

UNIVERSITY  
OF  
CALIFORNIA

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# Capital Financial Plan

2019-25





University of California  
Office of the President  
Capital Asset Strategies & Finance  
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Cover photo: UC Berkeley  
Photo credit: Elena Zhukova





# 2019-25 CAPITAL FINANCIAL PLAN TABLE OF CONTENTS

Summary	5
<b>CAPITAL PLAN BY LOCATION</b>	
How to Read the Tables	17
Berkeley	19
Davis	27
UC Davis Health	33
Irvine	39
UC Irvine Health	47
Los Angeles	53
UC Los Angeles Health	58
Merced	63
Riverside	69
San Diego	75
UC San Diego Health	83
San Francisco	89
UCSF Health	94
Santa Barbara	99
Santa Cruz	107
Division of Agriculture and Natural Resources	115
Lawrence Berkeley National Laboratory	119
Systemwide and Office of the President	125
Appendix – Projects of Interest to UC Health	130



## SUMMARY

The University’s capital program is driven by the campuses’ and medical centers’ academic and strategic plans. The Capital Financial Plan (CFP) is developed based on the needs at each location for buildings and other physical infrastructure to achieve these overarching plans.

- Strategic and Academic Plans define priority areas and goals and may include institutional aspirations.
- The Long Range Development Plan is a comprehensive plan, as approved by the Regents, on proposed future physical planning and development of a campus or medical center.
- The Physical Design Framework identifies planning principles and objectives for design of the physical environment.

The CFP presents proposed capital projects, public private partnerships, and acquisition of real property that support these plans.

The 2019-25 CFP represents \$52 billion of capital need as articulated by the campuses and medical centers over this year and the next five fiscal years (through 2024-25). As summarized in Display 1, the plan identifies \$24 billion in unfunded capital need, the majority of which (\$20 billion) supports state eligible education and general facilities.

A General Obligation (GO) bond could assist in making these unfunded projects a reality with a focus on addressing seismic corrections, capacity expansion to accommodate enrollment increases, and renewal of UC’s aging plant including deferred maintenance.

Display 1. Summary of Capital Need with Comparison to Last Year’s Need (\$M)

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	This Year’s Current Term Total	Last Year’s Current Term Total
Capital Need with Funding	7,844	8,966	6,991	1,640	886	1,505	27,833	24,750
Capital Need with Funding Not Identified	1,676	5,427	4,928	4,759	2,363	5,313	24,466	11,800
<b>Total (\$M)</b>	<b>9,521</b>	<b>14,393</b>	<b>11,920</b>	<b>6,399</b>	<b>3,249</b>	<b>6,818</b>	<b>52,299</b>	<b>36,550</b>

*note: because of rounding, some totals may not correspond with the sum of the separate parts*

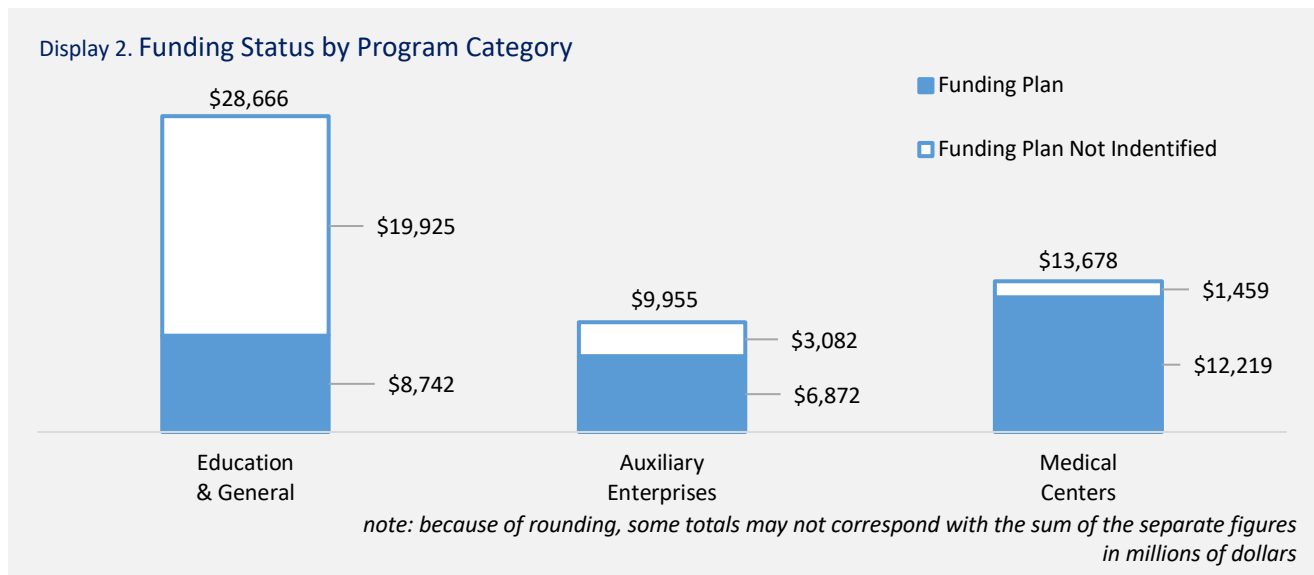
Furthermore, UC is currently undertaking two significant capital initiatives—comprehensively assessing seismic and deferred maintenance deficiencies. These new initiatives have informed this year’s CFP and are key reasons the total capital need has increased significantly from last year’s CFP.

## PROGRAM ORGANIZATION

Each campus and medical center has strategic and academic plans and capital needs are guided by these plans. Accordingly, the ten campuses, five medical centers, Division of Agriculture and National Resources (ANR), Lawrence Berkeley National Laboratory (LBNL), and systemwide each have a chapter that outlines the location’s capital needs. Within the campus chapters, the program is further categorized into projects that support education and auxiliary enterprises.

### Program Categories

- Campus Education and General.** These projects involve the construction and renovation of instruction, research, and student service space as well as administrative space and infrastructure that supports the academic program. The Education and General (E&G) category also includes education related to the health sciences (see Appendix for additional information).
- Campus Auxiliary Enterprises.** The auxiliaries support the campus academic mission by providing: housing for students, faculty, and staff; parking; recreation; and other self-supporting enterprises that enhance and support the campus environment.
- Medical Centers.** These projects involve hospitals, clinics, and other space supporting UC’s five medical centers and their associated patient care networks.



Display 2 identifies the stark differences in the availability of funding to support capital between the three program categories. UC’s medical centers and auxiliary enterprises have revenue streams associated with their operations and as result, their associated capital program is largely funded. In general, Education and General projects do not have a revenue stream and therefore its capital program has a large funding shortfall.

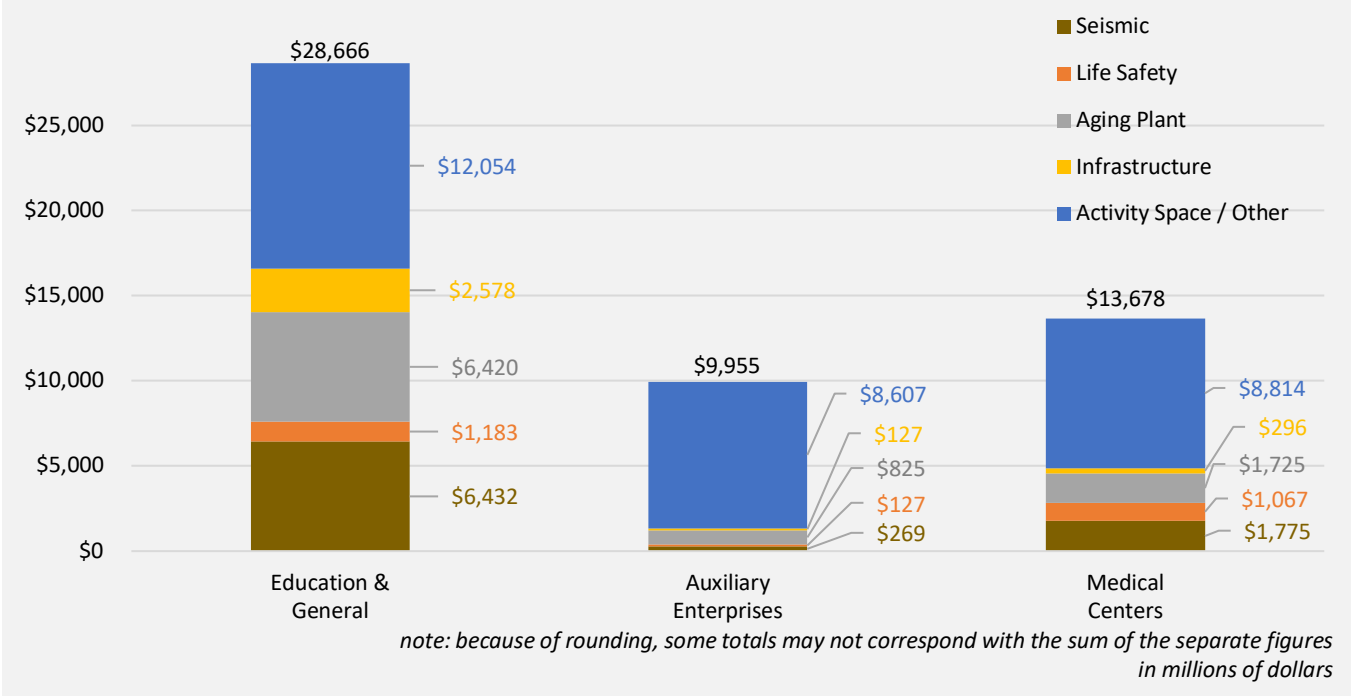


## PROJECT OBJECTIVES

Capital projects in the campuses' and medical centers' capital program respond to one or more project objectives or broad categories of need. Each capital project cost is divided among five project objectives as most capital projects have multiple objectives.

- **Seismic.** Seismic upgrades to existing facilities or new facilities replacing seismically deficient space.
- **Life Safety.** Upgrades to existing or installation of new fire and other life safety systems (non-seismic). Also includes building code compliance for accessibility or other code issues.
- **Aging Plant.** Deferred maintenance, capital renewal, and capital improvement projects to address issues (non-seismic or life safety) in existing facilities.
- **Infrastructure.** Utilities, roads, bridges, and similar services between buildings. Includes central plant related projects.
- **Activity Space/Other.** Creation of new space or renovation of existing facilities to accommodate program improvements/growth.

Display 3. Project Objective by Program Category



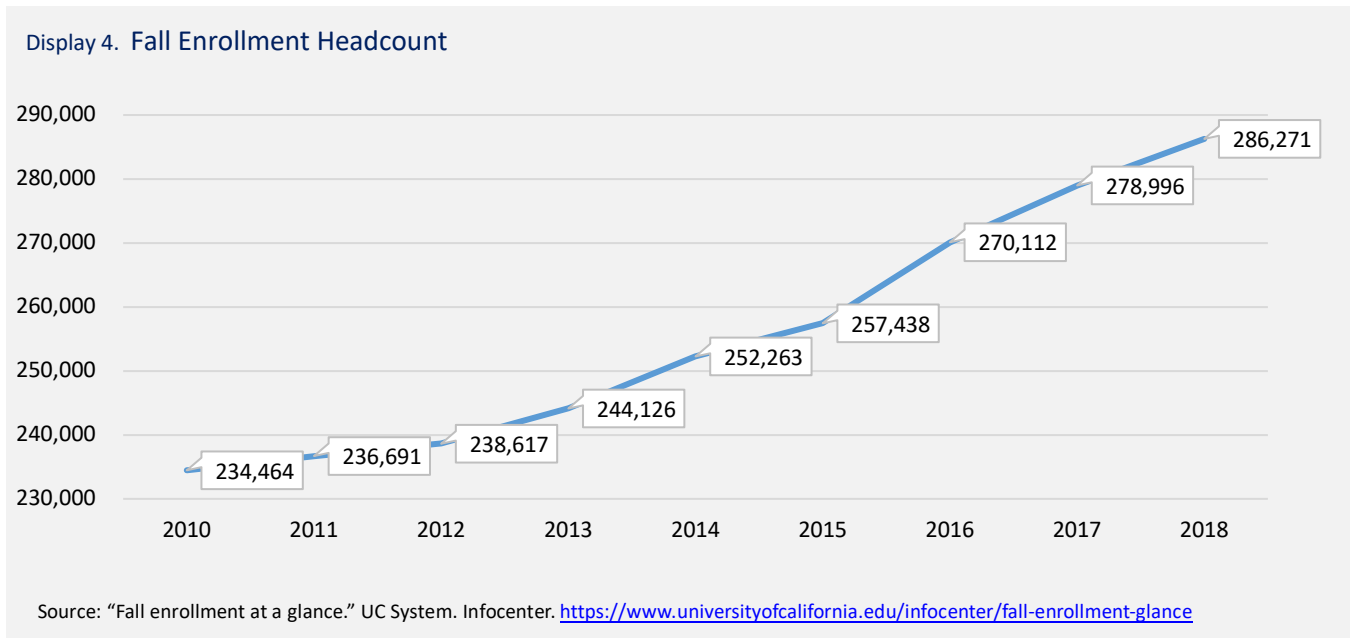
Campuses and medical centers need a significant capital investment for program improvements and growth in their respective areas. With the age of the University's buildings, campuses and medical centers have identified significant investment needed to address facilities modernization.

## DRIVERS OF CAPITAL NEED

The campuses' and medical centers' academic and strategic plans are the basis of UC's capital program. The proposed 2019-26 CFP is impacted by enrollment as well as two initiatives underway to assess the University's seismic and deferred maintenance issues.

### Enrollment

As shown in Display 4, the University has experienced a high level of enrollment growth in recent years.



The University envisioned increasing total California resident undergraduate enrollment by at least 10,000 students within four years (from 2014-15 through 2018-19), it ultimately enrolled over 10,000 undergraduate students in just three years (by 2017-18). Although the University has expanded access for undergraduates, graduate enrollments have not kept pace. Growth in graduate enrollments is necessary to maintain excellence in instruction and research and graduate students amplify their research contributions by supervising and mentoring undergraduates engaged in research projects. Enrollment growth creates challenges for the campuses because enrollment growth can happen quickly but facilities – classrooms, laboratories, and housing – to support the increase population takes years to implement. New or renovated facility projects in this CFP fill needs created by enrollment growth in prior year.

### Seismic

The first UC Seismic Safety Policy was adopted in 1975. The University began a proactive effort to make further updates to our seismic safety program. This comprehensive initiative that will involve work across multiple years is part of UC's ongoing commitment to the safety and well-being of the UC community.

Advances in seismology, structural engineering, and geotechnical engineering have informed UC’s approaches for protecting the UC community during an earthquake. The University recognizes this type of knowledge is evolving and, as a result, continuously updates its seismic safety program. In 2018, UCOP and the campuses initiated seismic re-evaluations of UC’s California facilities.

The evaluations are being done in a consistent manner throughout the system and reflect current knowledge in seismology, structural engineering, geotechnical engineering, and lessons learned from past earthquakes, as well as resulting updates to the California Building Code. To date, the campuses have completed initial evaluations for 2,069 buildings, totaling approximately 56 million square feet or about 40% of the total area of all buildings systemwide. Campuses are now in the process of completing the remaining evaluations, conducting follow-up evaluations, where needed, and planning for seismic improvement projects.

The CFP includes over 157 campus and medical center<sup>1</sup> projects that address seismic issues. In the development of these projects, campuses are incorporating critical deferred maintenance associated with the building as well as all required building code and life safety updates triggered by the seismic correction work. Each location’s

project lists is annotated if the project includes seismic mitigation.

### Deferred Maintenance

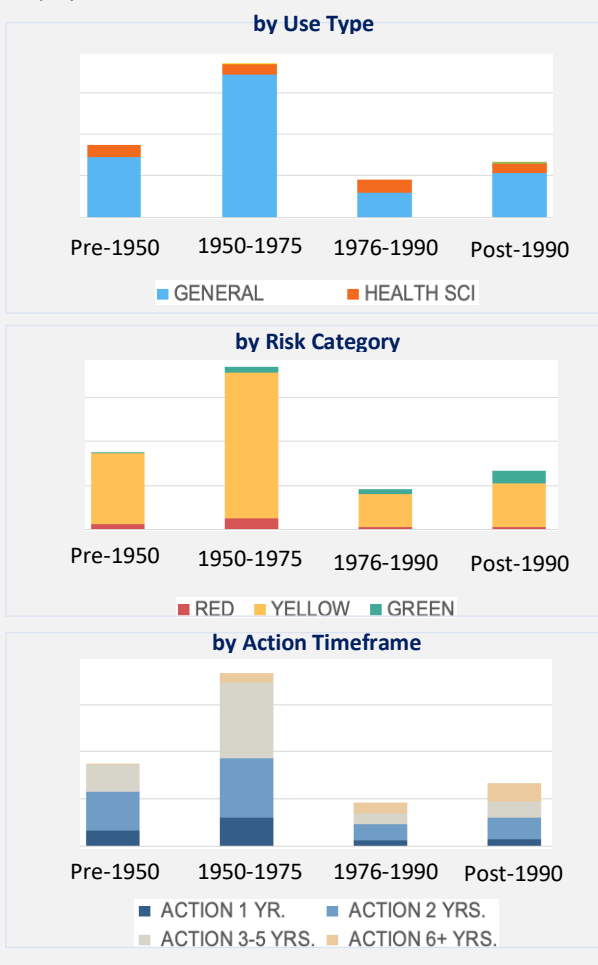
Deferred maintenance (DM) is the backlog of asset replacement and renewal resulting from the lack of sufficient regular and predictable investment in capital renewal. UC’s aging facilities are more expensive to maintain particularly as past deferrals accumulate and many building systems and components are at or beyond their useful life. Moreover, specialized research facilities comprise a growing percentage of the University’s inventory of space and are more expensive to maintain.

### INTEGRATED CAPITAL ASSET MANAGEMENT PROGRAM

Limited and inconsistently available resources to fund the University’s facilities and infrastructure in conjunction with a considerable amount of existing and growing deferred maintenance requirements precipitated the multi-year development and implementation of a comprehensive and ongoing Integrated Capital Asset Management (ICAMP) program.

Phase I of the standardized, repeatable, and sustainable Facility Condition Assessment (FCA) program needed to initiate ICAMP is well underway, with over one-half of

Display 5. Deferred Maintenance



<sup>1</sup> Medical center’s seismic compliance and safety are coordinated under the auspices of California’s Office of Statewide Health and Planning and Development (OSHPD).

the nearly 70 million square feet of state-eligible facilities inventoried and assessed for condition and risk. Some early results of these assessments are summarized in Display 5 above. Additionally, the initial ICAMP assessment has been expanded to include campus infrastructure assets and will conclude concurrently with state eligible building FCAs by the end of 2020.

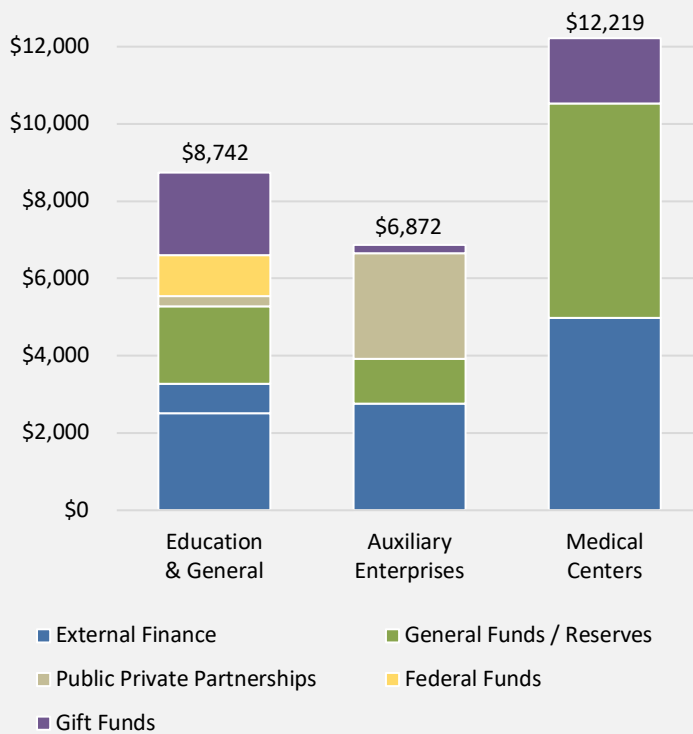
ICAMP uses a data-driven approach to inform systemwide and campus-level capital asset renewal decisions based upon common methodology identifying, quantifying, and prioritizing asset renewal and DM needs using associated risks. During the initial building FCA and infrastructure assessment phase through the end of 2020, the campuses have been asked to continue to develop DM estimates and priorities using their methodologies and practices, while leveraging ICAMP interim results as available. Once ICAMP data are complete and available, it will provide the basis for DM included in future CFPs. This approach will provide a consistent and comprehensive look at University assets across the system.

## CAPITAL INVESTMENT WITH FUNDING IDENTIFIED

UC has identified over \$52 billion of capital need. Approximately one-half (54%) of the plan, or \$28 billion, has an identified funding plan. The funding plan includes projects that are funded by UC’s General, gift, and federal funds, public private partnerships and debt that will be repaid by UC’s General Funds, auxiliary and medical revenues as well as State General Funds for select projects approved by the state.

As shown in Display 6, the University relies on a wide range of fund sources to directly fund or pay the debt service that supports \$28 billion component of the capital program with an identified funding plan.

Display 6. Identified Funding Plan by Program



### Education & General

External Finance – UC General Funds	\$2,514
External Finance – State General Funds	764
General Funds and Reserves*	2,004
Public Private Partnerships	269
Federal Funds	1,048
Gift Funds	2,142
<b>Total</b>	<b>\$8,742</b>

\* includes one-time State General Funds of \$251 million

### Auxiliary Enterprises

External Finance – Auxiliary Funds	\$2,766
General Funds and Reserves	1,147
Public Private Partnerships	2,736
Gift Funds	223
<b>Total</b>	<b>\$6,872</b>

### Medical Centers

External Finance – Medical Center Funds	\$4,974
Reserves	5,551
Gift Funds	1,694
<b>Total</b>	<b>\$12,219</b>

note: because of rounding, some totals may not correspond with the sum of the separate figures in millions of dollars

## Non-State Fund Resources

- **UC General Funds and Reserves.** UC General Funds and reserves provide funding for UC's core educational mission. UC General Funds include Nonresident Supplemental Tuition, a portion of indirect cost recovery on federal and state contracts and grants, application fees, a portion of patent royalty income, and interest on General Fund balances. Auxiliary and medical center reserves are generated from their specific operations.
- **Gift Funds.** Gift funds include those in-hand, pledged, and to-be-raised. Projects dependent upon gifts are advanced when the funding targets have been achieved.
- **Federal Funds.** The federal funds in the CFP support Lawrence Berkeley National Laboratory and represent a significant investment by the Federal government in support of LBNL's capital program. LBNL facilities supported more than 1,800 UC researchers in 2018.
- **Public Private Partnerships.** Public private partnerships (P3) may provide opportunities to deliver facilities for the benefit of campuses and medical centers with limited or no commitment of University capital funds. UC has found the P3 model to be efficient for those building types commonly developed privately, such as rental and for-sale housing.

## State Fund Resources

The CFP has two sources of state support totaling \$1 billion for capital.

**External Finance – State General Funds.** In accordance with the California Education Code, the University is authorized to finance capital projects that have been approved by the state and to redirect a portion of its State General Fund appropriation from operating needs to pay debt service for the approved projects.

- The 2019-20 State Capital Budget totals \$213 million and includes projects that address seismic and life safety corrections at the Berkeley campus; enrollment growth at the Irvine, Riverside, Santa Barbara, and Santa Cruz campuses; facilities renewal and improvements for the Division of Agriculture and Natural Resources; and the third phase of a systemwide DM program.
- The remaining \$551 million of external financing supported by State General Funds is for the proposed 2020-21 State Capital Improvements. The state capital outlay focuses on addressing seismic safety and enrollment growth, including supporting a medical school at UCR School of Medicine and UC Center Sacramento. The seismic projects to be funded in 2020-21 will be determined in early 2020 and will address the most critical projects identified in the seismic re-evaluation process described above in the *Drivers of Capital Need* section.

**One-Time State General Funds.** The second source of state support are funds the University has received for deferred maintenance work of \$151 million (including \$144 million of one-time funds identified in the 2019-20

State Budget Act) and \$100 million of Children’s Hospital Program of 2018 funds to support the Benioff Children’s Hospital in Oakland, a non-profit children’s hospital.<sup>2</sup>

## External Financing

As shown in Display 6, almost 40% of the capital need with funding identified in the CFP is funded by long term debt financing. For the current term, approximately \$11 billion of the funding plan is expected to come from external financing. External financing for E&G projects is repaid with unrestricted campus funds or, in some cases, State General Funds. External financing for auxiliary projects is repaid with revenues generated by the projects that are financed. Similarly, external financing for medical center projects is repaid with revenues generated by the medical centers.

Each campus manages its debt burden and evaluates and prioritizes proposed new uses of external financing based on the UC Debt Policy. For the CFP, campuses analyzed feasibility of proposed debt-funded projects, with the additional debt burden measured against the UC Debt Policy metrics – specifically, modified cash flow margin and either debt service to operations or expendable resources to debt, and for auxiliary projects, project debt service coverage and auxiliary system debt service coverage. A campus’s metrics are analyzed again when external financing is requested at the time of individual project budget approval.

Medical center projects funded with external financing are also evaluated based on the UC Debt Policy using the respective medical center’s financial projections.

## SUMMARY OF CAPITAL NEED

The CFP, identifies close to \$24 billion in unfunded capital need over the next five fiscal years (through 2024-25) – the majority of which (close to \$20 billion) is in state supportable education and general facilities. The unfunded need is close to half of the University’s overall projected capital needs of roughly \$52 billion over this time period.

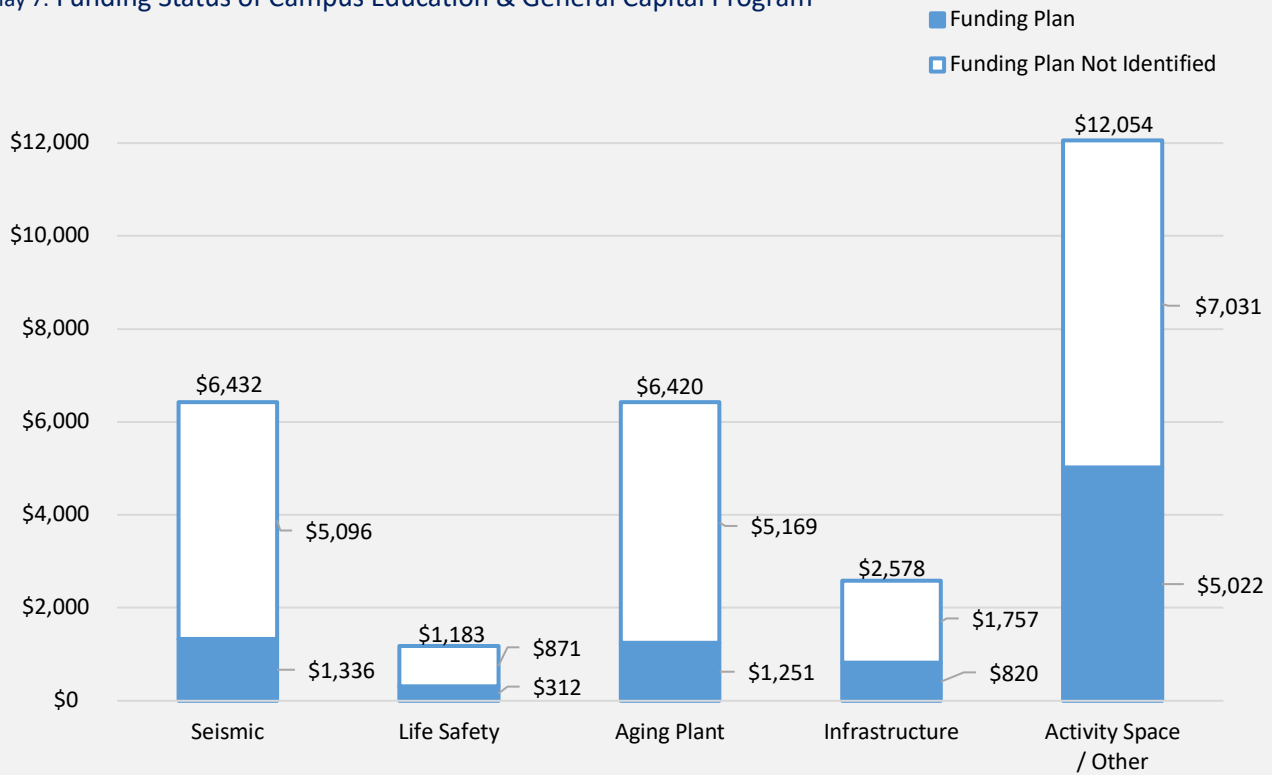
### Campus Education and General

The campuses’ need for capital investment of \$29 billion to support its E&G program is the highest of the three programs. As noted earlier, the E&G program does not have a revenue stream so funding facilities that serve this program is challenging and accordingly, less than a third (30% or \$9 billion) of this program has a funding plan (refer to Display 7).

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<sup>2</sup> This amount does not include \$270 million of Children’s Hospital Bond Act of 2018 funds for UC’s children’s hospitals. As projects are developed, these funds will appear in future plans.

Display 7. Funding Status of Campus Education & General Capital Program



*note: because of rounding, some totals may not correspond with the sum of the separate figure in millions of dollars*

In general, UC relies on state support to fund core E&G needs. For the most part, the \$29 billion of capital need shown in Display 7 is eligible to be funded from the state; however, over \$20 billion of need does not have a funding plan. A General Obligation (GO) bond could assist in furthering these unfunded projects with a focus on addressing seismic corrections, capacity expansion to accommodate enrollment increases, and renewal of UC’s aging plant including deferred maintenance.

### Campus Auxiliary Enterprises

To support campus academics, the CFP includes \$10 billion of auxiliary projects. Unlike E&G projects, auxiliary enterprises generate revenue to support the capital needs and over two-thirds (69 % or \$7 billion) of its capital program has a funding plan. This total includes almost \$8 billion of capital need to expand and renovate campus dining and student housing programs, with some housing for faculty and staff. The remaining \$2 billion addresses: student health and wellness, parking and transportation, athletics, and mixed use facilities, as well as, capital renewal and deferred maintenance for all auxiliary enterprises.

### Medical Centers

The five medical centers have identified capital needs totaling close to \$14 billion. These projects include addressing seismic and life safety issues by correcting or replacing facilities that do not meet state standards, as well as renovating and constructing new space to provide the highest level of patient care. Over \$8 billion include new hospitals for UC Davis Health, UC Irvine Health, UC San Diego Health, and UCSF Health (Parnassus Heights and Oakland), as well as a medical complex for UCI Health.

## CONCLUSION

The University's fundamental mission is teaching, research, and public service. In fulfilling its mission, UC has a history of excellence: UC campuses are regularly rated among the best in the nation and the world; similarly, UC's medical centers rank among the nation's best. Facilities that support this excellence are aging, seismic standards have tightened, and deferred maintenance needs increase as time goes by. With continued growth in the University's operations, additional space is needed. With changes in pedagogy and advances in the clinical enterprise and technology, space needs to be modernized to support a world-renowned research university.

UC has always relied on funding from the state to support its capital program. The University cannot sustain its capital program on debt or non-state funds or rely on fundraising for capital projects. Without an infusion of additional funding, the ability to fully implement the capital program is uncertain and, in many cases, unlikely. This funding gap highlights the urgency for new state funding. A new state General Obligation Bond would provide much needed resources to support the University's important mission.



**Capital  
Financial  
Plan**

**2019-25**

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By Location



# HOW TO READ THE TABLES

## Capital Plan with Funding

	Update 3 DM Seismic 4	Current Term (2019-20 to 2024-25)						Total	State Eligible 6
		5 2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS 2</b>									
10889 Wilshire Building Improvements 1		7 20,000 EF						40,000	61%
Statewide Energy Partnership (SEP) Program	1	15,800 EF						15,800	100%
<b>Campus Projects Total</b>		<b>35,800</b>	<b>151,500</b>	<b>42,700</b>	<b>35,100</b>	<b>40,500</b>	<b>122,300</b>	<b>970,300</b>	<b>388,900</b>

**1 Project List**  
This column lists the names of projects that are proposed over the six-year plan that have a funding plan.

**2 Program Categories**  
Projects are identified by three program categories:

**Education & General:** New construction, rehabilitation, and renovation of core instruction, research, and general campus academic space. Includes associated support space and infrastructure.

**Education–Health Sciences:** Includes construction and renovation of Health Sciences Education space. This would include graduate and professional schools – such as dentistry, nursing, pharmacy, medicine, optometry, public health, and veterinary.

**Auxiliary:** New construction, rehabilitation, and renovation of student and faculty housing, dining, student activities, recreation or athletic facilities, student health centers, parking and roads, child care facilities, fee-supported facilities, and other enterprises.

**Medical Centers:** New construction, rehabilitation, and renovation of patient care facilities, infrastructure, and medical center support space.

**3 Project Update**  
Changes from the prior year plan are indicated by three types:

- 1 - Budget Update: costs have been revised to reflect current estimates.
- 2 - Scope Update: the scope or program of the project has been revised from prior year.
- 3 - New Project: indicates a project not included in prior year plan.
- Blank indicates no change from prior year.

**4** Indicates if a proposed project addresses one of the of the following areas:

**DM** - Deferred maintenance (DM) scope and/or in implementing the project, the DM backlog is reduced.  
**Seismic** - Scope includes seismic rehabilitation.

**5 Plan Year**  
This area indicates the fiscal year that the project will request budget approval. Project completion dates will vary by project type.

**6 State Eligible**  
The estimated portion of the total project budget that is eligible for State funding based on the anticipated or existing uses of the facility.

**7 Proposed Funding Source**  
This area provides the proposed source of funding from the following options:

**Funding Identified Categories**

<b>AR</b> Auxiliary Resources	<b>OG</b> Other Grants
<b>CF</b> Campus Funds	<b>OUS</b> Other University Systemwide Funds
<b>DD</b> Donor Developed	<b>P3</b> Public Private Partnership
<b>EF</b> External Financing	<b>SG</b> State General Fund Financed (a form of external financing)
<b>GF</b> Gift Funds	<b>SPG</b> State Pay as You Go Funds
<b>HR</b> Hospital Reserves	<b>UR</b> University Fee Reserves (voted, life safety, and registration)
<b>FG</b> Federal Grant	

**Funding Not Identified (FNI) Categories**

<b>SE</b> FNI-State (fully or partially eligible for State funding)	<b>NSE</b> FNI-Non-State (fully or partially supportable by non-State (campus or medical center) resources)
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# 2019-25 BERKELEY CAMPUS CAPITAL NEED

More than 150 years after its founding, UC Berkeley is renowned for its excellence, for the opportunities it affords students of all backgrounds, and for its pioneering achievements across all manner of disciplines. Ranked among the top research universities worldwide, Berkeley empowers engaged thinkers and global citizens to change our world. Discovery is the foundation of the Berkeley experience and the heart of our campus identity.

Today, with approximately 42,500 undergraduate and graduate students and more than 19,000 faculty and staff, Berkeley offers more than 350 degree programs in 184 academic departments and programs, in 14 schools and colleges.

The Capital Financial Plan (CFP) presents the campus’s capital need for the near term, focusing on the current year and the next five fiscal years. Berkeley’s CFP is supported by approximately \$5.1 billion over the current term, of which approximately \$1.8 billion has a funding strategy. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found in the Appendix.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	113,900	210,150	484,450	742,500	144,500	56,000	1,751,500	414,400
Capital Need with Funding Not Identified	184,900	342,900	794,600	802,100	470,200	799,600	3,394,300	2,943,200
<b>Total</b>	<b>298,800</b>	<b>553,050</b>	<b>1,279,050</b>	<b>1,544,600</b>	<b>614,700</b>	<b>855,600</b>	<b>5,145,800</b>	<b>3,357,600</b>

## Priorities

The CFP reflects Berkeley’s Academic Strategic Plan, updated in 2018, which is founded on the core institutional values and commitments to diversity, excellence, innovation, our public mission, and accountability and transparency. This past year the campus also launched initiatives to update its Long Range Development Plan and create a new Campus Master Plan. These plans, along with the CFP, will continue to reflect Berkeley's ongoing strategy of maintaining and advancing land use and capital development priorities in light of a challenging fiscal environment.

Berkeley’s proposed projects in the near-term planning horizon prioritize reinvestment for safety, modernization, and program improvements to support enrollment needs with selective new construction for seismic replacement, housing, and academic signature initiatives in data science and climate science. Within these priorities, the campus will advance projects that integrate education and research, support academic strategic initiatives, improve teaching and instructional facilities to support sustained enrollment growth over the past several years, and improve Berkeley's ability to recruit and retain exceptional faculty, students, researchers, and staff.

## Challenges

**Seismic:** Improving safety and campus resilience through remediation of seismic risk remains a top priority. Berkeley has a substantial portfolio of seismic upgrades across multiple building types, including seismic renovation or replacement of Moffitt Library, Donner Lab Addition, and University, Evans, Durant, Cory, Stephens, O'Brien, Hesse, and Wellman Halls. Dozens of other buildings have been identified as needing structural strengthening or have yet to be assessed. Given the size and occupancies of the existing buildings, these projects will require substantial surge space which the campus does not have in sufficient quantity. Recent demolitions of several small and large buildings that posed a high seismic risk, such as Tolman Hall, have strategically opened up a few parcels suitable for new development. Potential projects include critically needed surge space and new facilities to support strategic academic initiatives in the fields of climate change and data science

**Housing:** The shortage of available housing for Berkeley's students and untenured ladder faculty is a matter of urgent concern. At present, Berkeley has the lowest percentage of beds for undergraduate and graduate students of any UC campus. This is further complicated by the fact that Berkeley is situated in one of the tightest housing markets in the nation. The lack of campus housing capacity adversely impacts the overall student experience and challenges Berkeley's ability to remain competitive with institutional peers. In response, the campus has established the goals of providing two years of housing for entering freshmen, one year of housing for entering transfer students, one year of housing for graduate students, and up to six years of housing to untenured faculty. All totaled, to meet these goals will require an additional 8,800 new beds. To achieve this capacity, it will likely be necessary to develop on every campus-controlled site identified by the Chancellor's Housing Task Force. And while those sites will make significant headway, additional housing sites will also need to be pursued as they become available.

**Deferred Maintenance:** Berkeley's 2019-25 CFP includes a significant backlog of deferred maintenance projects for which no funding strategy is identified. The campus's deferred maintenance projects address replacement, refurbishment, and repair of building systems, building envelope components such as windows and roofs, as well as utility repair and refurbishment, life safety systems repair, and addressing of code issues. Based on Berkeley's long-term facility renewal plan, the current deferred maintenance estimated need in State-supportable space is approximately \$1.3 billion. An additional \$300 million of deferred maintenance backlog exists in the campus's non-state eligible facilities, such as housing, athletics and recreational space, and parking facilities.

**Science Technology Engineering Math (STEM) Modernization:** Rehabilitation of older STEM buildings will help Berkeley address significant enrollment increases over the past several years across STEM disciplines. Undergraduate STEM majors increased 45% in the last 10 years to over 12,600 students, and graduate STEM majors increased by 33% over the same period. Estimated costs to bring STEM buildings into competitive alignment with peer institutions is approximately \$2.4 billion. Investments in STEM modernization will also directly support two new strategic academic initiatives: one, Inclusive Intelligence and two, Environmental Change, Sustainability, and Justice.

**Energy Efficiency:** Responding to the President's Carbon Neutrality Initiative remains a campus priority. Studies to determine an energy strategy that will reliably serve the campus through a carbon-sensitive method are ongoing. However, the resulting projects have no funding strategies identified at this time.

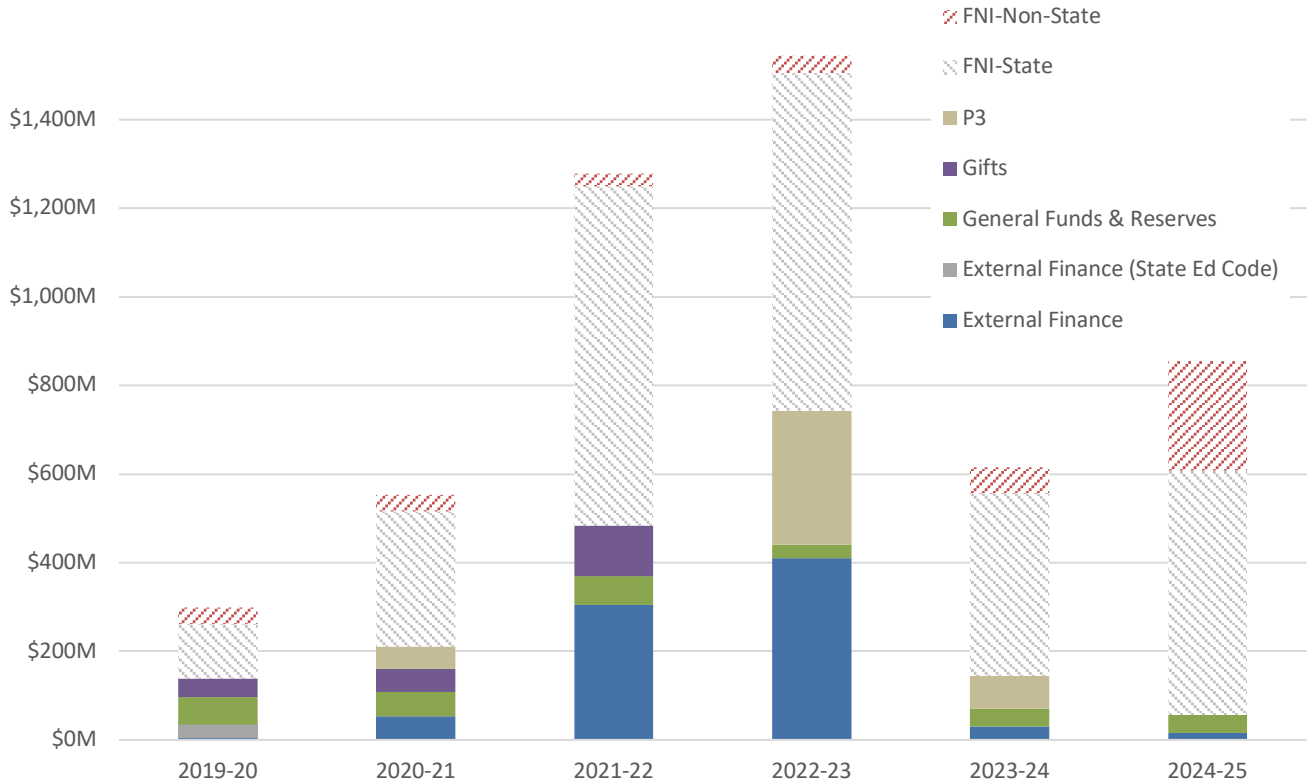
## Funding

Years of financial challenges resulting, in part, from reduced State without adequate alternative funding sources have led to a depletion of Berkeley's central reserves. With limited capacity to increase certain core funds, it has been challenging to implement projects that address the deferred maintenance backlog, improve seismic resilience, and support increased enrollment. Berkeley prioritizes any State capital funds it receives toward seismic and life safety upgrades, as well as capital renewal of certain core academic buildings for which there are few other fund sources.

Identification of priority projects is based on an annual comprehensive evaluation and ranking of all proposed projects. Funding will be provided for the most critical projects, particularly those driven by the age and condition of core buildings and infrastructure systems, and by code and life safety deficiencies. As the results of campus seismic assessments are known, campus priorities may need to be adjusted. The remainder of the State-supportable program has no funding source and includes safety and renovation projects, deferred maintenance, and improvements needed to support academic programs.

Extremely limited campus debt capacity requires the campus to explore new, innovative, and underutilized models of capital development, including campus funds, gift funds, grants, and private development. Berkeley is strategically using non-State resources to support the most urgent capital needs. Utilizing donor-development, public-private partnerships, in addition to campus cash and reserves, the campus is advancing critical projects such as the Bakar BioEnginunity Hub, Moffitt Library Renovation Phase 2, Upper Hearst Development, and the Gateway Housing Project.

Display 2: \$5B Capital Need



Display 3. Berkeley Campus Capital Need with Funding (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
2234 Piedmont Renovation	3	•	•	4,000 GF							4,000	100%
Chemistry Expansion^* (see FNI table)	3	•	•	2,200 GF	8,800 GF	59,000 GF					70,000	100%
Deferred Maintenance	1	•		40,000 CF							40,000	100%
Law School Library Conversion	1		•	18,000 GF							18,000	100%
LSA Modifications for Neurohub	3			1,000 GF	6,500 GF						7,500	100%
Minor Hall Optometry School Clinic Expansion^*	1	•	•	7,500 GF	37,500 EF	15,000 GF					60,000	100%
Moffitt Library Seismic Corrections	1	•	•	3,950 CF 6,050 SG							10,000	100%
Moffitt Library Renovation Phase 2^*	1	•	•	6,100 GF	19,450 GF	19,450 GF					45,000	100%
Moffett Field Development Project	3			TBD							TBD	100%
Senior Hall Seismic Corrections	3		•	3,200 GF							3,200	100%
Centennial Bridge - campus share	3				12,500 CF						12,500	100%
CNR Oxford Relocation Building	3				2,000 CF	33,000 CF					35,000	100%



	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
Long Library Renovation Haas Business School	1				2,200 GF	22,000 GF					24,200	100%
Capital Projects \$1M to \$10M (E&G)	1	•						10,000 CF	10,000 CF		20,000	100%
Campus Capital Renewal	3	•		10,000 CF	10,000 CF	10,000 CF	10,000 CF	10,000 CF	10,000 CF		60,000	100%
<b>Total Education:</b>											<b>409,400</b>	
<b>AUXILIARY PROJECTS</b>												
Beach Volleyball Facility	3			1,000 CF	5,000 CF						6,000	
Levine-Fricke Softball Stadium	1	•		6,400 CF	25,700 CF						32,100	
Parking	1				50,000 P3						50,000	
Housing Project- Intersection Mixed Use Project in Emeryville	1 2			TBD DD	TBD DD						TBD	
Housing Project Gateway Project New Construction	2			TBD DD	TBD DD	TBD DD					TBD	
International House Res Hall Seismic Corrections	3	•	•		10,000 GF						10,000	
Housing Project - Channing/Ellsworth + dining facility*	3					5,000 EF	10,000 EF	20,000 EF			35,000	
New Dining Commons	1						1,500 P3	73,500 P3			75,000	
Housing Project - Oxford Tract	3						300,000 P3				300,000	
Housing Project Unit 3 Rehab and Infill	3						400,000 EF				400,000	
Housing Project - Fulton/Bancroft	3							10,000 EF	15,000 EF		25,000	
Housing Project - People's Park Housing Project*	1			4,000 EF	16,000 EF	300,000 EF					320,000	
Capital Projects \$1M to \$10M (AUX)	3					21,000 CF	21,000 CF	21,000 CF	21,000 CF		84,000	
<b>Total Auxiliary:</b>											<b>1,337,100</b>	
<b>EDUCATION HEALTH</b>												
Intersection Emeryville Development Commercial Space for Optometry Center	3			500 GF	4,500 GF						5,000	100%
<b>Total Education-Health:</b>											<b>5,000</b>	
<b>Campus Projects Total</b>				<b>113,900</b>	<b>210,150</b>	<b>484,450</b>	<b>742,500</b>	<b>144,500</b>	<b>56,000</b>		<b>1,751,500</b>	<b>414,400</b>

### Funding Not Identified (FNI)

This list of projects below does not reflect the full need for capital investment at Berkeley. There continues to be pressure to improve aging facilities and campus infrastructure, to provide space for expanding programs, and to continue to address life safety deficiencies in existing buildings. Berkeley continues to evaluate the critical facility needs and to identify appropriate and financially feasible solutions. A fraction of this unfunded need is shown in the table below; however, there remain many projects on the horizon for which more planning and cost analyses are required.

**Display 4. Berkeley Campus Capital Need with Funding Not Identified (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Durant Hall Seismic Corrections	3	•	•	300 SE	1,300 SE	14,400 SE				16,000	100%
Evans Hall Seismic Replacement / Data Science Classroom & Lecture Hall Building*	1 2	•	•	31,800 SE	177,200 SE	150,500 SE				359,500	100%
Evans Hall Seismic Replacement /Piedmont Site Business Econ Hub*	3		•	10,000 SE		30,000 SE	75,000 SE			115,000	100%
Deferred Maintenance	1	•		25,000 SE						25,000	100%
Hesse-O'Brien Halls Seismic Replacement*	1 2	•	•	43,800 SE	133,100 SE	131,800 SE				308,700	100%
STEM Building Modernization	3			25,000 SE	25,000 SE	25,000 SE	25,000 SE	25,000 SE	25,000 SE	150,000	100%
Stephens Hall Seismic Corrections	3	•	•	1,000 SE	4,000 SE	40,000 SE				45,000	100%
2111 Bancroft Seismic Demolition	1		•		1,200 SE	10,800 SE				12,000	100%
Climate & Environment Crossroads - Seismic Replacement Lab Building*	3	•	•		22,200 SE	115,800 SE	95,800 SE			233,800	100%
Deferred Maintenance Backlog	1	•			50,000 SE	50,000 SE	50,000 SE	50,000 SE	50,000 SE	250,000	100%
Surge Building*	1 2		•		10,000 SE	57,900 SE	37,100 SE			105,000	100%
Chemistry Expansion^ (see funded table)	3	•	•			40,000 SE				40,000	100%
College of Natural Resources Lab Building	3		•			9,300 SE	41,900 SE			51,200	100%
Donner Laboratory Addition Seismic Demo/Replacement*	1 2	•	•			19,900 SE	98,400 SE	92,300 SE		210,600	100%
Minor Hall Optometry School Clinic Expansion^	1	•	•			15,000 SE				15,000	100%
Relocations for Housing Sites – Greenhouses	1 2					2,900 SE	27,000 SE			29,900	100%
Strategic Property Acquisitions	3					10,000 SE				10,000	100%
Architects & Engineers Building Seismic Demolition	1		•				3,700 SE			3,700	100%
Cesar Chavez Center Seismic Corrections*	3	•	•				9,300 SE	49,600 SE	38,800 SE	97,700	100%
Cory Hall Seismic Replacement*	3	•	•				31,100 SE	153,800 SE	141,200 SE	326,100	100%
Bechtel Addition	3							1,300 SE	15,900 SE	17,200	100%
Etcheverry Hall Seismic Corrections*	3	•	•					15,000 SE	77,000 SE	92,000	100%
Hilgard Hall Seismic Correction	3		•					6,800 SE	35,900 SE	42,700	100%
Northwest Animal Facility Seismic Corrections	3	•	•					5,000 SE	25,700 SE	30,700	100%
Sproul Hall Seismic Corrections	3	•	•					4,100 SE	38,100 SE	42,200	100%
Wellman Hall Seismic Corrections	3	•	•					4,300 SE	40,400 SE	44,700	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
Wheeler Hall Seismic Corrections	3	•	•					5,000 SE	46,200 SE	51,200	100%	
Capital Projects \$1M to \$10M (E&G)	3			10,000 SE	10,000 SE	10,000 SE	10,000 SE			40,000	100%	
Davis Hall Seismic Retrofit and Replacement Project					4,000 SE	30,000 SE	126,000 SE			160,000	100%	
University Hall Seismic Corrections	1								18,300 SE	18,300	100%	
<b>Total Education:</b>										<b>2,943,200</b>		
<b>AUXILIARY PROJECTS</b>												
Strategic Property Acquisitions - Housing	3						10,000 NSE			10,000		
Student Wellness Facilities - Health and Recreation	1 2							9,900 NSE	53,900 NSE	63,800		
Recreational Sports Facility Seismic Corrections	3							18,100 NSE	163,200 NSE	181,300		
Capital Projects \$1M to \$10M (AUX)	3			8,000 NSE	8,000 NSE					16,000		
Deferred Maintenance Non State	1 2			30,000 NSE	30,000 NSE	30,000 NSE	30,000 NSE	30,000 NSE	30,000 NSE	180,000		
<b>Total Auxiliary:</b>										<b>451,100</b>		
<b>Campus Projects Total</b>				<b>184,900</b>	<b>342,900</b>	<b>794,600</b>	<b>802,100</b>	<b>470,200</b>	<b>799,600</b>	<b>3,394,300</b>	<b>2,943,200</b>	

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year

Project Notes: ^Portions of funding for this project are from sources that are identified (as shown in Display 3) while other sources are not yet identified (as shown in Display 4). The project will not advance until all sources have been identified.  
\*Funding displayed by an anticipated year of expenditure. Typically amounts displayed are shown in the anticipated year of budget approval for a discrete project or project phase.



# 2019-25 DAVIS CAMPUS CAPITAL NEED

From humble roots as the University Farm, UC Davis has developed into a comprehensive research university with unparalleled disciplinary breadth over 10 schools and colleges, including two ranked first in the nation. The home of the Aggies — go-getters, change-makers, and problem-solvers who shape and are shaped by one of the top public universities in the United States — UC Davis offers 102 undergraduate majors to its more than 29,000 undergraduate students, 38% of whom conduct research. The campus’s more than 7,500 graduate and professional students have access to 101 graduate programs, more than half of which are interdisciplinary. With its commitment to academic excellence and scholarship in service to the public good, UC Davis is uniquely positioned as an international leader in addressing the most pressing problems facing humanity over the coming years.

The Capital Financial Plan (CFP) presents the campus’s capital need in order to realize its ambitious strategic vision that champions academic excellence, social mobility, diversity, and leadership in addressing global issues. The CFP focuses on this year (2019-20) and the next five fiscal years (2020-21 to 2024-25) and articulates projects in the near-term planning horizon. The standout academics, global outlook, interdisciplinary opportunities, and championing of sustainability for which UC Davis is known are all reflected in the CFP. As the document that guides the campus in support of its mission and facility-based needs, the CFP identifies a need for approximately \$3 billion over the current term in support of campus infrastructure, deferred maintenance, and life safety upgrades critical to increase the useful life of existing buildings. The CFP also includes campus and gift-funded initiatives in support of a broad range of program improvements that support academics, research, and student life. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found in the Appendix.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	738,356	454,000	222,000	136,000	5,000	69,000	1,624,356	1,101,566
Capital Need with Funding Not Identified	90,000	977,000		65,000	80,000	185,000	1,397,000	1,360,900
<b>Total</b>	<b>828,356</b>	<b>1,431,000</b>	<b>222,000</b>	<b>201,000</b>	<b>85,000</b>	<b>254,000</b>	<b>3,021,356</b>	<b>2,462,466</b>

## Priorities

The CFP reflects the strategic initiatives of the Davis campus. The campus updated its Long Range Development Plan (LRDP) in July 2018 and the recently approved plan sets the framework for physical development to support the academic enterprise, enrich community life, and create a sustainable future. The LRDP charts growth for new academic facilities, renovation, and infill development in the campus core, as well as ambitious housing growth.

Consistent with the LRDP, UC Davis is prioritizing the following goals: 1) provide facilities that respond to existing and projected enrollment and faculty growth, 2) reduce students’ time to graduation, 3) reduce deferred

maintenance backlog, 4) provide more on-campus student housing, and 5) sustain existing resources through infrastructure renewal and seismic remediation.

The projects proposed in the CFP begin to implement this vision.

### *Academics and Research*

Proposed facilities that respond to campus priorities to provide needed classroom seats and support emerging trends in pedagogy include the Teaching and Learning Complex and the Animal Science Teaching Facility. Additional academic projects will renovate and create research and teaching laboratories to accommodate both new and existing students and faculty; these include such projects as the Chemistry Addition and Renovation Vision project, the Computational and Data Sciences facility, the Multi-Disciplinary Research building, and renovations to existing research buildings.

### *Housing*

UC Davis is in the midst of delivering the most ambitious student housing plan in the campus's history. In fall 2019, the campus opened 400 beds in Yosemite Hall, and an additional 4,100 are currently approved or under construction with the new Shasta Hall and The Green at West Village. The CFP prepares for the continued implementation of the housing program with projects to redevelop Orchard Park and provide housing for student families.

### *Infrastructure and Seismic Remediation*

Infrastructure renewal and seismic remediation are a high priority to sustain existing resources. In order to support the instruction and research core to the campus's mission, continued investment in existing facilities and infrastructure is necessary. High priority investments in infrastructure include conversion of the aging steam infrastructure to hot water to provide building heat, and continued investments in other utility systems, including electrical distribution, domestic, storm and wastewater, and natural gas.

Seismic corrections included in the CFP are based on current estimated need; however, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near time, or adjustments to estimated budgets as the scope for corrective action is refined.

Detailed analysis is currently underway to complete evaluations across campus buildings; however, significant investment needs have also been identified as necessary to bring campus buildings into compliance with the UC Seismic Safety policy. As the campus's building stock continues to age, significant resources are necessary to support ongoing maintenance needs.

### **Challenges**

The largest physical campus in the UC system, UC Davis is located on 5,300 acres with 14 million gross-square-foot of built space and 130 miles of infrastructure. UC Davis operates like a city, with its own wastewater treatment plant, utilities, and central heating and cooling plant. A consequence of this massive and aging plant, UC Davis faces the challenges associated with maintaining older facilities, accommodating academic and research space needs, and infrastructure renewal demands, with limited resources.

The campus undertook a comprehensive study several years ago that identified a substantial deferred maintenance and capital renewal backlog. The campus is completing investments undertaken as part of a multi-year deferred maintenance program utilizing approximately \$100 million of campus resources allocated to address the most urgent deferred maintenance needs, with external financing, along with some State funds. Significant investment beyond this plan is necessary to address capital renewal, estimated at more than \$400 million. The campus is investigating funding sources for this need.

Pursuant to the University of California Seismic Safety Policy, all campus buildings must be evaluated. Detailed evaluations are underway, but the campus estimates that at least \$550 million in investment will be necessary to meet this requirement; this amount far exceeds available campus resources.

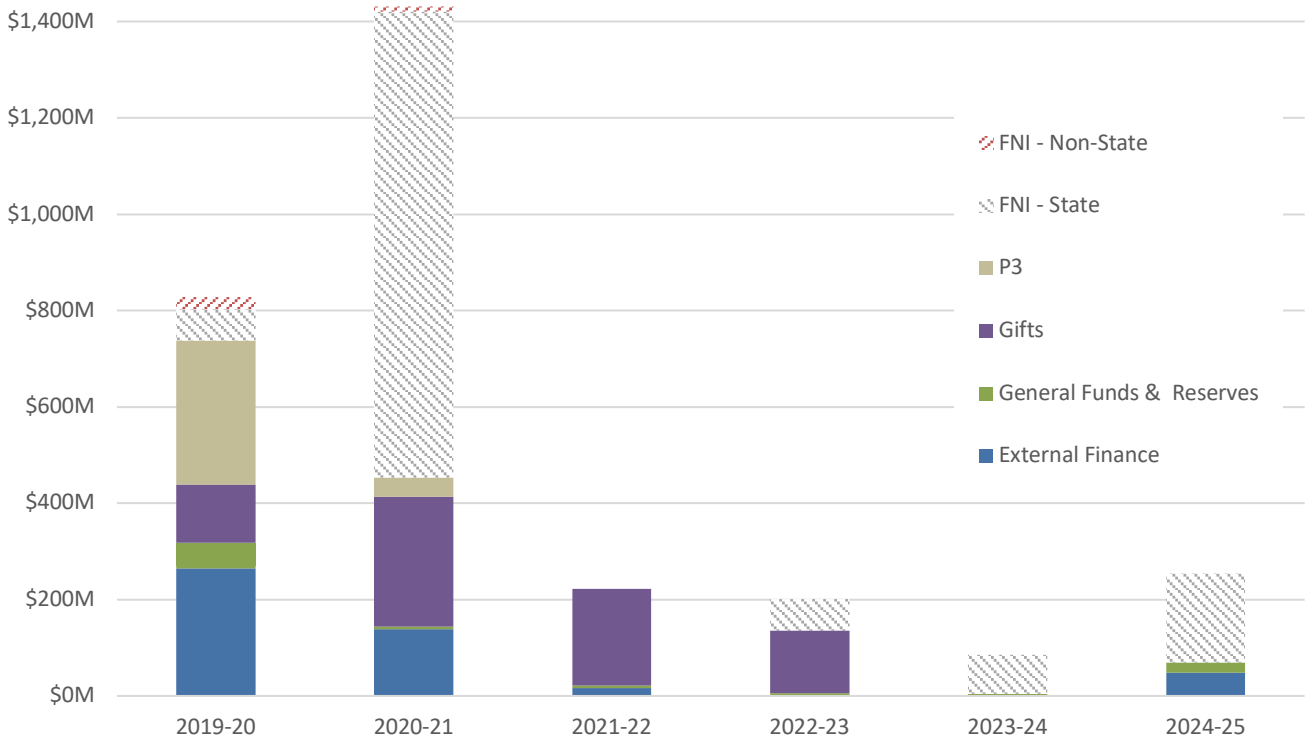
## **Funding**

While the Davis campus's current term of the CFP identifies projects that represent the most pressing need - and many have been in the CFP for years – the campus continues to refine its analysis to capture the total State-supportable need.

Because sufficient State funding is not available, the CFP calls for investment of approximately \$1.1 billion in non-State resources to support the capital needs. UC Davis is investing campus resources in, and anticipates significant donor support for, these projects; however, funding these needs strains the campus's ability to fund daily operations and high priority initiatives and mandates. The remainder of the State-supportable program in the current term has no funding source. These unfunded State-supportable projects represent safety and renovation projects as well as deferred maintenance. Long-term underfunding of State-supportable capital projects cannot be replaced by campus resources.

The campus also relies on gift funds and external financing to improve and create mission-critical instructional and academic facilities. UC Davis began its second comprehensive fundraising campaign on July 1, 2016. Currently in the silent/quiet phase, the campus has begun large scale planning for interdisciplinary initiatives and school/unit priorities. The most ambitious capital project slated for the campaign is the more than \$500 million Veterinary Medical Center vision, which will dramatically change the face of the Health Sciences district of campus. The Colleges of Agricultural and Environmental Sciences, Engineering, Letters & Science, as well as Athletics also have capital goals for this campaign. The generous donors for these projects appreciate opportunities that leverage multiple funding sources, including the State, to maximize programmatic benefit from their gifts.

**Display 2. \$3.0B Capital Need**



**Display 3. Davis Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Chemistry Addition and 1st Floor Renovation	1	•	•	46,921 EF						46,921	100%
Cruess Hall North Renovation	1 2	•	•	2,700 EF						2,700	100%
Engineering Student Design Center	1	•		21,000 GF						21,000	100%
Hot Water Conversion	1 2			55,200 EF						55,200	100%
Infrastructure Improvements	1 2			60,000 EF						60,000	100%
Seismic Corrections	1			10,000 CF						10,000	100%
Laboratory for Energy-related Health Research (LEHR) Remediation	1			15,000 EF						15,000	100%
Aggie Square Parking	3				40,000 P3					40,000	
Aggie Square Phase 1	3				TBD P3					TBD	TBD
Computational and Data Sciences	1				50,000 GF					50,000	100%
Library Renovations	1	•			50,000 GF					50,000	100%



	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
Multi-Disciplinary Research	1				100,000 EF					100,000	100%
Wildlife Teaching Center	1				50,000 GF					50,000	100%
Winery Expansion	1				25,000 GF					25,000	100%
Capital Projects <\$10M	1	•	•	20,000 EF 25,000 CF	20,000 EF					65,000	85%
Deferred Maintenance	1	•		30,000 EF	15,000 EF	15,000 EF				60,000	100%
<b>Total Education:</b>									<b>650,821</b>		
<b>AUXILIARY PROJECTS</b>											
Orchard Park Redevelopment	1 2			300,000 P3						300,000	
Student Athlete Performance Center	1 3			20,000 GF 20,000 EF 12,000 HR						52,000	23%
Equestrian Center	3						30,000 GF			30,000	
Segundo Dining Commons 2	1							26,250 EF 8,750 AR		35,000	
Tercero Student Housing Phase 5	1							21,000 EF 7,000 AR		28,000	
Auxiliary Projects <\$10M	1	•		5,000 AR 2,000 EF	6,000 AR 3,000 EF	6,000 AR 1,000 EF	5,000 AR 1,000 EF	4,000 AR 1,000 EF	5,000 AR 1,000 EF	40,000	
<b>Total Auxiliary:</b>									<b>485,000</b>		
<b>EDUCATION-HEALTH PROJECTS</b>											
Veterinary Medical Center	1 2			13,535 EF 80,000 GF	95,000 GF	200,000 GF	100,000 GF			488,535	100%
<b>Total Education-Health:</b>									<b>488,535</b>		
<b>Campus Projects Total</b>				<b>738,356</b>	<b>454,000</b>	<b>222,000</b>	<b>136,000</b>	<b>5,000</b>	<b>69,000</b>	<b>1,624,356</b>	<b>1,101,566</b>

### Funding Not Identified (FNI)

The campus has a multitude of projects in the current term that do not have a fund source identified at this time. This list of projects, however, does not reflect the full unfunded need for capital investment at UC Davis. There continues to be pressure to improve aging facilities and campus infrastructure, to provide space for new and expanding programs, initiatives and educational demands, and to address life safety deficiencies across the campus. These projects represent a subset of the priority needs for these types of investments; many additional projects remain for which the campus needs to engage in further planning and cost analysis.

Display 4. Davis Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
<b>EDUCATION PROJECTS</b>											
Demolition (Teaching Labs Leverage)	3	•		65,000 SE						65,000	100%
Asmundson Renovations (Seismic and Deferred Maintenance Retrofits)	3	•	•		25,000 SE					25,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
Bainer Hall Renovation (Deferred Maintenance Driven Leverage)	1	•	•		32,000 SE					32,000	100%
Chemistry Renovations (Deferred Maintenance Driven Leverage)	3	•			21,000 SE					21,000	100%
Everson Hall Renovation (Program-Driven Seismic Leverage)	3	•	•		50,000 SE					50,000	100%
Hickey Gym Renovation (Program-Driven Seismic Leverage)	3	•	•		77,000 SE					77,000	100%
Hunt Hall 2nd Floor Renovation (Program-Driven Seismic Leverage)	1	•			20,000 SE					20,000	100%
Kemper Hall Renovations (Seismic and Deferred Maintenance Retrofits)	3	•	•		60,000 SE					60,000	100%
Physics Renovation (Deferred Maintenance Driven Leverage)	1	•			20,000 SE					20,000	100%
Seismic Corrections	1		•		10,000 NSE 360,000 SE					370,000	97%
Social Sciences and Humanities Renovation (Seismic and Deferred Maintenance Retrofits)	3	•	•		30,000 SE					30,000	100%
Sprocket Renovation (Program-Driven Seismic Leverage)	3	•	•		12,000 SE					12,000	100%
Teaching Lab Center (Teaching Labs Leverage)	1				120,000 SE					120,000	100%
Voorhies Renovations (Seismic and Deferred Maintenance Retrofits)	3	•	•		30,000 SE					30,000	100%
Wickson Hall Renovation (Deferred Maintenance Driven Leverage)	3	•			65,000 SE					65,000	100%
Young Hall Renovation (Program-Driven Seismic Leverage)	1	•	•		45,000 SE					45,000	100%
Enology Renovation (Deferred Maintenance Driven Leverage)	1	•	•					20,000 SE		20,000	100%
Infrastructure Improvements	1								135,000 SE	135,000	100%
Research Animal Facility	1								50,000 SE	50,000	100%
Deferred Maintenance						65,000 SE	60,000 SE			125,000	100%
<b>Total Education:</b>										<b>1,372,000</b>	
<b>AUXILIARY PROJECTS</b>											
Transportation Infrastructure Program	1				25,000 NSE					25,000	
<b>Total Auxiliary:</b>										<b>25,000</b>	
<b>Campus Projects Total</b>					<b>90,000</b>	<b>977,000</b>	<b>65,000</b>	<b>80,000</b>	<b>185,000</b>	<b>1,397,000</b>	<b>1,360,900</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year

Projects from \$5 - \$10 million: Buildout of Shelled Space - TLC Kemper C.N. Gorman Museum Relocation    Coffee Center Courtyard Repairs

# 2019-25 UC DAVIS HEALTH CAPITAL NEED

As the Sacramento region's only academic health center, UC Davis Health is improving lives and transforming health by providing exceptional patient care, conducting groundbreaking research, fostering innovative inter-professional education, and creating dynamic research partnerships. UC Davis Health is comprised of the School of Medicine and Betty Irene Moore School of Nursing; a 627-bed (Trauma Level 1) acute care hospital; a National Cancer Institute-designated Cancer Center; a pioneering telehealth program; the Medical Investigation of Neurodevelopmental Disorders (M.I.N.D.) Institute; a Children’s Hospital; and outpatient clinics in communities throughout the Sacramento region. The nearly 1,500 faculty, 900 residents/fellows, 884 students, and 10,500 staff help to serve a population of 6 million people across 33 counties in Northern and Central California.

The main UC Davis Health campus is located on 149 acres in Sacramento, California. The 63 structures on the Sacramento campus constitute nearly 4.7 million gross-square-feet of inpatient and outpatient clinical, teaching, research, and administrative support space. UC Davis Health also has a presence in 55 off-site facilities totaling approximately 1.1 million gross-square-feet throughout the Sacramento region.

The Capital Financial Plan (CFP) presents the UC Davis Health portion of the CFP. The CFP focuses on this year (2019-20) and the next five fiscal years (2020-21 to 2024-25). These six years are named the current term. The UC Davis Health portion of the CFP is supported by \$2.7 billion in capital projects over the current term. Seismic corrections included in the CFP are based on current estimated need; however, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near time, or adjustments to estimated budgets as the scope for corrective action is refined.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Capital Need with Funding	398,500	1,955,000	97,000	97,000	97,000	22,000	2,666,500
Capital Need with Funding Not Identified		54,000					54,000
<b>Total</b>	<b>398,500</b>	<b>2,009,000</b>	<b>97,000</b>	<b>97,000</b>	<b>97,000</b>	<b>22,000</b>	<b>2,720,500</b>

## Priorities

UC Davis Health’s priorities address California seismic mandates, improve inpatient and outpatient space, modernize aging technology and parking infrastructure to support future growth, and consolidate office spaces which are currently in leases which are over market-rate and are anticipated to not meet UC seismic safety standards. UC Davis Health’s priorities also include seeking future opportunities to advance academic, teaching, and research programs by leveraging the University’s strength of being a catalyst for economic change, job creation, and economic vitality in the Sacramento region.

Hospitals in California are subject to seismic safety mandates outlined in Senate Bill 1953 (SB 1953), and compliance with SB 1953 mandates has been an integral component of UC Davis Health’s capital program for the past 20 years. The relocation of remaining hospital administrative and support programs out of the seismically-deficient North/South Wing of the Hospital is expected to occur in 2019 with the completion of the

North Addition Office Building. Meeting key SB 1953 provisions over the next year will mark a major milestone for UC Davis Health.

The seismically-deficient East Wing of the Hospital houses 154 acute care beds along with several hospital-based programs and must be brought into compliance with the provisions of SB 1953 by January 1, 2030. Developing a solution for the East Wing of the Hospital within the context of changes in healthcare led UC Davis Health to embark upon a comprehensive facilities master planning effort in 2015. This effort resulted in the development of a number of plans, including the Clinical Services Master Plan, Research Park Plan (Aggie Square), Utility Master Plan & Sustainability Roadmap, and the Office of the Future (Administrative Space) Master Plan.

With this framework, UC Davis Health is well positioned to proceed with the planning, design, construction, and operation of cost-effective, efficient, and technologically-advanced structures, helping to forge an academic health center that is value-based, affordable, and sustainable. Results from the planning efforts reaffirm the need to: replace the East Wing (with the Hospital Bed Replacement Tower project); expand inpatient and outpatient (Ambulatory Care Center) spaces on the Sacramento campus and in the Northern California Region; address seismic deficiencies related to office leases; and expand utilities, data communications, and parking on the Sacramento campus to accommodate the expansion of acute care, academic, teaching, and research programs.

### **Challenges**

Ensuring continued financial success in today's changing healthcare environment while also addressing changing building and seismic, regulatory mandates is a challenge for UC Davis Health. UC Davis Health is continually reevaluating the prioritization and funding strategy for all capital projects. Seismic safety regulations mandate some projects; while other needs, such as aged facilities and additional space, compete for limited funding.

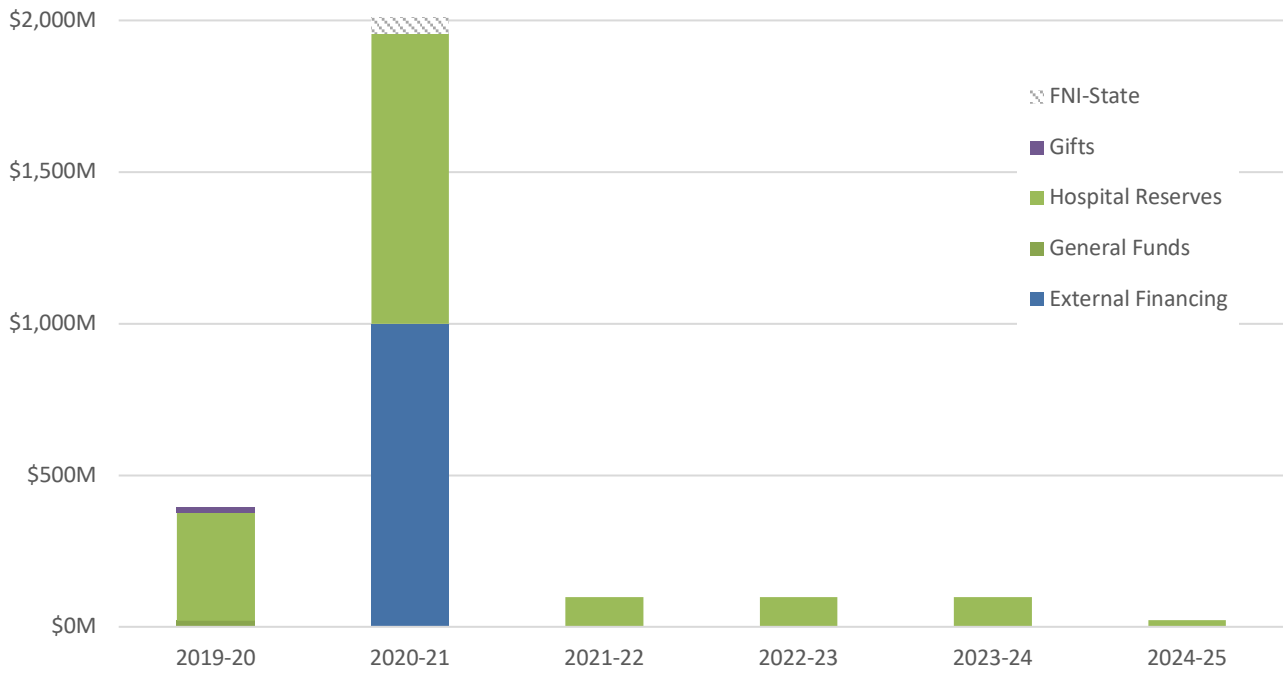
### **Gift Campaign**

While funding for UC Davis Health is primarily from revenue generated from acute care (hospital reserves), UC Davis Health continues to work diligently to identify, cultivate, and solicit prospects and donors to support capital projects. UC Davis Health received a large gift (\$38.5 million) by a single private donor to help pave the way for an Eye Center. UC Davis Health intends to focus on off-campus outpatient clinics to help generate revenue. Finally, UC Davis Health also intends to utilize external financing to support large-scale hospital development.

### **Deferred Maintenance**

UC Davis Health addresses maintenance issues on an as-required basis to ensure continuity of care and safety for patients and care providers. The development of a comprehensive strategic plan to address aging buildings and infrastructure is currently under development.

**Display 2. \$2.7B Capital Need**



**Display 3. UC Davis Health Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Ambulatory Care Center (Ellison) w/ Eye Center Expansion (Sacramento Campus)	1			49,500 HR							87,500
	2			19,000 GF							
				19,000 CF							
Cancer Center Linear Accelerator	1	•		16,000 HR							16,000
Office of the Future	1			60,000 HR							60,000
	2										
Outpatient Clinic with PM&R Development	3			28,000 HR							28,000
UC Davis Health Priority 2	1			12,000 HR							12,000
UC Davis Health Priority 1	1			16,000 HR							16,000
Emergency Department Improvements	3			12,000 HR							12,000
Roseville Clinic Expansion	1			40,000 HR							40,000
Outpatient Regional Strategy I	1			50,000 HR							50,000
Outpatient Regional Strategy	3			25,000 HR							25,000
Call Center Development	3			22,000 HR							22,000
Broadway Building Improvements	3	•			15,000 HR						15,000

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	
				2019-20	2020-21	2021-22	2022-23	2023-24		2024-25
Imaging Technologies Investment (Sacramento Campus)	1			11,000 HR					11,000	
Hospital Bed Replacement Tower (Sacramento Campus)	1	•		1,000,000 EF 500,000 HR					1,500,000	
Emergency Department Expansion	3			20,000 HR					20,000	
Hospital Seismic East Wing Façade (Sacramento Campus)	3	•		11,000 HR					11,000	
Inpatient Regional Strategy	1			155,000 HR					155,000	
Outpatient Regional Strategy II	1			80,000 HR					80,000	
Parking Structure 4 (Sacramento Campus)	1			53,000 HR					53,000	
Pharmacy Improvements	1			13,000 HR					13,000	
Ambulatory Care Center (Ellison) Renovations Phase 1 (Sacramento Campus)	1			75,000 HR					75,000	
Ambulatory Care Center (Ellison) Renovations Phase 2 (Sacramento Campus)	1				75,000 HR				75,000	
Ambulatory Care Center (Ellison) Renovations Phase 3 (Sacramento Campus)	1					75,000 HR			75,000	
Ambulatory Care Center (Ellison) Renovations Phase 4 (Sacramento Campus)	1						75,000 HR		75,000	
Health System Projects \$1M to \$10M	1			30,000 HR	22,000 HR	22,000 HR	22,000 HR	22,000 HR	22,000 HR	140,000
<b>Total</b>				<b>398,500</b>	<b>1,955,000</b>	<b>97,000</b>	<b>97,000</b>	<b>97,000</b>	<b>22,000</b>	<b>2,666,500</b>

### Funding Not Identified (FNI)

UC Davis Health has identified two projects for which it does not have an identified fund source. However, UC Davis Health continues to analyze funding strategies and state bond opportunities to allow for the implementation of these projects.

Display 4. UC Davis Health Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	
				2019-20	2020-21	2021-22	2022-23	2023-24		2024-25
UC Davis Health Pediatric Priority	3			36,000 SE					36,000	
Davis Tower 7 Peds Upgrade	3			18,000 SE					18,000	
<b>Total</b>				<b>54,000</b>					<b>54,000</b>	

#### NOTES

Update Codes: 1 = Budget Update 2 = Scope Update 3 = New Project Blank = no change from prior year







# 2019-25 IRVINE CAMPUS CAPITAL NEED

In just 50 years, the Irvine campus has grown into an internationally distinguished research university, consistently ranking among the nation’s best public institutions and among the top 50 universities overall. UC Irvine is also known as a national leader in sustainability and has been ranked in Sierra Magazine’s top ten “Coolest Schools” in each of the last ten years, and the number one school three times.

In 2016, UC Irvine’s Strategic Plan was updated to coincide with the campus’s 50<sup>th</sup> anniversary, providing a roadmap for achieving continued excellence and social impact while planning for growth and expansion. Key aspects of the Strategic Plan include expanding the faculty by 250 and substantially increasing funded research, particularly in the sciences; expanding the student body and fostering excellence in teaching and learning; increasing community engagement; and becoming a driver for change in the region. The campus is making good progress on these goals: since publication of the Strategic Plan, a little more than half of the 250 new faculty positions have been added; total enrollment has increased by 17%, from 29,887 students in 2015-16 to 34,829 in 2018-19; and the campus received a record \$441 million in research funding in 2018-19—22% more than the previous year. To fully realize the Strategic Plan objectives, additional space to accommodate this recent growth as well as future demand will be required, as will investments in facility renewal and infrastructure.

The Capital Financial Plan (CFP) presents the campus’s capital need, focusing on this year (2019-20) and the next five fiscal years (2020-21 to 2024-25). This plan represents a \$4.5 billion need, of which approximately \$1.8 billion has a funding plan (refer to Display 1). Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found In the Appendix.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	970,589	345,500	282,300	36,600	30,000	203,000	1,867,989	1,028,614
Capital Need with Funding Not Identified	210,700	542,800	760,800	397,700	306,800	470,300	2,689,100	2,410,650
<b>Total</b>	<b>1,181,289</b>	<b>888,300</b>	<b>1,043,100</b>	<b>434,300</b>	<b>336,800</b>	<b>673,300</b>	<b>4,557,089</b>	<b>3,439,264</b>

## Priorities

Capital program priorities support the campus’s strategic goals, the development objectives outlined in the 2007 Long Range Development Plan (LRDP), and the context of the Physical Design Framework. The highest priority for the 2019-25 CFP is to provide the facilities needed to accommodate recent growth; to expand to a three-term average enrollment of 37,000 students, consistent with the LRDP; and to increase faculty and funded research as outlined in the 2016 Strategic Plan. The CFP for the main campus includes 36 projects for which funding has been identified, totaling approximately \$1.8 billion. Of this total, more than 70%—over \$1.3 billion—is for projects that will provide new space, primarily through the construction of new buildings such as the Susan & Henry Samueli College of Health Sciences Building and the Sue & Bill Gross Nursing & Health Sciences Hall. Another \$400 million is earmarked mainly for facility renewal, including replacement of the

deteriorated Biological Sciences greenhouses, as well as renovation and deferred maintenance projects such as the Capital Renewal and Infrastructure Improvements Program, and McGaugh Hall Renovation. Several parking and other infrastructure projects to address existing deficiencies and growth needs complete the program.

The Irvine campus is committed to responsible stewardship of resources and to demonstrating leadership in sustainable development. To date the Irvine campus has constructed 18 LEED™ Platinum and nine LEED™ Gold buildings, making it one of the leading academic institutions in green building. For the projects contained in the 2019-25 CFP, the Irvine campus will prioritize innovative green building practices and low carbon growth in its effort to meet the goals outlined in the President's Carbon Neutrality Initiative.

## Challenges

**Shortage of academic and support space** The campus has a critical shortage of instruction and research space to support current and projected enrollment and faculty research. In many cases, space assignments do not meet the functional needs of a program. Several newer programs, such as the School of Nursing, the Program in Public Health, and the Department of Pharmaceutical Sciences, are housed in space borrowed from other academic units until permanent space can be provided. As noted in the discussion above, the primary focus of the 2019-25 CFP is to address these shortages.

**Deferred maintenance** The campus currently has a backlog of more than \$400 million in State-supportable deferred maintenance needs. In recent years, the campus has instituted the Capital Renewal and Infrastructure Improvement Program to address the most urgent deferred maintenance priorities. The 2019-25 CFP includes funding totaling more than \$75 million for the next phases of this program. In addition, the CFP includes projects with a deferred maintenance component, including building renovation and renewal, and replacement of obsolete buildings.

**Infrastructure renewal** Upgrade and expansion of infrastructure is needed to support current and planned development. Existing systems, such as sewer and storm drains, chilled and high-temperature water, and others, do not have the capacity needed for growth and, in some cases, existing equipment is obsolete, inefficient, and at the point of failure. Some of the most urgent needs will be addressed through the Capital Renewal and Infrastructure Improvement program; however, not all infrastructure requirements are addressed in the CFP due to funding limitations.

**Seismic program** In accordance with UC Seismic Policy requirements, the campus is currently evaluating the seismic safety of its building stock. Initial seismic evaluations have been performed on high-priority buildings, and as a result, 12 projects that would upgrade 36 academic and student support buildings and 40 housing structures have been added to the CFP, pending completion of more detailed studies to confirm what seismic work is required. No fund source has been identified for these projects. Evaluation of the remaining campus buildings is currently underway.

## Funding

The CFP identifies a significant number of capital projects that would be State-supportable and eligible for State General Obligation or Lease Revenue bond funding. Because of limited State funding for capital needs, the Irvine campus has chosen to redirect limited non-State resources to fund a portion of the need.

**Non-State resources funding State-supportable scope** Of the 35 projects included in the CFP with funding identified, 18 are fully State-supportable and another three projects are partially State-supportable. These projects include new academic buildings, completion of shell space in existing buildings, the relocation of Facilities Management and campus services currently located in an area slated for redevelopment, and deferred maintenance projects in State-supportable buildings. In the absence of sufficient State funds, the campus is choosing to implement these projects using a combination of external financing, gifts, and campus funds.

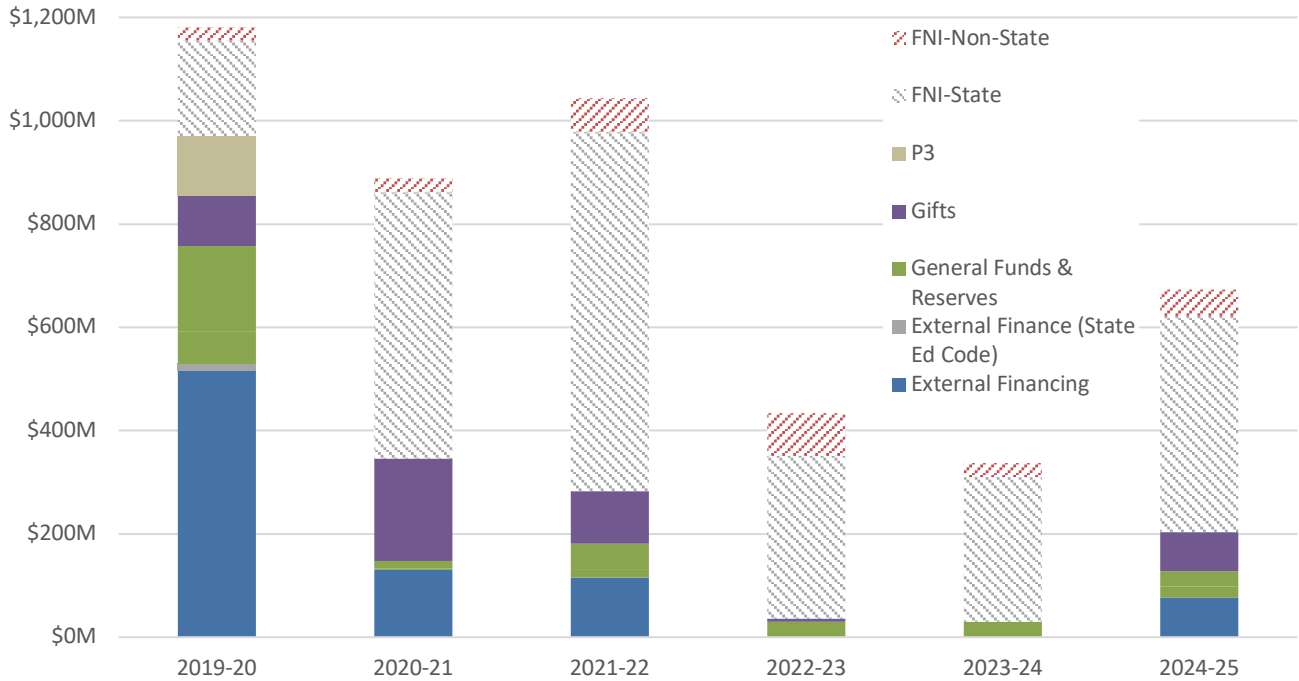
**Gift campaigns** The 2016 Strategic Plan places emphasis on making fundraising a central feature of the planning and leadership culture of the campus. The sharp reduction in State funding in recent years has already resulted in the campus turning more to gift funding for capital projects, and these efforts have been quite successful. The 2019-25 CFP includes projects that are partially funded by some of the largest single gifts in the campus's history: \$30 million for the Gross Nursing & Health Sciences Hall, and \$55 million for the College of Health Sciences Building. A major focus of upcoming fundraising efforts for the main campus will be the proposed Institute and Museum of California Art.

### **Real Estate and Public Private Partnerships**

The Irvine campus has a long history of partnering with third-party entities to advance its strategic goals. Most notably, partnering with a private developer and manager of student housing has allowed the campus to make great strides in meeting its LRDP goal of housing 60% of students on campus. Since 2000, this public private partnership (P3) has added more than 6,400 student beds to the on-campus housing supply, including an additional 1,440 beds that were completed this fall.

The 2019-25 CFP includes the next phase of this partnership: East Campus Apartments Phase 4B will provide approximately 1,000 additional beds and East Campus Apartments Phase 5, included late in the program, could provide up to 2,700 beds. Other P3 projects identified in the CFP include an on-campus hotel, redevelopment of UCI's North Campus, and redevelopment of a faculty/staff rental apartment complex to provide additional faculty for-sale homes in University Hills.

**Display 2. \$4.5B Capital Need**



**Display 3. Irvine Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Biological Sciences Greenhouse Replacement			•	18,100 CF							18,100	100%
Capital Renewal and Infrastructure Improvements Program Phase 5	1		•	15,800 EF							15,800	100%
Facilities Management/Campus Services Relocation	1 2			100,000 EF							100,000	100%
Office Property Acquisition	3			12,200 CF							12,200	100%
Property Acquisition for Corporation Yard	3			20,000 CF							20,000	100%
Student Excellence Center	3			11,000 CF							11,000	100%
Student Success Building				44,606 CF 12,000 GF 13,000 SG							69,606	34%
Campus Office Building	3				100,000 EF						100,000	100%
Engineering Student Innovation Factory	3				30,000 GF 30,000 EF						60,000	100%
Institute & Museum for California Art	1 2				100,000 GF						100,000	100%
McGaugh Hall Renovation			•			21,000 CF 21,000 GF					42,000	100%
NatureScape	3					20,000 GF					20,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
Beall Center Expansion and Renovation		•					6,600 GF			6,600	100%	
Langson Library Expansion		•							75,000 GF	75,000	100%	
Capital Projects \$1M to \$5M (E&G)	1			15,000 CF	15,000 CF	15,000 CF	15,000 CF	15,000 CF	15,000 CF	90,000	100%	
Capital Renewal/Deferred Maintenance	1	•			15,000 CF	15,000 CF	15,000 CF	15,000 CF		60,000	100%	
<b>Total Education:</b>										<b>800,306</b>		
<b>AUXILIARY PROJECTS</b>												
East Campus Apartments Phase 4B				116,000 P3						116,000		
Health Sciences Parking Deck	3			25,000						25,000		
Las Lomas Redevelopment	3			TBD P3						TBD		
Lot 5 Parking Deck				5,300 AR						5,300		
North Campus Mixed-Use Redevelopment				TBD P3						TBD		
Parking Structure 5				63,000 EF						63,000		
Verano Unit 8 Apartments	1 2			215,583 EF 58,000 AR 11,000 CF						284,583		
ARC Field Expansion					2,200 AR 5,800 GF					8,000		
Athletics Facilities Improvements	1 2	•			52,000 GF					52,000		
Shellmaker Island Boathouse Replacement					10,500 GF					10,500		
On-Campus Hotel						TBD P3				TBD		
ARC Expansion Phase 4						60,000 EF				60,000		
Continuing Education 2	1 2	•				55,300 EF 15,000 AR				70,300	16%	
East Campus Apartments Phase 5									TBD P3	TBD		
Student Health Center Replacement	3	•							9,000 AR 57,000 EF	66,000		
Satellite Student Center	1								20,000 EF 12,000 AR	32,000		
<b>Total Auxiliary:</b>										<b>792,683</b>		
<b>EDUCATION-HEALTH PROJECTS</b>												
Buildout of Shell Space - Medical Education Building	1			15,000 CF						15,000	100%	
Buildout of Shell Space - Hewitt Hall				15,000 CF						15,000	100%	
Susan & Henry Samueli College of Health Sciences Building/ Sue & Bill Gross Nursing & Health Sciences Hall	1 2			85,000 GF 96,500 EF 3,500 CF						185,000	100%	
Beckman Laser Expansion and Renovation	1	•				60,000 GF				60,000	80%	
<b>Total Education-Health:</b>										<b>275,000</b>		
<b>Campus Projects Total</b>				<b>970,589</b>	<b>345,500</b>	<b>282,300</b>	<b>36,600</b>	<b>30,000</b>	<b>203,000</b>	<b>1,867,989</b>	<b>1,028,614</b>	

## Funding Not Identified (FNI)

Funding constraints severely impact the campus’s ability to provide the facilities and infrastructure needed to fully realize its Strategic Plan goals. In addition to the projects discussed above, the campus has identified a further \$1.2 billion in needs for which no fund sources have been identified. Of the nearly 50 projects on this list, eight projects are academic buildings needed to continue to accommodate enrollment and faculty growth, an additional 12 projects are seismic upgrades, and the remaining projects are made up of facility renewal and replacement and infrastructure projects.

Display 4. Irvine Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
EDUCATION PROJECTS											
Arts District Improvements	3				10,000 SE					10,000	100%
Central Plant and Utility Distribution Renewal Phase 1	1				15,000 SE					15,000	100%
Engineering Renovations	1 2	•			25,000 SE					25,000	100%
Humanities Hall Seismic Improvements	3	•	•		39,000 SE					39,000	100%
Law Building					222,000 SE					222,000	100%
Non-Recurring Building Needs	3	•			76,000 SE					76,000	100%
Regional Water Quality Improvements	3				10,000 SE					10,000	100%
Sciences Buildings Renovations, Phase 1		•			26,000 SE					26,000	100%
Social Sciences Lecture Hall Seismic Improvements	3	•	•		1,500 SE					1,500	100%
Classroom Renovations	1 2					8,000 SE				8,000	100%
Engineering Tower Seismic Improvements and Renewal	3	•	•			120,000 SE				120,000	100%
Seismic Upgrades to Four Gateway Quad Buildings	3	•	•			10,500 NSE 8,500 SE				19,000	45%
Seismic Upgrades to Three Arts Buildings	3	•	•			9,000 SE				9,000	100%
Social Sciences Buildings Seismic Improvements and Renewal	3	•	•			108,000 SE				108,000	100%
Water Distributions Systems Renewal Phase 1	1					7,500 SE				7,500	100%
Central Plant and Utility Distribution Renewal Phase 2	1						15,000 SE			15,000	100%
Contemporary Arts Center 4th Floor Renovation							7,400 SE			7,400	100%
Fire and Life Safety Improvements Phase 2							26,000 SE			26,000	100%
Integrated Nanosystems Research Facility Renovations	3	•					25,000 SE			25,000	100%
Seismic Upgrades to Five Engineering/Computer Science Structures	3	•	•				98,000 SE			98,000	100%
Seismic Upgrades to Three Athletics Buildings	3	•	•				57,000 NSE			57,000	

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Qureshy Laboratory/Bonney Center Seismic Improvements	3	•	•				10,000 SE			10,000	100%
Interdisciplinary Science & Engineering Building 2								140,000 SE		140,000	100%
Sciences Buildings Renovations, Phase 2		•						42,000 SE		42,000	100%
Sewer Infrastructure Improvements								23,000 SE		23,000	100%
Water Distributions Systems Renewal Phase 2	1							7,500 SE		7,500	100%
Central Plant and Utility Distribution Renewal Phase 3	1								15,000 SE	15,000	100%
Chilled Water System Expansion	1								15,000 SE	15,000	100%
Fire and Life Safety Improvements Phase 3									21,000 SE	21,000	100%
Humanities/Arts Building	2								68,000 SE	68,000	100%
Multipurpose Academic & Admin Bldg 2 (please see Social Sciences Parking Structure Expansion)									42,000 SE	42,000	100%
Social & Behavioral Sciences 2									60,000 SE	60,000	100%
Storm Drain Improvements									23,000 SE	23,000	100%
Transportation Infrastructure Safety Improvements	1								10,000 SE	10,000	100%
Campus Security Improvements	3	•		10,000 SE			10,000 SE		10,000 SE	30,000	100%
Agency-required Environmental and Safety Improvements	3	•		5,000 SE	2,000 SE	2,000 SE	2,000 SE	2,000 SE	2,000 SE	15,000	100%
Capital Projects \$5M to \$10M (E&G)	1			15,000 SE	15,000 SE	15,000 SE	15,000 SE	15,000 SE	15,000 SE	90,000	100%
Capital Renewal/Deferred Maintenance (E&G)	1	•		143,200 SE	44,000 SE	20,000 SE	30,000 SE	31,000 SE	14,000 SE	282,200	100%
Energy-saving Projects	3	•		9,000 SE	9,000 SE	8,000 SE	8,000 SE	8,000 SE	8,000 SE	50,000	100%
Landscape/Hardscape Renewal & Maintenance	3			12,000 SE	11,800 SE	11,800 SE	11,800 SE	11,800 SE	11,800 SE	71,000	100%
<b>Total Education:</b>										<b>1,939,100</b>	
<b>AUXILIARY PROJECTS</b>											
Seismic Upgrades to 40 Housing Structures	3	•	•				28,000 NSE			28,000	
Social Sciences Parking Structure Expansion (please see Multipurpose Academic & Admin Bldg 2)	3								24,000 NSE	24,000	
Capital Projects \$5M to \$10M (AUX)	1			10,000 NSE	10,000 NSE	10,000 NSE	10,000 NSE	10,000 NSE	10,000 NSE	60,000	
Capital Renewal/Deferred Maintenance (AUX)	1	•		16,500 NSE	16,500 NSE	16,500 NSE	16,500 NSE	16,500 NSE	16,500 NSE	99,000	
<b>Total Auxiliary:</b>										<b>211,000</b>	
<b>EDUCATION-HEALTH PROJECTS</b>											
College of Health Sciences Building Unit 2						105,000 SE				105,000	100%
College of Health Sciences Research Building	1 2	•				220,000 SE				220,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Med Sci Renovations		•				53,000 SE				53,000	100%
Seismic Upgrades to Six Health Sciences Buildings	3	•	•				56,000 SE			56,000	100%
College of Health Sciences Research Building 2	3								105,000 SE	105,000	100%
<b>Total Education-Health:</b>										<b>539,000</b>	
<b>Campus Projects Total</b>				<b>210,700</b>	<b>542,800</b>	<b>760,800</b>	<b>397,700</b>	<b>306,800</b>	<b>470,300</b>	<b>2,689,100</b>	<b>2,410,650</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year



# 2019-25 IRVINE HEALTH CAPITAL NEED

UC Irvine Health is comprised of the clinical, medical education, and medical research enterprises of the University of California, Irvine. The School of Medicine is located on the University of California, Irvine campus in the City of Irvine while UC Irvine Medical Center (UCIMC) is located 14 miles north in the City of Orange. UCIMC is a 417-bed acute-care hospital that provides tertiary and quaternary care, ambulatory and specialty medical clinics, and behavioral health and rehabilitation services. UC Irvine Health serves more than 3.5 million people in the greater Orange County region.

The Capital Financial Plan (CFP) presents UC Irvine Health’s capital need for six years. The CFP focuses on this year (2019-20) and the next five fiscal years (2020-21 to 2024-25), the current term. The UCI Health CFP represents \$1.59 billion need, of which \$1.24 billion has a funding plan (refer to Display 1). Seismic corrections included in the CFP are based on current estimated need; however, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Capital Need with Funding	1,109,676	45,300	33,000	16,500	16,500	23,000	1,243,976
Capital Need with Funding Not Identified	10,000	13,000	155,000	10,000	5,000	150,000	343,000
<b>Total</b>	<b>1,119,676</b>	<b>58,300</b>	<b>188,000</b>	<b>26,500</b>	<b>21,500</b>	<b>173,000</b>	<b>1,586,976</b>

## Strategic Goals

UC Irvine Health’s capital priorities are directly aligned with the goals and objectives outlined in the UC Irvine Health strategic plan. The following four goals represent the most prevalent linkages across the capital projects:

- ensure appropriate and adequate access to care,
- be the destination provider for distinctive service lines,
- create a competitive patient-centric ambulatory network, and
- provide unparalleled quality and value to our patients and healthcare purchasers.

## Capital Plan Priorities

Based on current bed demand, inpatient bed capacity exceeds 80% occupancy in all General Acute Care units and increasingly results in delays in securing an inpatient bed. This in turn causes lost admissions and revenue, increased emergency department diversion, and patient and referring physician dissatisfaction. Two projects within the CFP aim to increase inpatient capacity and offer patients expanded access to UC Irvine Health programs and services.

The first is the conversion of certain areas of Douglas Hospital (DH) into additional Medical/Surgical or Telemetry bed units. Currently under construction is the conversion of DH44 into a 16-bed Telemetry unit, with planned

occupancy in 2020. Proposed conversion of two additional areas – DH36 and DH38 – would provide two new 16-bed Med-Surge or Telemetry units. The second project is the Irvine Campus Medical Complex, which would provide a 95 - 110-bed tertiary and quaternary care destination hospital sited on the Irvine Campus. The hospital, planned to open in 2025, will serve as a destination for the local region as well as attract national and international patients to an exceptional healing and care environment that is focused on specialty care.

As part of its strategic plan, UC Irvine Health intends to become a leader in population health management and provide high-value community-based care. UC Irvine Health aims to significantly increase its ambulatory clinical footprint by extending its network of care across the region. In the future, several new sites are anticipated for:

- Outpatient clinics and an ambulatory surgery center on the Irvine campus, as part of the proposed UC Irvine Campus Medical Complex,
- Community-based outpatient clinics, cancer center, and surgery center, and
- Community-based primary and specialty care offices.

Recently completed is a medium-sized community-based ambulatory center located in Yorba Linda. This clinic provides one-stop healthcare services for northeast Orange County residents.

In addition to the off-campus ambulatory sites, the CFP addresses the replacement of aged and inefficient ambulatory clinics on the Orange Campus; however funding has not yet been identified for this effort. A majority of the current Outpatient Clinical and Support buildings are beyond their life expectancy and are planned to be replaced with the future Orange Campus Ambulatory Replacement project, on or proximate to the Orange campus. Replacing these outdated buildings with state-of-the-art medical office facilities aligns with the goal in the strategic plan to provide unparalleled value, quality, and experience to patients.

## **Challenges**

The greatest challenge is addressing requirements with limited resources. Many clinics and support services buildings at the Orange Campus are beyond their life expectancy. At the same time, UC Irvine Health needs to expand its patient care network to provide accessible care in this competitive healthcare environment. Parking is also a challenge. Neighboring properties, due to their own needs, have fewer surplus parking spaces available for the Medical Center to lease for staff. The CFP addresses these challenges.

## **Deferred Maintenance**

Included in the CFP are several deferred maintenance projects such as replacement of aged infrastructure, many building repairs, replacement of elevators and elevator controls, and many others. UC Irvine Health is currently conducting a detailed analysis of its capital assets to establish a comprehensive plan to address, implement, and manage deferred maintenance needs.

## **Real Estate Transactions**

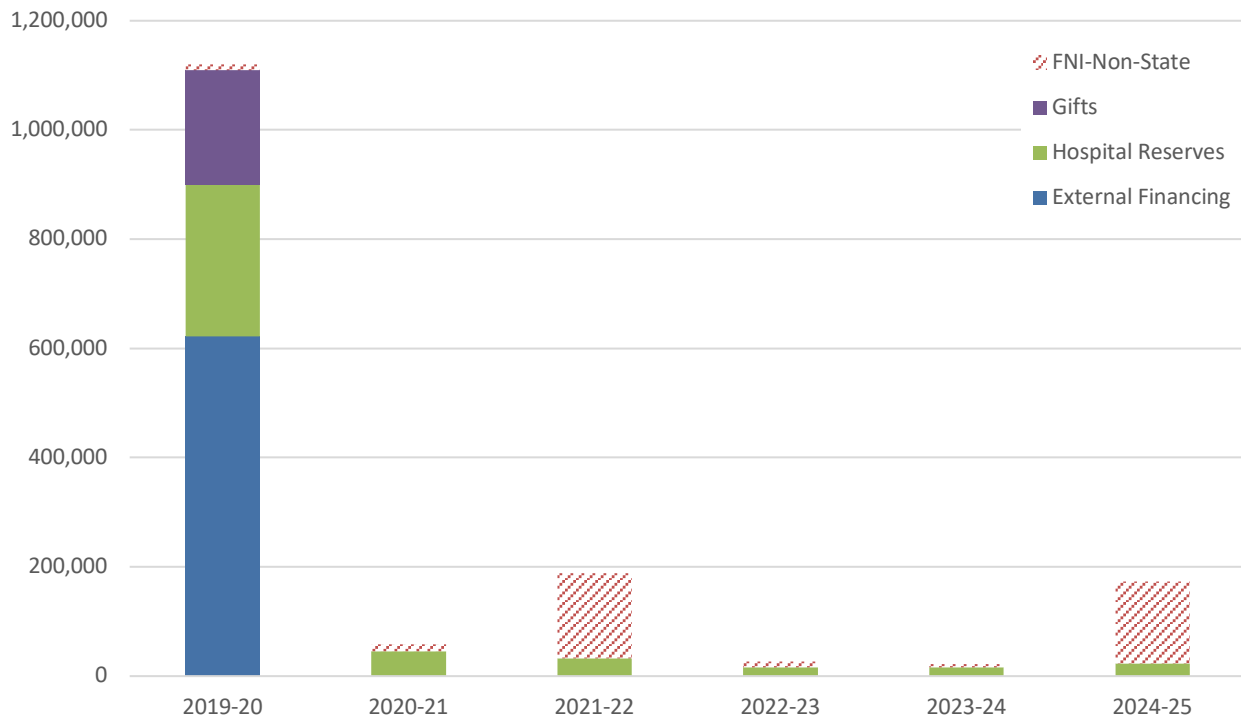
Several projects have public private partnership (P3) potential. Although funding has not yet been identified for the future Orange Campus Ambulatory Replacement, this project is a likely candidate for P3, as it would consolidate clinical services, enhance parking, provide a much more efficient clinical setting, and either mitigate or eliminate a large portion of the deferred maintenance issues.

In addition, lease opportunities for buildings located in strategic areas in the region are being targeted for the continued expansion of UC Irvine Health’s ambulatory footprint.

### Gift Campaigns

A feasibility study needs to be completed for the projects identified with gift campaign allocations. In this analysis, Health Advancement, in conjunction with the Vice Chancellor for University Advancement, will determine feasibility and probability of lead gift donor giving and what portion of the projects can be funded through philanthropy.

Display 2. \$1.6B Capital Need



Display 3. Irvine Health Capital Need with Funding (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
Center for Child Health MOB	3			1,000 HR 72,000 EF 10,000 GF						83,000
Douglas Hospital Inpatient Capacity (DH36 & DH38)	3			40,000 HR						40,000
UC Irvine Campus Medical Complex	1 2			550,000 EF 200,000 GF 200,000 HR						950,000
South County Ambulatory Center	1				5,000 HR					5,000
Ambulatory Center #3 - East Irvine					12,000 HR					12,000

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
Ambulatory Center #4 - Northwest Orange County					12,000 HR					12,000
Ambulatory Center #2 - Northeast Orange County (Multi-Specialty)						20,000 HR				20,000
Capital Projects \$5M to \$10M (MC)	1 3	•		9,500 HR	6,300 HR	3,000 HR	6,500 HR	6,500 HR	13,000 HR	44,800
Capital Projects \$1M to \$5M (MC)	1 3	•		27,176 HR	10,000 HR	10,000 HR	10,000 HR	10,000 HR	10,000 HR	77,176
<b>Total</b>				<b>1,109,676</b>	<b>45,300</b>	<b>33,000</b>	<b>16,500</b>	<b>16,500</b>	<b>23,000</b>	<b>1,243,976</b>

### Funding Not Identified (FNI)

Funding constraints severely impact our ability to provide the facilities and infrastructure needed to fully realize our Strategic Plan goals. In addition to the projects discussed above, UC Irvine Health has identified a further \$343 million in needs for which no fund sources have been identified.

#### Display 4. Irvine Health Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
Building 22A Seismic Upgrades	3	•	•		3,000 NSE					3,000
Orange Office Building	3					82,500 NSE				82,500
Orange Parking Structure	3					62,500 NSE				62,500
SB1953 Non-Structural Seismic Upgrades	3		•						50,000 NSE	50,000
Orange Campus Ambulatory Replacement (Replaces 146,900 gsf of Pavilions)	2	•							100,000 NSE	100,000
Deferred Maintenance	3	•		10,000 NSE	10,000 NSE	10,000 NSE	10,000 NSE	5,000 NSE		45,000
<b>Total</b>				<b>10,000</b>	<b>13,000</b>	<b>155,000</b>	<b>10,000</b>	<b>5,000</b>	<b>150,000</b>	<b>343,000</b>

#### NOTES

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year





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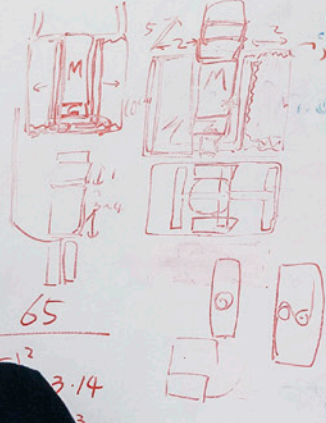
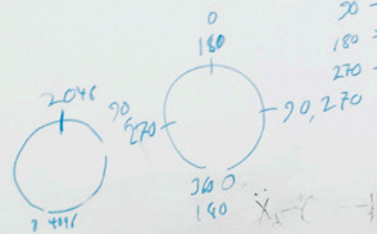
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# 2019-25 LOS ANGELES CAMPUS CAPITAL NEED

UC Los Angeles’s (UCLA) Westwood campus opened its doors in 1929 with a Teacher’s College and the College of Letters and Science occupying the first four permanent campus buildings. Since that time, the campus has continued to expand and evolve into a world-renowned university. Today, with approximately 45,000 undergraduate and graduate students and more than 37,000 faculty and staff, UCLA offers degree programs through the College of Letters and Science, seven general campus professional schools, and four health sciences professional schools. The medical enterprise, consisting of four hospitals and affiliated programs, continues to be a leader in medical education, research, and public service.

The Capital Financial Plan (CFP) focuses on this year (2019-20) and next five fiscal years (2020-21 to 2024-25) and represents projects in the near-term planning horizon. UCLA’s CFP framework guides the campus in prioritizing capital investments in support of its mission, and identifies facilities needs aligned with the 2002 Long Range Development Plan, as amended in January 2018, and the 2009 Physical Design Framework. The Los Angeles CFP is supported by \$4.3 billion over the current term of which approximately \$970 million has a funding plan. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found In the Appendix.

Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)

	Current Term (2019-20 to 2024-25)							State Eligible
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	
Capital Need with Funding	578,200	151,500	42,700	35,100	40,500	122,300	970,300	389,040
Capital Need with Funding Not Identified	410,666	747,666	280,167	655,167	532,667	682,667	3,309,000	2,918,160
<b>Total</b>	<b>988,866</b>	<b>899,166</b>	<b>322,867</b>	<b>690,267</b>	<b>573,167</b>	<b>804,967</b>	<b>4,279,300</b>	<b>3,307,200</b>

## Priorities

**Seismic Program** Since the mid-1980s, the campus has completed seismic corrections to 64 structures totaling nearly 9.8 million gross square feet (gsf), and has work in progress on five structures totaling 435,000 gsf. Since 1990, the campus has used 93% of its State funds designated for capital outlay and considerable campus resources to address this effort. During 2019-20, buildings without current ratings and buildings with newly identified structural deficiencies (including Powell Library and Young Research Library) will be analyzed in accordance with the 2017 amended UC Seismic Safety Policy.

**Deferred Maintenance** There is a need to renew systems in more than 50 buildings that are 25 to 80 years old. UCLA has estimated over \$1 billion in deferred maintenance needs and this figure is anticipated to increase once the University’s Integrated Campus Asset Management Program (ICAMP) has systematically evaluated all buildings on campus. Renewal scope would involve replacement of obsolete building systems, utility

infrastructure and life safety systems; modernization initiatives to improve functionality and space utilization; refurbishment of classrooms; and repairs to campus hardscape and roadways.

**Student Facilities** During the past 30 years, UCLA has evolved from a commuter campus to a residential campus and now accommodates 14,650 students in on-campus housing and over 3,000 in University-owned off-campus housing. Three on-campus housing projects are currently in construction to provide 5,219 beds for undergraduate and graduate students. These additional beds will enable the campus to meet its goal of guaranteed housing to all entering first-year students for four years, to all new transfer students for two years, and to help address graduate student housing demand. These projects will be available for occupancy in 2021-22. The CFP also includes two projects that will provide additional on-campus housing for 1,400 students if needed to meet the goals of the Student Housing Master Plan.

To accommodate the increased student population, the current CFP includes projects to renovate and expand classrooms throughout the campus, and improve and expand recreation facilities in the northwest campus.

### Challenges

**Upgrade Campus Infrastructure** In addition to the deployment of available State Deferred Maintenance funding, UCLA proposes to fund a number of critical upgrades to infrastructure from campus resources. This work includes upgrades to the electrical distribution system, and replacement of obsolete emergency generator equipment serving the Center for Health Sciences. Master planning for upgrading campus sewer, storm water, and other infrastructure is underway and projects will be included in future updates to the CFP.

**Sustainability** The campus will continue to advance sustainability practices and initiatives. UCLA is pursuing LEED™ Gold certification for all new construction and minor refurbishment projects. Of 46 projects that have been granted green building certifications, 15 achieved Platinum, 21 achieved Gold, and 10 achieved the University minimum of Silver. Another 14 projects are registered to receive certification. Other energy conservation programs, transportation, housing, information systems, and waste diversion initiatives are underway.

### Funding

A \$4.2 billion centennial gift campaign has been underway to raise funds for a broad range of programs and campus priorities by 2019, some of which will be dedicated to capital needs. The campus has exceeded that goal by \$800 million. The campaign will continue through December 2019.

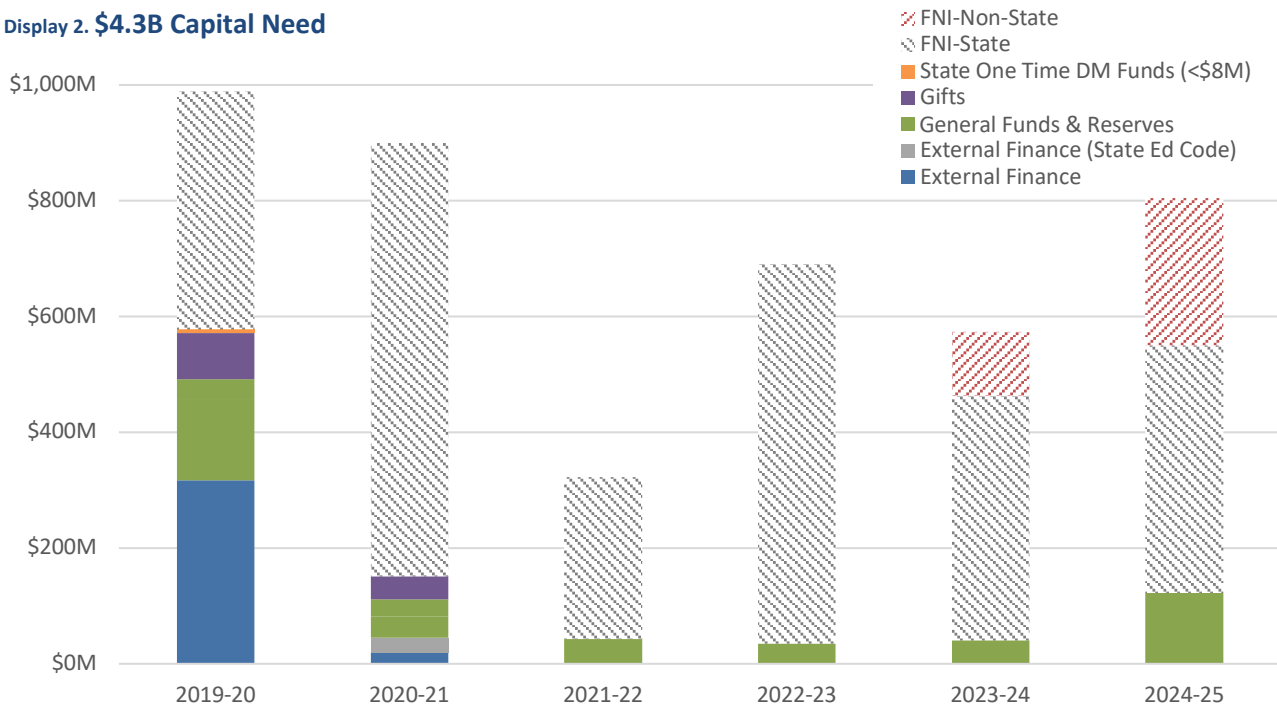
### Real Estate and Public Private Partnerships

The campus evaluates alternative delivery models for capital projects, including their potential as developer-delivered public private partnerships (P3).

As land area on campus is limited, UCLA continues to make strategic acquisitions of properties as they become available. For example, the campus acquired a property on Hilgard Avenue to be developed for faculty housing proximate to campus. The campus also recently purchased the Crest Theater on Westwood Boulevard to create a new off-campus performing arts space. The venue will be renamed the UCLA Nimoy Theater.



**Display 2. \$4.3B Capital Need**



**Display 3. Los Angeles Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
10889 Wilshire Building Improvements				20,000 AR 20,000 EF							40,000	61%
Statewide Energy Partnership (SEP) Program	1			15,800 EF							15,800	100%
Wilshire Center Improvements				20,000 AR 20,000 EF							40,000	55%
Nimoy Theater Seismic Renovation	1		•	19,500 GF							19,500	100%
924 Westwood Building Improvements				20,000 AR 20,000 EF							40,000	34%
Public Affairs Seismic Renovation	1 2		•	4,000 CF 25,000 SG							29,000	100%
Capital Projects \$1M to \$10M - CF	1	•		20,000 CF	20,000 CF						40,000	100%
Capital Renewal Program - Campus	1	•		20,000 EF	20,000 EF						40,000	100%
Capital Renewal Program - Off-Campus Buildings	3	•		5,400 AR	5,800 AR	7,400 AR	2,800 AR	5,200 AR	16,000 AR		42,600	100%
<b>Total Education:</b>											<b>306,900</b>	
<b>EDUCATION-HEALTH PROJECTS</b>												
CHS Emergency Power System Replacement				15,000 EF 7,000 SPG							22,000	92%
CHS Program and Infrastructure Improvements Step 1			•	50,000 EF							50,000	92%
CHS South Tower Post-Occupancy Improvements (Levels 8-10)				30,000 EF							30,000	92%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
Fielding School of Public Health Building Interior Renovation					10,000 CF 40,000 GF						50,000	95%
<b>Total Education-Health:</b>											<b>152,000</b>	
<b>AUXILIARY PROJECTS</b>												
Faculty Center Renovation				10,000 CF 5,000 GF							15,000	
Hilgard Faculty Housing	1 2			16,000 AR 66,000 EF							82,000	
Real Estate Acquisition No. 1				5,000 AR 20,000 EF							25,000	
Real Estate Acquisition No. 2				5,000 AR 20,000 EF							25,000	
Sunset Canyon Recreation Center Renovation and Expansion	1		•	20,000 EF 20,000 GF							40,000	2%
Mo Ostin Academic Center for Student-Athletes				35,000 GF							35,000	
Capital Renewal Program - Housing	3		•	15,000 AR	5,200 AR	11,200 AR	6,500 AR	13,000 AR	43,000 AR		93,900	
Capital Renewal Program - Parking	3		•	4,800 AR	3,000 AR	1,600 AR	3,300 AR	2,300 AR	3,300 AR		18,300	
Capital Projects \$1M to \$10M - AUX				29,700 AR	22,500 AR	22,500 AR	22,500 AR	20,000 AR	60,000 AR		177,200	
<b>Total Auxiliary:</b>											<b>511,400</b>	
<b>Campus Projects Total</b>				<b>578,200</b>	<b>151,500</b>	<b>42,700</b>	<b>35,100</b>	<b>40,500</b>	<b>122,300</b>		<b>970,300</b>	<b>389,040</b>

### Funding Not Identified (FNI)

The projects identified in the below table are those projects for which funding has not been identified. This list of projects, however, does not reflect the full need for capital investment at UCLA, and there remains many projects on the horizon for which more planning and cost analyses are required. There continues to be pressure to improve aging facilities and campus infrastructure, to provide space for expanding programs, and continue to address life safety deficiencies in existing buildings. UCLA continues to evaluate the critical facility needs and to identify appropriate and financially feasible solutions.

Display 4. Los Angeles Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
North Campus Infrastructure Improvements	2			20,000 SE							20,000	100%
Powell Library Seismic Renovation	2		•	100,000 SE							100,000	100%
Young Research Library Seismic Renovation			•	150,000 SE							150,000	100%
Central Plant Expansion	1				70,000 SE						70,000	100%
Law School Addition and Academic Facility					100,000 SE						100,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
Botanical Garden Enhancements	1				20,000 SE				20,000	100%	
North Campus Classroom Facility	1				300,000 SE				300,000	100%	
Seismic Project A	3	•			50,000 SE				50,000	100%	
Seismic Project B	3	•			50,000 SE				50,000	100%	
Lab School Renovations	1 2				20,000 SE	20,000 SE			40,000	100%	
Law School Renovation	3					50,000 SE			50,000	100%	
Seismic Project C	3	•				70,000 SE			70,000	100%	
Life Sciences Building Renovation Phase 2		•					50,000 SE		50,000	100%	
South Campus Academic Facility	1					70,000 SE			70,000	100%	
Fowler Museum Renovation and Addition	1	•						70,000 SE	70,000	100%	
Satellite Wastewater Treatment Facility								25,000 SE	25,000	100%	
Capital Renewal - State Eligible Deferred Maintenance	1 2	•		62,500 SE	62,500 SE	125,000 SE	250,000 SE	312,500 SE	312,500 SE	1,125,000	100%
Statewide Energy Partnership (SEP) Program - FNI	3			15,166 SE	15,166 SE	15,167 SE	15,167 SE	15,167 SE	15,167 SE	91,000	100%
<b>Total Education:</b>									<b>2,451,000</b>		
<b>EDUCATION-HEALTH PROJECTS</b>											
Neuropsychiatric Institute (NPI) Seismic Renovation	3	•		58,000 SE 5,000 NSE					63,000	92%	
CHS Fire Sprinkler Installation	1				55,200 SE 4,800 NSE				60,000	92%	
CHS Program and Infrastructure Improvements, Step 2	1 2	•					184,000 SE 16,000 NSE		200,000	92%	
Psychology - Neuroscience Research Building	1						70,000 SE		70,000	100%	
CHS - Biomedical Library Tower Renovation	1	•						100,000 SE	100,000	100%	
<b>Total Education-Health:</b>									<b>493,000</b>		
<b>AUXILIARY PROJECTS</b>											
Bradley South Residence Hall	1							110,000 NSE	110,000		
Drake Stadium Residence Hall	1							185,000 NSE	185,000		
Student Services / Welcome Center								70,000 NSE	70,000		
<b>Total Auxiliary:</b>											
<b>Campus Projects Total</b>				<b>410,666</b>	<b>747,666</b>	<b>280,167</b>	<b>655,167</b>	<b>532,667</b>	<b>682,667</b>	<b>3,309,000</b>	<b>2,918,160</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year

# 2019-25 LOS ANGELES HEALTH CAPITAL NEED

As one of the premier providers of modern medicine to the Los Angeles area and the nation, UCLA is home to leading medical facilities and world-renowned physicians.

At UCLA, the Ronald Reagan UCLA Medical Center is consistently ranked among the top ten hospitals in the nation. The UCLA Mattel Children's Hospital sets a global standard for pediatric care — offering procedures, technology, and advances that bring in children from all over the country. UCLA's Resnick Neuropsychiatric Hospital, featuring the most advanced medical technology in the world, is among the leading centers for patient care and education in mental health.

The Capital Financial Plan (CFP) presents the campus’s capital need. The CFP focuses on this year (2019-20) and next five fiscal years (2020-21 to 2024-25) and represents projects in the near-term planning horizon (refer to Display 1). These six years are named the current term. UCLA Health, comprised of the Hospital system, Faculty Practice Group, and David Geffen School of Medicine, operates four hospitals and hospital outpatient clinics in nearly 2.5 million square feet of owned space. In addition, UCLA Health is responsible for managing and maintaining an additional 1.8 million square feet of leased freestanding ambulatory offices and clinics. Accordingly, UCLA Health’s capital needs are significant, with constant demand for capital facility renovations and equipment upgrades and replacements. The Los Angeles Health System CFP includes approximately \$1.9 billion of projects in the current term.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Capital Need with Funding	409,000	552,000	274,500	236,500	236,500	236,500	1,945,000

## Priorities

UCLA Health prioritizes its capital funding within three strategic priority areas: 1) alleviating clinical care capacity constraints; 2) maintaining aging physical facilities; and 3) investing in state-of-the-art infrastructure and equipment upgrades.

**Capacity Constraints** UCLA Health’s inpatient volume has experienced significant growth since the opening of the Ronald Reagan UCLA Medical Center in 2008. The current aggregate occupancy of the four hospitals (inclusive of Mattel’s Children Hospital) is 93%, well above the standard optimal occupancy of 85% to cost-effectively operate a hospital facility. To alleviate this inpatient care capacity constraint, preliminary planning was begun on a Westwood Patient Tower Addition project. This project would potentially add 52 pediatric beds and 116 adult beds, with ancillary services such as laboratory, radiology, and pharmacy.

After initial consideration and assessment of the costs and complexity of the project, this plan has been put on hold. UCLA Health will explore partnerships and physician service agreements with other hospitals and health systems in the area to manage the capacity issues. In this model, patients would be assigned to hospitals based on their level of acuity and/or geographic location. UCLA Health physicians would provide all care, irrespective of location, along with UCLA Health quality and safety standards. If successful, this approach would obviate the need for a costly capital construction project. If unsuccessful, the tower addition will be revisited.

Alleviating ambulatory clinical space constraints remains a constant issue as well. A proposed project to build a new Santa Monica medical office building would help the UCLA Health System address near-term capacity needs for clinic space near the Santa Monica campus.

**Aging Physical Facilities** In spite of the addition of the relatively new hospital replacement facilities at Westwood and Santa Monica, UCLA Health maintains and operates some older facilities that require building renovation and infrastructure investment. Renovation of the Merle Norman Pavilion on the Santa Monica campus and improvements to the clinical space on the basement levels of the South Tower in the Center for the Health Sciences are representative of these types of capital projects.

**Infrastructure/Equipment Upgrades** The Campus Co-generation Plant has been the primary source for electricity, steam, and chilled water to the Ronald Reagan UCLA Medical Center. The increasing power demands being placed on the plant as a result of a robust campus building program has required UCLA Health to consider development of a separate utility building. Discussions and planning with the campus are underway to assess options.

Technological advances in conjunction with equipment/infrastructure that exceeds its useful life requires UCLA Health to continuously make capital investments in state-of-the-art medical equipment and infrastructure technology to maintain and improve patient safety, improve clinical outcomes, and/or improve cost efficiency. Accordingly, a significant amount of capital funds are projected for this purpose over the next decade.

## Challenges

Common among many academic medical centers, UCLA Health is challenged with balancing and prioritizing the financial outlays for projects that fall within the three strategic priority areas referenced above. Also, timing of capital outlays may be problematic as planned project implementation and capital expenditures may not, for various reasons, coincide with early budget estimates. Finally, unbudgeted capital spending (e.g., repairs for flooding, seismic events, and other unforeseen needs) require flexibility in capital investment planning.

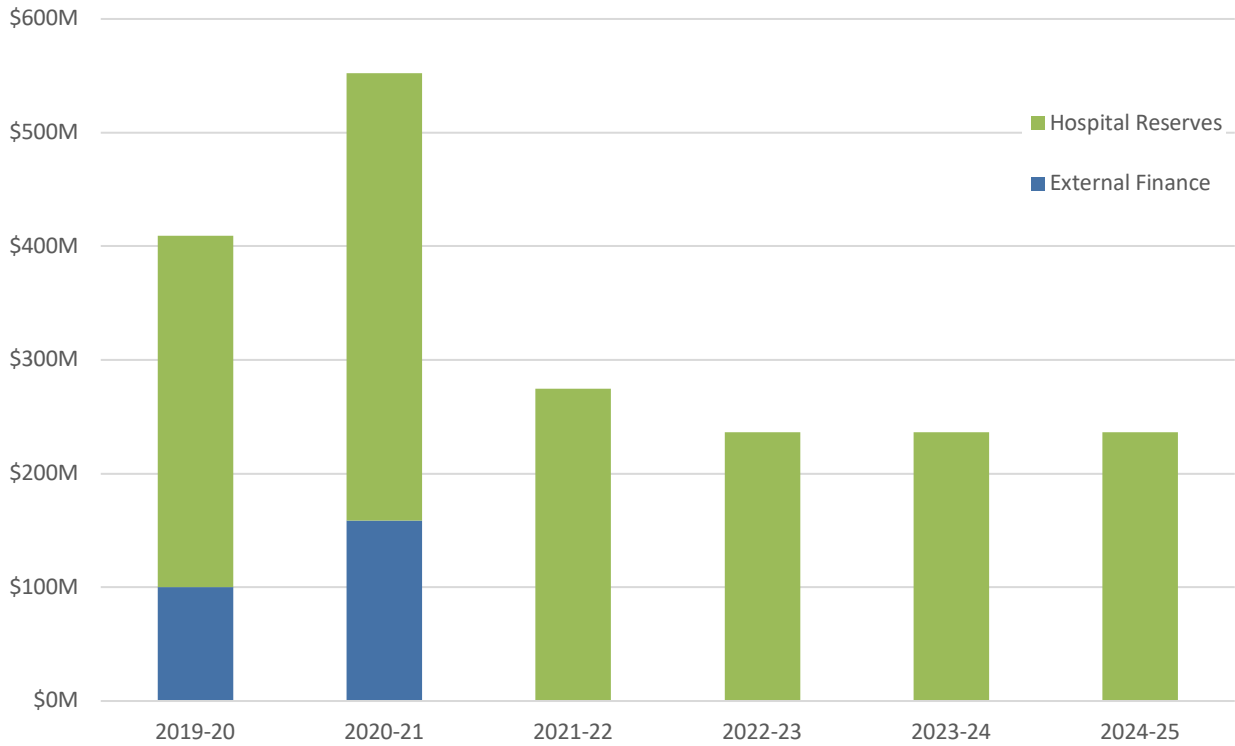
## Funding

UCLA Health depends on gift campaigns to partially fund major projects, as was the case with the construction of the Ronald Reagan UCLA Medical Center. Anticipated new revenue, resulting from new facilities, plus judicious use of reserves can also contribute to funding and debt service.

## Real Estate Transactions

UCLA Health continually evaluates properties that come on the market for strategic acquisition opportunities.

**Display 2. \$1.9B Capital Need**



**Display 3. Los Angeles Health Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	
				2019-20	2020-21	2021-22	2022-23	2023-24		2024-25
Medical Plaza 100 Suite 700 Liver Clinic				12,000 HR						12,000
RRUMC Utility Building Central Plant	1			100,000 EF						100,000
CHS South Tower Post- Occupancy Improvements (Levels A&B)	1			70,000 HR						70,000
SMH Merle Norman Pavilion Renovation				70,000 HR						70,000
Santa Monica Hospital Medical Office Building Acquisition #1				89,000 EF						89,000
Santa Monica Hospital Medical Office Building New Admin/Clinic Building	1			70,000 EF						70,000
Medical Center Real Estate Acquisition #2						30,000 HR				30,000
Capital Renewal	1			50,000 HR	25,000 HR	25,000 HR	25,000 HR	25,000 HR	25,000 HR	175,000
Capital Projects \$1M to \$10M - Health System	1	•		15,000 HR	15,000 HR	15,000 HR	15,000 HR	15,000 HR	15,000 HR	90,000
Capital Projects \$1M to \$10M - 26585 Agoura Road	1			14,000 HR	13,000 HR	4,500 HR	4,500 HR	4,500 HR	4,500 HR	45,000
Capital Projects \$1M to \$10M - Medical Plaza 200	1			20,000 HR	12,000 HR	12,000 HR	12,000 HR	12,000 HR	12,000 HR	80,000
Capital Projects \$1M to \$10M - Santa Monica Hospital	1	•		10,000 HR	10,000 HR	10,000 HR	10,000 HR	10,000 HR	10,000 HR	60,000

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	
				2019-20	2020-21	2021-22	2022-23	2023-24		2024-25
Capital Projects \$1M to \$10M - Reagan Hospital	3	•		20,000 HR	20,000 HR	20,000 HR	20,000 HR	20,000 HR	20,000 HR	120,000
Capital Projects \$1M to \$10M - Medical Plaza 100	3			8,000 HR	8,000 HR	8,000 HR				24,000
Annual Capital Equipment Replacement	1	•		160,000 HR	150,000 HR	150,000 HR	150,000 HR	150,000 HR	150,000 HR	910,000
<b>Health Projects Total</b>				<b>409,000</b>	<b>552,000</b>	<b>274,500</b>	<b>236,500</b>	<b>236,500</b>	<b>236,500</b>	<b>1,945,000</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year





## 2019-25 MERCED CAMPUS CAPITAL NEED

UC Merced (UCM), the newest of the UC Campuses was recently ranked fourth among research universities 50 years or younger. Since opening in September 2005, UCM has grown to offer 24 undergraduate majors, 25 undergraduate minors, and 17 graduate programs. For the 2019-2020 academic year, UCM will enroll over 8,000 undergraduate students, over 64% of them Pell eligible and 73% first generation college students. UCM is proud to be a major center of advanced research, a model of sustainable design and construction, and a stimulus to economic growth and diversification in the Central Valley region.

The campus has been established as a model of physical sustainability for the 21<sup>st</sup> century, inviting all members of the campus and surrounding community to think and act as good stewards of the environment that they will convey to future generations. UC Merced will open a center of excellence in the Sustainability Sciences with the activation of the new Sustainability Research and Engineering building in fall 2019. This center of excellence will draw from academic and research expertise in virtually every discipline in the School of Engineering, School of Natural Sciences, and School of Social Sciences, Humanities, and Arts finding its center of gravity in the new research laboratory facility completed as a part of the second delivery of the 2020 Project.

The Capital Financial Plan (CFP) presents the campus’s capital plans for the next six years. The CFP focuses on the current fiscal year (2019-2020) and the next five fiscal years (2019-2020 through 2024-2025) and represents critical capital, capital renewal, and environmental projects in the near term planning horizon. The UCM CFP includes capital projects that total \$593 million of which \$39 million has an identified funding plan. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found In the Appendix.

Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)

	Current Term (2019-20 to 2024-25)						Total	State Eligible
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Capital Need with Funding	4,552	175	5,000	5,000	5,000	20,000	39,727	
Capital Need with Funding Not Identified	55,736	426,400	25,934	26,539	15,682	2,726	553,017	527,412
<b>Total</b>	<b>60,288</b>	<b>426,575</b>	<b>30,934</b>	<b>31,539</b>	<b>20,682</b>	<b>22,726</b>	<b>592,744</b>	<b>527,412</b>

### Priorities

In July 2016, the Regents approved the 2020 Project, which consisted of the simultaneous development of 1.2 million gross square feet (790,000 assignable-square-feet) of academic, research, student residence, and student life facilities, as well as infrastructure, roadways and parking by a single development team. The 2020 Project represents a major financial commitment to fulfill the mission established for the University of California, Merced, and is on schedule to complete in summer 2020. Upon completion of 2020 Project, UCM will be able to accommodate enrollment growth to 10,000 students in alignment with the 2009 Long Range Development Plan.

While remaining fully focused on the completion, delivery, and activation of the third, and final, phase of the 2020 Project, UCM must also turn its attention to meeting the needs of the campus as enrollment grows beyond 10,000 students and research and academic programs grow and shift. Priorities fall into six categories:

- Backfill projects formulated to optimize the use of facilities vacated by occupancy of the 2020 buildings,
- Identification of facilities gaps not addressed by the 2020 Project,
- Infrastructure requirements triggered by enrollments greater than 10,000 students,
- IT and AV infrastructure renewal programs,
- Deferred maintenance requirements in the original UCM buildings, and
- Facilities necessary to support and enable new academic programs.

**“Backfill Project” Space Strategy on Existing Campus** The campus has identified and begun to develop a number of “backfill” projects to strategically renovate and use existing space vacated by the occupation of the new 2020 buildings. The overarching goals of the “backfill” projects are to co-locate the faculty in the same department or research group to facilitate interdisciplinary and collaborative research, to locate departments in a manner that accommodates growth, and to develop strategic centers of research and teaching excellence to support an increase in research grants and philanthropy. Completion of these projects is critical to UCM’s ability to continue to recruit faculty and provide instruction to a growing student enrollment.

**Facilities Gaps Not Addressed by the 2020 Project** As a result of a comprehensive space planning process and new program opportunities, several facilities have been identified as missing from the space inventory and are deemed critical to the ongoing growth of the academic program. In particular, health and behavioral sciences facilities have been identified as a top priority. This new space would also allow for the growth of Psychology and Public Health departments and enable UCM to participate in the UCSF/UCM medical education and health sciences initiatives that are on the horizon.

UCM has proposed the Health and Behavioral Sciences building for consideration of future State funding should it become available. UCM has additionally undertaken a preliminary assessment of the financial implications of developing this building as a public private partnership using an availability payment-funding model. See section on Real Estate and Public Private Partnerships for further information on this funding approach.

**Infrastructure Requirements Triggered by Increased Enrollment** As UC Merced approaches the enrollment threshold of 10,000 students, both the urban services and the transportation agreements will require attention. The campus will be required to fund future transportation improvements including a study to widen the primary road to the UC Merced campus and there will likely be some costs associated with campus growth after 2020. Additionally, the 10,000-student threshold will trigger a requirement for the University to re-negotiate the urban services agreement for sewer and water services with the City of Merced. These discussions will begin during the 2019-2020 fiscal year although it is not yet clear what impact the negotiations will have on the campus.

**IT and AV Renewal Programs** In 2014, UC Merced launched the Next Generation Network (NGN) project and an infrastructure modernization strategy. The NGN projects commenced a complete redesign of the campus network, as it was not originally designed to meet growing campus needs for big data research, mobile, wireless computing, and the growing demand for bandwidth by end users carrying on average 2.5 devices per person.

UCM is seeking approximately \$12 million over the current term to keep its network and on premise infrastructure healthy and able to meet current standards and increase end user productivity.

Additionally, approximately 50% of UCM academic and non-academic spaces lack digital connectivity and in 40% of the same spaces, the audiovisual equipment is over a decade old. Not only have these spaces reached their “end of life” refresh windows, they contain equipment with analog connectivity that is no longer compatible with most end user (faculty) computing devices. For UCM to maintain effective learning environments that engage students and faculty, the audiovisual instructional technologies must be continually renewed and maintained. UCM has identified a need of approximately \$16 million over the current term to renew its audiovisual technology base and to implement a regular renewal cycle.

**Deferred Maintenance in Existing Buildings** UCM’s existing (non-Project 2020) buildings are now ten to fifteen years old, and several are in need of repairs and building systems replacements. The UCM expects that the results of the building condition assessments to be completed in 2019 as a part of the ICAMP Project will identify outstanding deferred maintenance needs. The campus estimates that \$20 million will be needed over the current term to address the deferred maintenance needs.

From this information, UC Merced expects to develop a strategic plan for the use of the Fresno Center, which is in need of significant repairs inside and outside of the facility. It is likely that the Fresno Center will also provide facilities for new academic programs. While discussions of specific programming are ongoing, with an investment in deferred maintenance, classroom technology, and modest renovations, the Fresno Center could provide a center of gravity in the Fresno area for UC Merced and UC/UCSF for health and medical education initiatives.

**Facilities to Support & Enable New Academic Programs** The campus has been offered an opportunity to raise matching funds (California Proposition 68) to partially fund a Merced Vernal Pool and Grassland Reserves Field Station. The primary goal of the field station project is to better serve the needs of the UC Merced and Merced communities, including faculty, students (graduate, undergraduate, and K-12), and the public. UCM envisions a facility that would provide active learning spaces to facilitate student learning, lab space to support faculty and student research needs, conference rooms and facility space to support discussions and events, and administrative support space.

## Challenges

UCM faces continued growth in enrollment and pressure to mount new academic programs with little access to a higher prospect donor community or other external funding mechanisms. The institution continues to be conservative with its reserves while also being creative in its exploration of possible solutions to the funding shortfalls. Over the current term, UCM will encounter serious constraints to its ability to hire and retain new faculty or offer new programs without the new Health and Behavioral Sciences building or completion of the highest priority backfill projects. In the three most popular undergraduate majors, UCM is operating with student faculty ratios already in excess of two times the UC average. Research and instructional space to support these oversubscribed programs and to enable the University to offer new programs is critical to UCM’s continued growth and ability to deliver on its mission for the state of California.

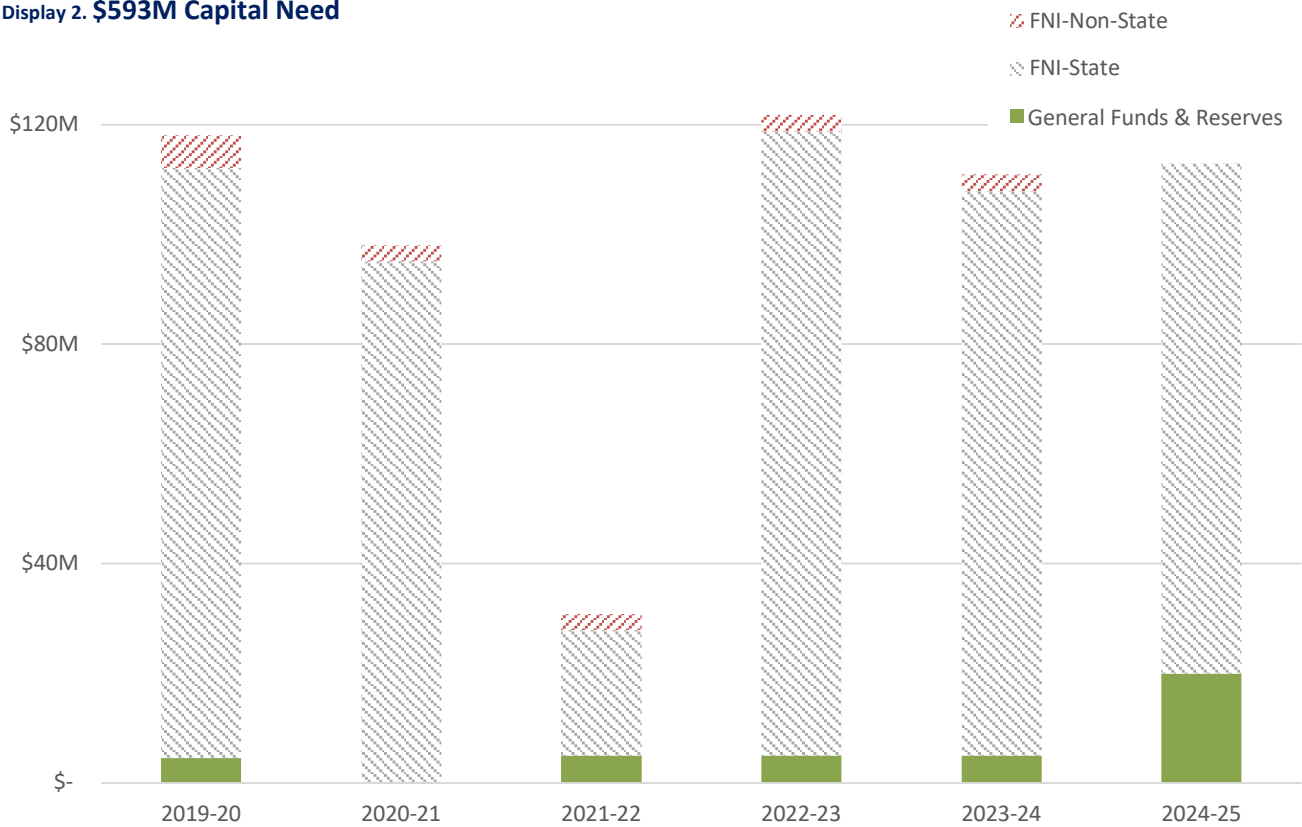
## Funding

The campus's total capital need is approximately \$593 million. The majority of the need (\$553 million) is for projects that do not have an identified funding source, but the campus continues to explore partnerships and opportunities for future State funding in order to advance these priorities.

## Real Estate and Public Private Partnerships

The Merced 2020 Project was structured as a type of public private partnership in which a single private development team designs, builds, operates and maintains major building systems and partially finances the entire project under a single contract. UC Merced is considering a similar delivery model for the needed Health and Behavioral Sciences building. A complete financial feasibility study, detailed programming, and an updated cost estimate for the project would need to be completed before reaching a recommendation, and will be studied in 2019-2020.

Display 2. \$593M Capital Need



**Display 3. Merced Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total		
				<b>EDUCATION PROJECTS</b>								
Federal Environmental Mitigation				4,552 CF	175 CF						4,727	
Capital Projects \$1M to \$5M (E&G)						5,000 CF	5,000 CF	5,000 CF	20,000 CF		35,000	
<b>Total Education:</b>											<b>39,727</b>	
<b>Campus Projects Total</b>				<b>4,552</b>	<b>175</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>20,000</b>		<b>39,727</b>	

**Funding Not Identified (FNI)**

Funding constraints impact the campus’s ability to provide renewal of existing facilities and infrastructure. In addition to the projects discussed above, the campus has identified a further \$386 million in needs for which no fund sources have been identified.

**Display 4. Merced Campus Capital Need with Funding Not Identified (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total		
				<b>EDUCATION PROJECTS</b>								
Audio/Visual Renewal Program				6,052 SE 1,328 NSE	1,575 SE	2,727 SE	1,980 SE 2,790 NSE				16,452	75%
Merced Grassland & Vernal Pools Field Station				2,356 SE	2,356 SE	2,356 SE 144 NSE					7,212	98%
Capital Projects \$1M to \$5M (E&G)				10,000 SE	5,000 SE						15,000	100%
Energy Program					475 SE	1,300 SE	400 SE	300 SE	100 SE		2,575	100%
Network Infrastructure Modernization & Replacement Program					422 SE	112 SE	5,329 SE 84 NSE	1,637 SE 1,745 NSE	1,051 SE 1,575 NSE		11,955	72%
Backfill Program				12,000 SE	18,213 SE	7,295 SE	3,956 SE				41,464	100%
Capital Renewal Projects \$1M to \$5M (E&G)				18,000 SE 6,000 NSE	9,000 SE 3,000 NSE	9,000 SE 3,000 NSE	9,000 SE 3,000 NSE	9,000 SE 3,000 NSE			72,000	75%
<b>Total Education:</b>											<b>166,658</b>	
<b>EDUCATION-HEALTH PROJECTS</b>												
Health & Behavioral Sciences Building					386,359 SE						386,359	100%
<b>Total Education-Health:</b>											<b>386,359</b>	
<b>Campus Projects Total</b>				<b>55,736</b>	<b>426,400</b>	<b>25,934</b>	<b>26,539</b>	<b>15,682</b>	<b>2,726</b>		<b>553,017</b>	<b>527,412</b>

**NOTES**

Update Codes: 1 = Budget Update 2 = Scope Update 3 = New Project Blank = no change from prior year

Projects from \$5 - \$10 million:  
 Backfill Program: Classroom Office Building  
 Backfill Program: Kolligian Library  
 Backfill Program: Science & Engineering I  
 Backfill Program: Science & Engineering II  
 Backfill Program: Social Science & Mgmt Bldg



## 2019-25 RIVERSIDE CAMPUS CAPITAL NEED

UC Riverside (UCR) takes pride in advancing and communicating knowledge through research and creative activity; developing and inspiring tomorrow’s leaders; and transforming communities. UCR offers over 100 undergraduate degree programs, 61 master’s degree programs, and 47 Ph.D. programs. With over 24,000 students in fall 2019, the student body is among the most diverse in the nation. Nearly 60% of UCR undergraduate students are the first in their families to pursue college degrees.

UCR 2020: The Path to Preeminence strategic plan (UCR 2020) describes how UC Riverside is transforming itself to become a national model for academic excellence, student access, diversity, inclusion, and community. UCR 2020 continues to serve as the framework and impetus for UCR’s improvements associated with capital program development by enhancing operational efficiencies, redefining and improving space utilization, and diversifying financing and development activities. With the 2020 horizon quickly approaching, the campus wide effort to produce an updated strategic was launched in spring 2019 and is expected to conclude in 2021.

Between 2000 and 2018, UCR’s undergraduate population grew by 80%, although the growth in state supported instructional and research space was only a fraction of this level. In support of the goals of the UCR 2020, the campus capital plan prioritizes building and renovating classrooms, improving and expanding research space, and developing new living-learning communities on campus. The 2016 Physical Master Plan Study provides a vision for the physical environment of the campus that meaningfully responds to its goals for future growth to up to 30,000 students within the planning horizon of 2015 to 2025. A new UCR Long Range Development Plan effort is underway which will broadly define the direction of campus physical growth through 2035 and is expected to recommend an enrollment of 35,000 students. UCR has the ability to grow its enrollment to meet the needs of the University and the State, if operational and capital resources are available as the campus has sufficient land and a supportive community.

The Capital Financial Plan (CFP) presents the campus’s capital need to support the strategic goals outlined by the planning framework described above, focusing on the current year (2019-20) and the next five fiscal years (2020-21 to 2024-25). The Riverside CFP represents a \$2.6 billion need over this period of which approximately \$605 million has a funding plan. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found In the Appendix.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	97,475	118,500	73,500	49,900	20,500	245,500	605,375	193,000
Capital Need with Funding Not Identified	40,000	565,200	321,000	377,000	209,500	439,500	1,952,200	1,861,500
<b>Total</b>	<b>137,475</b>	<b>683,700</b>	<b>394,500</b>	<b>426,900</b>	<b>230,000</b>	<b>685,000</b>	<b>2,557,575</b>	<b>2,054,500</b>

## Priorities

In support of UCR 2020, the campus has identified strategic areas for improving quality and quantity of instructional and research space. In order to keep pace with continued enrollment growth, new patterns of student matriculation, and evolving approaches to pedagogy, the campus has prioritized the creation of high-quality, flexible instructional space through both renovation and new construction. In addition, UCR continues to actively pursue strategies to optimize the effective use of existing facilities, including comprehensive integration of the campus seismic, deferred maintenance, and capital renewal programs with the capital improvement program. The campus is proposing a CFP that will improve existing research and teaching facilities, accommodate increased undergraduate enrollment, and modernize campus infrastructure systems. Projects that improve quality and supply of instructional and research space include Undergraduate Class Lab/Studio and Teaching Facility, Business School buildings, School of Medicine Education Building and Engineering Building Unit 3. A slate of infrastructure and utility projects, such as the West Campus Infrastructure project, Campus Electrical Upgrades, and a series of seismic projects are planned to ensure that critical campus systems can continue to support the campus into the foreseeable future. These projects support the campus's goals of improving access to higher education, promoting innovation in research, and supporting sustainable development.

## Challenges

Approximately 60% of total campus space is 40 years old or older, much of it still operating with originally-installed building systems from when the campus opened in 1954 and with additions to space in the 1960's. Addressing obsolete or inadequate facilities and building systems is integral to UCR's CFP. Long-term underfunding of basic maintenance has constrained the campus's renewal efforts and exacerbated a backlog of deficiencies for both State- and non-State-supportable facilities. Several projects are proposed to improve building systems and extend the useful life of these structures. In addition, campus infrastructure systems, for example the central plant (to include focus on the UC carbon neutrality goal), electrical power distribution network, and chilled and hot water distribution network, are in need of comprehensive assessment and renewal to ensure operational stability, capacity for future growth, and compatibility with UC sustainability goals.

## Funding

Given the scarcity of State funding there is an increasing need to redirect non-State resources to capital needs at the expense of campus programs and operations, the new Multidisciplinary Research Building research facility being a prime example. The campus continues to focus on developing new strategies that will utilize public private partnership (P3) development and increase gifts/fundraising over time. The campus also continues to plan to use limited Century Bond financing to fund deferred maintenance, capital renewal, and other critical needs. The majority of the State-supportable program has no funding source. These unfunded State-supportable projects include infrastructure, campus support, and instruction and research improvements.

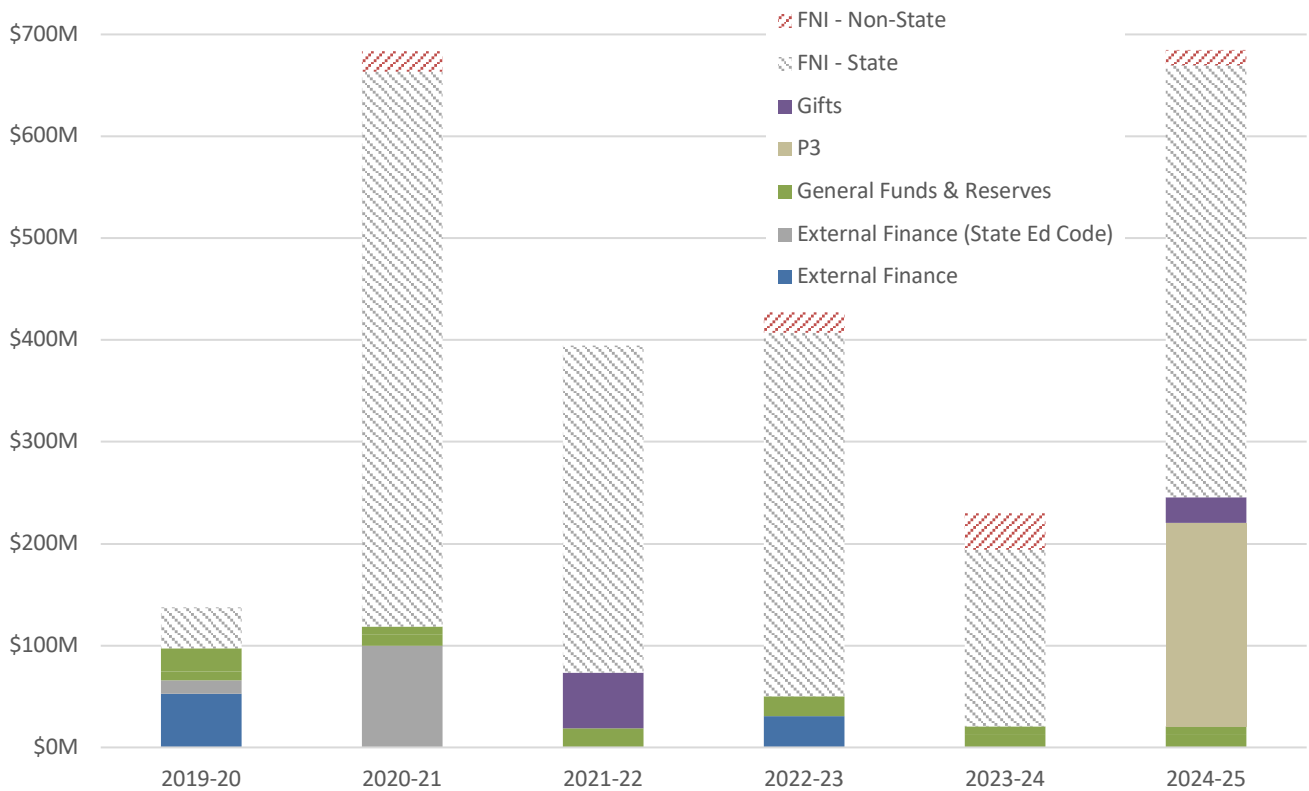
## Real Estate and Public Private Partnerships

Projects such as the Dundee Residence Hall, Glasgow Dining Hall, and the North District Housing development leverage public-private partnerships in response to the UC President's Student Housing Initiative, working towards the goal of providing sufficient, affordable housing to students who wish to reside on campus. The possibility of a campus hotel/conference center is being explored as a future P3 venture to provide facilities for



academic and research events intended to help the UCR community engage and collaborate with innovators and leaders in their respective fields.

**Display 2. \$2.6B Capital Need**



**Display 3. Riverside Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Pierce Hall Interiors	1	•		13,000 SG							13,000	100%
Business School Building Phase 1	1					55,000 GF					55,000	100%
Business School Building Phase 2	3								25,000 GF		25,000	100%
Capital Projects \$5M to \$10M (E&G)		•		10,000 CF	5,000 CF	5,000 CF	5,000 CF	5,000 CF	5,000 CF		35,000	
Capital Projects \$1M to \$5M (E&G)		•		5,000 CF	2,500 CF	2,500 CF	2,500 CF	2,500 CF	2,500 CF		17,500	
<b>Total Education:</b>										<b>145,500</b>		
<b>EDUCATION-HEALTH PROJECTS</b>												
School of Medicine Education Building	3				100,000 SG						100,000	100%
<b>Total Education-Health:</b>										<b>100,000</b>		
<b>AUXILIARY PROJECTS</b>												
Parking Structure 1	1			2,500 AR							30,475	

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Student Health and Counseling Center	1			8,000 CF							
	2			25,000 EF						33,000	
Hotel and Conference Center	3					P3				TBD	
Parking Structure 2	1						30,400 EF			30,400	
North District Ph 2 - Student Housing	3								200,000 P3	200,000	
Capital Projects \$1M to \$5M (AUX)	3	•		6,000 AR	11,000 AR	11,000 AR	6,000 AR	8,000 AR	8,000 AR	50,000	
Capital Projects \$5M to \$10M (AUX)	1	•					6,000 AR	5,000 AR	5,000 AR	16,000	
										<b>Total Auxiliary:</b>	<b>359,875</b>
<b>Campus Projects Total</b>				<b>97,475</b>	<b>118,500</b>	<b>73,500</b>	<b>49,900</b>	<b>20,500</b>	<b>245,500</b>	<b>605,375</b>	<b>193,000</b>

### Funding Not Identified (FNI)

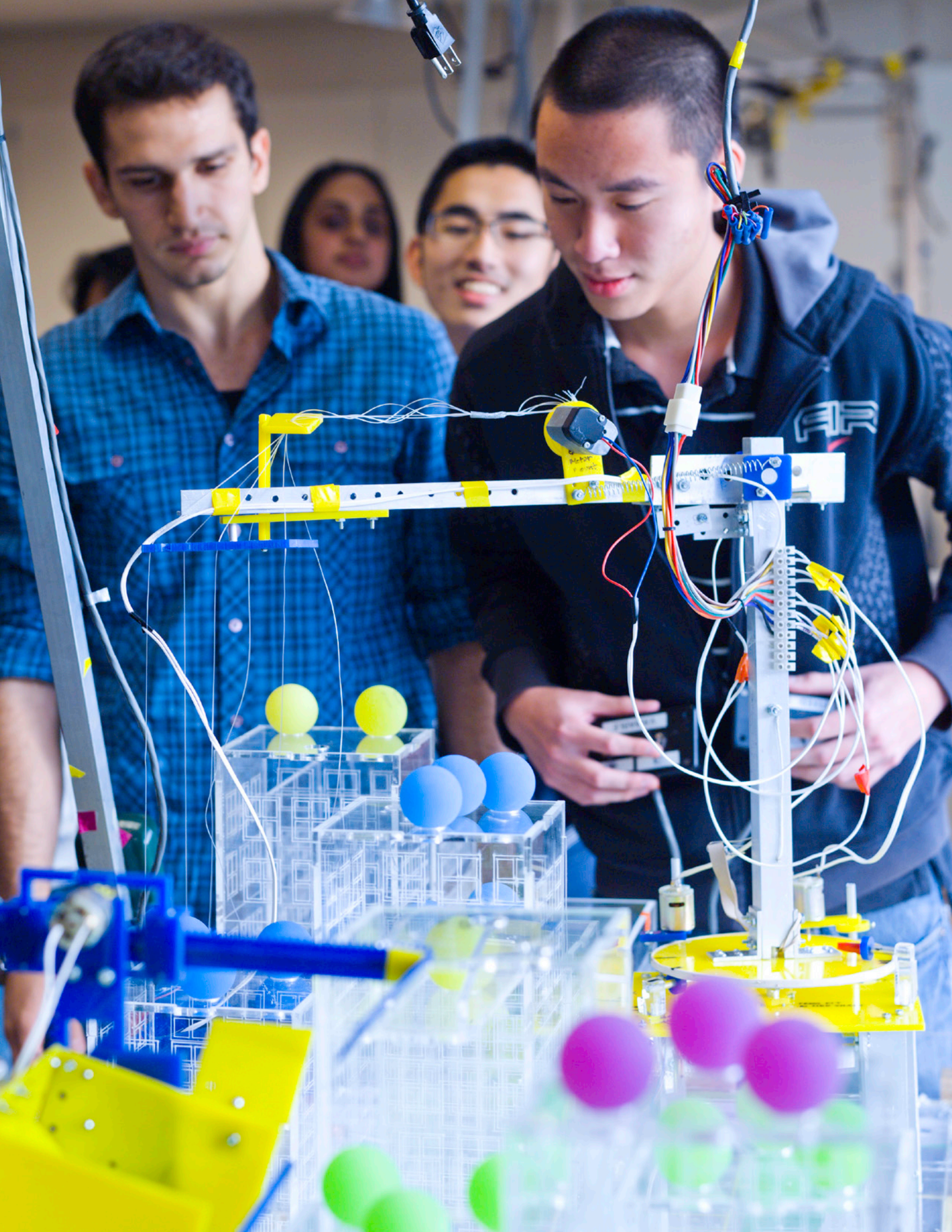
The table that follows includes projects that do not have an identified funding plan. When funding is available, the campus priority is advancing certain State-eligible projects that support UCR’s strategic goals:

Undergraduate Class Lab/Studio and Teaching Facility, Spieth Hall Renovation and Seismic Upgrade, Olmsted Hall and University Theater Seismic and Interior Improvements, as well as renovations to Physics, Boyce Hall, and Webber Hall.

### Display 4. Riverside Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Clean Energy Technology Park - Planning Phase	3				10,000 SE					10,000	100%
College Building South					2,200 SE					2,200	100%
Future East Campus Acquisitions	3				10,000 NSE					10,000	
Future Land Acquisitions Including Agricultural Operations	3				10,000 NSE					10,000	
Olmsted Hall and University Theater Seismic and Interior Improvements	1 2	•	•		87,000 SE					87,000	100%
Physics Building Renovation	1 2	•			61,000 SE					61,000	100%
Rivera Library Unit 1	3				129,000 SE					129,000	100%
Seismic Project A	3	•			35,000 SE					35,000	100%
Spieth Hall Renovation and Seismic Upgrades	1 2	•	•		76,000 SE					76,000	100%
Undergraduate Class Lab and Teaching Facility	1 2				100,000 SE					100,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
Boyce Hall and Webber Hall Renovations and Seismic Upgrades	1 2	•	•			86,000 SE			86,000	100%	
Central Plant Seismic and Infrastructure Improvements	1 2		•			25,000 SE			25,000	100%	
Clean Energy Technology Park	3					TBD SE			TBD	100%	
Engineering Building Unit 3	1 2					115,000 SE			115,000	100%	
Seismic Project B			•			25,000 SE			25,000	100%	
West Campus Infrastructure	3					10,000 SE			10,000	100%	
Campus-Wide Multi-Phased Site Development and Infrastructure	3						20,000 NSE		20,000		
Multidisciplinary Research Building 2							200,000 SE		200,000	100%	
Natural Reserve Projects	3	•					15,000 SE		15,000	100%	
Plant Growth Environments Facility 2							25,000 SE		25,000	100%	
Watkins Hall Renovation	1 2	•					57,000 SE		57,000	100%	
Life Sciences Building Lab Renovation	3	•						24,000 SE	24,000	100%	
Seismic Project C	3		•					25,000 SE	25,000	100%	
Sproul Hall Renovation	1 2							70,000 SE	70,000	100%	
Multidisciplinary Research Building 3	1 2								230,000 SE	100%	
Professional School - Education and Public Policy	3								72,000 SE	100%	
Tree of Life Museum and Botanic Garden Infrastructure Improvements	1 2								15,000 NSE		
Campus Chilled, Hot Water and Steam Upgrades				5,000 SE	20,000 SE	15,000 SE	15,000 SE	12,500 SE	12,500 SE	80,000	100%
Campus Electrical Upgrades				5,000 SE	10,000 SE	30,000 SE	30,000 SE	20,000 SE	20,000 SE	115,000	100%
Deferred Maintenance (State-Eligible)	1	•		30,000 SE	15,000 SE	15,000 SE	15,000 SE	15,000 SE	90,000 SE	180,000	100%
<b>Total Education:</b>									<b>1,909,200</b>		
<b>AUXILIARY PROJECTS</b>											
Athletics Dance Renovation and Seismic Upgrades	3	•	•					35,700 NSE 7,300 SE	43,000	17%	
<b>Total Auxiliary:</b>									<b>43,000</b>		
<b>Campus Projects Total</b>				<b>40,000</b>	<b>565,200</b>	<b>321,000</b>	<b>377,000</b>	<b>209,500</b>	<b>439,500</b>	<b>1,952,200</b>	<b>1,861,500</b>
<b>NOTES</b>											
Update Codes: 1 = Budget Update 2 = Scope Update 3 = New Project Blank = no change from prior year											
Projects from \$5 - \$10 million: Engineering Maker Space Natural Reserves projects SOM Clinical Skills and Simulation Suite Materials Science & Engineering - Clean Rooms Buildout University Electrical Substation Upgrade and Redundancies											



## 2019-25 SAN DIEGO CAMPUS CAPITAL NEED

UC San Diego’s origins date to 1912 when the Scripps Institution of Oceanography (SIO) became part of the University of California. Established as a comprehensive general campus in 1960, UC San Diego has evolved into an internationally renowned research university. A distinguishing academic feature of the campus is its undergraduate college system. Currently there are six colleges, each with its own residential and academic support facilities, and a distinctive educational philosophy that provides academic and extramural opportunities typically found in small liberal arts colleges. The campus is committed to maintaining and strengthening the college system, and is continuing its plan to accommodate undergraduate student enrollment growth while keeping each college at a reasonable size (approximately 4,000 students) to foster a sense of community. UC San Diego’s recently approved Seventh College, which will enroll its first students in fall 2020, is part of the campus’s broader plan to strategically manage recent and future enrollment growth in a way that ensures student success.

Professional and advanced degrees, as well as research opportunities, are provided by the general campus’s divisions and graduate programs, the Graduate School of Global Policy and Strategy, the Rady School of Management, Scripps Institution of Oceanography, the Jacobs School of Engineering, the School of Medicine, and the Skaggs School of Pharmacy and Pharmaceutical Sciences.

UC San Diego’s Strategic Plan, completed in 2014, guides campus efforts to be a student-centered, research-focused, service-oriented public university. Priorities for the capital improvement program will continue to evolve to support the goals of the Strategic Plan and the 2018 Long Range Development Plan (LRDP). The campus is redeveloping existing low-density areas, in addition to redeveloping existing surface parking lots.

The Capital Financial Plan (CFP) presents the campus’s capital needs for this year (2019-20) and the next five fiscal years (2020-21 to 2024-25). The UC San Diego CFP represents a \$7.5 billion need over this period of which approximately \$4.2 billion has a funding plan. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found In the Appendix.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	1,325,070	1,229,600	1,545,000	27,000	32,750	113,250	4,272,670	492,845
Capital Need with Funding Not Identified	65,000	204,600	1,522,000	644,100	261,000	542,000	3,238,700	1,739,455
<b>Total</b>	<b>1,390,070</b>	<b>1,434,200</b>	<b>3,067,000</b>	<b>671,100</b>	<b>293,750</b>	<b>655,250</b>	<b>7,511,370</b>	<b>2,232,300</b>

### Priorities

Over the next four years, UC San Diego will undergo a significant physical transformation to meet the growing needs of the campus. With the arrival of Light Rail Transit in 2021, continued student enrollment growth, and UC San Diego’s 2018 LRDP, the campus is adding housing, classrooms, and research facilities, as well as renovating

existing facilities to enhance and elevate both the academic and social experience on the campus and create a more vibrant, better-connected campus that continues to foster innovation.

Projects identified in the CFP would: support student enrollment growth, and new and expanding instruction and research programs; address critical systems renewal needs; improve capacity and distribution of utilities; address the need for seismic corrections; and further enhance community relationships. These projects include:

- new construction and renewal of student housing and dining facilities (e.g., the Pepper Canyon West Upper Division Undergraduate Housing and the Café Ventanas Dining Renovation);
- new construction to provide critical instruction, research, academic advising, and collaboration space (e.g., Future College Living and Learning Neighborhood and Shiley/Viterbi Family Vision Research and Clinical Center);
- new construction to provide space for student programs and services, enhance community relationships, and create a welcoming arrival destination at the center of campus (e.g., Triton Pavilion for Student Resources and Community Engagement);
- improvements for fire and life safety and seismic to address campus safety (e.g., School of Medicine Emergency Power System Upgrades and Warren Apartments Structural and Concrete Spalling Repairs);
- renovation and repurposing of existing outdated teaching and research spaces (e.g., Humanities and Social Sciences Renovation, Literature Building Renovation, and SIO Hubbs Hall Renovation and Seismic Corrections);
- utility projects to address capacity issues (e.g., Central Plant Chiller Expansion, and Reville Utility Upgrades); and
- pedestrian, bicycle, and road improvements to improve circulation within the campus and provide connections to the new Light Rail Transit station (e.g., Voigt West Circulation Improvements and Ridge Walk North Campus Improvements).

**Sustainability** The projects in the CFP are in alignment with UC Sustainable Practices Policy guidelines to exceed Title 24 by 20%. Each project will achieve minimum LEED™ Silver; in addition, projects are evaluated to promote health and wellness. Some of the projects in the CFP support integrating the new Light Rail Transit within the fabric of the campus, encouraging the use of alternative transportation. In February 2019, the campus updated its Climate Action Plan which is a framework for implementing the University's climate strategy to meet State and UC climate policies and objectives.

## Challenges

**Aged Facilities and Capital Renewal** Many of the buildings serving the general campus are more than 40 years old; a few at Scripps Institution of Oceanography are 60 to 100 years old. Long-term underfunding has created a substantial backlog of capital renewal projects in State-supportable facilities. Through a multi-year facilities condition assessment, the campus has identified more than \$800 million in renewal and upgrades required to respond to health and safety requirements, obsolescence, and changing academic programs. Without renewal or replacement, many older buildings cannot support modern teaching and research activities effectively.

**Academic Space Shortage** The campus has faced a shortage of academic space over the last decade as State funding for construction of new facilities has not kept pace with the evolution of academic programs and significant campus enrollment growth. Without State funding for new construction or renovation, the campus will continue to grapple with space shortages, expanding programs will be constrained given the limited space available for their operations, and outdated classrooms will be limited in their use and will not be able to support new teaching methodologies (e.g., active learning classrooms).

**Housing Shortage** Providing affordable housing to students is a top priority for the campus. Demand for on-campus affordable housing is significantly greater than the number of students the campus can currently house. This demand is expected to grow due to increasing private market rental rates, historically low rental vacancies, and campus plans to increase student enrollment. Expanded campus housing also helps address sustainability goals by reducing the number of students commuting to campus. A large part of UC San Diego's external debt is serviced by self-funding auxiliaries such as housing and parking.

**Seismic Corrections** The safety of students, faculty, staff, and visitors as well as the preservation of campus buildings and structures is a top priority to the campus. The new seismic safety policy requires evaluations of campus buildings to determine which require seismic corrections. These evaluations are still underway. State funding is critical to complete the required seismic corrections.

## **Funding**

Because State funding has been constrained, the San Diego campus has chosen to redirect limited non-State resources to support the most critical capital needs, such as life safety, infrastructure, and utility projects. The balance of State-supportable priorities, however, remains unfunded, including high priority renewal and seismic correction projects, such as Geisel Library Renovation and Seismic Corrections, Medical Teaching Facility Replacement, Scripps Institution of Oceanography Hubbs Hall Renovation and Seismic Corrections, and York Hall Renovation and Seismic Corrections.

With diminished State funding, the campus is not able to pursue many projects that support its Strategic Plan objectives. The campus funds many projects through external financing, including projects that meet the needs of student housing, research programs, infrastructure, and capital renewal.

**Campaign** The campus also has a long history of successful fundraising efforts. The Campaign for UC San Diego, which began July 1, 2012, is a \$2 billion comprehensive fundraising effort to transform the student experience and the campus (of which approximately \$2.04 billion has been raised as of July 2019, exceeding the target).

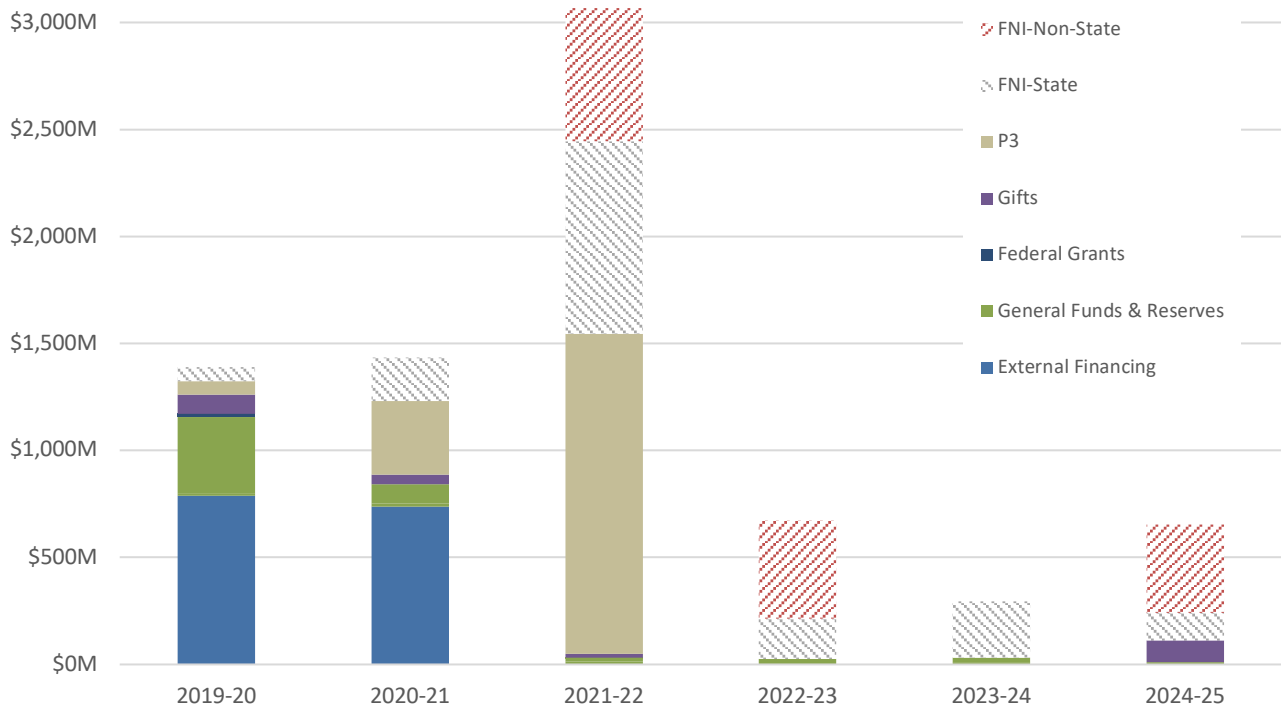
## **Real Estate and Public Private Partnerships**

The San Diego campus evaluates each proposed capital project to determine the optimum delivery approach. For some projects, a public private partnership (P3) method may assist the campus in:

- preserving campus debt capacity for other upcoming projects;
- transferring development, financing, leasing, or other risks to a third party; and
- creating new faculty/staff housing, retail, and other revenue-generating facilities.

Similarly, the campus continuously evaluates opportunities to acquire new properties that could reduce the campus’s reliance on leasing third party space, reduce occupancy costs, or garner greater control of its occupied space.

**Display 2. \$7.5B Capital Need**



**Display 3. San Diego Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Campus Parking Lot Erosion Repair (South of VA Hospital)	1			18,000 CF							18,000	
Central Plant (Chiller) Expansion - Phase 1	2			20,000 CF							20,000	100%
Downtown Park & Market Tenant Improvements	1			20,000 GF							35,000	
	2			15,000 CF								
East Campus Loop Road Extension	3			15,000 CF							15,000	
Englekirk Structural Engineering Center - Shake Table Improvements	1			16,300 FG							20,000	100%
	2			3,700 CF								
Pepper Canyon Amphitheater and Public Realm Improvements (formerly Pepper Canyon Improvements)	1			54,000 CF							54,000	
	2											
SIO Marine Conservation and Technology Facility	1			17,500 EF							17,500	100%
	2											



		Current Term (2019-20 to 2024-25)									
	Update	DM	Seismic	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Triton Pavilion for Student Resources and Community Engagement	1			293,800 EF						409,350	20%
	2			55,550 CF							
				60,000 GF							
Voigt Drive West Circulation Improvements	3			15,700 CF						15,700	
Central Plant (Chiller) Expansion - Phase 2	1				18,000 CF					18,000	100%
	2										
Hillcrest Multi-Use Building	3				165,500 P3					165,500	25%
Ridge Walk North Campus Improvements	3				30,000 CF					30,000	
SIO Birch Aquarium Expansion and Renovation	1				45,000 GF					45,000	
	2										
Central Plant Upgrades (formerly Central Plant Steam Chiller WC-1)	1						15,000 CF			15,000	100%
	2										
East Campus Substation Gear Replacement	1							8,000 CF		8,000	100%
	2										
Villa La Jolla Road Widening/Improvements and Pedestrian Bridge Replacement	1							15,000 CF		15,000	
	2										
Economics and Political Science Building Replacement	1								88,500 GF	88,500	100%
	2										
Scripps Visitor Outreach Center	1								15,000 GF	15,000	
	2										
<b>Total Education:</b>										<b>1,004,550</b>	
<b>AUXILIARY PROJECTS</b>											
Canyonview Recreation Center Renovation and Expansion	3			31,500 EF	10,000 AR					41,500	
Childcare Facility (formerly North Campus Childcare Facility)	1			30,000 CF						30,000	
	2										
Hillcrest Land Acquisitions	1			46,000 CF						46,000	
	2										
Pepper Canyon West Upper Division Undergraduate Housing	1			7,000 CF						341,000	3%
	2			334,000 EF							
Voigt Transit Operations Center (formerly West Campus Parking Structure or VPS)	1				68,000 CF					68,000	
	2										
Café Ventanas Dining Renovation	1				15,000 AR					15,000	
	2										
Future College Living and Learning Neighborhood	1				645,000 EF					645,000	3%
	2										
Hillcrest Campus Outpatient Pavilion and Parking (campus portion)	1				91,600 EF					110,600	
	2				19,000 CF						
Medical Office Building, Del Sur Corporate Center (4S Ranch and Bernardo Center)	1				177,000 P3					177,000	
	2										
Stein Lease (VA) TI's and Building Upgrades	3				12,000 CF					12,000	
Hillcrest Mixed-Use Residential and Wellbeing Center	1					485,000 P3				485,000	
	2										

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
Hotel with Conference Center & Restaurants, East Campus	1 2					110,000 P3					110,000	
Muir College Dining Renovations	3	•				15,000 AR					15,000	
Regents Road Faculty/Staff Housing and Mixed-Use						900,000 P3					900,000	
Spanos Facility Expansion	1 2					8,000 UR 17,000 GF					25,000	
Warren College Apartments Structural and Concrete Spalling Repairs	1 2	•						9,750 AR	9,750 AR		19,500	
<b>Total Auxiliary:</b>											<b>3,040,600</b>	
<b>EDUCATION-HEALTH PROJECTS</b>												
Shiley/Viterbi Vision Research and Clinical Center (Campus Portion)	1 2			111,020 EF 10,000 CF 10,000 GF							131,020	100%
Villa La Jolla Office Building (P3)	3			63,000 P3							63,000	
Villa La Jolla Office Building (land acquisition and TI's)	3				11,500 CF						11,500	
School of Medicine Emergency Power Upgrades	1 2					10,000 CF					10,000	100%
Hillcrest Central Utility Plant (non-OSHDP)	3						12,000 CF				12,000	100%
<b>Total Education-Health:</b>											<b>227,520</b>	
<b>Campus Projects Total</b>				<b>1,325,070</b>	<b>1,229,600</b>	<b>1,545,000</b>	<b>27,000</b>	<b>32,750</b>	<b>113,250</b>	<b>4,272,670</b>		<b>492,845</b>

### Funding Not Identified (FNI)

With diminished State funding and limited campus resources, the campus's capital needs far exceed available funding. The CFP includes \$3.2 billion of projects with no funding identified, including \$1.7 billion associated with State-supportable programs.

Display 4. San Diego Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)							Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Humanities and Social Sciences Renovation	1 2	•		45,000 SE							45,000	100%
Literature Building Renovation and Seismic Corrections	1 2	•	•	20,000 SE							20,000	100%
Biomedical Sciences Building Seismic Corrections and Deferred Maintenance	3	•	•		96,600 SE						96,600	100%
Center for Neural Circuits and Behavior (CNCB) Seismic Corrections and Deferred Maintenance	3	•	•		13,000 SE						13,000	100%
Mandell Weiss Theatre & Shops Seismic Corrections and Deferred Maintenance	3	•	•		10,000 SE						10,000	100%
York Hall Seismic Corrections, Deferred Maintenance and Renovation	3	•	•		85,000 SE						85,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24		
Geisel Library Seismic Corrections, Deferred Maintenance and Renovation	3	•	•			208,000 SE			208,000	100%
SIO Biological Collections Building	1 2					9,500 SE			9,500	100%
SIO Hubbs Hall Seismic Corrections, Deferred Maintenance & Renovation	1 2	•	•			105,000 SE			105,000	100%
Torrey Pines Center South (TPCS) Seismic Corrections and Deferred Maintenance	3	•	•			49,755 SE 3,745 NSE			53,500	93%
Urey Hall Demolition and Replacement	3					186,000 SE			186,000	100%
Galbraith Hall Seismic Corrections and Deferred Maintenance	3	•	•				23,600 SE		23,600	100%
Jacobs Hall (EBU-1) Seismic Corrections and Deferred Maintenance	3	•	•				60,300 SE		60,300	100%
Scripps and Human Health Research Building	1 2						90,000 SE		90,000	100%
Social Sciences Building Seismic Corrections and Deferred Maintenance	3	•	•				13,200 SE		13,200	100%
Applied Physics & Mathematics (AP&M) Renovation and Seismic Corrections	3	•	•					41,100 SE	41,100	100%
Bonner Hall Seismic Corrections and Deferred Maintenance	3	•	•					37,400 SE	37,400	100%
McGill Hall and Mandler Hall Renovation and Seismic Corrections	1 2	•	•					20,400 SE	20,400	100%
Pacific Hall Seismic Corrections and Deferred Maintenance	3	•	•					73,900 SE	73,900	100%
Science and Engineering Research Facility (SERF) Seismic Corrections and DM	3	•	•					18,200 SE	18,200	100%
SIO Nimitz Marine Facility Laboratory Building (Bldg 4 Replacement)	3							70,000 SE	70,000	100%
Biology Building Seismic Corrections and Deferred Maintenance	3	•	•					21,500 SE	21,500	100%
Mayer Hall Seismic Corrections and Deferred Maintenance	3	•	•					15,000 SE	15,000	100%
SIO Interdisciplinary Research Building (formerly SIO Biology Laboratory Building)	1 2							90,000 SE	90,000	100%
<b>Total Education:</b>									<b>1,406,200</b>	
<b>AUXILIARY PROJECTS</b>										
Main Gym and Natatorium Renovation and Seismic Corrections	1 2	•	•			67,000 NSE			67,000	
South Mesa (Mesa Housing Neighborhood Redevelopment)						556,000 NSE			556,000	
Marshall College Housing Expansion (Extension Site Redevelopment)	1 2						420,000 NSE		420,000	
SIO Parking Structure & Entry Improvements	1 2						37,000 NSE		37,000	
Single Undergraduate Housing (Marshall College Lowers Redevelopment)	1 2							415,500 NSE	415,500	
<b>Total Auxiliary:</b>									<b>1,495,500</b>	

		Current Term (2019-20 to 2024-25)								
	Update DM Seismic	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible	
<b>EDUCATION-HEALTH PROJECTS</b>										
Campus Wet Laboratory Building	3			233,000 SE				233,000	100%	
Medical Teaching Facility Replacement/Future School of Public Health and Education	1 2			104,000 SE				104,000	100%	
<b>Total Education-Health:</b>								<b>337,000</b>		
<b>Campus Projects Total</b>		<b>65,000</b>	<b>204,600</b>	<b>1,522,000</b>	<b>644,100</b>	<b>261,000</b>	<b>542,000</b>	<b>3,238,700</b>	<b>1,739,455</b>	

**NOTES**

Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change from prior year
Projects from \$5 - \$10 million:	Central Research Services Facility Upgrades Revelle Utility Upgrades	RIMAC Seismic Corrections	Revelle Utility Upgrades	
	Repurpose Student Health and Deferred Maintenance Work Geisel Library Revitalization Initiative, Level 2	Tenaya Hall Seismic Corrections	Tioga Hall Seismic Corrections	

# 2019-25 SAN DIEGO HEALTH CAPITAL NEED

As a comprehensive academic health system, UC San Diego Health continues to leverage its tripartite mission of clinical care, research, and education. UC San Diego Health operates under a two-campus strategy, integrating research, teaching, and clinical care on two existing campuses in Hillcrest and La Jolla. It has proven its ability to grow, adapt to changes in the health care environment, train health care professionals for the future, and excel in measures of patient care, safety, and satisfaction. There are several projects in the Capital Financial Plan (CFP) that will allow UC San Diego Health to build on its multi-disciplinary collaborations that enhance patient experience, expand to address community needs, and evolve to meet the changing needs of healthcare.

The CFP presents UC San Diego Health’s capital plan for this year (2019-20) and the next five years (2020-21 to 2024-25). UC San Diego Health’s CFP represents a \$1.5 billion investment over this six-year period.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Capital Need with Funding	98,080	346,500					444,580
Capital Need with Funding Not Identified			14,000	1,048,000			1,062,000
<b>Total</b>	<b>98,080</b>	<b>346,500</b>	<b>14,000</b>	<b>1,048,000</b>			<b>1,506,580</b>

## Priorities

With the successful opening of the Jacobs Medical Center (JMC) in fall 2016 and the Koman Family Outpatient Pavilion (KOP) in spring 2018, the capital investment priorities on the La Jolla campus are now focused on: 1) completing renovations to Thornton Pavilion that will enhance patient care, provide expanded space for support services, renovate the current East Entry to integrate the existing Thornton facility within the broader context of the Medical Center at La Jolla and specifically address its new role as the main entry to the JMC complex; 2) improving the Perlman Ambulatory Care Center to provide needed complementary outpatient services to the KOP; and 3) expanding and renovating the Shiley Eye Institute in association with the creation of Viterbi Family Vision Research Center.

Beyond the La Jolla campus, UC San Diego Health will be heavily investing in the Hillcrest Campus guided by a new Long Range Development Plan (LRDP). The Hillcrest Campus, located 13 miles south of the La Jolla campus, is a critical regional resource, with the 370-bed inpatient hospital, a Level 1 Trauma Center, and a Regional Burn Center, serving San Diego, Riverside, and Imperial Counties. The new development described in the LRDP will focus on: expanding outpatient services, siting a new hospital to replace by 2030 the existing Hillcrest Hospital that will not meet Senate Bill 1953 requirements, replacing parking structures, and providing a new residential component with amenities to benefit the campus and the local community. The first phase of development, currently scheduled to begin construction in fiscal year 2021, will include the Hillcrest Outpatient Pavilion and Parking, supporting the medical portion of the campus. The Outpatient Pavilion will focus on a range of vitally needed specialty services for the area including orthopedics, neurology, otolaryngology, and a full range of oncology therapies and services. The Outpatient Pavilion will also house comprehensive outpatient surgical and procedural suites, along with advanced imaging capabilities to provide the highest quality care.

UC San Diego Health will also be investing in the expansion of services to the larger community through continued development of its ambulatory network. While these facilities are currently planned to be leased, UC San Diego Health is investing significant capital to provide equipment to support the range of care needed at each site. Investment is across 11 different sites with emphasis on primary care and general medical specialties (e.g., obstetrics and gynecology, psychiatry, and radiology). Initial investment is geographically concentrated to create a more efficient delivery network and leverage regional partnerships more effectively. The larger project at the Del Sur and Rancho Bernardo sites is listed in the CFP. Investment of \$24 million across nine other medical office building sites is shown in aggregate as part of the capital projects under \$10 million.

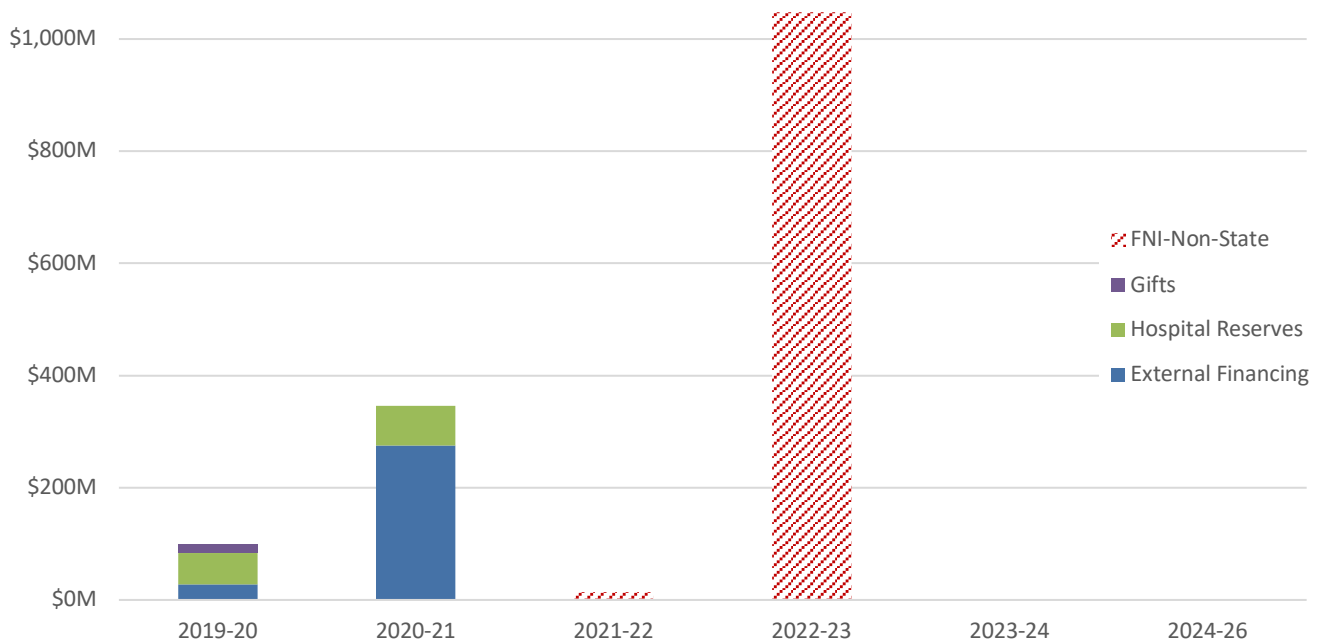
### **Funding Challenges**

Funding the large capital cost of a replacement hospital at Hillcrest due to seismic requirements will be a significant challenge. Healthcare reform, changes in reimbursement, wage pressures and the resulting declining margins, together limit UC San Diego Health's ability to fund needed capital investments with cash reserves. Limited cash reserves combined with minimal debt capacity drive the need to explore public private partnerships as an alternative strategy for funding capital investments, if appropriate.

To minimize capital investment, UC San Diego Health plans to lease existing medical office spaces and enter into development/financing arrangements where feasible, especially in support of its ambulatory network expansion.

UC San Diego Health has a history of successful fund raising efforts. The Campaign for UC San Diego launched in July 2012 is a \$2 billion comprehensive fundraising effort that includes projects for UC San Diego Health. UC San Diego Health is also creating fund raising opportunities focused specifically on Hillcrest Hospital redevelopment. The hospital has been part of the fabric of the community for decades and is greatly respected for its role in serving the community, including those typically underserved.

## Display 2. \$1.5B Capital Need



## Display 3. San Diego Health Capital Need with Funding (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total
				2019-20	2020-21	2021-22	2022-23	2023-24	
La Jolla - Thornton East Entry Renovation and Imaging Expansion	1		16,500 HR						31,500
	2		15,000 GF						
Shiley/Viterbi Vision Research and Clinical Center (Med Ctr portion)	1		27,580 EF						41,580
	2		14,000 HR						
Bernardo Center and Del Sur Medical Office Building - Tenant Improvements	3			11,500 HR					11,500
Hillcrest Campus Outpatient Pavilion and Parking (Med Ctr portion)	1			275,000 EF					323,000
	2			48,000 HR					
Capital Projects \$1M - \$10M			25,000 HR	12,000 HR					37,000
<b>Total</b>			<b>98,080</b>	<b>346,500</b>					<b>444,580</b>

## Funding Not Identified (FNI)

The projects identified in Display 3 are those for which funding has been identified and are necessary to implement the capital investment strategy of UC San Diego Health. This list of projects, however, does not reflect the full need for capital investment in the Health System. An estimate of the unfunded need is shown in Display 4 below, for which more planning and cost analyses are required before budgets will be confirmed. The funding of the replacement Hillcrest Hospital and associated infrastructure remains the largest capital investment to be addressed for UC San Diego Health and represents over \$1 billion in capital need.

**Display 4. San Diego Health Capital Need with Funding Not Identified (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total
				2019-20	2020-21	2021-22	2022-23	2023-24	
Hillcrest West Wing Replacement						14,000 NSE			14,000
Hillcrest Central Utility Plant (Med Ctr portion)	1						48,000 NSE		48,000
Hillcrest Replacement Hospital	2						1,000,000 NSE		1,000,000
<b>Total</b>						<b>14,000</b>	<b>1,048,000</b>		<b>1,062,000</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year







# 2019-25 SAN FRANCISCO CAMPUS CAPITAL NEED

Founded in 1873, the University of California, San Francisco (UCSF) campus is a leading institution dedicated to advancing health worldwide through biomedical, clinical, and translational research; graduate-level education in the life sciences and health professions; and excellence in patient care. It is the only UC campus devoted exclusively to health sciences, with professional degree programs in dentistry, medicine, nursing, and pharmacy, as well as interdisciplinary graduate programs and numerous postdoctoral programs. It also provides patient care through the UCSF Health System and UCSF Dental Center.

The Capital Financial Plan (CFP) presents the campus’s capital need for the next six years, focusing on this year (2019-20) and the next five fiscal years (2020-21 to 2024-25). The UCSF CFP is supported by \$3.3 billion, of which approximately \$2.1 billion has a funding plan, to support priorities of growth, seismic safety, and sustainability. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found in the In the Appendix.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	637,904	1,118,500	71,000	73,800	78,000	166,500	2,145,704	1,696,674
Capital Need with Funding Not Identified	88,000	703,000	88,000	88,000	88,000	88,000	1,143,000	1,063,800
<b>Total</b>	<b>725,904</b>	<b>1,821,500</b>	<b>159,000</b>	<b>161,800</b>	<b>166,000</b>	<b>254,500</b>	<b>3,288,704</b>	<b>2,760,474</b>

## Priorities

UCSF’s primary capital priorities support growth, seismic safety, sustainability, and cost management – all in response to its urban context. New investments are driven by the need to reinvigorate the Parnassus Heights campus as reflected in the recently completed Comprehensive Parnassus Heights Plan (CPHP).

Over the last 20 years, UCSF has invested significant resources into acquiring, developing, and supporting its Mission Bay campus site, without commensurate investment in the Parnassus Heights campus. The Parnassus Heights campus is over 100 years old and most buildings are over 20 years old. It continues to be the home of UCSF’s four professional schools and medical center for many of its clinical services. Parnassus also houses basic science disease-oriented research programs and clinical and translational research programs, both of which focus on the diagnosis and treatment of human disease as well as the care of patient populations.

The Parnassus Heights campus site is in need of modernization and revitalization. Reinvestment in the Parnassus campus beyond seismic projects is another major capital priority. Providing facilities that support the alignment of research and clinical activities through translational research is fundamental to planning for a revitalized Parnassus. UCSF clinicians and physician scientists are consistently pioneering ways to apply scientific discoveries to real-world diagnostics and treatments.

Two of the near-term recommendations of the CPHP are included in the plan: a new Research and Academic Building is proposed as well as the construction of an improved and enhanced arrival experience for the south

side of the campus. The new Research and Academic Building would provide much-needed high quality research and academic space as well as “swing space” to allow for continued renovation and renewal of space in other Parnassus Heights research facilities and replacement space for programs located in buildings requiring significant investment in seismic retrofit and deferred maintenance. The Irving Street Arrival project enhances the visitor, patient, and employee arrival sequence with better connections to existing buildings and a clarified vertical transportation system.

Compliance with seismic regulations and policies through renovations, replacement, and demolition of seismically compromised facilities continues to be a major capital priority. UCSF is making significant investments in renovating older buildings at its Parnassus Heights campus and constructing a research building at the city-owned Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) to vacate seismically challenged buildings there. The School of Nursing Building is proposed for demolition due to recently completed seismic evaluation.

## Challenges

**Urban Location** UCSF is a distinctly urban campus with sites throughout the city and some locations beyond the city limits. The densely urban context of San Francisco and the highly complex nature of UCSF’s health science research and clinical facilities pose considerable construction challenges and contribute to higher project costs at UCSF relative to other UC locations.

**Limited Resources** There continues to be pressure to improve aging facilities and infrastructure at various campus sites, to provide space for expanding programs, and to continue to address seismically compromised facilities. UCSF continues to evaluate the critical facility needs and to identify appropriate and financially feasible solutions. Due to limited resources, UCSF is unable to fund all of the needed capital projects. A portion of this unfunded need is shown in the CFP; however, there remain many projects on the horizon for which more planning and cost analyses are required.

**Deferred Maintenance** With increased constraints on operating budgets, as well as stewardship and sustainability demands, UCSF must invest in its existing facilities to address deferred maintenance and renewal needs, and optimize the use and operational efficiency of existing space. The campus has a substantial backlog of deferred maintenance in State-supportable facilities with costs of “mission critical” deferred maintenance and renewal projects currently estimated at almost \$830 million. This estimate will be validated by the comprehensive Integrated Capital Asset Management Program (ICAMP) Facilities Condition Assessments. The campus continues to apply a multipronged strategy to balance its investment in deferred maintenance, scheduled maintenance, and renewal.

## Funding

UCSF’s capital plan is supported by a combination of fund sources, including campus funds, external financing, gifts, and limited State funding. Because State funding has been constrained, the San Francisco campus has chosen to redirect limited non-State resources to support the most critical capital needs.

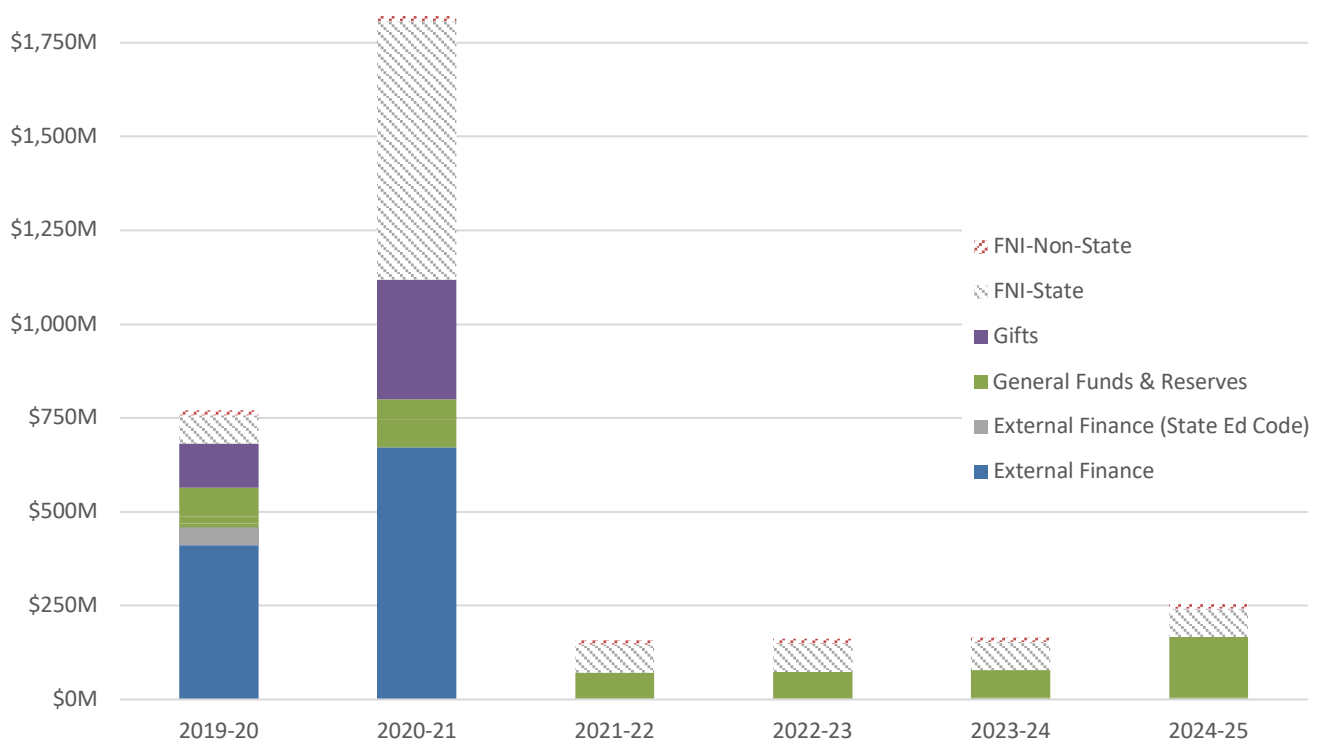
Philanthropy also is a source of funding for the capital plan. In October 2017, UCSF announced an ambitious \$5 billion comprehensive fundraising campaign. The campaign, only the third in UCSF’s history and the first in more than a decade, will support all aspects of UCSF’s mission to teach, discover, care, and serve. Support of capital

projects is one of the three main types of support targeted in this gift campaign. The ZSFG Research Building Seismic Replacement project that is identified in the CFP with gift funding is one of the major capital project targets for the capital campaign.

### Real Estate and Public Private Partnerships

UCSF has utilized public private partnerships (P3) on several projects and will continue to look for opportunities to do so in the future. The CFP currently does not include any P3 projects; however, as the campus considers options for priority projects without identified funding, it is likely that P3 delivery could help the campus meet some of its need.

Display 2. \$3.3B Capital Need



Display 3. San Francisco Campus Capital Need with Funding (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
2 North Point Structural and Tenant Improvements	3	•	•	33,514 EF							33,514	88%
Capital Projects \$1M to \$10M - Infrastructure	3		•	18,365 CF							18,365	100%
Central Utility Plant Fuel Tanks	3			16,700 EF 8,300 HR							25,000	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Parnassus Water Mains		•		10,700 EF 5,300 HR						16,000	100%
Police Consolidation at 654 Minnesota Street				21,700 EF 2,500 CF						24,200	100%
Real Estate Transactions A			•	60,000 EF						60,000	50%
Roadway and Site Improvements at Zuckerberg San Francisco General				11,816 EF						11,816	
Statewide Energy Partnership Projects	1	•		22,700 EF						22,700	
Irving Street Arrival Experience	1				72,000 EF 69,000 GF 66,000 HR					207,000	
Capital Projects \$1M to \$10M - Facility Investment Needs	1 2	•		2,400 AR 6,600 CF 17,700 EF 2,800 HR	1,800 AR 14,000 CF 8,200 EF 4,700 HR	1,400 AR 22,400 CF 3,500 HR	1,000 AR 23,300 CF 3,100 HR	1,000 AR 23,900 CF 3,200 HR	1,000 AR 25,000 CF 3,200 HR	170,200	87%
Capital Projects \$1M to \$10M - Renovation	3			36,060 CF 8,575 GF	32,800 CF	35,300 CF	37,600 CF	39,900 CF	42,500 CF	232,735	99%
Parnassus Library Renewal	3	•		1,800 CF	1,900 CF	2,700 CF	3,100 CF	3,600 CF	2,800 CF	15,900	98%
<b>Total Education:</b>										<b>837,430</b>	
<b>EDUCATION–HEALTH PROJECTS</b>											
GMP Facility				60,000 GF						60,000	
UCSF Research Facility at Zuckerberg San Francisco General			•	5,620 CF 199,615 EF 50,000 GF						255,235	99%
ZSFG Wet Laboratory Tenant Improvements and Relocations			•	17,004 EF						17,004	100%
Parnassus Heights Research and Academic Building and Related District Projects			•		522,800 EF 250,000 GF					772,800	100%
School of Nursing Building Demolition			•					83,500 CF		83,500	100%
Mount Zion Cancer Research Building Renewal			•	2,100 CF	2,900 CF	1,800 CF	2,100 CF	2,000 CF	5,800 CF	16,700	98%
Parnassus Dentistry Building Renewal			•	2,100 CF	1,900 CF	2,500 CF	3,600 CF	4,400 CF	2,700 CF	17,200	100%
<b>Total Education-Health:</b>										<b>1,222,439</b>	
<b>AUXILIARY PROJECTS</b>											
Millberry Union / Ambulatory Care Center Garages Spall Repair	1				22,100 EF					22,100	
Mission Bay Block 34 Parking Garage	3				45,900 EF					45,900	
Capital Projects \$1M to \$10M - Parking & Housing	3				7,935 AR 3,000 CF 3,000 GF	2,500 AR	1,400 AR			17,835	
<b>Total Auxiliary:</b>										<b>85,835</b>	
<b>Campus Projects Total</b>				<b>637,904</b>	<b>1,118,500</b>	<b>71,000</b>	<b>73,800</b>	<b>78,000</b>	<b>166,500</b>	<b>2,145,704</b>	<b>1,696,674</b>

## Funding Not Identified (FNI)

The projects identified in the below table are those projects for which funding has not been identified. This list of projects, however, does not reflect the full need for capital investment at UCSF. There continues to be pressure to improve the aging facilities and infrastructure at the various campus sites, to provide space for expanding programs, to provide affordable housing for graduate students and trainees and short-term transitional housing for faculty, and to continue to address seismically compromised facilities. UCSF continues to evaluate the critical facility needs and to identify appropriate and financially feasible solutions. A fraction of this unfunded need is shown in the table below; however, there remain many projects on the horizon for which more planning and cost analyses are required.

Display 4. San Francisco Campus Capital Need with Funding Not Identified (\$000s)

	Update DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
			2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>											
Facilities Investment Needs (FIN)	•		13,000 NSE 75,000 SE	13,000 NSE 75,000 SE	13,000 NSE 75,000 SE	13,000 NSE 75,000 SE	13,000 NSE 75,000 SE	13,000 NSE 75,000 SE	528,000	85%	
<b>Total Education:</b>									<b>528,000</b>		
<b>EDUCATION-HEALTH PROJECTS</b>											
School of Nursing Research and Academic Space Seismic Replacement	•	•		240,000 SE					240,000	100%	
School of Dentistry Research and Academic Space Seismic Replacement	•	•		375,000 SE					375,000	100%	
<b>Total Education-Health:</b>									<b>615,000</b>		
<b>Campus Projects Total</b>			<b>88,000</b>	<b>703,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>88,000</b>	<b>1,143,000</b>	<b>1,063,800</b>	
<b>NOTES</b>											
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change from prior year							
Projects from \$5 - \$10 million:	CSB Utility Relocation - Phase 2 HSIR Exterior Repairs Phase 1 Koret Renovation - Surgical Skills and School of Dentistry (CANDO) Misc. Departmental and School Renovation Projects (under \$10M)				MB Surface Parking Blocks 15 MB Surface Parking Blocks 16 Parking Opportunity Retail TI's and Buildouts - various locations			Sandler Neuroscience Center Auditorium Surge Building Demolition Saunders Court Stairs West Campus Childcare New Center Woods Building Demolition			

# 2019-25 UCSF HEALTH CAPITAL NEED

UCSF consistently ranks among the top ten hospitals in the nation and in 2019 was ranked Number 7 by US News and World Report. As the number one academic medical center in Northern California and an innovator in the development of new care protocols and disease management strategies, it is imperative that UCSF Health maintain state of the art facilities that support its mission.

UCSF Health operates inpatient and outpatient programs at three major sites in San Francisco (Parnassus Heights, Mission Bay, and Mount Zion) as well as at Benioff Children’s Hospital in Oakland. These locations include 780 licensed acute care beds in San Francisco with an average daily census (ADC) of 648 patients, 190 licensed beds in Oakland with an ADC of 126 and an additional 22 available beds at the Langley Porter Psychiatric Institute (ADC of 15). In addition, the UCSF Health faculty practice supports 1.8 million annual outpatient visits (including clinics, lab, and radiology) and an average of 280 daily patient visits for emergency services.

The Capital Financial Plan (CFP) presents UCSF Health’s facilities capital plan for the next six years, which directly supports the strategic goals of increasing access to care while improving the quality and value of the services provided to patients. The CFP focuses on this year (2019-20) and the next five fiscal years (2020-21 to 2024-25) and represents projects in the near-term planning horizon. The CFP is supported by \$5.9 billion over the term, and represents renewal and renovation of existing space and infrastructure, and construction of three new buildings. The plan includes an investment of \$3.8 billion for the Helen Diller Medical Center at Parnassus Heights Program, \$366 million for an outpatient facility at Mission Bay, and \$1 billion for the Benioff’s Children’s Hospital Oakland along with various supporting structures.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22*	2022-23	2023-24	2024-25	Total
Capital Need with Funding (\$000’s)	268,884	1,564,846	3,784,640	108,560	93,844	98,172	5,918,946

\*Includes estimated budget for a hospital replacement project.

### *Parnassus Heights*

In the years following the successful completion of the Mission Bay hospitals, UCSF Health’s capital program has focused on expanding inpatient bed capacity and adding additional outpatient exam rooms at the Parnassus Heights campus to meet the overwhelming demand for care. Approximately 105 inpatient beds, made available through the relocation of pediatric services to Mission Bay in 2015, have been converted for adult use and plans are underway to create additional adult beds in the last remaining space at the Parnassus Heights campus, in vacated space on the 15th floor of Moffitt Hospital. Despite the fact that Moffitt Hospital (opened in 1954) can only remain an Acute Care Hospital until January 1, 2030 (due to State seismic regulations), the demand for services and the associated incremental margins justifies investment in this existing facility. These conversion projects address the near-term inpatient expansion in existing space and will likely result in full capacity starting in 2024.

To further expand capacity at the Parnassus Heights campus, the attention over the next six years will shift to the new Helen Diller Medical Center, which will be located on the Langley Porter Psychiatric Institute & Hospital site adjacent to the existing Long Hospital Building. Additionally, planning is currently underway to replace the



inpatient beds and associated diagnostic and treatment facilities in Moffitt Hospital, one of two hospital towers on the Parnassus campus.

The upgrade and replacement of end-of-life utility infrastructure systems in the aging clinical facilities at the Parnassus Heights campus site (Moffitt Hospital - 1954, Long Hospital – 1984, Crede Ambulatory Care Building – 1971) continues to be a priority and is an on-going drain on capital resources. The replacement of chillers, emergency generators, electrical distribution equipment, and other infrastructure systems is imperative for maintaining patient safety, improving clinical outcomes, and lowering overhead costs.

#### *Mission Bay Relocations*

In addition, UCSF Health is evaluating the feasibility of transferring lower acuity adult inpatient populations to its strategic affiliates in order to create additional capacity for patients in need of the tertiary and quaternary care that UCSF provides. The Bakar Precision Cancer Medicine Building opened Phase 1 in June 2019 on the Mission Bay campus and houses facilities to deliver comprehensive cancer care, including cancer specialty clinics, an infusion center, radiology, and radiation oncology therapy. This new building will free up space in the Gateway Medical Building for much needed expansion of Pediatric outpatient services.

Outpatient service access is being addressed with two ambulatory surgery centers – one at the Parnassus Heights campus site and an expansion at the Mission Bay campus site coupled with specialty clinics and a proton therapy facility.

#### *Benioff Children’s Hospital Oakland*

The Benioff Children’s Hospital (BCH) Oakland is also undergoing significant facilities upgrades during Phase I of its Master Facilities Plan, to construct a second outpatient clinic building and mitigation of seismic issues affecting the morgue, pharmacy, environmental services and telecom, as well as modernizing key patient care areas (e.g. the Neonatal Intensive Care Unit, inpatient rehabilitation, and the Pediatric Intensive Care Unit). The corner stone of Phase 2, which is included in this six-year plan, is development of a new Patient Pavilion Hospital to replace outdated acute care beds and allow BCH Oakland to consolidate inpatient services to its main campus, meet future inpatient pediatric bed demands in the East Bay, and provide high-quality services that enhance patient and family experience – similar to BCH San Francisco.

## **Challenges**

The demand for patient care services at all locations has grown significantly over the past few years. On the Parnassus Heights campus site, UCSF has limitations on the amount of new facilities it can add due to the long-standing space ceiling established by a 1976 Regents’ Resolution. Therefore, it is often necessary to upgrade space within the existing clinical facilities to add new technologies, improve efficiencies, and create capacity to see more patients. This strategy is often more costly than a “green field” project. This is another reason UCSF Health is turning to its strategic partners to leverage under-utilized, non-UCSF facilities in the region allowing growth in clinical programs without having to construct additional facilities.

The Mount Zion hospital buildings house an ambulatory surgery center, therapeutic services such as radiation oncology and infusion, diagnostic imaging and lab facilities, and other outpatient programs. Mount Zion facilities are also being upgraded to accommodate clinical and administrative functions now housed in the seismically non-compliant Hellman Building. As at the Parnassus Heights site, upgrading aging (1940s era) utility

infrastructure systems at Mount Zion is a priority that competes with other programmatic needs for capital resources.

### Funding

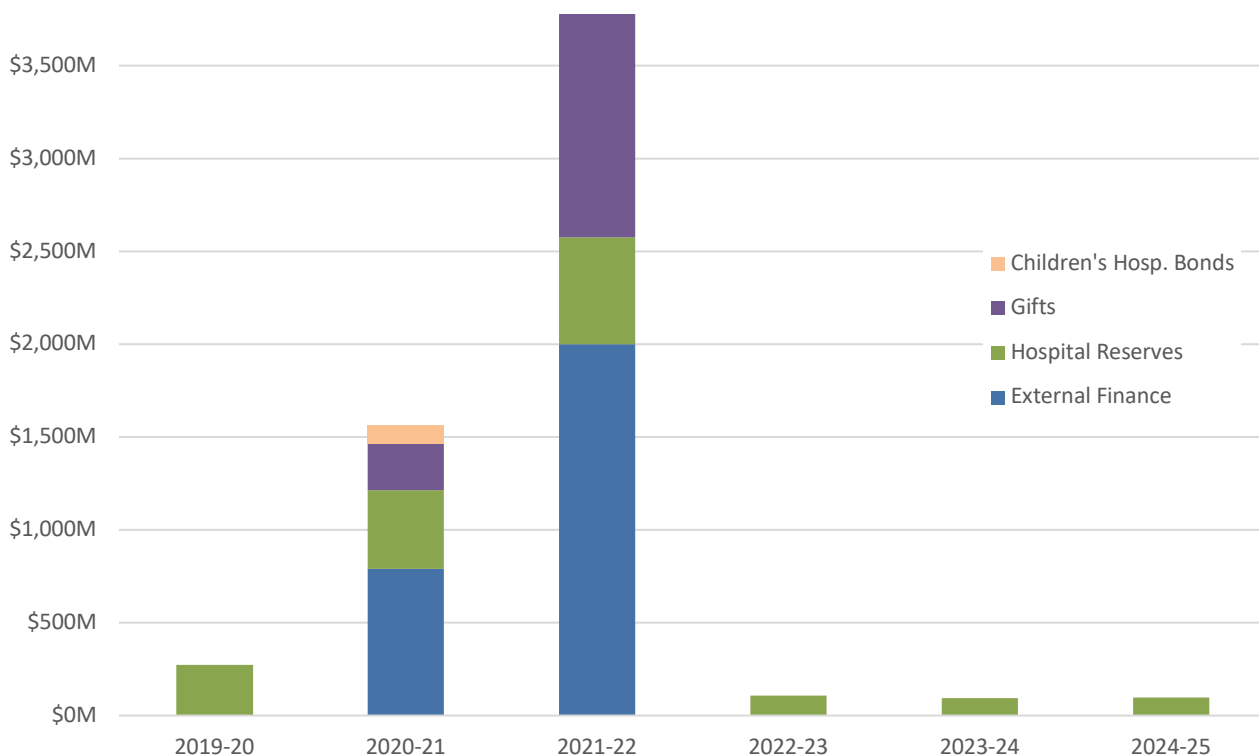
Funding for UCSF Health’s capital program is from a combination of external financing, donor funds, and revenue generated from acute care activity (hospital reserves) and is reflected in the CFP.

The replacement of the two major infrastructure projects for the Helen Diller Medical Center at Parnassus and the BCH Oakland Phase 2 will require external funding of an estimated \$2.5 billion. UCSF received a \$500 million commitment from the Helen Diller Foundation to support the planning, design, and construction of the new hospital at UCSF Helen Diller Medical Center at Parnassus Heights, ensuring that UCSF can continue to provide premier care to patients in the San Francisco Bay area and beyond.

### Public Private Partnership and Real Estate Transactions

As part of its joint venture with John Muir Health, UCSF Health established a new outpatient center in Berkeley to support the needs of the Canopy Health accountable care network. The Outpatient Center includes primary care practices, a broad array of rotating specialty physicians from UCSF Health and John Muir Health, as well as imaging and lab services. Other initiatives are in the planning stages with our regional partners including Dignity, Marin Health, Washington Hospital, and John Muir.

Display 2. \$5.9B Capital Need



**Display 3. UCSF Health Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	
				2019-20	2020-21	2021-22	2022-23	2023-24		2024-25
Capital Projects \$5M to \$10M - Medical Center		•	•	7,427 HR	39,084 HR					46,511
Clinical Space Renovation and Expansion Program		•	•	56,157 HR	47,012 HR	40,595 HR	57,224 HR	47,784 HR	49,086 HR	297,858
Moffitt 15 Acute Care Nursing Unit		•	•	40,050 HR						40,050
ACC 7 Transplant Center Expansion Augmentation	1 2			2,560 HR						2,560
M/L New Electrical Substation		•	•		15,000 HR					15,000
Mission Bay Block 34 Clinical Building					290,000 EF 76,000 HR					366,000
Helen Diller Medical Center at Parnassus Heights	1 2	•	•			2,000,000 EF 1,200,000 GF 506,600 HR				3,706,600
ACC Supply Fans & Roof Replacement	3	•	•		12,000 HR					12,000
M/L Sterile Processing Equipment Upgrade	3	•	•		11,300 HR					11,300
Benioff Children's Hospitals Oakland Phase 2 - Multiple Projects	3	•	•		500,000 EF 250,000 GF 150,000 HR 100,000 SPG					1,000,000
ACC Plaza Level Ambulatory Surgery Center Upgrades (Augmentation)	1 2	•	•		29,300 HR					29,300
Moffitt Seismic Improvements	3		•	41,400 HR						41,400
Integrated Center for Design and Construction (ICDC) at Parnassus	3			12,000 HR						12,000
Inpatient Psych Relocation	3	•	•	40,000 HR						40,000
Immunogenetics and Transplant Laboratory (ITL) Renovations	3	•	•	20,000 HR						20,000
Capital Projects \$1M to \$5M - Infrastructure		•	•	34,118 HR	34,161 HR	27,040 HR	37,116 HR	33,163 HR	35,342 HR	200,940
Capital Projects \$1M to \$5M - Renovation		•	•	15,172 HR	10,989 HR	10,405 HR	14,220 HR	12,897 HR	13,744 HR	77,427
<b>Total</b>				<b>268,884</b>	<b>1,564,846</b>	<b>3,784,640</b>	<b>108,560</b>	<b>93,844</b>	<b>98,172</b>	<b>5,918,946</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year

Projects from \$5 - \$10 million:  
 ACC 2 Spine Center Relocation  
 ACC 3 HEM BMT  
 LPPI Magnet  
 Mount Zion Hellman Demolition  
 MB GMB Level 4 Backfill  
 PCMB Vacated Space Renovation



# 2019-25 SANTA BARBARA CAMPUS CAPITAL NEED

UC Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Teaching and research go hand in hand, ensuring that UCSB students are full participants in an educational journey of discovery that stimulates independent thought, critical reasoning, and creativity. The campus community is characterized by a culture of interdisciplinary collaboration responsive to the needs of a multicultural and global society. Its commitment to public service is manifested through the creation and distribution of art, culture, and knowledge that advance the well-being of California, the nation, and the world. All of this takes place within a unique living and learning environment. Students, faculty, staff, and the public seek opportunities - and draw inspiration from - the beauty and resources of UC Santa Barbara’s extraordinary location next to the Pacific Ocean.

The Capital Financial Plan (CFP) presents the campus’s capital need for the next six years. The CFP focuses on this year (2019-20) and next five fiscal years (2020-21 to 2024-25) and represents projects in the near-term planning horizon. The Santa Barbara CFP is supported by \$2.4 billion in capital projects over the current term (refer to Display 1). Seismic corrections included in the CFP are based on current estimated need; however, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near time, or adjustments to estimated budgets as the scope for corrective action is refined.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	155,882	76,974	44,190	34,084	58,136	80,045	449,311	185,948
Capital Need with Funding Not Identified	438,588	388,030	129,932	140,513	211,915	602,685	1,911,663	1,911,663
<b>Total</b>	<b>594,470</b>	<b>465,004</b>	<b>174,122</b>	<b>174,597</b>	<b>270,051</b>	<b>682,730</b>	<b>2,360,974</b>	<b>2,097,611</b>

## Challenges

Surging enrollment coupled with aging buildings creates tremendous pressure on capital needs. Over the last 20 years, campus headcount enrollment has grown approximately 30%, nearly half of which has occurred in the past five years. In 2019, on-campus enrollment climbed to 24,574, a 3.2% increase over 2018 and that is currently approaching the Long Range Development Plan (LRDP) enrollment cap of 25,000 six years earlier than anticipated.

The need for academic space has mirrored enrollment growth. The challenge has been how to balance the need for major building maintenance and increased space for academic program growth. Without additional new space and adequate capital funding, the challenge is compounded. To support academic growth, the campus has converted building corridors and lobby space, and reassigned storage, administrative offices, and class laboratory service space to address acute shortages of academic space. To fund deferred maintenance and basic capital needs, the campus has leveraged reserves generated by its energy program and tapped other scarce campus funds to tackle critical deferred maintenance issues. Aging facilities and space shortages are persistent problems affecting academic programs. The general scarcity of campus space and capital resources presents

serious obstacles to supporting continued enrollment growth, recruiting and retaining faculty, and sustaining the academic distinction the campus has achieved.

UC Santa Barbara's capital improvement program depends heavily on State funding support. Over the past decade, State support for capital has been limited and uneven. It has been 16 years since the campus's last discipline-specific academic building was approved for State funding (i.e., Education and Social Sciences Building), and since 2013, academic support space remained flat or declined while enrollment grew by approximately 15%.

Enrollment growth has also put pressure on student services facilities such as student health, career services, as well as on housing. Other crucial student service programs, such as student mental health and counseling, have outgrown their space, which has created further challenges for students already in need of support.

Regarding housing, the campus Long Range Development Plan (LRDP) analyzed enrollment, with the campus growing from 20,000 to 25,000 students. For each additional student above 20,000, the campus is required to build a new bed (5,000 beds). Approximately 1,000 of those beds have been added, and another 4,000 beds are currently being planned (i.e., the Donor Funded Student Housing project).

The campus is also addressing the need for new housing for faculty and staff, as described in the LRDP. For faculty, 160 housing units have been completed or are in process, while concurrently, the campus is pursuing a public-private partnership (P3) mixed-use project to construct approximately 500 to 600 housing units on Ocean Road. It is imperative that the campus provide affordable housing opportunities near campus. Santa Barbara is one of the most expensive real estate markets in the country, which makes it a challenge to recruit and retain faculty and staff.

The growing backlog of deferred maintenance combined with a list of seismically deficient buildings represents a significant challenge for the campus's capital program. The deferred maintenance backlog is estimated at \$630 million and encompasses 50 state-supportable facilities, plus administrative support facilities and infrastructure.

Regarding seismic safety, in response to the UC systemwide seismic assessment, the campus moved aggressively in engaging structural studies to identify deficiencies that represent the highest risk. After the initial Tier 1 assessment, the campus targeted 11 high priority buildings for immediate inclusion in the CFP; of these, four are rated UC Seismic Performance Level (SPL) VI and seven are rated SPL V. The preliminary estimate for these high priority seismic projects exceeds \$400 million, of which approximately \$300 million focuses on seismic corrections. The \$100 million variance addresses code required improvements and repairs to aged building systems and infrastructure.

## Priorities

UCSB's current level of academic distinction is the result of years of collaborative hard work and the investment of significant resources. To continue to advance academic excellence, the campus must grow to accommodate increasing enrollment and expanding interdisciplinary programs and initiatives. This growth must also be consistent with the framework of the LRDP. Enrollment growth has created space shortages, a challenge that is compounded by growing deferred maintenance and managing the seismic safety of aging assets. The following gives brief descriptions of State-eligible projects that represent the campus's highest priorities in addressing these challenges:

- The New Physics Building will support a department whose undergraduate enrollment has increased 319% over the last ten years. The project will add a new lecture hall, seminar room, academic offices, laboratories,

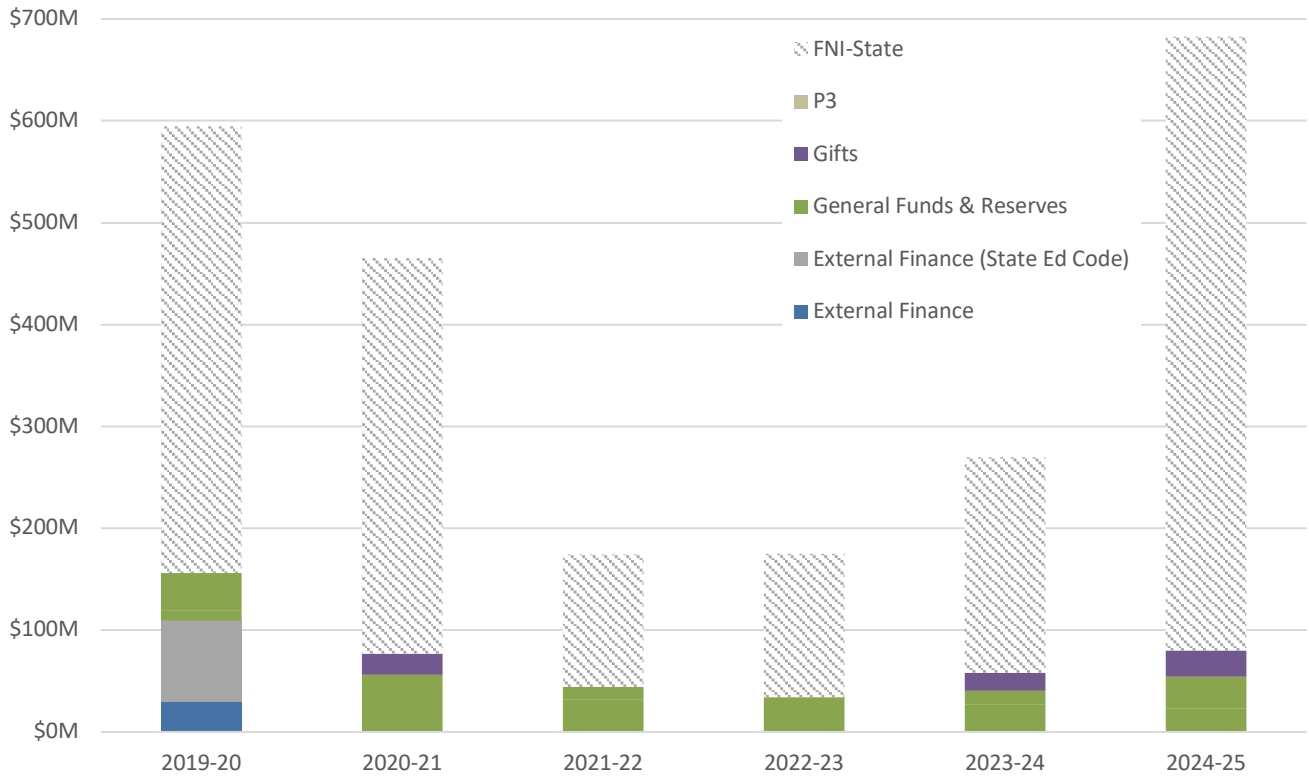
student study spaces, and a commons. At completion, the project would release space in Broida Hall, enabling a major renovation targeting deferred maintenance and seismic strengthening, while providing increased academic and administrative support and class laboratory space that Physics desperately needs.

- The Engineering III Building will address significant space deficiencies stemming from past enrollment growth in the College of Engineering. The project addresses critical needs in the departments of Materials, Electrical and Computer Engineering, and Chemical Engineering. At completion, the project would release space in existing buildings to benefit other departments, enabling a major renovation project that would address deferred maintenance.
- The Marine Biotechnology Laboratory was constructed in 1963 and was among the first university buildings in the country with a piped seawater system. The building was rated SPL V in the systemwide assessment. Located next to the Pacific Ocean, the building suffers from corrosion caused by the marine environment, seawater, and age. Significant deterioration of concrete and structural steel requires repairs to ensure seismic safety. In addition, building systems are reaching the end of their useful life. A comprehensive building renewal and seismic retrofit is proposed.
- Music Building Unit I Seismic Corrections addresses identified seismic deficiencies and deferred maintenance. The UC seismic evaluation program rated the building's seismic performance level a "VI". The Music Building was among the first permanent campus buildings, constructed in 1954.

Housing continues to be a high priority. The LRDP requires new student housing to support enrollment growth, and the campus's Strategic Academic Plan cites affordable housing for faculty and staff as "perhaps the greatest single tactical challenge that the campus faces." Projects that represent campus priorities in addressing these challenges include:

- Facilities Management Relocation to Cabrillo Business Park (CBP): the project will vacate the Facilities Management (FM) site to enable construction of the new Donor Funded Student Housing project. Located a quarter mile from campus, the CBP site will be redeveloped including demolition, new construction, and possible renovation of existing buildings. The project will provide facilities for the current occupants of the FM site, and new office space for select academic units to be relocated from campus in order to create expansion space to support academic programming on campus.
- Donor Funded Student Housing: the project provides approximately 4,000 student beds to support enrollment growth as articulated in the LRDP.
- Ocean Road Faculty and Staff Housing: this project is a public private partnership that will develop 500-600 faculty and staff rental and for-sale homes. The project will incorporate parking, retail, and campus services. The proposed site is on Ocean Road, between the main campus and Isla Vista, and the plan is to integrate the campus and the Isla Vista community where possible.

**Display 2. \$2.4B Capital Need**



**Display 3. Santa Barbara Campus Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Facilities Management Relocation Cabrillo Business Park	1			30,000 EF							30,000	100%
Broida Lecture Hall Seismic Repair	3	•	•	4,000 CF							4,000	
Classroom Building	1			79,787 SG 17,346 CF							97,133	100%
Ocean Science Education Bldg (OSEB) Ph 2	1				20,703 GF						20,703	100%
West Campus Ranch House									26,000 GF		26,000	
Capital Projects \$1M to \$10M (E&G)	1	•		5,176 CF	5,357 CF	5,546 CF	5,740 CF	5,942 CF	10,351 CF		38,112	100%
Deferred Maintenance	1	•		5,000 CF	7,000 CF	7,000 CF	7,000 CF	7,000 CF	21,000 CF		54,000	
<b>Total Education:</b>											<b>269,948</b>	
<b>AUXILIARY PROJECTS</b>												
University Childrens Center Seismic Corrections	3			5,000 CF							5,000	
Capital Projects \$1M to \$10M (Aux)	1			9,573 AR	43,914 AR	31,644 AR	21,344 AR	27,194 AR	22,694 AR		156,363	



	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Donor Funded Student Housing Project	1		TBD AR								
	3		TBD GF								
			TBD CF								
			TBD EF								
Student Wellness Center	3				P3						TBD
Ocean Road Faculty and Staff Housing	3				TBD						TBD
Aquatics Center	1							18,000 GF			18,000
<b>Total Auxiliary:</b>										<b>179,363</b>	
<b>Campus Projects Total</b>				<b>155,882</b>	<b>76,974</b>	<b>44,190</b>	<b>34,084</b>	<b>58,136</b>	<b>80,045</b>	<b>449,311</b>	<b>185,948</b>

### Funding Not Identified (FNI)

Reductions or stagnation in State support for the capital program impacts Santa Barbara greatly, since the campus lacks alternative sources of revenue that could be used to help offset the lack of State capital funding. Without State support, UCSB’s capital program is dependent upon external financing, philanthropy, grants, auxiliary, and campus funds to address capital needs.

#### Display 4. Santa Barbara Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Biological Sciences 2 Seismic Corrections	3	•	•	44,000 SE							44,000	100%
Chemistry Building Seismic Renewal	3	•	•	72,000 SE							72,000	100%
Ellison Hall Seismic Corrections	3	•	•	45,000 SE							45,000	100%
Engineering 2 Seismic Corrections	3	•	•	51,000 SE							51,000	100%
Marine Bio Technology Building Seismic Renewal	1	•	•	40,000 SE							40,000	100%
Music Building Unit I Seismic Corrections	3		•	10,588 SE							10,588	100%
Phelps Hall Seismic Corrections	3	•	•	102,000 SE							102,000	100%
Cheadle Hall Seismic Corrections	3	•	•		26,000 SE						26,000	100%
Engineering III Building	1	•			162,515 SE						162,515	100%
New Physics Building	1	•			162,515 SE						162,515	100%
HSSB Seismic Corrections	3	•	•			36,000 SE					36,000	100%
Music Renewal	1	•				36,229 SE					36,229	100%
Public Safety Building Expansion	2					20,703 SE					20,703	100%
Academic Building I	1						82,810 SE				82,810	100%
	2											

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Infrastructure Renewal Phase 2 (W,C)	1						20,703 SE			20,703	100%
Academic Building II	1						103,513 SE			103,513	100%
Broida Renovation	1	•					71,402 SE			71,402	100%
Academic Building III	1							103,513 SE		103,513	100%
Academic Building IV	1							103,513 SE		103,513	100%
Academic Building Renewal I	1	•						51,756 SE		51,756	100%
Academic Building Renewal II	1	•						41,405 SE		41,405	100%
Academic Building Renewal III	1	•						51,756 SE		51,756	100%
Academic Building Renewal IV	3	•						41,405 SE		41,405	100%
College of Creative Studies	1							36,229 SE		36,229	100%
Engineering Buildings Renovation	1	•						62,108 SE		62,108	100%
Deferred Maintenance	1	•		37,000 SE	37,000 SE	37,000 SE	37,000 SE	37,000 SE	111,000 SE	333,000	100%
										<b>Total Education:</b>	<b>1,911,663</b>
<b>Campus Projects Total</b>				<b>438,588</b>	<b>388,030</b>	<b>129,932</b>	<b>140,513</b>	<b>211,915</b>	<b>602,685</b>	<b>1,911,663</b>	<b>1,911,663</b>

**NOTES**

Change Codes: 1 = Budget Update      2 = Scope Update      3 = New Project      Blank = no change from prior year

Projects from \$5 - \$10 million:      Articial Flume      Ceasar Uyesaka Stadium  
 Arnhold Tennis Center      Lighting Marine Ecology Labs  
 Chemistry PSB North      San Clemente Apartments





# 2019-25 SANTA CRUZ CAMPUS CAPITAL NEED

The University of California, Santa Cruz, is a leading public research university distinguished by a commitment to distinctive educational opportunities, social justice, diversity and inclusion, and the environment. The UC Santa Cruz faculty perform ground-breaking research in a number of diverse interdisciplinary fields including astronomy and astrophysics, games and playable media, genomics, ocean and marine sciences, and sustainable organic agriculture. By taking an integrated approach to research and education, the campus offers undergraduate and graduate students a transformational experience, providing experiential learning and research opportunities. While its accomplishments are considerable, UC Santa Cruz faces challenges endemic to higher education in the twenty-first century, including the funding of core services and capital needs and an increased demand for student support services.

The Santa Cruz Campus Capital Financial Plan (CFP) focuses on projects in the current fiscal year (2019-20) and the next five years (2020-21 to 2024-25). It identifies a total need (state and non-state supportable) of over \$3.2 billion in the current term — of which the most critical issues are the quantity of needed seismic retrofits, and shortages of classrooms, laboratory space, and on-campus housing. The state supportable portion of this need is 84%, but State General Funds are only available for 2.5% of that need. Seismic corrections included in the CFP are based on current estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near term, or adjustments to estimated budgets as the scope for corrective action is refined. Campus projects in the CFP that could be of specific interest to the goals of UC Health can be found In the Appendix.

Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	118,412	2,950	6,000	15,000	2,000	24,516	168,878	70,833
Capital Need with Funding Not Identified	74,050	423,226	825,067	486,895	175,956	1,127,149	3,112,343	2,606,522
<b>Total</b>	<b>192,462</b>	<b>426,176</b>	<b>831,067</b>	<b>501,895</b>	<b>177,956</b>	<b>1,151,665</b>	<b>3,281,221</b>	<b>2,677,355</b>

## Academic & Enrollment Priorities

The CFP seismic, instructional, and housing projects help address severe classroom and laboratory shortages associated with significant growth in STEM-related fields and with faculty recruitments in these disciplines. The 2019-25 projects also make possible planned near-term growth and programmatic improvements that support systemwide goals to increase the number of degrees awarded and sustain the UC Santa Cruz transformative educational experience associated with key Strategic Academic Plan research and learning goals.

Building on UC-wide Innovative Learning Technology Initiative (ILTI) investments, the campus has experienced noteworthy year-over-year growth in online enrollments -- a strategy supporting time-to-degree improvements and providing alternate student success pathways. The campus’s recent success in growing its online curriculum, however, does not attenuate our instruction and research space shortages characterized by classroom and laboratory space per enrollment, which are amongst the lowest in the UC system.

Projects include construction of instruction and research space, renovations to support faculty recruitment, expand research opportunities, accommodate changing pedagogies, and provide on-campus housing for a diverse and growing student body. Where feasible, these projects also address the deferred maintenance backlog as identified by the campus-wide Facility Condition Assessment (FCA), conducted as part of UC's ICAMP (Integrated Capital Asset Management Platform.)

The CFP projects were prioritized by a committee of principal officers and the Academic Senate. Evaluation criteria included fulfilling academic and enrollment needs as well as addressing life-safety or regulatory requirements (seismic and ADA), and repairing/modernizing critical infrastructure. The resulting near-term plan represents a compromise that balances these needs with potentially available resources.

### **A Focus on Seismic Priorities**

While past campus plans included specific projects to mitigate known seismic issues, the UC-wide seismic policy requires all campus buildings with a seismic rating of V or VI to be mitigated. To conform to the policy, the CFP includes approximately \$1 billion for seismic retrofits and/or building replacement projects. Retrofit projects for the most seismically deficient and operationally critical structures are included in the early current-term years, while additional seismic projects are planned for the later current-term. Funding has not yet been identified for these projects.

The largest challenge associated with performing these seismic projects is the lack of decanting space on the UC Santa Cruz campus. Preliminary studies indicate that many buildings will need to be vacated during the seismic retrofit improvements, requiring up to 189,000 gross-square-feet of surge space be available to address seismic issues.

*Interdisciplinary Instruction & Research Building (II&R Building):* This new facility would provide replacement square footage for the seismically deficient and functionally outdated Thimann Laboratories and also include additional square footage for instructional and support space. In the near term, this additional square footage would be used as decanting space for other top priority seismic retrofit projects. In the longer term it would be available for critically needed classrooms and laboratory space to address current students and future enrollment growth.

*Kerr Hall Seismic Retrofit:* Kerr Hall currently houses key administrative offices and support spaces. These functions are essential to business continuity and will decant to space made available by the II&R project during the Kerr Hall retrofit project.

*Jack Baskin Engineering Building (JBEB) Seismic Retrofit:* JBEB is the largest instructional and research laboratory facility on campus. Due to its size, the decanting plan for this project includes the space made available by the II&R project as well as other campus space that will require modifications to accommodate laboratory uses. Prior to re-occupancy, JBEB will be renewed to renovate pedagogically outdated instructional spaces and address deferred maintenance issues.

## Student and Employee Housing

When Student Housing West, a public private partnership that will provide approximately 3,000 new beds, is complete by 2023-24, the campus will house approximately 30% more students than housed today. Plans for additional on-campus employee housing are also reflected in the CFP.

## Infrastructure

Electrical service to the campus is supplied through a single, outdated service connection from the local electrical grid. This represents a single point of failure that often results in widespread campus power outages. UC Santa Cruz has grown to the point where the current system configuration does not provide the capacity, redundancy, or reliability necessary to fully support the campus. Capacity requirements are also expected to increase significantly in future years as the campus works to comply with the UC Sustainability Policy which requires all electric solutions for energy systems.

The *Campus-wide Electrical System Seismic Resiliency* utility upgrade eliminates single-point-of-failure issues and provides increased electrical service to support enrollment growth, reduce campus electrical outages, and provide resiliency during a catastrophic event.

## Deferred Maintenance

The current estimate of highest priority, State-supportable deferred maintenance (DM) projects included in the CFP approaches \$110 million. However, the ongoing ICAMP assessment is anticipated to identify additional DM projects that will substantially increase this estimated backlog.

Capital investment allowances have not kept pace with the renewal demands of aging facilities and infrastructure. This lack of funding reduces the useful life of buildings and infrastructure systems. The campus invests annually to address urgent DM, but the backlog of highest priority State-supportable DM continues to grow.

The CFP includes capital renewal projects for dining facilities at Porter College and Rachel Carson College, as well as the apartments at Crown and Merrill Colleges, Redwood Grove, and Graduate Student Housing. In addition, the plan identifies infrastructure upgrade projects such as the 12kV B-Feeder Reinforcement, and Extension and Circulation System Safety Upgrades that would extend the life of existing systems and prevent potential system failures.

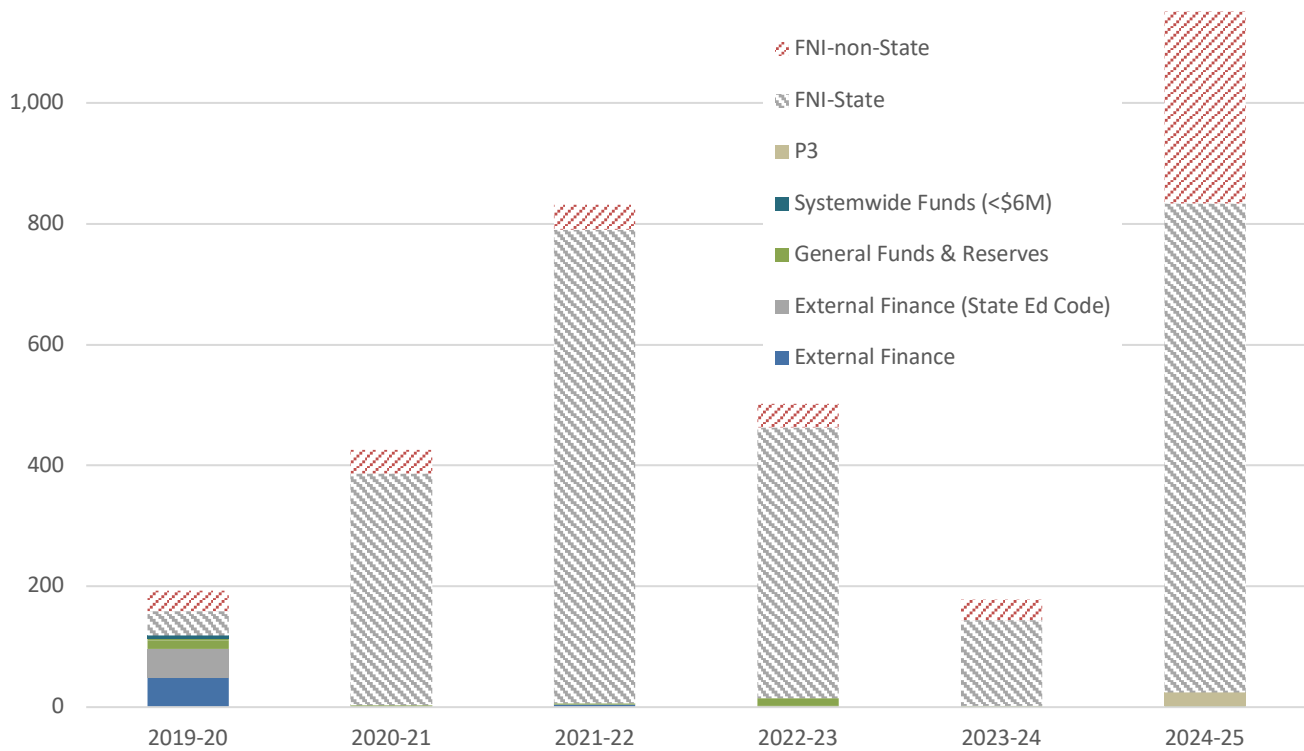
## Funding Challenges

Increasing capital needs coupled with higher construction costs pose a funding challenge not fully addressed by available State funding mechanisms.

In light of constrained State funding, the campus has creatively used non-State resources (such as Century Bonds and other debt) to address the most urgent projects and, where possible, initiated multi-use development projects (such as the Kresge College redevelopment) to maximally leverage available resources. To the extent feasible, campus resources are invested in the planning and early design phases of capital projects, but external

financing or State funds are required to complete construction. Private support plays a key role for select capital projects such as the recent third floor renovation of the Science and Engineering Library (enabled by \$5 million in donor funding).

### Display 2. \$3.3B Capital Need



### Display 3. Santa Cruz Campus Capital Need with Funding (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
<b>EDUCATION PROJECTS</b>												
Kresge College Academic				47,200 SG							47,200	100%
Projects Under \$10M - State Eligible	3			7,000 EF 5,000 OUS							12,000	100%
Telecommunications Infrastructure Improvements Phase D	1			1,410 AR 7,668 EF 3,234 UR							12,312	62%
Statewide Energy Partnership (SEP) Program	1 2					4,000 EF					4,000	100%
Student Life Seismic Corrections Phase 2B	3		•				13,000 UR				13,000	
<b>Total Education:</b>											<b>88,512</b>	
<b>AUXILIARY PROJECTS</b>												
Rachel Carson College Dining Expansion	1			1,800 AR 34,400 EF							36,200	
Ranch View Terrace Phase 2 (P3)									22,516 P3		22,516	



	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Projects Under \$10M - Non-State Eligible	3	•		10,700 AR	2,950 AR	2,000 AR	2,000 AR	2,000 AR	2,000 AR	21,650	
<b>Total Auxiliary:</b>										<b>80,366</b>	
<b>Campus Projects Total</b>				<b>118,412</b>	<b>2,950</b>	<b>6,000</b>	<b>15,000</b>	<b>2,000</b>	<b>24,516</b>	<b>168,878</b>	<b>70,833</b>

### Funding Not Identified (FNI)

The projects identified in the below table are those projects for which funding has not been identified. Not all campus enrollment-driven priorities are reflected in this listing. However, many projects listed have been identified in the campus plan for several years and contribute toward needs generated by past enrollment growth.

#### Display 4. Santa Cruz Campus Capital Need with Funding Not Identified (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Silicon Valley Campus Improvements	3			9,947 SE						9,947	100%
Telecommunications Infrastructure Improvements Phase D	1			3,010 SE						3,010	100%
Top Five Life-Safety and Operational Enhancement Infrastructure Projects	3			5,750 SE						5,750	100%
Alterations for Physical, Biological, and Social Sciences (Soc Sci 1 & Thimann)	1				15,285 SE					15,285	100%
Engineering 3	1				138,169 SE					138,169	100%
Infrastructure Improvements Phase 3	1 2				35,921 SE					35,921	100%
Interdisciplinary Instruction and Research Building	3				15,120 SE	236,880 SE				252,000	100%
Jack Baskin Engineering Seismic Decanting Project	3				5,138 SE	80,494 SE				85,632	100%
Kerr Hall Seismic Retrofit	3				65,000 SE					65,000	100%
Social Sciences 3A	1 2				70,000 SE					70,000	100%
Campus-wide Electrical System Seismic Resiliency	3	•				9,720 SE	152,280 SE			162,000	100%
Earth & Marine Sciences Building Seismic Retrofit						143,727 SE				143,727	100%
Global Engagement Space Efficiency	3					2,796 SE				2,796	100%
Instructional Facilities Upgrades	1					22,176 SE				22,176	100%
Integrated Teaching and Learning Complex	3	•				41,328 SE				41,328	100%
Infrastructure Improvements Phase 4	1 2					50,369 SE				50,369	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)					Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24			2024-25
Jack Baskin Engineering Building Seismic & Capital Renewal	3		•			30,738 SE	30,738 SE	65,123 SE		126,599	100%
New Instructional Facilities - Non-State Eligible	1 2					2,112 NSE				2,112	
New Instructional Facilities - State Eligible	1 2					84,479 SE				84,479	100%
Science & Engineering Library Student Study Space Level 1	3					21,120 SE				21,120	100%
Theater Arts Complex Seismic Retrofit	3					38,000 SE				38,000	100%
Alterations for Academic Programs Phase 2 - 2300 Delaware	1						24,975 SE			24,975	100%
Instruction and Research Building 1	1						92,927 SE			92,927	100%
Ocean Health Building Expansion	3						25,000 SE			25,000	100%
Science & Engineering Library Collaborative Learning Hub	1						16,579 SE			16,579	100%
Science & Engineering Library Information Commons	1						13,199 SE			13,199	100%
Science & Engineering Library Student Study Space Level 3	1						19,603 SE			19,603	100%
Social Sciences 3B, 3C	1 2						52,000 SE			52,000	100%
Infrastructure Improvements Phase 5	1 2							56,240 SE		56,240	100%
Campuswide Sanitary Sewer System Seismic Resiliency	3		•						96,000 SE	96,000	100%
Infrastructure Improvements Phase 6	1 2								31,288 SE	31,288	100%
Instruction and Research Building 2	1								92,927 SE	92,927	100%
Resource Recovery Facility Phase 2	1		•						13,728 SE	13,728	100%
Science & Engineering Library Café	1								11,827 NSE	11,827	
Seismic and Capital Renewal - Phase 2, State Supported	3		•						280,000 SE	280,000	100%
Seismic and Capital Renewal - Phase 3, State Supported	3		•						17,200 SE	17,200	100%
Seismic and Capital Renewal - Phase 4, State Supported	3		•						3,500 SE	3,500	100%
Statewide Energy Partnership (SEP) Program	3								14,000 SE	14,000	100%
UCO Instrumentation Facility	1								12,672 SE	12,672	100%
Thimann Capital Renewal	3								67,215 SE	67,215	100%
Thimann Seismic Project	3		•						154,796 SE	154,796	100%
West Jordan Gulch Pedestrian Bridge	1		•						4,224 SE	4,224	100%
Deferred Maintenance and Capital Renewal Program - State Funded	3	•		15,501 SE	15,501 SE	15,501 SE	15,501 SE	15,501 SE	15,501 SE	93,006	100%
Projects Under \$10M - State Eligible	3			5,750 SE	24,000 SE	6,535 SE	5,000 SE	5,000 SE	5,850 SE	52,135	100%

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible	
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25			
								<b>Total Education:</b>	<b>2,620,461</b>			
<b>AUXILIARY PROJECTS</b>												
Student Health Services Renovation	3			5,000 NSE						5,000		
Projects Under \$10M - Non-State Eligible	3	•			5,000 NSE	5,000 NSE					10,000	
Seismic and Capital Renewal - Phase 1, Non-State Supported	3		•							30,000 NSE	30,000	
Seismic and Capital Renewal - Phase 2, Non-State Supported	3		•							8,200 NSE	8,200	
Student Center	3									100,000 NSE	100,000	
Student Health Services Expansion	1									134,130 NSE	134,130	
Deferred Maintenance and Capital Renewal Program - Non State Funded	3	•	•	34,092 NSE	34,092 NSE	34,092 NSE	34,092 NSE	34,092 NSE	34,092 NSE	204,552		
								<b>Total Auxiliary:</b>	<b>491,882</b>			
<b>Campus Projects Total</b>				<b>74,050</b>	<b>423,226</b>	<b>825,067</b>	<b>486,895</b>	<b>175,956</b>	<b>1,127,149</b>	<b>3,112,343</b>	<b>2,606,522</b>	

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year

Projects from \$5 - \$10 million	2300 Delaware A/B Office Renovations - east 2300 Delaware A/B Office Renovations - west Academic Resource Center Renovations Alterations for Academic Programs Phase 3 (Jack Baskin Engineering Building and Engineering 2) Biomedical Sciences Building Functional Improvements BSOE Advanced Instructional Computing Lab Classroom Unit One Parking Improvements Communications Building Interior Improvements Cook House Remediation	Data Center Generator Hay Barn Phase 2B KZSC Tower Generator Parking Lot Porter College Dining Expansion Rachel Carson Res Halls Shower Door Renovations for New Faculty Hires Upgrades (with ADA, site improvements) Stevenson College Lower Quad Utilities Stevenson House 4 Laundry Room	Stevenson House 7 Laundry Room Student Success Facilities Expansion University Events Center University House Redevelopment
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# 2019-25 DIVISION OF AGRICULTURE AND NATURAL RESOURCES CAPITAL NEED

The mission of the University of California’s Division of Agriculture and Natural Resources (UC ANR) is to engage the University with the people of California to achieve innovation in fundamental and applied research and education that supports:

- sustainable, safe, and nutritious food production and delivery;
- economic success in a global economy;
- a sustainable, healthy, and productive environment;
- science literacy and youth development programs.

To help achieve these results, UC ANR has an approximately \$70 million capital program for the current term (2019-20 to 2024-25), for which \$24 million in funding is identified. Seismic corrections included in the CFP are based on current assessments of estimated need. However, the results of an ongoing systemwide assessment could result in additional projects being prioritized in the near-term or adjustments to estimated budgets as the scope for corrective action is refined.

**Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding	19,904	667	1,001	1,000	1,000	667	24,239	19,237
Capital Need with Funding Not Identified	4,689	26,000	3,000	3,000	6,000	3,000	45,689	43,439
<b>Total</b>	<b>24,593</b>	<b>26,667</b>	<b>4,001</b>	<b>4,000</b>	<b>7,000</b>	<b>3,667</b>	<b>69,928</b>	<b>62,676</b>

## Priorities

To achieve the mission of the Division of Agriculture and Natural Resources, UC ANR continues to modernize technology and facilities infrastructure. However, many of the facilities are aging and in need of renovation. As part of the Systemwide effort, a seismic review has been initiated and the first phase evaluation shows that numerous UC ANR facilities have incomplete or inadequate seismic ratings and need to be brought into compliance with current safety standards.

A needs assessment conducted for all ANR facilities also identified deferred maintenance, capital renewal, and capital improvement projects, and prioritized improvements at all ten locations. The priorities include public engagement and education buildings, greenhouse renewal, and emergency response infrastructure. Greenhouse renewal is necessary to conduct innovative research that has a significant impact on surrounding communities, local growers, and California’s economy. Additionally, UC ANR’s public engagement and education buildings facilitate collaboration and sharing of applied research amongst academics, local governments, public agencies, and the public. Finally, UC ANR plans to make updates to life safety initiatives, such as fire suppression, water infrastructure, and emergency access for various locations.

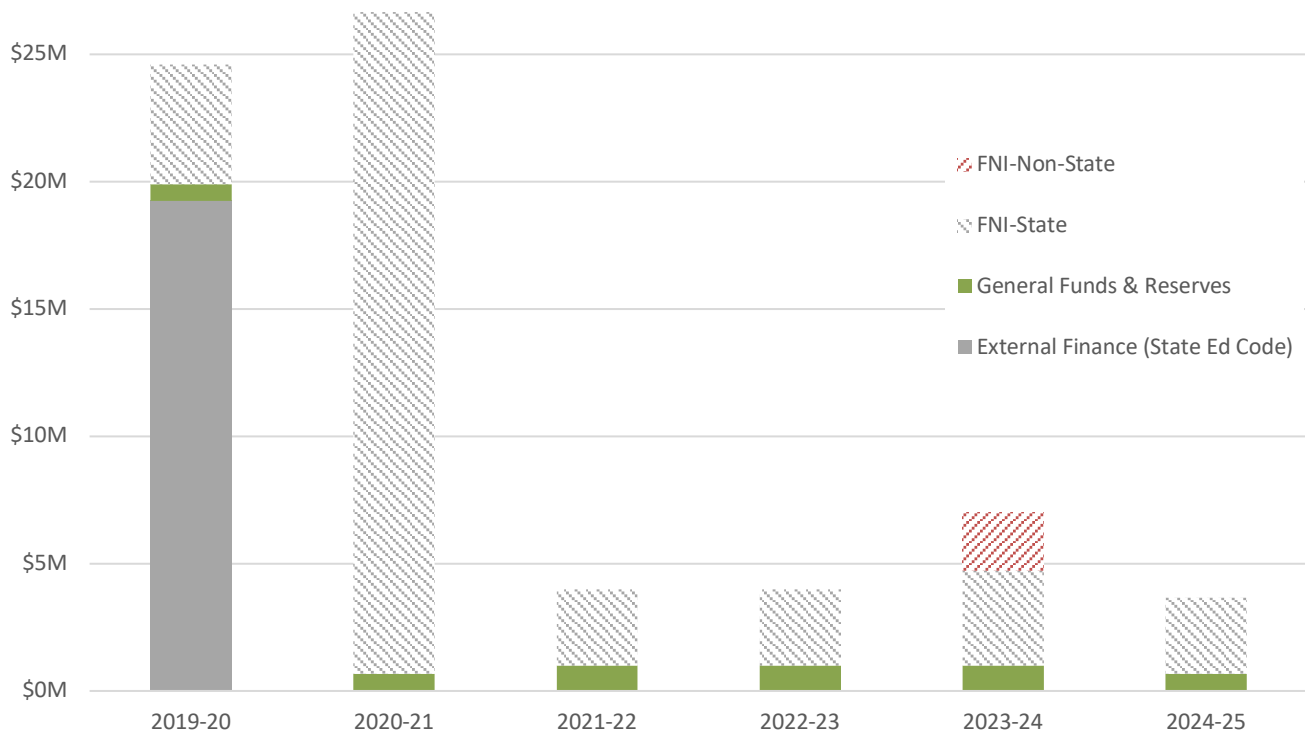
## Challenges

A deferred maintenance backlog continues to grow for UC ANR, with a current estimate of more than \$20 million. The deferred maintenance figures will feed into the comprehensive Integrated Capital Asset Management Program (ICAMP) for long-term management. Several of the highest priority projects will address some of these needs, but UC ANR needs additional funding to maintain facilities according to the highest standard of quality expected for the University.

## Funding

UC ANR has been able to obtain State GO bond funding to address some of our capital needs. Over the last twelve months, the Division has identified a large amount of seismic retrofits that we must include in our funding needs. The capital campaign continues to be defined and is expected to generate funding in later years. To address our needs, we will continue to seek external financing and conduct fund raising, while assessing our debt capacity to determine the ability to finance needs and commitments. The Division's current term of the CFP identifies approximately \$63 million of capital projects that qualify for State support. UC ANR does not have alumni, student fees, or auxiliary income to support facility projects and relies heavily on State support.

Display 2. \$70M Capital Need



**Display 3. ANR Capital Need with Funding (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Facilities Renewal and Improvements				19,237 SG						19,237	100%
Energy Efficiency Program						334 CF	333 CF	333 CF		1,000	
Capital Improvement Program				667 CF	667 CF	667 CF	667 CF	667 CF	667 CF	4,002	
<b>Total Education:</b>										<b>24,239</b>	
<b>Campus Projects Total</b>				<b>19,904</b>	<b>667</b>	<b>1,001</b>	<b>1,000</b>	<b>1,000</b>	<b>667</b>	<b>24,239</b>	<b>19,237</b>

**Funding Not Identified (FNI)**

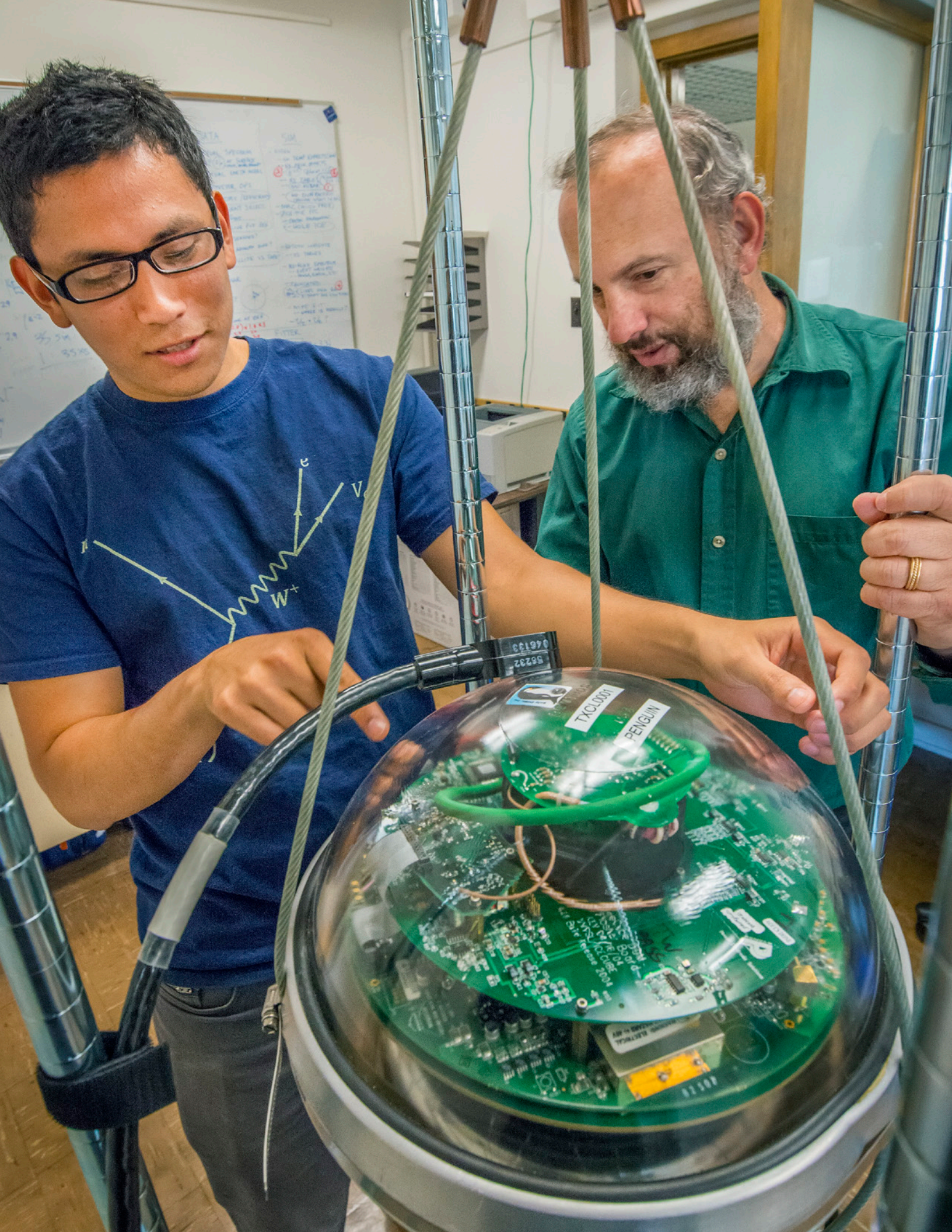
The projects identified in the below table as are projects for which funding has not been identified. This list of projects, however, does not reflect the full need for capital investment at UC ANR. There continues to be pressure to improve aging facilities and infrastructure, to provide space for expanding programs, and to continue to address life safety deficiencies in existing buildings. UC ANR continues to evaluate the critical facility needs and to identify appropriate and financially feasible solutions.

**Display 4. ANR Capital Need with Funding Not Identified (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Greenhouse Renewal					4,000 SE					4,000	100%
Renovate & Retrofit Public Engagement and Education Buildings					10,000 SE					10,000	100%
Renovate & Retrofit Research Facilities & Infrastructure					12,000 SE					12,000	100%
Elkus Ranch Environmental Education Center Program Improvements								750 SE 2,250 NSE		3,000	25%
Deferred Maintenance Program				4,689 SE		3,000 SE	3,000 SE	3,000 SE	3,000 SE	16,689	100%
<b>Total Education:</b>										<b>45,689</b>	
<b>Campus Projects Total</b>				<b>4,689</b>	<b>26,000</b>	<b>3,000</b>	<b>3,000</b>	<b>6,000</b>	<b>3,000</b>	<b>45,689</b>	<b>43,439</b>

**NOTES**

Change Codes: 1 = Budget Update 2 = Scope Update 3 = New Project



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## 2019-25 LAWRENCE BERKELEY NATIONAL LABORATORY CAPITAL NEED

Lawrence Berkeley National Laboratory (Berkeley Lab or Lab) is a world leading federal research institution managed exclusively by the University of California (UC) for the U.S. Department of Energy (DOE). UC researchers and students and the State of California leverage significant benefits from Berkeley Lab in advancing scientific research, technology development, and policy solutions to grand challenges.

Berkeley Lab is an open, unclassified, multiprogram research institution that advances the frontiers of science and technology through large multidisciplinary team science, core research programs led by outstanding investigators, and advanced instruments and user facilities. Among its specialized capabilities are high performance computing and data science, materials synthesis and characterization, and genomic science. Berkeley Lab is located on 202 acres of Regents-owned land in the hills above the UC Berkeley campus and has been a part of the UC system since 1931; it has been affiliated with DOE or DOE's federal predecessors since the 1940s. Berkeley Lab's main campus consists of approximately 1.98 million gross-square-feet (gsf) of space across 98 buildings and 20 trailers. Three of the buildings, containing 263,536 gsf of space, are owned by the University of California. Approximately 3,130 full-time University of California employees work at the Lab.

Berkeley Lab's scientific leadership among the federal labs, including its high number of peer reviewed journal articles, citations, and patents, and its focus on DOE mission objectives, such as novel energy technologies, environmental sustainability solutions, and basic scientific discoveries, reflects a set of competencies and capabilities that benefit the UC system and the State of California. Representing more than \$1 billion per year in federal investment, Berkeley Lab's scientific user facilities annually support more than 1,800 researchers from the ten UC campuses in addition to researchers from the California State University system. Major Lab-led initiatives such as the Joint Bioenergy Institute offer further funding and collaborative opportunities for UC researchers. More than 1,000 students and young scientists, most of them from UC campuses, gain critical, on-the-job experience working alongside world-class researchers at Berkeley Lab's unique scientific facilities.

Although the DOE supports the substantial majority of Berkeley Lab's capital investment, selective, strategic state investments are at times necessary to enable University of California and the State to fully leverage the Lab's capabilities, successfully compete for large federal grants, and assert leadership in key fields. For example, a \$40 million state investment in Regents-owned Chu Hall at Berkeley Lab helped win national leadership (shared with Caltech) of a \$195 million federal investment in conversion of sunlight to clean fuels and hydrogen. The \$143 million Regents -owned Wang Hall houses the National Energy Research Scientific Computing Center (NERSC) and the Lab's world-class supercomputer, used annually by approximately 800-900 UC users. NERSC's supercomputer is typically ranked as one of the top ten most powerful computers in the world and is often considered one of the most productive supercomputers, with 2,400 peer reviewed published papers annually.

Certain infrastructure elements located at or near Berkeley Lab are either wholly owned by the Regents or integrated with federally owned infrastructure. The Regents-owned Guest House facilitates broad access to use of the Lab's facilities, including housing for UC students, and post-doctoral and faculty researchers from throughout the State. Additionally, Berkeley Lab infrastructure systems, such as roads and utilities, are integrated with Regents-owned infrastructure and require coordinated federal and state investments to ensure continuous safe and reliable service to both organizations.

The Capital Financial Plan (CFP) presents the Lab's capital need for six years. The CFP focuses on this year (201920) and next five fiscal years (2020-21 to 2024-25) and represents projects in the near-term planning horizon.

These six years are named the current term. The Berkeley Lab’s CFP is supported by \$254 million for UC projects over the current term, for which funding has not been identified.

**Display 1. Summary of Current Term (2019-20 to 2024-25) UC Capital Need (\$000s)**

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total	State Eligible
Capital Need with Funding Not Identified		13,000	6,000	15,000		220,000	254,000	144,000
<b>Total</b>		<b>13,000</b>	<b>6,000</b>	<b>15,000</b>		<b>220,000</b>	<b>254,000</b>	<b>144,000</b>

**State Funding Priorities**

While most capital funding will come from federal sources, Berkeley Lab has identified several funding gaps where state investments can: 1) leverage federal investments to the benefit of the University of California and the State, 2) improve deficient assets owned by the Regents, 3) enhance the University of California’s excellence in Lab stewardship and safety, and 4) renew or otherwise improve facilities of a shared or interconnected nature between the University of California and DOE.

**Centennial Bridge Lab Share:** Constructed in 1963 by the Atomic Energy Commission (AEC) and donated to the Regents, Centennial Bridge is built on a landslide area and faces significant seismic risks. The road and associated bridge are now used principally by UC Berkeley and local residents to access a number of UC facilities including the Lawrence Hall of Science, the Math Sciences Research Institute, and the Space Sciences Laboratory. Since Centennial Road bisects the Lab, the bridge enables physical connectivity throughout the Lab site. In doing so, the bridge allows continuous access to approximately one quarter of the Lab’s facilities, including the Lab’s permitted waste handling facility. The road also serves as a key emergency exit route for UCB, the Lab, and the general public during an emergency fire or earthquake event.

**Hearst Avenue/Cyclotron Road:** The primary entry and egress point for Berkeley Lab is located near the terminus of Hearst Avenue, just east of the UC Berkeley campus. The existing configuration of this road lacks a shoulder on the uphill side and is suboptimal for receiving large trucks and Lab shuttles given its steep incline and tight turn. This project will also improve the safety profile of this heavily trafficked road by connecting pedestrian and bicycle improvements recently constructed along Hearst Avenue with similar improvements made at the Lab. Numerous UC students and employees travel daily between the Lab and UC Berkeley to teach and conduct joint research.

**Biological Building #3:** To enhance the UC System’s ability to compete for major federal research investments and maximize research and educational opportunities created by the Lab’s position as the DOE’s primary biosciences center, this project will design and construct a new biological research laboratory and office building to facilitate vacating buildings seismically rated V (poor) and VI (very poor), reduce the Lab’s use of offsite leased space, and potentially expand federal research program investments. State investment in new academic and laboratory space will advance the University’s research and academic missions, strengthen University and State technology leadership, and advance the State’s workforce development in strategic sectors.

**Emergency/Standby Power Replacements:** Several emergency/standby generators supporting UC operations are at the end of useful life and require replacement. These generators provide important life safety functions and protect critical research constituents by providing continuous power to facilities during unplanned power

outages. Modernization of backup power infrastructure will ensure the safety of UC employees and protect invaluable outputs of research work.

### Federal Facilities Modernization Strategy

Berkeley Lab is seeking and/or undertaking significant federally-funded upgrades, totaling \$1.032 billion dollars, related to four strategic areas:

- Chemistry and Materials Science with an upgrade to the Advanced Light Source (ALS),
- Replacement of its current supercomputer to support breakthrough Science at the Exascale,
- Discovery Science in Fundamental Physics, and
- New capabilities in Biological and Environmental Science housed in new laboratory buildings within the envisioned biosciences cluster.

Federal Projects at Berkeley Lab Current Term (2019-20 to 2024-25)		
Project	Funding Year	Total
Advanced Light Source Upgrade (ALS-U)	2019-20	410,200
Biological & Environmental Program Integration Center (BioEPIC) Building	2019-20	140,000
Linear Asset Modernization Project (LAMP)	2020-21	236,000
Seismic and Safety Modernization Building (SSM)	2020-21	95,400
General Plant Projects	2019-20 2024-25	150,000
<b>Projects Total (\$000s)</b>		<b>1,031,600</b>

Pursuit of these strategic priorities will transform Berkeley Lab’s aging facilities and infrastructure into a modern, integrated, interactive, sustainable, and fully mission-aligned environment for ground-breaking science. For example, the envisioned new biosciences cluster will support the growth of synthetic biology and the development of transformative bio-based products; these are critical components to California’s rapidly growing bioeconomy.

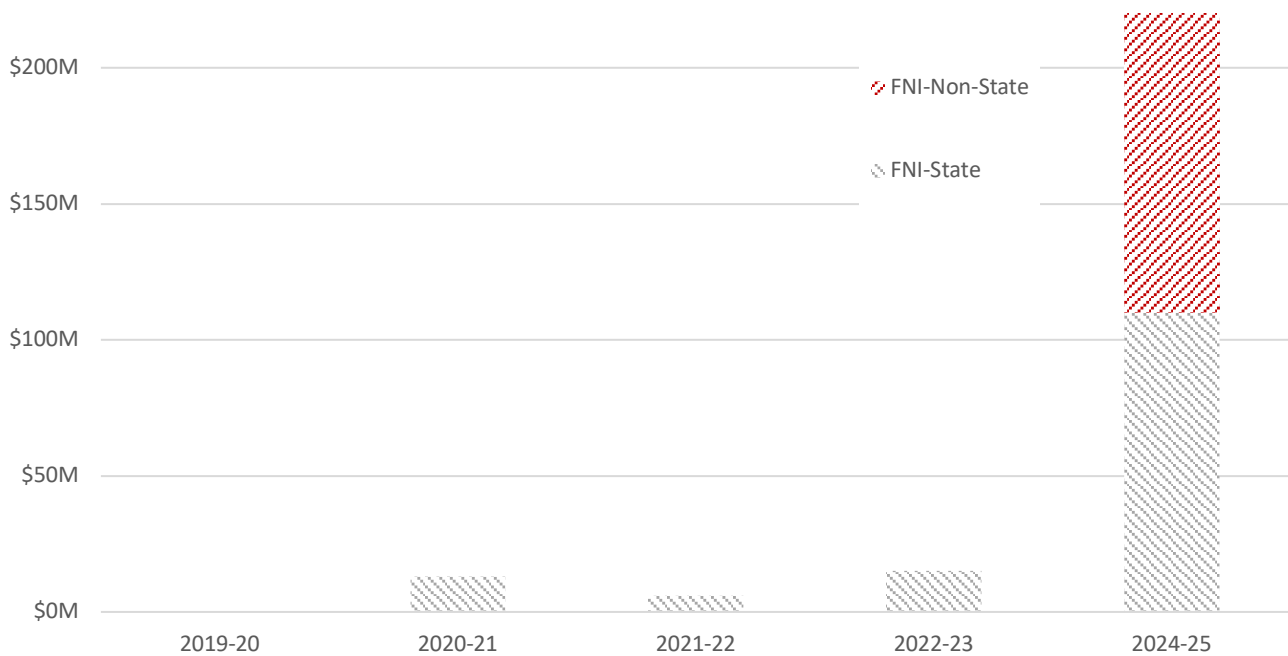
### Challenges

**Age and condition of infrastructure.** Berkeley Lab is the oldest of the DOE national laboratories. This long history is reflected in existing facilities and infrastructure that varies greatly in age and condition. More than 60% of its buildings are older than 50 years. Based on the DOE’s condition assessment standards, 78% of facilities and 29% of utilities are either inadequate or substandard as measured against replacement plant value. Though Berkeley Lab continues to sustain and modernize its enduring infrastructure, there is recognition that redevelopment activities (e.g., demolition and disposal, new construction) are the keys to making substantial progress in improving the conditions of facilities and infrastructure across the site.

**Remediation of seismic risks** Following over a decade of seismic risk reduction efforts, the number of federally funded Berkeley Lab buildings rated as poor (V) or higher is down from 42 to 19. However, additional seismic risk mitigation needs are being identified through new evaluations of trailers, non-building assets, and reevaluations of buildings rated V or higher, per the UC Seismic Safety Policy. Berkeley Lab continues to seek federal funding to reduce seismic-related risks linked to federally owned assets, such as the proposed replacement of the existing cafeteria with a new “Welcome Center”, relocation of Health Services into the new building, and the seismic retrofit of the firehouse, all as part of the Seismic Safety and Modernization Project. Additional seismic risk mitigation projects are being planned and proposed to federal sponsors on an ongoing basis.

**Deferred maintenance** Berkeley Lab’s \$233 million deferred maintenance backlog for federally funded facilities in 2018 represented 15.6% of its replacement plant value. Nearly half of this backlog is related to site mechanical utilities (e.g., supply water, storm drain). Berkeley Lab has proposed a Linear Asset Modernization Project (LAMP) through the DOE to address a significant portion of the deferred maintenance backlog.

Display 2. **\$254M Capital Need**



**Display 3. Berkeley Lab UC Capital Need with Funding Not Identified (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Centennial Bridge – Lab Share	3		•	13,000 SE						13,000	100%
Hearst Ave./ Cyclotron Rd. Horseshoe Curve Improvement	3				6,000 SE					6,000	100%
Emergency/Standby Power Replacements	3		•			15,000 SE				15,000	100%
Biological Building #3	3		•						110,000 SE 110,000 NSE	220,000	50%
<b>Projects Total</b>	<b>3</b>			<b>13,000</b>	<b>6,000</b>	<b>15,000</b>			<b>220,000</b>	<b>254,000</b>	<b>144,000</b>

**NOTES**

Update Codes: 1 = Budget Update    2 = Scope Update    3 = New Project    Blank = no change from prior year

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## 2019-25 SYSTEMWIDE AND OFFICE OF THE PRESIDENT CAPITAL NEED

The Systemwide and Office of the President (OP) Capital Program includes projects which directly support campuses and indirectly support the entire UC system via the Office of the President location. The Office of the President is the systemwide headquarters of the University of California, managing its fiscal and business operations and supporting the academic and research missions across all its campuses, labs, and medical centers.

Display 1. Summary of Current Term (2019-20 to 2024-25) Capital Need (\$000s)

	Current Term (2019-20 to 2024-25)						Total	State Eligible
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
Capital Need with Funding	224,800	437,600					662,400	616,200
Capital Need with Funding Not Identified	4,000		3,000				7,000	
<b>Total</b>	<b>228,800</b>	<b>437,600</b>	<b>3,000</b>				<b>669,400</b>	<b>616,200</b>

### Priorities

Systemwide projects are primarily focused on addressing deferred maintenance, seismic corrections, and the planning for near-term needs. Deferred maintenance projects will apply recently approved State funds to reduce the maintenance backlog across the system and are informed by the going ICAMP assessment process. In 2018, seismic re-evaluations of UC's facilities located in the state of California were initiated. The evaluations are being done in a consistent manner around the system and reflect current knowledge in seismology, structural engineering, geotechnical engineering, or lessons learned from past earthquakes, as well as resulting updates to the California Building Code. It is anticipated that this re-evaluation process will be completed in mid-2020. The CFP includes a systemwide program to address some the projects that have already been identified as a priority repairs. Similarly the plan includes funding to advance the planning for high priority projects so that scope and cost estimates can be refined in advance of near-term State Capital Outlay requests.

UC Sacramento Learning Complex project would renovate the newly acquired 1115 11th Street asset in downtown Sacramento for general assignment classrooms, with associated faculty and staff workspace to support the UC Center Sacramento program and the State Government Relations group. Relocation to a newly renovated building will provide the opportunity to realign resources and plan for the continued growth and expansion of the programs

The project would renovate interior and exterior spaces and add useable square footage to provide approximately 24,000-26,000 gross-square-feet (gsf) of modern, efficient classroom space adjacent to the Capitol where students will perform their internships and program events attract participation from legislators and their staff.

OP projects prioritize greater efficiencies by supporting common services to all UC campuses, addressing deferred maintenance, and consolidating operations. The 1111 Franklin, Blake House, and 1100 Broadway projects will provide deferred maintenance and tenant improvements as part of a space consolidation and

deferred maintenance plan. The consolidation plan will place an emphasis on core facility needs and lowering overall per person, per square foot operating cost, with increased energy efficiency and improved business sustainability.

## **Challenges**

The UC Sacramento Learning Complex project houses programs that are currently located in the UC-owned building at 1130 K Street, which does not meet the University's seismic safety standards and will support strong growth of the UCCS program.

Accommodating long-term growth and use during renovation requires a short construction schedule (18 months) to avoid negative impacts to the program. The budget will be impacted by the need for construction on a very constrained urban site within one block of the Capitol building.

The majority of OP office space is currently in four separate buildings in the downtown Oakland area, up to a mile apart. A portion of this space is leased and rental rates in the strong San Francisco Bay Area market are rising rapidly. The majority of the owned space has been occupied for 20 years, and the deferred maintenance backlog, and operational inefficiencies must be addressed to reduce the amount of space used and total cost of operations.

Blake House is the former residence provided for the President of the University. The building is in urgent need of roofing, waterproofing, and seismic strengthening to preserve the asset. The full restoration of this currently unused facility is estimated at over \$10 million and its potential future use is still being evaluated.

## **Funding**

The UC Sacramento Learning Complex project will be funded by the proceeds of the sale of 1130 K Street and AB94 funds. Debt service and operations costs are included in the UCOP operation budget.

OP related deferred maintenance, tenant improvements, and Blake house projects will not use any direct state appropriation, tuition, or fees. These projects will use deferred maintenance reserve funds, reallocated debt from 415 20<sup>th</sup> street, or funding sources yet to be identified.

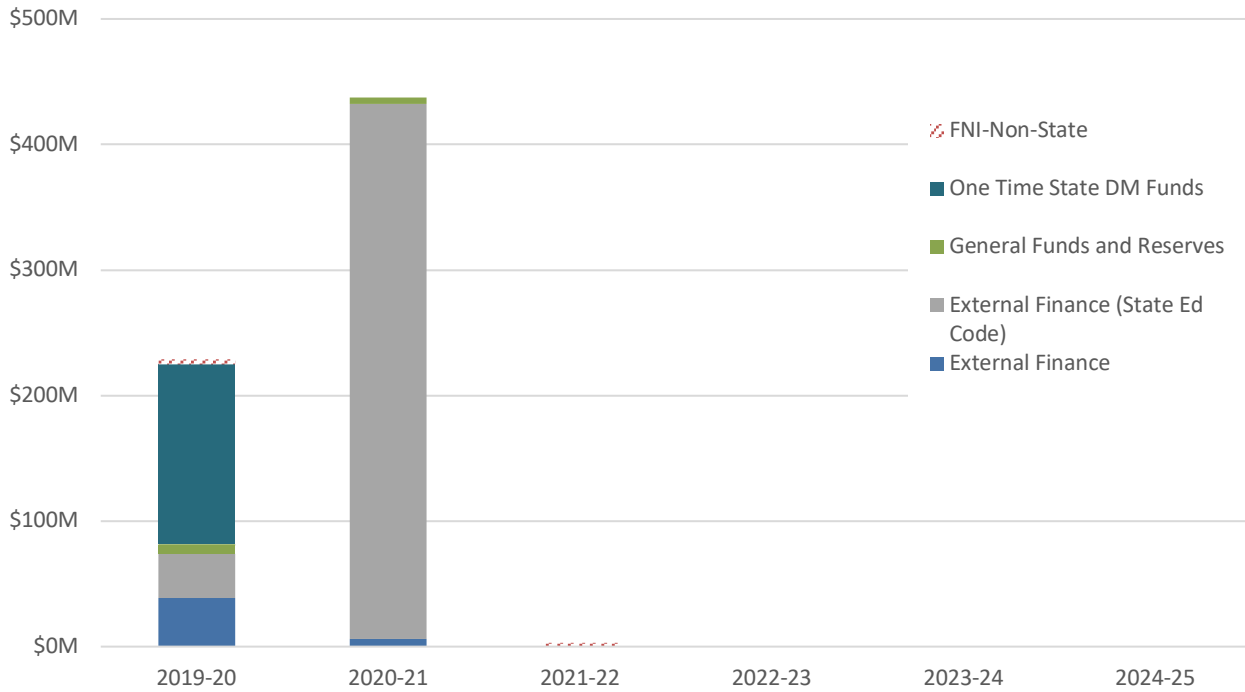
## **Real Estate and Public Private Partnerships**

OP has entered into an office space lease for 165,000 square feet in the lower levels of a new office building at 1100 Broadway, which is adjacent to the UCOP building at 1111 Franklin Street. This lease will provide consolidated facilities using less space over the next 15 to 30 years at a lower cost, while also addressing the deferred maintenance backlog and operational inefficiencies of existing facilities. The combination of UC owned space, giving up a comparable amount of leased space in other Oakland locations, and a favorable long-term market rate lease at 1100 Broadway, directly adjacent to the Franklin street building, provides a lowest cost alternative to the University.

Display 2 summarizes the capital plan by fund source. The list of projects with funding is shown in Display 3. OP has identified unfunded needs for the current term in Display 4.



### Display 2. \$669M Capital Need



### Display 3. Systemwide Capital Need with Funding (\$000s)

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>EDUCATION PROJECTS</b>											
Systemwide State Deferred Maintenance Program				35,000 SG	35,000 SG					70,000	100%
Systemwide State Deferred Maintenance Program (One Time Funding)				143,500 SPG						143,500	100%
UC Sacramento Learning Complex Acquisition and Tenant Improvements	3			4,500 OUS 6,800 EF	11,400 SG					22,700	100%
Project Planning for Future State Capital Outlay					80,000 SG					80,000	100%
UC Seismic Program Supported by State Resources					300,000 SG					300,000	100%
<b>Total Education:</b>										<b>616,200</b>	
<b>OFFICE OF THE PRESIDENT PROJECTS</b>											
1100 Broadway Tenant Improvements	1			19,000 EF	2,000 EF					21,000	
Facilities Modernization & Deferred Maintenance 1111 Franklin	1	•		8,000 EF 2,000 OUS	4,000 EF					14,000	
Hertz Hall	3			1,000 AR	5,200 AR					6,200	
Meridian Parkway 2nd Floor Tenant Improvements				5,000 EF						5,000	
<b>Total OP Projects:</b>										<b>46,200</b>	
<b>Campus Projects Total</b>				<b>224,800</b>	<b>437,600</b>					<b>662,400</b>	<b>616,200</b>

**Display 4. Systemwide Capital Need with Funding Not Identified (\$000s)**

	Update	DM	Seismic	Current Term (2019-20 to 2024-25)						Total	State Eligible
				2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
<b>OFFICE OF THE PRESIDENT PROJECTS</b>											
Blake House	2	•	•	4,000 NSE		3,000 NSE				7,000	
<b>Total OP:</b>										<b>7,000</b>	
<b>Campus Projects Total</b>				<b>4,000</b>		<b>3,000</b>				<b>7,000</b>	

<b>NOTES</b>	
Change Codes:	1 = Budget Update      2 = Scope Update      3 = New Project
Source Codes:	The systemwide and OP improvements use funds from specific reserves noted below: BMR: Building Deferred Maintenance Reserve

**Capital  
Financial  
Plan**

**2019-25**

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Appendix

## APPENDIX - PROJECTS OF INTEREST TO UC HEALTH

UC Health provides leadership and strategic direction for UC’s five academic medical centers and 18 health professional schools. UC Health’s central office supports operational initiatives at individual campuses and development of systemwide initiatives, promoting collaboration among the university’s health professional schools and providing oversight on the business and financial activities of the clinical enterprise.

Campus and medical center projects from the CFP that could be of interest to the efforts of UC Health are summarized below for reference.

### UC Health Related Campus Capital Need with Funding (\$000s)

	Current Term (2019-20 to 2024-25)						Total
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
<b>BERKELEY</b>							
Intersection Emeryville Development Commercial Space for Optometry Center	500	4,500					5,000
LSA Modifications for Neurohub	1,000	6,500					7,500
Minor Hall Optometry School Clinic Expansion <sup>A*</sup>	7,500	37,500	15,000				60,000
<b>DAVIS</b>							
Student Athlete Performance Center	52,000						52,000
<b>IRVINE</b>							
Buildout of Shell Space - Medical Education Building	15,000						15,000
Buildout of Shell Space - Hewitt Hall	15,000						15,000
Student Success Building	69,606						69,606
Susan & Henry Samueli College of Health Sciences Building/ Sue & Bill Gross Nursing & Health Sciences Hall	185,000						185,000
Beckman Laser Expansion and Renovation			60,000				60,000
Student Health Center Replacement						66,000	66,000
<b>LOS ANGELES</b>							
CHS Emergency Power System Replacement	22,000						22,000
CHS Program and Infrastructure Improvements Step 1	50,000						50,000
CHS South Tower Post-Occupancy Improvements (Levels 8-10)	30,000						30,000
Fielding School of Public Health Building Interior Renovation		50,000					50,000
<b>RIVERSIDE</b>							
Student Health and Counseling Center	33,000						33,000
School of Medicine Education Building		100,000					100,000
<b>SANTA BARBARA</b>							
Student Wellness Center				P3			
<b>SAN DIEGO</b>							
Shiley/Viterbi Vision Research and Clinical Center (Campus Portion)	131,020						131,020

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Triton Pavilion for Student Resources and Community Engagement	409,350						409,350
Villa La Jolla Office Building (P3)	63,000						63,000
Hillcrest Multi-Use Building		165,500					165,500
Medical Office Building, Del Sur Corporate Center (4S Ranch and Bernardo Center)		177,000					177,000
Villa La Jolla Office Building (land acquisition and TI's)		11,500					11,500
School of Medicine Emergency Power Upgrades			10,000				10,000
Hillcrest Central Utility Plant (non-OSHDP)				12,000			12,000
<b>SAN FRANCISCO</b>							
GMP Facility	60,000						60,000
ZSFG Wet Laboratory Tenant Improvements and Relocations	17,004						17,004
Parnassus Heights Research and Academic Building and Related District Projects		772,800					772,800
School of Nursing Building Demolition						83,500	83,500
Mount Zion Cancer Research Building Renewal	2,100	2,900	1,800	2,100	2,000	5,800	16,700
Parnassus Dentistry Building Renewal	2,100	1,900	2,500	3,600	4,400	2,700	17,200

### UC Health Related Campus Capital Need with Funding Not Identified (\$000s)

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
<b>BERKELEY</b>							
Minor Hall Optometry School Clinic Expansion			15,000				15,000
<b>IRVINE</b>							
College of Health Sciences Building Unit 2			105,000				105,000
College of Health Sciences Research Building			220,000				220,000
Med Sci Renovations			53,000				53,000
Seismic Upgrades to Six Health Sciences Buildings				56,000			56,000
College of Health Sciences Research Building 2						105,000	105,000
<b>LOS ANGELES</b>							
Neuropsychiatric Institute (NPI) Seismic Renovation	63,000						63,000
CHS Fire Sprinkler Installation		60,000					60,000
CHS Program and Infrastructure Improvements, Step 2				200,000			200,000

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Psychology - Neuroscience Research Building				70,000			70,000
CHS - Biomedical Library Tower Renovation						100,000	100,000
<b>MERCED</b>							
Health & Behavioral Sciences Building		386,359					386,359
<b>SANTA CRUZ</b>							
Student Health Services Renovation		5,000					5,000
Student Health Services Expansion						134,129	134,129
<b>SAN DIEGO</b>							
Campus Wet Laboratory Building			233,000				233,000
Medical Teaching Facility Replacement/Future School of Public Health and Education			104,000				104,000
<b>SAN FRANCISCO</b>							
School of Dentistry Research and Academic Space Seismic Replacement		375,000					375,000
School of Nursing Research and Academic Space Seismic Replacement		240,000					240,000

### UC Health Related Medical Center Capital Need (\$000s)

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
<b>DAVIS HEALTH</b>							
Ambulatory Care Center (Ellison) w/ Eye Center Expansion (Sacramento Campus)	87,500						87,500
Call Center Development	22,000						22,000
Cancer Center Linear Accelerator	14,000						14,000
Emergency Department Improvements	12,000						12,000
Office of the Future	60,000						60,000
Outpatient Clinic with PM&R Development	28,000						28,000
Outpatient Regional Strategy	25,000						25,000
Outpatient Regional Strategy I	50,000						50,000
Roseville Clinic Expansion	40,000						40,000
UC Davis Health Priority 1	16,000						16,000
UC Davis Health Priority 2	12,000						12,000
Ambulatory Care Center (Ellison) Renovations Phase 1 (Sacramento Campus)		75,000					75,000

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Broadway Building Improvements		15,000					15,000
Emergency Department Expansion		20,000					20,000
Hospital Bed Replacement Tower (Sacramento Campus)		1,500,000					1,500,000
Hospital Seismic East Wing Façade (Sacramento Campus)		11,000					11,000
Imaging Technologies Investment (Sacramento Campus)		11,000					11,000
Inpatient Regional Strategy		155,000					155,000
Outpatient Regional Strategy II		80,000					80,000
Pharmacy Improvements		13,000					13,000
Parking Structure 4 (Sacramento Campus)		53,000					53,000
Ambulatory Care Center (Ellison) Renovations Phase 2 (Sacramento Campus)			75,000				75,000
Ambulatory Care Center (Ellison) Renovations Phase 3 (Sacramento Campus)				75,000			75,000
Ambulatory Care Center (Ellison) Renovations Phase 4 (Sacramento Campus)					75,000		75,000
Health System Projects \$1M to \$10M	30,000	22,000	22,000	22,000	22,000	22,000	140,000
<b>IRVINE HEALTH</b>							
Center for Child Health MOB	83,000						83,000
Douglas Hospital Inpatient Capacity (DH36 & DH38)	40,000						40,000
UC Irvine Campus Medical Complex	950,000						950,000
Ambulatory Center #3 - East Irvine		12,000					12,000
Ambulatory Center #4 - Northwest Orange County		12,000					12,000
South County Ambulatory Center		5,000					5,000
Ambulatory Center #2 - Northeast Orange County (Multi-Specialty)			20,000				20,000
Capital Projects \$1M to \$5M (MC)	27,176	10,000	10,000	10,000	10,000	10,000	77,176
Capital Projects \$5M to \$10M (MC)	9,500	6,300	3,000	6,500	6,500	13,000	44,800
<b>LOS ANGELES HEALTH</b>							
RRUMC Utility Building Central Plant	100,000						100,000
CHS South Tower Post-Occupancy Improvements (Levels A&B)		70,000					70,000
Santa Monica Hospital Medical Office Building Acquisition #1		89,000					89,000
Santa Monica Hospital Medical Office Building New Admin/Clinic Building		70,000					70,000
SMH Merle Norman Pavilion Renovation		70,000					70,000

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Medical Center Real Estate Acquisition #2			30,000				30,000
Medical Plaza 100 Suite 700 Liver Clinic	12,000						12,000
Annual Capital Equipment Replacement	160,000	150,000	150,000	150,000	150,000	150,000	910,000
Capital Projects \$1M to \$10M - 26585 Agoura Road	14,000	13,000	4,500	4,500	4,500	4,500	45,000
Capital Projects \$1M to \$10M - Health System	15,000	15,000	15,000	15,000	15,000	15,000	90,000
Capital Projects \$1M to \$10M - Medical Plaza 100	8,000	8,000	8,000				24,000
Capital Projects \$1M to \$10M - Medical Plaza 200	20,000	12,000	12,000	12,000	12,000	12,000	80,000
Capital Projects \$1M to \$10M - Reagan Hospital	20,000	20,000	20,000	20,000	20,000	20,000	120,000
Capital Projects \$1M to \$10M - Santa Monica Hospital	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Capital Renewal	50,000	25,000	25,000	25,000	25,000	25,000	175,000
<b>SAN DIEGO HEALTH</b>							
La Jolla - Thornton East Entry Renovation and Imaging Expansion	31,500						31,500
Shiley/Viterbi Vision Research and Clinical Center (Med Ctr portion)	41,580						41,580
Hillcrest Campus Outpatient Pavilion and Parking (Med Ctr portion)		323,000					323,000
Capital Projects \$1M - \$10M	25,000	12,000					37,000
<b>SAN FRANCISCO</b>							
ACC 7 Transplant Center Expansion Augmentation	2,560						2,560
Helen Diller Medical Center at Parnassus Heights			3,706,600				3,706,600
Immunogenetics and Transplant Laboratory (ITL) Renovations	20,000						20,000
Inpatient Psych Relocation	40,000						40,000
Integrated Center for Design and Construction (ICDC) at Parnassus	12,000						12,000
Moffitt Seismic Improvements	41,400						41,400
ACC Plaza Level Ambulatory Surgery Center Upgrades Augmentation		29,300					29,300
ACC Supply Fans & Roof Replacement		12,000					12,000
Benioff Children's Hospitals Oakland Phase 2 - Multiple Projects		1,000,000					1,000,000
M/L New Electrical Substation		15,000					15,000
M/L Sterile Processing Equipment Upgrade		11,300					11,300
Mission Bay Block 34 Clinical Building		366,000					366,000
Capital Projects \$1M to \$5M - Infrastructure	34,118	34,161	27,040	37,116	33,163	35,342	200,940
Capital Projects \$1M to \$5M - Renovation	15,172	10,989	10,405	14,220	12,897	13,744	77,427



Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Capital Projects \$5M to \$10M - Medical Center	7,427	39,084					46,511
Clinical Space Renovation and Expansion Program	56,157	47,012	40,595	57,224	47,784	49,086	297,858

### UC Health Related Medical Center Capital Need with Funding Not Identified (\$000s)

Current Term (2019-20 to 2024-25)							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
<b>DAVIS HEALTH</b>							
Davis Tower 7 Peds Upgrade		18,000					18,000
UC Davis Health Pediatric Priority		36,000					36,000
<b>IRVINE HEALTH</b>							
Deferred Maintenance	10,000	10,000	10,000	10,000	5,000		45,000
SB1953 Non-Structural Seismic Upgrades						50,000	50,000
Orange Campus Ambulatory Replacement (Replaces 146,900 gsf of Pavilions)						100,000	100,000
Orange Office Building			82,500				82,500
Orange Parking Structure			62,500				62,500
Building 22A Seismic Upgrades		3,000					3,000
<b>SAN DIEGO HEALTH</b>							
Hillcrest Central Utility Plant (Med Ctr portion)				48,000			48,000
Hillcrest Replacement Hospital				1,000,000			1,000,000
Hillcrest West Wing Replacement			14,000				14,000

#### NOTES

Project Notes: ^Portions of funding for this project are from sources that are identified while other sources are not yet identified. The project will not advance until all sources have been identified.

\*Funding displayed by an anticipated year of expenditure. Typically amounts displayed are shown in the anticipated year of budget approval for a discrete project or project phase.





