Executive Summary

The University of California (UC) Proposes Major Expansion of Merced Campus. UC is proposing to double the campus’s facility space by 2020. Under the plan, enrollment on the Merced campus would grow from 6,000 to 10,000 full-time equivalent students by 2020. UC proposes to deliver this project by entering into an agreement with a private partner to finance, design, construct, operate, and maintain the facilities. The total cost of the project is estimated to be $1.1 billion, with $527 million associated with the construction of state-eligible facilities.

Legislature Has Until April 1 to Review Proposal. Under the state’s current capital outlay approval process for UC, the Department of Finance is to notify the Legislature by February 1 of any UC projects it has preliminarily approved. As of the release of this report, the department had not yet provided this notification for the UC project. The Legislature has until April 1 to express any concerns it might have with the project. Given the size, scope, and complexity of the Merced campus expansion, we recommend the Legislature schedule hearings in late February or early March to express its views of the proposal to the administration and UC.

Four Key Issues for the Legislature to Consider. As the Legislature examines the proposal, it will face four key decisions:

- What growth in UC resident enrollment is desired over the next few years?
- How should additional resident students be accommodated?
- If additional students are accommodated at UC Merced, what are appropriate growth objectives for the campus?
- Should any expansion of the Merced campus be accomplished using design-bid-build, design-build, or a public-private partnership?

For each of these four key decisions, we provide the Legislature with various factors to consider.
INTRODUCTION

In November 2015, the Regents of the University of California (UC) approved a proposal to enter into a public-private partnership to double the physical size of the Merced campus. Under the plan, enrollment on the Merced campus would grow from 6,000 to 10,000 full-time equivalent (FTE) students by 2020. This brief is intended to assist the Legislature in reviewing this proposal. Below, we provide background on the Merced campus and the state process for approving capital outlay projects at UC, describe key aspects of the proposed project, and raise four key issues for the Legislature to consider.

BACKGROUND

Merced Campus Opened in 2005. The tenth and newest UC campus, Merced (located in the San Joaquin Valley) was built to accommodate UC enrollment growth. As with all other UC campuses, Merced was envisioned and is being built as a research university. Since 2001, the state has issued over $350 million in bonds to develop the campus site and construct facilities. The Legislature has maintained an ongoing interest in the campus’s development. It took its most recent related action in the 2015-16 budget, earmarking up to $1 million for the campus to plan for the development of a medical school.

Merced Campus Has Been Steadily Growing. Over the last ten years, UC Merced has received a steady increase in applicants, and every year more admitted applicants enroll at the campus. Enrollment has grown from 865 FTE students in 2005-06 to more than 6,000 FTE students in 2015-16. Over 93 percent of the students at Merced are undergraduates, with the remaining students enrolled in academic graduate programs. Merced remains the smallest campus in the UC system, with other UC campuses ranging from 17,000 to 37,000 FTE students.

State Recently Granted UC Authority to Finance Capital Projects With State Funds. Historically, the state has funded some but not all types of facilities at UC. Specifically, the state has funded facilities that support UC’s core academic activities of instruction and research (“state-eligible” facilities). By contrast, UC funds housing, dining, and other nonacademic facilities using fee revenue associated with those facilities. Prior to 2013-14, the state funded construction of state-eligible facilities by issuing general obligation and lease-revenue bonds and appropriated funding annually to service the associated debt. Chapter 50 of 2013 (AB 94, Committee on Budget) revised this method by authorizing UC to pledge its state support appropriation to issue bonds for state-eligible facilities and associated campus infrastructure. The state allows UC to pay the associated debt service using its state support appropriation. Given these changes, the state has not issued bonds for UC projects the past few years.

State Recently Changed Legislative Review Process for UC Capital Outlay Proposals. In order for UC to use the authority granted under Chapter 50, the Department of Finance must approve each proposed project. Chapter 50 requires UC to submit project proposals to the department and the budget committees of the Legislature by September 1 for the upcoming fiscal year. The legislation requires the department to
notify the budget committees by February 1 as to which projects it intends to approve. The budget committees then can express any concerns with the projects. The department can grant final approval of projects no sooner than April 1 for the upcoming fiscal year.

**State Recently Granted UC Authority to Enter Into Public-Private Partnerships.**

Chapter 22 of 2015 (SB 81, Committee on Budget and Fiscal Review) revised UC’s capital outlay authority to allow UC to enter into contracts with private partners to finance, design, construct, maintain and operate state-eligible facilities. For the Merced project, Chapter 22 specifically requires UC to use its own employees for routine maintenance, meaning the partner only would perform maintenance on major building systems. UC must still undergo the same approval process described above. (Prior to Chapter 22, the state already had authorized other agencies, including the California Department of Transportation, the Administrative Office of the Courts, and the High-Speed Rail Authority, to enter into public-private partnerships.)

## PROPOSAL

**Merced Expansion Proposal in Midst of New State Review Process.** A major expansion of the Merced campus is UC’s only state-eligible capital outlay proposal for 2016-17. The UC Regents approved this proposal in November 2015. As of the release of this report, the Department of Finance had not yet notified the Legislature whether it intended to preliminarily approve the Merced project. The Legislature has until April 1, 2016 to review the proposal and express any concerns it may have to the department. We provide further detail on the proposed project below.

**Purpose of Project Is to Expand Enrollment.** The proposal aims to grow the Merced campus from 6,000 to 10,000 FTE students by 2020. UC asserts that the campus is currently operating at physical capacity and projects that student demand for the campus will continue to grow as in past years. In addition, UC asserts that enrollment growth at Merced will provide the campus a larger base of tuition revenue and generate economies of scale, thereby reducing per-student instructional costs.

**Project Would Double the Physical Size of the Campus.** As shown in Figure 1 (see next page), the project would add 917,500 square feet of facility space to the campus, of which 414,400 square feet would be state-eligible. Over 40 percent of the state-eligible space would be for new research laboratories and another 35 percent would be office space for faculty and academic administrators. Of the 17 percent of space dedicated for instruction, a majority would be for small classrooms (24 to 30 seats per room) and teaching laboratories. UC estimates the total cost of construction to be $1.1 billion, with $527 million attributable to state-eligible facilities.

**UC Proposes to Deliver Project Using Public-Private Partnership.** UC asserts this partnership will provide the following benefits: (1) faster delivery of the project’s facilities, (2) construction and maintenance savings, (3) the transfer of certain construction-related risks onto the private entity, and (4) increased budgetary certainty for the maintenance of the facilities. We describe the proposed partnership below.

**UC and Partner Each Would Finance a Portion of Construction.** Under the partnership, the partner would design and construct the facilities. UC would issue $400 million in bonds
for construction of the state-eligible facilities. The partner would finance the remaining $127 million for these facilities. (UC and the partner also would share responsibility for financing the facilities that are not state-eligible.) Under the contract, UC would pay the partner for the construction costs in three installments upon completion of certain construction milestones. UC states that this payment schedule would provide an incentive for the partner to complete construction without delays.

**ISSUES FOR LEGISLATIVE CONSIDERATION**

_Recommend Early Legislative Hearings._

Under the new capital outlay process established for UC under Chapter 50, the Legislature must send clear signals to the Governor by April 1 if it wishes to influence UC projects on state-eligible facilities. Given the size, scope, and complexity of the Merced proposal, we recommend the Legislature hold hearings in late February or early March to discuss the proposal and convey any concerns to the administration at that time.

**Proposal Raises Four Key Issues for the Legislature.** To help guide the Legislature in its review of the proposal, we examine the key decisions it faces. As shown in Figure 2, these decisions are largely sequential, as the first decisions will have implications for the remaining decisions. UC indicates that the contract it plans for the partnership would allow it to reduce or withhold these payments if the facilities do not meet certain operational standards. For example, if a facility were to shut down and no longer be available for use, UC could withhold funding from the partner.

In 2055, UC would assume full responsibility for the operation and maintenance of the facilities. (Annual ongoing costs for the facilities that are not state eligible initially would total $58 million.)
issues. The Legislature first will want to consider how much growth in UC resident enrollment it desires over the next few years. Once the Legislature determines this number, it will want to weigh its options for accommodating these students. If the Legislature decides that additional students are best accommodated by constructing new facility space at Merced, it will want to set some basic growth objectives for the campus. After settling on these growth objectives, the Legislature will want to select a capital outlay approach to deliver the new space. We describe these key decision points in the remainder of the report.

Figure 2
Key Decisions Facing the Legislature

What Growth in Resident Enrollment Is Desired Over the Next Few Years?

How Should UC Accommodate Additional Resident Students?
- Free up space through instructional efficiencies
- Free up space for residents by reducing nonresident enrollment
- Increase utilization of existing space
- Construct new facilities

If new facilities at UC Merced, then . . .

What Should Be UC Merced’s Basic Growth Objectives?
- How many students?
- What time frame?
- What balance of instruction and research?

After settling on growth objectives

What Capital Outlay Approach Should UC Use to Expand Merced Campus?
- Design-Bid-Build
- Design-Build
- Public-Private Partnership
What Growth in Resident Enrollment Is Desired Over the Next Few Years?

Master Plan Defines Which Students Are Eligible to Attend UC. The state has long sought to provide residents an opportunity to earn a bachelor’s degree through its two public university systems, UC and the California State University (CSU). Instructional costs, however, are higher at the public universities relative to the state’s community colleges, particularly at UC due to its emphasis on research. The 1960 Master Plan for Higher Education in California established two pathways to the universities in order to preserve access for students and reduce pressure on the state General Fund. Under the first pathway, the top 12.5 percent and 33 percent of public high school graduates are eligible to attend UC and CSU, respectively, as freshmen. Under the second pathway, students who are not eligible to attend the universities as freshmen can attend a community college and transfer to UC or CSU after completing two years of full-time study with a certain grade-point average. These Master Plan goals historically have served as the state’s policy basis for enrollment decisions at each segment.

Available Data Suggest UC Currently Meeting or Exceeding Master Plan Expectations. For fall 2014, UC admitted 13 percent of public high school graduates as freshmen. An even larger share of public high school graduates is eligible for freshman admission because not all eligible high school students choose to apply. (The state currently is conducting a study to estimate the overall share of students eligible for freshman admission. The results of the study are due December 2016.) For transfer admission, UC reports it has been admitting all eligible applicants in recent years.

Available Data Suggest Little Growth in Pool of Eligible Students in Near Term. Demographic projections show the 18 to 24 year-old population (which comprises 93 percent of UC’s undergraduate student body) declining 6 percent by 2020. Projections of public high school graduates fluctuate between small increases and decreases over the next several years, with a less than 1 percent increase in graduates between 2015-16 and 2019-20.

Not All Eligible Students Admitted to Campus of Choice. The Master Plan established systemwide eligibility criteria for admission, providing UC discretion to allocate enrollment among its campuses. Student demand varies greatly by campus, with Berkeley, Los Angeles, and San Diego receiving the most applicants. In order to accommodate all eligible applicants, UC traditionally redirects some eligible students applying to high-demand campuses to other campuses. Currently, eligible students not admitted to a campus of their choice are offered admission at Merced.

Legislature Increasingly Concerned About Resident Access to High-Demand Campuses. In recent years, UC’s highest-demand campuses have become increasingly more selective for resident students. For example, the Berkeley and Los Angeles campuses, respectively, admitted around 19 percent and 16 percent of California resident freshman applicants in fall 2015, as compared to about 25 percent for both campuses in fall 2007. At the same time, these campuses have enrolled more nonresident undergraduate students, increasing the nonresident share of their undergraduate enrollment from under 10 percent in fall 2007 to about 25 percent in fall 2015. During 2015-16 budget hearings, members of the Legislature expressed growing concerns regarding these trends.

Legislature Recently Provided Funding for UC to Grow Enrollment. The 2015-16 budget set an expectation that UC enroll 5,000 more resident undergraduate students in 2016-17 than in 2014-15. The 2015-16 budget made a $25 million augmentation contingent upon meeting this
enrollment expectation. UC plans to meet this expectation by growing enrollment at all of its campuses, including Berkeley, Los Angeles, and San Diego. The state has not set any additional enrollment expectations for UC beyond 2016-17.

**Master Plan Periodically Revisited.** Over the last several decades, the Legislature has periodically revisited the Master Plan’s provisions, doing so most recently in 2010. If the Legislature continues to have concerns regarding access to UC, it could initiate a new Master Plan review. As part of this review, the Legislature could consider expanding UC’s freshman eligibility pool, enabling more students to enroll in UC directly after graduating from high school. It also could consider setting resident enrollment targets for each UC campus, potentially enabling more students to attend their first choice campus. Any changes such as these to the Master Plan would have significant implications for UC systemwide enrollment, campus enrollment, and state costs moving forward.

**How Should UC Accommodate Additional Resident Students?**

**UC Implementing Instructional Efficiencies to Free Up Space.** The Legislature has multiple options for expanding access to UC. One option is to encourage UC to achieve additional instructional efficiencies. In a May 2015 agreement with the Governor, UC committed to implementing a number of changes to its academic programs. The goal of these changes is to expand access for resident students while reducing the need for significant state enrollment funding or new facility space. Some of these changes, such as counting more college preparatory work as college credit and reducing the required units for certain degrees, could reduce the need for some students to take certain courses, thereby freeing up space for other students. Other changes, such as expanding online course offerings, could free up lecture space to accommodate additional students. In a recent report to the Legislature, UC indicated that it has made some progress but is still in the early stages of implementing these reforms. Before committing to new facility construction, the Legislature may wish to consider how these instructional efficiencies will expand access to UC and whether the university system could further its efforts in these areas.

**UC Not Maximizing Use of Existing Space.** Periodically, the state has made efforts to expand the use of UC facilities in the summer and fully use UC facilities throughout the year. UC has been expanding summer enrollment since 2001. In summer 2015, UC enrolled 19 percent of the number of FTE students it enrolled during its other terms. As part of its May 2015 agreement with the Governor, UC plans to experiment with different pricing models at three campuses in summer 2016 to encourage more students to enroll during that term. If UC were to expand these efforts, it potentially could accommodate a significant number of students. For example, if UC were to double its summer enrollment to equal 40 percent of its other terms, it could accommodate an additional 15,000 FTE students.

**Decreasing Nonresident Enrollment Would Free Up Space, but UC Would Lose Associated Revenue.** UC currently enrolls over 30,000 nonresident undergraduate students, over 60 percent of whom are located at Berkeley, Los Angeles, and San Diego. These nonresident students occupy space that could be used by resident students. Nonresident students, however, provide significant funding to UC because they pay a supplemental tuition charge ($26,682 in 2016-17) that exceeds the per-student funding rate that UC requests from the state for resident students ($10,000). UC asserts that the $16,682 difference helps fund instruction for resident students. If the Legislature were to consider requiring UC to decrease nonresident enrollment to admit more
resident students, it would need to consider how UC would manage the associated loss of revenue.

**Constructing New Academic Facilities Entails Significant Capital Expenditures.** The state traditionally has constructed new facility space to accommodate enrollment growth. Unlike the options discussed above, this approach requires significant capital expenditures. For example, the 2013-14 budget authorized $45.1 million to construct a single classroom and academic office building at the Merced campus that contained six medium-size lecture classrooms and one small seminar space. Moreover, new facilities require ongoing funding to operate and maintain and, in the past, UC has not kept up on regular maintenance of its buildings, leading the university system to estimate it has over $1.2 billion in deferred maintenance. Despite these issues, the Legislature still may wish to expand facility space at one or more UC campuses. In deciding which campus or campuses to expand, the Legislature likely would want to consider various factors, including campuses’ growth objectives, existing footprints, and relative construction costs.

**What Should Be UC Merced’s Basic Growth Objectives?**

*Not Necessarily One “Right” Number of Students for Campus.* If the Legislature decides to construct new facility space at Merced, it will have to decide how many students it would like the campus to serve. The Legislature could consider several factors when making this decision. It could consider economies of scale and per-student costs, which UC cites as one reason to grow enrollment to 10,000 FTE students. The Legislature also could consider projected enrollment for the Merced campus and the effect of growth on the campus’s surrounding communities.

**UC Traditionally Has Proposed Campus Growth Incrementally Over Longer Time Frame.** The next question the Legislature will want to consider is over what time frame it would like to attain its enrollment target for Merced. Traditionally, the state has expanded campuses on an incremental basis. The state took this approach when it first developed the Merced campus between 2000 and 2006. An incremental process offers the state and UC flexibility to adjust priorities in future years. UC’s latest proposal, by contrast, bundles together many facilities under one project. This approach reduces the number of times the state would be able to review and assess the campus’s growth priorities. If the Legislature concluded that facilities were needed in the near future, the bundling approach could have the benefit, however, of potentially reducing the time required to construct all the new facilities.

**Research Space Significantly Adds to Construction and Operational Costs.** Although UC cites enrollment growth as the key justification for expanding the Merced campus, over 40 percent of the proposed state-eligible space and over 50 percent of the estimated state construction cost is for new research facilities. Increasing research activities at Merced increases costs because (1) it increases the campus’s overall space needs and (2) research space is the costliest type of space to construct. UC also would incur ongoing maintenance and staffing costs for the research space. UC asserts that research space is necessary for the instruction of the campus’s students majoring in a science or engineering discipline. The Legislature, however, could prioritize the construction of instructional space, including teaching laboratories, enabling the campus to continue accommodating more students and reducing the cost of the project.

**What Capital Outlay Approach Should UC Use to Expand Merced Campus?**

**UC Considered Three Procurement Methods for Merced Project.** UC proposes a public-private
partnership to deliver the project. It also considered two other procurement methods. Under the first method, “design-bid-build,” UC would hire an architecture and engineering firm for the project design and then award the construction contract through a competitive bid. Under the second method, “design-build,” UC would contract with one firm to both design and construct the project. Under both methods, UC would finance the whole project and assume responsibility for operating and maintaining the facilities once construction is completed.

**No Timing Advantage of Public-Private Partnership Over Design-Build.** UC indicates that both a design-build approach and a public-private partnership could deliver the project by 2020. In contrast, UC estimates a design-bid-build approach would complete the project by 2024. Though its own analysis indicates no advantage in delivery time over a design-build approach, UC identifies a faster time to delivery over a design-bid-build approach as one of the strengths of a public-private partnership.

**Savings From Public-Private Partnership Uncertain.** UC asserts that a private partner could develop innovative construction and maintenance practices that would produce long-term savings relative to a design-bid-build or design-build procurement method. Although these savings are plausible, estimating costs associated with a public-private partnership are highly uncertain because the state has entered into only a few partnerships and evidence from other states is limited. In one regard, a public-private partnership almost certainly will cost more than the other procurement methods. Specifically, the partner will face higher interest rates than UC when issuing debt, thereby increasing financing costs for the project. In our view, UC has not been able to provide sufficient evidence that construction and maintenance costs would be low enough under a public-private partnership to outweigh the likelihood of increased financing costs.

**Bid Threshold Does Not Necessarily Guarantee Savings.** In order to ensure that it does not pay more under a public-private partnership, UC has established a bid threshold equal to its estimate of the cost to construct and maintain the proposed facilities under a design-build method. UC indicates it will not accept a bid that comes in above this threshold. The effectiveness of this cost threshold, however, depends on the accuracy of UC’s design-build estimate. Procurement cost estimates are subject to significant uncertainty and can over- or underestimate the project’s true cost. If UC has overestimated the cost of design-build, it may not realize any projected savings under a public-private partnership.

**Public-Private Partnership Creates Risk of Legal Disputes.** Though UC asserts that a public-private partnership would transfer risks associated with the construction and operations of a facility onto the private partner, the partner most likely will factor these risks into its bid. As public-private partnerships tend to entail complex legal contracts, with each side attempting to minimize risk, disputes are common. For this project, future disputes between UC and the partner over the terms of the contract could be numerous and serious. For instance, UC could experience costly disputes with the partner if the contract fails to address an unforeseen issue or lacks clarity on a specific performance metric. Such disputes have occurred in other public-private partnership projects in California and created increased costs for the state agencies involved in the disputes.

**Public-Private Partnership Could Improve Maintenance.** Under the proposal, UC would be contractually obligated to provide ongoing payments to the partner to maintain the project’s facilities. The contract also would require the partner to maintain a reserve account to ensure
that funding is available for scheduled facility renewal. A stable budget for maintenance could prevent the campus from accumulating a large deferred maintenance backlog.

CONCLUSION

As with most complex proposals, the Legislature faces several major issues as it assesses the merits of UC’s proposal to expand the Merced campus. As conveyed throughout this report, each of the issues raised is multifaceted, and the issues tend not to lend themselves to quick and clear answers. Given this complexity, the Legislature likely will want to sift through each issue carefully. As the time allotted to the Legislature for its review is so short under the new capital outlay review process, we encourage the Legislature to begin its review immediately. The views the Legislature shares with the administration about the proposal could have far-reaching implications for the state and UC for years to come.
LAO Publications

This brief was prepared by Jason Constantouros, with assistance from Helen Kerstein, and reviewed by Paul Golaszewski. The Legislative Analyst’s Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.

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