Background

As part of the Fiscal Year (FY) 2021 Audit Plan, Audit and Management Advisory Services (AMAS) conducted a review of major capital construction projects managed by UC Davis Health’s (Health’s) Facilities Planning and Development (FPD) department. Major capital projects exceed $1M in estimated cost and require the highest level of review, approval, and monitoring. These projects require additional authorizations that can escalate to the UC Regents if the budget exceeds $70M.

In FY 2017 FPD implemented Compass,1 an on-line project management system intended to provide better collaboration, increased efficiency, and enhanced financial control. As of the time of this report Compass is not fully implemented and FPD continues to work with developers to enhance the system to Health’s specifications.

Purpose and Scope

Our objective was to validate that major capital projects are completed on time and within budget, and that all necessary approvals are obtained. Our review considered all major capital projects that were active during FY 2016 to FY 2020, which included projects that were both completed and still active.

To perform our review we gathered a list of active projects for the selected years, original documentation of approvals and initial schedules and budget requests, data from Compass to support the projects’ current status, and data from the Kuali Financial System (KFS) to document life-to-date expenditures by project. Using these data we verified appropriateness of approvals, adherence to budgets and deadlines, project oversight, and timely close-out. We also met with various leadership and staff in FPD and Capital Finance.

1 Compass is the name assigned to the local system. The software is from PM Web and UCDH has contracted with a Sacramento based software developer to provide custom configuration.
Conclusion

Of the 42 projects identified as active during the scope of our review all projects were found to have appropriate approvals. Final costs for all of the completed projects we observed were within budget, and active projects were on track to meet budgets.

We also conclude the following:

- UCOP Facilities Manual requires an independent review of cost estimates for major capital projects\(^2\). We observed that approved budgets sometimes exceeded their cost estimates and a reconciliation of the variances was not available.
- The same section of the UCOP Facilities Manual also states that the cost estimator shall not act as a consultant on the project being estimated. We observed that cost estimators did not always meet policy standards for independence.
- Completed projects are not closed-out timely.
- For the sample of projects tested most were not completed within the original estimated timeframe.
- Compass, FPD’s project management tool, is underutilized. System-generated progress reporting is limited, and this impairs visibility into project timelines and cash flow forecasting for all of Health.
- FPD has significant staffing shortages, relies on consultants to fill project manager roles, and is losing numerous staff with historical organizational knowledge.

Details of these observations, recommendations and management actions can be found in the body of this report.

\(^2\) UCOP Presidential Policy states “Independent cost estimates shall be conducted for all major capital projects which may be subject to design approval by the Committee on Grounds and Buildings as well as for other projects deemed appropriate.”
Observations, Recommendations, and Management Corrective Actions

<table>
<thead>
<tr>
<th>Report Ref</th>
<th>MCA#</th>
<th>MCA Description</th>
<th>Action Date</th>
<th>Priority</th>
<th>Person Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-32.A</td>
<td>A.1.a</td>
<td>FPD will develop operational guidelines for when major capital projects require independent cost review.</td>
<td>1/15/2022</td>
<td>Medium</td>
<td>Samara Lull</td>
</tr>
<tr>
<td>21-32.A</td>
<td>A.1.b</td>
<td>FPD will begin to include documentation of independent cost estimates in budget request packets.</td>
<td>2/15/2022</td>
<td>Medium</td>
<td>Samara Lull</td>
</tr>
<tr>
<td>21-32.A</td>
<td>A.2</td>
<td>FPD will implement changes to processes to ensure that independent cost estimates comply with UC guidance.</td>
<td>2/15/2022</td>
<td>Medium</td>
<td>Samara Lull</td>
</tr>
<tr>
<td>21-32.B</td>
<td>B.1</td>
<td>FPD will assess vacant FTEs or those currently filled by external contractors to identify a more sustainable staffing structure with increased reliance on internal project management and analytical staff.</td>
<td>2/15/2022</td>
<td>Medium</td>
<td>Samara Lull</td>
</tr>
<tr>
<td>21-32.C</td>
<td>C.1.a</td>
<td>FPD will develop a method to ensure that projects are closed out timely.</td>
<td>1/15/2022</td>
<td>Medium</td>
<td>Craig Allen</td>
</tr>
<tr>
<td>21-32.C</td>
<td>C.1.b</td>
<td>FPD and Capital Finance will implement a method of consistent communication on the status of all capital projects.</td>
<td>1/15/2022</td>
<td>Medium</td>
<td>Craig Allen</td>
</tr>
<tr>
<td>21-32.D</td>
<td>D.1</td>
<td>FDP will implement an oversight program to ensure schedules and stop light reports are updated.</td>
<td>3/15/2022</td>
<td>Medium</td>
<td>Brett Mitchell</td>
</tr>
</tbody>
</table>

A. Independent cost estimates

1. Some approved budgets were found to exceed their independent cost estimates.

The UCOP Facilities Manual incorporates the Regent’s “Policy for Independent Design and Cost Review of Building Plans” which states that “independent cost estimates shall be conducted for all major capital projects which may be subject to design approval….” We found that FPD has not operationalized criteria or thresholds for when an independent cost review should be sought.

AMAS received four examples of external review of cost estimates and compared them to the approved budgets for contract construction costs. Of the four, two had approved budgets that exceeded the construction cost estimates provided by the third party reviewer, one had an approved budget that agreed with the cost estimate and the last was for a project not within our scope.

---

3 These cost estimates were received directly from the external vendors.
We found that budget request packets did not include independent cost estimates when submitted to leadership for approval. This information would have given leadership awareness of adjustments or additions and an opportunity to obtain explanation where necessary.

**Recommendations**

FPD should ensure consistent application of policy by defining thresholds or other criteria for the requirement of independent cost review.

FPD should develop a process to ensure that budget approvals are informed by knowledge of independent cost estimates.

**Management Corrective Actions**

1. By January 15, 2022, FPD will develop operational guidelines for when major capital projects require independent cost review.

2. By February 15, 2022, FPD will begin to include documentation of independent cost estimates in budget request packets.

**2. Cost estimators did not always meet policy standards for independence.**

The UCOP Policy for Independent Design and Cost Review of Building Plans states “the cost estimator shall have no current connection to the project being estimated with the firm or firms acting as executive architect or as consultants on the project being estimated.” Additionally, the estimator shall not be an employee of the University.

In the limited samples available, AMAS found two instances of a consulting firm acting as both estimator and consultant on the same project.

**Recommendation**

FPD should adhere to UC guidance to ensure that it obtains independent cost estimates for major capital projects.

**Management Corrective Action**

1. By February 15, 2022, FPD will implement changes to processes to ensure that independent cost estimates comply with UC guidance.

**B. Staffing shortages and loss of key personnel**

**FPD has a significant number of vacant positions, including leadership roles and relies heavily on contracted staff.**

The FPD organizational chart reflects a total of 133 positions, of those 19 are vacant, 13 are planned new positions for FY 2022, 4 are filled by temporary staff and 47⁴ are consultants. A review of invoices from four different vendors providing project managers as

---

⁴ Not all are billing at a full time equivalent.
consultants showed hourly rates ranging from $160 to $212 per hour. This is significantly higher than the average of $97 per hour for internal project managers, which includes the cost of benefits.

Additionally, the amount of vacant positions could be a contributor to the shortfalls in reporting and communication identified above and negatively impacting FPD’s ability to maintain up-to-date information.

Finally, FPD relies on the project managers, a skilled labor source in high demand, to complete administrative tasks that could be completed by lower level staff.

**Recommendation**

FPD should consider staffing solutions to help maximize project managers’ time and potentially reduce overall labor costs.

**Management Corrective Action**

1. By February 15, 2022, FPD will assess vacant FTEs or those currently filled by external contractors to identify a more sustainable staffing structure with increased reliance on internal project management and analytical staff.

**C. Project completion and close-out**

**Project close-outs are not completed timely and communicated to Capital Finance.**

There are numerous administrative tasks required to close-out a project once it is complete. It is the responsibility of the project manager to complete these tasks, but due to workload and shifting priorities these final steps can be delayed unnecessarily. Our review found five projects indicated in Compass with a status of “close-out” but which were still active. There were three other projects in “construction” status for which comments indicated completion.

Once a project is complete and has been closed by FPD, Capital Finance is responsible for the journal entries to capitalize the asset. However, there is not a process for FPD to communicate to Capital Finance when a project is substantially complete to begin capitalization or when a project is closed.

Delays in close-out can make it harder for vendors and consultants to confirm all outstanding invoices are accounted for or delay issuance of the OSHPD closeout certification. Additionally, funds “left over” in a budget create risk of additional expenditures that were not included in the original scope.

**Recommendations**

FPD should develop processes to ensure timely close-out of projects in Compass.

FPD and Capital Finance should develop a process of communication for the status of capital projects.

---

5 FPD is subject to oversight by the California Office of Statewide Health Planning and Development (OSHPD), which requires financial information as part of project closure.
Management Corrective Actions

1. By January 15, 2022, FPD will develop a method to ensure that projects are closed out timely.

2. By January 15, 2022, FPD and Capital Finance will implement a method of consistent communication on the status of all capital projects.

D. Utilization of Compass project management tool.

Some elements of Compass, such as schedules and stop light reports are not fully utilized.

Not all project data are entered into Compass. 28% of the population of project files under review did not have a current schedule and 61% did not have a current stop light report⁶.

Additionally, Capital Finance is responsible for forecasts for cash flow estimates, and the lack of current schedules and status updates in Compass impedes their ability to estimate the cash needed for immediate commitments to capital.

Recommendation

FPD will begin a process of oversight to ensure schedule and stop light reports are updated appropriately.

Management Corrective Action

1. By March 15, 2022, FDP will implement an oversight program to ensure schedules and stop light reports are updated.

⁶ Reporting that uses red, yellow and green to indicate overall project status and provide comments on next steps. Expectation is for reports to be updated monthly.