AUDIT AND ADVISORY SERVICES

Subaward Monitoring
Audit
Project No. 551

June 20, 2011

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June 20, 2011

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Vice Chancellors Fleming and Wilton:

We have completed our audit of Subaward Monitoring in accordance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter.

The objective of this audit was to evaluate business processes and monitoring controls designed to ensure compliance with terms of subaward agreements between the University and subrecipients as well as compliance requirements outlined in OMB Circular A-133. Responsibility for monitoring is shared over the lifecycle of a subaward by the Sponsored Projects Office, Extramural Funds Accounting, and Principal Investigators. Audit and Advisory Services examined activity across the lifecycle from subrecipient selection through project close-out.

As a result of our fieldwork, we note that our observations can be grouped into the following categories:

- Advancement of funds in excess of allowable amounts
- Pre-award documentation not received
- Fair and Reasonable Cost Analysis form not completed
- Approval of subrecipient invoices without appropriate supporting documentation
- Inappropriate cost shifting of subrecipient invoices
- Expenditure reports not received from the subrecipient

We excluded sponsored projects managed by Research Enterprise Services (RES) due to the large number of contracts and grants that were undergoing transition from individual research units to RES during the period of our audit review. A separate audit of RES was completed in May 2011.

The reported observations with management action plans are expounded upon in the accompanying report. As part of our audit, we obtained management responses to our observations. We have assessed these responses and believe that they will remediate the exceptions noted and promote compliance going forward.

Please destroy all copies of draft reports and related documents. Thank you to the Sponsored Projects Office, Extramural Funds Accounting, and individual departments and organized research units that were included in our testing sample for their cooperation during this audit. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Wanda Lynn Riley
Chief Audit Executive

cc: Assistant Vice Chancellor Patrick Schlesinger
Director Pamela Miller
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University of California, Berkeley
Audit and Advisory Services
Subaward Monitoring

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OVERVIEW

Executive Summary

The objective of this audit was to evaluate business processes and monitoring controls designed to ensure compliance with terms of agreements between the University, subrecipients, and federal sponsors, as well as with compliance requirements outlined in OMB Circular A-133. Responsibility for monitoring is shared over the lifecycle of a subaward by the Sponsored Projects Office (SPO), Extramural Funds Accounting (EFA), and Principal Investigators (PIs). Audit and Advisory Services examined activity across the subaward lifecycle from subrecipient selection through project close-out.

As a result of our fieldwork, we note that our observations can be grouped into the following categories:

- Advancement of funds in excess of allowable amounts
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As part of our audit, we have obtained management responses to our observations. We have assessed these responses and believe that they will remediate the exceptions noted and promote compliance going forward.

Purpose of the Audit

The purpose of the audit was to assess controls related to subaward monitoring during the pre-award, post-award, and close-out stages to ensure that, for example, required pre-award documents and forms were submitted, the viability of the subrecipient was confirmed, subrecipient expenses were reasonable and allowable, access to subrecipients' financial records and statements were permitted, performance and technical reports were submitted timely, and compliance with OMB Circular A-133 was confirmed.

Scope of the Audit

The audit scope included 863 active subawards during FY2009 (as of October 23, 2009), totaling approximately $289 million as identified in COEUS, the campus' research contract and grant system of record. These subawards included projects funded from federal, state, and private sources. In addition to transactional activity, the scope also included consideration of controls (i.e., policies and procedures) in place related to subaward monitoring.

We excluded sponsored projects managed by Research Enterprise Services (RES) due to the large number of contracts and grants that were undergoing transition from individual research units to RES during the period of our audit review. A separate audit of RES was completed in May 2011.

In addition, The Federal Funding Accountability and Transparency Act (FFATA), enacted in 2006, requires that information on federal awards be made available to the public via a federal transparency internet site. As a result of FFATA, the campus is required to report certain information regarding subrecipients depending on the size of the subaward. We noted that these requirements – beginning in September 2010 for newly awarded prime contracts over $20,000,000, in October 2010 for newly awarded prime contracts over $550,000, and finally in March 2011 for newly awarded prime contracts over $25,000 – occurred after the fieldwork for this audit and resultant observations.

Audit Methodology

During the audit we interviewed management from SPO and EFA to ascertain their responsibilities related to pre-award, post-award, and close-out stages of a subaward. Additionally, we reviewed applicable University policies, federal regulations, and conducted independent research related to subaward monitoring to gain an understanding of specific requirements.

Our audit focused on SPO's pre-award and certain post-award subaward monitoring responsibilities which included reviewing subrecipient proposal information and potential risk issues; verifying that all required subrecipient documentation and forms are present; validating A-133 compliance; preparing the subaward agreement; and tracking subawards in COEUS.

We also examined EFA's post-award subaward responsibilities which primarily involved establishing subawards to other UC campuses in the Berkeley Financial System (BFS) and assisting in the preparation of financial reports to the prime agency at the close-out of the award, as needed.

During the audit we also surveyed six campus departments and interviewed cognizant staff regarding their current processes and controls related to monitoring of subawards. From these six campus departments we selected a total of ten subawards to evaluate and determine the effectiveness of monitoring controls related to subawards. We used stratified sampling techniques to select a sample of subawards from the 863 active subawards during FY2009 (as of October 23, 2009).

Background Information

A subaward is an agreement with a non-federal third-party organization (the subrecipient) to perform a portion of a UC Berkeley sponsored research project or program. The subrecipient may be a domestic or foreign entity, such as an educational institution, independent laboratory, foundation, for-profit corporation, or non-profit corporation. The

terms of the subaward agreement are influenced by the prime agreement, and all subawards should be monitored to ensure that the subrecipient complies with these terms and federal regulations, if applicable. Federal regulations for subrecipient monitoring are found in OMB Circular A-133 (Audits of States, Local Governments, and Non-Profit Organizations).

The University has a three-pronged approach to the assignment of roles and responsibilities to meet its obligation for monitoring subaward activities. SPO, EFA, and the project's PI work in concert to appropriately manage subaward activities during different phases of a subaward lifecycle.

- SPO is responsible for ensuring that subaward agreements contain appropriate federal and other applicable regulations consistent with sound business practices and for collection of subrecipient federal A-133 audits, if necessary. SPO prepares and identifies revisions needed to subaward agreements noting potential risk issues. SPO validates subrecipient A-133 compliance information, assesses risk and need for additional post-award monitoring or reporting, performs annual compliance reviews of subrecipients, and extends, modifies, and issues the subaward agreement.

- EFA is responsible for completing the set-up of prime awards in BFS after receiving the prime award documents from SPO. As part of the set-up process, EFA inputs selected prime award information into the BFS panels that are not already fed from COEUS. The prime award budget amount is information that is entered into COEUS by SPO and fed to BFS. If a prime award has a subaward and the award documents provide a breakdown of expenses by cost category, EFA will allocate the budget for the total subaward amount on the budget journal processed for the prime award. If the prime award budget does not include a breakdown of expenses, the subaward budget is not allocated during the set-up process. In these cases, administering units can prepare a budget journal to reallocate the subaward budget. During the close-out of the prime award, the subaward expenses are included with all the award expenses in the final report EFA submits to the sponsor.

- The project PI serves as the primary individual responsible for monitoring subawards in accordance with the terms of both the prime award and the subaward, University policy, and federal regulations. For example, the PI is responsible for the review and approval of invoices received from the subrecipients and for ensuring that expenses are reasonable and allowable. The PI is also responsible for the receipt and review of technical performance reports or other deliverables.

On August 18, 2009, the Subrecipient Monitoring Business Process Analysis (BPA) was completed by team members from the Sponsored Projects Office, Industry Alliances Office, Office of Risk Management, School of Public Health, College of Engineering, and Center for Organizational & Workforce Effectiveness. The purpose of the BPA was

to develop a standardized subrecipient expense template, a defined process for subrecipient risk assessment, and an overview of the roles and responsibilities associated with subrecipient monitoring on the Berkeley campus. The BPA included a redesign of the process of subrecipient monitoring and a focus on high-risk subrecipients (including international agencies) that have not completed an annual single audit or whose audit results have demonstrated deficiencies in administering federal funding, a history of failing to adhere to applicable provisions of contracts and grant agreements, weak internal control structures, and start-up entities with limited resources and/or prior experience in performing research.

Summary Conclusion

Subaward monitoring presents challenges which need to be managed in order to ensure that subrecipients are functioning in accordance with subaward and sponsor agreement terms, University policies, and federal regulations. Effective and efficient subaward monitoring can be accomplished through a concerted effort by SPO, EFA, PIs, and campus department staff. Central units, such as SPO and EFA, can facilitate effective and efficient subaward monitoring by clearly communicating what is required of the campus department and PI during the pre-award, post-award, and close-out stages and how to accomplish these responsibilities by providing the campus department, PI, and subrecipients specific training and resources.

Overall, we observed that central units are aware of policies, procedures, and federal regulations related to subawards. In addition, campus departments have a general understanding of subaward monitoring. However, control activities to assure that the subrecipient is appropriately managing subawards vary significantly across departments, research units, and principal investigators. As a result, we identified certain exceptions during our testing and opportunities for improvement of internal controls.

As a result of our fieldwork, our specific observations can be grouped into the following categories:

- Advancement of funds in excess of allowable amounts
- Pre-award documentation not received
- Fair and Reasonable Cost Analysis form not completed
- Approval of subrecipient invoices without appropriate supporting documentation
- Inappropriate cost shifting of subrecipient invoices
- Expenditure reports not received from the subrecipient

A detailed description of our observations and management responses follows.

SUMMARY OF OBSERVATIONS & MANAGEMENT RESPONSE AND ACTION PLAN(S)

Advancement of Funds In Excess of Allowable Amounts

Observation

We considered whether funds were being advanced to subrecipients in excess of allowable working capital requirements. Our audit found instances where subaward advances were made in amounts that appear to exceed allowable limits based upon the subrecipient's working capital as discussed in OMB Circular A-110.

Regarding advances, OMB Circular A-110, Subpart C, .22(f) states[1]:

> If a recipient cannot meet the criteria for advance payments and the Federal awarding agency has determined that reimbursement is not feasible because the recipient lacks sufficient working capital, the Federal awarding agency may provide cash on a working capital advance basis. Under this procedure, the Federal awarding agency shall advance cash to the recipient to cover its estimated disbursement needs for an initial period generally geared to the awardee's disbursing cycle. Thereafter, the Federal awarding agency shall reimburse the recipient for its actual cash disbursements. The working capital advance method of payment shall not be used for recipients unwilling or unable to provide timely advances to their subrecipient to meet the subrecipient's actual cash disbursements.

Furthermore, EFA policy on fund advances and working capital states:

> In the rare event that you make an advance to a subrecipient, please ensure the advances are made in accordance with University and federal regulations prior to advancing funds. You should only advance the amount of money needed to cover the short term working capital needs of the subrecipient organization. For example if the subaward is $100k for research work to be performed over a 12 month period, you should not advance the full amount of the subaward. If the subrecipient cannot finance their working capital needs on a month-to-month basis, you might advance $5k or the equivalent of one month's payroll needs.

Our audit found one foreign subrecipient received two advances of federal funds in the amounts of $183,449 and $174,915, which represent advances for the total amount of the 2007-2008 and 2009-2010 annual performance periods, respectively. These

[1] We note that this section of Circular A-110 is stated to apply to subrecipients as well if such subrecipients are institutions of higher education, hospitals or other non-profit organizations. OMB Circular A-110, Subpart A.5.

advancements appear to be in excess of working capital described in A-110 and EFA guidelines.

Management Response and Action Plan (SPO)

Beginning July 1, 2011, COEUS will be customized to accept an attribute that will indicate when a "working capital advance" has been authorized as part of a subaward agreement. EFA will then be able to access and review any subaward documents scanned into Alfresco associated with a working capital advance to obtain information on the amount(s) and time period(s) related to each subaward advance.

Additionally, the SPO website includes the following information that outlines the procedures for requesting the advance as well as guidelines for the amount of the advance:

1. The PI must submit a written request to SPO to allow an advance payment to be made to the subrecipient. The request must justify the need for advanced payments and include the following information:

    - Documentation of need provided by the subrecipient. This should be a written statement signed by the subrecipient's authorized official.
    - The specific amount of funds needed to cover the short term working capital needs of the subrecipient organization. In no case should this be the total amount of the subaward or subcontract.
    - The period of time during which the project activities supported by the advanced payment will take place.
    - An explanation for the specific amount of the advanced payment. This might include payroll needs and/or the specific costs of activities carried out during the advanced payment period.
    - A description of how the PI will ensure that the work being performed by the subrecipient with funds advanced by the University will be monitored during the advance payment period. The PI should describe specific steps/actions that will be taken to ensure that the subrecipient is:

        - performing the scope of work as expected
        - submitting financial reports by the required deadlines
        - expending project funds in accordance with the subaward/subcontract budget
        - in compliance with all other terms of the subaward

2. Upon receipt of a request containing this information, SPO managers will make a determination if there is sufficient justification to approve a request for an advance payment. If approved, SPO will include payment terms in the subagreement based on the justification information provided by the PI. These terms will require the

subrecipient to provide a financial report of all expenditures made with advanced funds before any subsequent advanced payments will be made.

3. If any of the subrecipient's costs subsequently are determined to be unallowable or to exceed the final expenditures submitted by the subrecipient, it will be the department/PI's responsibility to collect these funds from the subrecipient. If these funds are uncollectable from the subrecipient, the department will be responsible for the uncollected funds.

Subaward agreements also inform the recipient of the requirement to remit interest in excess of $250/yr.

Management Response and Action Plan (EFA)

In fiscal year 2012, by October 1, 2011, EFA will establish a monitoring program that will be used to evaluate the risk associated with subaward advances.

Pre-award Documentation Not Received

Observation

For awards handled by SPO, we observed instances of the following pre-award documents that were not received:

- For one subrecipient a financial audit was completed 172 business days after the subaward was fully executed. This financial audit, however, was not in accordance with A-133. The required federal audit forms, such as, the Data Collection form (SF-SAC) was not completed, and the audit performed did not include, for example, a schedule of expenditures of federal awards, a summary schedule of prior audit findings, a report on internal control, and a report on compliance with laws and regulations. Additionally, the audit was not submitted to the Federal Audit Clearinghouse (FAC) in compliance with A-133.

- For one subrecipient, the Mini-Audit Questionnaire was not completed. According to SPO management, they relied on their understanding that the state sponsoring agency performs an extensive review of the potential subrecipient's qualifications. Also, according to SPO management, the state sponsoring agency does not share their review with the University.

Management Response and Action Plan (SPO)

Point #1: "For one subrecipient a financial audit was completed 172 business days after the subaward was fully executed..."

SPO obtains a subrecipient's most recent A-133 audit IF:

- The University is awarding federal flow-through dollars to the subrecipient, AND
- The subrecipient is subject to the A-133 audit requirement (i.e. the subrecipient expended at least $500,000 in federal funds during the subrecipient's preceding fiscal year.)

In this particular case the award was from the State of California under federal funding program CFDA# 84.287. According to the CFDA description of this program, the funds are distributed to states via a federal formula grant.

https://www.cfda.gov/?s=program&mode=form&tab=step1&id=26dca05c81b04747b39a11eb0045dee2

The determination by EFA that this award involved "partial" federal funding indicates that "other than federal" funds are included. Under such circumstances, to determine if an A-133 audit should be requested, SPO looks at the terms and conditions in the agreement from the State to see if the State has flowed down federal terms and conditions to Berkeley. This award primarily contained state terms and conditions, although there was a general reference to undefined federal terms and conditions. SPO also looks at the F&A rate applied to see if we are subject to our state or federally negotiated F&A rate. If federal terms and conditions are present and our federally negotiated F&A rate has been applied, SPO considers the funds to be federal flow-through funds. In the future, SPO will also check for other indicia of federal funding, such as the presence of a CDFA number, which provide a clear direction to applicable federal requirements. In such cases, SPO will request the most recent A-133 audit from any proposed subrecipient that is subject to the A-133 audit requirement by virtue of the level of its federal expenditures.

Point #2: "For one subrecipient, the Mini-Audit Questionnaire was not completed..."

SPO Response: In this particular case SPO relied on their understanding that the state sponsoring agency had performed an extensive review of the potential subrecipient's qualifications. Unfortunately the state sponsoring agency does not share such reviews with the University.

Going forward SPO will ask for an A-133 audit if federal flow through funds are involved (as described above) and if the subrecipient is subject to A-133 reporting requirements. If the subrecipient is not subject to A-133 reporting requirements, SPO will request the subrecipient complete the Mini-Audit Questionnaire.

If federal flow-through funds are not involved and the subrecipient is subject to A-133 audit requirements due to its level of federal expenditures, SPO may choose to request the subrecipient's most recently completed A-133 audit (as an evaluation tool) or to request that a Mini-Audit Questionnaire be completed by the subrecipient. The following grid illustrates these options:

	Type of Subrecipient	
Type of Funding	**Subject to A-133 Audit (expended at least $500K in federal funds in previous FY)**	**Not Subject to an A-133 Audit (did not expend $500K in federal funds in previous FY)**
Federal Flow-Through	A-133 will be requested/reviewed	Mini-Audit Questionnaire requested/reviewed
Not Federal Flow-Through e.g., state or non-profit funding	A-133 or Mini-Audit Questionnaire will be requested/reviewed	Mini-Audit Questionnaire requested/reviewed

Fair and Reasonable Cost Analysis Form Not Completed

Observation

Our audit of two subawards under contract found that for one subaward a required Fair and Reasonable Cost Analysis form was not completed. Based on a response from management regarding the lack of a Fair and Reasonable Cost Analysis for this subcontract, we understand that SPO staff members working at the time of the original subcontract recall numerous mechanisms that would have satisfied the cost analysis certifications in lieu of the Fair and Reasonable Cost Analysis form. However, upon inquiry, SPO was unable to locate the documentation of this analysis.

Management Response and Action Plan (SPO)

As stated above, SPO staff members working at the time of the original subcontract recall numerous mechanisms that would have satisfied the cost analysis certifications in lieu of the Fair and Reasonable Cost Analysis form. However, upon inquiry, SPO was unable to locate the documentation of this analysis.

For appropriate contracts, SPO now requires that a cost/price analysis and sole source justification be performed. PIs are required to submit the Fair and Reasonable Cost Analysis and Sole Source Justification: Subawards Under Contracts form (http://www.spo.berkeley.edu/Forms/UCForms.html) along with documentation as to why this subrecipient is unique and should be selected over other possible partners to the UCB Sponsored Projects Office at proposal stage.

Department Observations

Department Observation(s) – School of Education

Observation (Prescott Joseph Center)

As part of the audit we had the following observations related the Graduate School of Education and a subaward to the Prescott Joseph Center (PJC):

- Five invoices totaling $590,682 and dated between August 15, 2007 and November 18, 2008 did not appear to contain appropriate expense detail and supporting documentation as required by the subaward agreement. These five invoices appear to correspond to amounts documented in the Statement of Work and are not based on the actual expenses incurred. For each of these five invoices, the PI appears to have approved the invoices for payment without obtaining appropriate supporting documentation.

- For the final invoice totaling $78,371, the PI appears to have reviewed the supporting invoice expense documentation twenty-five business days after the invoice was paid.

Subsequent to our initial fieldwork, we observed that PJC had submitted detailed expenditure reports at the request of GSE management in support of the invoices we examined.

Management Response and Action Plan

After receiving the expenditure reports from PJC, GSE management communicated to the PJC Executive Director a revised, detailed supporting financial report form to be included with submitted invoices going forward. GSE management and the PI are aware of requirement to review supporting expense documentation prior to the payment of any invoice.

A&AS Comment on Management Response and Action Plan

A&AS inspected this revised financial report form and noted that, if completed in full going forward, it appears to contain sufficient detail for which to approve an accompanying invoice.

Department Observation(s) – Institute of Transportation Studies

Observation (PATH – NAVTEQ)

Our audit found that the subrecipient, NAVTEQ, did not submit any invoices for payment during the subaward performance period of October 31, 2008 through January 31, 2009 to the Partners for Advanced Transit and Highways (PATH), the Institute of Transportation

Studies (ITS) unit responsible for managing the subaward. The subaward Statement of Work documents the "major milestone" for the overall project to be the development and support of applications and software related to traffic data collection, processing and distribution, and signage and navigation software for the Intelligent Transportation Society World Congress, November 16-20, 2008, in New York City. The invoice for the total subaward amount of $204,352 was submitted during the audit to PATH for payment via fax on January 27, 2010, 246 business days after the subaward ended on January 31, 2009. The NAVTEQ invoice was dated May 29, 2009, 82 business days after the subaward ended.

In accordance with the "General Requirements" section of the subaward agreement, "Regular delivery of cost reports" was required to be received by PATH. However, no cost reports were received by PATH management during the subaward performance period and PATH management did not follow-up with NAVTEQ to request these cost reports or an invoice during the entire subaward performance period even after the Intelligent Transportation Society World Congress in November 2008.

Based on a discussion during the audit with the ITS Assistant Director, ITS management became aware of the lack of NAVTEQ expense activity after an overdraft resulted in fund 77056 due to April 2009 payroll expenses inappropriately charged from fund 77751 (the fund with which the NAVTEQ subaward was associated) to fund 77056. PATH management charged these payroll expenses to fund 77056 since fund 77751 was running out of money and it anticipated the full execution of fund 15384, a new follow-up contract to fund 77751. PATH management planned to move the payroll expenses to fund 15384 after it was fully executed. We observed that this activity of shifting costs between sponsored agreements is not allowed under OMB Circular A-21.

Management Response and Action Plan

In part due to dissatisfaction with the controls in place, the ITS Director convened a faculty committee in Summer 2010 to review the overall structure of the PATH program. As a result of the committee's recommendations, the Director ultimately decided to reorganize the PATH program completely, merging it with the ITS' California Center of Innovative Transportation (CCIT) program into a single center. This reorganization began in Fall 2010 and was completed in January 2011. Under the new organizational structure, PATH and CCIT are now one organization, re-branded as PATH, but with a different unit name: Partners for Advanced Transportation TecHnology. ITS management has expressed their confidence that the new organizational structure will allow for greater visibility and control of PATH operations, and that this strengthened oversight will prevent similar issues from occurring in the future.