

Office of Audit and Advisory Services  
401 Golden Shore, 4th Floor  
Long Beach, CA 90802-4210

562-951-4430  
562-951-4955 (Fax)  
lmandel@calstate.edu

November 16, 2017

Dr. Dianne F. Harrison, President  
California State University, Northridge  
18111 Nordhoff Street  
Northridge, CA 91330-8230

Dear Dr. Harrison:

**Subject: Audit Report 17-43, Facilities Management, California State University, Northridge**

We have completed an audit of *Facilities Management* as part of our 2017 Audit Plan, and the final report is attached for your reference. The audit was conducted in accordance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

I have reviewed the management response and have concluded that it appropriately addresses our recommendations. The management response has been incorporated into the final audit report, which has been posted to the Office of Audit and Advisory Services' website. We will follow-up on the implementation of corrective actions outlined in the response and determine whether additional action is required.

Any observations not included in this report were discussed with your staff at the informal exit conference and may be subject to follow-up.

I wish to express my appreciation for the cooperation extended by the campus personnel over the course of this review.

Sincerely,



Larry Mandel  
Vice Chancellor and Chief Audit Officer

c: Timothy P. White, Chancellor

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**FACILITIES MANAGEMENT**  
**California State University, Northridge**

Audit Report 17-43  
October 19, 2017

## EXECUTIVE SUMMARY

### OBJECTIVE

The objectives of the audit were to ascertain the effectiveness of operational, administrative, and financial controls related to facilities operations and to ensure compliance with relevant governmental regulations; Trustee policy; Office of the Chancellor (CO) directives; and campus procedures.

### CONCLUSION

We found the control environment for the areas reviewed to be effective.

Based upon the results of the work performed within the scope of the audit the operational, administrative, and financial controls for campus facilities as of August 18, 2017, taken as a whole, provided reasonable assurance that risks were being managed and objectives were met.

Our audit procedures did identify opportunities to improve controls over the work orders policies and procedures, preventive maintenance (PM) and deferred maintenance programs, and chargebacks.

Specific observations, recommendations, and management responses are detailed in the remainder of this report.

## OBSERVATIONS, RECOMMENDATIONS, AND RESPONSES

### 1. WORK ORDER POLICIES AND PROCEDURES

#### OBSERVATION

Campus policies and procedures for the administration of work orders were not current.

Specifically, the *Standard Operating Procedure (SOP) for Work Control Center* had not been updated to reflect the current process/procedures and the new computerized maintenance management system (CMMS) system (Azzier).

Current policies and procedures for work orders help to ensure that assets are well maintained, service levels are enhanced, and resource needs for the maintenance of campus facilities are accurately reported.

#### RECOMMENDATION

We recommend that the campus update written policies and procedures for the administration of work orders.

#### MANAGEMENT RESPONSE

We concur. The *Work Control Center* SOP that describes procedures for the administration of work orders will be revised, formalized, and approved by December 31, 2017.

### 2. PREVENTIVE MAINTENANCE

#### OBSERVATION

The campus preventive maintenance (PM) program needed improvement.

We found that documented procedures for establishing PM intervals and monitoring compliance with those intervals were not in place.

Consistent PM provides greater assurance that assets and equipment will perform at peak efficiency and decreases the risk of deterioration.

#### RECOMMENDATION

We recommend that the campus develop documented procedures for establishing PM intervals and monitoring compliance with those intervals.

#### MANAGEMENT RESPONSE

We concur. The PM procedure process will be formalized into an SOP and approved by December 31, 2017.

### 3. DEFERRED MAINTENANCE

#### OBSERVATION

The campus deferred maintenance program needed improvement.

We found that:

- The campus had not finalized and formally approved the *Facilities Condition Database Maintenance and Upgrading SOP*.
- Deferred maintenance records were not always timely updated. We reviewed four deferred maintenance work orders and found no documented evidence in two instances that the deferred maintenance records were updated for work completed.

An effective deferred maintenance program provides greater assurance that assets will be well-maintained and allows management to accurately report on state facilities and the resources necessary to maintain them.

#### RECOMMENDATION

We recommend that the campus:

- a. Finalize and formally approve and implement the *Facilities Condition Database Maintenance and Upgrading SOP*.
- b. Develop a procedure to ensure that deferred maintenance records are timely updated after work orders are closed.

#### MANAGEMENT RESPONSE

We concur.

- a. The *Facilities Condition Database Maintenance and Upgrading SOP* will be revised, formalized, and approved by December 31, 2017.
- b. The *Facilities Condition Database Maintenance and Upgrading SOP* will be revised to include procedures for the timely updating of deferred maintenance records. This SOP will be formalized and approved by December 31, 2017.

### 4. CHARGEBACKS

#### OBSERVATION

The facilities department chargeback rates were not current, and the process for ensuring that chargebacks were fully recovered was inadequate.

We found that:

- The chargeback rates for services provided by the facilities department had not been reviewed and updated since 2004. Chargeback rates should be reviewed and updated periodically to ensure that reasonable costs are recovered for services performed.
- For two of the 20 work orders we reviewed, the requisitions for maintenance services were closed before all associated work orders were processed, resulting in costs not being recovered.

Current chargeback rates and an adequate process for ensuring that chargebacks are fully recovered provide greater assurance that the campus operating fund will be fully compensated for maintenance and other support provided to auxiliary organizations and other campus areas.

**RECOMMENDATION**

We recommend that the campus:

- a. Review and, if necessary, update the chargeback rates for services provided by the facilities department.
- b. Review and enhance as necessary processes to ensure that chargebacks are fully recovered.

**MANAGEMENT RESPONSE**

We concur.

- a. Revised chargeback rates for services provided by the facilities department will be approved by January 5, 2018.
- b. The *Work Control Center* SOP that describes procedures for the administration of work orders (including chargeback work orders) will be revised, formalized, and approved by December 31, 2017.

## GENERAL INFORMATION

### BACKGROUND

The need to protect the substantial public investment represented by California State University (CSU) facilities and grounds was brought to the forefront in the Legislative Analyst's Report on the 1979/80 state budget. Subsequently, the Legislature directed the CSU to implement a preventive maintenance program. As a result, the CSU has adopted directives, executive orders (EO) and technological tools to ensure that facilities-related assets are adequately maintained.

The EO 847, *Facility Maintenance*, refines the standards in which campuses maintain CSU facilities. It provides clear definition of operations and maintenance, deferred maintenance and capital renewal requirements to assure efficient and effective use of available maintenance funding. It also requires the university president to ensure that appropriate resources are directed toward meeting the requirement of proper operations and maintenance of the campus physical plant.

The Capital Planning, Design and Construction (CPDC) department at the CO maintains a space and facilities database (SFDB), a centralized system that provides information about capacity and facilities at each of the 23 campuses. It also provides details regarding custodial space and farm acreage on the campuses and contains information on each facility, including the condition, construction type, gross square footage (GSF), and master plan status. The California State University, Northridge (CSUN) campus consists of 91 facilities on an open campus of 356 acres and has 7.3 million GSF. The average age of facilities is 27.1 years.

In recent years, funding appropriation challenges in the CSU system have affected facilities maintenance. Each year, CPDC must determine how much funding is necessary to maintain the 89 million square feet of state-supported facilities systemwide, and also identify, prioritize, and find funds for the backlog of deferred maintenance projects. In 2014/15, the CSU had an estimated \$2.67 billion dollars of total backlog of deferred maintenance projects in academic and critical infrastructure. The CSUN campus had an approximate \$105-million backlog of deferred maintenance projects in academic and critical infrastructure in 2014/15, and the recent campus deferred maintenance program has focused on major mechanical projects that replaced outdated systems while increasing equipment and energy efficiency.

The CSUN campus is one of the largest of the CSU campuses in both its physical facilities and its large academic community. After the 1994 Northridge earthquake, which damaged most of its major facilities, the campus completed a \$407-million restoration of its buildings, grounds, and infrastructure. The facilities planning, design and construction (FPDC) department includes physical plant management (PPM) and is responsible for the planning, development, design, construction, and inspection of campus facilities and for delivering physical environments that support and enhance the university's academic mission. PPM is responsible for the maintenance of the campus physical environment and also includes the environmental health and safety department. As the stewards of the buildings and grounds on a 356-acre campus, PPM is the single point of contact for all service and maintenance requests. The PPM department also provides logistical services, such as asset management and shipping and receiving. The FPDC department reports to the vice president and chief financial officer for business and financial affairs.

## SCOPE

We visited the CSUN campus from July 25, 2017, through August 18, 2017. Our audit and evaluation included the audit tests we considered necessary in determining whether administrative and operational controls are in place and operative. The audit focused on procedures in effect from July 1, 2015, through August 18, 2017.

Specifically, we reviewed and tested:

- Facilities management administration and organization, to determine whether it includes clear lines of organizational authority and responsibility, and current and comprehensive policies and procedures.
- The comprehensive planned/programmed maintenance schedule, to ensure that it captures all categories of maintenance, including routine, preventive, and deferred.
- The process by which the campus identified facility conditions, including deferred maintenance and capital renewal needs, and annually reported the information to the CO.
- Campus implementation of an effective CMMS to ensure proper administration of maintenance tasks, including scheduling, cost management reporting, and productivity tools to account for resource utilization.
- Campus implementation of 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 process to ensure proper capture, tracking, and collection of costs for non-maintenance and auxiliary-related work orders.
- The campus process to ensure keys are issued to authorized individuals, and access devices are properly secured and monitored.

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.

Our testing and methodology, which was designed to provide a review of key administrative and operational controls, included interviews, walkthroughs, and detailed testing on certain aspects of the campus facilities operations. Our review was limited to gaining reasonable assurance that controls were in place to identify and address facility maintenance needs, but did not assess the quality of any repair or maintenance tasks.

## CRITERIA

Our audit was based upon standards as set forth in federal and state regulations and guidance; CSU Board of Trustee policies; Office of the Chancellor policies, letters, and directives; campus procedures; and other sound administrative practices. This audit was

conducted in conformance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

This review emphasized, but was not limited to, compliance with:

- EO 847, *Policy Statement on Facility Maintenance*
- Integrated California State University Administrative Manual (ICSUAM) §9047.01, *Space Facilities Database*
- EO 1000, *Delegation of Fiscal Authority and Responsibility*
- Government Code §13402 and §13403

## AUDIT TEAM

Senior Director: Michelle Schlack

Audit Manager: Caroline Lee

Senior Auditor: Rick Pyles