

NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

MEMORANDUM

DATE: June 18, 2010

TO: Martha A. Rubenstein
Director and Chief Financial Officer
Office of Budget, Finance, and Award Management (BFA/OAD)

FROM: James J. Noeth
Acting Associate Inspector General for Audit

SUBJECT: Additional NSF Outreach and Guidance Will Promote More Consistent and Accurate ARRA Reporting by NSF Grantees, Report 10-6-008

As part of our oversight responsibilities, the OIG is conducting reviews of institutions that have received NSF grants funded by the American Recovery and Reinvestment Act (ARRA or Recovery Act) to help assess the overall quality of quarterly reporting efforts. We have been analyzing issues noted during our grantee reviews to provide NSF with timely and constructive feedback on issues as they arise. We believe that such information will assist NSF to fulfill its role as stewards of ARRA and taxpayer funds.

Review Results

Our review at five ARRA recipients found that appropriate internal controls have generally been established to provide reasonable assurance of compliance with quarterly ARRA reporting requirements. Specifically, the grantees have properly segregated Recovery Act funds and established processes for compiling and reporting ARRA data elements. The exceptions identified during our review occurred primarily because each institution was in the early phases of developing its ARRA reporting processes. Given the delays and changes to OMB reporting guidance and the volume of data required to be reported, this was understandably a very challenging process for ARRA grant recipients. Thus, we believe that many of the recipient issues identified will be addressed as awardees refine their ARRA reporting procedures.

However, our review identified five areas where NSF recipients were not consistently, accurately, or completely reporting data elements to fulfill the ARRA accountability and transparency goals. Therefore, NSF should perform additional outreach to its recipient community and/or work with the Office of Management and Budget (OMB) to enhance its reporting guidance to promote consistent and accurate recipient reporting in the following areas:

- ARRA jobs for NSF fellowship, scholarship, and training grants,
- ARRA job estimates for subawards and vendor contracts,
- ARRA jobs reported in the proper reporting quarter,
- ARRA quarterly grant activities, and
- ARRA subawardee and contractor debarment and suspension status.

Separate recipient summaries of the review results for each of these five areas are attached as appendices. The appendices included suggested corrective actions and were sent to each recipient for its review and comment. In general, the five institutions agreed to implement the suggested corrective actions.

In addition, a draft of this Memorandum was provided to NSF management for its review and comment. NSF generally agreed with the findings and recommendations and has taken or proposed appropriate actions to address recommendations to enhance ARRA reporting guidance in the five areas noted above to promote consistent and accurate NSF recipient reporting. NSF written comments in its entirety are included as an Attachment to the Memorandum.

Background

On February 17, 2009, the American Recovery and Reinvestment Act of 2009 was signed into law. Section 1512 requires recipients to submit reports on the use of ARRA funding to a central reporting portal at the web site FederalReporting.gov. The quarterly reporting requirement is part of the President's commitment to provide an unprecedented level of transparency and accountability on the use of Recovery Act funds. Accordingly, recipients are required to submit quarterly reports beginning with the reporting period ending September 30, 2009 to provide detailed information on ARRA projects and activities and their impact on job creation and retention.

OMB established a Recipient Reporting Data Model to define the 99 data elements required to be reported for each ARRA grant by the tenth calendar day after the end of each quarter. Clarifications to the elements were published by OMB as a set of Frequently Asked Questions with extensive updates published to address both recipient and federal agency concerns; many of which were issued only a short time prior to the end of each ARRA reporting quarter. Some of the key data elements required to be reported include award number, date, and amount; award description; quarterly award activities; award expenditures; number of and description of jobs retained or created; number and dollar of subawards and vendor payments; project status; and final report status.

NSF issued its Recipient Quarterly Reporting Instructions on September 28, 2009 to assist recipients in consistent and quality quarterly ARRA reporting. For each data element in the OMB Recipient Reporting Data Model, the NSF instructions provide additional information to assist its recipients in reporting accurate data. NSF updates to the ARRA reporting instructions required OMB review and approval. As such, NSF's proposed December 18, 2009 changes were not approved by OMB until several months later, on April 2, 2010.

NSF received \$3 billion under the Recovery Act for investments in basic research, education, and research infrastructure. According to NSF, this investment will have an immediate impact on research investigators, post-doctorate scholars, graduate and undergraduate students, and educators throughout the nation. As of December 31, 2009, NSF had awarded over 4700 ARRA grants and contracts totaling \$2.4 billion.

Objectives, Scope, and Methodology

The review objectives were to assess whether NSF recipients of Recovery Act grants (1) segregated and separately tracked the ARRA funds in its project cost accounting system and (2) provided accurate and timely quarterly reporting of ARRA activities. Additionally, we attempted to identify any underlying issues precluding recipients from providing accurate and timely reporting and address those issues with NSF so that corrective actions could be undertaken to promote the highest degree of transparency and accountability over Recovery Act expenditures.

In order to gain an understanding of the ARRA reporting requirements and NSF's oversight of its Recovery Act grants, we reviewed relevant OMB and NSF guidance for carrying out the reporting requirements identified in Section 1512 of the Recovery Act. At each grantee institution, we evaluated whether the entity's policies, procedures, and processes for collecting, compiling, reviewing, and reporting selected data elements were reasonably compliant with ARRA Section 1512 requirements and NSF guidance. The data elements reviewed were the number of jobs, job descriptions, expenditures, funds received/invoiced, vendor payments, subaward amounts, Quarterly Activities/Project Description, project status, and final report status. Our evaluation was primarily focused on reviewing the December 30, 2009 ARRA report. Limited transactions' testing was performed during the review to validate that selected ARRA data elements were supported by adequate documentation.

The review was performed at the following NSF grantees: California Institute of Technology, California State University Fresno Foundation, George Mason University, University of Colorado – Boulder, and University of Kentucky. The onsite review work at each university was performed during the period from late January to early March 2010. These recipient reviews were conducted as non-audit services. As such, the reviews were not conducted in accordance with Generally Accepted Government Auditing Standards, but were planned and performed to obtain sufficient appropriate evidence to provide a reasonable basis for the information and conclusions contained in this memorandum and the attached appendices for each NSF grantee reviewed.

1. Guidance Needed for Jobs Reported for NSF Fellowship, Scholarship, and Training Grants

NSF has not established formal guidance regarding the reporting of jobs created or retained for \$147 million of fellowship, scholarship, and/or training grants funded through the Recovery Act. Yet, a cognizant NSF program official stated that the “cost of attendance/education stipends” and salary supplements paid to individuals under such NSF

grants should be included in recipient reporting of ARRA jobs. In addition, our review found that the National Institutes of Health (NIH) have issued guidance regarding the reporting of Recovery Act jobs created or retained for similar fellowship, scholarship, and training grant as follows:

“While NRSA fellow/trainees are not considered employees, these individuals should be reported as jobs created/retained when ARRA funds have been awarded to a training grant or individual fellowship, based on the amount of time they are appointed for during the reporting quarter. For example, a person appointed during the entire quarter should be reported as 1.0 FTE for the number of jobs; a person appointed for only two months of the reporting quarter should be reported as 0.66 FTE.”

Without clear NSF guidance, three of the five institutions reviewed did not have consistent positions on whether ARRA jobs should be reported for individuals receiving assistance from NSF fellowship, scholarship, and training grants. Specifically, the California State University Fresno Foundation (Fresno) stated that it did not plan to report any ARRA jobs for its \$1.5 million fellowship grant, but the University of Colorado-Boulder (CU) did plan to report jobs for its \$2 million award. Specifically, Fresno stated that it believes that ARRA jobs should only be reported for amounts paid as salaries to individuals, not amounts paid as stipends under budgeted participant support costs under Recovery Act grants. Similarly, CU and the University of Kentucky also had \$.5 million of participant support costs budgeted in various ARRA grants that could be used to pay stipends to program participants. In some cases, such stipends are paid as a subsistence allowance for attending conferences or training workshops and would clearly not create ARRA jobs. However, in other instances, stipends are paid for student participation in research training activities and should likely be reported as ARRA jobs. For example, students receiving stipends funded under NSF's Research Experiences for Undergraduates Program (REU) should be reported as ARRA jobs created or retained.

At the time of our review, these three institutions had incurred little or no costs on the subject ARRA awards, thus the reporting of jobs created or retained had not yet become an issue. However, given that NSF has awarded \$147 million of Recovery Act funds for fellowship, scholarship, and training-type grants and budgeted additional amounts for participant support costs, NSF needs to establish clear guidance to ensure its recipients consistently and accurately report jobs created or retained for such funding.

Recommendation:

NSF should work with OMB to provide agency guidance on how recipients should report ARRA jobs created or retained for individuals paid stipends under fellowship, scholarship, and training grants.

NSF Response

NSF agrees to work with OMB to develop additional guidance on jobs reporting for fellowship, scholarship, and training grants. NSF notes that in October 2009, guidance was provided to Graduate Research Fellowship Program recipients to report fellows as ARRA jobs, but specific guidance was not developed for scholarship and training grants.

OIG Comment

NSF's proposed corrective action is fully responsive to the recommendation.

2. Additional Guidance Needed for Job Estimates Reported for Subawards and Vendors

ARRA recipients need additional guidance regarding the reporting of estimates for jobs created or retained for subawards and vendor contracts funded by Recovery Act funds. All five institutions had not established procedures requiring a quality or reasonableness check for the job estimates reported by its subawardees and vendors. Additionally, our evaluation disclosed that:

- California State University Fresno Foundation lacked (i) ARRA subaward terms and conditions that clearly required the quarterly reporting of jobs created or retained and (ii) established procedures for obtaining job estimates from vendors.
- University of Kentucky, George Mason University, and the California Institute of Technology did not require jobs reporting for vendor contracts less than \$25,000.

A common area of recipient confusion pertained to whether vendors are required to provide job estimates for vendor contracts under \$25,000. While OMB guidance does not explicitly exclude such reporting, the grantees generally believed such reporting was not necessary and would be negligible due to the small dollar values. However, we found that consulting service contracts can often be under the \$25,000 threshold, but do create jobs by the nature of the services being provided. Given the ARRA transparency goals, additional guidance is required to ensure awardee institutions consistently report such jobs data.

Recommendations

- a. NSF should work with OMB to provide clear guidance on whether job estimates are required for vendor contracts under \$25,000. Consideration should be given to require jobs reporting for all consulting service contracts regardless of dollar value.
- b. NSF should perform additional outreach to its ARRA recipient community to remind prime recipients of their monitoring responsibilities to ensure that jobs estimates provided by its subrecipients and vendors are reasonable in relationship to the level of ARRA funding provided.

NSF Response

NSF agrees to work with OMB to clarify guidance on jobs reporting for vendor contracts under \$25,000 and to revise outreach materials to remind prime recipients of their monitoring responsibilities.

OIG Comment

NSF's proposed corrective actions are fully responsive to the recommendations.

3. Jobs Not Reported in the Correct ARRA Quarter

Pursuant to OMB reporting guidance, ARRA jobs created or retained should be reported when the work is actually performed. Specifically, the guidance states that “. . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred.”¹

However, the California State University Fresno Foundation and George Mason University did not correctly report ARRA jobs in the quarter the work was actually performed. This occurred because principal investigators (PI) did not timely process payroll labor distribution documentation for themselves or employees when work was initiated on ARRA projects. When such significant changes are made in an employee's work activity on sponsored projects, federal cost principles² require that such changes be recorded in the payroll distribution system. As a result of the delay, the ARRA jobs were inaccurately reported in the quarter in which the labor distribution reports were submitted and not when the work was actually performed.

Recommendation:

NSF should perform additional outreach to its recipient community to emphasize the importance of accurately reporting jobs created or retained in the correct quarter in which the work was performed. Grantees should be reminded that timely submission of payroll labor distribution reports for employees working on ARRA grants is essential in guaranteeing the accurate reporting of jobs created or retained.

¹ Section 5.9 of Part 2 of OMB Memorandum M-10-08, Updated Guidance on the American Recovery and Reinvestment Act – Data Quality, Non-Reporting Recipients, and Reporting of Job Estimates, issued on December 18, 2009.

² Section J.10.b.(2)(e) of OMB Circular A-21, Cost Principles for Educational Institutions, requires universities to identify and enter into the payroll distribution system significant changes in employee work activity.

NSF Response

NSF agrees to revise outreach materials to emphasize the importance of accurate jobs reporting and timely submission of payroll labor distribution reports. At current outreach events, NSF informs grantees to correct jobs numbers during the ARRA continuous correction period for late or corrected payroll distribution reports. However, since only the previous ARRA quarter's report can be adjusted, NSF will contact OMB to clarify the proper reporting for late or corrected payroll distribution reports when submitted outside of the continuous ARRA correction period.

OIG Comment

NSF's proposed corrective action is fully responsive to the recommendation. In addition, NSF should be commended for proposing additional action to obtain OMB clarification on how late and corrected payroll distribution reports should be handled when submitted during subsequent ARRA reporting quarters.

4. The Reporting of Quarterly Project Activities Needs Improvement

In order to fulfill ARRA transparency requirements, OMB requires recipients to report quarterly updates to provide the public and all stakeholders with an overview of the types of research activities on which Recovery Act funds are spent. Accordingly, the OMB guidance requires grantees to provide both an *Award Description* and a *Quarterly Activities/Project Description* for each ARRA project. Specifically, the OMB guidance requires "a description of the overall purpose and expected outputs and outcomes or results of the award. . ." be reported in the *Quarterly Activities/Project Description* data element for each ARRA grant.

However, NSF's September 2009 ARRA reporting instructions did not establish a mandatory recipient requirement to report quarterly activity on its Recovery Act grants. As a result, our review disclosed that for the December 30, 2009 ARRA report, four of the five grantees either did not provide a description of quarterly activities accomplished or did not consistently update the description from the prior quarter. Only the University of Colorado – Boulder provided a description of quarterly activities for each of its ARRA grants. This occurred because NSF's reporting instructions allowed ARRA recipients to reference the information provided in the *Award Description* data field for reporting the *Quarterly Activities/Project Description*. While the NSF instructions stated that recipients had the option to provide supplementary information on quarterly activities as ARRA projects progressed, it was not a mandatory NSF reporting requirement.

However, in mid-December 2009, NSF did appropriately propose changes in its ARRA reporting instructions to require grantees to provide a brief summary of activities conducted during the quarter in the *Quarterly Activities/Project Description* data field. Unfortunately, these changes were not approved by OMB until April 2, 2010, over three months after NSF submission. We commend NSF for making the subject change and working patiently with OMB to obtain its approval for revising its guidance to provide a higher level of transparent reporting of quarterly accomplishments on its ARRA research projects to the public and all stakeholders.

Recommendation:

NSF should perform appropriate outreach to its recipient community to ensure grantees clearly understand that revised NSF reporting guidance requires that “. . . a very brief summary of activities conducted to date. . .” be provided for each ARRA grant on a quarterly basis.

NSF Response

NSF stated that its outreach materials have already been updated to inform grantees of the changes in NSF’s ARRA guidance requiring a brief summary of grant activities completed be reported on a quarterly basis.

OIG Comment

NSF actions taken are responsive to the recommendation.

5. Excluded Parties List Needs to be Appropriately Reviewed for ARRA Subawardees and Vendors

OMB grant regulations³ restrict subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts equal to or greater than \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from the entity regarding its Excluded Parties List (EPL) status and that of its principal employees.

However, two of the five institutions reviewed were not in full compliance with the OMB requirement for obtaining required certification of EPL status from subawardees and contractors. Specifically, George Mason University did not require EPL status certification from any contractors and the California Institute of Technology did not require subrecipients receiving less than a \$25,000 award to certify its EPL status. In the case of George Mason University contractors, this occurred because the University was required to use the State of Virginia’s contracting system, which only checked the vendor’s debarment status against the State’s EPL and not the federal EPL. Given the increased transparency and accountability goals for expending Recovery Act funds and the public’s scrutiny of the awarding of large ARRA-funded road construction contracts to debarred companies in recent months, it is imperative that NSF ensure its grantees are fully compliant with OMB grant requirements for debarment and suspension.

³ Section .13, *Debarment and suspension*, of OMB Circular A-110, Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations, requires Federal awarding agencies and grant recipients to comply with the debarment and suspension common rule implementing E.O.s 12549 and 12689, “Debarment and Suspension.”

Recommendation:

NSF should perform additional outreach to its recipient community to emphasize the importance of full compliance with OMB requirements for debarment and suspension. Grantees should be reminded that formal procedures should be established and implemented to ensure internal controls are in place to validate that all vendor contracts over \$25,000 and all subaward agreements are not awarded to any organization or its principals that are presently debarred, suspended, or proposed for debarment by any federal department or agency.

NSF Response

NSF agrees to revise outreach materials to emphasize the importance of full compliance with OMB requirements for debarment and suspension.

OIG Comment

NSF's proposed corrective action is fully responsive to the recommendation.

Thank you for the opportunity to provide you with our initial assessment of NSF actions needed to ensure its ARRA recipients are providing accurate, consistent, and quality quarterly reporting. Should you or your staff have any questions or concerns regarding this information, please feel free to contact me at (703) 292-5005 or Joyce Werking at (703) 292-8097.

cc: Mary Santonastasso, Division Director, DIAS
James Lightbourne, Senior Advisor, OIA

[REDACTED]



OFFICE OF BUDGET, FINANCE, AND AWARD MANAGEMENT

MEMORANDUM

DATE: June 11, 2010

TO: James J. Noeth
Acting Associate Inspector General for Audit

FROM: Martha A. Rubenstein *Martha*
Director and Chief Financial Officer
Office of Budget, Finance, and Award Management

SUBJECT: Discussion draft on the alert memorandum, "Additional NSF Outreach and Guidance Will Promote More Consistent and Accurate ARRA Reporting by NSF Grantees"

NSF management appreciates the opportunity to review the discussion draft of the alert memorandum resulting from the OIG review of the overall quality of award recipients' quarterly reporting efforts under the American Recovery and Reinvestment Act (ARRA). NSF management is encouraged that your review found that the appropriate controls were in place at recipient institutions to provide reasonable assurance of compliance with quarterly ARRA reporting requirements. As you note, the evolving guidance from OMB has been a challenge for NSF and its grantees. NSF believes the minor issues you identified will be addressed over the next few reporting cycles.

In general, NSF management agrees with the OIG's findings and recommendations. We are providing you with additional detail on NSF's past and planned activities to address the recommendations. We also request minor revisions to the section, "Guidance Needed for Jobs Reported for NSF Fellowship and Training Grants."

1. Guidance Needed for Jobs Reported for NSF Fellowship and Training Grants

NSF management agrees that we will work with OMB to provide additional guidance on jobs reporting for fellowships, scholarships, and training grants. NSF did provide guidance to Graduate Research Fellowship Program (GRFP) recipients in October that fellows may be reported as a job created/retained¹ but specific guidance was not developed for scholarship and training grants.

NSF management requests the following revisions to the discussion draft:

¹ GRFP awards are the only fellowships awarded to institutions with ARRA funds. All other ARRA-funded fellowship awards are awarded to individuals and are exempt from ARRA section 1512 recipient reporting requirements.

- Add scholarships to this section. The detail for California State University Fresno Foundation (appendix B) refers to the Noyce Master's Scholarship Program but the body of the alert memorandum only refers to fellowship and training grants.
- Remove references to "participants" and substitute with fellows, scholarship recipients, and trainees. The draft uses "participants" to refer to fellows and trainees and may be confused with "participant support."

2. Additional Guidance Needed for Job Estimates Reported for Subawards and Vendors

NSF management agrees that we will work with OMB to clarify guidance on jobs reporting for vendor contracts under \$25,000. NSF will also revise outreach materials to remind prime recipients of their monitoring responsibilities.

3. Jobs Not Reported in the Correct ARRA Quarter

NSF management agrees that we will revise outreach materials to emphasize the importance of accurate jobs reporting and timely submission of payroll labor distribution reports. At outreach events, grantees frequently ask for clarification on proper jobs reporting for late or corrected payroll labor distribution reports. The NSF response has been that the continuous correction period should be used to correct the jobs number in this scenario. Currently, only the previous quarter's report may be adjusted during the continuous correction period. NSF will contact OMB to clarify the proper reporting for late or corrected payroll labor distribution reports when submitted outside of the continuous correction period.

4. The Reporting of Quarterly Project Activities Needs Improvement

As noted in the discussion draft, NSF has already updated guidance to require "a very brief summary of the activities conducted to date." Outreach materials have already been updated to reflect this change.

5. Excluded Parties List Needs to be Appropriately Reviewed for ARRA Subawardees and Vendors

NSF management agrees that we will revise outreach materials to emphasize the importance of full compliance with OMB requirements for debarment and suspension.

Thank you for the opportunity to review the discussion draft of the alert memorandum resulting from the OIG review of the overall quality of award recipients' quarterly reporting efforts under ARRA. If you have any questions about NSF management's response, please contact Mary Santonastasso at 703-292-8230.

Appendices for ARRA Recipient Review Results

Appendix A: California Institute of Technology, OIG Report 10-6-008-A

Appendix B: California State University Fresno Foundation, OIG Report 10-6-008-B

Appendix C: George Mason University, OIG Report 10-6-008-C

Appendix D: University of Colorado – Boulder, OIG Report 10-6-008-D

Appendix E: University of Kentucky, OIG Report 10-6-008-E

Review of ARRA Recipient Reporting

California Institute of Technology

Pasadena, CA.

**National Science Foundation
Office of Inspector General**

**June 18, 2010
OIG 10-6-008-A**



NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

[REDACTED]
California Institute of Technology
Mail Code 201-15
Pasadena, CA 91125-1500

Dear Dr. [REDACTED]:

Please find attached a NSF Alert Memorandum summarizing the results of our review at five universities to assess the overall quality of quarterly reporting of grants funded by the American Recovery and Reinvestment Act (ARRA). Our review found that the five universities have generally established appropriate internal controls to (a) segregate ARRA funding in its financial management system and (b) provide reasonable assurance of compliance with ARRA reporting requirements.

The final report of our ARRA review at your institution is attached as Appendix A (OIG Report # 10-6-008-A). A draft report requesting comments on the five findings was issued for your review and comment. The University's complete response is attached. We have summarized your response after each recommended corrective action and provided our comments. The University's actions taken and/or proposed are appropriate to implement all suggested corrective actions except for Finding 4. We reaffirm that the University needs to revise its reporting procedures to provide an updated description of ARRA grant activities accomplished during each reporting quarter. Such actions are required to be fully compliant with the May 4, 2010 revisions to NSF's Recipient Quarterly Reporting Guidance, which now require mandatory reporting of "a very brief summary of activities conducted to date." We continue to believe that the reporting of quarterly project accomplishments to the public and all stakeholders is essential to fulfilling the Federal Government's enhanced transparency and accountability goals for ARRA funding.

We appreciate the cooperation that was extended to the audit team during our review. If you have any questions, please feel free to call me at 703-292-8097 or Mark Kim at 703-292-8531.

Sincerely,

Joyce N. Werking
Acting Deputy Associate Inspector General for Audits

Enclosure

California Institute of Technology

ARRA Funding Level

NSF ARRA Grants	37
Amount of NSF/ARRA Grants	\$17.8M
ARRA Expenses as of Dec 2009	\$2.2M
NSF Non-ARRA Grants	222
Amount of NSF Non-ARRA Grants	\$280.4M
Percentage of ARRA Grants to Total NSF Grants (\$)	6 %

ARRA Reporting Methodology

The California Institute of Technology (Caltech) has generally established appropriate internal controls to provide reasonable assurance that the University is in compliance with Section 1512 reporting requirements of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). Caltech staff was experienced and possessed a good knowledge of ARRA requirements; there appears to be good support from management to ensure proper reporting and compliance with ARRA requirements. The Office of Sponsored Research centrally manages Section 1512 reporting for all ARRA grants and has established the following key processes for ARRA reporting:

- Developed a series of processes and automated system-based tools that allow for collection and storage of information necessary for ARRA reporting.
- Established a system flag to segregate ARRA awards in Caltech's accounting system to allow the University to separately identify and track the source and use of ARRA funds.
- Established procedures for collecting, compiling, reviewing, and reporting on Section 1512 data elements to ensure reasonable compliance with OMB reporting guidance for the December 2009 ARRA Report. A review of 5 of the total 37 ARRA grants, with \$1,156,726 of expenditures or 20.3 percent of total funds awarded for these grants, disclosed that the reported number of jobs, expenditures, and project status were reasonably supported.

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of ARRA requires reporting “An estimation of the number of jobs created or retained by the [ARRA] projects or activities . . .” In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as “an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding.”

Results: Caltech has not established formal policies and procedures addressing how ARRA jobs should be computed and reported for individuals funded by fellowship and training grants. Caltech officials pointed out that fellows/trainees are not employees, nor are their positions considered "jobs" according to federal standards for employment and compensation. Also, officials noted that there is a lack of clear OMB or NSF guidance as to how ARRA jobs reporting for fellows/trainees should be handled. However, NSF has not provided any ARRA-funded fellowship, scholarship, or training grants to Caltech. Therefore, Caltech has chosen to apply the National Institutes of Health’s guidance for fellows/trainees to its ARRA awards by including fellows/trainees in the ARRA jobs numbers.

Caltech should formally update its ARRA procedures to clarify jobs reporting for fellows and trainees working on ARRA awards.

Caltech Response: Caltech agrees with the suggested corrective action and will update its ARRA procedures to incorporate this business decision.

OIG Comments: Caltech’s proposed corrective actions are appropriate. However, if Caltech should receive ARRA funding from NSF for such fellowship, scholarship, or training grants in the future, the University should consult with the Foundation to ensure that its current procedure of reporting ARRA jobs for fellows/trainees is acceptable.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by collecting the total number of jobs created or retained on ARRA-funded projects and activities from subrecipients and vendors.

Results: Caltech has appropriately revised its standard subaward agreement to establish contractual provisions to comply with ARRA Section 1512 requirements. Thus, the University’s subaward terms and conditions clearly require the reporting of ARRA job estimates. However, Caltech’s policies and procedures require obtaining this jobs estimate in the form of a certification at the inception of the subaward. While the subaward agreement requires the subrecipient to notify Caltech if the initial ARRA jobs estimate changes, the University does not have a process for requesting a quarterly update. While Caltech has chosen to delegate quarterly ARRA reporting to its subrecipients, it cannot delegate the reporting of jobs created or retained

by the subaward. Therefore, the University cannot be assured of the accuracy of the ARRA jobs it reports quarterly without obtaining an update of the initial job estimates provided at the inception of its subawards.

Caltech procedures also require vendors to provide job estimate certifications for contracts over the \$25,000 small purchase threshold and to notify Caltech if the estimate changes. However, although certain types of contracts such as consulting services clearly create jobs, Caltech did not require jobs estimates if the contracts were under the \$25,000 threshold. As a result, for one of the five ARRA grants we reviewed, a job estimate was not requested and reported in the December 2009 ARRA report for consulting service vendor payments totaling \$25,600.

Furthermore, the University has not established monitoring procedures to ensure ARRA jobs estimates reported by subrecipients or vendors are reasonably accurate and complete in relationship to the level of funding provided. Without basic reasonableness and completeness checks, the reliability of the reported ARRA jobs cannot be assured.

While Caltech has informally agreed with our observations, the University should establish formal ARRA procedures to (a) obtain jobs data from subrecipients on a quarterly basis; (b) obtain jobs certifications for all consulting contracts regardless of the dollar value, and (c) perform basic reasonableness checks of the jobs data received from subawardees and vendors

Caltech Response: Caltech agrees to modify its ARRA procedures to obtain jobs data from subrecipients on a quarterly basis, collect jobs data from consultants regardless of dollar value, and perform basic reasonableness checks for jobs data received from subrecipients and vendors.

OIG Comments: Caltech's proposed corrective actions are appropriate.

3. ARRA Jobs Should be Reported When the Work Is Performed

Criteria: Section 5.9 of OMB M-10-8 states that a "funded job is defined as one in which the wages or salaries are either paid for or will be reimbursed with Recovery Act funding . . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred." Using the definition above, recipients are required to report the total number of jobs created or retained in the ARRA quarter when the work is actually performed.

Results: Caltech accurately reported ARRA jobs in the reporting quarter the employees actually worked on project activities. Review of 5 of the 37 ARRA awards found that the jobs were correctly reported for the December 2009 quarter.

OIG Comment: Since Caltech properly reported ARRA jobs, no comments are necessary.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The OMB Recipient Reporting Data Model requires “a description of the overall purpose and expected outputs and outcomes or results of the award. . .” to be reported for the *Quarterly Activities/Project Description* data element for each ARRA grant. However, NSF’s Recipient Quarterly Reporting Instructions (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: Pursuant to September 2009 NSF instructions, Caltech reported the original description from the award abstract in the *Quarterly Activities/Project Description* data field in the December 2009 ARRA report. Although NSF guidance stated that recipients “may want to supplement this statement with items such as: personnel in place, research underway, and/or equipment purchased and/or installed,” the University chose not to provide such supplementary information on its ARRA research activities. In order to meet ARRA transparency goals, it is essential that an accurate description of quarterly grant activities be reported so that the public and all stakeholders are informed on how Recovery funds are expended.

Caltech should revise its ARRA reporting procedures to require principal investigators to provide an updated description of quarterly activities accomplished for each ARRA grant.

Caltech Response: Caltech disagreed that with our suggested corrective action because it believes that adding activity descriptions would provide very little meaning to the public and the information is already available through other Section 1512 reporting elements, i.e., project status and expenditure amounts.

OIG Comment: We continue to believe that the public would benefit from additional disclosure about how ARRA funds were expended during each ARRA quarter, therefore, we reaffirm our position.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

Criteria: Paragraph .13 of OMB Circular A-110,¹ *Debarment and suspension*, restricts subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from its contractor and/or subawardees regarding its Excluded Parties List (EPL) status and that of its principal employees.

Results: For awards over \$25,000, Caltech internal controls provide reasonable assurance that subrecipient organizations and contractors were not presently debarred, suspended, or proposed for debarment by any federal department or agency. However, the University’s established

¹ OMB Circular A-110: Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations.

procurement policies did not require that subrecipients receiving awards less than the \$25,000 threshold certify its Excluded Parties List (EPL) status as required by OMB grant requirements.

Caltech has agreed to amend its procurement procedures to require University officials to independently use a specialized software program to automatically check the EPL and other similar lists for all subcontracts and subawards, regardless of the dollar value. This change should strengthen Caltech's internal controls over procurements and result in a more efficient process.

Caltech Response: Caltech agreed with our comments and has already amended its procurement procedures to expand the application of EPL screening to all subawards regardless of dollar value.

OIG Comments: Caltech corrective actions implemented are appropriate.



CALIFORNIA INSTITUTE OF TECHNOLOGY

Office of Research Administration
Mail Code 231-15
Pasadena, California 91125

Phone: [REDACTED]
FAX: [REDACTED]

April 30, 2010

Mark Kim
Office of Audits
Office of Inspector General
National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230

Dear Mr. Kim:

I am writing to provide Caltech's response to the recommendations made by the NSF Office of Inspector General as a result of its review of Caltech's ARRA processes. We are in general agreement with your observations, but would like to offer the following specific comments:

1. ARRA Jobs Reporting for Fellowship and Training Grants

NSF Recommendation: Caltech should update its ARRA procedures to clarify jobs reporting for fellows and trainees working on ARRA awards.

Caltech Response: Caltech agrees with the recommendation for clear documentation and will update its ARRA procedures to incorporate this business decision.

2. Jobs Reporting for Subrecipients and Vendors

NSF Recommendation: The University should establish formal ARRA procedures to (a) obtain jobs data from subrecipients on a quarterly basis; (b) obtain jobs certifications for all consulting contracts regardless of the dollar value, and (c) perform basic reasonableness checks of the jobs data received from subawardees and vendors

Caltech Response: Caltech agrees that it should obtain jobs data from subrecipients on a quarterly basis, collect jobs data from consultants regardless of dollar value, and perform basic reasonableness checks for jobs data received from subrecipients and vendors. Caltech will modify its procedures accordingly.

3. ARRA Jobs Should be Reported When the Work is Performed

NSF Recommendation: No recommendations were made.

Caltech Response: None.

4. Quarterly ARRA Activities Need to be Reported

NSF Recommendation: Caltech should revise its ARRA reporting procedures to require principal investigators to provide an updated description of quarterly activities accomplished for each ARRA grant.

Caltech Response: Caltech agrees that it is reasonable to report on quarterly activities when there are discrete project milestones and/or deliverables against which to report – this is the intent of this requirement. However, for basic research awards, where the only concrete deliverable is an annual progress report and usually there are no discrete milestones, it does not make sense to provide a quarterly update on project activities since that would have very little meaning to the public and therefore would not be particularly helpful in achieving ARRA's transparency goals. Our position is based on the following:

- Annual progress reports are already required for all federal grants; these reports provide far greater detail of the activities and scientific progress relative to the project's goals and objectives than can be addressed in the 2000 characters allowed in the Quarterly Activities/Project Description field. NSF is very judicious in withholding incremental funding on grants until the annual progress reports have been received and accepted.
- There are already Section 1512 reporting elements specifically designed to provide full transparency of both the financial and programmatic progress of an ARRA award:
 - (1) Project Status shows the relative percent of the Project Description completed since the Award Date;
 - (2) Expenditure Amount shows the financial progress towards full use of the Award Amount.

On a standard research project, even statements as simple as "equipment has been ordered" or "equipment has been received" would have no meaning to the public relative to the Award Description field, the latter being the public's only baseline. Caltech acknowledges, however, that for a project such as an instrumentation award, where similar statements would more likely make sense to the public relative to the Award Description field, providing a brief description of project activities could be appropriate.

The challenge for both NSF and its ARRA grantees is to find quantifiable, or at least comparable, methods of reporting “quarterly activities” in 2,000 characters.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

NSF Recommendation: Caltech should expand the application of EPL screening to all subawards, regardless of dollar value.

Caltech Response: Caltech has implemented this recommendation.

Caltech acknowledges the thoroughness of the OIG’s review of our ARRA grants management program and appreciates the opportunity to comment on your findings and recommendations.



Review of ARRA Recipient Reporting

**California State University
Fresno Foundation**

Fresno, CA.

**National Science Foundation
Office of Inspector General**

**June 18, 2010
OIG 10-6-008-B**



NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

[REDACTED]
California State University Fresno Foundation
4910. N. Chestnut
Fresno, CA 93726-1852

Dear Mr. [REDACTED]

Please find attached a NSF Alert Memorandum summarizing the results of our review at five universities to assess the overall quality of quarterly reporting of grants funded by the American Recovery and Reinvestment Act (ARRA). Our review found that the five universities have generally established appropriate internal controls to (a) segregate ARRA funding in its financial management system and (b) provide reasonable assurance of compliance with ARRA reporting requirements.

The final report of our ARRA review at your institution is attached as Appendix B (OIG Report # 10-6-008-B). A draft report requesting comments on the five findings was issued for your review and comment. The University's complete response is attached. We have summarized your response after each recommended corrective action and provided our comments. The University's actions taken and/or proposed are appropriate to implement all suggested corrective actions.

We appreciate the cooperation that was extended to the audit team during our review. If you have any questions, please feel free to call me at 703-292-8097 or Mark Kim at 703-292-8531.

Sincerely,

Joyce N. Werking
Acting Deputy Associate Inspector General for Audits

Enclosure

California State University Fresno Foundation

ARRA Funding Level

NSF ARRA Grants	4
Amount of NSF/ARRA Grants	\$3.4M
ARRA Expenses as of Dec 2009	\$42K
NSF Non-ARRA Grants	6
Amount of NSF Non-ARRA Grants	\$1.9M
Percentage of ARRA Grants to Total NSF Grants (\$)	65 %

ARRA Reporting Methodology

California State University Fresno Foundation (Fresno) has generally established appropriate internal controls to provide reasonable assurance that the Foundation is in compliance with Section 1512 reporting requirements of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). However, some opportunities for improvement were noted. Fresno has established the following key processes for ARRA grants:

- The Grants Accounting Office centrally manages all ARRA grants, including quarterly reporting, to ensure consistent administration of funding and reporting. A key position has been designated that has central responsibility for compiling all required ARRA reporting information.
- A unique code has been established to segregate each ARRA award in Fresno's accounting system to allow the Foundation to identify and track the source and use of ARRA funds.
- Procedures for collecting, compiling, reviewing, and reporting on Section 1512 data elements have been established and implemented for the December 2009 ARRA Quarterly Report to ensure reasonable compliance with OMB reporting guidance. Our review of all four ARRA grants, with total expenditures of \$42,124 or 1.2 percent of total funding, disclosed that the reported expenditures and project status were reasonably supported. However, improvements are needed to improve the accuracy and transparency of the reported ARRA jobs created/retained.

Fresno Processes for NSF Alert Memorandum Discussion Items

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of ARRA requires reporting “An estimation of the number of jobs created or retained by the [ARRA] projects or activities . . .” In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as “an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or **will be reimbursed** with Recovery Act funding.”

Results: Fresno has not established policies and procedures to address whether ARRA jobs should be reported for participants funded by NSF fellowship and training grants. However, Foundation officials stated that ARRA jobs will be reported if students or participants are paid salaries through the payroll system; but jobs will not be reported for any stipends paid to such individuals. As such, Fresno does not plan to report any ARRA jobs for the 18 teaching fellows receiving various stipends paid from its \$1.5 million Noyce Master’s Scholarship Program grant.

Fresno should obtain clarification from NSF on the proper reporting of ARRA jobs for the 18 Noyce Master's Program teaching fellows.

Fresno Response: Fresno concurs and will obtain clarification from NSF on the proper reporting of ARRA jobs for the fellowship stipends paid.

OIG Comment: Fresno’s proposed corrective actions are appropriate.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by directly collecting specific data from subrecipients and vendors on the total jobs created or retained on ARRA-funded projects and activities.

Results: Fresno has revised its standard subaward agreement to address the new ARRA Section 1512 requirements. However, the revised contractual provisions did not clearly require subrecipients to segregate ARRA funds and to provide quarterly reporting of the estimate of jobs created/retained. Similarly, Fresno has not established procedures for obtaining job estimates for ARRA-funded vendor contracts.

Additionally, the Foundation has not established monitoring procedures to ensure ARRA job estimates reported by subrecipients and vendors are reasonably accurate and complete in relationship to the level of funding provided. Without basic reasonableness and completeness checks, the reliability of the reported ARRA job estimates cannot be assured.

Fresno should (a) amend its ARRA subaward agreements to clearly require the segregation of ARRA funds and quarterly reporting of job estimates, (b) establish formal procedures for requiring quarterly job estimate reporting from vendors, and (c) perform high-level logic checks to ensure the reasonableness of the quarterly job estimates reported by vendors and subrecipients.

Fresno Response: Fresno concurs with the suggested actions and has created a supplement to its standard Subaward Agreement that clearly communicates these requirements. Also, the Foundation will develop (i) a similar supplement for Purchase Orders or other direct vendor contracts/agreements to require the reporting of jobs and (ii) formal procedures (including reasonableness checks) to assure compliance.

OIG Comment: Fresno's proposed corrective actions are appropriate.

3. ARRA Jobs Should be Reported When the Work Is Performed

Criteria: Section 5.9 of OMB M-10-8 states that a "funded job is defined as one in which the wages or salaries are either paid for or will be reimbursed with Recovery Act funding . . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred." Using the definition above, recipients are required to report the total number of jobs created or retained in the ARRA quarter when the work is actually performed.

Results: Fresno's established process for reporting ARRA jobs is based on employee salaries charged to an award, which is appropriately converted to full-time equivalents per OMB reporting guidance. However, to ensure the jobs are accurately reported in the quarter when the work was actually performed, principal investigators need to timely process payroll distribution documentation for their ARRA work activities. In addition, the Foundation needs to establish a process for properly reporting ARRA jobs for faculty members granted academic release time to work on Recovery Act research activities.

Our review of the December 2009 ARRA report disclosed that for one ARRA grant, an exception rate of 28 percent occurred because principal investigator jobs reported were not reflective of actual work performed in the quarter. Given the public scrutiny regarding the number of ARRA jobs reported each quarter, Fresno must undertake concerted efforts to report jobs in the quarter in which the work was actually performed to provide sufficient transparency on the use of Recovery Act funds.

Fresno should (a) require that principal investigators timely process payroll distribution documentation when work is initiated on ARRA grants and (b) establish a process for timely reporting jobs for faculty members granted academic release time to work on ARRA grants.

Fresno Response: Fresno concurs and has initiated a process to scope the implementation of an online, web-based time management system that will have the

ability to capture effort on ARRA grants. In addition, it will work with the University to facilitate increased frequency of academic release time reporting. In the interim, the Foundation will communicate with all ARRA principal investigators the requirement for timely processing of both payroll distribution and release time documentation.

OIG Comment: Fresno's proposed corrective actions are appropriate.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The OMB Recipient Reporting Data Model requires "a description of the overall purpose and expected outputs and outcomes or results of the award. . ." to be reported for the *Quarterly Activities/Project Description* data element for each ARRA grant. However, NSF's Recipient Quarterly Reporting Instructions (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: Fresno written procedures appropriately required principal investigators to complete the *Quarterly Activities* data element in accordance with the OMB's definition. However, our review of quarterly activities reported for the December 2009 quarter disclosed that for two of the four ARRA grants, the data field referred back to the original grant description at the time of NSF award. In order to meet ARRA transparency goals, it is essential that an accurate description of quarterly activities accomplished be reported.

Fresno should require that principal investigators are providing an accurate update on activities completed in each quarterly ARRA report as required by established Foundation procedures.

Fresno Response: Fresno concurs and has already taken action to require principal investigators to provide quarterly activity updates.

OIG Comment: Fresno's corrective actions implemented are appropriate.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

Criteria: Paragraph .13 of OMB Circular A-110,¹ *Debarment and suspension*, restricts subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from its contractor and/or subawardees regarding its Excluded Parties List (EPL) status and that of its principal employees.

Results: While Fresno does not have any formal written procedures or controls in place to ensure that the Excluded Parties List (EPL) is consulted, cognizant grants officials stated that the EPL is reviewed prior to issuance of any vendor contract or subaward agreement. Given the increased transparency and accountability goals for spending ARRA funding, it is essential that the Foundation establish formal procedures to be fully compliant with OMB Circular A-110 requirements for debarment and suspension.

Fresno should establish formal procedures requiring that the EPL be reviewed and the status documented for all vendor contracts over \$25,000 and all subaward agreements to ensure neither the organization nor its principal employees are presently debarred, suspended, or proposed for debarment by any federal department or agency.

Fresno Response: Fresno concurs and states that its Sub-Recipient Monitoring Policy, Procurement Policy, and Subcontracts Checklist have all been revised to address this requirement.

OIG Comment: Fresno's proposed corrective actions are appropriate.

¹ OMB Circular A-110: Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations

To obtain a copy of the Auditee Response to this report,

Please contact us at oig@nsf.gov or at (703) 292 7100.

In your request please specify the audit title and report number.

Review of ARRA Recipient Reporting

George Mason University

Fairfax, Virginia

**National Science Foundation
Office of Inspector General**

**June 18, 2010
OIG 10-6-008-C**



NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

[REDACTED]
Office of Sponsored Programs
George Mason University
4400 University Drive, MS 6D5
Fairfax, VA 22030

Dear Mr. [REDACTED]:

Please find attached a NSF Alert Memorandum summarizing the results of our review at five universities to assess the overall quality of quarterly reporting of grants funded by the American Recovery and Reinvestment Act (ARRA). Our review found that the five universities have generally established appropriate internal controls to (a) segregate ARRA funding in its financial management system and (b) provide reasonable assurance of compliance with ARRA reporting requirements.

The final report of our ARRA review at your institution is attached as Appendix C (OIG Report # 10-6-008-C). A draft report requesting comments on the five findings was issued for your review and comment. The University's complete response is attached. We have summarized your response after each recommended corrective action and provided our comments. The University's actions taken and/or proposed are appropriate to implement all suggested corrective actions except for actions 2(a) and 2(b). We made some editorial revisions to the finding to provide clarification that reasonableness test for vendor jobs reporting should be based on total contract value and not individual vendor payment amounts. Therefore, we reaffirm that the University should (a) require reporting of job estimates for all consulting service contracts regardless of dollar value and (b) clarify that the \$25,000 threshold for vendor job estimates applies to the total value of the contract and not individual vendor payments.

We appreciate the cooperation that was extended to the audit team during our review. If you have any questions, please feel free to call me at 703-292-8097 or Jerel Silver at 703-292-8461.

Sincerely,

Joyce N. Werking
Acting Deputy Associate Inspector General for Audits

Enclosure

George Mason University

ARRA Funding Level

NSF ARRA Grants	13
Amount of NSF/ARRA Grants	\$7.9M
ARRA Expenses as of Dec 2009	\$ 361K
NSF Non-ARRA Grants	92
Amount of NSF Non-ARRA Grants	\$27.5 M
Percentage of ARRA Grants to Total NSF Grants(\$)	22 %

ARRA Reporting Methodology

George Mason University (GMU) has generally established appropriate internal controls to provide reasonable assurance that the University is in compliance with Section 1512 reporting requirements of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). However, some opportunities for improvement were noted. GMU has established the following key processes for ARRA reporting:

- The GMU Office of Sponsored Projects centrally manages all ARRA grants, including quarterly reporting, to ensure consistent administration of funds and reporting.
- A unique fund code has been established to segregate each ARRA award in GMU's accounting system to allow the University to identify and track the source and use of ARRA funds.
- Procedures for collecting, compiling, reviewing, and reporting on Section 1512 data elements have been established and implemented to ensure reasonable compliance with OMB reporting guidance for the December 2009 ARRA report. A review of 7 of 13 NSF ARRA grants, with \$60,632 of expenditures or 1 percent of total ARRA funds awarded on these grants, disclosed that the estimate for the number of jobs, expenditures, and project status were reasonably supported.

GMU Processes for NSF Alert Memorandum Discussion Items

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of ARRA requires reporting “An estimation of the number of jobs created or retained by the [ARRA] projects or activities...” In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as “an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding.”

Results: GMU did not have established policies and procedures addressing whether jobs should be reported for students funded by fellowship and training grants because it did not receive any ARRA funding for such awards. However, GMU does have non-ARRA funded fellowship and training grants and is aware of the purpose and nature of such federal support. As such, GMU officials stated that in their opinion, ARRA jobs should be reported for students funded by fellowship and training grants.

GMU Response

GMU agreed with the finding and stated that if the University receives ARRA-funded fellowship and training grants, it would implement policies and procedures to report Recovery Act jobs.

OIG Comment

GMU’s response meets the intent of the report finding.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by directly collecting specific data from subrecipients and vendors on the total jobs created or retained on ARRA-funded projects and activities.

Results: GMU has developed a standard subaward agreement to establish contractual provisions to comply with ARRA Section 1512 requirements. The University’s subaward terms and conditions clearly require the reporting of ARRA job estimates to the University on a quarterly basis.

However, GMU’s ARRA policies did not clearly establish similar procedures requiring jobs reporting for vendor contracts under a \$25,000 threshold. Specifically, the University's procedures do not require vendors to report estimate of jobs for any **payments less than \$25,000**. However, these procedures mistakenly use the amount of each individual vendor payment as the threshold for requiring jobs reporting instead of the total value of the vendor contract. To illustrate, even if a contract was awarded for

\$ 200,000, GMU current procedures would not require any ARRA job estimates as long as no individual payment to the vendor was greater than the \$25,000 threshold. By applying the \$25,000 threshold to individual vendor payment amounts instead of the total contract value, the number of ARRA jobs reported could be understated.

In addition, GMU needs to reassess if excluding jobs reporting for all vendor contracts with a total value of less than \$25,000 is reasonable given the transparency requirements associated with the spending of Recovery Act funds. For example, consulting services, which by the nature of the work create jobs, are often under the \$25,000 threshold and should not be excluded from ARRA jobs reporting. While relatively small in dollar value, we found that three of GMU's 13 ARRA grants have \$109,000 budgeted for consultant services.

Furthermore, the University does not have any established monitoring procedures to ensure ARRA jobs estimates reported by subrecipients or vendors are reasonably accurate and complete in relationship to the level of funding provided. Without basic reasonableness checks, the reliability of the reported ARRA jobs cannot be assured.

GMU should revise its ARRA procedures to (a) require reporting of job estimates for all consulting service contracts regardless of dollar value, (b) clarify that the \$25,000 threshold for vendor job estimates applies to the total value of the contract and not individual vendor payments, and (c) perform high level logic checks to ensure the reasonableness of quarterly job estimates reported by vendors and subrecipients.

GMU Response

GMU stated that in the absence of specific guidance related to jobs reporting for vendor payments, University officials interpreted a \$25,000 threshold as reasonable for requiring job estimates from vendors. The University believes that OMB clarification on this issue would be helpful to ensure that ARRA job estimates are accurate and time is not invested on small dollar vendor payments that are unlikely to result in ARRA jobs directly created or retained. As such, GMU did not respond to suggested corrective actions 2(a) and 2(b), but has revised ARRA procedures to include high level logic checks to ensure the reasonableness of quarterly job estimates reported by vendors and subrecipients in response to item 2(c).

OIG Comments

We continue to believe that job estimates should be required for all consulting service contracts regardless of dollar value. For other vendor contracts, the reasonableness test for vendor jobs reporting should be based on total contract value and not vendor payments. However, we believe that GMU did not clearly understand our finding in this regard, thus we have made some editorial revisions to the finding to provide clarification and reaffirm our position for suggested corrective actions 2(a) and 2(b). For action item 2(c), GMU actions taken to revise its ARRA procedures are responsive.

3. ARRA Jobs Should be Reported When the Work Is Performed

Criteria: Section 5.9 of OMB M-10-8 states that a “funded job is defined as one in which the wages or salaries are either paid for or **will be reimbursed** with Recovery Act funding . . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred.” Using the definition above, recipients are required to report the total number of jobs created or retained in the ARRA quarter when the work is actually performed.

Results: GMU generally had adequate internal controls in place to accurately report the number of ARRA jobs created or retained for the December 2009 reporting quarter. However, our review of 7 of the 13 ARRA grants disclosed one exception where the University over-reported the jobs. This occurred because the principal investigator did not process payroll distribution paperwork¹ to allocate salary to the ARRA grant when six employees initiated work on the research project. When salary adjustments were made two months later, the cost transfers resulted in an 18 percent overstatement of ARRA jobs in the December 30, 2009 reporting quarter for the subject grant for work actually performed in the prior quarter. Given the importance of the accuracy of ARRA reporting, concerted efforts should be made to report jobs in the quarter in which the work was actually performed to provide sufficient transparency on the use of Recovery funds.

GMU should ensure that principal investigators timely process payroll distribution documentation when employees are assigned to work on ARRA grants.

GMU Response

GMU agreed with the importance of submitting payroll distribution documentation in a timely manner and will continue to emphasize the need for timely processing by principal investigators responsible for initiating payroll distribution changes.

OIG Comment

GMU’s proposed corrective actions are appropriate.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The OMB Recipient Reporting Data Model requires “a description of the overall purpose and expected outputs and outcomes or results of the award. . .” to be reported for the *Quarterly Activities/Project Description* data element for each ARRA grant. However, NSF’s Recipient Quarterly Reporting Instructions (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project

¹ Section J.10.b.(2)(e) of OMB Circular A-21, Cost Principles for Educational Institutions, requires universities to identify and enter into the payroll distribution system significant changes in employee work activity.

progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: GMU appropriately required principal investigators to complete the *Quarterly Activities* data element in accordance with the OMB's definition. However, we determined that for 5 of 13 ARRA grants, the *Quarterly Activities/Project Description* between the September and December 2009 ARRA reports had not been revised. In order to meet Recovery Act transparency goals, it is essential that an accurate description of quarterly grant activities be reported.

GMU should ensure that principal investigators are providing an accurate update on activities completed in each quarterly ARRA report.

GMU Response

While GMU noted that given the early stages of ARRA projects, it is reasonable for the status of activities on some projects to remain unchanged, it agreed that in the future the Office of Sponsored Programs (OSP) will perform a reasonable check of the subject data element prior to submitting the ARRA report. If the description has not changed, OSP will confirm with the principal investigator that the description provides an accurate update on quarterly activities.

OIG Comment

GMU's proposed corrective actions are appropriate.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

Criteria: Paragraph .13 of OMB Circular A-110,² *Debarment and suspension*, restricts subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from its contractor and/or subawardees regarding its Excluded Parties List (EPL) status and that of its principal employees.

Results: GMU internal controls provide reasonable assurance that neither subrecipient institutions nor its principal employees are presently debarred, suspended, or proposed for debarment by any federal department or agency by reviewing the federal EPL prior to the issuance of a subaward. However, the University does not have similar controls over contracts awarded for goods and services under federal assistance grants. This occurred because as a State organization, GMU's procurement office uses the State of Virginia's

² OMB Circular A-110: Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations.

contracting system. According to University officials, the State system only checks companies against Virginia's excluded parties list and not the federal list. Given the increased transparency and accountability goals for ARRA funding, OSP officials have agreed to amend its procurement procedures for federally-funded contractors to ensure the EPL is reviewed to ensure full compliance with federal grant regulations.

GMU should establish formal procurement procedures to ensure that all federally-funded contractors and its principal employees are not presently debarred, suspended, or proposed for debarment by any federal department or agency prior to issuing any contract for goods and/or services over \$25,000.

GMU Response

GMU agreed and stated that the University's Procurement Office has revised its formal written procedures to review the EPL for contracts awarded for goods and services under federal funding.

OIG Comment

GMU corrective actions implemented are appropriate.



Fiscal Services

4400 University Drive, MS 4B2, Fairfax, Virginia 22030
Phone: 703-993-2660; Fax: 703-993-2920

April 30, 2010

Mr. Jerel Silver
Audit Manager
NSF-OIG
4201 Wilson Blvd, Suite II-705
Arlington, VA 22230

Dear Mr. Silver:

We have reviewed the findings and recommendations resulting from the recent compliance review of NSF grants conducted by NSF-OIG. The following contains the NSF-OIG findings and management's response to the concerns and issues raised.

NSF-OIG Finding: ARRA Jobs Reporting for Fellowship and Training Grants

GMU did not have established policies and procedures addressing whether jobs should be reported for students funded by fellowship and training grants because it did not receive any ARRA funding for such awards. However, GMU does have non-ARRA funded fellowship and training grants and is aware of the purpose and nature of such federal support. As such, OSP officials stated that in their opinion, ARRA jobs should be reported for students funded by fellowship and training grants.

Management's Response

George Mason University fully intends to implement policies and procedures to report jobs for students funded by fellowship and training grants if applicable.

NSF-OIG Finding: Jobs Reporting for Subrecipients and Vendors

GMU should revise its ARRA procedures to (a) require reporting of job estimates for all consulting service contracts regardless of dollar value, (b) clarify that job estimates are required for all vendor contracts with a total value over \$25,000, and (c) perform high level logic checks to ensure the reasonableness of quarterly job estimates reported by vendors and subrecipients.

Mr. Jerel Silver
April 30, 2010
Page 2

Management's Response

In the absence of specific guidance related to jobs reporting associated with vendor payments, University officials interpreted a \$25,000 threshold as reasonable for further investigation of possible job estimates by vendors. Clarification from OMB on this issue would be helpful to ensure that job estimates are accurate and investigative time is not invested on small dollar vendor payments that are unlikely to result in jobs directly created or retained. George Mason University has revised procedures to include high level logic checks to ensure the reasonableness of quarterly job estimates reported by vendors and subrecipients and is fully committed to complying with ARRA reporting requirements and accurately reporting job estimates.

NSF-OIG Finding: ARRA Jobs Should be Reported When the Work Is Performed

GMU should ensure that principal investigators timely process payroll distribution documentation when employees are assigned to work on ARRA grants.

Management's Response

University officials agree with the importance of submitting payroll distribution documentation in a timely manner and will continue to emphasize the need for timely processing by principal investigators responsible for initiating payroll distribution changes.

NSF-OIG Finding: Quarterly ARRA Activities Need to be Reported

GMU appropriately required principal investigators to complete the Quarterly Activities data element in accordance with the Recovery Board's definition. However, we determined that for five of 13 ARRA grants, the Quarterly Activities/Project Description between the September and December 2009 reports had not been revised. In order to meet ARRA transparency goals, it is essential that an accurate description of quarterly grant activities be reported.

GMU should ensure that principal investigators are providing an accurate update on activities completed in each quarterly ARRA report.

Management's Response

Given the early stage of the ARRA projects it is reasonable for the status of activities on some projects to remain unchanged between the first and second quarters. As the project periods progress, we expect to see more significant updates between quarterly reports. Prior to report submission, the Office of Sponsored Programs (OSP) will perform a reasonableness check of the Quarterly Activities/Project Description. If the description has not changed from the prior

Mr. Jerel Silver
April 30, 2010
Page 3

quarter, OSP will confirm with the principal investigator that the description provides an accurate update of quarterly activities.

NSF-OIG Finding: Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

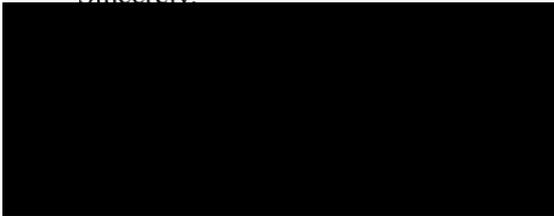
GMU internal controls provide reasonable assurance that neither subrecipient institutions nor its principals are presently debarred, suspended, or proposed for debarment by any federal department or agency by reviewing the Federal Excluded Parties List (EPL) prior to the issuance of a subaward. However, the University does not have similar controls over contracts awarded for goods and services under federal grants. This occurred because as a State organization, GMU's procurement office uses the Virginia State contracting system. According to University officials, the State system only checks companies against Virginia's excluded parties list and not the federal list. Given the increased transparency and accountability goals for ARRA funding, GMU's procurement office has agreed to amend its procurement procedures for federally-funded contractors to ensure the EPL is reviewed to ensure full compliance with federal grant regulations.

GMU should establish formal procurement procedures to ensure that all federally-funded contractors and its principal employees are not presently debarred, suspended, or proposed for debarment by any federal department or agency prior to issuance of a contract for goods and/or services.

Management's Response

The University's Procurement Office has included in its formal written procedures the requirement to review the Federal Excluded Parties List (EPL) for contracts awarded for goods and services under federal funding.

Sincerely,



Review of ARRA Recipient Reporting

University of Colorado

Boulder, CO

**National Science Foundation
Office of Inspector General**

**June 18, 2010
OIG 10-6-008-D**



NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

[REDACTED]
University of Colorado
3100 Marine Street, Room 479
572 UCB
Boulder, CO 80309-0527

Dear Dr. [REDACTED]:

Please find attached a NSF Alert Memorandum summarizing the results of our review at five universities to assess the overall quality of quarterly reporting of grants funded by the American Recovery and Reinvestment Act (ARRA). Our review found that the five universities have generally established appropriate internal controls to (a) segregate ARRA funding in its financial management system and (b) provide reasonable assurance of compliance with ARRA reporting requirements.

The final report of our ARRA review at your institution is attached as Appendix D (OIG Report # 10-6-008-D). A draft report requesting comments on the five findings was issued for your review and comment. The University's complete response is attached. We have summarized your response after each recommended corrective action and provided our comments. The University's actions taken and/or proposed are appropriate to implement all suggested corrective actions.

We appreciate the cooperation that was extended to the audit team during our review. If you have any questions, please feel free to call me at 703-292-8097 or Susan Crismon at 303-312-7649.

Sincerely,

Joyce N. Werking
Acting Deputy Associate Inspector General for Audits

Enclosure

University of Colorado - Boulder

ARRA Funding Level

NSF ARRA Grants	63
Amount of NSF/ARRA Grants	\$29 M
ARRA Expenses as of Dec 2009	\$1.7 M
NSF Non-ARRA Grants	494
Amount of NSF Non-ARRA Grants	\$220 M
Percentage of ARRA to Total NSF Grants (\$)	11.7 %

ARRA Reporting Methodology

The University of Colorado (CU) has generally established appropriate internal controls to provide reasonable assurance that it is in compliance with Section 1512 reporting requirements of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). Pursuant to the State of Colorado's ARRA reporting requirements, the University provides its quarterly data to the State through its Controller's Office. The State is responsible for submitting the required quarterly ARRA reports to the central reporting portal. The University's Sponsored Projects Accounting Office, works in conjunction with the Office of Contracts and Grants, to manage all ARRA grants and has established the following key processes for reporting:

- Developed a series of processes and automated system-based tools, including a web-based survey (questionnaire) for PIs, to collect and store information necessary for quarterly ARRA reporting.
- Established a system to flag and segregate ARRA awards in CU's accounting system to allow the University to separately identify and track the source and use of Recovery Act funds.
- Established procedures for collecting, compiling, reviewing, and reporting Section 1512 data elements to ensure reasonable compliance with OMB reporting guidance for the December 2009 ARRA reporting quarter. A review of 13 of the total 63 NSF ARRA grants, with \$681,129 of expenditures or 9.7 percent of total funds awarded, disclosed that the reported number of jobs, expenditures, and project status were reasonably supported.

Furthermore, we found that the University's Office of Controller has established an ARRA data quality review process, using automated system checks, to help identify any possible reporting errors before the information is submitted to the State of Colorado for formal submission of the report.

CU Processes for NSF Alert Memorandum Discussion Items

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of ARRA requires reporting “An estimation of the number of jobs created or retained by the [ARRA] projects or activities...” In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as “an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding.”

Results: CU has not established policies and procedures addressing whether ARRA jobs should be reported for participants funded by fellowship and training-type grants. Nevertheless, it did report jobs for students funded under its \$2 million ARRA-funded Graduate Research Fellowship award. But for its six other ARRA grants, with a total of \$145,186 budgeted for participant support, University officials stated that there are no plans to report Recovery Act jobs for any students and/or participants funded under the subject awards.

CU should obtain clarification from NSF on the appropriate reporting of ARRA jobs for students and participants funded by its Graduate Research Fellowship award as well as participant support costs budgeted under its other Recovery Act-funded grants.

CU Response: CU acknowledges the need to clarify the reporting requirements for Graduate Fellowships and students receiving support from ARRA funded awards. It is CU’s understanding that NSF will be posting a Frequently Asked Question (FAQ) regarding fellowships on the NSF ARRA website in the near future. If the FAQ is not posted by the end of May 2010, then CU will seek additional guidance from the NSF. However, CU questions whether the funding for participants should constitute the creation of jobs for ARRA reporting purposes because these individuals are grant participants and not University employees.

OIG Comment: CU’s proposed corrective actions are appropriate.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by collecting the total number of jobs created or retained on Recovery Act-funded projects and activities from subrecipients and vendors.

Results: CU has established appropriate standard contractual provisions for its subawards and vendor contracts to comply with ARRA Section 1512 requirements. The University’s contractual terms require the reporting of Recovery Act job estimates to the University on a monthly basis. However, CU has not established monitoring procedures to ensure ARRA jobs estimates reported by subrecipients or vendors are reasonably accurate and complete in relationship to the level of funding provided. Without basic

reasonableness and completeness checks, the reliability of the reported ARRA jobs cannot be assured.

CU should establish formal ARRA procedures to require basic reasonableness checks of the jobs data received from subawardees and vendors.

CU Response: In order to ensure the basic reasonableness of ARRA job estimates reported by subawardees and vendors, CU proposes to require the jobs data be reported as the percentage of effort of each individual for each month employed on ARRA funded projects. The data will be required to be certified by a subawardee or vendor employee with direct knowledge of the funded employee's effort.

OIG Comment: Based on additional information provided in CU's comments, we eliminated one of our suggested corrective actions. For the remaining suggested corrective action, CU's proposed actions to take additional steps to ensure the reasonableness of job estimates reported for ARRA- funded subawards and vendor contracts is appropriate.

3. ARRA Jobs Should be Reported When the Work Is Performed

Criteria: Section 5.9 of OMB M-10-8 states that a "funded job is defined as one in which the wages or salaries are either paid for or **will be reimbursed** with Recovery Act funding . . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred." Using the definitions above, recipients are required to report the total number of jobs created or retained in the ARRA quarter when the work is actually performed.

Results: CU accurately reported ARRA jobs in the reporting quarter the employees actually worked on project activities. A review of 13 of the 63 ARRA grants found that the jobs were correctly reported for the December 2009 quarter.

CU Response: No response needed.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The OMB Recipient Reporting Data Model requires "a description of the overall purpose and expected outputs and outcomes or results of the award. . ." to be reported for the *Quarterly Activities/Project Description* data element for each ARRA grant. However, NSF's Recipient Quarterly Reporting Instructions (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: Pursuant to NSF instructions, CU reported the original description from the award abstract in the *Quarterly Activities/Project Description* data field in the December 2009 ARRA report. Although NSF guidance stated that recipients "may want to

supplement this statement with items such as: personnel in place, research underway, and/or equipment purchased and/or installed,” the University choose not to provide such supplementary information on its reporting of ARRA research activities. In order to meet ARRA transparency goals, it is essential that an accurate description of quarterly grant activities be reported so that the public and all stakeholders are informed on how Recovery funds are expended.

CU should revise its ARRA reporting procedures to require principal investigators to provide an updated description of quarterly research results accomplished for each Recovery Act grant.

CU Response: CU supports the ARRA transparency goals and acknowledges the spirit of the NSF guidance to provide an updated description of quarterly research results. As such, CU has agreed to include additional directions to principal investigators on its web-based questionnaire to update research accomplishments in the *Quarterly Activities/Project Description* data field.

OIG Comment: CU’s proposed corrective actions are appropriate.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

Criteria: Paragraph .13 of OMB Circular A-110,¹ *Debarment and suspension*, restricts subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from its contractor and/or subawardees regarding its Excluded Parties List (EPL) status and that of its principal employees.

Results: CU’s internal controls provide reasonable assurance that all subrecipient organizations and contractors are not presently debarred, suspended, or proposed for debarment by any federal department or agency. The University’s established procedures require all subrecipients and contractors, regardless of dollar value of the award, to certify that neither the organization nor its principal employees are on the EPL.

CU Response: No response needed

¹ OMB Circular A-110: Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations

Office of Contracts and Grants

Administrative Research Center East Campus
Room 479, Campus Box 572
3100 Marine Street
Boulder, Colorado 80309-0572
Phone (303) 492-6221
Fax (303) 492-6421
www.colorado.edu/ocg/

April 27, 2010

Joyce Werking, CPA
Audit Manager
Office of Inspector General
National Science Foundation

Dear Ms. Werking:

Below, please find our response to the recent compliance review of our NSF ARRA awards.

Thank you.

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of the ARRA requires reporting of “An estimation of the number of jobs created or retained by the [ARRA] projects or activities . . .” In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as “an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding.”

Results: CU has not established policies and procedures addressing whether ARRA jobs should be reported for participants funded by fellowship and training-type grants. Nevertheless, it did report jobs for students funded under its \$2 million ARRA-funded Graduate Fellowship Award. But for the six other ARRA grants, with a total of \$145,186 budgeted for participant support, University officials stated that there are no plans to report ARRA jobs for any students and/or participants funded under the subject awards.

CU should obtain clarification from NSF on the appropriate reporting of ARRA jobs for students and participants funded by its Graduate Fellowship Award as well as participant support costs budgeted under its other ARRA-funded grants.

CU RESPONSE

CU acknowledges the need to clarify the reporting requirements for Graduate Fellowships and students receiving support from ARRA funded awards. It is our understanding that the NSF will be posting a Frequently Asked Question (FAQ) regarding fellowships on the NSF ARRA website in the near future. If the FAQ is not posted by the end of May 2010, then we will seek guidance from the NSF Grants Office.

We are confused, however, by the definition of jobs in 5.2 of OMB M-10-08:

A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding.

and the reference to “participant support costs” in the “Results” and recommendations. In the NSF Grants Policy Manual, participants are clearly differentiated from employees, who would be receiving wages or salaries.

Participant support costs are 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 meetings, conferences, symposia or training projects.

Consequently, we question whether the funding of participants should constitute the creation or retention of a job for ARRA reporting purposes.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by collecting the total number of jobs created or retained on ARRA-funded projects and activities from subrecipients and vendors.

Results: CU has revised its standard subaward agreement to establish contractual provisions to comply with ARRA Section 1512 requirements. The University’s subaward terms and conditions clearly require the reporting of ARRA job estimates to the University on a quarterly basis. However, the University’s ARRA policies did not clearly establish similar procedures requiring jobs reporting for vendor contracts.

Furthermore, the University has not established monitoring procedures to ensure ARRA jobs estimates reported by subrecipients or vendors are reasonably accurate and complete in relationship to the level of funding provided. Without basic reasonableness and completeness checks, the reliability of the reported ARRA jobs cannot be assured.

The University should establish formal ARRA procedures to require (a) quarterly reporting of vendor job estimates and (b) basic reasonableness checks of the jobs data received from subawardees and vendors.

CU RESPONSE

Regarding the recommendation to establish procedures that require jobs reporting from vendors, CU respectfully submits the following explanation.

The University of Colorado system Procurement Service Center is responsible for the issuing of agreements to vendors, while the campus sponsored offices (Office of Contracts and Grants and Sponsored Projects Accounting) are responsible for issuing subrecipient agreements and subcontracts (OCG), monitoring the performance of subrecipients and subcontractors (OCG and SPA), and reporting on subrecipient and subcontractor expenses (SPA). Principal Investigators are responsible for reviewing and approving subrecipient and subcontractor invoices.

In the “State of Colorado Supplemental Provisions for Contracts and Grants Using Funds Provided under the American Recovery and Reinvestment Act of 2009”, which is attached to all vendor agreements, a Contractor is defined as either a Subrecipient or a Recipient Vendor and specifically required to report on jobs:

Recipient Vendor Reporting. *A Recipient Vendor shall report to its Contracting Entity no later than the 25th day of each month the following inception-to-date data elements as of the end of the prior month:*

24.1.1 Job Creation Narrative

24.1.2 Number of Jobs Created or Retained

[http://www.colorado.gov/dpa/dfp/sco/contracts/ARRA/Terms_&Conditions\(2009-0821\).pdf](http://www.colorado.gov/dpa/dfp/sco/contracts/ARRA/Terms_&Conditions(2009-0821).pdf)

Regarding the recommendations to perform basic reasonableness checks of the jobs data received from subawardees and vendors, CU proposes the following changes to our procedures effecting the quarterly reporting of jobs from subawardees and vendors.

CU will require that jobs data be reported as the percentage of effort of each individual for each month employed on an ARRA funded projects and that these data be certified by a subawardee or vendor employee with direct knowledge of the funded employee’s effort and the authority to certify such effort.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The Recovery Board’s Data Dictionary requires “a description of the overall purpose and expected outputs and outcomes or results of the award. . .” to be reported for the Quarterly Activities/Project Description data element for each ARRA grant. However, NSF’s *Recipient Quarterly Reporting Instructions* (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: Pursuant to September 2009 NSF instructions, CU reported the original description from the award abstract in the Quarterly Activities/Project Description data field in the December 2009 ARRA report. Although NSF guidance stated that recipients “may want to supplement this statement with items such as: personnel in place, research underway, and/or equipment purchased and/or installed,” the University choose not to provide such supplementary information on its ARRA research activities. In order to meet ARRA transparency goals, it is essential that an accurate description of quarterly grant activities be reported so that the public and all stakeholders are informed on how Recovery funds are expended.

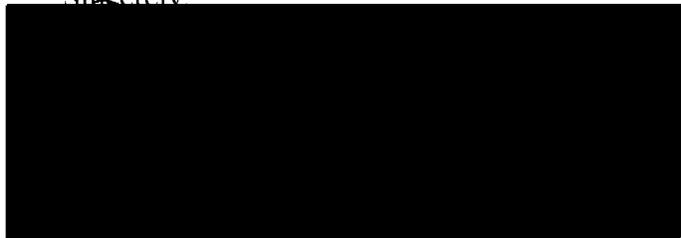
CU should revise its ARRA reporting procedures to require principal investigators to provide an updated description of quarterly research results accomplished for each ARRA grant.

CU RESPONSE

CU supports the ARRA transparency goals and acknowledges the spirit of the NSF guidance to provide an updated description of quarterly research results. In many cases, we believe that such information is being provided by the University’s ARRA funded Investigators, but to encourage all our Investigators to respond in the spirit of the NSF guidance, CU will add the following language to the directions on the quarterly on-line questionnaire.

In the abstract submitted to NSF at the time of award, you described the project’s Scope of Work and anticipated outcomes. The NSF Office of the Inspector General recently completed a compliance review of the University’s ARRA policies and procedures and strongly recommends that these anticipated outcomes be revised and documented in each quarterly progress report. Consequently, if there has been significant progress on your project since the last quarterly report, we encourage you to describe this progress by reporting such things as personnel in place, research underway, and equipment purchased and/or installed.

Sincerely

A large black rectangular redaction box covering the signature and name of the sender.

cc:

A black rectangular redaction box covering the list of recipients for the email.

Review of ARRA Recipient Reporting

University of Kentucky

Lexington, KY

**National Science Foundation
Office of Inspector General**

**June 18, 2010
OIG 10-6-008-E**



NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

[REDACTED]
University of Kentucky
411 South Limestone Street
301 Peterson Service Building
Lexington, KY 40506

Dear Ms. [REDACTED]:

Please find attached a NSF Alert Memorandum summarizing the results of our review at five universities to assess the overall quality of quarterly reporting of grants funded by the American Recovery and Reinvestment Act (ARRA). Our review found that the five universities have generally established appropriate internal controls to (a) segregate ARRA funding in its financial management system and (b) provide reasonable assurance of compliance with ARRA reporting requirements.

The final report of our ARRA review at your institution is attached as Appendix E (OIG Report # 10-6-008-E). A draft report requesting comments on the five findings was issued for your review and comment. The University's complete response is attached. We have summarized your response after each recommended corrective action and provided our comments. The University's actions taken and/or proposed are appropriate to implement all suggested corrective actions except for Finding 4. We reaffirm that the University needs to ensure that principal investigators provide an update of quarterly ARRA grant activities as outlined in the University's web-based ARRA reporting system.

We appreciate the cooperation that was extended to the audit team during our review. If you have any questions, please feel free to call me at 703-292-8097 or Susan Crismon at 303-312-7649.

Sincerely,

Joyce N. Werking
Acting Deputy Associate Inspector General for Audits

Enclosure

University of Kentucky

ARRA Funding Level

NSF ARRA Grants	16
Amount of NSF/ARRA Grants	\$10.6M
ARRA Expenses as of Dec 2009	\$259K
NSF Non-ARRA Grants	147
Amount of NSF Non-ARRA Grants	\$86M
Percentage of ARRA Grants to Total NSF Grants (\$)	11 %

ARRA Reporting Methodology

The University of Kentucky (UK) has generally established appropriate internal controls to provide reasonable assurance that the University is in compliance with Section 1512 reporting requirements of the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). The Office of Sponsored Project Administration centrally manages all Recovery Act grants and has established the following key processes for ARRA reporting:

- Established a key position that has central responsibility for compiling all required ARRA reporting information from the Office of Sponsored Projects Administration, Sponsored Projects Accounting, principal investigators (PI), subrecipients, and vendors.
- Developed a web-based system for the collection and storage of information from PIs necessary for ARRA reporting.
- Established a system to flag and segregate ARRA funded awards in the UK accounting system to allow the University to separately identify and track the source and use of Recovery Act funds.
- Established procedures for collecting, compiling, reviewing, and reporting on Section 1512 data elements to ensure reasonable compliance with OMB reporting guidance for the December 2009 ARRA report. A review of 5 of the total 16 NSF ARRA grants, with \$123,440 of expenditures or 2.9 percent of the total funds awarded, disclosed that the reported number of jobs, expenditures, and project status were reasonably supported.

UK Processes for NSF Alert Memorandum Discussion Items

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of ARRA requires reporting “An estimation of the number of jobs created or retained by Recovery Act projects or activities . . .” In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as “an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding.”

Results: UK has not established policies and procedures addressing whether ARRA jobs should be reported for students or participants funded by budgeted participant support costs in NSF grants. The University had four ARRA grants that included budgeted participant support costs totaling \$345,621. UK officials stated that it was uncertain whether jobs for participants funded under such grants should be reported as created or retained in its quarterly ARRA data.

UK should request clarification from NSF on the appropriate reporting of jobs for individuals funded by participant support costs budgeted under its ARRA grants.

UK Response: UK has requested clarification from the NSF Policy Office regarding ARRA jobs reporting for persons paid from budgeted participant support costs.

OIG Comment: UK proposed corrective actions are appropriate.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by collecting the total number of jobs created or retained on ARRA-funded projects and activities from subrecipients and vendors.

Results: UK has appropriately revised its standard subaward agreement to establish contractual provisions to comply with ARRA Section 1512 requirements. The University’s subaward terms and conditions clearly require the reporting of ARRA job estimates to the University on a quarterly basis. However, the University’s ARRA policies did not clearly establish similar procedures requiring jobs reporting for vendor contracts. Specifically, its policies and procedures only required jobs estimates for one time purchases of \$25,000 or more, but not for vendor purchases under the \$25,000 threshold. However, during our review, we noted that consulting service contracts can often be under the \$25,000 threshold, but do create jobs by the nature of the services being provided. Thus, the total exclusion of all vendor contracts under the \$25,000 threshold from ARRA jobs reporting is not appropriate.

In addition, the University has not established monitoring procedures to ensure ARRA jobs estimates reported by subrecipients or vendors are reasonably accurate and complete

in relationship to the level of funding provided. Without basic reasonableness and completeness checks, the reliability of the reported ARRA jobs cannot be assured.

UK should establish formal ARRA procedures to require (a) reporting of job estimates for all consulting service contracts regardless of dollar value and (b) basic reasonableness checks of the quarterly jobs data received from subrecipients and vendors.

UK Response: While UK stated that ARRA jobs information for vendor payments less than \$25,000 is not collected because the University's assessment shows that the number of jobs are negligible for small purchases, it does agree to revise its procedures in the future to request and report job estimates for any consulting service contracts regardless of dollar value. Also, UK has developed a new Vendor Job Count Form to be provided to vendors to help the University verify the job information submitted. University personnel will also review the ARRA jobs data submitted by subrecipients and vendors for accuracy and follow-up on any discrepancies noted.

OIG Comment: UK proposed corrective actions are appropriate.

3. ARRA Jobs Should be Reported When the Work Is Performed

Criteria: Section 5.9 of OMB M-10-8 states that a “funded job is defined as one in which the wages or salaries are either paid for or **will be reimbursed** with Recovery Act funding . . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred.” Using the definition above, recipients are required to report the total number of jobs created or retained in the ARRA quarter when the work is actually performed.

Results: UK accurately reported jobs in the reporting quarter that its employees actually worked on Recovery Act project activities. A review of 5 of the 16 ARRA grants found that the jobs were correctly reported in the December 2009 reporting quarter.

UK Response: None required.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The OMB Recipient Reporting Data Model requires “a description of the overall purpose and expected outputs and outcomes or results of the award. . .” to be reported for the *Quarterly Activities/Project Description* data element for each ARRA grant. However, NSF's Recipient Quarterly Reporting Instructions (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: Pursuant to the September 2009 NSF instructions, UK reported the original description from the NSF award abstract in the *Quarterly Activities/Project Description* data field in the December 2009 ARRA report for 8 of its 16 grants. This occurred even though the University's own web-based system for collecting ARRA information directed PIs to provide "a statement that addresses personnel in place, research underway, and equipment purchased and installed" for the *Quarterly Activities/Project Description* data element for each grant. However, for the remaining eight ARRA grants, UK did provide a more detailed description for quarterly activities on which Recovery Act funds had been spent. In order to meet ARRA transparency goals, it is essential that an accurate description of quarterly grant activities be reported for all ARRA grants so that the public and all stakeholders are informed on how Recovery Act funds are expended.

UK should require all PIs to enter a brief description of quarterly project activities for each ARRA grant as required by established University procedures.

UK Response: UK stated that the NSF guidance was changed in late December 2009 to require that a brief summary of a project's status be provided for this data element and that subsequently UK changed its web-based system to reflect the updated NSF guidance. However, UK does not agree that current federal guidance requires a detailed description for the *Quarterly Activities/Project Description* data element for each grant.

OIG Comment: Based on UK's comments, we have revised our suggested corrective action to be consistent with NSF's December 2009 proposed revisions to its ARRA reporting instructions requiring a "brief summary of activities conducted. . ." be reported in the subject data field instead of a "detailed description." Therefore, we reaffirm our position that PIs should provide an update of quarterly ARRA grant activities as outlined in the University's web-based ARRA reporting system.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

Criteria: Paragraph .13 of OMB Circular A-110,¹ *Debarment and suspension*, restricts subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from its contractor and/or subawardees regarding its Excluded Parties List (EPL) status and that of its principal employees.

Results: UK's internal controls provide reasonable assurance that all subrecipient organizations and vendor contractors are not presently debarred, suspended, or proposed for debarment by any federal department or agency. The University checks the EPL for all subawardees and its principal employees prior to award issuance and the subrecipient organization must certify its exclusion status in the subaward agreement.

¹ OMB Circular A-110: Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations

In addition, UK maintains a vendor database of eligible contractors qualified to receive University contracts. To ensure the integrity of the database, the University has implemented a process to verify a new vendor's EPL exclusion status prior to being added to the database. Furthermore, UK administrative regulations require that vendors must immediately report inclusion on the EPL to the University.

UK Response: None required.



April 27, 2010

Susan L. Crismon CPA
National Science Foundation
Office of Inspector General
999 18th Street, suite 775
Denver, CO 80202

Office of the Treasurer
301 Peterson Service Building
Lexington, KY 40506-0005
859 257-4758
fax 859 257-4805
www.uky.edu

Dear Ms. Crimson,

We have reviewed the written summary of the review of the University of Kentucky's internal control processes for segregating ARRA funds and for providing accurate and timely quarterly ARRA reporting. The University of Kentucky's responses are indicated below each NSF OIG recommendation:

1. ARRA Jobs Reporting for Fellowship and Training Grants

Criteria: Section 1512 of the ARRA requires reporting of "An estimation of the number of jobs created or retained by the [ARRA] projects or activities . . ." In addition, section 5.2 of OMB M-10-08 reporting guidance defines jobs as "an estimate of total jobs that were funded in the quarter by the Recovery Act. A funded job is defined as one in which the wages or salaries are either paid or will be reimbursed with Recovery Act funding."

Results: UK has not established policies and procedures addressing whether ARRA jobs should be reported for students or participants funded by budgeted participant support costs in NSF grants. The University had four ARRA-funded grants that included budgeted participant support costs totaling \$345,621. UK officials stated that it was uncertain whether jobs for participants funded under such grants should be reported as created or retained in its quarterly ARRA data.

UK should request clarification from NSF on the appropriate reporting of jobs for individuals funded by participant support costs budgeted under its ARRA-funded grants.

UK Response: The guidance above was quoted in the discussions and we requested clarification on how to report while the reviewers were on-site. Our reviewers were unaware of specific guidance on how to appropriately count jobs related to these costs. UK has requested clarification from the NSF policy office regarding job reporting of persons paid from budgeted participant support costs.

2. Jobs Reporting for Subrecipients and Vendors

Criteria: Section 5.7 of OMB M-10-08 requires prime recipients to generate estimates of jobs impact by collecting the total number of jobs created or retained on ARRA-funded projects and activities from subrecipients and vendors.

Results: UK has appropriately revised its standard subaward agreement to establish contractual provisions to comply with ARRA Section 1512 requirements. The University's subaward terms and conditions clearly require the reporting of ARRA job estimates to the University on a quarterly basis. However, the University's ARRA policies did not clearly establish similar procedures requiring jobs reporting for vendor contracts. Specifically, its ARRA policies and procedures only required jobs estimates for one time purchases of \$25,000 or more, but not for vendor purchases under the \$25,000 threshold. However, during our review, we noted that consulting service contracts can often be under the \$25,000 threshold, but do create jobs by the nature of the services being provided. Thus, the total exclusion of all vendor contracts from ARRA jobs reporting is not appropriate.

In addition, the University has not established monitoring procedures to ensure ARRA jobs estimates reported by subrecipients or vendors are reasonably accurate and complete in relationship to the level of funding provided. Without basic reasonableness and completeness checks, the reliability of the reported ARRA jobs cannot be assured.

UK should establish formal ARRA procedures to require (a) reporting of job estimates for all consulting service contracts regardless of dollar value and (b) basic reasonableness checks of the quarterly jobs data received from subrecipients and vendors.

UK Response: UK agrees that we are not collecting job information for payments that are less than \$25,000. Based on a suggestion from the Council on Governmental Relations (COGR) and our own assessment that numbers of jobs are likely negligible for small purchases, we have established \$25,000 as a reasonable threshold for collecting job information from vendors.

For any vendor payment over \$25,000, the Office of Sponsored Projects Administration, Assistant Director, has contacted the vendor directly to obtain job count information. We have also developed a Vendor Job Count Form (attached). We will use this information on the form to verify the full-time equivalent (FTE) by insuring the form is complete and the math is computed correctly. The contact information for this individual is available on the form should a vendor have questions.

UK has continued our efforts to improve and streamline jobs reporting by working with the UK Purchasing department. Purchasing is currently reviewing a list of ARRA awards and including additional ARRA terms and the Vendor Job Count Form when issuing any purchase order on an ARRA funded account. In addition, programmers are working on a system that will automate this process and eliminate the manual review of Purchasing.

The monitoring process of sub-recipient job reporting includes reviewing the FTE calculations, the quarterly reports and the invoices. Most sub-recipients provide the detailed calculation and

these calculations are reviewed for accuracy prior to including them in UK's 1512 reporting. If the detail is not included, UK requests a written description of the job calculation methodology. If the invoices contain expenses for salary, the invoices and the FTE calculation are reviewed for reasonableness. If there are discrepancies between the invoice amounts for salary and the number of FTE reported, UK contacts the sub-recipient to reconcile the information.

We do not currently have any consulting agreements under NSF awards. If we issue a consulting agreement in the future, job reporting will be treated as we currently treat sub-recipients. Jobs will be counted regardless of the dollar amount of the agreement.

3. ARRA Jobs Should be Reported When the Work Is Performed

Criteria: Section 5.9 of OMB M-10-8 states that a "funded job is defined as one in which the wages or salaries are either paid for or **will be reimbursed** with Recovery Act funding . . . the recipient only reports the jobs as created or retained during quarters in which the employment actually occurred." Using the definitions above, recipients must estimate the total number of jobs funded in the reporting quarter by the Recovery Act.

Results: UK accurately reported jobs in the reporting quarter that its employees actually worked on ARRA project activities. A review of five of the 16 NSF ARRA grants found that the jobs were correctly reported in the December 2009 reporting quarter.

UK Response: None required.

4. Quarterly ARRA Activities Need to be Reported

Criteria: The Recovery Board's Data Dictionary requires "a description of the overall purpose and expected outputs and outcomes or results of the award. . ." to be reported for the Quarterly Activities/Project Description data element for each ARRA grant. However, NSF's *Recipient Quarterly Reporting Instructions* (September 28, 2009) only require grantees to report the grant abstract at the time of NSF award. As a project progressed, recipients had an option to supplement the original award description, but this was not a mandatory NSF reporting requirement.

Results: Pursuant to the September 2009 NSF instructions, UK reported the original description from the NSF award abstract in the Quarterly Activities/Project Description data field in the December 2009 ARRA report for eight of its 16 grants. This occurred even though the University's own web-based system for collecting ARRA information directed PIs to provide "a statement that addresses personnel in place, research underway, and equipment purchased and installed" for the Quarterly Activities data element for each grant. It is essential that an accurate description of quarterly grant activities be reported so that the public and all stakeholders are informed on how Recovery funds are expended.

UK should require all PIs to enter a detailed description of quarterly project activities for each ARRA grant as required by established University procedures.

UK Response: The Quarterly Activities and Project Description are two separate fields. Per NSF guidance and instructions, the Award Description is the Abstract at the time of the award and is pulled from the Research.gov web-site. Per September 2009 NSF guidance, the Quarterly Activities field was completed by entering “See Award Description.” The guidance also indicated:

“As the project progresses recipients *may want* to supplement this statement with items such as personnel in place; research underway; and/or equipment purchased or installed.”

Please note that not all federal agency guidelines are exactly the same and the initial direction on our website asked PIs to “Update only if there are significant changes.” The NSF guidance was changed in late December 2009 to “Recipients *should* provide a brief summary . . .” Our website was subsequently changed to reflect the updated guidance. There is no federal guidance that indicates a *detailed* description is required.

5. Procedures for Ensuring ARRA Vendors and Subrecipients Are Not Excluded Parties

Criteria: Paragraph .13 of OMB Circular A-110,¹ *Debarment and suspension*, restricts subawards and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Accordingly, for contracts over \$25,000 and all subawards funded with federal assistance funds, prime recipients are required to obtain a certification from its contractor and/or subawardees regarding its exclusion status and that of its principal employees.

Results: UK’s internal controls provide reasonable assurance that all subrecipient organizations and vendor contractors are not presently debarred, suspended, or proposed for debarment by any federal department or agency. The University checks the Federal Excluded Parties List (EPL) for all subawardees and its principal employees prior to award issuance. In addition, the subrecipient organization must certify its EPL exclusion status in the subaward agreement itself.

In addition, UK maintains a vendor database of eligible contractors qualified to receive University contracts. To ensure the integrity of the database, the University has implemented a process to verify a new vendor’s EPL exclusion status prior to being added to the database. Furthermore, UK administrative regulations require that vendors must immediately report inclusion on the EPL to the University.

UK Response: None required.

Sincerely,



University of Kentucky

¹ OMB Circular A-110: Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations