, or curtailment of activities by, the non-Federal entity in that country, are unallowable, unless they are necessary for the performance of Federal programs and approved by the Federal awarding agency.
- (j) (1) *For IHEs only.* Fringe benefits in the form of tuition or remission of tuition for individual employees are allowable, provided such benefits are granted in accordance with established non-Federal entity policies, and are distributed to all

non-Federal entity activities on an equitable basis. Tuition benefits for family members other than the employee are unallowable.

(2) Fringe benefits in the form of tuition or remission of tuition for individual employees not employed by IHEs are limited to the tax-free amount allowed per section 127 of the Internal Revenue Code as amended.

(3) IHEs may offer employees tuition waivers or tuition reductions for undergraduate education under IRC Section 117(d) as amended, provided that the benefit does not discriminate in favor of highly compensated employees. Federal reimbursement of tuition or remission of tuition is also limited to the grantee for which the employee works. See §200.466 Scholarships and student aid costs, for treatment of tuition remission provided to students.

(k) For IHEs whose costs are paid by state or local governments, fringe benefit programs (such as pension costs and FICA) and any other benefits costs specifically incurred on behalf of, and in direct benefit to, the non-Federal entity, are allowable costs of such non-Federal entities whether or not these costs are recorded in the accounting records of the non-Federal entities, subject to the following:

- (1) The costs meet the requirements of Basic Considerations in §§200.402 Composition of costs through 200.411 Adjustment of previously negotiated indirect (F&A) cost rates containing unallowable costs of this subpart;
- (2) The costs are properly supported by approved cost allocation plans in accordance with applicable Federal cost accounting principles; and
- (3) The costs are not otherwise borne directly or indirectly by the Federal government.

2 CFR § 200.438 Entertainment costs

Costs of entertainment, including amusement, diversion, and social activities and any associated costs are unallowable, except where specific costs that might otherwise be considered entertainment have a programmatic purpose and are authorized either in the approved budget for the Federal award or with prior written approval of the Federal awarding agency.

2 CFR § 200.453 Materials and supplies costs, including costs of computing devices

- (a) Costs incurred for materials, supplies, and fabricated parts necessary to carry out a Federal award are allowable.
- (b) Purchased materials and supplies must be charged at their actual prices, net of applicable credits. Withdrawals from general stores or stockrooms should be charged at their actual net cost under any recognized method of pricing inventory withdrawals, consistently applied. Incoming transportation charges are a proper part of materials and supplies costs.

- (c) Materials and supplies used for the performance of a federal award may be charged as direct costs. In the specific case of computing devices, charging as direct costs is allowable, but not solely dedicated, to the performance of a Federal award.
- (d) Where federally-donated or furnished materials are used in performing the Federal award, such materials will be used without charge.

2 CFR 200.459 Professional service costs

- (a) Costs of professional and consultant services rendered by persons who are members of a particular profession or possess a special skill, and who are not officers or employees of the non-Federal entity, are allowable, subject to paragraphs (b) and (c) when reasonable in relation to the services rendered and when not contingent upon recovery of the costs from the Federal government. In addition, legal and related services are limited under §200.435 Defense and prosecution of criminal and civil proceedings, claims, appeals and patent infringements.
- (b) In determining the allowability of costs in a particular case, no single factor or any special combination of factors is necessarily determinative. However, the following factors are relevant:
 - (1) The nature and scope of the service rendered in relation to the service required.
 - (2) The necessity of contracting for the service, considering the non-Federal entity's capability in the particular area.
 - (3) The past pattern of such costs, particularly in the years prior to Federal awards.
 - (4) The impact of Federal awards on the non-Federal entity's business (i.e., what new problems have arisen).
 - (5) Whether the proportion of Federal work to the non-Federal entity's total business is such as to influence the non-Federal entity in favor of incurring the cost, particularly where the services rendered are not of a continuing nature and have little relationship to work under Federal awards.
 - (6) Whether the service can be performed more economically by direct employment rather than contracting.
 - (7) The qualifications of the individual or concern rendering the service and the customary fees charged, especially on non-federally funded activities.
 - (8) Adequacy of the contractual agreement for the service (e.g., description of the service, estimate of time required, rate of compensation, and termination provisions).

- (c) In addition to the factors in paragraph (b) of this section, to be allowable, retainer fees must be supported by evidence of bona fide services available or rendered.

2 CFR § 200.461 Publication and Printing Costs

- (a) Publication costs for electronic and print media, including distribution, promotion, and general handling are allowable. IF these costs are not identifiable with a particular cost objective, they should be allocated as indirect costs to all benefiting activities of the non-Federal entity.
- (b) Page charges for professional journal publications are allowable where:
 - (1) The publications report work supported by the Federal government; and
 - (2) The charges are levied impartially on all items published by the journal, whether or not under a Federal award.
 - (3) The non-Federal entity may charge the Federal award before close-out for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the Federal award.

2 CFR § 200.468 Specialized Service Facilities

- (a) The costs of services provided by highly complex or specialized facilities operated by the non-Federal entity, such as computing facilities, wind tunnels, and reactors are allowable, provided the charges for the services meet the conditions of either paragraphs (b) or (c) in this section, and, in addition, take into account any items of income or Federal financing that qualify as applicable credits under §200.406 Applicable credits.
- (b) The costs of such services, when material, must be charged directly to applicable awards based on the basis of a schedule of rates or established methodology that:
 - (1) Does not discriminate between activities under Federal awards and other activities of the non-Federal entity, including usage by the non-Federal entity for internal purposes, and
 - (2) Is designed to recover only the aggregate costs of the services. The costs of each service must consist normally of both its direct costs and its allocable share of all indirect (F&A) costs. Rates must be adjusted at least biennially, and must take into consideration over/under applied costs of the previous period(s).
- (c) Where the costs incurred for a service are not material, they may be allocated as indirect (F&A) costs.
- (d) Under some extraordinary circumstances, where it is in the best interest of the Federal government and the non-Federal entity to establish alternative costing arrangements, such arrangements may be worked out with the Federal cognizant agency for indirect costs.

2 CFR § 200.474 Travel Costs

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

(b) Lodging and subsistence. Costs incurred by employees and officers for travel, including costs of lodging, other subsistence, and incidental expenses, must be considered reasonable and otherwise allowable only to the extent such costs do not exceed charges normally allowed by the non-Federal entity in its regular operations as the result of the non-Federal entity's written travel policy. In addition, if these costs are charged directly to the Federal award documentation must justify that: (1) Participation of the individual is necessary to the Federal award; and (2) The costs are reasonable and consistent with non-Federal entity's established travel policy.

(c) (1) Temporary dependent care costs (as dependent is defined in 26 U.S.C. 152) above and beyond regular dependent care that directly results from travel to conferences is allowable provided that: (i) The costs are a direct result of the individual's travel for the Federal award; (ii) The costs are consistent with the non-Federal entity's documented travel policy for all entity travel; and (iii) Are only temporary during the travel period. (2) Travel costs for dependents are unallowable, except for travel of duration of six months or more with prior approval of the Federal awarding agency. See also §200.432 Conferences. (3) In the absence of an acceptable, written non-Federal entity policy regarding travel costs, the rates and amounts established under 5 U.S.C. 5701–11, ("Travel and Subsistence Expenses; Mileage Allowances"), or by the Administrator of General Services, or by the President (or his or her designee) pursuant to any provisions of such subchapter must apply to travel under Federal awards (48 CFR 31.205– 46(a)).

(d) Commercial air travel. (1) Airfare costs in excess of the basic least expensive unrestricted accommodations class offered by commercial airlines are unallowable except when such accommodations would: (i) Require circuitous routing; (ii) Require travel during unreasonable hours; (iii) Excessively prolong travel; (iv) Result in additional costs that would offset the transportation savings; or (v) Offer accommodations not reasonably adequate for the traveler's medical needs. The non-Federal entity must justify and document these conditions on a case-by-case basis in order for the use of first-class or business class airfare to be allowable in such cases. (2) Unless a pattern of avoidance is detected, the Federal government will generally not question a non-Federal entity's determinations that customary standard airfare or other discount airfare is unavailable for

specific trips if the non-Federal entity can demonstrate that such airfare was not available in the specific case.

(e) Air travel by other than commercial carrier. Costs of travel by non-Federal entity-owned, -leased, or -chartered aircraft include the cost of lease, charter, operation (including personnel costs), maintenance, depreciation, insurance, and other related costs. The portion of such costs that exceeds the cost of airfare as provided for in paragraph (d) of this section, is unallowable.



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