

**Audit and Advisory Services**  
401 Golden Shore  
Long Beach, CA 90802-4210

June 23, 2021

Dr. Lynn Mahoney, President  
San Francisco State University  
1600 Holloway Avenue  
San Francisco, CA 94132

Dear Dr. Mahoney:

**Subject: Audit Report 20-07, Facilities Management, San Francisco State University**

We have completed an audit of *Facilities Management* as part of our 2021-2022 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 will be posted to 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,



Vlad Marinescu  
Vice Chancellor and Chief Audit Officer

c: Joseph I. Castro, Chancellor  
Adam Day, Chair, Committee on Audit  
Jane W. Carney, Vice Chair, Committee on Audit

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# **FACILITIES MANAGEMENT**

**San Francisco State University**

Audit Report 20-07  
June 23, 2021

## EXECUTIVE SUMMARY

### OBJECTIVE

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

### CONCLUSION

Based upon the results of the work performed within the scope of the audit, except for the weaknesses described below, the operational, administrative, and financial controls for facilities management as of March 19, 2021, taken as a whole, provided reasonable assurance that risks were being managed and objectives were met.

Our review indicated that overall work order administration within facilities services (FS) needed improvement to ensure that all work orders were prepared to include required information, were updated as the status changed, and were reviewed by management. In addition, the process for ensuring that costs for performing non-routine maintenance services were reimbursed needed improvement. We also found that comprehensive work order procedures were not documented.

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

## OBSERVATIONS, RECOMMENDATIONS, AND RESPONSES

### 1. WORK ORDER ADMINISTRATION

#### OBSERVATION

Administration, maintenance, and review of aged and closed work orders needed improvement.

The campus uses MetaBIM Facilities Link as its computerized maintenance management system (CMMS) to capture, assign, monitor, and analyze the status and completion of work and maintenance requests. The department processes more than 25,000 service requests per year. A work order aging report as of January 4, 2021, provided by the campus listed 577 open work orders, with 128 (22 percent) open from 30 to 60 days, 158 (27 percent) open from 60 to 120 days, and 100 (17 percent) open over 120 days. Management indicated that the majority of the significantly aged work orders were legacy service requests from the previous system prior to conversion to MetaBIM in April 2019, but that a project to review and resolve the items was affected when work priorities and staffing assignments were revised due to the COVID-19 pandemic.

We reviewed 11 open aged work orders coded as high priority from the backlog as of July 1, 2020, and 30 closed work orders that were completed and closed during the time frame under review. We found that:

- Work orders were not always closed timely once the work was completed. Three of the open aged work orders and 16 of the closed work orders showed delays in updating work orders as closed once the task was completed, with a range of delay from 38 to 350 days.
- Work orders were sometimes closed without an indication as to whether they were cancelled or completed. We noted this on two work orders, aged 159 and 235 days, of the 30 closed work orders we reviewed.
- Work orders remained open without updates to indicate reasons for delays or progress toward completion. We noted this on six of the open aged work orders, which at the time of the audit, were aged from 52 to 92 days.

We further noted that work orders did not consistently include all required information necessary to capture direct costs associated with a task. In our review of the work order reports, we noted that FS was not routinely recording the estimated time of completion in work orders. FS did not record labor hours for five work orders, even though the tasks were determined to have been completed and the status was updated to closed.

Proper administration of the work order process enhances service levels, provides greater assurance that assets will be adequately maintained, and allows management to accurately report on state facilities and the resources necessary to maintain them.

**RECOMMENDATION**

We recommend that the campus:

- a. Evaluate the current work order review process and implement improvements to ensure that management consistently reviews open and aged work orders.
- b. Revise the current work order review procedures to enhance management oversight and ensure that all elements of completion, including labor hours and task details, are completed.
- c. Communicate the updated procedures and provide training to key personnel.

**MANAGEMENT RESPONSE**

We concur. The campus will:

- a. Evaluate the current work order review process and implement improvements to ensure that management consistently reviews open and aged work orders.
- b. Revise the current work order review procedures to enhance management oversight and ensure that all elements of completion, including labor hours and task details, are completed.
- c. Communicate the updated procedures and provide training to key personnel.

This will be completed by November 19, 2021.

**2. CHARGEBACKS**

**OBSERVATION**

The process for ensuring that chargebacks were fully recovered needed improvement.

The FS budget covers basic maintenance requirements in accordance with definitions provided in Executive Order (EO) 847, *Policy Statement on Facility Maintenance*, and these include routine maintenance, capital renewal of facilities, utility infrastructure services, roads, and grounds. The EO indicates that facilities departments should also provide non-maintenance services and improvements but should recover both direct and indirect costs associated with these services from the appropriate requesting party. MetaBIM provides fields to capture the work orders eligible for reimbursement and to collect all labor and costs associated with the task based on agreed-upon hourly rates for work assigned to each trade on campus and approved by the vice president for administration and finance, and chief financial officer. The campus developed service level agreements for self-support units and campus departments that outlined the responsibilities, scope, and cost of billable maintenance services provided by FS.

We reviewed 20 work orders for non-routine maintenance during the audit period and found that:

- FS did not recover the costs of its services for seven work orders, as required by systemwide policy.
- Three work orders for routine maintenance were miscategorized as chargeback services.
- As noted in the observation above, work orders did not consistently include all required information. In our review of the chargeback work order report, we noted that FS was not routinely recording labor hours, labor costs, or applicable material costs.

Adequate processes to ensure FS costs are fully recovered may help to ensure that the campus operating fund is fully compensated for non-maintenance work performed for the campus and other self-support entities.

#### **RECOMMENDATION**

We recommend that the campus:

- a. Evaluate the current process and implement improvements to ensure that costs for performing non-routine maintenance services are reimbursed.
- b. Revise the current work order review procedures to enhance management oversight and ensure that all elements of completion, including labor hours and task details, are included in work orders.

#### **MANAGEMENT RESPONSE**

We concur. The campus will:

- a. Evaluate the current process and implement improvements to ensure that costs for performing non-routine maintenance services are reimbursed.
- b. Revise the current work order review procedures to enhance management oversight and ensure that all elements of completion, including labor hours and task details, are included in work orders.

This will be completed by November 19, 2021.

### **3. STANDARD OPERATING PROCEDURES**

#### **OBSERVATION**

Standard written procedures needed improvement to facilitate routine procedures.

FS had a guidebook (*SFSU Guide to Facilities Services*), numerous flowcharts, and PowerPoint training materials for various maintenance and administrative functions, most were part of an extensive onboarding and training program for staff or were manuals to explain processes applicable to outside departments. However, the department had not developed and documented comprehensive work order standard operating procedures (SOP) addressing basic workflow responsibilities such as review of requests, acceptance and creation of work orders, scheduling and assignment, technician notes and completion, review and approval by supervisors or managers, and timing of status changes.

Comprehensive and current policies and procedures help to ensure that assets are well-maintained, service levels are enhanced, and resource needs for the maintenance of campus facilities are effectively administered and accurately reported.

**RECOMMENDATION**

We recommend that the campus document a comprehensive SOP for the work order process that includes, but is not limited to, review of requests, acceptance and creation of work orders, scheduling and assignment, technician notes and completion, review and approval by supervisors or managers, and timing of status changes.

**MANAGEMENT RESPONSE**

We concur. The campus will document a comprehensive SOP for the work order process that includes, but is not limited to, review of requests, acceptance and creation of work orders, scheduling and assignment, technician notes and completion, review and approval by supervisors or managers, and timing of status changes.

This will be completed by November 19, 2021.

## 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 and technological tools to ensure that facilities-related assets are adequately maintained.

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 CO is currently reviewing and revising EO 847, which was issued in 2003, to reflect more contemporary risks and requirements.

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, and master plan status. CPDC requires each campus to annually update its facility file in the SFDB; this information provides the basis for both the ongoing maintenance budget as well as the capital outlay program, including funding for any required deferred maintenance, for the immediate and subsequent years.

In 2016, CPDC launched a multiyear plan to improve the quality of facilities data in multiple areas of development and operations. The plan included a new energy information system, which streamlined and improved campus monthly utility reporting; refinements in the reporting categories for self-support facilities such as recreation centers, public/private partnerships, and faculty/staff housing; and detailed facility condition assessments (FCA) to update, in a consistent manner, the estimated backlog of renewal needs. CPDC initiated a master enabling agreement with a qualified firm to conduct the FCAs, and by 2020 all campuses had been subject to the standardized review. Information from the FCA reports ensures uniformity in the campus reporting of facility conditions and allows CPDC to more accurately determine annual funding priorities to reduce the capital renewal backlog.

In recent years, funding appropriation challenges in the CSU system have affected facilities maintenance. Each year, CPDC must not only determine how much funding is necessary to maintain the 89 million square feet of facilities systemwide, but also identify, prioritize, and find funds for the backlog of deferred maintenance projects, which the system has reported for 2021/22 to represent \$4 billion in potential costs. The 2019 FCA for San Francisco State University (SFSU) estimated that the campus will need \$340 million in facility renewal costs over ten years and that costs for immediate and critical needs were \$11.2 million.

The FS department at SFSU manages 4.4 million gross square feet of space in 73 buildings, 144 acres of land at the main campus, the downtown campus on Market Street, and 34 acres of



land at an ocean sciences research center in Tiburon. In April 2019, the department launched MetaBIM FacilitiesLink, an enterprise-level CMMS. The campus is currently using the system to capture and manage work orders, preventive maintenance, housing unit turns, and other facilities and space-related information, integrating with accounting, procurement, scheduling, and other related systems. Staff have been provisioned remote handheld electronic devices to manage assigned work orders, communicate schedules and tasks, and capture productivity in real time. Future implementation includes modules to calculate cost recovery charges and create invoices and to facilitate task-specific materials management, including links to a preferred vendor ordering system.

## SCOPE

Due to temporary operating procedures and limitations resulting from the COVID-19 public health emergency, we performed fieldwork remotely from January 19, 2021, through March 19, 2021. Our audit and evaluation included the audit tests we considered necessary in determining whether operational, administrative, and financial controls are in place and operative. The audit focused on procedures in effect from July 1, 2019, through March 19, 2021.

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.
- Campus procedures to control access to work order and electronic key access systems and procedures to adequately safeguard the inventory of physical keys to facilities

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 operational, administrative, and financial controls, included interviews, walkthroughs, and detailed testing on certain aspects of the facilities management function. Our review was limited to gaining reasonable assurance that essential elements of the campus facilities management program were in place and did not examine all aspects of the program. The review did not include maintenance operations for buildings or areas that maintain their own facilities management functions independent of the overall campus department.

## CRITERIA

Our audit was based upon standards as set forth in federal and state regulations and guidance; Trustee policy; Office of the Chancellor directives; and campus procedures; as well as sound administrative practices and consideration of the potential impact of significant risks. 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 649, *Safeguarding State Property*
- EO 847, *Policy Statement on Facility Maintenance*
- EO 1000, *Delegation of Fiscal Authority and Responsibility*
- Government Code §13402 and §13403
- Integrated California State University Administrative Manual (ICSUAM) §9047.01, *Space Facilities Database*
- ICSUAM §8060.00, *Access Control*
- ICSUAM §9047.01, *Space Facilities Database*
- *SFSU Guide to Facilities Services*

## AUDIT TEAM

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