

NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



MEMORANDUM

DATE: March 10, 2011

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

FROM: Dr. Brett M. Baker /s/
Assistant Inspector General for Audit

SUBJECT: Limited Scope Review of Recovery Act Data Quality – West Virginia University
Research Corporation, Report Number OIG-11-1-005

As part of our oversight responsibilities, the Office of Inspector General has conducted reviews of institutions that have received National Science Foundation (NSF) grants funded by the American Recovery and Reinvestment Act (ARRA or Recovery Act) to assess the overall quality of required quarterly reports. Such reports contain detailed information on ARRA projects and activities and are the primary means for keeping the public informed about the way funds are spent and the outcomes achieved. Our review objectives were to determine whether the West Virginia University Research Corporation (WVU) had established an adequate system of internal controls to provide reasonable assurance that (1) Recovery Act funds were segregated and separately tracked in its project cost accounting system and (2) quarterly reporting was timely, accurate, and fully compliant with Section 1512 ARRA reporting requirements. Detailed description of background, objectives, scope, and methodology can be found in Appendix A.

Our limited scope review found that WVU had properly segregated \$3.1 million in NSF funds awarded for nine ARRA grants in its accounting system, timely submitted Recovery Act quarterly reports, and centralized ARRA reporting to ensure consistent application of federal and NSF reporting requirements. In addition, the University established a multi-disciplinary team to develop ARRA reporting processes and to provide campus training during the early stages of the Recovery Act program. However, improvements were needed in WVU processes for compiling and reviewing the quarterly ARRA information to ensure all data elements reported were accurate, complete, and fully compliant with Section 1512 requirements. Specifically, our review disclosed that the University's (i) data quality review process did not preclude clerical posting and other human-related type errors and (ii) ARRA vendor jobs reporting was limited only to vendor payments greater than \$25,000.

As a result, review of a sample of ARRA grants in the December 2009 and March 2010 reports disclosed that four of the eight ARRA data elements reviewed were incorrectly reported. Specifically, the data elements reported correctly include: quarterly activities/project description, vendor payments, project status, and final report status. However, improvements were needed to ensure that the number of jobs, expenditures, funds received/invoiced, and subawards were accurately and completely reported.

The exceptions identified during our review occurred in part due to the extensive last minute changes the Office of Management and Budget (OMB) made to reporting guidance each quarter and the volume of ARRA data required to be reported within 10 days after the end of each quarter. WVU efforts to continuously update processes to comply with evolving OMB guidance were understandably challenging. However, given the unprecedented accountability and transparency goals of the Recovery Act, the development of effective WVU processes and oversight functions were critical factors for ensuring ARRA data quality.

A draft of this memorandum was provided to WVU management for its review and comment. Also, the review results were discussed with University management at the completion of our onsite review work so that timely WVU actions could be taken to implement improvements needed to promote the highest degree of transparency and accountability over Recovery Act funds. The University stated that it has already taken steps to implement the report recommendations, thus believes the recommendations are no longer relevant. We have requested WVU to work with NSF to formally resolve the recommendations to ensure corrective actions taken are appropriate and fully address the audit findings. OK WR 3/1 WVU comments on the findings and recommendations are included in their entirety in Appendix B.

To help ensure the recommendations are resolved within six months of audit report issuance pursuant to Office of Management and Budget Circular A-50, please provide the audit resolution memorandum for our review when NSF has obtained an acceptable WVU Corrective Action Plan. The Plan should document that appropriate corrective actions have been implemented to address the report recommendations and milestone dates should be established for any corrective actions not completed. OK WR 3/1

We appreciate the cooperation that was extended to us during our review. If you have any questions, please free to contact Joyce Werking at extension 8097 or Roslyn Kessler at extension 2334.

cc: Mary Santonastasso, Division Director, DIAS
Dale Bell, Deputy Division Director, DIAS
Alex Wynnyk, Branch Chief, CAAR/DIAS
Jon Crowder, Division Director, DHHS OIG

Audit Findings and Recommendations

1. Improvements Needed in Data Quality Review Process to Ensure Accurate ARRA Quarterly Reports

Section 4.2 of OMB Memorandum M-09-21¹ requires “Prime recipients, as owners of the data submitted, [to] have the principal responsibility for the quality of the information submitted.” Specifically, the prime recipient is responsible for (a) implementing internal control measures to ensure accurate and complete information and (b) performing data quality reviews to identify reporting errors and making appropriate and timely corrections.

However, WVU had not established adequate data quality review procedures to ensure all ARRA data elements were accurate, complete, and fully compliant with OMB reporting guidance. As a result, our review disclosed the following data elements were incorrectly reported:

- One ARRA grant for \$230,000 was reported twice for the period ending December 2009. WVU incorrectly reported ten ARRA grants instead of nine ARRA grants, which resulted in over-reporting of total ARRA funds awarded, received, and expended.
- One ARRA subaward with expenditures of \$14,727 was reported twice in the March 2010 report. The University mistakenly reported the subaward both in the prime recipient and subrecipient reports.
- One NSF award number was reported incorrectly for the March 2010 reporting period. WVU incorrectly included the alpha prefix with the award number.
- ARRA jobs were overstated for the one grant tested in the March 2010 report. While the 2.17 jobs in the supporting documentation were correctly calculated, a posting error resulted in reporting 3.17 jobs in the ARRA report, an overstatement of one job or 46 percent.

These reporting exceptions occurred because WVU had not yet fully developed a thorough understanding of the mechanical intricacies of the ARRA reporting system or established sufficient processes to preclude clerical and other human-related reporting errors. According to University officials, time constraints coupled with the last minute changes and vagueness of OMB reporting guidance were obstacles for developing a proficiency in ARRA reporting so that all data elements reported were accurate and complete. Nevertheless, a more robust data quality review process would have allowed the identification of most of the reporting errors we identified and allowed WVU the opportunity to correct the data prior to submission.

¹ OMB Memorandum M-09-21, *Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009*, issued on June 22, 2009.

Recommendation:

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with cognizant audit agency, as needed, to require WVU to formulate a more robust data quality review process to ensure its ARRA quarterly reports are accurate and complete.

WVU Response

WVU has implemented additional measures to enhance the data quality review process to comply with the current OMB guidance/clarification for ARRA federal reporting. The University stated that the revised process incorporates at least three review/validation steps during the report filing period. As such, WVU believed the recommendation is no longer relevant since its data quality review process has been significantly enhanced. The full text of the University's comments is located in Appendix B. OK WR 3/1

OIG Comment

WVU's response met the intent of the recommendation. Nevertheless, the University must work with NSF management to formally resolve the recommendation to ensure the corrective actions taken are appropriate and fully address the audit finding. OK WR 3/1

2. WVU Needs To Report Jobs for ARRA Vendors

Section 5.7 of OMB Memorandum M-10-08² requires prime recipients to generate estimates of jobs impact by directly collecting data from subrecipients and vendors on the total jobs funded by ARRA projects and activities. Such job data collection from all institutions receiving Recovery Act funds is essential for accurate and complete reporting of ARRA jobs to the public.

However, WVU had not established a process for obtaining job estimates for vendor payments less than \$25,000. As such, for the March 2010 reporting period, the University did not report any vendor jobs for a \$10,500 payment made on a consulting service contract valued at \$105,000. Hence, the University understated the number of ARRA jobs reported because consulting service contracts by their nature employ people.

This control weakness occurred because WVU officials interpreted OMB guidance to only require jobs reporting for vendor payments greater than \$25,000. However, the OMB reporting guidance does not explicitly establish any threshold for ARRA vendor jobs reporting. Job impact is one of the most scrutinized ARRA data elements and all stakeholders are extremely interested in how the Recovery Act funding has helped reduce the rate of unemployment in our country. In the current economic downturn, every ARRA job created and

² 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 December 18, 2009.

retained and consequently reported makes a difference. Thus, it was not reasonable for the University not to report any vendor jobs for the \$105,000 consulting service contract discussed above or other similar contracts awarded in the future. Accordingly, WVU should reassess its current methodology to evaluate if it fully meets the intent of the Recovery Act. Consideration should be given to determining if total vendor contract value versus a single payment would be a more appropriate criterion for vendor jobs reporting. Also, consideration should be given to the types of services or goods being purchased.

Recommendation:

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with cognizant audit agency, as needed, to require WVU to establish formal criteria for determining ARRA jobs reporting requirements for smaller value vendor contracts.

WVU Response

WVU stated that it has implemented an additional step to identify vendor payments less than \$25,000 to subcontractors and professional service consultants. When these payments are identified, the impact on jobs is calculated and incorporated in its job narrative and full-time equivalent job count. As such, WVU believed the recommendation is no longer relevant since the jobs data for vendor payments less than \$25,000 is now being reported quarterly. The full text of the University's comments is located in Appendix B. OK WR 3/1

OIG Comment

WVU's response met the intent of the recommendation. Nevertheless, the University must work with NSF management to formally resolve the recommendation to ensure the corrective actions taken are appropriate and fully address the audit finding. OK WR 3/1

Background, Objectives, Scope, and Methodology

Background:

Recovery Act Reporting Requirement: On February 17, 2009, the American Recovery and Reinvestment Act of 2009 (Recovery Act or ARRA) was enacted to help the nation recover from a severe economic downturn. The Recovery Act emphasizes unprecedented levels of accountability and transparency over the \$787 billion of public funds committed by Congress, of which \$3 billion was received by NSF. The public expects that the use of ARRA funds will result in a positive impact to our nation's economy, including jobs creation and retention. Accordingly, Section 1512 of the Recovery Act requires recipients to submit reports on ARRA activity no later than 10 days after the end of each reporting quarter. The first ARRA quarterly report was required to be submitted for the period ending September 30, 2009.

ARRA reporting instructions are contained in the Office of Management and Budget (OMB) guidance. OMB is the primary agency responsible for providing Section 1512 reporting guidance used by federal agencies, grant recipients, and grant subrecipients. The federal guidance clearly establishes that recipients have primary responsibility for the quality of data submitted. In addition, NSF has issued supplemental guidance to its recipients for ARRA reporting.

OMB published a Recipient Reporting Data Model to define the 99 data elements required to be reported for each ARRA grant on June 22, 2009. 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; quarterly award activities; funds received/invoiced; award expenditures; number of and description of jobs; number and dollar of sub-awards and vendor payments; and final report status.

NSF Recipient Information: West Virginia University (WVU) is a public university in Morgantown, West Virginia with over 29,000 students and 1,500 full-time faculty members. The University offers 193 bachelor's, master's, doctoral, and professional degree programs in 13 colleges. The faculty conducts \$152 million annually in sponsored research contracts and grants. The West Virginia University Research Corporation is a non-profit organization that receives and administers sponsored project funds in behalf of the University.

As of March 31, 2010, WVU had been awarded nine ARRA grants totaling \$3.1 million, which is 13.5 percent of its total NSF grant portfolio of \$23 million and 72 awards. ARRA expenditures totaled \$312,821 or 10 percent of the total \$3.1 million Recovery award funds as of the March 2010 reporting period.

Review Objectives:

Our review objectives were to determine whether WVU had established an adequate system of internal controls to provide reasonable assurance that (1) Recovery Act funds were segregated and separately tracked in its project cost accounting system and (2) quarterly reporting was timely, accurate, and fully compliant with Section 1512 reporting requirements.

Scope and Methodology:

Our review focused on WVU's December 2009 and March 2010 ARRA reports. We reviewed the University's processes for compiling and reporting Recovery Act data elements. Of the 99 data fields required to be reported for each ARRA grant, we selected key elements that were either deemed critical to ensuring transparency or that were considered more at risk of being reported inconsistently or inaccurately. Accordingly, our review focused on the following eight data elements: the number of jobs, funds received/invoiced, expenditures, vendor payments, sub-award amounts, quarterly activities/project description, project status, and final report status indicator. To gain an understanding of WVU's processes for compiling and reporting of the ARRA data elements, we conducted a limited review of internal controls related to our audit objectives. Our review included the following steps:

- Reviewed criteria applicable to Section 1512 reporting requirements, including OMB and NSF guidance.
- Reviewed WVU policies, procedures, and processes for collecting, compiling, reviewing, and reporting ARRA data.
- Interviewed cognizant WVU officials to gain an understanding of their role in the ARRA project management and reporting process.
- Performed analytical procedures to understand and evaluate WVU's Recovery Act reporting processes and related controls. This included the processes for reporting quarterly activities/project description, project status, and final project status indicator. OK WR 3/1
- Performed limited non-statistical sampling procedures to determine the reasonableness of the reported data elements when compared to supporting documentation for funds received/invoiced, expenditures, vendor payments, and sub-award amounts.
- Reconciled the number of jobs reported to payroll records to determine the reasonableness of the number of jobs reported for one of the nine ARRA grants.
- Discussed fieldwork results with WVU management officials.

The onsite WVU review work was performed from May 17 - 21, 2010, with additional information obtained through August 2010. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan the review to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for the findings and conclusions contained in this report.

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.