Trends in Higher Education

Facilities

Legislative Analyst's Office **2025**

Introduction

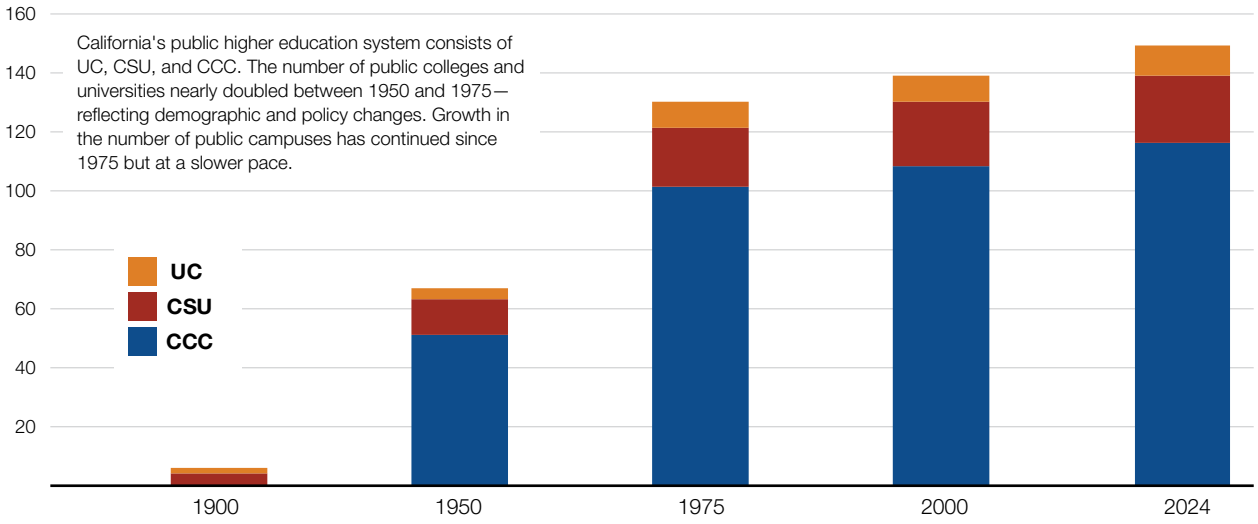
This is the final brief in a six-part analytical series focused on higher education trends. Previously released briefs have focused on student access, college affordability, student outcomes, higher education finance, and faculty and staff. This sixth brief focuses on facilities. The series has two main objectives. The first is to track many of the key changes that higher education has undergone over time. The second is to help legislators draw upon their understanding of the past to aid them in better navigating the future. To this end, each brief is punctuated by key issues for legislators to consider as they move forward in making higher education policy and budget decisions.

This brief begins with a look at how the overall physical footprints of the three public higher education segments—the University of California (UC), the California State University (CSU), and the California Community Colleges (CCC)—have grown over time. It then turns to a deeper look at trends in state-supportable versus self-supportable space, types of state-supportable space (such as classrooms and research space), student housing, facility utilization, maintenance backlogs, facility conditions, the financing of facilities, and construction costs. As with the other briefs in this series, this brief contains a set of infographics. The facilities data are drawn primarily from sources at the state and segment levels. We select the exact time period for each chart by considering the availability of data, comparability of the reported data over time, and the most interesting trends emanating from the data. Some charts provide data back one decade whereas others go back several decades.

The brief tells many stories about higher education facilities. It tells of the growth in public higher education campuses, particularly between 1950 and 1975. It tells of the aging of facilities, the growth in maintenance backlogs, and campuses' generally poor facility conditions. It tells of underutilized facilities, particularly with the recent growth of online instruction. It shows voters' periodic approval of state and local bond measures to support facility projects, along with the universities' relatively new authority to issue university bonds to finance state-approved projects. It also shows annual associated debt service ratios have fallen below their 2010-11 peak but remain elevated over the levels seen in the 1970s, 1980s, and 1990s. Lastly, it shows construction costs have risen more quickly than overall inflation for decades, but particularly over the past five years.

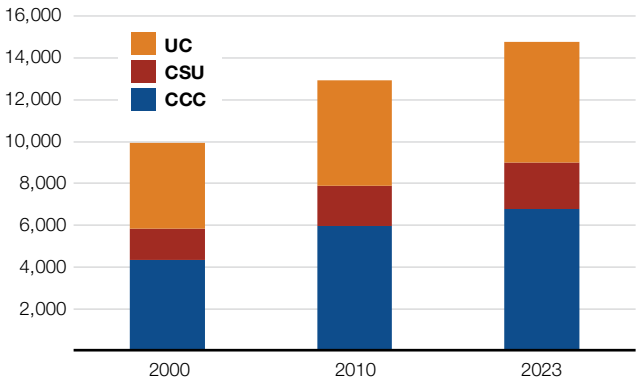
California's Public Higher Education System Has Grown Over Time

Number of Public Campuses



Number of Buildings Continues to Increase at All Three Public Segments…

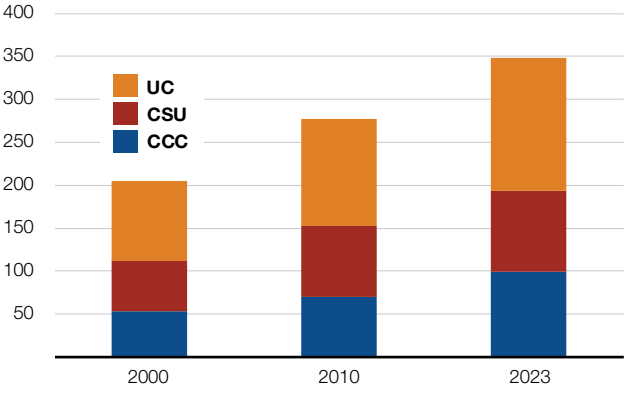
Number of Buildings



Note: In the first bar, the CCC and UC data are from 2000, whereas the CSU data are from 2003. In the third bar, the UC data are from 2022.

…As Does Amount of Physical Space

Gross Square Footage of All Facilities (In Millions)



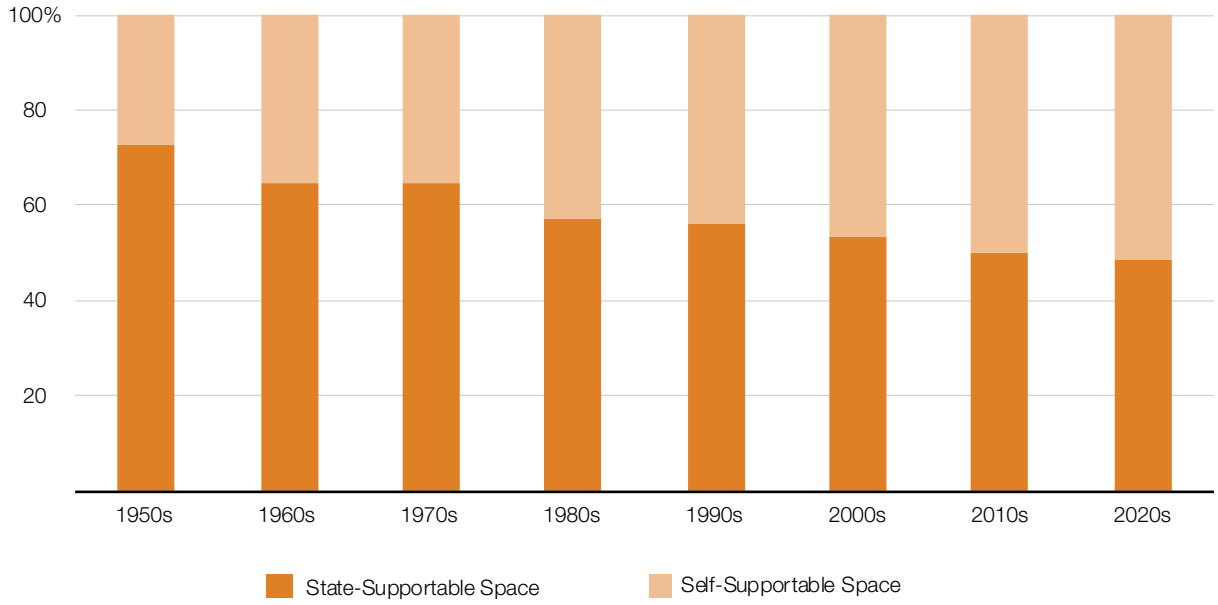
Note: In the first bar, the CCC and UC data are from 2000, whereas the CSU data are from 2003. In the third bar, the UC data are from 2022. In addition to their main campuses, all three segments operate at other locations, such as off-campus centers and district offices. At CSU, these locations comprise less than 1 percent of overall square footage. At CCC, these locations comprise less than 10 percent of overall square footage. Comparable data is not readily available for UC.

Despite having the fewest campuses of the three public higher education segments, UC encompassed roughly 45 percent of overall gross square footage in 2023, with the remainder split about evenly between CSU and CCC. UC's five medical centers, nine agricultural research and extension centers, and other specialized research facilities contribute to the segment's larger footprint.

State-supportable spaces generally include classrooms, instructional and research laboratories, faculty and administrative offices, and libraries. Self-supportable spaces include student housing, dining facilities, parking structures, student unions, bookstores, and spaces used for Continuing Education and University Extension programs. Whereas state funding may pay for state-supportable spaces, nonstate funding must be used for self-supportable spaces. Typically, user charges cover the cost of those spaces.

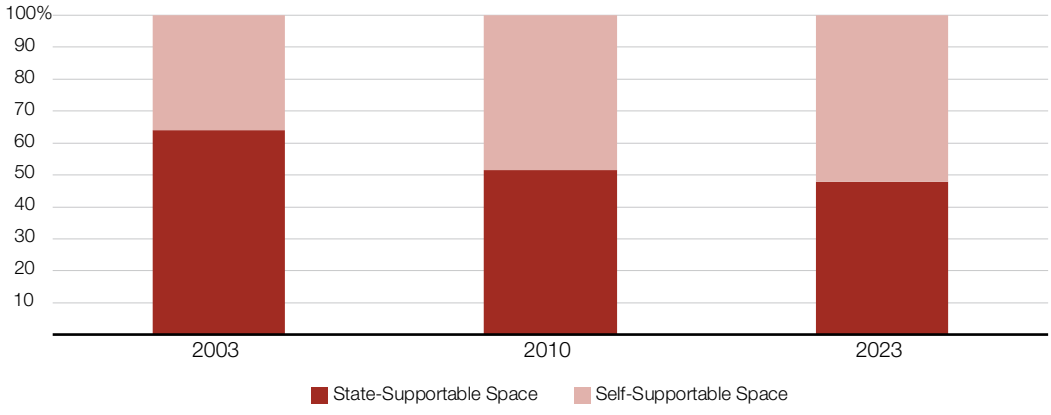
At UC, Share of Space That Is State Supportable Has Been Declining Over Time

Share of Gross Square Footage



At CSU, Share of Space That Is State Supportable Also Has Been Declining

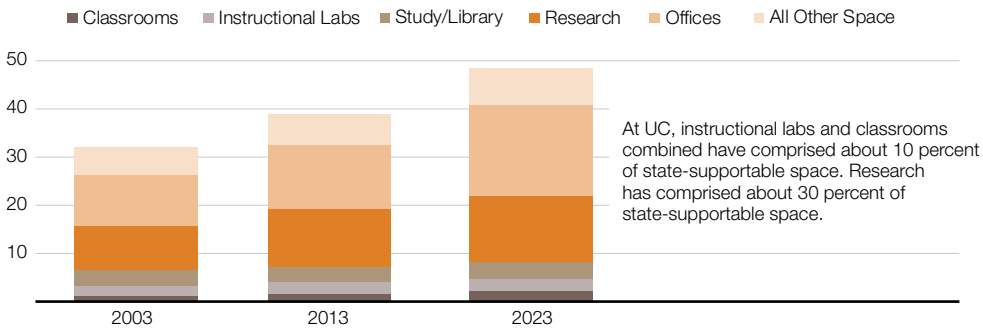
Share of Gross Square Footage



Note: CCC does not have comparable data for the share of space that is state versus self supportable. Compared to the university segments, CCC operates fewer self-supportable programs.

At UC, Offices Comprise a Growing Share of State-Supportable Space

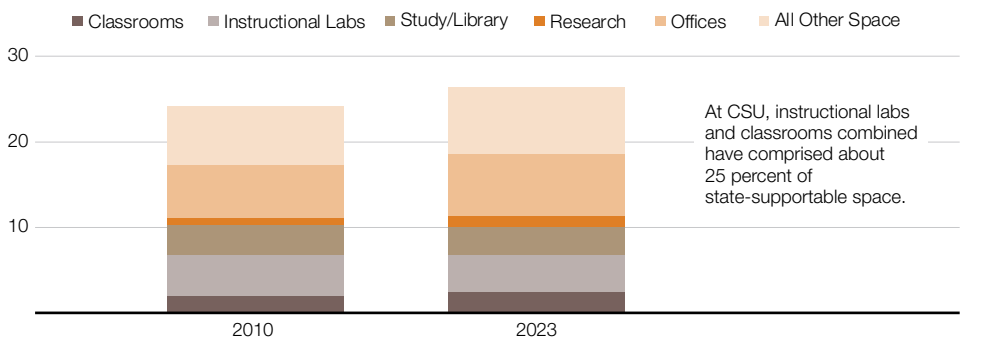
Assignable Square Footage of State-Supportable Space (In Millions)



Note: "Offices" includes faculty and administrative offices. "All Other Space" includes animal quarters, greenhouses, museums, galleries, assembly spaces, child care, mechanical shops, and central services, among other spaces.

At CSU, Offices Also Comprise a Large Share of State-Supportable Space

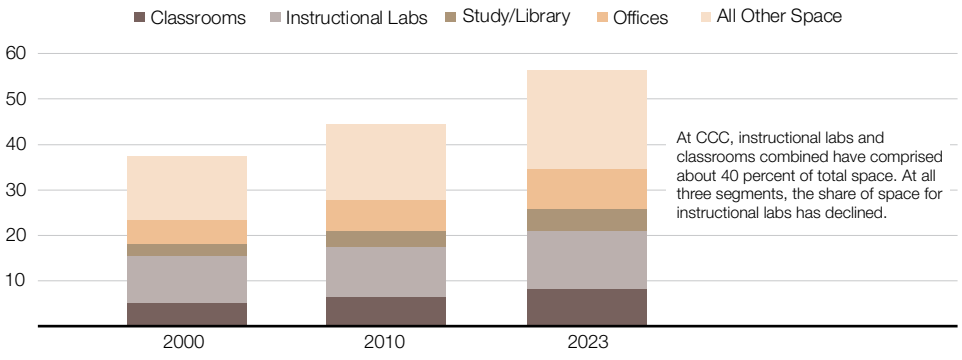
Assignable Square Footage of State-Supportable Space (In Millions)



Note: "Offices" includes faculty and administrative offices. "All Other Space" includes certain types of stockrooms, general storage, warehouses, museums, and galleries, among other spaces.

At CCC, a Larger Share of Space Is for Classrooms and Labs

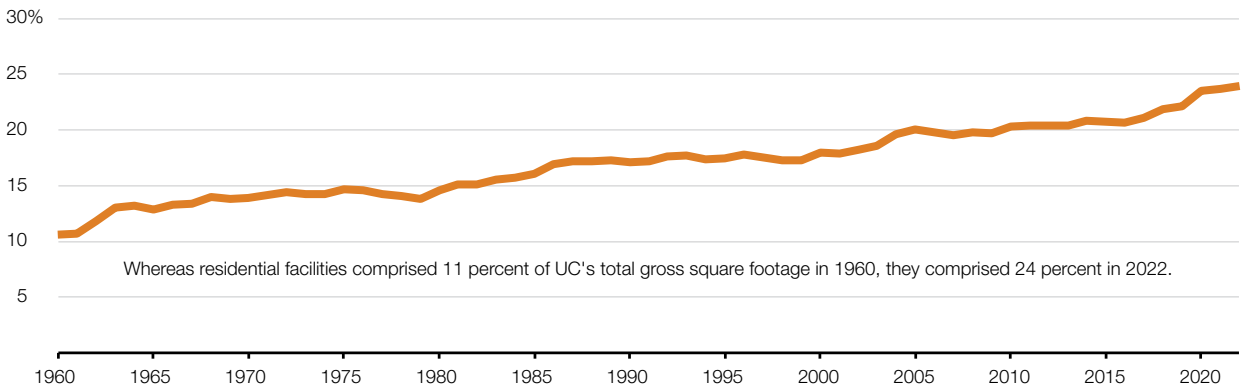
Assignable Square Footage of All Space (In Millions)



Note: Chart includes state-supportable and self-supportable space. "All Other Space" includes athletic and recreation areas, assembly space, food and merchandise facilities, audio/visual space, and central utility plant space, among other spaces.

Growing Share of UC Space Is for Student Housing

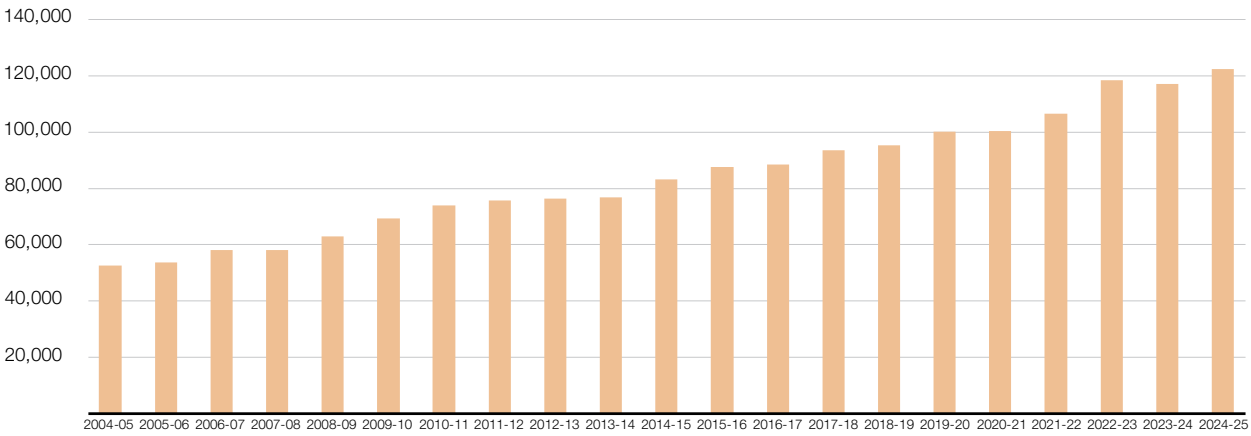
Percentage of Gross Square Footage Designated as Residential



Note: UC categorizes its facilities as residential, health science, or general. "Residential" space includes on-campus and off-campus student housing that UC owns.

Number of Student Beds at UC Has More Than Doubled Over Past 20 Years

Number of Student Beds

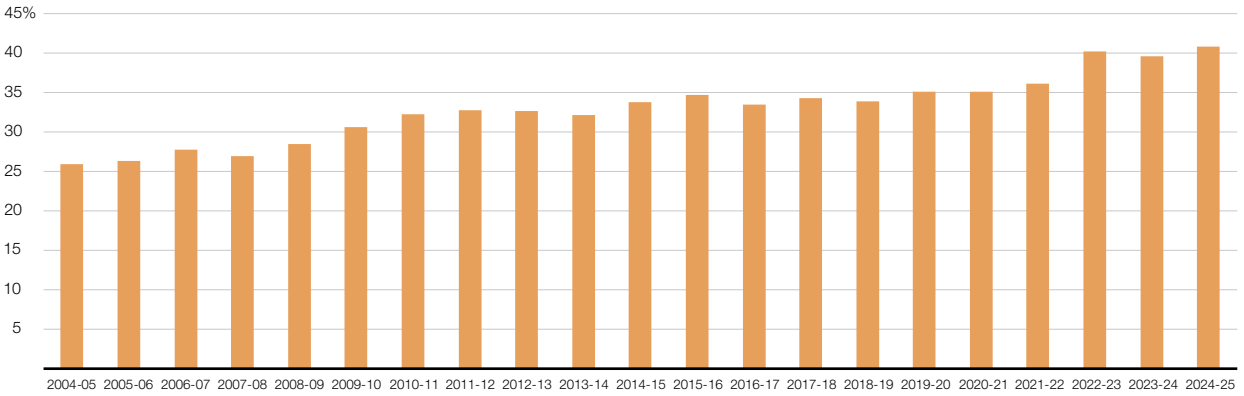


Note: Bed count consists of single student beds and student family apartments (with each family apartment counting as one student bed space). Campuses generally give first-year students highest priority for housing slots.

UC Now Houses Over 40 Percent of Students—an All-Time High

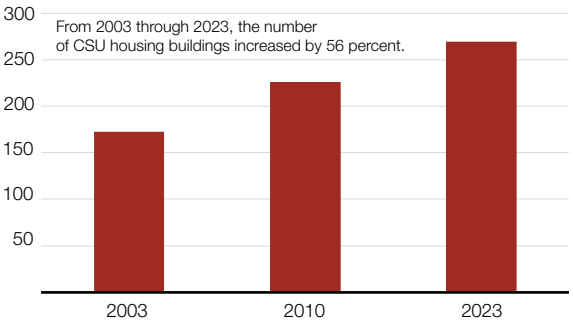
Percent of All Students Housed in UC-Owned Residential Facilities

Whereas UC housed 26 percent of students (including undergraduates and graduate students) in 2004-05, it housed 41 percent of students in 2024-25.



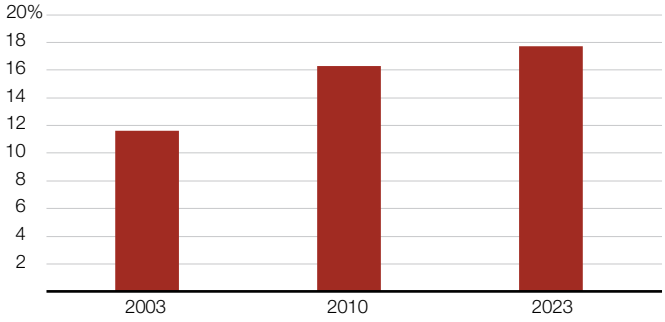
CSU Continues to Add Student Housing

Number of CSU Housing Buildings



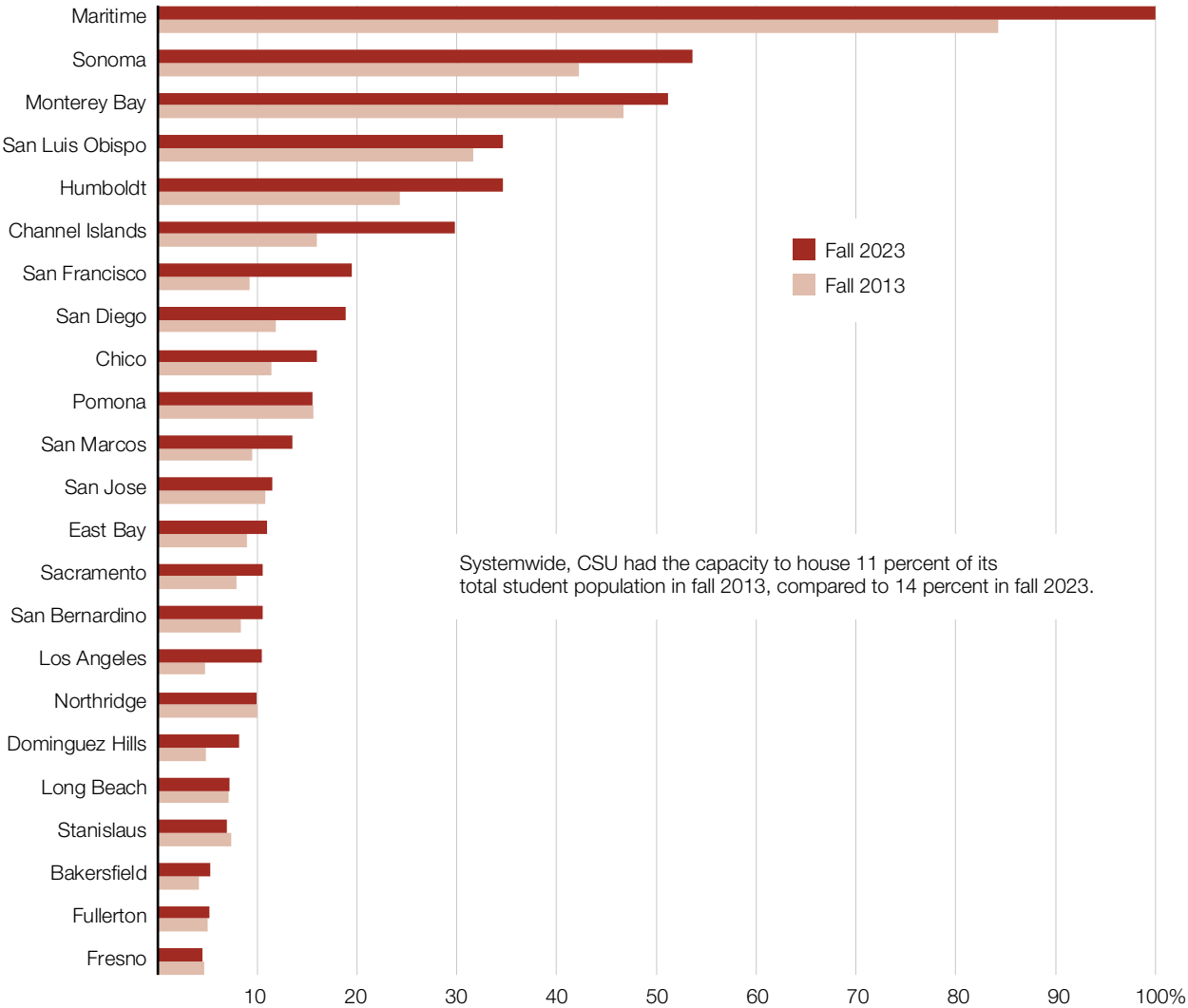
Share of CSU Space Designated for Housing Is Ticking Upward

Percentage of Gross Square Footage Designated as Residential



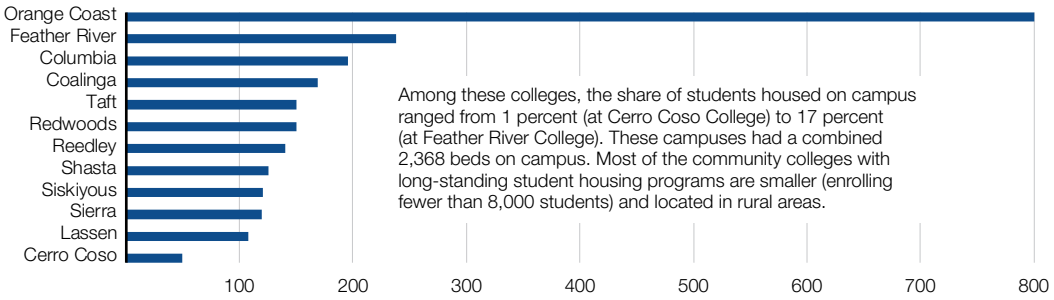
Share of Students in CSU Housing Has Increased at Nearly Every Campus

Student Beds as a Percentage of Total Enrollment by Campus



Prior to 2022-23, a Dozen Community Colleges Had On-Campus Student Housing

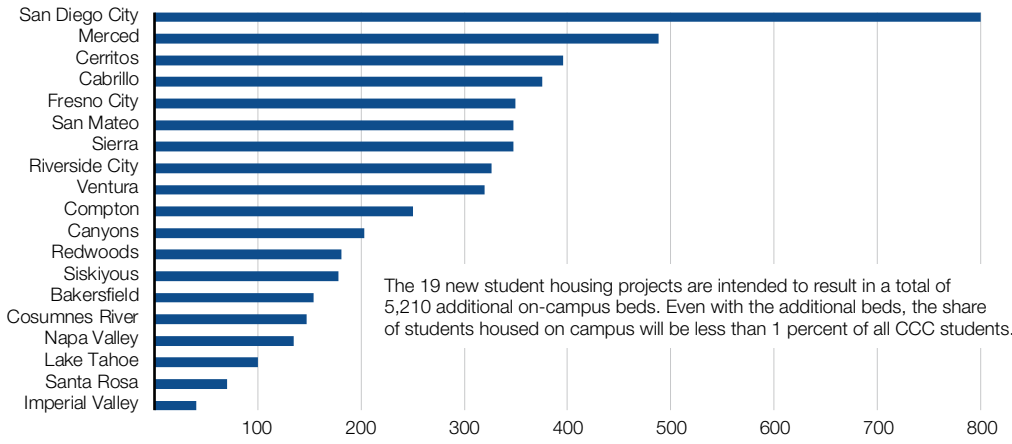
Number of On-Campus Student Beds



Note: These community college student housing facilities are self-supporting, meaning that the facilities charge students rent and the rental revenue covers all associated financing and facility costs.

In 2022-23 and 2023-24, State Funded 19 New CCC Student Housing Projects

Number of On-Campus Student Beds



Note: These facilities are to expand the CCC footprint by approximately 2.3 million gross square feet (reflecting a 2 percent increase). Number of on-campus beds reflects data provided by the CCC Chancellor's Office as of July 2024. Four of the projects are intersegmental (Cabrillo College/UC Santa Cruz, Imperial Valley College/CSU San Diego, Merced College/UC Merced, and Riverside City College/UC Riverside).

These new community college student housing facilities are state supported. Total project costs are estimated to be $1 billion. The state is financing most of these costs over the next approximately 30 years, with an average annual cost of $79 million. Colleges still charge students rent. The rental charges, however, are intended to be below market price.

Key Issue

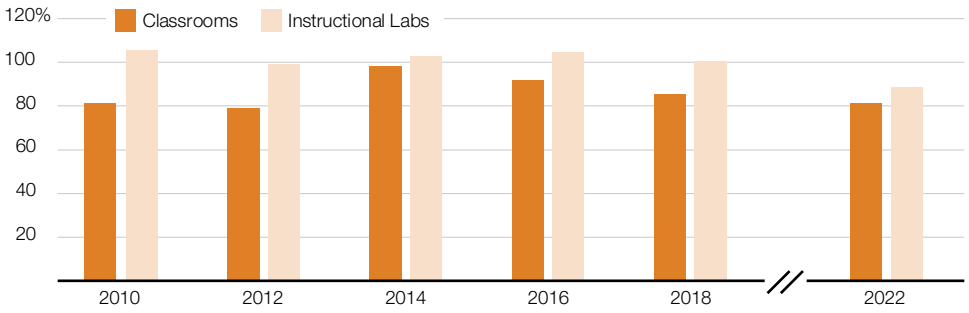
For decades, student housing programs charged rent to cover all of their financing and operating costs. These programs generally had very high occupancy rates. Over the past few years, the state has provided substantial funding to subsidize new housing projects. The Legislature likely will want to monitor the outcomes of these projects to ensure that state objectives are being met and the budgetary trade-offs are worthwhile.

Key Issue

The Legislature has established utilization standards for college classrooms and instructional labs. A utilization rate below 100 percent indicates facilities are being used less than legislative standards. A rate higher than 100 percent indicates facilities are being used in excess of those standards—one sign that additional space might be warranted. The Legislature could continue to monitor these rates to help guide whether to approve requests for new campus construction projects.

In Fall 2022, UC Facility Utilization Was Below Legislative Standards

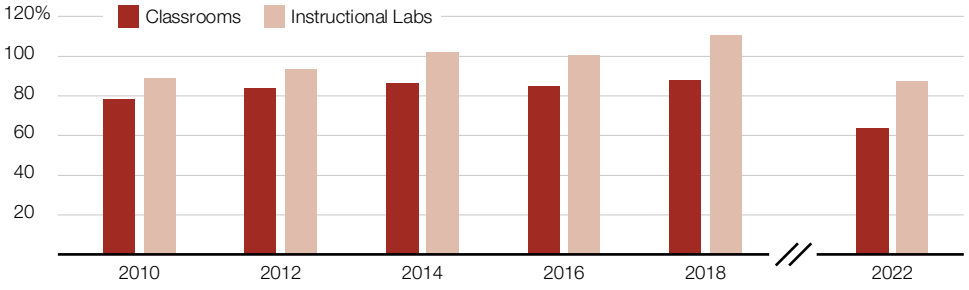
Utilization Rates of Classrooms and Instructional Labs, Fall Term



Note: UC did not complete a facility utilization report in 2020 due to the COVID-19 pandemic.

In Fall 2022, CSU Facility Utilization Also Was Below Legislative Standards

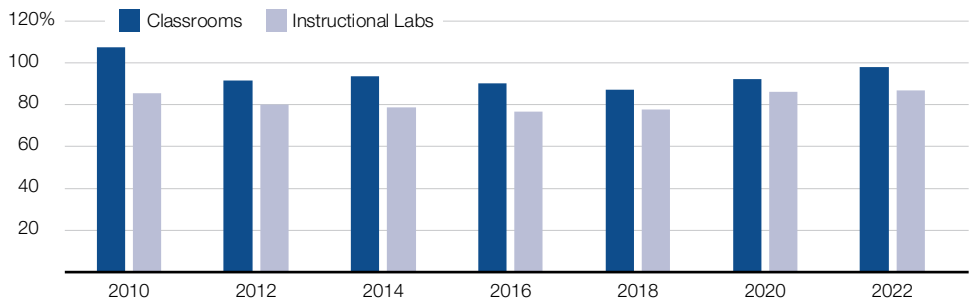
Utilization Rates of Classrooms and Instructional Labs, Fall Term



Note: CSU did report utilization in 2020. Due to the pandemic and shift to remote instruction, utilization fell to near zero for classrooms and to 7.7 percent for instructional labs.

CCC Facility Utilization Has Been Below Legislative Standards for Several Years

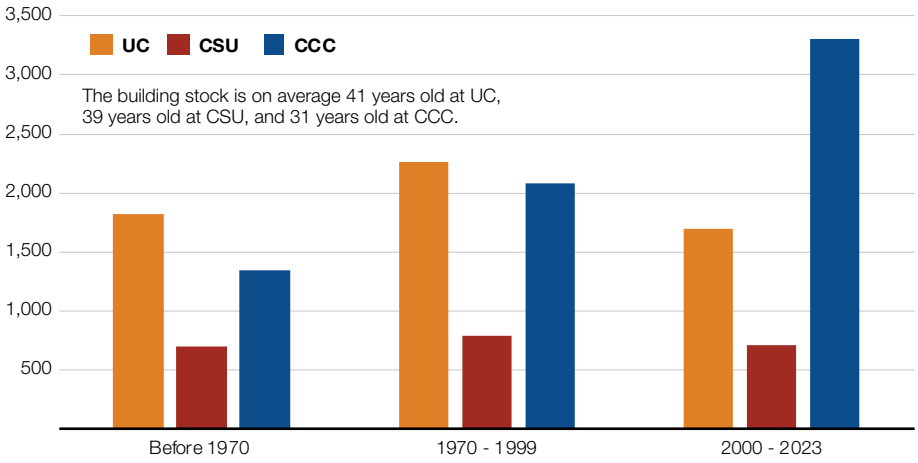
Utilization Rates by Classroom and Instructional Labs, Fall Term



Note: The methodology CCC has been using to calculate facility utilization is based on total enrollment, rather than in-person enrollment. As a result, reported CCC facility utilization rates are artificially high and likely not comparable to the UC and CSU rates. In fall 2024, CCC estimates that approximately 60 percent of instruction was in person (with the remainder primarily online).

Many Buildings Were Constructed Several Decades Ago

Number of Buildings Constructed by Time Period

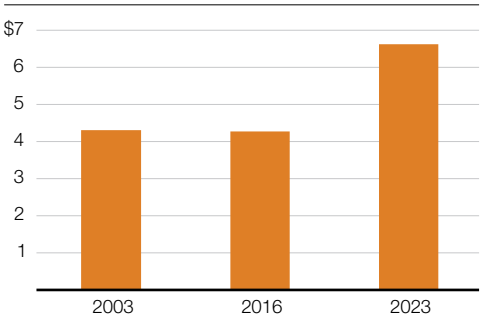


Roughly 30 percent of UC and CSU buildings were constructed before 1970, nearly 40 percent were constructed from 1970 through 1999, and roughly 30 percent were constructed since 2000. In contrast, only 20 percent of CCC buildings date before 1970, with about 30 percent constructed from 1970 through 1999, and nearly 50 percent constructed since 2000.

Note: Reflects all buildings (state supportable and self supportable). UC data extends through 2022. CSU and CCC data extends through 2023. The age of a facility is not necessarily an indication of its condition, how well the facility is maintained, or when it was last renovated.

UC's Maintenance Backlog Has Risen Notably Since 2016

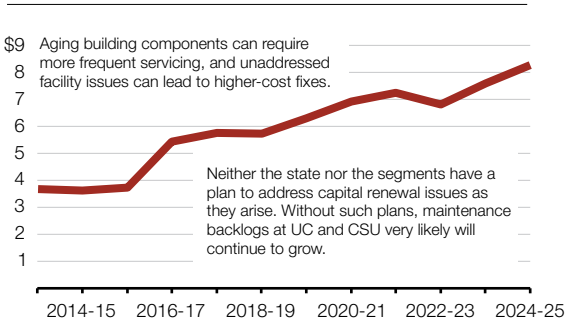
State-Supportable Space, 2024-25 Dollars (In Billions)



Note: The increase in UC's reported maintenance backlog between 2016 and 2023 is in part due to a change in how it assessed its backlog. UC previously made assumptions about the useful life of building components. It now uses direct inspection of each facility.

CSU's Maintenance Backlog Also Has Increased Over Time

State-Supportable Space, 2024-25 Dollars (In Billions)



Note: CSU identifies its deferred maintenance needs in its annual five-year capital outlay report.

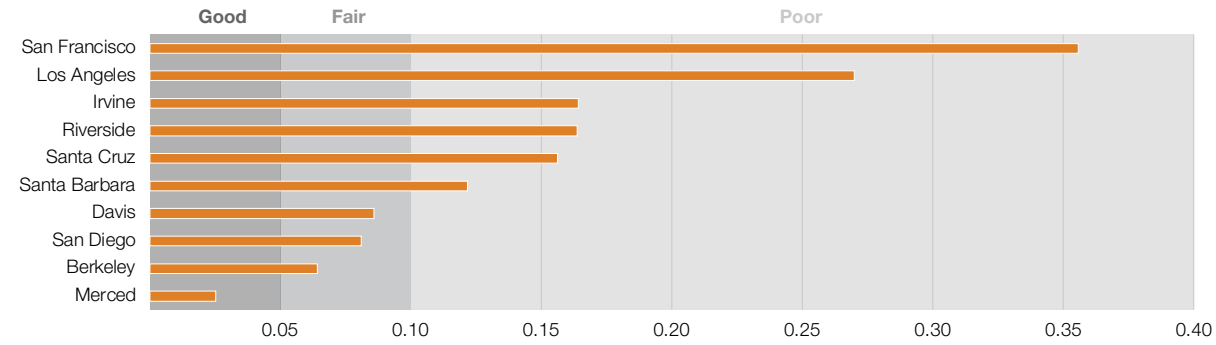
CCC also recently began to identify its deferred maintenance needs in its annual five-year capital outlay report. CCC estimates that its systemwide maintenance backlog totaled $2 billion in 2024-25, up from $1.6 billion the previous year.

The state sometimes provides one-time General Fund to the segments for deferred maintenance. Since 2015-16, the state has provided total deferred maintenance funding of $689 million for UC, $784 million for CSU, and an estimated $904 million for CCC.

UC and CSU track the condition of their facilities using the "Facility Condition Index (FCI)." The FCI shows each campus's capital renewal backlog for academic facilities, divided by the current replacement value of those facilities. A lower index score reflects better facility conditions. An FCI score above 0.10 is generally an indicator of poor facility conditions.

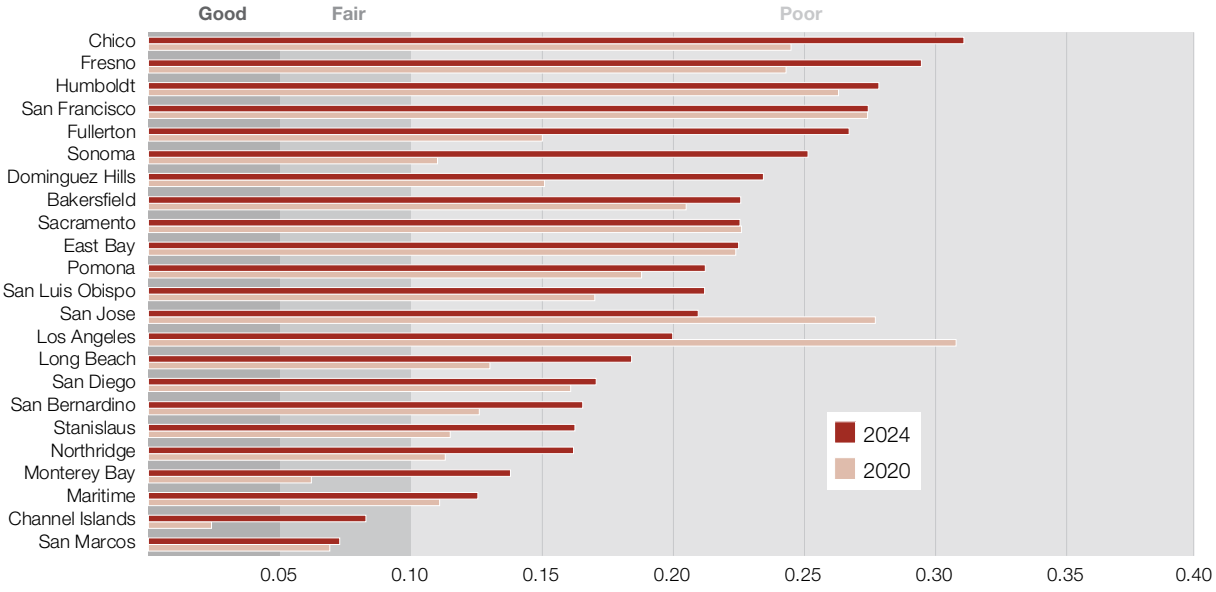
Many UC Campuses Have Poor Facility Conditions

Facility Condition Index by UC Campus, 2021



Facility Conditions Have Worsened at Almost All CSU Campuses Since 2020

Facility Condition Index by CSU Campus, 2020 Compared to 2024



Note: Among CSU campuses, only Los Angeles and San Jose had better facility conditions in 2024 compared to 2020.

Note: CCC does not have comparable facility condition index data.

Key Issue

The segments currently do not comprehensively track their capital renewal spending across all fund sources. Without this information, the Legislature cannot measure the gap between the segments' emerging capital renewal needs and their current spending. We recommend the Legislature collect more granular spending data moving forward.

UC and CSU have seismic safety policies. UC developed its seismic safety policy in 1975 and has updated it over time to incorporate new knowledge in seismology, structural engineering, and changes to the California Building Code. CSU adopted its seismic safety policy in 1993 and, similar to UC, has updated it several times. Both segments prioritize those buildings with the greatest risk of failure during an earthquake for seismic safety upgrades.

UC's Seismic Safety Rating Scale

Rating	UC Seismic Safety Policy Classification
I, II, III, IV	Compliant
V	Will require further evaluation and, if rating is confirmed, must be addressed in order of priority
VI	Priority for improvement
VII	Must be unoccupied and access restricted

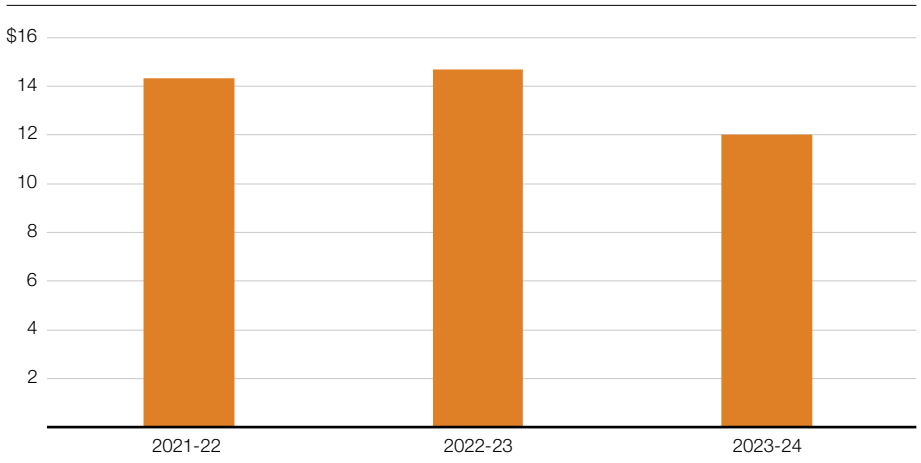
CCC does not have a seismic safety policy. However, when allocating state general obligation bond funds, the Chancellor's Office gives top priority to seismic and other life safety projects. Over the past ten years, the state has approved nine community college seismic safety projects.

CSU's Seismic Safety Rating Scale

Rating	CSU Seismic Safety Policy Classification
No List	Building has a seismic vulnerability that does not warrant assignment to List 1 or 2.
List 2	When a major capital project is allocated to the building, the building must be evaluated for compliance with California Existing Building Code seismic performance requirements. If non-compliant, necessary seismic improvements must be included in the project.
List 1, Part B List 1, Part A	Building poses a significant risk so is a priority for seismic retrofit as soon as resources are available without regard to other modifications. Part B applies to buildings that do not have permanent occupancy and use is limited to storage. Part A applies to buildings that are in use or regularly occupied.

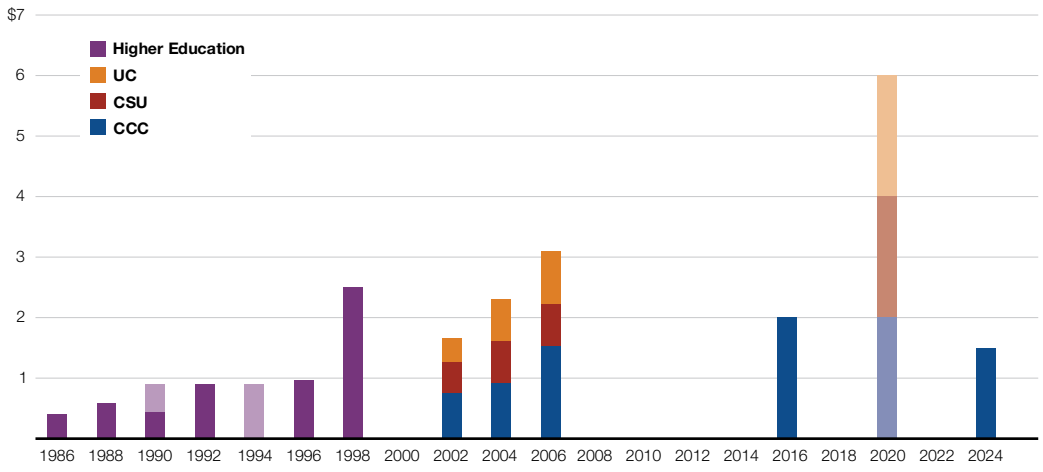
UC's Backlog of Seismic Safety Projects Remains High

Estimated Cost to Make Buildings Compliant With UC's Seismic Safety Policy (In Billions)



Note: UC recently undertook a new inventory of the seismic needs of its state-supportable facilities. As UC completes seismic renovations, the backlog of seismic safety projects has begun to shrink. CSU does not regularly track its total state-supportable seismic safety costs. In 2023-24, it estimated total costs of $2.7 billion.

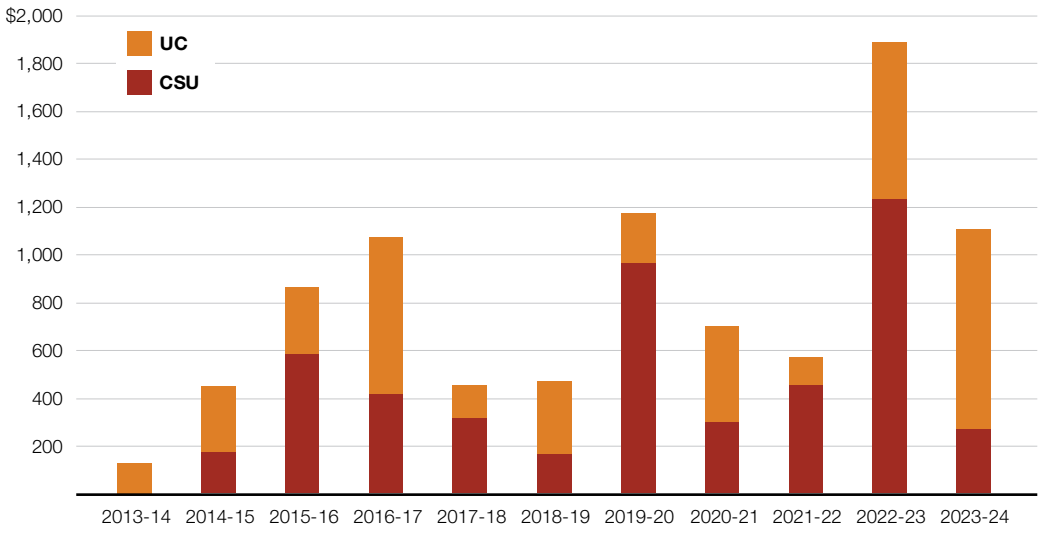
Voters Have Approved Most Statewide Higher Education Facility Bond Measures
State General Obligation Bond Measures (In Billions)



Note: Faded bars reflect failed bond measures. Voters approved all other measures. In 1990, California voters approved Proposition 121 in the June primary election but rejected Proposition 143 in the November general election.

Historically, the state paid for the construction and renovation of academic facilities at the three public higher education segments using state-issued bonds. State bond measures through 1998 did not designate specific funding amounts for each public higher education segment. Beginning with Proposition 47 in 2002, state bond measures have identified the amounts for each higher education segment.

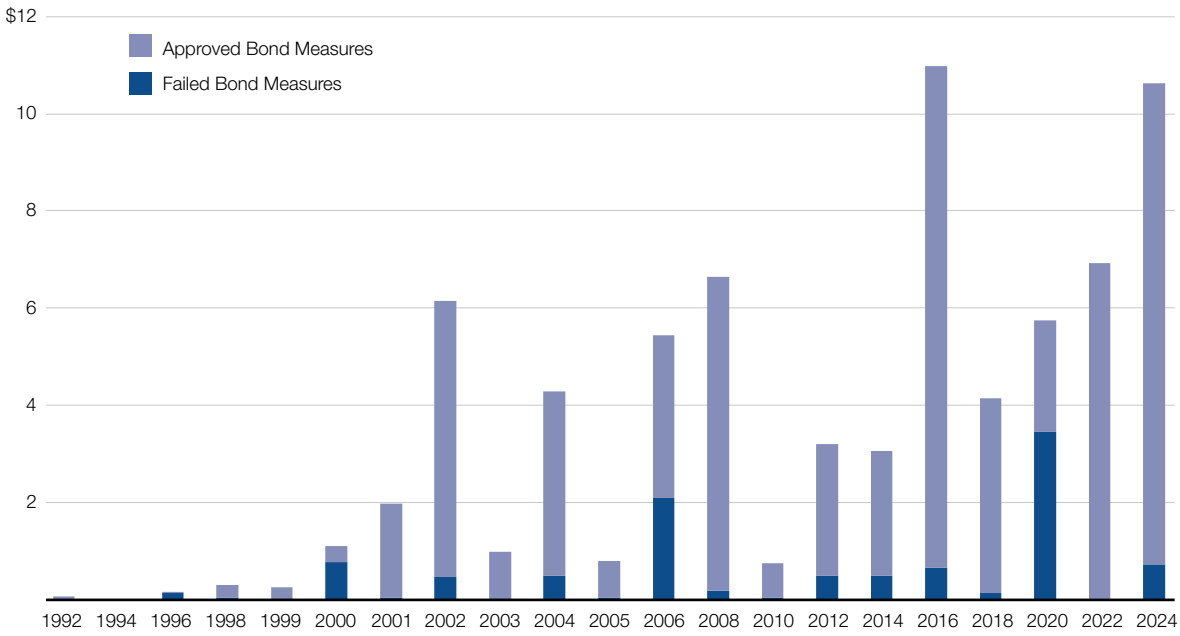
UC and CSU Now Directly Issue University Bonds to Finance State-Approved Projects
University Bonds for State-Approved Projects (In Millions)



About ten years ago, the state changed how it financed UC and CSU academic facilities. Instead of the state issuing general obligation bonds, the state gave UC and CSU authority to issue university bonds. UC and CSU make associated debt service payments using their main annual state General Fund appropriations.

Voters Have Approved Many Local Bond Measures for Community College Facilities

Total Amount of Local General Obligation Bonds for Community College Facilities (In Billions)

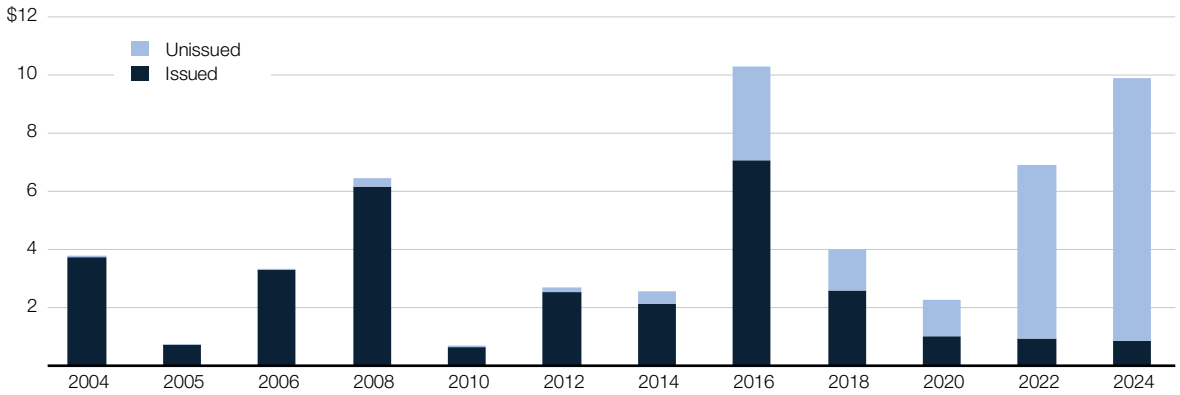


Note: No local general obligation bond measures for community college facilities were on the ballot in 1994.

The state and community college districts typically share the cost of academic facility projects, with districts generally covering about half of project costs. In 2000, the passage of Proposition 39 reduced the vote threshold required to approve local bond measures from 67 percent to 55 percent. After the vote threshold was lowered, there was a marked increase in the number and size of local general obligation bond measures.

Billions of Dollars Remain Unissued From Local Bond Measures

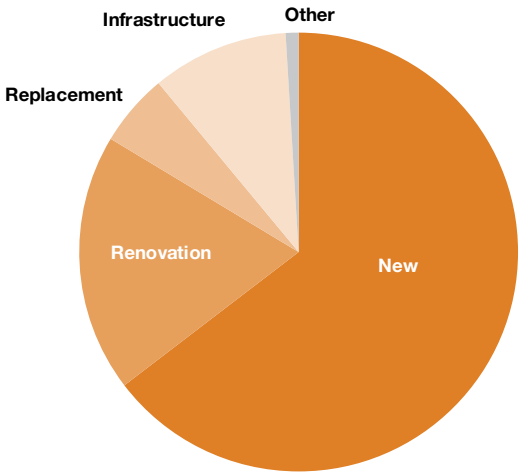
Total Amount of Local General Obligation Bonds for Community College Facilities (In Billions)



Note: Data as of January 2025.

About Two-Thirds of UC University Bonds Have Been for New Facilities

Share of University Bonds for Specific Types of Facility Projects, 2013-14 Through 2023-24

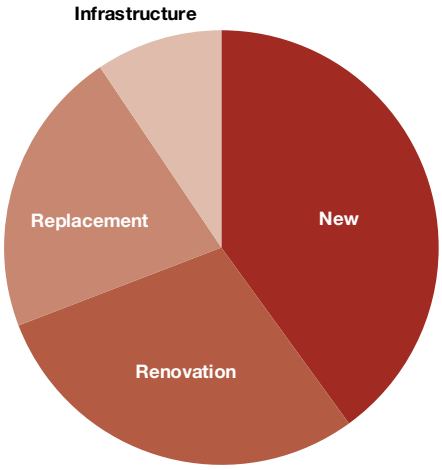


Note: Reflects university bonds for state-approved projects."Renovation" includes replacing building components (such as roofs, plumbing, and heating and cooling systems). "Infrastructure" refers to physical assets that support multiple facilities (such as central plants, utility distribution systems, and pedestrian pathways). "Other" primarily includes equipment.

From 2013-14 through 2023-24, the state has given UC authority to finance $4 billion in university bonds for state-supportable capital projects.

40 Percent of CSU University Bonds Have Been for New Facilities

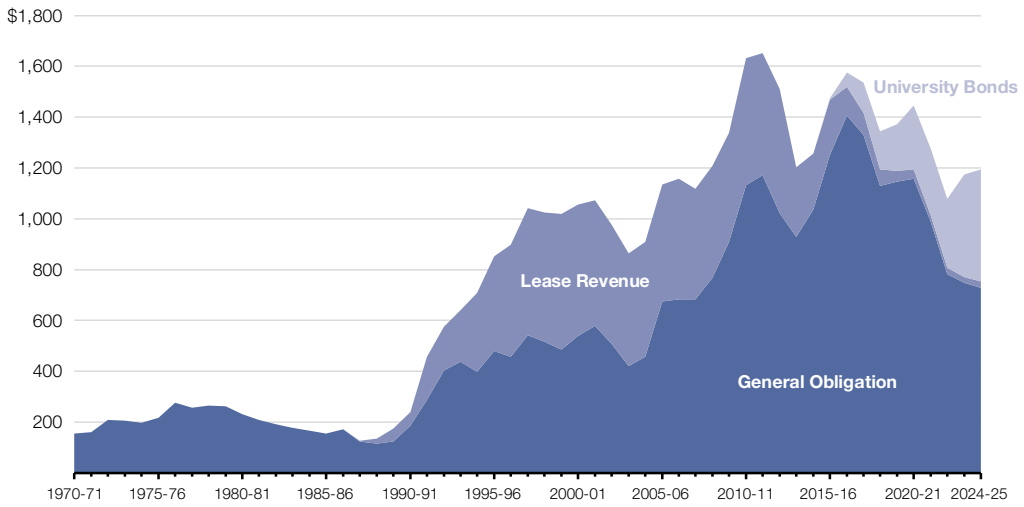
Share of University Bonds for Specific Types of Facility Projects, 2014-15 Through 2023-24



Note: Reflects university bonds for state-approved projects. "Renovation" includes replacing building components (such as roofs, plumbing, and heating and cooling systems). "Infrastructure" refers to physical assets that support multiple facilities (such as central plants, utility distribution systems, and pedestrian pathways).

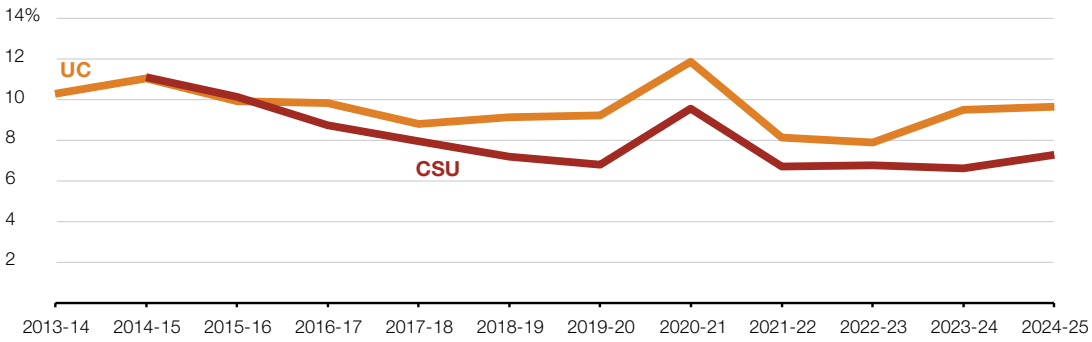
From 2014-15 through 2023-24, the state has given CSU authority to finance $4.8 billion in university bonds for state-supportable capital projects.

State Debt Service Costs Peaked in 2011-12
Higher Education Debt Service, 2024-25 Dollars (In Millions)



In the late 1980s, the state developed a lease revenue bond program. Lease revenue bonds do not require voter approval. During the Great Recession, the state generally stopped issuing lease revenue bonds for higher education projects. In 2025-26, the state is resuming the issuance of these types of bonds. The most recent lease revenue bonds are for certain state-approved community college student housing projects.

UC and CSU Debt Service Obligations Have Not Changed Substantially Over Past Decade
General Fund-Supported Debt as a Share of Each Segment's Annual General Fund Revenues



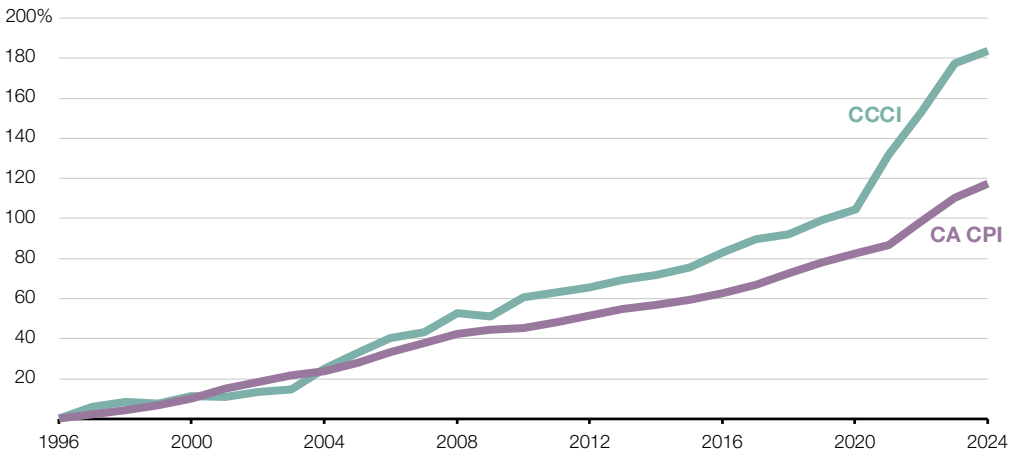
Note: Includes debt service on all state-approved general obligation, lease revenue, and university bonds. "Annual General Fund Revenues" includes ongoing and one-time funds.

Key Issue

Using bonds to finance facility projects stretches the cost generally over the useful life of the facilities. At some point, however, debt service costs can become so high that future expansion is hindered. Neither UC nor CSU appears to have reached this point. The Legislature, however, likely will want to continue monitoring the universities' debt load to ensure it remains manageable and is meeting state objectives.

Growth in Construction Costs Exceeds Growth in Overall Inflation

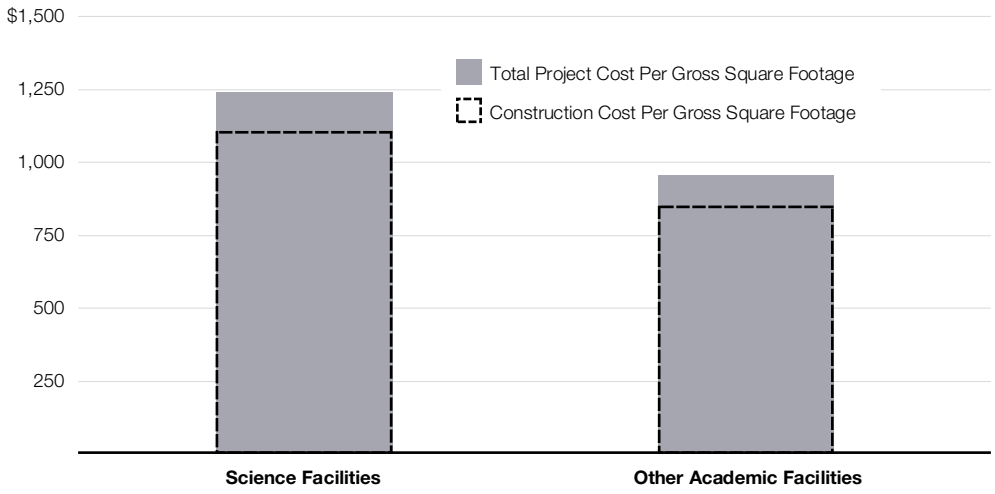
Cumulative Percentage Increase in CCCI and CA CPI Since 1996



Note: The California Construction Cost Index (CCCI) is a measure that tracks changes in the cost of construction materials, labor, and other related expenses. The California Consumer Price Index (CA CPI) is a measure of inflation that tracks the average change over time in the prices paid by urban consumers for goods and services in California.

Science Facilities Tend to Be Higher Cost Than Other Types of Academic Facilities

Average Cost Per Gross Square Foot for Selected Projects, 2023-24 Dollars



Note: Includes UC, CSU, and CCC projects from 2015-16 through 2023-24.

Higher education projects tend to cost more than many other types of facility projects. For instance, from 2015-16 through 2018-19, several courthouses were constructed across the state. The average cost of those projects was $780 per gross square footage (GSF), notably below the average classroom cost of $953 per GSF over the same period.

LAO PUBLICATIONS

This report was prepared by Ian Klein, with contributions from Natalie Gonzalez and Lisa Qing. It was designed by Vu Chu. It was reviewed by Jennifer Pacella and Ross Brown. 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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