# NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard ARLINGTON, VIRGINIA 22230



#### **MEMORANDUM**

Date: March 25, 2009

To: Mary F. Santonastasso

Division Director, Division of Institution and Award Support

(BFA/DIAS)

Karen Tiplady

Division Director, Division of Grants and Agreements (BFA/DGA)

From: Michael R. Kuklok /s/

Senior Audit Manager

Subject: NSF OIG Report Number 09-1-006

Audit of Effort Reporting System, University of Arizona

Attached is the final report prepared by Williams Adley & Company, LLP, an independent public accounting firm, on the audit of the payroll distribution and effort reporting system used by the University of Arizona to support salary and wages charged to NSF grants. The University's comments to the draft report have been summarized after the recommendations for each audit finding and the auditor's response has been provided to these comments. The full text of the University's comments is included as Appendix A to the audit report.

The audit found that the University generally has a well established Federal grants management program. However, because the University, prior to FY 2008, did not place sufficient emphasis on effort reporting, Arizona needs to improve its internal controls to ensure proper implementation and oversight of its labor effort reporting system. Without appropriate controls for certifying labor effort reports, Arizona has less assurance that the certifications are reliable and reasonably support salaries and wages charged to NSF's sponsored projects. In addition, weak internal controls lead to NSF paying \$16,584 in excessive salaries, fringe benefits and overhead due to faculty exceeding NSF summer salary limitations. The University also had not conducted an independent internal evaluation of the effort reporting system since the system was changed to an electronic format in 1992.

We consider Arizona's internal control procedural weaknesses identified in the audit findings to be significant. Accordingly, we request that your office work with the University and

the cognizant audit agency, the Department of Health and Human Services (DHHS), to develop a written Corrective Action Plan detailing specific actions taken and/or planned to address each audit recommendation. Milestone dates should be provided for corrective actions not yet completed.

To help ensure the recommendations are resolved within six months of issuance of the audit report pursuant to Office of Management and Budget Circular A-50, please coordinate the development of the Corrective Action Plan with our office during the resolution period. Each audit recommendation should not be closed until NSF, in coordination with DHHS, determines that Arizona has adequately addressed the recommendation and proposed corrective actions have been satisfactorily implemented. Please note that we have sent a copy of the audit report under separate cover to Jon D. Crowder of DHHS-OIG.

## OIG Oversight of Audit

To fulfill our responsibilities under Generally Accepted Government Auditing Standards, the Office of Inspector General:

- Provided a detailed audit program for the agreed upon procedures review and ensured Williams Adley's approach and planning for the audit was appropriate;
- Evaluated the qualifications and independence of the auditors;
- Monitored progress of the audit at key points by accompanying Williams Adley auditors onsite at the grantee;
- Coordinated periodic meetings with Williams Adley and OIG management to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by Williams Adley, to ensure compliance with Generally Accepted Government Auditing Standards and the NSF Audit Program; and
- Coordinated issuance of the audit report.

Williams Adley & Company, LLP is responsible for the attached audit report on Arizona's payroll distribution and effort reporting system and the conclusions expressed in the audit report. The NSF OIG does not express an opinion on the audit report's conclusions.

We appreciate the cooperation that was extended to us during our review. If you have any questions, please feel free to call me at 703-292-4975 or Jerel Silver at 703-292-8461.

#### Enclosure

cc: Gilbert Tran, Technical Manager, Office of Management and Budget Thomas Cooley, Director and Chief Financial Officer, BFA/OAD Alexander Wynnyk, Branch Chief, BFA/DIAS Charles Zeigler, Special Assistant, BFA/DIA

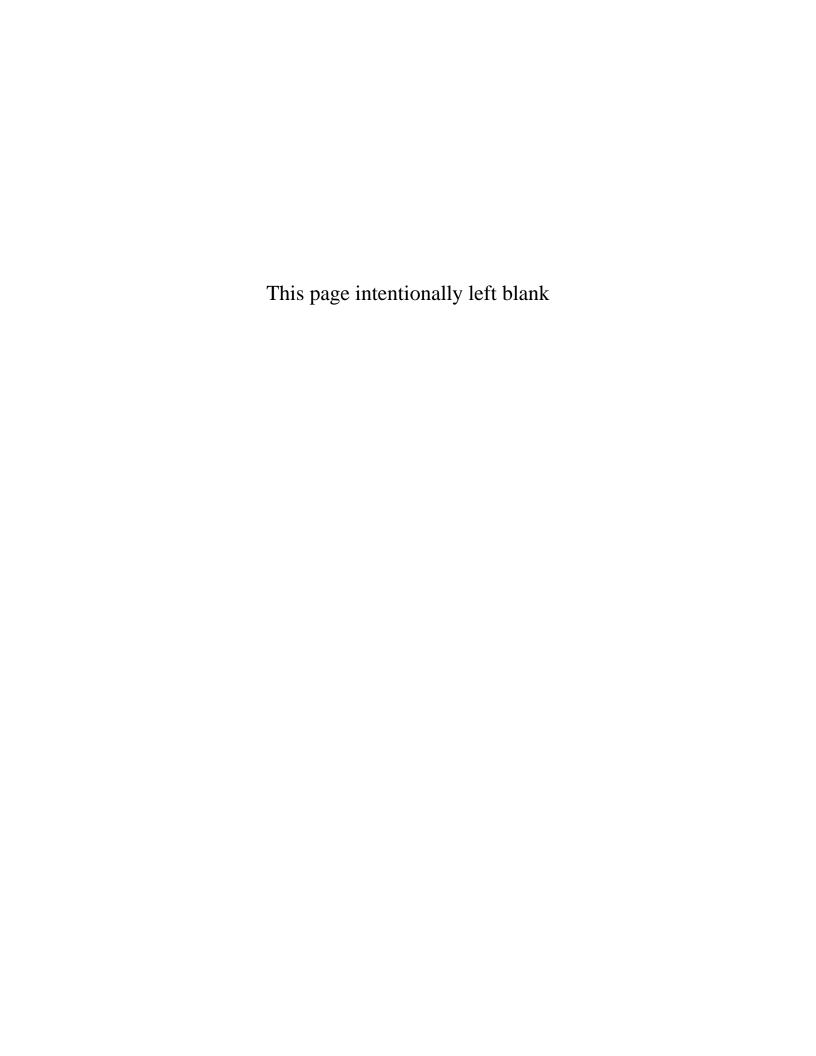
## **Audit of Effort Reporting System**

## University of Arizona Tucson, Arizona

**National Science Foundation Office of Inspector General** 

> March 25, 2009 NSF OIG 09-1-006

Audit Performed by: Williams, Adley & Company, LLP 1250 H Street N.W., Suite 1150 Washington, DC 20005



## **Executive Summary**

This audit report provides the results of our review of the effort reporting system used by the University of Arizona (Arizona) to support salaries and wages charged to National Science Foundation (NSF) awards. In fiscal year 2007, Arizona had total Federal sponsored projects of approximately \$330.6 million, of which \$47.2 million or 14 percent were funded by NSF. Of this amount, over \$12.8 million or 27 percent were for labor costs directly charged to NSF awards. This audit is one of a series of Office of Inspector General (OIG) reviews of the labor effort distribution systems being conducted at NSF's top-funded universities to assess the adequacy of internal controls to ensure salary and wage costs claimed on NSF grants are properly managed, accounted for, and monitored.

Our review disclosed that Arizona generally has a well established Federal grants management program. However, the audit disclosed several internal control weaknesses that Arizona needs to correct to ensure proper implementation and oversight of its effort reporting system. Our review of 30 sampled employees, with total FY 2007 NSF salary charges of \$724,186, found that the effort reporting system did not ensure salaries and wages charged to NSF awards reasonably reflected actual work performed on the sponsored projects. Specifically, we determined Arizona did not meet Federal requirements for providing a suitable means of verification that the work was actually performed when certifying labor effort reports for NSF grants. We also identified system weaknesses that allowed faculty to exceed NSF summer salary limitations. Further, Arizona did not have an independent internal evaluation of the effort reporting system since it changed to an electronic format in 1992. Finally, we identified several other system weaknesses over cost sharing, faculty effort estimation when no faculty commitments were made to a sponsored project, and the establishment of a precision range for correction of labor effort variances.

As a result, Arizona provides less assurance to Federal sponsoring agencies that effort reports are reliable in reasonably supporting salaries and wages charged to sponsored projects. Specifically, Arizona department administrative officials improperly certified 770 of 780 effort reports, supporting \$709,520 (98%) of FY 2007 NSF salary charges reviewed and overcharged NSF \$16,584 in salary, fringe benefits and overhead by exceeding NSF compensation policies. The nature of these control weaknesses raises concerns about the reasonableness and allowability of the remaining \$12.1 million of FY 2007 labor charges to NSF grants, and could affect the reliability of the salary portion of Arizona's other \$283.4 million of Federal awards.

These weaknesses occurred because Arizona, prior to FY 2008, did not place sufficient emphasis on effort reporting. Specifically, Arizona had not (i) established sufficient detailed written guidance for all effort reporting processes to ensure full compliance with Federal requirements, (ii) performed adequate monitoring to ensure all Arizona departments complied with established effort reporting policies and procedures,

and (iii) ensured cognizant personnel received adequate training on their effort reporting responsibilities.

Arizona is in the process of implementing a new financial management system scheduled to be operational in calendar year 2010 and implemented an interim effort reporting system in FY 2008. Arizona has recognized the weaknesses identified in the report. The recommendations, made in this report, take this into consideration by reminding Arizona of the importance of ensuring the new system has the capabilities and controls needed to correct these weaknesses.

Our recommendations were primarily directed toward enhancing the University's centralized oversight of the labor effort reporting system by (i) updating and revising policies to fully comply with Federal regulations, (ii) providing adequate oversight of the effort reporting process and (iii) providing employee training to ensure cognizant department and academic staff fully understand their effort reporting responsibilities so that established procedures are accurately and consistently implemented. Finally, we recommended that Arizona resolve the \$16,584 in questioned salary, fringe benefits and overhead.

A draft audit report requesting comments on the findings and recommendations was issued to the University of Arizona. The University concurred with the findings and recommendations and stated that they revised or plan to revise various policies and procedures, implemented and improved its paper-based interim Effort Reporting System which began in January 2008 and plans to implement an electronic Effort Reporting System in calendar year 2010. The University also said they hired a Financial Compliance Coordinator to oversee the entire effort reporting process to ensure departments appropriately certify effort reports and they removed the questioned costs to a non-sponsored account.

Arizona's responses, once implemented, should address our audit recommendations. NSF should work with the cognizant audit agency and/or Arizona to ensure the University develops an acceptable corrective action plan to resolve each audit recommendation. We have summarized Arizona's responses and provided our comments after each recommendation in the report. We also included Arizona's response to our draft report in its entirety as Appendix A.

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ACRONYM	$\mathbf{S}$	
NSF	National Science Foundation	
PI	Principal Investigator	
OIG	Office of Inspector General	
OMB	U.S. Office of Management and Budget	
OTR	On Line Time Roster	
SPS	Sponsored Projects Services	

## **INTRODUCTION**

#### BACKGROUND

Approximately one third of the National Science Foundation (NSF) award funds are provided for salaries and wages, amounting to about \$1.3 billion annually at universities. Also, in recent years, there have been several civil settlements involving overcharges of labor costs to Federal grants, amounting to millions of dollars at several major universities, including some funded by NSF. Because of these legal actions and the material amounts of labor costs paid from NSF awards, the Office of Inspector General (OIG) is undertaking a series of reviews of the labor effort distribution systems at NSF's top-funded universities in order to assess the adequacy of internal controls to ensure salary and wage costs claimed on NSF grants are properly managed, accounted for, and monitored. This audit, involving the University of Arizona, is one of the planned reviews of such labor effort distribution systems.

The University of Arizona (Arizona) is a premier, student-centered research institution. It was established in 1885 as the first university in the Arizona Territory and Arizona's only land grant institution. Arizona's fundamental missions are teaching, research, and public service. The University has become one of the nation's top 20 public research institutions with premier programs in optics, water research, and astronomy. Arizona offers 334 fields of study at the bachelor, masters, doctoral, and first professional level and has 18 colleges and 12 schools located on the 378 acre campus. The University has over 36,000 students and 14,000 employees.

The University derives the majority of its funding from sponsored research projects, student tuition, and state subsidies. For FY 2007, the University received \$422.1 million in grants and contracts which included approximately \$330.6 million, or 78 percent, from the Federal government. Approximately \$47.2 million, or 14 percent, of the Federally-sponsored project awards were provided by NSF.

Within the Arizona Office of the Vice President for Research, Graduate Studies, and Economic Development, the Sponsored Projects Services (SPS) is responsible for the management and oversight of Federal grant programs. Primarily, SPS provides preaward and post-award administrative services for sponsored programs. SPS develops Arizona policies and procedures for Federal grants management and is charged with implementing appropriate training programs. Within Arizona Business Affairs, the Financial Services Office is responsible for the overall internal controls over the University's financial activities while Systems Control is responsible for compiling, generating, and maintaining effort reports.

Senior administrative officials located within each academic department are tasked with the management and oversight of sponsored projects to ensure compliance with Federal and University policies and procedures. They typically assist and advise faculty members on Federal grants management and review financial information to ensure that award accounts and budgets are created accurately in the University's financial system,

award expenditures are monitored on a monthly basis, and charges to Federal awards are appropriate. Principal Investigators (PI) have primary responsibility for all aspects of Federal grants including approval of all charges and ensuring that the research is conducted in accordance with the award terms and conditions.

## Objective, Scope, and Methodology

**Audit Objectives**. Our audit objectives were to: (a) evaluate whether Arizona internal controls are adequate to properly manage, account for, monitor, and report salary and wage costs on NSF grants in accordance with the U.S. Office of Management and Budget (OMB) and NSF grant requirements and (b) determine if salaries and wages charged to NSF awards are allowable, allocable, and reasonable in accordance with Federal cost principles and NSF award terms and conditions.

**Scope and Methodology.** The audit focused on Arizona's effort reporting system and accordingly reviewed internal controls for ensuring that labor costs charged to NSF (i) were actually incurred, (ii) benefited NSF awards, (iii) were accurately and timely recorded and charged to NSF, and (iv) were for allowable and allocable-type activities as required by Federal and NSF requirements. In addition, we evaluated if the level of PI effort pledged in grant proposal and award documents was actually contributed by the faculty member to accomplish award objectives.

To address each of the control objectives, the NSF OIG engaged a statistician to provide expert advice in selecting a statistical sample of employee salary records for testing. The use of statistical tools and methodology will enable projecting our audit results to the entire population of universities to be included in the planned reviews of payroll distribution systems nationwide. However, due to the small statistical sample size of 30 employees tested, we are not able to make any projections to the total Arizona population of labor costs charged to NSF grants. Specifically, the FY 2007 salary and wage costs for the 30 sample employees tested amounted to \$724,186 and were supported by 780 effort reports. Our statistical sample was derived from a total population of 1,071 Arizona employees, who charged \$12.8 million of salaries to NSF grants during FY 2007. This population excluded (a) any employee with total salary costs of \$100 or less and (b) all salary charges for undergraduate students. These amounts were excluded because of their small dollar value and the difficulty in locating undergraduate students for personal interviews.

We interviewed key University officials and reviewed the organization structure and written policies and procedures to assess the "attitude" or "tone at the top" toward grants management and compliance in general as it affects effort reporting.

We compared Arizona's policies and procedures to Federal and NSF requirements for allocating labor costs to Federal awards and interviewed Arizona personnel to gain an understanding of the controls in place to ensure salaries and wages charged to NSF awards were reasonable and allowable. For each statistically selected salary record, we

obtained the following documentation to determine whether labor costs Arizona charged NSF awards met the control objectives:

- Effort reports documenting 100 percent of each employee's compensation allocated to sponsored and non-sponsored projects for each reporting period.
- Appointment letters or other documents supporting the approved annual salary for employees.
- Personal Service Operation System reports detailing the actual salaries and wages charged to sponsored projects and other activities for each employee during each reporting period.
- Award documents to determine whether the grant had any terms and conditions that would affect allowable labor charges to the award.

To ensure that salary and wage costs charged to NSF awards were incurred and benefited NSF awards, we corroborated the information on the effort reports by interviewing the 30 sampled employees. We inquired whether (a) the labor charges documented were actually incurred on projects and activities, (b) the approximate percentage of effort actually worked on each sponsored project and/or activity was reasonably consistent with NSF labor charges, and (c) the type of work performed on NSF projects was generally consistent with the scope of the awards. In addition, we interviewed administrative officials in academic departments of the sampled employees to determine how they met the Federal and University certification requirement on verifying effort reports to ensure the work was actually performed as shown on the reports. We also discussed with department administrative officials their procedures for processing and monitoring employee salary charges to Federal grants. Additionally, we interviewed selected PIs to determine the number of projects and personnel they were responsible for and their processes for verifying effort reporting.

To confirm that faculty effort pledged in grant proposals was actually contributed to accomplish grant objectives, we reviewed processes for reporting and tracking PI effort and whether the associated salary costs were properly included in the organized research base for computation of the University's indirect cost rate. We reviewed award documents for all Federal grants that a faculty member worked on during FY 2007 to determine the effort pledged on each project and compared this proposed effort to the approximate percentage of actual effort worked on the project. In addition, we determined whether and how Arizona tracked and documented PI effort on sponsored projects when no faculty salary support was requested or reimbursed by the Federal Government.

To determine whether labor costs were accurately recorded and charged to NSF, we compared the amounts in appointment letters or other documentation supporting salaries and wages paid to the amounts recorded in the Personal Service Operation System for each individual in our selected sample. We recalculated salary and wage

costs charged to NSF projects by using the salary shown on supporting documentation and apportioning it by the period of time and percent of effort represented on the effort reports. We also reviewed labor transactions to determine whether Arizona followed Federal, NSF, and University requirements on charging labor costs to NSF projects.

The audit determined whether Arizona officials certified effort reports in a timely manner by comparing the date the effort reporting period ended to the date the reports were certified. Timeliness was based on Arizona's internal policy requiring that effort reports are completed in accordance with the bi-weekly payroll schedule.

Finally, we reviewed prior audit reports on Arizona's Federal grants management program performed by OMB Circular A-133 auditors and the University's internal auditors to determine whether there were any audit findings and recommendations on labor effort reporting. Specifically, we interviewed cognizant Internal Audit staff and reviewed the working papers, as needed, to gain an understanding of the scope and procedures used in any audits of Arizona's payroll distribution reporting system and/or University management of labor costs charged to Federal projects. We met with Arizona's A-133 auditors to discuss their overall audit scope and procedures used for reviewing salaries and wages charged to Federal awards and their review of the labor effort reporting system. Accordingly, we reviewed the most current A-133 audit working papers available during our site visit to ascertain the actual audit scope and procedures used by the auditors in order to (i) preclude any duplicative audit work and (ii) to determine the specific work performed on the labor effort reporting system.

Onsite audit work at the Arizona campus was performed during two 2-week periods in January and March 2008. The remainder of the audit work was completed through phone interviews, emails, and documentation requests through December 2008. We were engaged to perform the above audit objectives by the NSF OIG. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## FINDING AND RECOMMENDATIONS

## 1. University of Arizona Effort Reporting System does not Comply with Federal Requirements and University Policy

## OMB Requirements for Labor Effort Reporting

OMB Circular A-21, *Cost Principles for Educational Institutions*, requires certification of labor effort contributed by employees on Federal awards to reasonably reflect the actual labor effort contributed by the employee to meet the objectives of the award. The effort reporting system must provide for after-the-fact confirmation of employee activity by the employee conducting the work being reported or by an official that is in a position to know whether the work was performed. For example, a PI with first hand knowledge of the work performed or an administrative official obtaining a suitable means of verification that the work was performed as shown on the effort report. The Circular also requires universities to provide for independent internal evaluations to ensure the effort reporting system's effectiveness and compliance with Federal standards. In addition, NSF limits its funding on the amount that faculty can earn in the summer months to no more than two-ninths of their academic salary. As such, "the recipient institution is responsible for ensuring that costs charged to a sponsored agreement are allowable, allocable, and reasonable under these cost principles" and "must provide for adequate documentation to support costs charged to sponsored agreements."

Consistent with the Circular A-21 requirement for "sound business management practices," OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organization*, requires entities receiving Federal awards to establish and maintain internal controls that are designed to reasonably ensure compliance with Federal laws, regulations, and program compliance.

## Arizona's Effort Reporting System

Pursuant to the OMB requirements, Arizona has established department On Line Time Rosters (OTR) to document the after-the-fact certification of the reasonableness of salaries directly charged to sponsored projects and other activities on which an employee works. The OTRs (effort reports) were produced every two weeks from the payroll distribution system. Arizona's System Control electronically generated OTRs on a biweekly basis and distributed them via the web to departmental offices according to the timeline established by the Arizona Payroll Office. Arizona has a decentralized

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Paragraphs C.4.d.(1) and A.2.e., respectively, of OMB Circular A-21, *Cost Principles for Educational Institutions*.

Section .21 of OMB Circular A-110, requires that a grantee's financial management system provide for "Effective control over and accountability for all funds, property, and assets. . . written procedures for determining the reasonableness, allocability and allowability of costs in accordance with the provisions of the applicable cost principles and terms and conditions of the award."

operational structure that includes 196 departments or offices. Each department or office is responsible for management of its Federal grants including certification of the OTRs. Although Arizona policy on effort reporting requires department administrative officials use a "suitable means of verification" that the work was performed when certifying effort reports, the policy did not define what constituted a "suitable means of verification." The policy also did not require administrative officials to document their "suitable means of verification" used to support costs charged to sponsored projects.

The audit disclosed Arizona did not meet Federal requirements for certifying labor effort reports for NSF grants. Further, Arizona exceeded NSF's summer salary limitations on faculty salary. Specifically, from our sample of 30 employees whose 780 labor effort reports support \$724,186 in salaries and wages charged to NSF:

- Department administrative officials certified 770 of 780 effort reports even though they were not in a position to know whether the work was actually performed as shown on the effort reports. Thus \$709,520 or 98 percent of the salaries and wages reviewed were not supported by valid effort reports because officials certified the reports without a suitable means of verifying an employee's effort on NSF grants.
- One of five sampled faculty members improperly charged salary to sponsored projects by exceeding NSF's summer salary limitations on faculty members. This led to Arizona inappropriately charging NSF \$9,380 in salary and \$7,204 in the related fringe benefits and overhead costs.

In addition, the University has not performed any comprehensive independent internal evaluation of its labor effort reporting system, to ensure its effectiveness and full compliance with Federal requirements.

These weaknesses occurred because Arizona, prior to FY 2008, did not place sufficient emphasis on effort reporting. Specifically, Arizona had not defined what constitutes a suitable means of verifying labor effort or established adequate internal controls to provide for effective management and oversight of its labor effort reporting system.

As a result, NSF has less assurance that Arizona effort reports are reliable in reasonably supporting salaries and wages charged to sponsored projects. The significant nature of these control weaknesses raises concerns about the reasonableness and reliability of the \$12.1 million of FY 2007 labor charges to NSF grants that we did not review and the salary portion of Arizona's other \$283.4 million of Federal awards.

## <u>Department Administrative Officials Certifying Effort Reports With No Suitable Means</u> of Verification

Labor effort reports were certified by departmental administrative officials that did not have a suitable means of validating the effort charged to NSF grants. As noted, our sample of 30 employees identified 770 of 780 effort reports that were certified by 15 departmental administrative officials without adequate information or knowledge to verify that the work was actually performed. Although employees who conduct the work being reported and their PIs are the most knowledgeable for effort reporting, OMB Circular A-21 allows administrative personnel who have no first hand knowledge of the work performed to certify effort reports provided they have a suitable means to validate the effort. At Arizona, department administrative officials certified effort reports for 27 to 400 employees each period, depending on the number of employees in their department. Officials stated they relied on employee time sheets as a suitable means to validate the actual effort performed. However, timesheets could not be used as a suitable means to validate effort performed because in most cases they did not assign the employee's hours to specific projects or activities. In fact, only 10 of the timesheets we reviewed contained hours by specific projects with the rest simply providing the total hours worked for the period. Thus, the administrative officials were not in a position to evaluate and validate the accuracy of the labor effort allocations to the various Federal awards, including NSF awards. For example, a department administrative official certified eight effort reports for an employee from November 5, 2006 through February 11, 2007, supporting salary charged to NSF of \$14,105. In March 2007, the PI determined that the certification of the eight effort reports was not correct and NSF was provided a credit of \$14,105 and this amount was more appropriately charged to two non-NSF projects. Although this error was caught and corrected, it raises concern over the accuracy of effort reports as a whole.

## **Improper Salary Charges to NSF**

In addition, our review disclosed that one of five faculty members in our sample improperly exceeded NSF's summer salary limitations in charging salary to NSF sponsored projects. This limitation, which includes summer salary received from all NSF-funded grants, is known as the NSF's two-ninths rule.<sup>3</sup> Specifically, NSF was erroneously charged \$9,380 in salary and \$7,204 in the related fringe benefits and overhead costs due to faculty salary exceeding NSF's two-ninths rule.

## Lack of an Independent Evaluation

Finally, Arizona had not conducted a comprehensive independent evaluation of its payroll distribution and effort reporting system. OMB Circular A-21 requires this evaluation to ensure university systems operate in accordance with Federal rules and regulations for Federal grants including those provided by NSF. However, Arizona had not performed this review either through its internal audit department or an external

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<sup>&</sup>lt;sup>3</sup> NSF's two-ninths rule provided in Paragraph V.B.1.a.(ii)(b) of NSF's *Award and Administration Guidelines*.

organization. In fact, we could not find any evidence that a comprehensive independent review had been performed since the effort reporting system was changed to an electronic format in 1992.

## Factors Contributing to Effort Reporting Weaknesses

These weaknesses occurred because Arizona officials, prior to FY 2008, did not place sufficient emphasis on effort reporting. Specifically, Arizona had not: defined what constitutes a suitable means of effort report validation and specific NSF requirements; required training for personnel involved in the effort reporting process; and, established proper oversight of the effort reporting system through internal reviews and independent audits.

Suitable Means. Arizona did not establish any policies or procedures defining what constitutes a suitable means of verification and the documentation required to be maintained in the award file to demonstrate that administrative officials obtained a suitable means of verification before certifying effort reports. None of the 15 department administrative officials who certified effort reports for the 30 sampled employees fully understood the concept of "using a suitable means to validate work performed" or the Federal requirement to adequately document the means of verifying actual work performed. For example, department administrative officials believed that employee time sheets were a suitable means of verifying work performed even though the time sheets did not allocate employee hours worked to specific projects or activities.

NSF's Two-ninths Rule. Arizona did not have a policy that fully explained and implemented NSF's two-ninths rule on faculty summer pay. Although the Arizona Handbook for Principal Investigators reminds investigators of the NSF's two-ninths rule limiting faculty summer salaries to no more than two-ninths of academic salary, the Handbook did not state that the limitation includes summer salary received from all NSF-funded grants. In addition, internal forms on budgeting and approving faculty summer salaries allows up to three summer months, which may be allowed by other Federal agencies, but the form does not contain any language on NSF's two-ninths rule and restrictions. Thus, PI's can easily overlook or confuse requirements for NSF and Federal grants.

Employee Training For Key Officials Was Not Mandatory. PIs and department administrative officials are the key officials for effort reporting. Arizona appears to have a comprehensive and well-publicized labor effort and grants management training program on its web site, encompassing a wide range of Federal grants management subjects, including most labor effort reporting policies and procedures. However, PIs and department administrative officials are not required to take the online labor effort training program. For example, 80 percent of PIs (4 of 5) we interviewed stated they did not recall receiving effort report training.

Oversight and Independent Internal Evaluations. In addition, Arizona did not have a program to provide adequate oversight of the effort reporting process, nor did it

establish policies to meet OMB requirements for independent internal evaluations. Considering Arizona's decentralized organizational structure, 196 departments and offices primarily responsible for management of their own portfolio of Federal grants, the need for strong and consistent oversight is necessary to maintain the overall integrity of the effort reporting system. Specifically;

Arizona provided little or no oversight of the effort reporting system. SPS, who has overall responsibility over Federal grants at Arizona, was not monitoring departments to ensure the department's certification process met Federal and University requirements for certifying effort reports.

Arizona had not conducted a comprehensive evaluation of the effort reporting system because University officials believed they met the A-21 requirement with their annual OMB Circular A-133 audit.<sup>4</sup> However, the A-133 audit was not, nor intended to be, a comprehensive review of the effort reporting system. While the A-133 audit procedures for effort reporting at Arizona cover some aspects of effort reporting, the audit is not designed to be detailed or comprehensive.

Thus, Arizona had not established any policies or procedures for a periodic and systematic review of a system that has been operating for over 15 years. comprehensive evaluations would have likely disclosed internal control deficiencies and recommended improvements. OMB does not define how often and who should conduct the independent evaluation, instead leaving it up to universities to establish this control according to their program needs. For example, the evaluation could be conducted by the internal audit office periodically or whenever there is a significant change in the effort reporting system as long as the internal organization is independent of the effort reporting management chain.

## Current Effort Reporting System May Produce Unreliable Effort Reports and Excess Labor Charges

Due to internal control weaknesses as noted above, Arizona provides limited assurance that effort reports supporting \$709,520 (98%) of sampled NSF salary charges are reliable. More significantly, those control weaknesses could affect the remaining \$12.1 million of FY 2007 labor charges to NSF grants, as well as the salary portion of Arizona's other \$283.4 million of Federal awards. Further, Arizona lack of policies and procedures on NSF's two-ninths rule allowed Arizona to overcharge NSF \$16,584 in salary and associated fringe benefits and overhead.

agencies for audits of States, Local Governments, and Non-Profit Organizations.

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<sup>&</sup>lt;sup>4</sup> Under the Single Audit Act of 1984 (Public Law 98-502) as amended in 1996 (Public Law 104-156), non-Federal entities that expend \$500,000 or more a year in Federal awards are required to have an organization-wide audit that includes the non-Federal entity's financial statements and compliance with Federal award requirements. The OMB Circular A-133 established uniform requirements among Federal

#### University Planned Improvements to its Current Effort Reporting System

The University has recognized that its current financial management system, including effort reporting, needed improvement and plans to implement a new electronic financial and effort reporting system in calendar year 2010. The new system will allow for on-line electronic certifications of effort reports. The University also decided to replace the current effort reporting system with an interim system beginning in January 2008.

In January 2008, the University implemented its interim effort reporting system to bridge the gap between the current effort reporting system and the new financial management system planned for calendar year 2010. The University recognized the cumbersome nature and difficulties encountered in using a bi-weekly effort reporting system and therefore changed the effort reporting period to a semi-annual cycle using hard-copy preprinted effort reports. University officials stated that the first semi-annual effort reports were distributed to the departments on September 3, 2008 and were certified and returned by November 3, 2008.

The University also revised its policy on certifying effort reports, indicating a preference that certification is done by an employee conducting the work being reported or PI/supervisor with first hand knowledge of work performed. However, it still allows for department administrative officials to certify effort reports. The revised policy requires time sheets, when used by administrative officials to validate work performed, to include effort distribution and be signed by the employee and/or supervisor. We believe that the policy should provide examples of documentary evidence that demonstrate administrative officials validated effort reports prior to certifying them. Examples could include an e-mail from the PI confirming the distribution of effort in addition to timesheets that allocate employee hours worked to specific projects and activities.

The recommendations provided below take into consideration the improvements Arizona had made and planned system changes for 2010 in comparison to the system audited.

## Recommendations

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to implement the following recommendations:

- 1. Work with Arizona officials to establish an internal control structure that provides for a payroll distribution system that reasonably reflects the actual effort employees devote on sponsored projects. At a minimum, Arizona should take the following corrective actions to revise or establish Arizona policies on:
  - a. Effort report certification to define what steps an administrative official should perform to demonstrate and document that a "suitable means of

verification" was obtained prior to certifying effort reports and require that such documentation be maintained in the award files.

## **University of Arizona Response**

The University concurred with the recommendation and stated they have improved their Interim Effort Reporting Policy and Procedures to include additional examples of documents that can serve as a "suitable means of verification," such as email messages from the principal investigator confirming the effort distribution or timesheets that include effort distribution or the hours worked on activities.

#### **Auditors' Comments**

Arizona's response met the intent of the recommendation. However, Arizona should consider requiring support documentation, such as email messages from the principal investigator confirming the effort distribution, be maintained in the award files.

b. NSF two-ninths rule to clarify that the faculty salary limitation includes summer salary received from all NSF-funded grants and require the Memorandum form on Summer Supplemental Compensation to include the NSF two-ninths rule restriction.

#### **University of Arizona Response**

The University concurred with the recommendation and stated they now include the NSF two-ninths rule and the maximum number of hours allowed on NSF awards in their Guidelines for Faculty Supplemental Compensation and also in their internal forms on budgeting and approving faculty summer salaries. Additionally, SPS has implemented an annual review to ensure compliance with the NSF's two-ninths rule and periodically sends out reminders to Arizona's research community on this rule.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation.

c. SPS or an appropriate function required to monitor the effort report certification processes at the department levels for providing oversight to ensure adequate procedures are in place.

#### **University of Arizona Response**

The University concurred with the recommendation and made SPS responsible for monitoring the effort report certification process. SPS has hired a Financial Compliance Coordinator to oversee the interim paper-based effort reporting system to ensure that the departments certify the reports appropriately and within 60 days from the date the reports are mailed. The University said they will implement an electronic effort reporting system in calendar year 2010 that will significantly improve the efficiency and effectiveness of the monitoring process by routing effort reports automatically and certified electronically.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation. However, we advise the University to consider revising their new policy from 60 days from the time the reports are mailed to a specific number of days from the end of the effort reporting period. Otherwise, a situation could occur where some effort reports are certified within 90 days from the end of the effort reporting period and considered late while other effort reports are certified 180 days or later from end of the effort reporting period and are considered on time, based on when the effort reports are mailed. Having a finite number of days from the end of the effort reporting period is critical for the integrity of the process since principal investigators generally certify effort reports based on their memory. Therefore, the longer it takes to certify an effort report, the less assurance the University can provide NSF and other Federal Sponsoring agencies that the effort report is reliable and accurate. In our example, the late effort report (certified within 90 days) would have more credibility than the effort report that was certified on time (certified in 180 days or later).

d. Independent evaluation of the effort reporting system required periodically to ensure its effectiveness and full compliance with Federal, NSF, and University standards. Such a requirement should identify the specific organization responsible for performing the evaluation and how often such an evaluation should be conducted.

## **University of Arizona Response**

The University concurred with the recommendation and stated that the Internal Audit Department or external audit firm will conduct an independent evaluation of the effort reporting system on a periodic basis and when major changes take place.

#### **Auditors' Comments**

Arizona's response met the intent of the recommendation. However, the University should consider defining "periodic basis" so that an independent evaluation will occur within so many years from the last evaluation. In our opinion, over a period of time, even when no major changes occur in the system, changes occur that could affect system effectiveness and meeting Federal requirements. For example, there could be changes in personnel, regulations, and feedback received from senior management.

2. Work with Arizona officials to ensure its existing labor effort training program addresses Federal and Arizona requirements, is kept up to date, and is taken by all officials involved in the effort reporting process on a periodic basis. Such training should include a thorough discussion of effort reporting certification responsibilities and requirements.

## **University of Arizona Response**

The University concurred with the recommendation and stated that new policies and procedures will be developed to require all officials involved in the effort reporting process be trained on a periodic basis. The University also said that the (new) SPS Financial Compliance Coordinator dedicates a significant amount of time to ensure training is delivered to faculty and staff and the Interim Effort Reporting Policy and Procedure reflects Federal and Arizona requirements and clarifies the roles and responsibilities in the effort reporting process.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation.

3. Resolve the \$16,584 in total questioned costs for overcharges in violation of NSF's two-ninths rule (\$9,380 salary, \$2,420 fringe, and \$4,784 overhead, respectively).

#### **University of Arizona Response**

The University concurred with the recommendation and stated that they have removed the questioned costs to a non-sponsored account.

#### **Auditors' Comments**

Arizona's response met the intent of the recommendation.

## 2. Additional Internal Control Weaknesses Needing Management Attention

An OMB January 2001 Clarification Memorandum<sup>5</sup> provide that Federally-funded research programs should have some level of committed faculty effort, paid or unpaid by the Federal Government. Such committed faculty effort should not be excluded from the organized research base by declaring it to be voluntary uncommitted cost sharing. If a research sponsored project shows no faculty effort, paid or unpaid by the Federal Government, an estimated amount must be computed by the university and included in the organized research base. The organized research base is used in calculating the universities indirect cost rate for charging federal grants. Federal requirements provide (i) cost sharing contributions be verifiable from the university's records and not included as contributions for any other federally-assisted project or program, and (ii) a "precision range" or "degree of tolerance" should be established for assessing when to adjust the labor distribution on effort reports for variances between actual and reported effort.

Although our limited sample did not identify any specific discrepancies, our review indicated Arizona had not established policies to ensure compliance with these Federal requirements and its current management systems did not have the capabilities to record, track and report cost sharing data. Due to the lack of these policies and capabilities, there is an increased risk that indirect costs charged to sponsored projects may be excessive, cost sharing commitments may not be met, and effort reports may be less reliable in supporting salary charges to NSF awards. Arizona is in the process of implementing a new financial management system; therefore, it is important these control weaknesses are addressed in the new system.

<u>Labor Effort Commitments Not Tracked.</u> Arizona did not have the capability to track PI committed effort to the actual effort performed on the grant. Therefore, SPS would not be able to track whether PIs, who after award of a sponsored project, redirect their salary to a graduate student or other employee and donated their effort to an award. Under this scenario, an estimated amount of faculty effort should be computed to go into the organized research base. Although we did not find any PIs from our sample without effort committed to a sponsored project (all sampled PIs had some level of committed faculty effort), the lack of effective controls could result in Arizona overcharging indirect costs to sponsored projects.

<u>University Cost Sharing Commitments Not Tracked.</u> Arizona's current financial management system could not record, track, and report labor cost sharing commitments and expenditures to specific sponsored projects as required by OMB guidance. This occurred because Arizona's current financial management system did not have the capability to establish cost sharing account numbers relating to specific sponsored projects. As a result, Arizona could not determine whether its cost sharing commitments were met. The University recognized this weakness and, in an effort to mitigate the risk

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<sup>&</sup>lt;sup>5</sup> OMB Memorandum M-01-06, January 5, 2001, *Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission*.

<sup>&</sup>lt;sup>6</sup> Our sample of 30 employees contained only five PIs.

that its cost sharing commitments were not being met, SPS created a written quality assurance desk procedure to monitor cost sharing at the department level on an annual basis. In FY 2007, the University had 27 NSF grants with an overall cost sharing commitment of \$3.3 million. Based on our review of the SPS quality assurance desk procedures and cost sharing reports, SPS conducted effective cost sharing reviews at the department level. The SPS also recognized there are no efficient tools such as an effort reporting system or separate cost sharing accounts to assist department administrators to manage cost sharing on a regular basis. Further the current payroll distribution system does not efficiently assist departments to manage multiple funding sources for PIs.

No Acceptable Variance Established for Effort Report Certification. OMB Circular A-21 recognizes "A precise assessment of factors that contribute to costs is not always feasible, nor is it expected. Reliance, therefore, is placed on estimates in which a degree of tolerance is appropriate." The Circular does not quantitatively define "precision" or "tolerance", but rather allows each institution to make reasonable judgments regarding this level of precision. For example, Arizona defined a significant change to an employees work activity as 5 percent or greater. Therefore, an employee's payroll distribution will not need to be changed until the work activity changes 5 percent. Changing an employee's payroll distribution affects future pay periods from the time the change is made. However, Arizona did not establish a tolerance level for certifying effort reports that would result in a one-time labor cost transfer made in the current pay period. Without quantifiable measures, Arizona certifying officials lack a basis to determine how much an employee's actual effort can differ from certified effort before the effort report must be changed. For example, 10 of the 30 sampled employees (33 percent) had 1 to 10 percent variances between actual effort, as provided by employee and/or PI in interview, and certified effort. Five of the 10 sampled employees had variances of 5 percent or greater. If Arizona used the same "tolerance level" as they used defining significant changes, then 17 percent of the sampled employees (5 of 30) had variances of at least 5 percent<sup>7</sup>. Yet no effort reports were modified to reflect the change in labor distribution for the period under review.

<u>Implementing Policies</u>. Arizona did not have policies to implement and institutionalize the OMB requirements for the issues described above. Although mitigating controls were established for cost sharing, without a university policy it is difficult to enforce compliance and consistency in the application of these requirements.

<u>Increased Risks for Excessive Costs.</u> Arizona is operating at a higher risk that (i) indirect costs charged to NSF awards could be excessive since its indirect cost rate may have been lowered by increasing the organized research base for PIs that had no effort committed to a sponsored project, (ii) cost sharing commitments of PI labor effort is not being met, resulting in either a reduction in the planned research or unnecessary increase

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<sup>&</sup>lt;sup>7</sup> A March 2007 report entitled *Policies and Practices: Compensation, Effort Commitments, and Certification*, issued by the Council on Governmental Relations, stated that the 5-percent standard used by some universities was based on a 1979 interpretation by the former Department of Health, Education, and Welfare stating "As a general rule of thumb, a change applicable to a given project or activity of 5% or more of an employee's total effort would warrant an adjustment by the employee or the official."

in NSF funding on the grant, and (iii) effort reports could be less reliable and salaries and wages charged to NSF awards may not be appropriate without established variance levels for certifying officials to follow.

New System Capabilities and Controls. As noted, Arizona is in the process of implementing a new electronic financial management system by calendar year 2010. SPS stated the new system would have the capability to track committed to actual time devoted to the grant. Further, SPS stated the new financial management system will have the capability to record, track, and report cost sharing commitments and expenditures to specific sponsored projects. Assigning cost sharing account numbers to specific sponsored projects would help department administrators manage cost sharing on a regular basis and help departments manage multiple funding sources for PIs.

The recommendations provided below take into consideration the new system capabilities and also reminds the University of the importance of including these controls in the new system and through its policies and procedures.

## **Recommendations**

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to implement the following recommendations:

- 1. Work with Arizona officials to establish an internal control structure that provides for a payroll distribution system that reasonably reflects the actual effort employees devote on sponsored projects. At a minimum, Arizona should take the following corrective actions:
  - a. Ensure the new financial management system has capabilities to:
    - 1. Record and track PI committed time to the actual time devoted to a grant and occurs with the implementation of the new financial management system and track PI effort to ensure some faculty effort is committed to a sponsored project.

#### **University of Arizona Response**

The University concurred with the recommendation and stated that the new grants management system will have the capability to track committed effort and actual time devoted to a grant to ensure that some faculty effort is committed to a grant. The new grants management system is planned to start in calendar year 2010.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation.

2. Assign cost sharing account numbers to record, track, and report cost sharing commitments and expenditures to specific sponsored projects and occurs with the implementation of the new financial management system in calendar year 2010.

## **University of Arizona Response**

The University concurred with the recommendation and stated that the new financial system, planned to begin in calendar year 2010, will have the capability to assign cost sharing account numbers to track cost sharing commitments and expenditures to specific sponsored projects.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation.

b. Develop a policy, including a requirement to document the methodology, for computing an estimated amount of faculty effort that would go into the organized research base to ensure at least some faculty effort is committed to a sponsored project.

#### **University of Arizona Response**

The University concurred with the recommendation and stated that they have formally incorporated in their Principal Investigator Handbook their practice of ensuring that some faculty effort is committed to a sponsored project during their proposal review process. The University also said that starting in calendar year 2010 (with the implementation of the new financial system) they will be able to ensure that all faculty committed effort is included in the organized research base.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation.

c. Establish a policy to set a "tolerance level" or "precision range" of accuracy to be used for certifying the reasonableness of labor effort allocated to each Federal award on effort reports.

## **University of Arizona Response**

The University concurred with the recommendation and stated they have improved their Interim Effort Reporting Policy and Procedures to set 5 percent of an employee's total UA compensated effort as the "tolerance level" or "precision range" for certifying the reasonableness of effort.

## **Auditors' Comments**

Arizona's response met the intent of the recommendation.



Sponsored Projects Services VP for Research & Grad Studies P.O. Box 3308 888 N. Euclid Ave., Rm 510 Tucson, AZ 85722-3308 Tel; (520) 626-6000 Fax: (520) 626-4137 www.sps.urizona.edu

March 10, 2009

Ms.

Partner

Williams, Adley & Company, LLP

1250 H Street, N.W., Suite 1150

Washington, DC 20005

<u>Subject:</u> UA's response to the Draft Report on Audit of University of Arizona's Effort Reporting System

Dear Y

The University of Arizona found this audit a very positive experience. We valued working with the auditors from Williams, Adley & Company and Mr. Jerel B Silver from the National Science Foundation's Office of Inspector General. We appreciate that the Draft Report expressly recognizes the significant steps UA has taken to improve its effort reporting system.

Enclosed is our response to the findings and recommendations contained in the Draft Report on Audit of University of Arizona's Effort Reporting System.

Please feel free to contact via email at if you have any questions.

Sincerely,



Enclosure



Serving the State Since 1885.

#### University of Arizona

March 10, 2009

#### Response to Draft Report on Audit of University of Arizona's Effort Reporting System

#### Finding No. 1 and Respective Recommendations

We generally agree with the facts and findings described under this section of the Draft Report. Below are our responses to each of the recommendations:

Recommendation 1.a: Revise or establish Arizona policies on effort report certification to define what steps an administrative official should perform to demonstrate and document that a "suitable means of verification" was obtained prior to certifying effort reports and require that such documentation be maintained in the award files.

#### UA Response to 1.a

We concur. Our current Interim Effort Reporting Policy and Procedure allows timesheets that included effort distribution or the hours worked on activities to serve as "a suitable means of verification." We have improved our Interim Effort Reporting Policy and Procedure to include additional examples of documents that can serve as a "suitable means of verification." The additional examples include documents such as email messages from the principal investigator confirming the effort distribution and department created reports that include effort distribution and are signed by the employee, supervisor, or the principal investigator.

Recommendation 1.b: Revise or establish Arizona policies on NSF two-ninths rule to clarify that the faculty salary limitation includes summer salary received from all NSF-funded grants and require the Memorandum form on Summer Supplemental Compensation to include the NSF two-ninths rule restriction.

#### UA Response to 1.b

We concur. The University of Arizona (UA) now includes the NSF two-ninths rule and the maximum number of hours allowed on NSF awards in the UA Guidelines for Faculty Supplemental Compensation and the Schedule for Supplemental Compensation. Sponsored Projects Services (SPS) has implemented an annual review of compensation paid from NSF awards to ensure the two-ninths rule is followed. In addition, SPS periodically reminds the UA's research community about the NSF two-ninths rule via a SPS email Listsery communication.

Recommendation 1.c: SPS or an appropriate function required to monitor the effort report certification processes at the department levels for providing oversight to ensure adequate procedures are in place.

#### UA Response to 1.c

We concur. UA has implemented a paper-based interim Effort Reporting System. The first mandatory reporting period was from December 31, 2007 to June 30, 2008. SPS is responsible for monitoring the effort report certification process. To fulfill this responsibility, SPS has established the Interim Effort Reporting Policy and Procedure and hired a Financial Compliance Coordinator. The Financial Compliance Coordinator oversees the entire effort reporting process to ensure that the departments certify the reports appropriately and return the reports within the time period prescribed, which is 60 days from the date the reports are mailed.

As described in the Draft Report, UA will implement an electronic Effort Reporting System in calendar year 2010. The electronic system will allow effort reports to be routed automatically and certified electronically. The efficiency and effectiveness of the monitoring process will be significantly improved.

Recommendation 1.d: Independent evaluation of the effort reporting system required periodically to ensure its effectiveness and full compliance with Federal, NSF, and University standards. Such a requirement should identify the specific organization responsible for performing the evaluation and how often such an evaluation should be conducted.

#### UA Response to 1.d

We concur. UA's Internal Audit Department or an external audit firm will conduct independent evaluation of the effort reporting system on a periodic basis and when major changes take place.

Recommendation 2: ensure its existing labor effort training program addresses Federal and Arizona requirements, is kept up to date, and is taken by all officials involved in the effort reporting process on a periodic basis. Such training should include a thorough discussion of effort reporting certification responsibilities and requirements.

#### UA Response to 2

We concur. UA continues to deliver training in effort reporting to its faculty members, business managers, and other employees involved in the effort reporting process. The Interim Effort Reporting Policy and Procedure reflects Federal and UA requirements and clarifies the roles and responsibilities in the effort reporting process. The SPS Financial Compliance Coordinator dedicates a significant amount of time to ensure training is delivered to faculty and staff. In addition to the traditional training methods, alternative methods such as telephone conference have been used and web-based training is being designed to ensure personnel involved in the effort reporting process are reached for

training. New policy and procedures will be developed to require all officials involved in the effort reporting process be trained on a periodic basis.

Recommendation 3: Resolve the \$16,584 in total questioned costs for overcharges in violation of NSF's two-ninths rule (\$9,380 salary, \$2,420 fringe, and \$4,784 overhead, respectively).

#### UA Response to 3

We concur. UA has removed the questioned costs on May 9, 2008 to a non-sponsored account.

#### Finding No. 2 and Respective Recommendations

We generally agree with the facts and findings described under this section of the Draft Report. Below are our responses to each of the recommendations:

Recommendation 1.a.1: Ensure the new financial management system has capabilities to record and track PI committed time to the actual time devoted to a grant and occurs with the implementation of the new financial management system and track PI effort to ensure some faculty effort is committed to a sponsored project.

#### UA Response to 1.a.1

We concur. UA's new grants management system will capture Principal Investigator (PI) committed effort. This capability will allow us to monitor the committed effort and the actual time devoted to a grant starting in calendar year 2010. Once the new grants management system is implemented, we will develop reports and procedures to track PI committed time and ensure some faculty effort is committed to a sponsored project.

Recommendation 1.a.2: Ensure the new financial management system has capabilities to assign cost sharing account numbers to record, track, and report cost sharing commitments and expenditures to specific sponsored projects and occurs with the implementation of the new financial management system in calendar year 2010.

#### UA Response to 1.a.2

We concur. UA's new financial system will have the capability to assign cost sharing account numbers to track cost sharing commitments and expenditures to specific sponsored projects. Currently, we expect the new system to be implemented in calendar year 2010.

Recommendation 1.b: Develop a policy, including a requirement to document the methodology, for computing an estimated amount of faculty effort that would go into the

organized research base to ensure at least some faculty effort is committed to a sponsored project.

#### UA Response to 1.b

We concur. As part of the proposal review process, UA requires PI effort to be committed on all sponsored projects except for awards that do not require PI effort, e.g., equipment and fellowship awards. We have formally incorporated this requirement in our PI Handbook to ensure that some faculty effort is committed to a sponsored project.

Staring in calendar year 2010, the monitoring procedures to track PI committed effort (see response to Recommendation 1.a.1) will ensure all faculty committed effort is included in the organized research base.

Recommendation 1.c: Establish a policy to set a "tolerance level" or "precision range" of accuracy to be used for certifying the reasonableness of labor effort allocated to each Federal award on effort reports.

#### UA Response to 1.c

We concur. We have improved our Interim Effort Reporting Policy and Procedure to set 5 percent of an employee's total UA compensated effort as the "tolerance level" or "precision range" of accuracy to be used for certifying the reasonableness of labor effort allocated to each Federal award.