January 29, 2018

To: Veronica Mendez – Interim Vice Chancellor for Planning and Budget

Subject: Theft Sensitive Equipment and Supplies Audit

Ref: Audit Report No. M18A002

Attached is the final report for the audit of Theft Sensitive Equipment and Supplies. This audit verifying the existence of equipment and supplies was part of the Fiscal Year 2017 – 2018 Audit Plan. The management corrective action in the report will be set up in the Internal Audit database (TeamCentral) to monitor it until completion.

This audit impacted departments from all campus divisions. We appreciate the help we received from administrative staff from these many departments during the audit. We also appreciate the collaboration of the Chief Procurement Officer and his staff who will work to correct the control weaknesses discussed in the audit report.

Todd Kucker
Director of Internal Audit

Attachment
cc  SVP Bustamante
    Chancellor Leland
    Associate Chancellor Putney
    Associate Vice Chancellor McLeod
    Assistant Vice Chancellor Toth
    Assistant Vice Chancellor and Controller Riley
    Chief Procurement Officer Dubroff
    Chief Information Security Officer Dugan
    Equipment Manager Callaway
    Ethics and Compliance Executive Committee
Theft Sensitive Equipment and Supplies Audit
Report No. M18A002

January 29, 2018

Work completed by:
Brandi Masasso – Internal Audit
Management Summary

Internal Audit has completed an audit to evaluate how UC Merced safeguards theft sensitive equipment and supplies. The audit was a review of existence where we verified that equipment purchased during Fiscal Year 2016 – 2017 could be located.

Overall, we noted inconsistent internal controls by departments that were responsible for protecting theft sensitive equipment. While some departments have invested significant employee time and resources to customize their own systems to track equipment, other departments could not provide evidence that any controls had been set up to manage equipment.

There are compelling reasons for improving controls over computers and other theft sensitive equipment at UC Merced.

- The equipment is at risk of being stolen as it can be easily sold for cash (eBay, etc.)
- The loss of a laptop computer puts data at risk and could result in an expensive data breach.
- Loss of equipment could result in embarrassing publicity if the campus does not have controls in place to even identify that it was missing.
- A significant portion of the equipment purchases were funded by Federal awards. Federal auditors often scrutinize whether these equipment purchases relate to the purpose of the grant.
- Inconsistent control over computer equipment may result in excessive costs to the campus. While it is difficult to determine a reasonable range of annual equipment costs per employee, the annual amounts spent appear to be growing.

The following report discusses our observations and recommendations under the following headings:

- Very different levels of control over theft sensitive equipment
- Improving control over Facilities’ spare parts and supplies
Purpose and Audit Objectives

Internal Audit has completed an audit of UC Merced’s management of theft sensitive equipment and supplies, which was part of the Fiscal Year 2017 – 2018 Internal Audit Plan. The audit was completed in order to review the effectiveness of internal controls related to theft sensitive equipment and Facilities’ parts inventories.

The audit objectives were:

- To determine whether departments adequately protect theft sensitive equipment from loss in an efficient and cost effective manner;
- To verify that departments can locate theft sensitive equipment for which they are responsible; and,
- To review that Facilities Management has set up effective and efficient controls to maintain spare parts, tools, and materials.

Scope of the Audit

The audit involved testing purchased equipment, spare parts, and materials for existence. We verified that we could locate theft sensitive equipment purchased during Fiscal Year 2016-2017. Based upon purchase information in the CatBuy system and the amount of computer equipment purchased by departments from the Campus Store, we estimated that there were around $2.1 million worth of theft sensitive equipment purchased during the year. We reviewed the purchase documentation for 75 purchases of theft sensitive equipment by 57 separate departments totaling $112,755. After selecting the purchases, we reviewed how the various departments maintain control over the equipment and verified that the equipment could be located.

During the audit, we also reviewed control over parts and tools inventories by Facilities Management. We interviewed Facilities employees and reviewed systems and procedures to obtain an understanding of controls in place during September 2017. The Facilities Parts inventory was valued at $83,861 at June 30, 2017.

Background Information Describing Current Procedures

Thief Sensitive Equipment

Business and Finance Bulletin BUS 29 “Management and Control of University Equipment” provides effective guidelines for managing and safeguarding equipment that cost more than $5,000. The Equipment Management department, which reports to the Chief Procurement Officer, works to maintain control over this “inventorial equipment”. Procedures for maintaining control over inventorial equipment include affixing asset tags to the equipment at the time of purchase, maintaining a listing of the equipment, and completing a physical inventory of the equipment every two years to verify that the items can be located and are adequately safeguarded.
Equipment that cost less than $5,000 is classified as “theft sensitive” equipment. Departments are responsible for setting up their own inventory control procedures over this equipment. There is very little written guidance or recommended procedures for controlling this equipment so departments take their own measures for controlling the equipment. As a result, there have been very different levels of control maintained by different departments. Some departments have set up their own databases and use asset tags to keep track of theft sensitive equipment. Others have not set up any processes for keeping track of equipment. Some departments maintain controls over equipment purchased for staff but have no controls set up for equipment purchased for faculty members or for research.

Departments purchase theft sensitive equipment utilizing various procurement methods. Departments utilize low value orders, purchase cards, and sometimes work with Central Procurement to purchase computers and other theft sensitive equipment. To purchase Apple computer equipment, departments work the Campus Store to order the equipment which is then charged to the department with an inter-department charge. Sometimes employees purchase their own equipment and request reimbursement from their departments.

As there are many purchase methods, it is difficult to determine exactly how much theft sensitive equipment has been purchased at UC Merced. The table below provides an overview for estimated purchases of theft sensitive equipment (purchase price between $200 and $4,999) during the last few years. (Bookstore recharges to departments ranged from $600,000 to $800,000 during each of the four years so we came up with a conservative annual estimate of $400,000 for theft sensitive equipment purchases.)

<table>
<thead>
<tr>
<th>Theft Sensitive Equipment</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Hardware</td>
<td>$777,596</td>
<td>$875,460</td>
<td>$2,092,337</td>
<td>$923,903</td>
</tr>
<tr>
<td>Copying Equipment</td>
<td>$15,914</td>
<td>$21,831</td>
<td>$30,648</td>
<td>$34,077</td>
</tr>
<tr>
<td>Office Equipment</td>
<td>$64,170</td>
<td>$25,771</td>
<td>$46,178</td>
<td>$50,863</td>
</tr>
<tr>
<td>Other Equipment</td>
<td>$503,929</td>
<td>$598,762</td>
<td>$572,565</td>
<td>$701,817</td>
</tr>
<tr>
<td>Musical Instruments</td>
<td>$15,701</td>
<td>$1,584</td>
<td>$2,158</td>
<td>$9,588</td>
</tr>
<tr>
<td>Equipment recorded in CatBuy</td>
<td>$1,377,310</td>
<td>$1,523,408</td>
<td>$2,743,886</td>
<td>$1,720,248</td>
</tr>
<tr>
<td>Estimated Equipment purchased via Campus Store</td>
<td>$400,000</td>
<td>$400,000</td>
<td>$400,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>Estimated Total Equipment Purchased</td>
<td>$1,777,310</td>
<td>$1,923,408</td>
<td>$3,143,886</td>
<td>$2,120,248</td>
</tr>
<tr>
<td>Estimated # of UC Merced Employees</td>
<td>1,297</td>
<td>1,404</td>
<td>1,454</td>
<td>1,462</td>
</tr>
<tr>
<td>Estimated Annual Cost per Employee</td>
<td>$1,370</td>
<td>$1,370</td>
<td>$2,162</td>
<td>$1,450</td>
</tr>
</tbody>
</table>

As most computers and other theft sensitive equipment would last at least three years, it appears that departments should be maintaining control over more than $7 million worth of theft sensitive equipment. As the campus continues to grow, the amount of equipment will also continue to grow.
It is important to maintain adequate control over theft sensitive equipment. Confidential and sensitive information is often maintained on the equipment and the University is at risk of an expensive breach if the equipment is stolen or cannot be located. Poor management of computer equipment can also result in excessive spending for equipment. Proper management would result in a set schedule for periodically purchasing new equipment. Also, properly safeguarding equipment enables the campus to efficiently obtain equipment back from separating employees.

During Fiscal Year 2016 – 2017, around $2.4 million of supplies and materials were funded by grants at UC Merced. A significant portion of these grant expenditures were for theft sensitive equipment. With equipment being purchased in many different ways, one risk is that equipment purchases on grants are poorly controlled and could be disallowed.

During Fiscal Year 2012 - 2013, UC Merced Internal Audit completed an audit of theft sensitive equipment. In the audit report, we recommended that the campus consider centralizing the management of inventorial and theft sensitive equipment with an equipment management system. After evaluating equipment management systems, the former AVC – Business and Financial Services deemed the costs of controlling the equipment centrally to be too expensive compared with the benefits of improving control over theft sensitive equipment. As a result, the management of theft sensitive equipment is decentralized with the campus departments as each department attempts to manage equipment with a spreadsheet or their own customized system.

**Parts and Tools in Facilities Management**

Facilities Management purchases spare parts and materials when completing campus repairs and requested work orders. During 2013, Facilities segregated an area within a warehouse to set up a storeroom for maintaining control over spare parts. The cost of parts in the storeroom at June 30, 2017 was $83,861.

When excess parts and materials are purchased for a particular job or work order, the unused parts become part of “shop stock”. The risk related to shop stock is that it is not formally tracked and can sometimes be sold for cash at a recycler. Effective controls over tools, spare parts, and materials should consider the costs (employee time, resources, etc.) versus the potential benefit of setting up and maintaining the controls.

**Audit Results**

From the results of our audit testing, we concluded that UC Merced’s control over theft sensitive equipment needs improvement. Improving processes related to purchasing and maintaining control over equipment would provide better insight into potential cost savings and provide confidence that the campus could identify if equipment was lost or stolen.

While current controls related to theft sensitive equipment are decentralized at UC Merced, UC policy assigns responsibility for procurement and equipment management procedures to the campus Materiel Manager. Accountability for the management responses in this report have been assigned to the Chief Procurement Officer, UC Merced’s Materiel Manager. We discuss areas for improvement under the following headings:
• Very different levels of control over theft sensitive equipment
• Improving control over Facilities’ spare parts and supplies

Observations and Management Corrective Actions

1. Very different levels of control over theft sensitive equipment

During the testing, we selected equipment for testing that was purchased by 57 different departments (the departments are listed in the Appendix to the report). Overall, while it was sometimes time consuming for departments to identify the selected equipment, employees were able to locate all of the selected equipment from FY 2016 – 2017 (or, as explained below, the departments were able to claim with some certainty that the equipment observed was the recently purchased equipment). From our review of how the departments attempt to keep track of theft sensitive equipment, we noted that some departments are not maintaining adequate control over the equipment. We noted the following:

• With the turnover and restructuring of some administrative employees, some departments identified that no one was maintaining a listing of their purchased equipment. As a result, these departments could not easily identify the selected equipment. Without a formal listing of equipment, there was no periodic review of equipment to verify that it could be located.

• Some departments were not obtaining serial numbers of equipment. As a result, there was not conclusive evidence that the equipment we observed was the same equipment that was purchased. For example, if a particular laptop model was selected, the department could only show us a computer of the same model without being certain that it was the same computer.

• Some departments have invested in specialized systems to keep track of theft sensitive equipment. While their control over equipment was usually better than other departments that relied upon spreadsheets, most departments did not have procedures to periodically review that the equipment being tracked could be located. One cost that we did not calculate is the overall cost that the various schools and departments have incurred in purchasing or programming their own stand-alone systems rather than relying upon a centralized system that could be utilized by all departments.

• While schools usually maintained control over computer equipment purchased for staff, computer equipment purchased for faculty and for research were not tracked.

Overall, we noted inconsistent control over theft sensitive equipment by departments. Many departments would not be able to quickly identify if equipment was lost or stolen.

We recommend that Central Procurement work closely with departments to improve the purchasing and receiving procedures for computers and other theft sensitive equipment. When theft sensitive equipment arrives, an asset tag should be affixed to the equipment in order to
improve tracking of the equipment. Identifying information and serial numbers of the equipment should be maintained in a centralized system. Periodically, physical inventories of the equipment should be completed to verify that items can be located.

**Management Corrective Action**

Guided by these audit findings the Equipment Management Department will take the following steps to ensure that Theft Sensitive Equipment is appropriately accounted for by University Departments.

1. The Equipment Management Department will draft guidance for University Departments that (1) describes the responsibility of each department related to theft sensitive equipment (2) provides a definition and examples of Theft Sensitive Equipment (3) provides recommended procedures to comply with the department responsibilities related to Theft Sensitive Equipment.
2. The Equipment Management Department will develop a standard template for use by University departments in tracking Theft Sensitive Equipment.
3. The Equipment Management Department will develop and provide training to University staff responsible for departmental inventory of Theft Sensitive Equipment.
4. The Equipment Management Department will conduct periodic reviews of departments with Theft Sensitive Equipment to evaluate compliance with tracking procedures and will provide follow up training as required.

This management action plan will be completed by June 30, 2018.

2. **Improving control over Facilities’ spare parts and supplies**

One purpose of the audit was to review internal controls over tools, spare parts, and materials by Facilities Management. During the audit, we noted the lack of adequate control over spare parts used to fulfill work orders. When parts ordered for a particular work order are not used, the parts become part of “shop stock”, which is not tracked. The cost of setting up formal controls related to shop stock is most likely not feasible as the costs to track the materials would outweigh the potential benefit from the controls.

The most cost-effective control related to these spare parts is a knowledgeable supervisor who scrutinizes purchases related to particular work orders. Supervisors who approve the purchases should identify when it appears that excessive parts or materials are purchased.

We recommend that Facilities Supervisors periodically review that only needed parts and materials are purchased and that shop stock is not accumulating. Supervisors should have access to all Facilities areas in order to verify that shop stock that can be recycled for cash is not being amassed.

[This observation was included in the report to encourage supervisors in Facilities Management to set up cost effective monitoring over shop stock. As the financial impact of managing shop stock is insignificant, a formal management corrective action was not required.]
Appendix – Departments Included in the Testing of Theft Sensitive Equipment

During the audit, Internal Audit selected Fiscal Year 2016 – 2017 equipment purchases by many different departments in order to get a broad overview of campus procedures. The following list shows the departments that were included in the testing. In many cases, certain administrative employees manage multiple departments. For example, the Administrative Coordination Team (ACT) is responsible for the various departments within the Chancellor’s Office and the Business and Administrative Services division.

Departments that had purchases included in the testing

Departments that report to the Chancellor
Chancellor’s Office
Campus Climate
Care Advocacy
Development and Alumni Relations
Fresno Outreach
Communications

Departments that report to the Provost
Provost’s Office
Academic Affairs
Academic Senate
Information Technology Services
International Affairs
University Library
Office of the Vice Provost for the Faculty
Office of the Vice Provost for U Education

School of Engineering
Dean’s Office
Materials Science and Engineering

School of Natural Sciences
Dean’s Office
Biological Sciences

School of Social Sciences, Humanities, and Arts
Dean’s Office
World Cultures and History

Office of Research and Economic Development
Research Administration
Natural Reserve System
Environmental Analytical Lab
Sponsored Research Services
Appendix – Departments Included in the Testing of Theft Sensitive Equipment (continued)

Office of Research and Economic Development (continued)
Stem Cell Instrumentation Foundry
Spatial Analysis and Research Center

Division of Planning and Budget
Business and Financial Services
Insurance and Risk Management
Institutional Research and Decision Support
Central Payroll Services
Finance / Budget Office

Physical Operations, Planning, and Development (POPD)
Office of the AVC – POPD
Facilities Operations
Fleet Services
Central Plant Operation
Real Estate
Fire and Building Safety
Parking and Enforcement
Design and Construction

Division of Business and Administrative Services
Office of the Vice Chancellor - BAS
Administration Coordination Team
Environmental Health and Safety
Human Resources
Protective Services

Division of Student Affairs
Office of the Vice Chancellor – Student Affairs
Admissions
Athletics
Bookstore
Housing and Dining
Center for Educational Partnerships
Bright Success Center
Disability Services
Student Life
Health Services
Financial Aid
Recreation
Registrar’s Office