FACILITIES MANAGEMENT

CALIFORNIA STATE UNIVERSITY,
SACRAMENTO

Audit Report 12-42
September 11, 2012

Members, Committee on Audit

Henry Mendoza, Chair
William Hauck, Vice Chair
Lupe C. Garcia   Steven M. Glazer
Hugo N. Morales   Glen O. Toney

Staff

University Auditor: Larry Mandel
Senior Director: Michelle Schlack
Audit Manager: Ann Hough
Senior Auditor: Alexander Khan

BOARD OF TRUSTEES
THE CALIFORNIA STATE UNIVERSITY
CONTENTS

Executive Summary ...................................................................................................................................... 1

Introduction ................................................................................................................................................... 2
  Background ............................................................................................................................................... 2
  Purpose ...................................................................................................................................................... 4
  Scope and Methodology ............................................................................................................................ 5

OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

Maintenance Program and Computerized Maintenance Management System ............................................. 6

Utilities Management .................................................................................................................................... 6

Physical and Logical Security ....................................................................................................................... 7
  Keys Issuance ............................................................................................................................................ 7
  Work Order System Access ...................................................................................................................... 8
APPENDICES

APPENDIX A: Personnel Contacted
APPENDIX B: Campus Response
APPENDIX C: Chancellor’s Acceptance

ABBREVIATIONS

CO          Office of the Chancellor
CPDC        Capital Planning, Design and Construction
CMMS        Computerized Maintenance Management System
CSU         California State University
FRRM        Facilities Renewal Cost Model Project
ICSUAM      Integrated California State University Administrative Manual
OUA         Office of the University Auditor
EXECUTIVE SUMMARY

As a result of a systemwide risk assessment conducted by the Office of the University Auditor (OUA) during the last quarter of 2011, the Board of Trustees at its January 2012 meeting, directed that Facilities Management be reviewed. The OUA had previously reviewed Operations and Maintenance of Plant in 1999.

We visited the California State University, Sacramento campus from June 5, 2012, through July 13, 2012, and audited the procedures in effect at that time.

Our study and evaluation did not reveal any significant internal control problems or weaknesses that would be considered pervasive in their effects on facilities management activities. However, we did identify other reportable weaknesses that are described in the executive summary and body of this report. In our opinion, the operational and administrative controls for facilities management activities as of July 13, 2012, taken as a whole, were sufficient to meet the objectives stated in the “Purpose” section of this report.

As a result of changing conditions and the degree of compliance with procedures, the effectiveness of controls changes over time. Specific limitations that may hinder the effectiveness of an otherwise adequate system of controls include, but are not limited to, resource constraints, faulty judgments, unintentional errors, circumvention by collusion, and management overrides. Establishing controls that would prevent all these limitations would not be cost-effective; moreover, an audit may not always detect these limitations.

The following summary provides management with an overview of conditions requiring attention. Areas of review not mentioned in this section were found to be satisfactory. Numbers in brackets [ ] refer to page numbers in the report.

MAINTENANCE PROGRAM AND COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM [6]

The campus was not using a perpetual inventory method to record and track the location of each item in the materials inventory from acquisition to final disposition.

UTILITIES MANAGEMENT [6]

The campus had not submitted monthly energy utilization reports to the chancellor’s office on a timely basis.

PHYSICAL AND LOGICAL SECURITY [7]

The campus did not have policies and procedures to track the custody of campus keys and electronic access devices after they had been issued. In addition, administration of access to the computerized maintenance management system (CMMS) needed improvement. Specifically, the campus had not established an authorization process for granting and removing user access to the campus CMMS or procedures for a routine review of access to the CMMS.
INTRODUCTION

BACKGROUND

The Legislative Analyst’s Report on the 1979/80 budget addressed the need to protect the substantial public investment represented by California State University (CSU) facilities, and the Legislature subsequently directed the CSU to implement a preventive maintenance program on each campus. In December 1979, a CSU Task Force on Plant Maintenance was appointed to explore preventive maintenance needs for the system. It concluded that the concept of preventive maintenance was too narrow in scope to accommodate the total maintenance needs of the CSU. Consequently, the concept of “planned/programmed maintenance,” which incorporated preventive maintenance and systematic planning and programming, was proposed. The CSU Executive Council reviewed the task force report and approved the concept in March 1981. Since then, the CSU has issued a sequence of directives and executive orders to reflect the system’s commitment to ensuring that facilities-related assets are adequately maintained.

In 1999, the Office of the University Auditor conducted an audit of Operations and Maintenance of Plant at ten campuses and issued a systemwide report. The report included exceptions related to planned/programmed maintenance, work order administration, cost recovery, and chargebacks and required facilities condition reporting to the Office of the Chancellor (CO). Several of the recommendations from the resulting systemwide report were incorporated into Executive Order (EO) 757, issued September 1, 2000, and later into EO 847, Policy Statement on Facility Maintenance, issued January 10, 2003. The latter is the most recent dictate on the subject.

In 2000, the CSU adopted the Facilities Renewal Cost Model Project (FRRM) with the long-term objective of securing adequate funding for deferred maintenance and renewal needs for CSU physical plants. FRRM implementation provided a standardized means for campuses to fulfill the requirement to prepare an annual five-year projection of deferred maintenance and capital renewal costs. It also provided the CO with information necessary for capital budgeting and planning.

Since the last audit and the adoption of FRRM, the CSU system has been confronted with funding appropriation challenges that have had a profound effect on facilities maintenance. The CSU support budget documentation for 2012/13 identifies a deferred maintenance need of $470 million. However, this amount represents the highest priority projects out of an estimated $1.6 billion in deferred maintenance and capital renewal backlog derived from the 2009/10 FRRM data. The model also concludes that absent investment of at least $99 million per year to maintain the current backlog level, the need will grow to $2.2 billion by 2016.

Meanwhile, appropriations for the CSU Capital Outlay budget have decreased significantly over the past several years, from $410 million for 2007/08 to less than $20 million in 2012/13. Between the fiscal years 2005/06 and 2008/09, the Trustees and the legislature provided for $140 million within the budget for capital renewal projects, but that funding has since ceased. The Five-Year Capital Improvement Plan for 2012/13 reflects campus facility needs approaching $6 billion. However, this number is artificially depressed by criteria, created to encourage campus prioritization, that limits the number of projects the campuses can request for funding. The CO’s Capital Planning, Design and Construction (CPDC) office, in consultation with the Trustees, has been working on solutions for funding infrastructure renewal, seismic strengthening, and other capital priorities.
The CSU codified its commitment to energy conservation and sustainability in February 1989 with the issuance of EO 538, *Policy Statement on Energy Conservation and Utilities Management for the California State University and Energy Consumption Reduction Goal for 1992/93 Compared to 1986/87.* This EO was superseded in August 2006 with EO 987, *Policy Statement on Energy Conservation, Sustainable Building Practices, and Physical Plant Management for the California State University.* This EO retained general operational provisions and sustainable building practices while adding the CSU Sustainable Measurement Checklist process. Since some of the deadlines for energy conservation goals outlined in the EO have expired, and other mandates within the EO have been deemed outdated, CPDC is considering options on how to update and issue new guidelines.
PURPOSE

Our overall audit objective was to ascertain the effectiveness of existing policies and procedures related to facilities management and to determine the adequacy of controls over related processes to ensure compliance with relevant Trustee policy, Office of the Chancellor directives, and campus procedures.

Within the overall audit objective, specific goals included determining whether:

- Administration of facilities management is well defined and includes clear lines of organizational authority and responsibility and documented delegations of authority.
- Management has established policies and procedures for facilities maintenance and utilities management and has developed the means to monitor and measure compliance with applicable laws and CSU policies.
- Facilities management risks have been identified, assessed, and monitored.
- A comprehensive planned/programmed maintenance schedule that captures all preventive maintenance and repair requirements is in place.
- The campus has effectively identified facility deferred maintenance and capital renewal needs and is reporting the information to the CO annually.
- The campus has implemented an effective computerized maintenance management system (CMMS) to ensure proper administration of maintenance tasks, including scheduling, costs management reporting, and productivity tools to account for resource utilization.
- The campus is preparing and submitting biennial facilities assessments and equipment audits to the CO in an accurate and timely manner.
- The campus has implemented effective and efficient custodial and groundskeeping programs that include productivity and performance standards to ensure the work is performed in an effective and efficient manner.
- The campus has implemented controls to ensure proper capture, tracking, and collection of costs for non-maintenance and auxiliary-related work orders.
- The campus has implemented an effective utility tracking system to capture and report information pertinent to CSU goals for sustainability and energy conservation.
- Keys and other physical access devices are issued to authorized individuals, and access devices are properly secured and monitored.
- Systems and applications under facilities management administration are adequately controlled and secured, and access rights are granted on a need-to-know basis.
SCOPE AND METHODOLOGY

The proposed scope of the audit as presented in Attachment A, Audit Agenda Item 2 of the January 24 and 25, 2012, meeting of the Committee on Audit stated that Facilities Management includes custodial services; grounds keeping; facility repairs, preventive maintenance, and renovations; and utility distribution. Proposed audit scope would include, but was not limited to, review of cost allocations; deferred maintenance; building and grounds conditions; sustainable building practices; materials and equipment inventory; and work order scheduling and control systems.

Our study and evaluation were conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors and included the audit tests we considered necessary in determining whether operational and administrative controls are in place and operative. This review emphasized, but was not limited to, compliance with Board of Trustee policies and Office of the Chancellor and campus policies, letters, and directives. The audit focused on procedures in effect from January 1, 2010, through February 28, 2012.

We focused primarily on the internal administrative and operations controls over facilities management activities. Specifically, we reviewed and tested:

- The campus framework for facilities management, including the required implementation of a CMMS and a utility tracking system.
- Methods by which the campus identifies, prioritizes, and monitors routine, preventive, and special maintenance projects.
- The capabilities and management utilization of a CMMS to capture and monitor task progress and to track resource allocations and costs.
- Methods by which the campus identifies and quantifies deferred maintenance backlog, and the escalation of the information to the proper management level, including the CO.
- Methods for capturing and recovering costs of services provided to non-state and auxiliary organizations.
- The campus strategic energy resource plan and its correlation to systemwide goals for energy conservation and sustainability.
- Compliance with specific energy conservation policies.
- Devices and technology used to control physical access to campus facilities.
OBSERVATIONS, RECOMMENDATIONS, AND CAMPUS RESPONSES

MAINTENANCE PROGRAM AND COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM

The campus was not using a perpetual inventory method to record and track the location of each item in the materials inventory from acquisition to final disposition.

We found that the campus could not provide an accurate system record of the location of four out of five items selected from shop shelves.

California State University, Sacramento Facilities Inventory Policy states that all new materials inventory will be independently counted, verified and logged into a computerized inventory module in the computerized maintenance management system (CMMS), and that careful accounting records are to be kept when the items are removed and utilized for a particular job.

Integrated California State University Administrative Manual (ICSUAM) §3150.01, Administration of University Property, dated October 6, 2011, states that university property must be protected from unauthorized use. The campus must accurately and timely record all transactions related to university property and establish appropriate controls to safeguard university property. Each campus must prepare written procedures that implement this policy.

The director of administrative services stated that the campus was in the process of migrating inventory to the module available on the CMMS, which utilizes a perpetual inventory method, but that the process had been delayed due to staff resource constraints.

Failure to accurately record and track inventory could result in misappropriation of assets and accounting errors.

Recommendation 1

We recommend that the campus implement a perpetual inventory method to record and track the location of each item in the materials inventory from acquisition to final disposition.

Campus Response

We concur. By March 31, 2013, the campus will implement a process that accurately records the location and transactions of items in the materials inventory from acquisition to final disposition.

UTILITIES MANAGEMENT

The campus had not submitted monthly energy utilization reports to the chancellor’s office (CO) on a timely basis.
We reviewed 15 monthly energy reports and found that five had been submitted to the CO after their due dates.

Executive Order 987, *Policy Statement on Energy Conservation, Sustainable Building Practices, and Physical Plant Management for the California State University*, dated August 2, 2006, states that the campuses are responsible for providing the CO with the data necessary for central reporting on systemwide energy utilization.

The senior director of sustainability and plant operations stated that monthly reports were completed manually, which required significant staff time, and that the failure to meet the CO deadline was due to a lack of personnel resources available for the task.

Failure to comply with deadlines for submission of monthly energy reports increases the risk that systemwide planning and initiatives for energy conservation will be hampered or flawed due to lack of relevant data.

**Recommendation 2**

We recommend that the campus submit utility energy reports to the CO on a timely basis.

**Campus Response**

We concur. For all of 2012, the campus has submitted our utility energy reports to the CO on a timely basis and will continue to submit timely reports going forward. Therefore, corrective action has been implemented and no further work is necessary.

**PHYSICAL AND LOGICAL SECURITY**

**KEYS ISSUANCE**

The campus did not have policies and procedures to track the custody of campus keys and electronic access devices after they had been issued.

State Administrative Manual §20050, *Internal Control*, states that the elements of a satisfactory system of internal accounting and administrative controls shall include an established system of practices to be followed in performance of duties and a system of authorization and recordkeeping procedures adequate to provide effective accounting control.

ICSUAM §8080, *Information Security Policy*, dated April 19, 2010, states that each campus must identify physical areas that must be protected from unauthorized physical access while ensuring that authorized users have appropriate access.

The director of administrative services stated that the campus has an effective procedure governing the issuance of keys. He further stated that the facilities staff relies on human resources and other departments to provide notice when an employee with a campus key or electronic access device...
separates from the university, and those processes had not always been adequately enforced, so the department was not always able to effectively track custody of keys and electronic access devices.

Failure to track the custody of keys and/or access devices increases the risk that keys will be unaccounted for or misused.

**Recommendation 3**

We recommend that the campus develop policies and procedures to track the custody of campus keys and electronic access devices.

**Campus Response**

We concur. By March 11, 2013, the campus will develop policies and procedures to track the custody of campus keys and electronic access devices. Facilities services and human resources are also working together to require all outstanding keys/access devices returned to the campus prior to separation.

**WORK ORDER SYSTEM ACCESS**

Administration of access to the CMMS needed improvement.

We found that the campus had not established:

- An authorization process for granting and removing user access to the CMMS.
- Procedures for a routine review of access to the CMMS.

ICSUAM §8060.0 *Access Control*, dated April 19, 2010, states that campuses must have a documented process for provisioning approved additions, changes, and terminations of access rights, and for reviewing access of existing account holders. It further states that the access review must be conducted at least annually and that the review must be documented.

The director of administrative services stated that the CMMS administrators were unaware of the requirement to establish an authorization process and routine access review for the CMMS.

Failure to adequately control user access to systems increases campus exposure to loss from inappropriate acts.

**Recommendation 4**

We recommend that the campus develop:

a. An authorization process for granting and removing user access to the CMMS.
b. Procedures for a routine review of access to the CMMS.
Campus Response

We concur. By March 11, 2013, the campus will develop the CMMS authorization process for granting and removing access, as well as the procedures for a routine review of current access.
### APPENDIX A: PERSONNEL CONTACTED

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexander Gonzalez</td>
<td>President</td>
</tr>
<tr>
<td>Bena Arao</td>
<td>Director, Administrative Services</td>
</tr>
<tr>
<td>Kendal Chaney-Buttleman</td>
<td>University Controller</td>
</tr>
<tr>
<td>Michael Clemson</td>
<td>Associate Energy Program Analyst</td>
</tr>
<tr>
<td>Darnell Cooper</td>
<td>Accountant II</td>
</tr>
<tr>
<td>Edna Flores</td>
<td>Administrative Analyst</td>
</tr>
<tr>
<td>Leticia Guerrero</td>
<td>Payroll Supervisor</td>
</tr>
<tr>
<td>Linda Hafar</td>
<td>Senior Director, Sustainability and Plant Operations</td>
</tr>
<tr>
<td>Yavette Hayward</td>
<td>Senior Management Auditor</td>
</tr>
<tr>
<td>Justine Heartt</td>
<td>Associate Vice President, Financial Services</td>
</tr>
<tr>
<td>Ali Izadian</td>
<td>Associate Vice President, Facilities Services</td>
</tr>
<tr>
<td>David Kesty</td>
<td>Lead Auto Mechanic</td>
</tr>
<tr>
<td>Ming-Tung “Mike” Lee</td>
<td>Vice President, Administration and Business Affairs/Chief Financial Officer</td>
</tr>
</tbody>
</table>
October 12, 2012

Larry Mandel
University Auditor
The California State University
401 Golden Shore
Long Beach, CA 90802-4210

SUBJECT: Campus Response to Recommendations of Facilities Management Audit Report. #12-42

Dear Larry:

Please find enclosed California State University, Sacramento’s response to the recommendations of the audit. The campus is committed to addressing and resolving the issues identified in the audit report.

If you have any questions or require additional information, please contact Kaye Milburn, Director of Auditing Services, at (916) 278-7439.

Sincerely,

Ming-Tung “Mike” Lee, Ph.D.
Vice President for Administration/CFO

MTL:kd

Enclosure

c: Alexander Gonzalez, President
   Ali Izadian, Associate Vice President, Facilities Services
   Linda Hafar, Senior Director, Sustainability and Plant Operations
   Bena Arao, Director, Administrative Services
   Kaye Milburn, Director, Auditing Services
FACILITIES MANAGEMENT
CALIFORNIA STATE UNIVERSITY,
SACRAMENTO
Audit Report 12-42

MAINTENANCE PROGRAM AND COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM

Recommendation 1

We recommend that the campus implement a perpetual inventory method to record and track the location of each item in the materials inventory from acquisition to final disposition.

Campus Response

We concur. By March 31, 2013, the campus will implement a process that accurately records the location and transactions of items in the materials inventory from acquisition to final disposition.

UTILITIES MANAGEMENT

Recommendation 2

We recommend that the campus submit utility energy reports to the CO on a timely basis.

Campus Response

We concur. For all of 2012, the campus has submitted our utility energy reports to the CO on a timely basis and will continue to submit timely reports going forward. Therefore, corrective action has been implemented and no further work is necessary.

PHYSICAL AND LOGICAL SECURITY

KEYS ISSUANCE

Recommendation 3

We recommend that the campus develop policies and procedures to track the custody of campus keys and electronic access devices.
Campus Response

We concur. By March 11, 2013, the campus will develop policies and procedures to track the custody of campus keys and electronic access devices. Facilities Services and Human Resources are also working together to require all outstanding keys/access devices returned to the campus prior to separation.

WORK ORDER SYSTEM ACCESS

Recommendation 4

We recommend that the campus develop:

a. An authorization process for granting and removing user access to the CMMS.
b. Procedures for a routine review of access to the CMMS.

Campus Response

We concur. By March 11, 2013, the campus will develop the CMMS authorization process for granting and removing access as well as the procedures for a routine review of current access.
October 26, 2012

MEMORANDUM

TO: Mr. Larry Mandel  
   University Auditor

FROM: Charles B. Reed  
      Chancellor  

SUBJECT: Draft Final Report 12-42 on Facilities Management,  
          California State University, Sacramento

In response to your memorandum of October 26, 2012, I accept the response as submitted with the draft final report on Facilities Management, California State University, Sacramento.

CBR/amd