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Cover photo: Geisel Library to the Price Center, UC San Diego

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PERSPECTIVE

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 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 for each campus and medical center.

The 2018-28 CFP represents, as articulated by the campuses and medical centers, the University's capital plan through 2028. The ten year plan totals \$47.6 billion of expected campuses' and medical centers' full capital needs. Projects are divided into two groups: those with a funding plan and those with a funding plan not identified.

While the CFP articulates a ten-year horizon, this discussion focuses on this fiscal year and the next five fiscal years ending 2023-24 to align with the University's annual reporting requirement to the state of California. These six years are collectively identified as the "current term." The remaining four years (2024-28) are provided to give current term projects a broader planning context.

Display 1. Summary of Current Term Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Current Term Total
Capital Need with Funding	7,701	5,280	4,309	1,839	4,406	1,215	24,750
Capital Need with Funding Not Identified	936	1,820	3,593	1,854	1,071	2,526	11,800
Total (\$M)	8,637	7,100	7,902	3,693	5,477	3,741	36,550

The \$36.6 billion is a projection of the University's capital needs over the current term. UC is currently undertaking two significant capital initiatives—comprehensively assessing seismic and deferred maintenance deficiencies. Seismic evaluations are underway for facilities that have not been rated or have ratings that are out of date. It is expected that these evaluations will identify additional facilities that will require seismic mitigation or replacement beyond the projects that are included in the plan. Additionally, UC is undertaking facility condition assessments and the first priority is to complete the assessments of 68.4 million gross square feet of core academic and research space. Upon completion, these assessments will deliver a specific, asset-based deferred maintenance and capital renewal forecast for the state-eligible space. As the data becomes available, these new initiatives will inform future plans.

PROGRAM ORGANIZATION

Capital needs are guided by campus' and medical center's strategic and academic plans. The 2018-28 CFP summarizes the campus and medical center capital programs separately. The ten campuses, five medical centers, Division of Agriculture and National Resources (ANR), and systemwide each have a chapter that outlines the location's capital needs. Within the campus chapters, the program is further grouped into Education and General, and Auxiliary Enterprise projects.

Campus Education and General (E&G). These projects involve the construction and renovation of instruction, research, and student service space as well as infrastructure that supports the academic program.

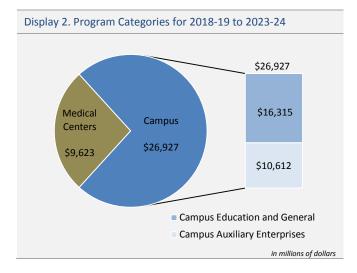
Campus Auxiliary Enterprises. The auxiliaries support the campus academic mission by providing: housing for students, faculty, and staff; parking; recreation; and other self-supporting enterprises that the University population may require. Typically these projects are located on or nearby a campus.

Medical Centers. These projects involve supporting UC's five medical centers and their associated patient care networks.

As shown in Display 2, the three administrative groups: Campus Education and General, Campus Auxiliary Enterprises, and Medical Centers collectively have identified \$36.6 billion of capital need in the current term.

The \$16.3 billion of need for academic and academic support space is the highest of three groups. Increasing enrollment, new academic programs, capital renewal, seismic corrections, and deferred maintenance are reflected in E&G projects. Some programs and research initiatives

can attract other funding sources, such as philanthropic support; however, in general, UC relies on the state support to fund these core needs.



To support campus academics, the CFP includes \$10.6 billion of auxiliary projects. This total includes \$8.4 billion of capital need to expand and renovate campus dining and student housing programs, with some housing for faculty and staff. Unlike E&G projects, auxiliary enterprises generate revenue to support the capital needs and do not rely on state support.

The five medical centers have identified capital needs totaling \$9.6 billion. These projects include addressing seismic 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.

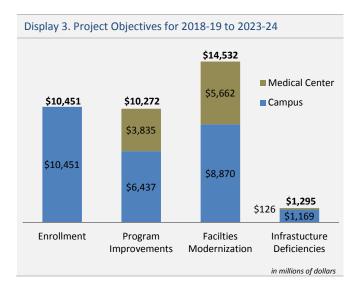
CAPITAL NEED

In order to summarize campus and medical center needs by broad objectives, each capital project is categorized into one of four objectives: enrollment, program improvements, facilities modernization, and infrastructure deficiencies.

Enrollment projects provide capacity in classrooms and space for faculty related to past or projected increases in student population. Program

¹ ANR's and systemwide's capital programs are grouped in campus capital program.

improvements projects support new or expanding programs that are not necessarily related to enrollment growth, such as those that expand research. Facilities modernization addresses unsatisfactory conditions and obsolescence in buildings. Infrastructure deficiencies projects address roads and utility systems that require updating or repair. This simple categorization does not take to into account that every capital project has multiple objectives.



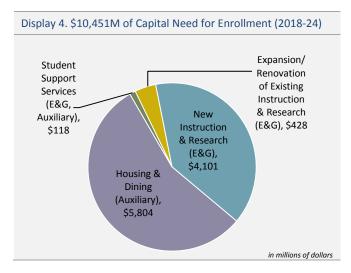
Display 3 illustrates the differences and the similarities in capital needs between the campuses and medical centers. The most striking difference is the campuses' need for capital investment to support enrollment and infrastructure deficiencies where the medical centers have little to no identified needs in these areas. However as demonstrated in the program improvements category, campuses and medical centers need space for new research and clinical programs. With the age of the University's buildings, both campuses and medical centers have identified a significant amount of investment needed to address facilities modernization.

Enrollment

Although the University envisioned increasing enrollment by at least 10,000 students within four years (from 2014-15 through 2018-19), it ultimately

enrolled over 10,000 new students in just three years (by 2017-18). This growth has created challenges for campus facilities to accommodate the additional students as well as the related increase in faculty and staff population to support the higher enrollment.

As shown in Display 4, the increase in the student population has created a need to renovate and build educational facilities as well as housing.



Instruction and Research Space. All campuses have been actively pursuing programmatic and physical options for accommodating the increase in students. Despite these efforts, campuses need additional instruction and research space to support enrollment growth. According to the latest Classroom and Teaching Lab Utilization Report, there is a shortage of large (300+ seat) classrooms and teaching lab spaces across the system. The campuses have identified capital need totaling \$4.1 billion over the current term for new space and \$428.0 million for expansion/renovation of instruction space to support enrollment growth.

Housing. Housing is in particularly short supply in some of the communities that are home to UC campuses. In response to the housing crisis and anticipated enrollment growth, President Napolitano announced the Student Housing Initiative in January 2016 that set a goal of adding 14,000 new affordable student housing beds by fall

2020. Since the announcement, over 5,100 new beds have been delivered and 8,000 beds are in construction. The campuses are on track to exceed the 14,000 bed target by fall 2020 with an additional 15,000 beds planned for delivery by 2025.

There is a demand for housing given the limited availability of on-campus housing capacity and the high cost of off-campus housing. For the current term, the campuses' enrollment growth projects include \$5.8 billion of capital need for housing and dining to meet this demand.

Program Improvements

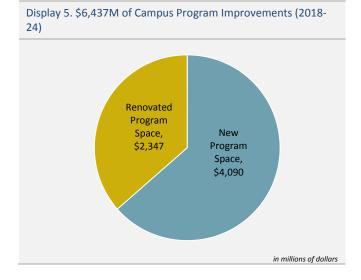
The University excels in national and international rankings. According to the 2019 U.S. News & World Report Best Colleges (released September 10, 2018), five campuses are among the top ten public universities for undergraduate education in the country and all nine undergraduate campuses rank among the top 75. ²

The Academic Ranking of World Universities (ARWU) ranks universities according to indicators based on alumni winning Nobel Prizes and Fields Medals, quality of faculty based on similar awards and research citations, research output based on papers in Nature and Science, and citations in Science and Social Science, and per capita academic performance. Seven UC campuses are ranked among the 100 best universities in the world with four campuses ranked in the top 25.³

Campus Program Improvements. In support of these rankings, new academic initiatives and continued growth in research activities creates demand for more complex space. As shown in Display 5, campuses have identified \$6.4 billion of capital needs related to these program improvements for the current term. Campuses use

Additional information on the campus rankings may be found at https://www.usnews.com/best-colleges/rankings.
 ARWU 2018 may be found at

a variety of fund sources to invest in these projects to ensure UC remains at the forefront of innovation.



Campuses have plans to meet approximately onethird of the need for new program space through the renovation and conversion of existing space. The estimated capital cost for this investment is over \$2.3 billion. However, existing space does not have the capacity to meet all of the requirements for program enhancements. Many new programs are multi-disciplinary and require adjacencies, advanced infrastructure, and flexible research space that renovated buildings cannot provide. The campuses have identified \$4.1 billion of capital need for new space to support these innovative programs.

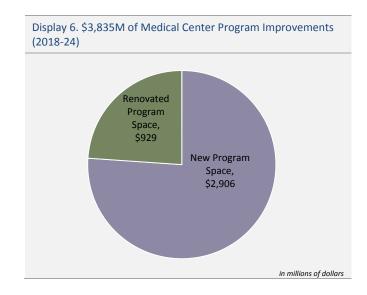
Medical Center Program Improvements. The University of California runs two of the nation's top ten hospitals and all five of its medical centers are among California's best, according to U.S. News & World Report's 2018-19 rankings (released August 14, 2018). These rankings indicate that the five medical centers have high-quality patient care across multiple specialties including demonstrable experience in treating complex cases.

http://www.shanghairanking.com/ARWU2018.html.

⁴ Additional information on the hospital rankings may be found at https://health.usnews.com/best-hospitals/rankings

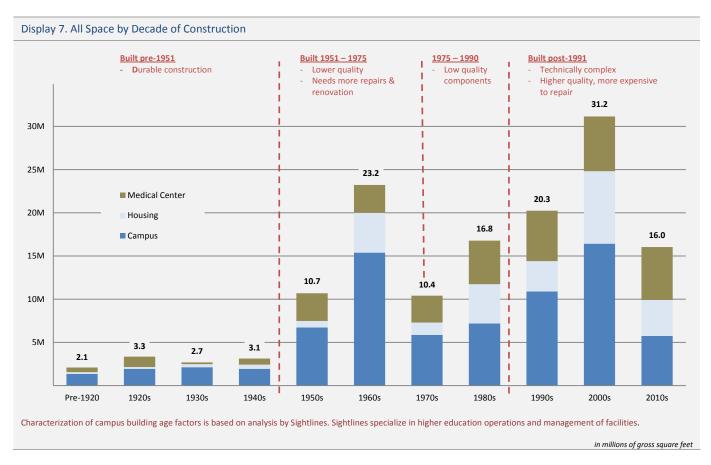
In order to maintain this excellence in medical care, the medical centers must continuously expand and develop their programs. Over the current term, the capital cost to provide this new program space totals \$2.9 billion, as shown in Display 6.

Medical centers have identified that approximately \$929.0 million of program improvements could be realized by renovating/expanding existing space to accommodate new programs.



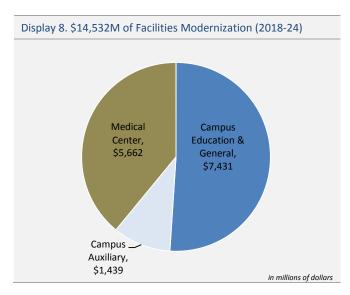
Facilities Modernization

Of the four project objectives in the CFP, the greatest need in terms of total dollars is for facilities modernization of campus and medical center space. The University occupies 139.8 million gross square feet (gsf) of space; close to half of this space (64.9 million gsf) is more than thirty years old.



Display 7 breaks out UC's space by decade of construction. Analyses of college and university facilities predict issues with campus buildings as they age. UC has approximately 61.1 million gross square feet (gsf) built between 1951 and 1990. Due to the quality of construction, analysis indicates that buildings of this era will have significant maintenance and repair issues.

Accordingly as shown in Display 8, campuses and medical centers have identified \$14.5 billion of need for facilities modernization and capital renewal for the current term. This high level of need is related to the age of UC's facilities. Capital renewal addresses the physical deterioration aspect of long-term use, the need for overall facility renewal due to technological obsolescence, the replacement of building systems which have become functionally inadequate, and the upgrading of supportive infrastructure which are no longer capable of adequately performing their function.



The \$7.4 billion of campus E&G facilities modernization projects include: renovation, capital renewal, seismic mitigation, and deferred maintenance across the ten campuses and ANR.

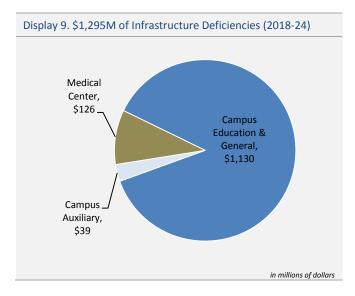
Campus auxiliaries have identified \$1.4 billion of modernization needs. Approximately half of this need is attributable to replacing two apartment communities with modern higher-density housing

for Davis and Irvine campuses. The remainder of the capital need includes a variety of renovation, capital renewal, and deferred maintenance needs.

The \$5.7 billion of facilities modernization for medical centers includes \$4.0 billion for two new replacement hospitals located at UCSF's Parnassus Heights campus and UC Davis Health. Not included in the total is UC San Diego's Hillcrest Replacement Hospital. The existing hospital needs to be replaced due to seismic requirements; however, the cost to replace the hospital is not available at this time.

Infrastructure Deficiencies

Campus and medical center infrastructure has capital needs as well. The current term includes \$1.3 billion of capital need related to infrastructure.



Nearly all (87.2%) UC infrastructure deficiencies serve the campus core instruction and research program. These \$1.1 billion of projects include campuswide programs to: expand and upgrade utilities; improve roads; and improve telecommunication systems. Campus' auxiliary projects totaling \$39.0 million address these same issues for housing and parking. The majority (\$100.0 million) of the \$126.0 million of medical center infrastructure needs is related to expanding and extending utility systems.

Capital Project Objectives

The grouping of capital need into one of four project objectives does not take into account that capital projects have multiple drivers. Two areas of critical capital need are found in all project objectives: deferred maintenance and seismic. Assessing both of these needs are systemwide initiatives.

DEFERRED MAINTENANCE

Deferred maintenance is the backlog of renewal resulting from the lack of regular and predictable investment in capital renewal. As shown in Display 7, UC's aging facilities are more expensive to maintain and many building systems 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. The University's deferred maintenance and capital renewal needs are escalating.

Integrated Capital Asset Management Program

Given the limited resources available to fund the University's facilities and infrastructure, there is a critical need at the campus to make data-driven capital renewal decisions based upon accurate information that identifies and quantifies renewal and deferred maintenance (DM) needs and their associated risk. To this end, the University has implemented a comprehensive Integrated Capital Asset Management Program (ICAMP) to gather facility data in a central repository using a standardized methodology.

By implementing a standardized and repeatable University Facility Conditions Assessment (FCA) program methodology, the University will be able to identify, quantify, estimate, and track its capital renewal and deferred maintenance needs, develop data-driven strategies, and manage the financial

and operational risks associated with its capital assets. Once the FCA data is collected, the University will have a systemwide apples-to-apples view of its asset portfolio and will be positioned to make more informed decisions on how funding is allocated and used to address the highest priority DM projects. Over time the University will be able to track the reduction in risk as the DM need is addressed.

It is anticipated that it will take until 2020 for the University to collect FCA data for the approximately 68.4 million gsf of state-eligible facilities that comprise phase 1 of ICAMP implementation. During this interim period, the campuses have been asked to develop DM estimates and priorities using their campus methodologies and practices, and include that data in the CFP.

In September 2018, the University submitted to the Department of Finance over \$4.4 billion of state supportable deferred maintenance work for inclusion in the state's forthcoming Five-Year Infrastructure Plan.

Each campus and medical center list of projects is annotated if the capital project scope includes DM. The total cost listed is for the entire capital project and not the cost of the DM work alone. The CFP includes \$7.7 billion of projects that include DM as part of the project's scope which includes \$4.4 billion of state supportable DM work.

Once the ICAMP data is available, it will supersede prior lists and provide the basis for DM costs that are included in future CFPs. This approach will provide a consistent and comprehensive look at University assets across the system.

SEISMIC POLICY

The University of California Seismic Safety Policy (Policy)⁵ is in place to provide an acceptable level of earthquake safety for students, employees, and the public who occupy University facilities, to the extent feasible by present earthquake engineering practice.

In May 2017, the University amended and restated the Policy and established December 31, 2030 as the deadline after which undiminished use of buildings with a V or VI rating ("poor" or "very poor" condition) would not be permitted.

Other policy changes included the establishment of a systemwide Seismic Advisory Board to provide guidance to the University in assessing seismic risk, advising on seismic priorities, reviewing new building and rehabilitation plans, and providing policy revision recommendations.

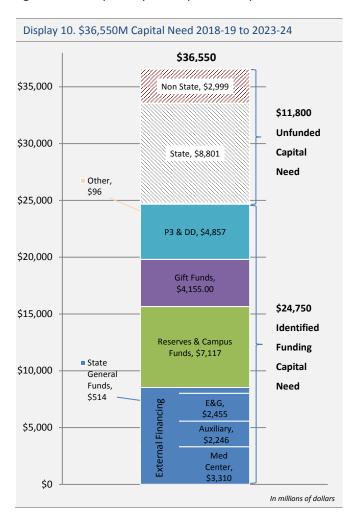
Seismic evaluations of buildings are an important step in identifying seismic hazards and in developing priorities for seismic improvements. In addition, seismic evaluations that were completed in past years may require updating because of more stringent code requirements, the availability of more accurate geotechnical data and updated analytical protocols that provide a more accurate assessment of seismic performance of buildings.

Each campus and medical center includes lists of projects. The list is annotated if the capital project scope includes addressing a seismic issue. Because seismic improvement projects typically trigger other code upgrades, the total listed is for the entire capital project and not the cost of the seismic work alone. The CFP includes 50 projects totaling \$6.1 billion that include seismic correction as part of the project's scope (\$4.0 billion of these projects are for the two replacement hospitals identified as facilities modernization needs).

In support of the 2030 deadline, campuses are completing seismic evaluations for facilities that have not been rated or have ratings that are out of date. It is estimated the evaluations will take approximately two years to complete. It is expected that these evaluations will identify additional facilities that will require seismic mitigation or full replacement. Capital costs related to these evaluations will be updated and included in future CFPs.

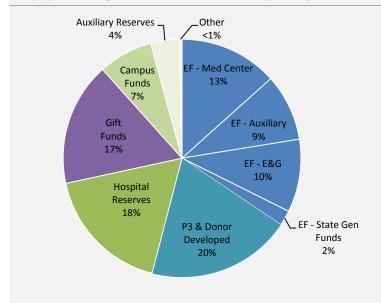
CAPITAL INVESTMENT

As summarized in Display 10, for the current term (2018-19 to 2023-24), UC has identified \$36.6 billion of capital need. Approximately two-thirds of the plan, or \$24.8 billion, has an identified funding plan. The funding plan includes projects that are funded by UC's campus funds, reserves, external finance, gift funds, or public private partnerships.



⁵ The text of the Policy may be found at https://policy.ucop.edu/doc/3100156/

Display 11. Funding Plan for 2018-19 to 2023-24 Capital Projects Totals \$24,750M



Fund Sources		
External Finance – Medical Center	3,310	13%
External Finance – Auxiliary	2,246	9%
External Finance – Education & General	2,455	10%
External Finance – State General Funds	514	2%
P3 & Donor Developed	4,857	20%
Hospital Reserves	4,335	18%
Gift Funds	4,155	17%
Campus Funds	1,825	7%
Auxiliary Reserves	957	4%
Other*	96	<1%
TOTAL	24,750	

^{*} Other includes: State One-Time DM Funds (\$46), Grants (\$27), and Systemwide Funds (\$23)

in millions of dollars

Identified Funding for Capital Need

The CFP shows the University relies on a wide range of fund sources to support its capital program, including gifts, grants, auxiliary enterprise revenues, and long-term debt financing. The distribution among funding sources for the projects that have a funding plan is shown in Display 11.

Non-State Fund Sources

With the decline in state support for the University's capital needs, the University now relies more on its own resources to fund capital projects.

External Financing (EF). Approximately one-third of the CFP is funded by long term debt financing. For the current term, approximately \$8.5 billion of the funding plan is expected to come from external financing. Projects funded with external financing can generally be categorized into education and general (E&G), auxiliary, and medical center. E&G projects support core instruction, research, and general campus academic space and associated support space and infrastructure. External financing for E&G projects is repaid with unrestricted general campus funds. Auxiliary projects are typically revenue-generating projects that are self-

supporting. 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 meeting certain debt metrics.

For the CFP, campuses analyzed feasibility of proposed debt-funded projects, with the additional debt burden measured against certain campus financial 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. Only projects that meet these metrics are included in the CFP with external financing funding. The campus metrics are analyzed again when external financing is requested at the time of individual project budget approval.

Medical center projects with a debt component are analyzed based on the respective medical center's financial projections; metrics such as pro forma net income margin, debt service coverage, and days cash-on-hand are considered in the analysis.

Campus Funds, Reserves, Gifts, and Grants. Capital projects are also supported by the following nonstate resources.

- Campus funds of \$1.8 billion; these funds include indirect cost recovery on sponsored contracts and grants, gifts, and investment earnings.
- Hospital and auxiliary reserves of \$5.3
 billion are proposed to support capital
 projects in this plan; these funds are
 generated from specific operations such as
 medical centers and housing.
- Gift funds of \$4.2 billion, including those inhand, pledged, and to-be-raised. The University's fundraising efforts remain highly successful. In 2016-17, the University surpassed the \$2 billion mark ⁶ in private support the third year in a row that the UC system exceeded this threshold, continuing a trend of strong philanthropic giving both in terms of dollars raised and the number of contributors to UC. Projects dependent upon gifts are advanced when funding targets have been achieved.
- Most grants fund operations. However, campuses have identified \$27.0 million of grant funds that can be used to cover capital expenditures.

State Fund Sources

The CFP has two sources of state support for capital. In accordance with the California Education Code, the University is authorized to finance capital projects that have been approved by the state and use a portion of its State General Fund support appropriation to pay the debt service. The CFP

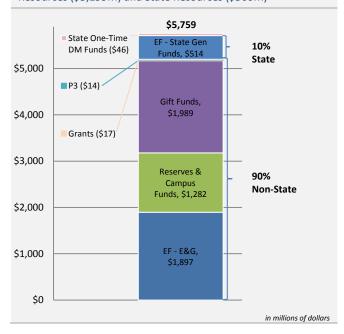
includes a total of \$514.1 million of projects to be funded under this financing mechanism:

- The 2018-19 State Capital Budget totals \$300.8 million and includes projects that address seismic and life safety corrections at the Berkeley, San Diego and San Francisco campuses; enrollment growth at the Davis, Riverside and Santa Cruz campuses; systemwide library storage needs; and the second phase of a systemwide DM program. The 2018-19 budget is supported with an additional \$109.6 million of non-state resources.
- The remaining \$213.3 million of state funding is for the proposed 2019-20 Budget for State Capital Improvements. This budget would be supported by an additional \$98.1 million of non-state resources. The projects 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 Division of Agriculture and Natural Resources; and the third phase of a systemwide DM program.

The second source of state support is one-time funds the University has received for DM work totaling \$46.0 million, which includes \$35.0 million from the Budget Act of 2018.

⁶ University of California, Annual Report on University Private Support, 2016-17. https://www.ucop.edu/institutional-advancement/files/annual-reports/2017.pdf

Display 12. \$5,759M State Capital Need Funded by Non-State Resources (\$5,199M) and State Resources (\$560M)



As illustrated in Display 12, there are not enough state resources to fully fund state supportable capital need. In the absence of significant state funding for capital, campuses have had to use non-state resources to fund critical state capital need. For the current term, the \$5.8 billion of state-eligible capital need is proposed to be almost entirely been funded by non-state resources (\$5.2 billion).

Public Private Partnerships & Donor Development

The University has extensive experience utilizing public private partnerships (P3) and donor development (DD) for capital. P3s may provide opportunities to deliver facilities for the benefit of campuses and medical centers with limited or no commitment of University capital funds. Campuses may also pursue P3s to take advantage of private industry expertise to develop projects outside of typical University uses. P3s can be structured around a variety of leases and management agreements with the potential to deliver any programmatic use. The final structure of the

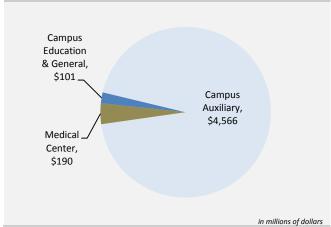
partnership varies depending on the type of use and the appropriate level of risk allocation.

DD projects provide facilities to the University through a donation of improvements that do not require a commitment of UC capital funds.

Approximately 19.6% of the University's capital program with identified funding is proposed to be implemented through P3/DD models. UC has found the P3 model to be most efficient for those building types commonly developed privately, such as rental and for-sale housing, commercial and medical office buildings, hotels, and generic laboratory facilities.

As summarized in Display 13, practically all (94.0%) of the projects to be delivered via P3/DD is for housing. San Diego Health System is exploring the use of P3 (approximately \$190.0 million) to deliver medical office space. Lastly, the campuses are exploring the use of P3 to implement some core campus projects.

Display 13. \$4,857M of Capital Need to be Implemented with a Public Private Partnership or Donor Development

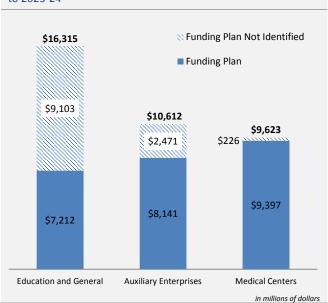


FUNDING CHALLENGES

The University uses a variety of fund sources to support its capital program. However, there is capital need for which funding has not been identified. Approximately two-thirds of the CFP, or \$24.8 billion, has an identified funding plan. Display 14 demonstrates that the availability of funding greatly differs for the three program categories. The

remaining \$11.8 billion of the plan does not have an identifed funding source. The majority of these unfunded projects (77.1% or \$9.1 billion) is related to instruction and research space in the education and general category.

Display 14. Funding Summary by Program Category for 2018-19 to 2023-24



Nearly all (97.7%) of the medical centers' capital need has an identified fund source. Approximately 76.7% of capital needs supporting campus auxiliary enterprises have an identified fund source. Most of the capital need for auxiliaries is associated with housing. Housing can generate revenue which, in turn, can be a fund source for capital. UC continues to make housing as affordable as possible; as a result, the revenues generated do not cover all capital need.

In contrast, over half (55.8%) of campuses' education and general capital need does not have a funding plan. With the exception of some research, most projects that support the core academic program do not generate revenue and they may not attract philanthropic support. These unfunded projects are eligible for state capital support.

With the state's goal to reduce overall bond debt, state funding for capital projects has shrunk in the

last decade. The last general obligation bond measure was passed in November 2006.

Since 2013-14 in accordance with the Education Code, the University is authorized to finance capital expenditures or fund pay-as-you-go capital outlay with its State General Fund support appropriation. The authority allows UC to reallocate a portion of its State General Fund allocation, with certain conditions, to finance or in the case of pay-as-you-go capital outlay, to directly fund the design, construction, and equipping of academic facilities to address seismic and life safety needs, enrollment growth, modernization of out-of-date facilities, and renewal or expansion of infrastructure to serve academic programs.

Since 2013-14 and including the proposed 2019-20 State Capital Budget, UC will have implemented \$2.0 billion of capital projects using its State General Fund support appropriation to pay for the debt service or to directly fund capital expenditures. The projects approved under this authority have allowed the University to address some of its highest priorities, including seismic and life safety improvements and expansion of classroom capacity to accommodate increased enrollment, as well as complete state projects that were previously suspended. UC's largest appropriation supports the Merced 2020 Project (\$653.9 million).

However, the funding for these capital projects does not represent additional funding from the state to support capital. UC has redirected funding from the University's general operating budget to support high priority capital needs; by 2023-24, approximately \$133.9 million per year of State General Funds will be committed to debt service for these capital projects.

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

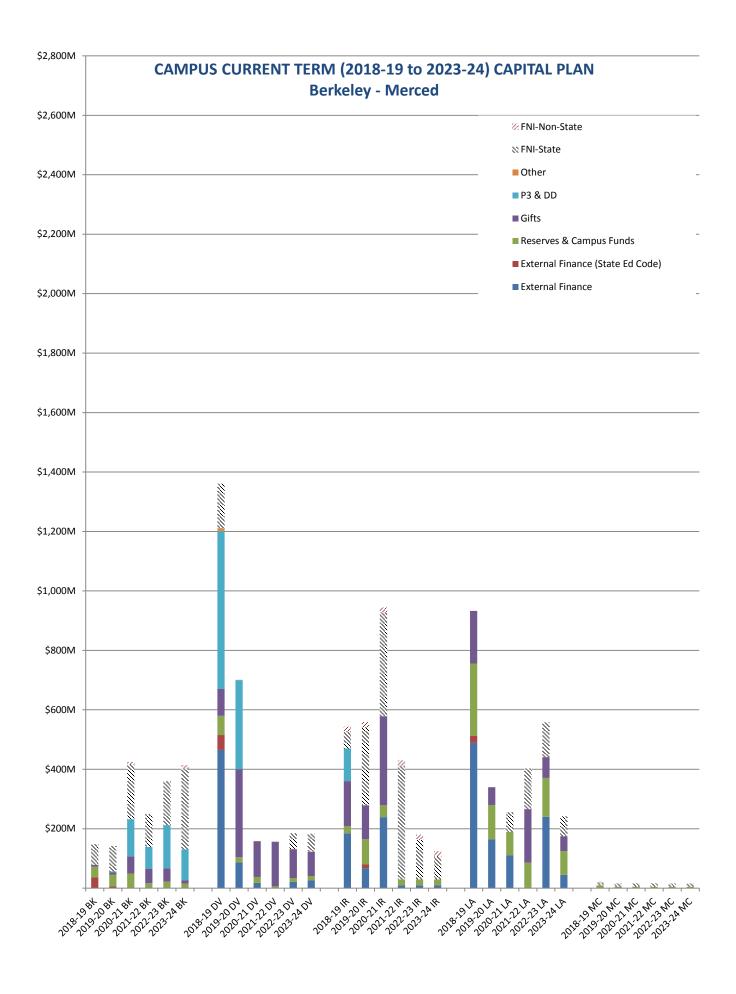
regularly rated among the best in the nation and the world; similarly, UC's medical centers rank among the nation's best. Facilities that support this excellence are aging, seismic standards have tightened, and deferred maintenance needs increase as time goes by. With continued growth in the University's 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.

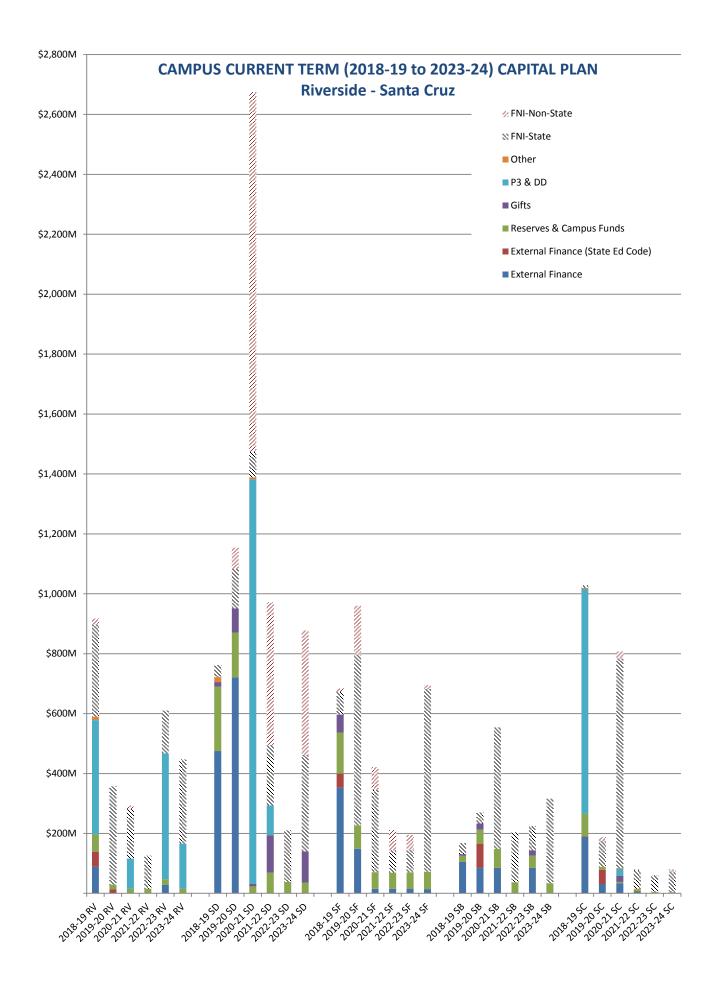
UC has always relied on funding from the state to support its capital program.

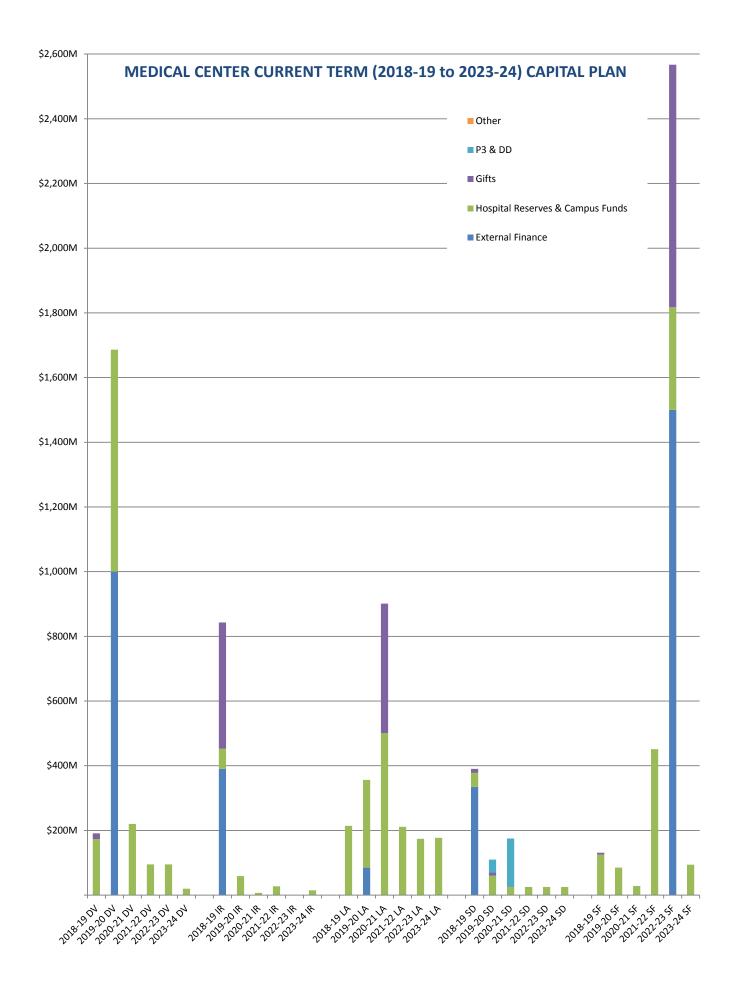
Average state capital outlay over 2013-14 to 2019-20 is \$289 million/year (\$195 million per year if Merced 2020 is excluded) all of which is a reallocation of operating funds to support debt service for the capital program. In contrast, average state capital outlay for the period 1996 to 2012 was nearly \$500 million per year, with funds allocated specifically for capital.

As demonstrated in Display 11, UC pursues many non-state funding sources including external financing, gifts, and creative P3 models to support the capital plan. However, as Display 14 shows, UC has approximately \$11.8 billion in unfunded capital need—mostly for state supportable education and general facilities.

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

2018-28

By Location

HOW TO READ THE TABLES

Capital Plan with Funding

Capital Flair With Fair	8											
	te		ji	Current Term (2018-19 to 2023-24)								
	Update	Δ	Seisn	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PRO	JECTS											
Library Renovation	3			GF	CF	CF				21,000	100%	
Classroom Building		•				EF				50,000	98%	
Campus Projects Total (\$000s)	3	4)	77,000	54,000	230,000	138,000	211,000	131,000	841,000	364,000	



This column lists the names of projects that are proposed over the ten 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.

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, feesupported 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 following areas:

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

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 facilty.

7 Proposed Funding Source

This area provides the proposed source of funding from the following options:

Funding Identified Categories

AR	Auxiliary Reserves	OG	Other Grants
CF	Campus Funds	ous	Other University Systemwide Funds
DD	Donor Developed	P3	Public Private Partnership
EF	External Financing	SG	State General Fund Financed (a form of external financing)
GF	Gift Funds	SPG	State Pay-As-You-Go Funds
HR	Hospital Reserves	UR	University Fee Reserves (voted, life safety, and registration)

Funding Not Identified (FNI) Categories

S	FNI-State (fully or
	partially eligible for
	State funding)

FNI-Non-State (fully or partially supportable by non-State (campus or medical center) resources)



2018-28 BERKELEY CAMPUS CAPITAL NEED

As the founding campus of the University of California, UC Berkeley remains a leader in education, research, and public service, ranking among the top research universities worldwide. Berkeley offers more than 270 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 next decade, focusing on the current and next five fiscal years. The Berkeley CFP is supported by approximately \$1.7 billion over the current term, of which approximately \$841 million has a funding strategy.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	77,000	54,000	230,000	138,000	211,000	131,000	841,000	364,000
Capital Need with Funding Not Identified	69,000	85,000	192,000	111,000	149,000	283,000	889,000	866,000
Total (\$000s)	146,000	139,000	422,000	249,000	360,000	414,000	1,730,000	1,230,000

Challenges and Priorities

Berkeley's 2018-28 CFP is based on the objectives, policies, and guidelines identified in the 2020 Long Range Development Plan (LRDP) which, in turn, is based on the principles of excellence articulated in the campus Strategic Academic Plan. The campus is in the process of creating a new Strategic Plan and is preparing to update the LRDP. These plans, as well as the CFP, will continue to reflect the campus's ongoing strategy to maintain and advance its land use and development principles in a fiscally challenging economic environment. The campus's core values—the passion for inquiry and discovery, instruction, and the primacy of public service remain unchanged. The campus commitment to goals of safety, carbon neutrality, universal access, and positive civic relationships provide important guides to development strategies.

Addressing safety and creating a resilient campus through remediation of seismic risk continues to be a priority, along with investment in facility renewal and deferred maintenance. Berkeley has a considerable portfolio of seismic upgrades across multiple building types. Seismic planning for Evans Hall remains a high priority; the Evans Hall Seismic Renovation or Replacement will require significant surge space, given the size and occupancy of the

existing building. Demolition of several small buildings that pose seismic risk will also strategically open up new parcels suitable for new development to meet contemporary needs.

Preliminary discussions around the Strategic Plan have focused on leveraging Berkeley's academic and research excellence and core values to foster multidisciplinary opportunities, enhance academic pathways, increase student success, and reinforce inclusion and diversity. In addition to charting a course for the campus, the Strategic Plan will provide guidance for the prioritization of campus facilities needs, with projects that integrate education and research continuing to have high priority. Another high priority need is teaching and instructional facilities to support sustained enrollment growth over the past several years. A number of proposed projects support these priorities as well as seismic risk, including seismic renovation or replacement of University Hall, Evans Hall, Hearst Gymnasium, O'Brien Hall, and Hesse Hall. Selective new construction includes the Bakar Bioenginuity Hub at Woo Han Fai Hall, anticipated to move forward with gift funding.

The lack of campus housing capacity has a deleterious impact on the overall student experience. The rising cost of housing is also

pushing students farther from campus, leading to longer commutes that reduce opportunities for engagement, with potential negative outcomes for student success. Addressing this shortage is essential to Berkeley's continued academic success. Compared to the 22% of undergraduate students and 9% of graduate students housed on campus in 2017, the campus's goal of 50% and 25%, respectively, translates to a significant and urgent need for additional beds. The campus identified potential sites for campus housing in its 2017 Housing Master Plan Task Force Report and is completing additional study of these sites to develop an implementation strategy. Consistent with that report, this CFP proposes substantial increase in campus housing, likely delivered through public private partnerships (P3).

Capital renewal of core buildings and infrastructure is key to the campus's ability to recruit and retain exceptional students, faculty, and researchers to pursue new topics of research and to explore new modes of instruction. Through its Capital Renewal Program, the campus is committed to a sustained effort to renew its inventory of existing buildings and infrastructure. However, like many other campuses, Berkeley's needs far outweigh the campus's resources. 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. Identification of priority projects is based on an annual comprehensive evaluation and ranking of all proposed projects. The 2018-28 CFP also includes a significant backlog of deferred maintenance projects for which no funding is identified. The campus estimates the current deferred maintenance need in State-supportable space at approximately \$761 million, based on the campus's long-term facility renewal plan. Berkeley's deferred maintenance projects address replacement of building systems, building envelope, as well as utility renewal, life safety upgrades, and code compliance requirements.

Responding to the President's Carbon Neutrality Initiative remains a priority. Studies are underway

to determine an energy strategy that will reliably serve the campus through a carbon-sensitive method, although the resulting projects have no identified funding source at this time.

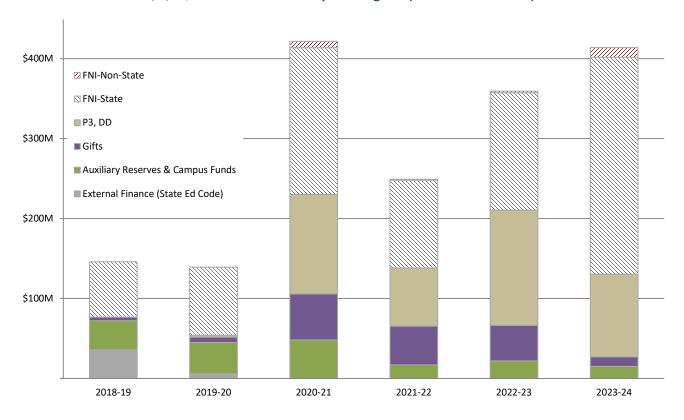
Funding

In the absence of significant increases in State funding, it is challenging to implement projects that support increased enrollment, that address the backlog in deferred maintenance, and that address seismic needs. For projects with funding identified, the limited campus debt capacity requires the campus to continue to explore new, innovative, and underutilized models of capital development, including campus funds, gift funds, grants, and private development. The campus prioritizes any State capital funds it receives toward seismic and life safety upgrades and capital renewal of core academic buildings for which there are few other fund sources.

- \$1.23 billion is needed for State eligible space.
- \$364 million in funding has been identified, of which \$322 million (88%) will come from non-State resources.
- \$866 million of State eligible space has no funding.

Because State funding is not available for much of its capital program, the campus is strategically redirecting non-State resources to support the most urgent capital needs. These critical projects, such as the Bakar Bioenginuity Hub at Woo Han Fai Hall and the Moffitt Library Renovation Phase 2, will address State-eligible space with non-State funds, such as gifts and P3 development, as well as campus cash and reserves. 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.

Display 2. \$1.7B Current Term Capital Program (2018-19 to 2023-24)



Display 3. Berkeley Campus Capital Need with Funding

Display 3. Del Keley Calli		7		11000	710111101110							
	e		ũ			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Long Library Renovations Haas Business School	3			GF	GF	GF				21,000	98%	
Moffitt Library Renovation Phase 2		•		GF	GF	GF	GF			50,000	98%	
University Hall Seismic Corrections	1	•	•	CF	SG	CF				17,000	99%	
Giannini Hall Seismic Renovation	1	•	•	SG						36,000	100%	
Berkeley Science Hub	1 2	•	•		GF	GF		GF		18,000	100%	GF
Woo Hon Fai Hall Seismic Renovation and Program Improvements for BioEnginuity Hub	2	•	•		DD	DD	DD			TBD	25%	
Goldman School Expansion (related to Upper Hearst Housing Component)	1					GF				20,000	100%	
Minor Hall Optometry School Clinic Expansion	1					GF	GF	GF		35,000	100%	
Haviland Hall Renovation for Social Welfare	1						GF			1,000	100%	GF
Old Art Gallery Renovation for Center for Latin American Studies		•	•				GF	GF	GF	17,000	100%	

	ıte		nic		Current Term (2018-19 to 2023-24)							
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Campus Capital Renewal	3	•		CF	CF	CF	CF	CF	CF	60,000	95%	CF
Capital Projects \$5M to 10M (E&G)				GF	GF	GF	GF	GF	GF	12,000	100%	GF
Capital Projects \$750K to \$5M (E&G)				CF	CF	CF	CF	CF	CF	30,000	100%	CF
Deferred Maintenance	1	•		CF	CF					40,000		
							Tota	al Education a	nd General:	357,000		
AUXILIARY PROJECTS												
Levine-Fricke Softball Stadium	3			CF	CF	CF				26,000		
Gateway Project New Construction	2				Р3	Р3	Р3			TBD		
Housing Project #1 - People's Park Site Redevelopment	3				Р3	Р3	Р3	Р3		135,000	10%	
Housing Project #1 - Open space					CF	CF	CF	CF		10,000		
Housing Project #2	3					Р3	Р3	P3	Р3	120,000		
Parking						Р3				50,000		
Upper Hearst Housing Component (related to Goldman School Expansion)	1					Р3				67,000		
New Dining Commons								Р3	Р3	75,000		
Housing Project – Master Plan	3			CF						1,000		
Housing Project - Other	3											Р3
Capital Projects \$750K to \$10M (AUX)												GF
								Tot	al Auxiliary:	484,000		
Campus Projects Total (\$000s)				77,000	54,000	230,000	138,000	211,000	131,000	841,000	364,000	

Funding Not Identified (FNI)

The projects identified in the below table are those needed projects for which funding has not been identified. This list of projects, however, 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

	ţ		ic	Current Term (2018-19 to 2023-24)								
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJECTION Classroom and Large Lecture												
Hall Building	1			S	S	S				29,000	100%	
Hearst Gymnasium Seismic Renovation and Program Improvements (W&C)	1	•	•	S						1,000	100%	S
Surge Building	2			S	S	S				90,000	100%	
Data Science Initiative Facilities (admin, classrooms)	3					S	S	S		59,000	100%	
2111 Bancroft Seismic Demolition	1		•			S				5,000	100%	S
Evans Hall Seismic Replacement (W&C)	2	•	•			S	S	S	S	204,000	100%	
Relocations for Housing Sites	3					S	S	S	S	50,000	100%	
Architects & Engineers Building Seismic Demolition	1		•				S			3,000	100%	
O'Brien Hall Seismic Replacement	3		•					S	S	3,000	100%	S
Hesse Hall Seismic Replacement	1	•						S	S	3,000	100%	S
CNR Seismic & Program Improvements	3	•	•						S	1,000	100%	S
Anna Head Building B, C and D Renovate for Social Sciences												S
COGEN Plant Planned Replacement	1	•	•								85%	S
Davis Hall Seismic Renovation	3		•								100%	S
Donner Laboratory Addition Seismic Demo/Replacement	3		•								100%	S
International House Res Hall Seismic Corrections	3		•								100%	S
McLaughlin Hall Seismic Renovation	1	•	•								100%	S
Multidisciplinary Lab Building	3										100%	S
Piedmont Houses Seismic and Code Upgrade and Remodel	3	•	•								100%	S
Capital Projects \$750K to \$10M (E&G)					S	S				7,000	100%	S
Deferred Maintenance Backlog	1	•		S	S	S	S	S	S	399,000	100%	S
							Tota	al Education a	nd General:	854,000		
AUXILIARY PROJECTS												
Student Service Space (Identity Groups, Other Services)	3						S	S	S	12,000	100%	NS
Student Wellness Facilities	3						NS	NS	NS	15,000		NS
Clark Kerr Campus Buildings Seismic Corrections (4)	3		•									NS
Edwards Stadium/Goldman Field Seismic Remediation & Redevelopment	3		•								25%	S
Performing Arts Academic Program (TDPS, Arts + Design)	2										100%	S

	9		. <u>.</u>	Current Term (2018-19 to 2023-24)								
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Richmond Field Station Buildings Seismic Corrections	3		•									S
Sather Tower Seismic Corrections	3		•								5%	S
Southside Buildings Seismic Corrections	3		•								100%	S
Capital Projects \$750K to \$10M (AUX)						NS				8,000		NS
				Total Auxiliary:					35,000			
Campus Projects Total (\$000s)				69,000	85,000	192,000	111,000	149,000	283,000	889,000	866,000	

NOTES							
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no chang	from prior year		
Projects Listed in 2017-27 Plan and now removed from Program:	Basketball Practice Fac	ility					
Projects from \$750k - \$10 million:	Botanical Gardens		Gilman Hall - Remediat	ion (LBNL/DOE)	North Gate Hall Ren Grad School Journalism		
	California Hall Renovat	tion	Haas Pavilion DM and	program			
					South Hall Improvements - School of		
	College of Engineering	Improvements	Laboratory Remodels - Projects	Faculty Start Up	Information		
	Donner Lab Remediati	on/Removal			Wurster Hall Improvements (Studios)		
			McCone Basement Rer	nodel for Data			
			Science				



2018-28 DAVIS CAMPUS CAPITAL NEED

UC Davis is a premier research university with state-wide and global impacts. The home of the Aggies — gogetters, 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 nearly 7,000 graduate and professional students have access to 96 graduate programs, more than half of which are interdisciplinary. UC Davis is ranked as the world's leader in veterinary medicine and takes pride in its residential program. The largest physical campus in the UC system, UC Davis is located on 5,300 acres with 14 million gross-square-feet, 1,200 buildings and 130 miles of infrastructure. UC Davis operates like a city, with its own wastewater treatment plant, utilities, and central heating and cooling plant.

The Capital Financial Plan (CFP) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and next five fiscal years (2019-20 to 2023-24) and represents projects in the near-term planning horizon. These six years are named the current term. UC Davis is known for its standout academics, global outlook, interdisciplinary opportunities, and sustainability. These themes are woven into the campus's history and in the campus's reputation for solving problems related to food, health, the environment, and society and are reflected in the campus's CFP. As the document that guides the campus in support of its mission and facility-based needs, the CFP identifies approximately \$2.7 billion over the current term in support campus capital infrastructure, deferred maintenance, and life safety upgrades critical to increase the useful life of existing buildings as well as campus and gift-funded initiatives in support of a broad range of program improvements that support academics, research, and student life.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19*	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	1,212,000	701,000	158,000	157,000	132,000	123,000	2,483,000	1,067,000
Capital Need with Funding Not Identified	150,000				53,000	60,000	263,000	263,000
Total (\$000s)	1,362,000	701,000	158,000	157,000	185,000	183,000	2,746,000	1,330,000

^{*}Includes estimated budget for a P3 housing project.

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 adopted 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, and ambitious new housing.

Consistent with the new 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. 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. Academic projects to renovate and create research and teaching laboratories will accommodate existing faculty and attract new faculty; these include such projects as the Chemistry Addition and Renovation Vision project, the Computational and Data Sciences facility, and renovations to existing research buildings. In addition to significant projects already approved and under construction, including redevelopment of Webster and Emerson Halls and expansion of housing in West Village, the CFP prepares for the future implementation of the housing program with projects to redevelop Orchard Park and provide housing for student families. Infrastructure renewal and seismic remediation also remain a high priority to sustain existing resources.

Challenges

UC Davis faces the challenges of older facilities, academic space needs, housing shortages, and infrastructure renewal demands. Some of the nearterm proposed projects in the CFP begin to address these challenges.

The campus undertook a comprehensive study several years ago that identified a substantial deferred maintenance and capital renewal backlog. The following outlines how this will be addressed:

- UC Davis is implementing a multi-year deferred maintenance program at \$100 million, representing the most urgent deferred maintenance needs, with a combination of state funds and external financing. Over \$60 million of this program is approved and underway.
- Significant investment beyond this plan is necessary to address capital renewal, estimated at \$400 million. The campus is investigating funding sources for this need.

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 - a more comprehensive analysis is being developed to capture the total State-supportable need.

- \$1.33 billion in funding is needed for State eligible space.
- \$1 Billion of funding has been identified, of which \$989 million (99%) will come from non-State resources.
- \$263 million of State eligible space has no funding.

Because State funding is not available, the Davis campus plans to use non-State resources of \$989 million to support the most urgent capital needs in the current term. UC Davis is investing campus resources in and anticipates significant donor support for these State-supportable projects; however, that funding plan 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 Statesupportable projects represent safety and renovation projects as well as deferred maintenance. Long-term underfunding of Statesupportable capital projects puts a great strain on 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 two years into the campaign (in the silent/quiet phase), the campus has begun large scale planning for

interdisciplinary initiatives and school/unit priorities. A preliminary roll-up of goals by type indicates that approximately 40% of funds raised for the campaign will support capital projects. 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.

Real Estate and Public Private Partnerships

The role of real estate in evaluating space and acquisition opportunities is key in addressing oncampus space challenges. Real Estate on the Davis

campus has enabled the establishment and structure of several successful public private partnerships (P3). Currently, the campus has a number of existing P3 housing projects, including The Colleges and Atriums at La Rue, Russell Park, West Village Apartments, and 8th and Wake graduate student housing. Continuing the campus's previous success in this area, the CFP includes additional student housing projects, such as the Orchard Park Redevelopment, which continue to utilize the P3 approach to deliver student housing. The campus is currently not contemplating any acquisition of real estate. These types of transactions are typically opportunistic and unforeseen, and, if presented, would be evaluated in the context of the campus's strategic goals.

\$1.200M ☑ FNI-Non-State \$1,000M ■ State One Time DM Funds (Total < \$5M) ■ P3 \$800M ■ Gifts Auxiliary Reserves & Campus Funds ■ External Finance (State Ed Code) \$600M ■ External Finance \$400M \$200M 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24

Display 2. \$2.7B Current Term (2018-19 to 2023-24) Capital Need

Display 3. Davis Campus Capital Need with Funding

	ë		ij			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	ΜO	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-2
EDUCATION AND GENERAL PRO	DJECTS	S										
Briggs Electrical Improvements and Re-roof	3			EF, SPG						23,000	100%	
Briggs Hall 1st Floor Laboratory Renovation	1			EF						16,000	100%	
Kemper Hall Improvements	3			CF, EF						25,000	100%	
Cruess Hall North Renovation	1			EF, CF						25,000	100%	
Chemistry Addition and Phase 1 Renovation Vision	1	•	•	EF						64,000	100%	
Hot Water Conversion	3	•		EF						56,000	100%	
Hunt Hall 2nd Floor Renovation	1	•		CF, EF						20,000	100%	
Infrastructure Improvements	3	•		EF						45,000	100%	
Laboratory for Energy- related Health Research (LEHR) Remediation	1			EF						15,000		
Performance Center at Aggie Stadium				EF, GF						38,000		
Teaching and Learning Complex	1			EF, SG						86,000	100%	
Veterinary Medical Center				EF, GF	GF			GF	GF	447,000	50%	GF
West Village Transfer Student and Continuing Undergraduate Student Housing				P3						532,000		
Computational and Data Sciences					GF					50,000	100%	
Engineering Student Design Center	1				GF					21,000	100%	
Research Animal Facility					EF					50,000	100%	
Library Renovations	2	•				GF				50,000	100%	
Museum of Biodiversity and Environment						GF				40,000	50%	
Winery Expansion Phase 1						GF				20,000	100%	
Discovery Hub (Multi- Disciplinary Research)	1						GF			140,000	80%	
Capital Projects \$750K to \$10M				EF	EF					40,000	100%	
Deferred Maintenance	1	•		EF	EF	EF				56,000	100%	
Seismic Corrections			•	CF	CF	CF				40,000	100%	
							Tota	al Education a	nd General:	1,899,000		
AUXILIARY PROJECTS												
Freeborn Hall Redevelopment	1	•	•	EF, UR						15,000		

	ıte		nic _			Curi	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Orchard Park Redevelopment	2				Р3					300,000		
Student Family Housing	3			AR, EF						67,000		
Transportation Infrastructure Program	3			EF						25,000		
Solano Park Redevelopment		•			Р3					TBD		
Tercero Student Housing Phase 5								AR, EF		28,000		
Segundo Dining Commons 2									AR, EF	35,000		
West Village Faculty/Staff Housing	1											CF, EF
Intercollegiate Athletics Initiatives \$750K to \$10M				AR, CF, GF	GF	GF	GF	GF	GF	70,000		
Student Affairs Division \$750K to \$10M				AR, UR	AR, UR	AR, UR	AR, UR	AR, UR	AR, UR	22,000		
Student Housing Projects \$750K to \$10M				AR, EF	AR	AR	AR	AR	AR	22,000		
								Tota	al Auxiliary:	584,000		
Campus Projects Total (\$000s)				1,212,00	701,000	158,000	157,000	132,000	123,000	2,483,000	1,067,000	

The campus has ten 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

	ate		ä.	Current Term (2018-19 to 2023-234								
	Update	M	Seisr	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PR	ROJECTS											
Bainer Hall Renovation				S						50,000	100%	
Young Hall Renovation		•	•	S						50,000	100%	
Physics Renovation		•		S						50,000	100%	
Wickson Hall Renovation		•						S		50,000	100%	
Enology Renovation		•	•						S	20,000	100%	
Governor's Hall Remodel (Sacramento Campus)												S

	ate		mic_	Current Term (2018-19 to 2023-234										
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28		
Institute for Regenerative Cures Phase 7 (Sacramento Campus)												NS		
Research IV Building (Sacramento Campus)											100%	S		
Deferred Maintenance		•						S		3,000	100%	S		
Seismic Corrections			•						S	40,000	100%			
							Tot	al Education a	nd General:	263,000	263,000			
Campus Projects Total (\$000s)				150,000				53,000	60,000	263,000	263,000			

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change	from prior year
Projects Listed in 2017-	Briggs Hall Safety Impr Building Renewal	ovements and	Emerson Hall Replaceme	nt	Third & A Mixed Use
27 Plan and now removed from Program:	Central Cage Wash Fac	ility	Physical Sciences & Engin Seismic and QMAP Renov	0 ,	Tercero Dining Commons 2
	Animal Science Teachin	ng Facility	CNPRC Lifespan Health		Physics Building Renovations
Projects from \$750k - \$10 million:	C.N. Gorman Museum	Relocation	Facility for Distilled Bever	rage Science	

2018-28 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 interprofessional 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 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 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 for the next decade. The CFP focuses on this year (2018-19) and the next five fiscal years (2019-20 to 2023-24). These six years are named the current term. The UC Davis Health portion of the CFP is supported by \$2.3 billion in capital projects over the current term.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20*	2020-21	2021-22	2022-23	2023-24	Total
Capital Need with Funding	191,000	1,686,000	220,000	95,000	95,000	20,000	2,307,000
Capital Need with Funding Not Identified				20,000			20,000
Total (\$000s)	191,000	1,686,000	220,000	115,000	95,000	20,000	2,327,000

^{*}Includes Hospital Bed Replacement Tower

Priorities

UC Davis Health's priorities address California seismic mandates, improve inpatient and outpatient space, and modernize aging technology and parking infrastructure to support future growth. UC Davis Health is also interested in new opportunities for collaboration to advance academic, teaching, and research programs. UC Davis and UC Davis Health are particularly interested in leveraging the University's strengths to become 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 a handful of 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), and Utility Master Plan & Sustainability Roadmap. 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. Initial 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; and expand utilities, data communications, and parking on the Sacramento campus, all to accommodate the growth and expansion of acute care, and academic, teaching, and research programs.

Challenges

Ensuring continued financial success in today's changing healthcare environment while also addressing changing regulatory mandates is a challenge for UC Davis Health. UC Davis Health is continually reevaluating the prioritization and

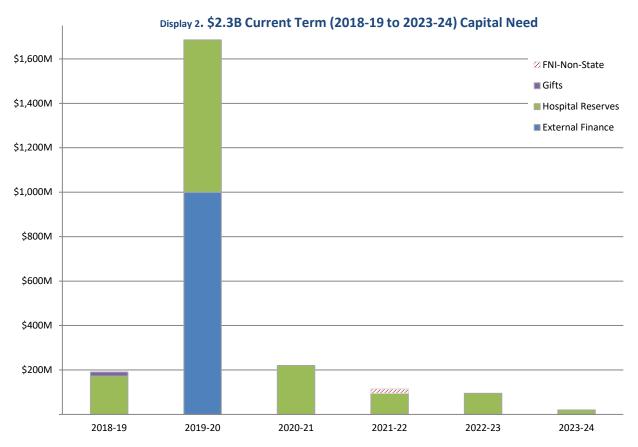
funding strategy for all capital projects. Seismic safety regulations mandate some projects and other needs, such as aged facilities and additional space, compete for limited funding.

Funding

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. In 2016, a large gift (\$38.5 million) was donated to UC Davis Health 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 3. UC Davis Health Capital Need with Funding

	Update	5	Seismic			Cur	rent Term (20	18-19 to 2023	:-24)		
	ž	Δ	Se	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Hospital Seismic Façade	1		•	HR						12,000	
Hospital Seismic Upgrade Stair Tower and Exit Corridor Upgrades	1		•	HR						10,000	
University Tower 1 Remodel	1		•	HR						3,000	
Cancer Center Addition for ZAP-X	3			HR						11,000	
Roseville Clinic Expansion	2			HR						35,000	
Ambulatory Care Center (Ellison) w/ Eye Center Expansion	2			GF, HR						80,000	
Ambulatory Care Center (Ellison) Renovations Phase 1	3				HR					75,000	
UC Davis Health Priority 1	1		•		HR					13,000	
UC Davis Health Priority 2	1		•		HR					11,000	
Compounding, Life Safety, & Utilities Compliance Upgrades	1				HR					15,000	
Cancer Center Linear Accelerator	1				HR					20,000	
Hospital Bed Replacement Tower (Sacramento Campus)	1		•		EF, HR					1,500,000	

	Update	_	Seismic 			Cur	rent Term (20	18-19 to 2023	-24)		
	ŋ	DM	Sei —	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Sacramento Region Land Acquisition (Sacramento Campus)	3				HR					22,000	
Ambulatory Care Center (Ellison) Renovations Phase 2 (Sacramento Campus)	3					HR				75,000	
Parking Structure 4	1					HR				35,000	
South Placer Development	3					HR				80,000	
Ambulatory Care Center (Ellison) Renovations Phase 3	3						HR			75,000	
Ambulatory Care Center (Ellison) Renovations Phase 4	3							HR		75,000	
Health System Projects \$750K to \$10M	1			HR	HR	HR	HR	HR	HR	160,000	
Capital Projects Health System 2024-25 to 2027-28	1										HR
Total (\$000s)				191,000	1,686,000	220,000	95,000	95,000	20,000	2,307,000	

UC Davis Health has identified one project (Administrative Office Relocations) for which it does not have an identified fund source. However, UC Davis Health continues to analyze funding strategies and opportunities to allow for the implementation of the project.

Display 4. UC Davis Health Capital Need with Funding Not Identified

	ate		nic			Curi	rent Term (20	18-19 to 2023	-234		
	Update	Δ	Seisı	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Administrative Office Relocations (Sacramento Campus)	3						NS			20,000	
Total (\$000s)							20,000			20,000	

NOTES				
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change from prior year
Projects Listed in 2017- 27 Plan and now removed from Program:	Ambulatory Care Cente California Tower (Plann	·		
	Ambulatory Care Center	er Net V2 Uprades	Hospital 2020 Priority 2	Pharmacy CIVA Upgrades
Projects from \$750k -	Cancer Center Improve	ements	Inpatient Rehabilitation	School of Medicine Skills Lab Improvements
\$10 million:	Child Care Center		Imaging Improvements	
	Emergency Power Upg	rade	Pavilion Pathology Lab Im	provements



2018-28 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" nine times within the last ten years, the number one school three times.

In 2016, UC Irvine's Strategic Plan was updated to coincide with the campus's 50th 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. To achieve these goals, additional space to meet current and future demand will be required, as will investments in facility renewal and infrastructure.

The Capital Financial Plan (CFP) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and the next five fiscal years (2019-20 to 2023-24). This plan represents a \$2.8 billion need over of which approximately \$1.4 billion has a funding plan (refer to Display 1).

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
	2016-19	2019-20	2020-21	2021-22	2022-23	2023-24	Iotai	
Capital Need with Funding	471,000	279,000	579,000	30,000	30,000	30,000	1,419,000	773,000
Capital Need with Funding Not Identified	73,000	280,000	365,000	400,000	151,000	94,000	1,363,000	1,255,000
Total (\$000s)	544,000	559,000	944,000	430,000	181,000	124,000	2,782,000	2,028,000

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. Consequently, the highest priority for the 2018-28 CFP is to provide the facilities needed 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 current term of the CFP for the main campus includes 27 projects for which funding has been identified, totaling approximately \$1.4 billion. Of this total, more than two-thirds—over \$850 million—is for projects that will provide new space, primarily through the construction of new buildings such as the College of Health Sciences

Building and the Gross Nursing & Health Sciences Hall. Another \$400 million is earmarked mainly for facility renewal, including replacement of deteriorated Verano Place student apartments, 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 17 LEEDTM Platinum and nine LEEDTM Gold buildings, making it one of the leading academic institutions in green building.

For the projects contained in the 2018-28 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 2018-28 CFP is to address these shortages.

Deferred maintenance The campus currently has a backlog of more than \$400 million in 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 2018-28 CFP includes funding totaling more than \$100 million for the next phases of this program. In addition, the program 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.

Funding

The Irvine campus's current term of 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 State funding is not available, the Irvine campus has chosen to redirect limited non-State resources to fund a portion of the need.

- \$2 billion in funding is needed for State eligible space.
- \$773 million has been identified, of which \$760 million (98%) will come from non-State resources.
- \$1.3 billion of State eligible space has no funding.

Non-State resources funding State-supportable scope Of the 27 projects included in the current term with funding identified, 12 are fully State-supportable and another five 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 State funds, the campus is choosing to implement these projects using a combination of external financing, gifts, campus funds, and public private partnership development.

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

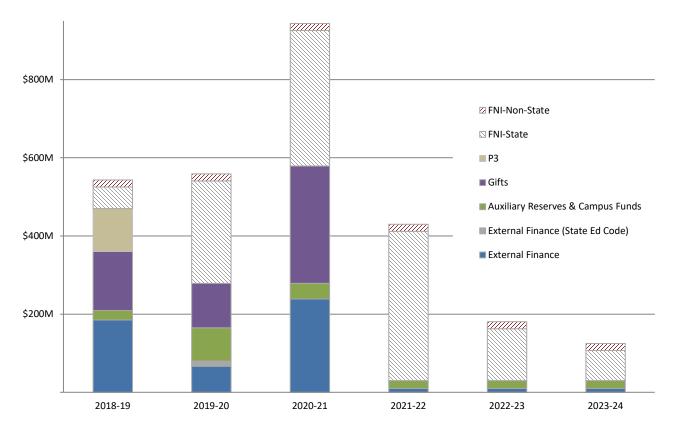
gift funding for capital projects, and these efforts have been quite successful. The 2018-28 CFP includes projects that are partially funded by some of the largest single gifts in the campus's history: \$40 million for the Gross Nursing & Health Sciences Hall, and \$55 million for the College of Health Sciences Building.

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 50% of students on campus. Since 2000, this public private partnership (P3) has added more than 5,000 student beds to the on-campus housing supply with an additional 1,440 beds set to be completed by fall 2020.

The 2018-28 CFP includes the next phase of this partnership: East Campus Apartments Phase 4B will provide approximately 900 additional beds and East Campus Apartments Phase 5, included in the last years of the program, could provide up to 2,700 beds. Other P3 projects identified in the CFP include an on-campus hotel and redevelopment of UCI's North Campus.

Display 2. \$2.8B Current Term (2018-19 to 2023-24) Capital Need



Display 3. Irvine Campus Capital Need with Funding

	흳		ë			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Buildout of Shell Space - Hewitt Hall				EF						15,000	100%	
Buildout of Shell Space - Interdisciplinary Science & Engineering Building	1			EF						20,000	100%	
Buildout of Shell Space - Medical Education Building				EF						10,000	100%	
College of Health Sciences Building	1 2			GF, EF AR						107,000	100%	
Horiba Institute for Mobility and Connectivity	3			GF, CF						15,000	100%	
Sue & Bill Gross Nursing & Health Sciences Hall (994275)				GF, EF						60,000	100%	
Beall Center Expansion and Renovation					GF					6,000	100%	
Beckman Laser Expansion and Renovation	1	•			GF					60,000	50%	
Capital Renewal and Infrastructure Improvements Program Phase 4	1	•		EF						10,000	90%	
Facilities Management/Campus Services Relocation					Р3					TBD	100%	

	O		j.			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
McGaugh Hall Renovation	3				CF, GF					40,000	100%	
Student Wellness & Success Building	1 2			CF	SG, GF, CF					70,000	34%	
Convergence Science Building	1 2					GF				150,000	100%	
Capital Renewal and Infrastructure Improvements Program Phase 5	1					EF				7,000	90%	
Institute & Museum for California Art	1 2					GF				150,000	100%	
Capital Renewal/Deferred Maintenance	3	•					EF, CF	EF, CF	EF, CF	45,000	90%	EF, CF
Langson Library Expansion											100%	GF
Capital Projects \$750K to \$5M (E&G)				CF	CF	CF	CF	CF	CF	90,000	100%	CF
							Tota	al Education a	nd General:	855,000		
AUXILIARY PROJECTS												
Athletics Facilities Improvements				GF						47,000		
East Campus Apartments Phase 4B				Р3						110,000		
Parking Structure 5	1			EF						60,000		
ARC Field Expansion					AR, GF					8,000		
Continuing Education 2	3				EF					67,000		
Lot 5 Parking Deck	3				AR					5,000		
North Campus Redevelopment					Р3					TBD		
Shellmaker Island Boathouse Replacement	1				GF					10,000		
ARC Expansion Phase 4						EF				57,000		
Verano Unit 8 Apartments	1 2					EF, AR				200,000		
On-Campus Hotel							Р3			TBD		
East Campus Apartments Phase 5	3											TBD
Student Center Expansion												TBD
								Tot	al Auxiliary:	564,000		
Campus Projects Total (\$000s)				471,000	279,000	579,000	30,000	30,000	30,000	1,419,000	773,000	

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 \$1.4 billion in needs for which no fund sources have been identified. Of the 30-plus projects on this list, nearly one-third are academic buildings needed to continue to accommodate enrollment and faculty growth; the remaining two-thirds of the list is made up of facility renewal and replacement and infrastructure projects.

Display 4. Irvine Campus Capital Need with Funding Not Identified

	ţ		ij			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJE	ECTS											
Sciences Buildings Renovations, Phase 1		•		S						25,000	100%	
Engineering Renovations		•			S					21,000	100%	
Law Building					S					211,000	100%	
Central Plant and Utility Distribution Renewal Phase 1		•				S				37,000	100%	
Contemporary Arts Center 4th Floor Renovation	3					S				7,000	100%	
Interdisciplinary Science & Engineering Building 2						S		S		133,000	100%	
Med Surge Replacement		•				S				104,000	100%	
Sciences Buildings Renovations Phase 2		•				S				40,000	100%	
College of Health Sciences Building Unit 2							S			100,000	100%	
College of Health Sciences Research Building							S			150,000	100%	
Classroom Renovations	1	•					S			5,000	100%	
Med Sci Renovations		•					S			50,000	100%	
Sewer Infrastructure Improvements	2	•					S			22,000	100%	
Water Distributions Systems Renewal Phase 1	2	•					S			25,000	100%	
Central Plant and Utility Distribution Renewal Phase 2		•						S		18,000	100%	
Chilled Water System Expansion								S		55,000	100%	
Fire and Life Safety Improvements Phase 2		•						S		25,000	100%	
Storm Drain Improvements	3	•							S	22,000	100%	
Water Distribution Systems Renewal Phase 2	2								S	25,000	100%	
Academic Building	1										100%	S
Biological Sciences Greenhouse Replacement		•									100%	S
Building Renewal Phase 1	1 2	•									100%	S

	Current Term (2018-19 to 2023-24)											
	DdD	DM	Seis	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Building Renewal Phase 2		•									100%	S
Central Plant and Utility Distribution Renewal Phase 3		•									100%	S
College of Health Sciences Unit 3											100%	S
Fire and Life Safety Improvements Phase 3	3	•									100%	S
Social & Behavioral Sciences 2											100%	S
Multipurpose Academic & Admin Bldg 2											100%	S
Transportation Infrastructure Safety Improvements											100%	S
Capital Projects \$5M to \$10M (E&G)				S	S	S	S	S	S	90,000	100%	S
Capital Renewal/Deferred Maintenance (E&G)	3	•		S	S	S	S	S	S	90,000	100%	S
							Tota	I Education a	nd General:	1,255,000		
AUXILIARY PROJECTS												
Social Sciences Parking Structure Expansion	3											NS
Capital Projects \$5M to \$10M (AUX)				NS	NS	NS	NS	NS	NS	60,000		NS
Capital Renewal/Deferred Maintenance (AUX)	3	•		NS	NS	NS	NS	NS	NS	48,000		NS
								Tot	al Auxiliary:	108,000		
Campus Projects Total (\$000s)				73,000	280,000	365,000	400,000	151,000	94,000	1,363,000	1,255,000	

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no chang	ge from prior year
	Capital Renewal and Ir	nfrastructure	FQHC Anaheim Repla	cement	Interdisciplinary Science & Engineering
Projects Listed in 2017-27 Plan and now removed	Capital Renewal Progr	am	Health Sciences Parki	ng Lot Expansion	Building Research Building Acquisition
from Program:	Electrical Safety Impro	vements	Improvements Progra	ım Phase 3B	Research building Acquisition

2018-28 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 the next decade. The CFP focuses on this year (2018-19) and the next five fiscal years (2019-20 to 2023-24). The UCI Health CFP represents \$1.1 billion need, of which \$951 million has a funding plan (refer to Display 1).

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Capital Need with Funding	843,000	59,000	7,000	27,000		15,000	951,000
Capital Need with Funding Not Identified	131,000	10,000	10,000	10,000	10,000	5,000	176,000
Total (\$000s)	974,000	69,000	17,000	37,000	10,000	20,000	1,127,000

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 10-year Capital Financial Plan is intended to further and/or achieve a number of the organization's priorities. 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
- 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 a portion of Douglas Hospital into an additional 15-bed Medical/Surgical or Telemetry unit, with planned occupancy in 2019. The second is a 70- to 150-bed tertiary and quaternary care destination hospital sited on the Irvine Campus, with a planned opening in 2025. The specialty hospital 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 specialties.

As part of its strategic plan, UC Irvine Health intends to become a leader in population health management and provide high-value communitybased care. UC Irvine Health aims to significantly increase its ambulatory clinical footprint by extending its network of care across the region. Over the next ten years, 13 new sites are anticipated for:

- Outpatient clinics and ambulatory surgery center on the Irvine Campus
- Outpatient clinics, cancer center, and surgery center
- Three medium-sized community-based ambulatory centers
- Four community-based primary care offices
- Three community-based specialty offices
- Newport Beach clinics

Under construction is a medium-sized community-based ambulatory center located in Yorba Linda. This clinic will open in early 2019 and will provide 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 a new Outpatient Pavilion and Medical Office Building on or proximate to the Orange campus, slated for occupancy within ten years. Replacing these outdated buildings with state-of-the-art medical office facilities aligns with the strategic plan's goal to provide unparalleled value, quality, and experience to our patients.

Challenges

The greatest challenge is addressing requirements with limited resources. Parking is a challenge.

Neighboring properties, due to their own needs, have fewer surplus parking spaces available for the

Medical Center to lease for staff. 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. The 10-Year CFP addresses these challenges.

Deferred Maintenance

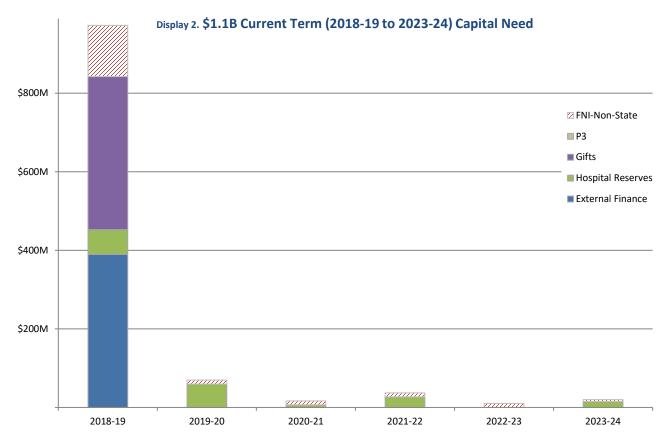
Included in the CFP are several deferred maintenance projects such as replacement of aged infrastructure, many building upgrades, replacement of elevators and elevator controls, and many others. UC Irvine Health is currently conducting a detailed analysis of its capital assets to establish a comprehensive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

Real Estate Transactions

Several projects have public private partnership potential. Most notable is the future Orange Campus Ambulatory Replacement, as this project would consolidate our clinical services, enhance parking, provide a much more efficient clinical setting, and either mitigate or eliminate a large portion of our deferred maintenance needs.

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 3. Irvine Health Capital Need with Funding

	Update		Seismic			Cur	rent Term (20	18-19 to 2023	-24)		
	ğ	Δ	Sei	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Douglas Hospital Inpatient Capacity	1			HR						22,000	
Irvine Campus Inpatient Specialty Hospital	1 2			EF, GF						650,000	
Irvine Campus Outpatient Clinic & Ambulatory Surgery Center	1 2			EF, GF						130,000	
MES Radiology Imaging Center	3			HR						11,000	
North Campus Urgent Care & MOB	3			HR						10,000	
Ambulatory Center #3 - East Irvine	3				HR					12,000	
Ambulatory Center #4 - Northwest Orange County	3				HR					12,000	
Ambulatory Center #2 - Northeast Orange County (Multi-Specialty)	3						HR			20,000	
South County Ambulatory Center	3								HR	15,000	
Capital Projects \$5M to \$10M (MC)					HR					8,000	HR
Capital Projects \$750K to \$5M (MC)				HR	HR	HR	HR			61,000	
Health Projects Total (\$000s)				843,000	59,000	7,000	27,000	0	15,000	951,000	

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 \$176 million in needs for which no fund sources have been identified.

Display 4. Irvine Health Capital Need with Funding Not Identified

	ate		nic			Curi	rent Term (20:	18-19 to 2023	-24)		
	Update	Δ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Orange Parking Structure	3			NS						63,000	
Orange Office Building	3			NS						63,000	
Seismic Upgrades	3		•								NS
Orange Campus Ambulatory Replacement (Replaces 146,900 gsf of Pavilions)	1										NS
Deferred Maintenance	3	•		NS	NS	NS	NS	NS	NS	50,000	
Health Projects Total (\$000s)				131,000	10,000	10,000	10,000	10,000	5,000	176,000	

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no chang	e from prior year
	B1, 1st Fl, SPD Upgrad	es	B35, Gottschalk Plaza R	enewal Remodel	SB1953 Douglas Hospital
Projects from \$750k - \$10 million:	B1, Bsmt, Nuclear Me	d Consolidation	Corona Cancer Progran	1	SB1953 Neuropsych
	B1A, Exterior Façade F	epositioning	UCIMC Cancer Center 4 Remodel	th Floor Clinic	SB1953 Tower



2018-28 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 31,000 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) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and next five fiscal years (2019-20 to 2023-24) and represents projects in the near-term planning horizon. These six years are named the current term. 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 \$2.7 billion over the current term of which approximately \$2.3 billion has a funding plan.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	933,000	340,000	188,000	266,000	440,000	175,000	2,342,000	1,100,000
Capital Need with Funding Not Identified			67,000	136,000	116,000	67,000	386,000	386,000
Total (\$000s)	933,000	340,000	255,000	402,000	556,000	242,000	2,728,000	1,486,000

Priorities

The primary strategic goals of UCLA's CFP, since its inception in 2009, have been to complete the seismic correction of all remaining seismically deficient structures by 2019, transform the campus into a residential academic community, and support the development of a sustainable campus.

The campus remains on track to complete the seismic correction of all known remaining structures with Level V or Level VI seismic performance ratings by 2019. 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. Completion of these projects represents a sustained decades-long effort to address seismic deficiencies in the existing building

inventory. Since 1994, the campus has used 92% of its State General Obligation bond funds and considerable campus resources to complete this effort. In 2017-18, two projects already included in the 2017-27 CFP were amended to include structural upgrades after seismic deficiencies were identified during pre-design studies. These upgrades represent approximately 40,000 gsf. During the next year, buildings without ratings or buildings with newly identified structural deficiencies will be analyzed and added to the 2019-29 CFP in accordance with the 2017 amended UC Seismic Safety Policy if seismic deficiencies are discovered.

The campus intends to commit resources during the next five years to provide additional facilities to enhance student academic and residential life on campus, upgrade campus infrastructure, and reduce

the backlog of deferred maintenance associated with State-supported facilities. As a result, the 2018-28 CFP includes funding for student facilities, critical infrastructure projects, and capital renewal to increase the useful life of buildings. These projects include new classroom, study, and academic support buildings; enhanced recreational facilities; and program, life/safety and systems improvements to buildings that have already been seismically upgraded. The CFP also reflects the goals of a major gift campaign currently underway to support a broad array of program improvements in a variety of campus facilities.

Challenges

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. During the past year, the Regents approved three on-campus housing projects to provide 5,219 new on-campus beds for undergraduate and graduate students that will meet the campus goal of guaranteed housing to all entering first-year students for four years, to all new transfer students for two years, and to help meet graduate student housing demand. These projects will be available for occupancy in 2021-22. To accommodate the increased student population, the current CFP includes projects that will provide additional space for individual and group study facilities in Powell Library and other locations, renovate and expand classrooms throughout the campus, and improve and expand recreation facilities in the northwest campus. 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.

Upgrade Campus Infrastructure Due to the absence of State funding, UCLA proposes to fund a number of critical upgrades to infrastructure from campus resources. This work includes upgrades to the

electrical distribution system that are currently underway, and replacement of obsolete emergency generator equipment serving the Center for Health Sciences. Additional studies are in progress to develop master plans for upgrading campus sewer, storm water and other infrastructure that will be included in future updates to the CFP.

Capital Renewal There is a need to renew systems in more than 50 buildings that are 25 to 80 years old. UCLA has estimated over \$770 million 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. The current CFP allocates \$270 million in campus Century Bond funds for this purpose.

Center for Health Sciences (CHS) The 2.4 million gsf CHS complex is one of the largest health sciences instruction and research facilities in the nation. The multi-building complex, built in phases beginning in 1951, houses the Schools of Medicine (including Neuropsychiatric Institute and the Jonsson Cancer Center), Dentistry, Nursing, Public Health, and portions of the UCLA Medical Center. Significant seismic and life safety upgrades have already been completed or are underway. Following completion of that work, post-occupancy projects would provide additional program and life safety improvements to support the next generation of use.

Sustainability The campus will continue to advance sustainability practices and initiatives. UCLA is striving for LEED™ Gold certification for all new construction and minor refurbishment projects. Of 44 projects that have been granted green building

certifications, 14 achieved Platinum, 20 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 gift campaign has been underway to raise funds for a broad range of programs and campus priorities by 2019. At the end of fiscal year 2017, the campus exceeded that goal by \$400 million. The campus has a successful history of fund raising. In fiscal year 2017-18, UCLA raised \$880 million in gifts and pledges. Since 2007, the campus has raised an average of \$520 million annually.

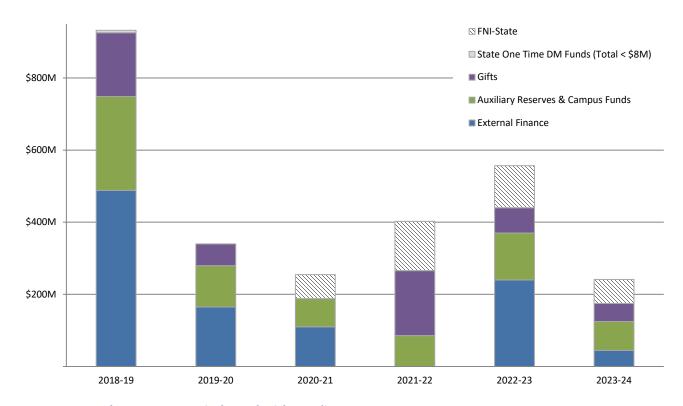
It has been seven years since the Los Angeles campus has had a capital project funded by a State General Obligation (GO) or Lease Revenue (LR) bond. State eligible critical capital needs include improvements to campus infrastructure, upgrades to life safety, provision of additional classrooms and study space, and modernization of older buildings.

- \$1.49 billion in funding is needed for State eligible space
- \$1.1 billion of funding has been identified, of which \$1.03 billion (94%) will come from non-State resources
- \$386 million of State eligible space has no funding.

Public Private Partnership and Real Estate Transactions

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 will continue to make strategic acquisitions of nearby properties as they become available. The CFP includes acquisition of a property on Hilgard Avenue to be developed for faculty housing proximate to campus, and several other potential real estate acquisitions to address unmet needs for student and faculty housing and administrative use.

Display 2. \$2.7B Current Term (2018-19 to 2023-24) Capital Need



Display 3. Los Angeles Campus Capital Need with Funding

ospiay s. LOS Affgeres Co			Jup									
	o o		ပ္			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
700 Westwood Plaza Addition and Renovation	3			GF, EF						24,000	100%	
924 Westwood Building Improvements	3			EF, AR						40,000	32%	
10889 Wilshire Building Improvements	3			EF, AR						70,000	59%	
Botany Building Renovation	1 2	•		GF, EF						40,000	100%	
CHS Emergency Power System Replacement		•		EF, SPG						22,000	58%	
CHS Program and Infra. Improvements Step 1	3			EF						50,000	100%	
CHS South Tower Post- Occupancy Improvements (Levels 8-10)				EF						30,000	100%	
Crest Theater Real Estate Acquisition	3			GF						6,000	100%	
Crest Theater Seismic Renovation	3		•	GF, EF						15,000	100%	
Engineering VI 5th Floor Improvements	3			GF						12,000	100%	
Law School Addition and Academic Facility	3			GF, EF						100,000	100%	

	te	Current Term (2018-19 to 2023-24)										
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Moore Hall Air Conditioning Installation	3	•		EF						11,000	100%	
North Campus Infrastructure Improvements		•		EF						20,000	100%	
Powell Library Interior Renovation	1	•		GF, EF						40,000	100%	
Wilshire Center Improvements	3			EF, AR						40,000	55%	
Fielding School of Public Health Bldg. Interior Reno.		•			GF, CF					50,000	95%	
Public Affairs Building Renovation					EF					35,000	100%	
CHS Fire Sprinkler Installation	3				EF	EF				60,000	100%	
Botanical Garden Enhancements							GF			20,000	100%	
Lab School Multipurpose Building							GF			20,000	100%	
North Campus Classroom Facility							GF			70,000	100%	
South Campus Academic Facility							GF			70,000	100%	
Psychology - Neuroscience Research Building		•						GF		70,000	100%	
Satellite Wastewater Treatment Facility	3								EF	25,000	100%	
Fowler Museum Renovation and Addition											100%	GF
Theater, Film & Television Renovation											100%	GF
Multiple Capital Renewal Projects	3	•		EF						20,000	100%	
Statewide Energy Partnership (SEP) Program	3			CF, EF						25,000	100%	
Capital Renewal Program - Campus	3	•		EF	EF	EF				210,000	100%	
Capital Projects \$750K to \$10M				CF	CF	CF	CF	CF	CF	240,000		CF
							Tota	al Education a	nd General:	1,435,000		
AUXILIARY PROJECTS												
911 Broxton Avenue Improvements				EF						4,000		
911 Broxton Avenue Real Estate Acquisition				AR						10,000		
Athletics Academic Support Center				GF, EF						35,000		
Covell Commons Refurbishment	3	•		AR						15,000		
Faculty Center Renovation				CF, GF						15,000		
Hilgard Avenue Real Estate Acquisition				AR						13,000		
Hilgard Faculty Housing				AR, EF						82,000		
Real Estate Acquisition No. 1				AR, EF						25,000		

	te te		ji			Curi	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Real Estate Acquisition No. 2					AR, EF					25,000		
Sunset Canyon Rec. Center Renovation and Expansion	1 2	•			GF, EF					40,000		
Bradley South Residence Hall								EF, AR		110,000		
Drake Stadium Residence Hall								EF, AR		185,000		
Student Services / Welcome Center									GF, EF	70,000		
Capital Renewal Program - Asset Management	3	•		AR	AR	AR	AR	AR	AR	37,000		AR
Capital Renewal Program - Housing	3	•		AR	AR	AR	AR	AR	AR	70,000		AR
Capital Renewal Program - Parking	3	•		AR	AR	AR	AR	AR	AR	23,000		AR
Capital Projects \$750K to 10M				AR	AR	AR	AR	AR	AR	148,000		AR
								Tota	al Auxiliary:	907,000		
Campus Projects Total (\$000s)				933,000	340,000	188,000	266,000	440,000	175,000	2,342,000	1,100,000	

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. 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												
	ate		DM Seismic		Current Term (2018-19 to 2023-24)							
	Update	Ā		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PR	OJECTS											
Central Plant Expansion	1						S			70,000	100%	
Life Sciences Building Renovation Phase 2		•						S		50,000	100%	S
CHS - Biomedical Library Tower Renovation		•									100%	S
CHS Program and Infra. Improvements, Step 2	1 2	•									100%	S
Capital Renewal	1	•				S	S	S	S	266,000	100%	S
							Tota	I Education a	nd General:	386,000		
Campus Projects Total (\$000s)						67,000	136,000	116,000	67,000	386,000	386,000	
NOTES												
Update Codes: 1 = Budget Update 2 = Scope Update 3 = New Project Blank = no change from prior year												

2018-28 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 and neurology.

The Capital Financial Plan (CFP) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and next five fiscal years (2019-20 to 2023-24) 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 \$2.0 billion of projects in the current term.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Capital Need with Funding (\$000's)	214,000	356,000	901,000	211,000	174,000	177,000	2,033,000

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-theart 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 is underway for the Westwood Patient Tower Addition. This tower will add 52 pediatric beds and

116 adult beds, with ancillary services such as laboratory, radiology, and pharmacy. 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.

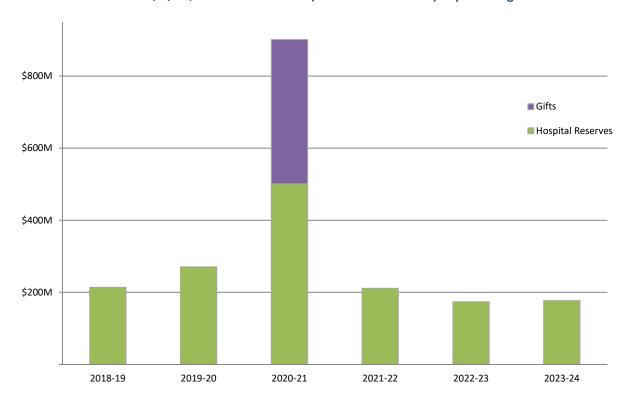
Funding

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. The proposed new bed tower is projected to cost approximately \$650 million, of which more than 60% of the funding will be from philanthropy and gifts.

Real Estate Transactions

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

Display 2. \$2.0B Current Term (2018-19 to 2023-24) Capital Program



Display 3. Los Angeles Health Capital Need with Funding

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	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28	
RRUMC Utility Building	1				HR					100,000		
SMH 1223 16TH Street Medical Office Building					EF					85,000		
SMH Medical Office Building						HR				70,000		
Westwood Patient Tower Addition						HR, GF				650,000		
Medical Center Real Estate Acquisition	3						HR			30,000		
SMH Merle Norman Pavilion Renovation		•					HR	HR	HR	30,000	HR	
CHS South Tower Post- Occupancy Improvements (Levels A&B)	1	•		HR	HR	HR	HR	HR	HR	60,000	HR	
Annual Capital Equipment Replacement	1			HR	HR	HR	HR	HR	HR	600,000	HR	
Capital Renewal	3			HR	HR	HR	HR	HR	HR	43,000	HR	
Capital Projects \$750K to \$10M	1			HR	HR	HR	HR	HR	HR	82,000	HR	
Capital Projects \$750K to 10M 26585 Agoura Road	3			HR						13,000		
Capital Projects \$750K to \$10M - Outpatient Buildings	3			HR	HR	HR	HR	HR	HR	90,000	HR	
Capital Projects \$750K to \$10M - Medical Plaza 200	3			HR	HR	HR	HR	HR	HR	100,000	HR	

	Update		eismic	Current Term (2018-19 to 2023-24)							
	ŋ	D	Sei	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Capital Projects \$750 to \$10M - Santa Monica Hospital	3			HR	HR	HR	HR	HR	HR	80,000	HR
Health Projects Total (\$000s)				214,000	356,000	901,000	211,000	174,000	177,000	2,033,000	

NOTES

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

MP 200 Suite 135 Pharmacy Renovation

Projects from \$750k - \$10

million:



2018-28 MERCED CAMPUS CAPITAL NEED

Opening in 2005 as the newest campus of the University of California, UC Merced continually strives for excellence in carrying out the University's mission of teaching, research, and public service benefiting society by discovering and transmitting new knowledge and functioning as an active repository of organized knowledge. Interdisciplinary practice in research nourishes undergraduate learning, building a foundation in connecting the ways that academic disciplines understand and grapple with society's problems.

The campus has been established as a model of physical sustainability for the 21st 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 celebrates its location in the San Joaquin Valley, reflecting the poetry of its landscape, history, resources, and diverse cultures, while capitalizing on and expanding the Valley's connections to the emerging global society. UC Merced recognizes that research that begins with the natural laboratory at home can extend what is known in the state, nation, and world.

The Capital Financial Plan (CFP) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and next five fiscal years (2019-20 to 2023-24) and represents projects in the near-term planning horizon. These six years are named the current term. The Merced CFP is supported by \$107 million over the current term, of which \$35 million has a funding plan.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

								State
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	Eligible
Capital Need with Funding	10,000	5,000	5,000	5,000	5,000	5,000	35,000	25,000
Capital Need with Funding Not Identified	12,000	12,000	12,000	12,000	12,000	12,000	72,000	54,000
Total (\$000s)	22,000	17,000	17,000	17,000	17,000	17,000	107,000	79,000

Priorities

A key element of the University of California enrollment plan is the growth at UC Merced, the youngest campus. Growth at the Merced campus will provide for increased access for eligible state students and support a rapidly growing, underserved region. In July 2016, the Regents approved the 2020 Project which consists 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. Merced campus entered into contract, in August 2016, with Plenary Properties Merced. This multidisciplinary consortium was competitively selected to design, build, finance, operate, and maintain major building systems. Upon completion of the project, the Merced campus will be able to accommodate enrollment growth to 10,000 students, which is consistent with the Long Range Development Plan adopted by the Regents in 2009.

The 2020 Project represents a major financial commitment to fulfill the mission established for UC Merced. The transaction structure is designed to help manage the campus's lifecycle performance and financial risk at the lowest possible cost.

Other priorities for the campus include deferred maintenance and complying with environmental mitigation requirements by purchasing wetland credits. In addition, the campus intends to establish a small internal revolving loan fund to provide

flexibility to fund minor capital projects as they arise.

Challenges

Enrollment UC Merced has had to seek ways to deliver UC-caliber teaching and research in a climate marked by dramatic reductions in State financial support, a scarcity of philanthropic resources, and in the face of increasing statewide demand for access to higher education from eligible students. Without the traditional support to enable it to grow as its sibling campuses did in previous decades, the Merced campus has developed an alternative framework for the 2020 Project (see Real Estate and Public Private Partnerships section below). The 2020 Project will help address enrollment growth.

Deferred Maintenance on Existing Campus While constructed within the last ten to 15 years, several buildings at Merced are in need of repairs and building systems replacement. The campus estimates that \$20 million will be needed in the next ten years to address this maintenance.

Space Strategy on Existing Campus The campus has identified and begun to develop over a dozen "backfill" projects to re-focus strategically the use of existing space vacated by the occupation of the new 2020 buildings. The overarching goals of the "backfill" projects are to co-locate 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. The plan is to start the first backfill project in fall 2018 and complete the final project in summer 2021.

Mitigation As UC Merced approaches the threshold of 10,000 students, both the urban services and the transportation agreement will require attention.

The campus will be required to fund future transportation improvements including a study to widen Bellevue Road (the primary road to the UC Merced campus). The university will have funding obligations associated with these road improvements. It should also be noted that the university is in the process of updating its Long Range Development Plan (LRDP) and there could be additional transportation improvements associated with future 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 service with the City of Merced. It is not yet clear what impact these negotiations will have on the campus.

Funding

The campus's total capital need is approximately \$107 million.

- \$79 million of funding is needed for State eligible space.
- \$25 million in funding has been identified, of which \$25 million (100%) will come from non-State resources.
- \$54 million of State eligible space has no funding.

Real Estate and Public Private Partnerships

The Merced 2020 Project is a type of public private partnership (P3) known as an "availability-payment concession," 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 known as the "Project Agreement".

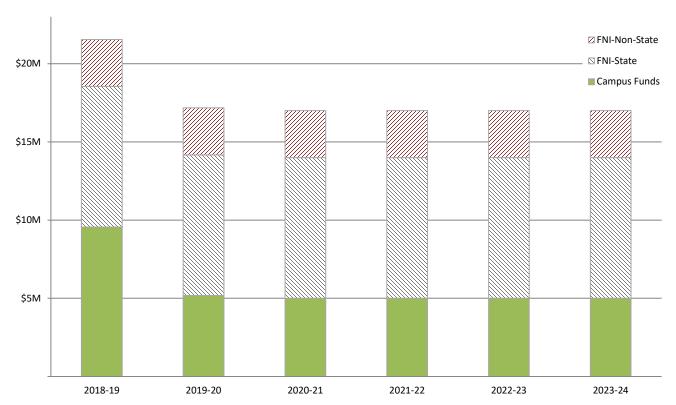
During construction, the University will make predetermined progress payments to the

developer. Once the buildings become available for use, the University will make performance-based "availability payments" that cover remaining capital costs, as well as the operations and maintenance of major building systems. From start to finish, the duration of the agreement is 39 years.

As structured, this hybrid model captures the time and cost advantages of the familiar "design-build" method of developing buildings and effectively adds a preventative capital-maintenance program and capital-renewal program. It does not transfer the University's property rights, does not assign revenue streams, and is not a lease.

Plenary Properties Merced, the winning Developer for the 2020 Project, has contracted with UC Merced. This P3 agreement to build out the 2020 Project has received notable awards and recognition domestically and internationally. The P3 agreement in conjunction with DBFOM delivery model allowed UC Merced to move forward in developing the campus through the 2020 Project without the availability of the traditional State funding model that enabled other UC campuses to grow.

Display 2. \$107M Current Term (2018-19 to 2023-24) Capital Need



Display 3. Merced Campus Capital Need with Funding

	te		ji.			Curi	rent Term (20	18-19 to 2023	-24)			
EDUCATION AND CENTRAL PRO	Update	M	Seism	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECIS											
Capital Projects \$750K to \$10M (E&G)	1			CF	CF	CF	CF	CF	CF	30,000	75%	CF
Federal Environmental Mitigation				CF	CF					5,000	53%	
Campus Projects Total (\$000s)				10,000	5,000	5,000	5,000	5,000	5,000	35,000	25,000	

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 \$72 million in needs for which no fund sources have been identified.

Display 4. Merced Campus Capital Need with Funding Not Identified

	ate		nic			Curr	ent Term (20	18-19 to 2023-	-24)			
EDUCATION AND GENERAL PROJE	7 Update	Σ	Seisr	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Capital Renewal Projects \$750M to \$10M (E&G)				S, NS	S, NS	S, NS	S, NS	S, NS	S, NS	72,000	75%	
							Tot	al Education a	nd General:	72,000		
Campus Projects Total (\$000s)				12,000	12,000	12,000	12,000	12,000	12,000	72,000	54,000	

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change from prior year	
Projects from \$750k - \$10	Deferred Maintenance				
million:	Transportation Improv	ements			



2018-28 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 23,000 students, 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.

Between 2000 and 2017, UCR's undergraduate population grew by 75%. 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 and will inform a new UCR Long Range Development Plan.

The Capital Financial Plan (CFP) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and next five fiscal years (2019-20 to 2023-24). The Riverside CFP represents a \$2.7 billion need over this period of which approximately \$1.4 billion has a funding plan.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	590,000	28,000	115,000	15,000	466,000	165,000	1,379,000	240,000
Capital Need with Funding Not Identified	327,000	328,000	177,000	110,000	143,000	280,000	1,365,000	1,333,000
Total (\$000s)	917,000	356,000	292,000	125,000	609,000	445,000	2,744,000	1,573,000

Priorities

In support of UCR 2020, the campus has identified strategic areas for improving quality and quantity of instructional 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 strategies for 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: Student Success Center, Pierce Hall Interiors, Undergraduate Class Lab and Teaching Facility, Professional School Education Building, 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 40% of total campus space is 40 years old or older, much of it still operating on originally-installed building systems. 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, electrical power distribution network, and chilled and hot water distribution network, are in need of comprehensive assessment to ensure operational stability, capacity for future growth, and compatibility with UC sustainability goals.

Funding

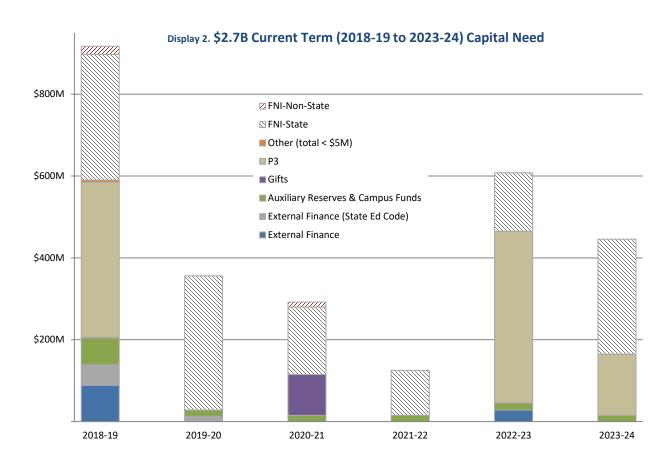
Given the scarcity of State funding there is an increasing need to redirect non-State resources to capital needs at the expense of campus programs

and operations. The campus continues to focus on developing new strategies that will increase debt capacity, 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, new research space, and other critical needs. The majority of the Statesupportable program has no funding source. These unfunded State-supportable projects include infrastructure, campus support, and instruction and research improvements.

- \$1.57 billion of funding is needed for State eligible space.
- \$240 million in funding has been identified, of which \$177 million (74%) will come from non-State resources.
- \$1.33 billion of State eligible space has no funding.

Real Estate and Public Private Partnerships

Projects such as the Dundee Residence Hall and Glascow Dining Hall and the North District 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 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 3. Riverside Campus Capital Need with Funding

0.0	-	5.40			8						
a		ပ္			Cur	rent Term (20	18-19 to 2023	-24)			
Updat	DM	Seismi	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
CTS											
1 2			EF, CF, GF						28,000	100%	
1			SG, UR, AR						60,000	83%	
3	•		CF						20,000	58%	
1				SG					13,000	100%	
1					GF				100,000	100%	
1 2			CF	CF	CF	CF	CF	CF	15,000	100%	
3			CF	CF	CF	CF	CF	CF	34,000	100%	
						Tota	al Education a	nd General:	270,000		
3			EF, CF						33,000		
3			Р3						160,000		
1			Р3						220,000		
	3 1 1 1 2 3 3 3 3	1 1 1 2 3 3 3 3 3	######################################	2018-19 2018-1	2018-19 2019-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-19 2018-20 2018-2018-2018-2018-2018-2018-2018-2018-	2018-19 2019-20 2020-21 ECTS 1	Current Term (20 Terms 7	Current Term (2018-19 to 2023 2018-19 2019-20 2020-21 2021-22 2022-23 EF, CF, GF SG, UR, AR GF CF CF CF CF CF CF CF CF CF	Current Term (2018-19 to 2023-24) 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24 2018-19 2019-20 2020-21 2021-22 2022-23 2023-24 2024-25 2022-23 2023-24 2024-25 2024-25 2022-23 2023-24 2024-25 2024-26 2025-	Current Term (2018-19 to 2023-24) Company	Current Term (2018-19 to 2023-24) Compared Term (2018-19 to 2023-24) Compared Te

	ŧ.		ë			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	MO	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Parking Structure 1	1			EF, AR						30,000		
UCR Mobility Hub and Central Campus Linkages	1			EF, OG, FG, CF, AR						16,000		
Hotel and Conference Center	3						Р3			TBD		
North District Phase 2 - Student Housing	1 2							Р3		420,000		
Parking Structure 2	1 2							EF, AR		30,000		
North District Phase 3 - Student Housing	1								Р3	150,000		
Capital Projects \$750K to \$5M (AUX)	1 2			AR	AR	AR	AR	AR	AR	15,000		
Capital Projects \$5M to \$10M (AUX)	3			AR	AR	AR	AR	AR	AR	35,000		
								Tota	al Auxiliary:	1,109,000		
Campus Projects Total (\$000s)				590,000	28,000	115,000	15,000	466,000	165,000	1,379,000	240,000	

The table that follows (see Display 4) includes a balance of cost-effective renovations to existing instruction and research facilities, along with new construction of modern laboratory and research support facilities, new classrooms, campus support and campus infrastructure necessary to support existing and new student and faculty workload. Without the improved facilities and infrastructure, the campus would be challenged to meet the goals of its Strategic Plan. The priority campus interest is advancing the unfunded State-eligible projects presented in the first two years of the plan: Undergraduate Class Lab and Teaching Facility, Professional School Education Building, and School of Medicine Educational Building, as well as renovations to Physics, Boyce Hall, and Webber Hall. The Clean Energy Technology Park represents efforts to promote innovation in sustainable research. Finally, the campus will continue to pursue opportunities to fund Multidisciplinary Research Building 2.

Display 4. Riverside Campus Capital Need with Funding Not Identified

	ate		mic_			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seisr	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Boyce Hall - Building Systems Improvements	1 2	•		S						13,000	100%	
Central Plant Carbon Neutrality Modernization	1 2			S						25,000	100%	
Future East Campus Acquisitions	3			NS						10,000		
Future University Avenue Acquisition	3			NS						10,000		
Physics Building - Building Systems Improvements	1 2	•		S						15,000	100%	
Professional School Education Building	1 2			S						72,000	100%	

	ŧ		ji			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Undergraduate Class Lab and Teaching Facility	3			S						87,000	100%	
West Campus Infrastructure	3	•		S						10,000	100%	
Boyce Hall and Webber Hall - Interior Renovations	1 2				S					73,000	100%	
Clean Energy Technology Park	3				S	S				10,000	100%	
Natural Reserve Projects	3				S					5,000	100%	S
Physics Building - Interior Renovation	1 2				S					40,000	100%	
School of Medicine Education Building	1				S					100,000	100%	
Seismic Project A	3		•		S					35,000	100%	
Performing Arts Studio Space	3					S				11,000	100%	
Spieth Hall Renovation (Deferred Maintenance)	2	•				S				18,000	100%	
Spieth Hall Renovation (Capital Improvements)	2					S				76,000	100%	
Plant Growth Environments Facility 2							S			50,000	100%	
Seismic Project B	3		•					S		25,000	100%	
Sproul Hall Renovation								S		70,000	100%	
Batchelor Hall Interiors Phase 2									S	12,000	100%	
Multidisciplinary Research Building 2	1								S	200,000	100%	
Pierce Hall Interiors Phase 2									S	21,000	100%	
Campus Support Services (Corp Yard Replacement)	3										50%	S
Classroom and Academic Building											90%	S
Insectary and Quarantine Expansion	3										100%	S
Interdisciplinary Research - Psychology Building Addition	1										100%	S
Multidisciplinary Research Building 3 (Fawcett Replacement)	1 2										100%	S
Olmsted Hall Renovation	1	•									100%	S
Plant Growth Environments Facility 3											100%	S
Seismic Project C	3		•								75%	S
Tree of Life Museum	3											NS
Watkins Hall Renovation		•									100%	S
Life Sciences Building Lab Renovation for CHASS	3										100%	Beyond 2028

	ate		nic_	Current Term (2018-19 to 2023-24) State-								
	Update	Δ	Seisı	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Campus-Wide Multi-Phased Site Development and Infra.	3										100%	Beyond 2028
Campus Chilled and Hot Water Upgrades	1 2	•		S	S	S	S	S	S	110,000	100%	
Campus Electrical Upgrades	1 2	•		S	S	S	S	S	S	165,000	100%	
Deferred Maintenance (State- Eligible)	1	•		S	S	S	S	S	S	90,000	100%	S
							Tot	al Education a	nd General:	1,353,000		
AUXILIARY PROJECTS												
Functional Training Facility	3					NS				12,000		
Agricultural Food Tasting Center	3									0		S
Parking Structure 3	3									0		NS
								Tot	al Auxiliary:	12,000		
Campus Projects Total (\$000s)				327,000	328,000	177,000	110,000	143,000	280,000	1,365,000	1,333,000	

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change	from prior year
Projects Listed in 2017-27	Athletics Replacement	Facility	New Satellite Central Pla	nt	Student Recreation Center North
Plan and now removed from Program:	Canyon Crest Housing I	Demolition	Parking Structure 1 / Ou	tpatient Parking Lot	Renovation
	Athletics and Dance Bu	ilding Improvements	Classroom Renovations	Phase 2: Physics	School of Medicine Clinical Skills and
Projects from \$750k - \$10	Campus Electrical Subs	tation Upgrades	1000/Watkins 2000		Simulation Suite at Orbach Science Library
million:	Communa Limborona 4 /ma		Falkirk Seismic Improver	nents	
	Campus Linkages 1 (pe	destrian sarety)			



2018-28 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 found in its semi-autonomous undergraduate colleges. Currently there are six colleges, each with its own residential and academic 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.

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, developed 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 updated Long Range Development Plan (LRDP). The Capital Financial Plan (CFP) presents the campus's capital need for the next decade. The CFP focuses on this year (2018-19) and the next five fiscal years (2019-20 to 2023-24). The UC San Diego CFP represents a \$6.7 billion need over this period of which approximately \$3.6 billion has a funding plan.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21*	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	773,000	950,000	1,389,000	294,000	38,000	139,000	3,583,000	818,000
Capital Need with Funding Not Identified	40,000	203,000	1,287,000	677,000	172,000	737,000	3,116,000	953,000
Total (\$000s)	813,000	1,153,000	2,676,000	971,000	210,000	876,000	6,699,000	1,771,000

^{*}Includes estimated budget for a P3 housing project.

Priorities

Over the next five 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 the update of UC San Diego's LRDP, the campus is adding more housing, classrooms, and research facilities; and 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; 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 Canyon Vista Dining Renovation);
- new construction to provide critical instruction, research, and collaboration space (e.g., the Design & Innovation Building, Franklin Antonio

Hall, and Viterbi Family Vision Research Institute);

- 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 utility infrastructure to address campus safety (e.g., I-5 Electrical Switch Station and Warren Apartment Buildings Fire Life Safety Improvements, Phase 2);
- renovation and repurposing of existing outdated teaching and research spaces (e.g., Humanities and Social Sciences Renovation, Literature Building Renovation, and Hubbs Hall Renovation);
- utility projects to address capacity issues (e.g., Central Plant Chiller Expansion); and
- pedestrian, bike, and road improvements to improve circulation within the campus and provide connections to the new Light Rail Transit station (e.g., Ridge Walk Improvements, University Center Urban Core Multi-Modal Improvements, and Pepper Canyon Improvements).

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 nearly 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 spaces 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. A large part of UC San Diego's external debt is serviced by self-funding auxiliaries such as housing, and parking.

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 Franklin Antonio Hall. The balance of State-supportable priorities, however, remains unfunded, including such projects as Medical Teaching Facility Replacement, Scripps Institution of Oceanography Hubbs Hall Renovation, and Campus Seismic Corrections – Various Buildings.

- \$1.77 billion in funding is needed for State eligible space.
- \$818 million in funding has been identified, of which \$768 million (94%) will come from non-State Resources.
- \$953 million of State eligible space has no funding.

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.

Capital Campaign The campus also has a long history of successful fundraising efforts. The capital campaign launched in March 2017 is a \$2 billion

comprehensive fundraising effort to transform the student experience and the campus (of which approximately \$1.7 billion has been raised).

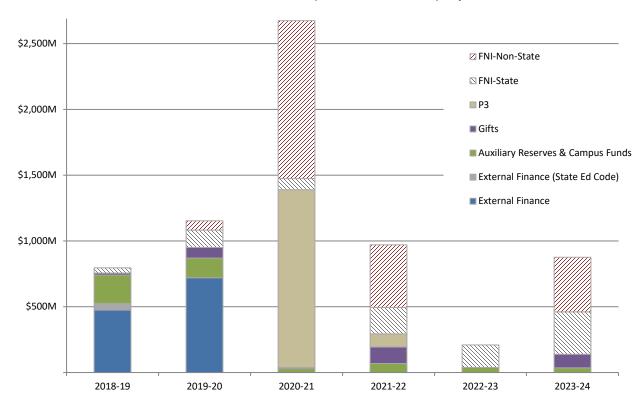
Real Estate and Public Private Partnerships

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 its credit 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. \$6.7B Current Term (2018-19 to 2023-24) Capital Need



Display 3. San Diego Campus Capital Need with Funding

	te		j <u>i</u>			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	ΔO	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Design & Innovation Building	1 2			EF, GF						67,000	60%	
East Campus Domestic Water & Gas Line Replacement	1 2	•		CF						8,000	50%	
Englekirk Structural Engineering Center - Shake Table Improvements	3			CF, FG						19,000	100%	
Franklin Antonio Hall (formerly Engineering Interdisciplinary Facility)	1 2			CF, EF						185,000	100%	
I-5 Electrical Switch Station				CF						18,000	100%	
Land Acquisitions	3			CF						33,000		
Park & Market Tenant Improvements	1 2			CF						20,000		
Ridge Walk Academic Complex	1 2			SG						50,000	100%	
Ridge Walk (Public Realm) Improvements	1 2			CF						14,000		
SIO Birch Aquarium Expansion	1 2	•			GF		GF		GF	45,000		
Scripps Outreach Center					GF					15,000		

	a		ņ			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Triton Pavilion for Student Resources and Community Engagement (formerly Student Resources and Alumni Services Building	1 2				CF, EF, GF					374,000	20%	
University Center Urban Core (UCUC) Multi-Modal Improv.	1 2				CF					24,000		
Viterbi Family Vision Research Institute	1 2				CF, EF					84,000	100%	
Central Plant (Chiller) Expansion	3					CF				20,000	100%	
School of Public Health Facility (remaining funds listed in FNI)	1 2						GF			50,000	100%	
SIO Oceans and Human Health Research Building	1 2						CF, GF			81,000	100%	
School of Medicine Emergency Power Upgrades	3						CF			10,000	100%	
Villa La Jolla Road Widening/Improvements and Pedestrian Bridge Replacement	1						CF			15,000		
Central Plant Steam Chiller WC-1		•						CF		15,000	100%	
Economics and Political Science Building	1 2								GF	89,000	100%	
East Campus Switch Station Gear Replacement	1 2								CF	8,000		
Capital Projects \$750K to \$10M (E&G)				CF	CF	CF	CF	CF	CF	19,000		
Deferred Maintenance				CF	CF	CF	CF	CF	CF	78,000	100%	CF
							Tota	al Education a	nd General:	1,341,000		
AUXILIARY PROJECTS												
Canyon Vista Dining Renovation	1 2	•		AR						15,000		
Hillcrest Campus Parking Structure(s) (Hillcrest OPP is on Medical Center list)	1 2			EF						130,000		
Hotel Acquisition	3			EF						113,000		
Warren Apartment Buildings Fire Life Safety Improvements - Phase 2	1 2			AR						9,000		
West Campus Parking Structure (formerly Voigt Parking Structure)	1 2			CF						50,000		
Café Ventanas Dining Remodel	1 2	•			AR					15,000		
Pepper Canyon West Upper Division Undergraduate Housing	1 2				EF					320,000		
SIO Parking Structure & Entry Improvements	1 2				EF					37,000		
Science Research Park Buildout – Tenant A	1 2				Р3					TBD		
North Campus Childcare Facility	1 2				CF					20,000		
Coast Faculty Housing	1 2					Р3				100,000		

	te		ji	Current Term (2018-19 to 2023-24)								
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Hillcrest Multi-Family Housing/Mixed-Use	3					Р3				276,000		
Regents Road Faculty/Staff Housing and Mixed-Use	1 2					Р3				900,000		
Joint Venture Development 1	3					Р3				75,000		
Spanos Facility Expansion	3	•				GF, UR				15,000		
Science Research Park Buildout – Tenant B	1 2						Р3			TBD		
Warren College Apartments Seismic & Concrete Spalling Repairs	1 2	•				AR	AR	AR	AR	39,000		
Hotel with Conference Center & Restaurants, East Campus	1 2						Р3			100,000		
Capital Projects \$750K to \$10M (AUX)				AR	AR	AR	AR	AR	AR	28,000		
								Tota	al Auxiliary:	2,242,000		
Campus Projects Total (\$000s)				773,000	950,000	1,389,000	294,000	38,000	139,000	3,583,000	818,000	

With diminished State funding and limited campus resources, the campus's capital needs far exceed available funding. The CFP includes \$3.1 billion of projects with no funding identified, including \$727 million associated with State—supportable programs.

Display 4. San Diego Campus Capital Need with Funding Not Identified

	ate		nic			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	Δ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
McGill and Mandler Hall Seismic Corrections	3	•	•	S						12,000	100%	
SIO Hubbs Hall: Renovation, Deferred Maintenance and Seismic Corrections	1 2	•	•	S						28,000	100%	
Humanities and Social Sciences: Renovation, Deferred Maintenance and Seismic Corrections	1 2	•	•		S					40,000	100%	
Literature Building Renovation & Deferred Maintenance	3				S					15,000	100%	
Pepper Canyon Improvements	3				NS					63,000		
Price Center Renovations (after Triton Pavilion)	3				NS					8,000		
SIO Biological Collections Building	1 2					S				8,000	100%	
Campus Seismic Corrections - Various Buildings	3						S	S		70,000	100%	
School of Public Health Facility (Gift funds included above)	1 2						S			90,000	100%	

	Current Term (2018-19 to 2023-24)											
	Dpd	Δ	Seisı	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Medical Teaching Facility Replacement	1 2							S		70,000	100%	
Interdisciplinary Research Building									S	131,000	100%	
SIO Biology Laboratory Building									S	90,000	100%	
Urey Hall Renovation and Deferred Maintenance	1 2								S	44,000	100%	
East Campus Office Building 2	1 2											NS
Facilities Investment Need	3				S	S	S	S	S	355,000	100%	S
							Tot	al Education a	nd General:	1,024,000		
AUXILIARY PROJECTS												
South Mesa (Mesa Housing Neighborhood Redev)	1 2					NS				556,000		
Future College Housing and Academic	1 2					NS				645,000		
Main Gym Renovation and Deferred Maintenance	3	•					NS			55,000		
Marshall College Housing Expansion (Extension Site Redevelopment)	1 2						NS			420,000		
Single Undergraduate Housing (Marshall College Lowers Redevelopment)	1 2								NS	416,000		
								Tot	al Auxiliary:	2,092,000		
Campus Projects Total (\$000s)				40,000	203,000	1,287,000	677,000	172,000	737,000	3,116,000	953,000	

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change	e from prior year
Projects Listed in 2017-27 Plan and now removed from Program:	East Campus Recreation Expedition Way/Caprice Development		Existing Sixth College (Canyon LRT Station) Rupertus Way Pedestr		SIO Sverdrup Hall Renewal
	Campus Wide Fire Loo Campus Soil Remediati	. , .	Marshall Uppers Solar Repairs	Panels and Roof	Voigt Hydronic Loop Warren Apartment Buildings Refresh - Phase
	Central Research Servi Upgrades	ce Facility (CRSF)	Medical Center Drive S Bicycle Improvements	outh Pedestrian &	1 Warren Apartment Buildings Refresh - Phase
Projects from \$750k - \$10 million:	Gilman Bridge Brandin	g and Up-lighting	One Miramar Street Ap Refresh	partments Exterior	2 Warren Residence Halls Refresh - Phase 1
	University Center Tem	•	Parcel Restoration & S South of VA	urface Parking Lot,	Warren Residence Halls Refresh - Phase 2
	Marshall Residence Ha		Torrey Pines Center So Renovations	uth 2nd Floor	

2018-28 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, meet important and expanding community needs, and grow and influence market share.

The CFP presents UC San Diego Health's capital plan for the next decade. The CFP focuses on this year (2018-19) and the next five years (2019-20 to 2023-24). UC San Diego Health's CFP represents a \$780 million need over this six-year period, with a funding plan.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Capital Need with Funding	390,000	110,000	175,000	25,000	25,000	25,000	750,000
Capital Need with Funding Not Identified		30,000					30,000
Total (\$000s)	390,000	140,000	175,000	25,000	25,000	25,000	780,000

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 Hospital that will enhance patient care, provide expanded space for support services, renovate the current East Entry to improve patient access; 2) improving the Perlman Ambulatory Care Center; and 3) expanding and renovating the Shiley Eye Institute.

Renovation of the East Entry will integrate the existing Thornton facility within the broader context of the Medical Center at La Jolla, specifically addressing its new role as the main entry to the JMC complex.

The KOP consolidated outpatient services for select service lines into one location and opened up much needed ambulatory space on both the La Jolla and Hillcrest campuses. In addition to the added capacity the KOP provides, changes in healthcare delivery require UC San Diego Health to offer ambulatory care in other regions of San Diego County. These offerings will be available to patients through UC San Diego Health's Clinically Integrated Network and several new ambulatory hubs planned across the County.

UC San Diego is preparing a new Long Range
Development Plan (LRDP) for the Hillcrest campus.
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
LRDP will focus on expanding outpatient services,
siting a new hospital to replace the existing Hillcrest
Hospital that will not meet Senate Bill 1953
requirements by 2030, replacing parking structures,
and providing a new residential component with

amenities to benefit the campus and the local community. The Hillcrest LRDP includes projects that are not included in the UC San Diego Health CFP but are intended to support campus-wide infrastructure and space needs. The LRDP aims to redevelop approximately 34 acres of the 62-acre property resulting in the removal and/or replacement of the majority of approximately 40 existing buildings, including the 11-story hospital. Redevelopment would also consolidate fragmented outpatient services and support activities and would improve circulation into and through the Hillcrest campus.

Leadership of UC San Diego Health is working collaboratively on this plan with Campus Planning, Real Estate, Capital Program Management, campus leadership, local agencies, and community constituents.

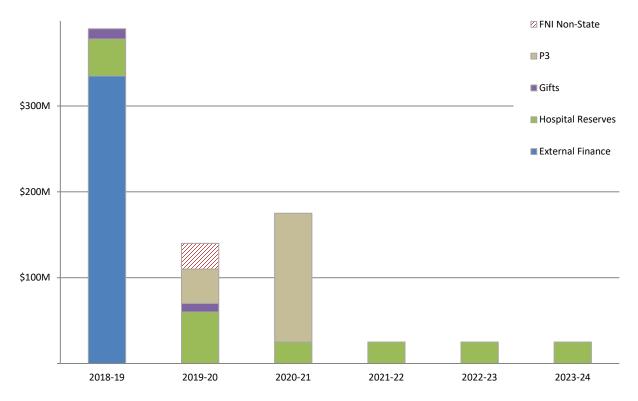
Challenges

Funding the large capital cost of a replacement hospital at Hillcrest will be a significant challenge. Healthcare reform, changes in reimbursement, wage pressures and the resulting declining margins, 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 (P3) as an alternative strategy for funding capital investments, if appropriate.

Funding

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 UC San Diego capital campaign
launched in March 2017 is a \$2 billion
comprehensive fundraising effort that includes
projects for UC San Diego Health.

Display 2. \$780M Current Term (2018-19 to 2023-24) Capital Need



Display 3. San Diego Health Capital Need with Funding

Display 3. Sall Diego nea	arcii.	Сир	rear	Neced W	itii i ama	116					
	Update	_	Seismic			Curi	rent Term (201	18-19 to 2023-	24)		
	ᆰ	DM	Se	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Hillcrest Outpatient Pavilion (Hillcrest Parking Structure is on campus list)	1 2			EF						335,000	
La Jolla - Thornton East Entry Renovation and Imaging Expansion	1 2			HR, GF						30,000	
Medical Office Building, Del Sur Corporate Center (4S Ranch)	1 2				Р3					40,000	
Shiley Eye Institute: Expansion and Renovation	1 2				HR, GF					45,000	
Bernardo Center Medical Office Building	3					Р3				150,000	
Capital Projects 2024-25 to 2027-28											HR
Capital Projects \$750K to \$10M (MC)				HR	HR	HR	HR	HR	HR	150,000	
Health Projects Total (\$000s)				390,000	110,000	175,000	25,000	25,000	25,000	750,000	

The projects identified in the CFP are those for which funding is 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. UC San Diego Health continues to evaluate the critical facility needs and identify appropriate and financially feasible solutions. A fraction of this unfunded need is shown in the CFP; however, there remain many projects on the horizon, particularly at the Hillcrest campus, for which more planning and cost analyses are required before budgets will be available.

Replacement facilities are required to allow for redevelopment of the Hillcrest campus. In addition to a replacement hospital, projects planned include new infrastructure such as roadways and circulation improvements, a new central utility plant, multi-family housing, parking, wellness and retail amenities, and research and administrative support space. Additional planning is required before the estimated cost of these endeavors could be accounted for in the CFP.

Display 4. San Diego Health Capital Need with Funding Not Identified

		_									
	Update	5	Seismic			Cur	rent Term (20	18-19 to 2023	-24)		
	ž	Δ	Se	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
Hillcrest West Wing Replacement	3				NS					30,000	
Deconstruction of Hillcrest Buildings	3						NS	NS	NS	TBD	
Hillcrest Replacement Hospital & Central Utility Plant	1 2 3							NS		TBD	
Health Projects Total (\$000s)					30,000		TBD	TBD	TBD	30,000	

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



2018-28 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 decade. The CFP focuses on this year (2018-19) and the next five fiscal years (2019-20 to 2023-24) and represents projects in the near-term planning horizon. These six years are named the current term. The UCSF CFP is supported by \$3.2 billion over the current term, of which approximately \$1.1 billion has a funding plan, to support priorities of growth, seismic safety, and sustainability.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	597,000	227,000	71,000	67,000	69,000	73,000	1,104,000	902,000
Capital Need with Funding Not Identified	88,000	733,000	350,000	142,000	125,000	623,000	2,061,000	1,680,000
Total (\$000s)	685,000	960,000	421,000	209,000	194,000	696,000	3,165,000	2,582,000

Priorities

UCSF's primary capital priorities reflect the goals of the 2014 Long Range Development Plan, which include growth, seismic safety, sustainability, and cost management – all in response to its urban context. Investments in new construction at its Mission Bay campus and smaller sites nearby are driven by donor-supported program expansion, site clearance for seismic replacement or consolidation needs, as well as student and trainee housing demand.

Another major capital priority is compliance with seismic regulations and policies through renovations, replacement, and demolition of seismically compromised facilities. 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.

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.

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, to provide affordable housing for graduate students and trainees, 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 capital financial plan; 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 over \$845 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 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.

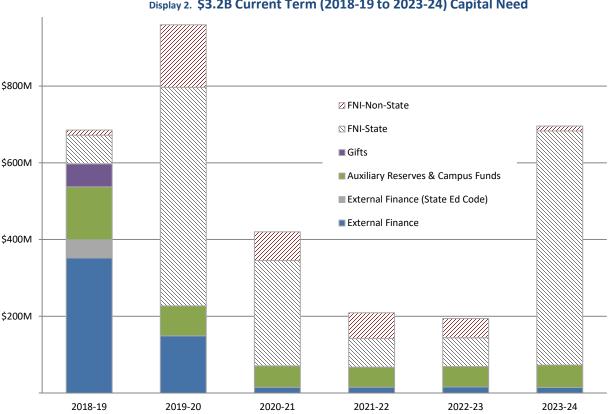
- \$2.58 billion of funding is needed for State eligible space.
- \$902 million of funding has been identified, of which \$855 million (95%) will come from non-State resources.
- \$1.68 billion of State eligible space has no funding.

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. \$3.2B Current Term (2018-19 to 2023-24) Capital Need

Display 3. San Francisco Campus Capital Need with Funding

	ā		. <u>.</u>			Curi	ent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-2
EDUCATION AND GENERAL PROJ	ECTS											
2 North Point Structural and Tenant Improvements	3			EF						24,000	50%	
CoLabs and Related Decant/Renovations	3			EF, GF						60,000	100%	
Millberry Union / Ambulatory Care Center Garage Spall Repair		•		EF						19,000		
Parnassus Health Sciences Instruction and Research Life Safety Improvements				SG						10,000	100%	
Parnassus Health Sciences Instruction and Research Seismic Improvements			•	SG						37,000	100%	
Police Consolidation at 654 Minnesota Street	1 2			EF						12,000	100%	
Research Support Facility	3			CF						30,000	100%	
Roadway and Site Improvements at Zuckerberg San Francisco General	3			CF, EF						12,000		
UCSF Research Facility at Zuckerberg San Francisco General	1		•	CF, EF, GF						260,000	100%	
Real Estate Acquisition A	3				EF					60,000	50%	
UC Hall Stabilize, Close and Secure Project		•	•		CF					15,000	55%	
ZSFG Wet Laboratory Tenant Improvements and Relocations	1		•		EF					20,000	100%	
Mount Zion Cancer Research Building Renewal		•		CF	CF	CF	CF	CF	CF	13,000	98%	CF
Parnassus Dentistry Building Renewal		•		CF	CF	CF	CF	CF	CF	17,000	100%	CF
Parnassus Library Renewal		•		CF	CF	CF	CF	CF	CF	14,000	98%	CF
Capital Projects \$750K to \$10M - Facility Investment Needs		•	•	AR, CF, EF, HR	170,000	87%	AR, CF, EF, HR					
Capital Projects \$750K to \$10M - Infrastructure				CF	CF	CF	CF			29,000	100%	
Capital Projects \$750K to \$10M - Renovation				CF, EF	CF	CF	CF	CF	CF	203,000	99%	CF
							Tota	al Education a	nd General:	1,005,000		
AUXILIARY PROJECTS												
Minnesota Street Graduate Student and Trainee Housing (Budget Augmentation)	1			AR, CF, EF						12,000		
Post Street Faculty Housing Seismic Retrofit	3			AR, EF						18,000		
Mission Bay New Parking Garage	3				EF					55,000		
Capital Projects \$750K to \$10M - Parking & Housing				AR	AR	AR	AR			14,000		
								Tota	al Auxiliary:	99,000		
				597,000	227,000	71,000	67,000	69,000	73,000	1,104,000	902,000	

The projects identified in the table below are those 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

isplay 4. San Francis	co camp	u5 C	-pitai ito								
	te	ij			Curi	ent Term (20	18-19 to 2023-	24)			
	Update	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-2
EDUCATION AND GENERAL P	ROJECTS										
Parnassus Heights Renewal and Infrastructure Improvements	•			S				S	850,000	100%	S
Mission Bay Infrastructure Improvements	•			S	S				255,000	100%	
Facilities Investment Needs (FIN)	•			S, NS	S, NS	S, NS	S, NS	S, NS	528,000	85%	S, NS
Seismic Improvements	•			S	NS	NS	NS		225,000	56%	
						Tota	al Education a	nd General:	1,858,000		
AUXILIARY PROJECTS											
Auxiliary Projects - Housing				NS					145,000		
Auxiliary Projects - Non- Housing				NS	NS	NS	NS		58,000		
							Tota	al Auxiliary:	203,000		
Campus Projects Total (\$000	s)		88,000	733,000	350,000	142,000	125,000	623,000	2,061,000	1,680,000	
NOTES											
Update Codes:	1 = Budget	Update	2 = Sco	pe Update	3 = New F	Project	Blank = no c	hange from p	rior year		
	HSIR Exteri Phase 1	or Reme	ediation and R	epairs		treetscape Ph					
Projects from \$750k - \$10 million:	Legal / Risk Street	Consoli	dation - 654 N	Minnesota		n-labs) Decant ciences Buildi	: Projects (UC I ng only)	Hall			

2018-28 UCSF HEALTH CAPITAL NEED

UCSF consistently ranks among the top ten hospitals in the nation by US News and World Report and has been number one in California for two years in a row. As one of the premier academic medical centers 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 782 licensed acute care beds in San Francisco with an average daily census (ADC) of 621 patients, 189 licensed beds in Oakland with an ADC of 123, and an additional 20 available beds at the Langley Porter Psychiatric Institute (ADC of 18). In addition, the UCSF Health faculty practice supports 1.7 million annual outpatient visits (including clinics, lab, and radiology) and an average of 282 daily patient visits for emergency services.

The Capital Financial Plan (CFP) presents UCSF Health's facilities capital need for the next decade, 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 (2018-19) and the next five fiscal years (2019-20 to 2023-24) and represents projects in the near-term planning horizon. The CFP is supported by approximately \$3.4 billion over the term, includes the replacement of the Moffitt Acute Care Center and focuses on the renewal and renovation of existing space and infrastructure.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23*	2023-24	Total
Capital Need with Funding (\$000's)	130,000	85,000	28,000	451,000	2,567,000	92,000	3,353,000

^{*}Includes estimated budget for a hospital replacement project.

Priorities

In the years following the successful completion of the Mission Bay hospitals, UCSF Health's Capital Program has focused on expanding inpatient bed capacity at the Parnassus Heights campus and adding additional outpatient exam rooms to meet the overwhelming demand for care. Approximately 150 inpatient beds, vacated after the Benioff Children's Hospital moved to Mission Bay in 2015, have been converted for adult use. The former Intensive Care Nursery on the 15th floor of Moffitt Hospital will finish design plans in FY 2019 to add an additional 24 beds. 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 the cost of this project. 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 affiliations are funded with strategic investment funds and therefore are lessening the need for new facilities investments.

The Precision Cancer Medicine Building is scheduled to open on the Mission Bay campus in spring 2019. The building will house facilities to deliver cancer outpatient 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 and other specialty outpatient services.

To address the demand for increased outpatient services, planning is underway for an ambulatory surgery center and specialty clinics at Mission Bay. This will complement the services currently provided and support the demand for outpatient surgery. Alternatives include evaluation of siting options, maximizing entitlements while providing flexibility for Phase II Mission Bay construction and potential efficiency of co-locating with a Proton Therapy center for pediatric and adult cancer patients.

Planning is currently underway to replace the inpatient beds and associated diagnostic and treatment facilities in Moffitt Hospital tower, one of two hospital towers on the Parnassus campus. A new building will likely be constructed on the Langley Porter Psychiatric Institute site adjacent to the existing Long Hospital building. Funding for this huge capital undertaking is a focus for this next year. Substantial philanthropic gifts have already been committed to secure naming rights for the new site to be called "Helen Diller Medical Center at Parnassus Heights." Financial planning to reach the necessary borrowing capacity is progressing.

The upgrade and replacement of 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.

Challenges

The demand for patient care services at all three San Francisco campuses 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 policy established by the 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.

Mount Zion hospital buildings are seismically compliant and house an ambulatory surgery center, therapeutic services such as radiation oncology and infusion, diagnostic imaging and laboratory facilities, and other outpatient programs. These buildings are 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 primarily from revenue generated from acute care activity (hospital reserves) and the funding proposed in the CFP reflects this. However, donor funds coupled with campus funds and/or campus-initiated external funding for mixed research/clinical projects such as the Weill Neurosciences Building is allowing UCSF Health to further leverage its capital and increase its clinical footprint.

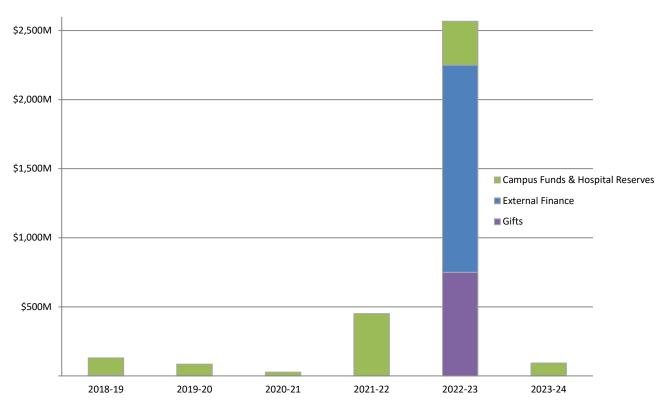
The new tower for the Moffitt replacement will require external financing for 60% of the estimated cost, supplemented with hospital reserves and philanthropy of which \$500 million in gifts has already been committed.

Public Private Partnership and Real Estate Transactions

As part of its joint venture with John Muir Health, UCSF Health has opened a new outpatient center in

Berkeley. The Outpatient Center features an Urgent Care Center, primary care practices, a broad array of rotating specialty physicians from UCSF Health and John Muir Health, as well as imaging and lab services.

Display 2. \$3.4B Current Term (2018-19 to 2023-24) Capital Need



Display 3. UCSF Health Capital Need with Funding

	Update DM Seismic	Current Term (2018-19 to 2023-24)							
	Upd DM Seisi	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	2024-28
ACC 7 Transplant Remodel		GF, HR						11,000	
M/L OR HVAC System Upgrades	1 2	HR						13,000	
M/L 3rd FL, RM 316 PET- CT/MRI Suite	3	HR						12,000	
M/L 4th FL Operating Rooms 7 & 8 Renovation for IOMRI	3	HR						19,000	
Moffitt 15 Acute Care Nursing Unit		HR						40,000	
M/L New Electrical Substation	3		HR					15,000	
Mission Bay Ambulatory Surgery Center, Proton Therapy, and Outpatient Clinics	3				HR			400,000	
Helen Diller Medical Center at Parnassus Heights	3 •					EF, GF, HR		2,500,000	
Clinical Space Renovation and Expansion Program	•		HR	HR	HR	HR	HR	193,000	
Capital Projects 2024-25 to 2027-28	•								HR
Capital Projects \$5M to \$10M -Medical Center		HR	HR	HR				72,000	
Capital Projects \$750K to \$5M - Infrastructure		HR	HR	HR	HR	HR	HR	26,000	HR
Capital Projects \$750K to \$5M - Renovation		HR	HR	HR	HR	HR	HR	52,000	HR
Total (\$000s)		130,000	85,000	28,000	451,000	2,567,000	92,000	3,353,000	
NOTES									
Update Codes:	1 = Budget Update	2 = Sco	pe Update	3 = New I	Project	Blank = no c	hange from p	rior year	
	Inpatient Psychiatric Heller Diller Medical								
	ACC 2 Spine Center I	Relocation		M6 South 10 Bed ICU Upgrades			Mount Zion Hellman		

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	from prior year	
Projects Listed in 2017-27 Plan and now removed from Program:	Inpatient Psychiatric U Heller Diller Medical C	Init (now integrated in enter project)			
	ACC 2 Spine Center Re		M6 South 10 Bed ICU U	Mount Zion Hellman Demolition	
Projects from \$750k - \$10 million:	CART and Clinical Expansion LPPI Magnet		Moffitt 2nd Chiller Repl	Parnassus Ambulatory Surgery Center	
	Long Chiller Plant Rep	acement			PCMB Vacated Space



2018-28 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 decade. The CFP focuses on this year (2018-19) and next five fiscal years (2019-20 to 2023-24) and represents projects in the near-term planning horizon. The Santa Barbara CFP is supported by \$1.7 billion in capital projects over the current term (refer to Display 1).

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	130,000	233,000	148,000	37,000	144,000	35,000	727,000	212,000
Capital Need with Funding Not Identified	37,000	37,000	406,000	167,000	81,000	282,000	1,010,000	1,010,000
Total (\$000s)	167,000	270,000	554,000	204,000	225,000	317,000	1,737,000	1,222,000

Challenges

In 2018, on-campus enrollment climbed to 23,823 (3-quarters average headcount), a 3.2% increase over 2017 and a 9.3% increase since 2015. Enrollment is expected to increase another 3.8% in 2019. These rapidly increasing enrollment numbers are approaching the campus Long Range Development Plan (LRDP) threshold of 25,000 in 2025, and have put tremendous pressure on growing capital needs to keep up. One of the biggest challenges is on the academic side, where funds have not been available to add needed classroom and lab space for at least the last ten years. Over that period, the registrar has reported record demand for classrooms which causes scheduling problems and impacts students' ability to get the classes they need to graduate in four years.

The academic space shortfall is exacerbated as many existing buildings have become aged and/or obsolete due to deferred maintenance (DM). The campus estimates its deferred maintenance backlog at \$621 million. The backlog encompasses 50 state supported facilities, plus administrative support facilities, infrastructure, and roads.

Rapid enrollment growth and requirements of the campus LRDP have also put pressure on students services facilities (e.g., Student Health, Career Services) and housing (students, faculty, and staff). Student services facilities have outgrown their existing space due to enrollment growth and growing student needs in some areas (e.g., student mental health, counseling). Regarding housing, the campus LRDP analyzed enrollment growing from 20,000 to 25,000. For each additional student above 20,000, the campus is required to build a new bed (5,000 beds). Approximately 1,500 of those beds

have been added in the past three years, but another 3,500 need to be built. The campus also plans to build 1,800 new units for additional faculty and staff needed to support enrollment growth. It is especially important that the campus ensure there is adequate and affordable housing near campus. Santa Barbara is one of the most expensive real estate markets in the country, which makes it challenging to recruit and retain faculty and staff.

- \$1.22 billion in funding is needed for State eligible space.
- \$212 million in funding has been identified, of which \$132 million (62%) will come from non-State resources.
- \$1.01 billion of State eligible space has no funding.

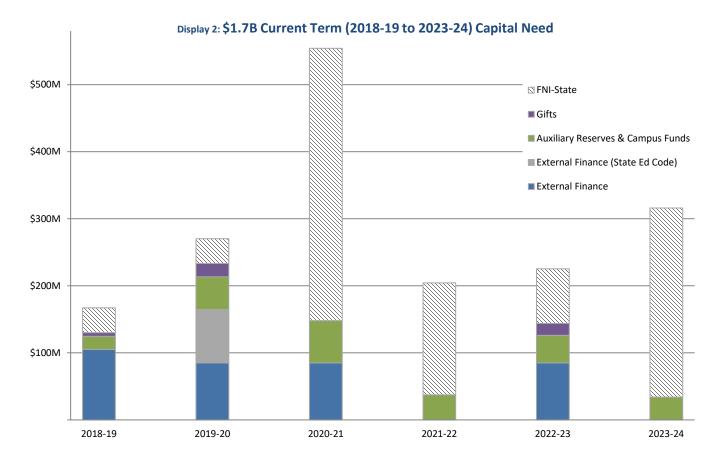
Priorities

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 increased enrollment and expanding interdisciplinary programs and initiatives. This growth must also be consistent with the framework of the LRDP. Within this framework, a campus planning exercise took place in 2017-18 where all campus divisions developed a Capital Needs Assessment for their respective areas. All of these assessments were consolidated and then campus-wide priorities were made. Those decisions are reflected in this CFP submittal, and following are brief descriptions of some of the current term highest priorities:

 The new interdisciplinary Classroom Building will provide lecture halls, flexible classrooms, and active learning classrooms that support contemporary teaching pedagogies. The

- proposed building would be the largest addition of new teaching space since the early 1990's. Project funding is expected to come from a combination of State-supported external financing (AB94) and campus general funds.
- Mesa Verde is the next student housing project and will provide 2,000 student beds in apartment units. It is expected the project will be approved and built in phases, with the first phase targeted to open in Fall 2022. The site for this project will lead to the displacement and relocation of campus facilities and transportation service areas. The project costs to build Mesa Verde and to relocate the displaced operations will be externally financed.
- The Campus is in the planning phase to pursue a public private partnership (P3) project to develop 500-600 faculty and staff rental and for-sale homes. The project will also 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 those communities where possible.
- The new Physics Building will support a department that has more than doubled over the last five years. The project will add new laboratories, a lecture hall, seminar, academic offices, student study spaces and commons. Funding for this project has not yet been identified.
- The Engineering III Building will address significant space deficiencies in the College of Engineering. The project will accommodate the departments of Materials, Electrical and Computer Engineering, and Chemical Engineering. Funding for this project has not yet been identified.
- The Marine Biotechnology Laboratory was constructed in 1963 and was among the first

university buildings in the country with a piped seawater system. Located next to the Pacific Ocean, the building suffers from corrosion caused by the marine environment, seawater, and age. A comprehensive renewal is proposed; funding for this project has not yet been identified.



Display 3. Santa Barbara Campus Capital Need with Funding

	ē		ë			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PRO	JECTS											
Facilities Management Relocation	3			EF						20,000		
Classroom Building (BP)	1				SG, CF					97,000	100%	
Ocean Science Education Bldg (OSEB) Ph 2					GF					20,000	100%	
Student Wellness Center					Р3					TBD		
West Campus Ranch House											100%	GF
Capital Projects \$750K to \$10M (E&G)			•	CF, GF	CF	CF	CF	CF	CF	36,000	100%	CF
Deferred Maintenance	1	•		CF	CF	CF	CF	CF	CF	39,000	100%	CF
							Tot	al Education a	nd General:	212,000		

	Current Term (2018-19 to 2023-24)											
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
AUXILIARY PROJECTS												
Mesa Verde Apartments 1	1			EF						85,000		
Ocean Road Faculty and Staff Housing					Р3					TBD		
Mesa Verde Apartments 2	1				EF					85,000		
Mesa Verde Apartments 3	1					EF				85,000		
Aquatics Center	1							GF		18,000		
Mesa Verde Apartments 4	1							EF		85,000		
Capital Projects \$750K to \$10M (AUX				AR	AR, CF	AR	AR, CF	AR	AR, CF	157,000		AR, CF
								Tot	al Auxiliary:	515,000		
Campus Projects Total (\$000s)				130,000	233,000	148,000	37,000	144,000	35,000	727,000	212,000	

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 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

	ate		ij			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJE	ECTS											
Engineering III Building	1					S				157,000	100%	
Music Renewal	2					S				35,000	100%	
Physics Building	1					S				157,000	100%	
Public Safety Building Expansion	1					S				20,000	100%	
Academic Building I	3						S			80,000	100%	
Marine Bio Technology Building Renewal	3	•					S			30,000	100%	
Infrastructure Renewal Phase 2		•					S			20,000	100%	
Broida Renovation		•						S		44,000	100%	
Academic Building Renewal I	3	•							S	50,000	100%	
Academic Building II	3								S	100,000	100%	

	ţe		jc			Curi	rent Term (20	18-19 to 2023-	24)			
	Update	M	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
College of Creative Studies	1	•							S	35,000	100%	
Engineering Buildings Renovation	1	•							S	60,000	100%	
Academic Building III	3										100%	S
Academic Building Renewal II	3	•									100%	S
Academic Building Renewal III	3	•									100%	S
Academic Building IV	3										100%	S
Academic Building Renewal IV	3	•									100%	S
Seismic Projects	3		•		S	S	S	S	S	TBD		S
Deferred Maintenance	1	•		S	S	S	S	S	S	222,000	100%	S
							Tot	al Education a	nd General:	1,010,000		
Campus Projects Total (\$000s)				37,000	37,000	406,000	167,000	81,000	282,000	1,010,000	1,010,000	

NOTES					
Change Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change from	n prior year
	Bioengineering Buildin	g	Ellison Hall Renovation	1	Phelps Hall Renovation
	Bio III (Bio Sci Instruction	onal Facility Renewal)	Gaucho Park		South Hall and HSSB Renovation
Projects Listed in 2017-27 Plan and now removed	Bioengineering 2		Jeff and Judy Henley H Music Building Seismic		Seismic Project II
from Program:	Buchanan Hall Renovat	tion	North Campus Open S		Seismic Project III
	Capital Renewal/Defer	red Maintenance	North Campus Faculty		
	Climate Research Build	ling	North campus raculty	riousing rinase iv & v	
Projects from \$750k - \$10 million:	Baseball Stadium Light:	S	Tennis Facility		



2018-28 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 the environment. 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 a lack of funding for core services and capital needs, increased demand for student support services, and dwindling research funding opportunities for faculty.

The Santa Cruz Campus Capital Financial Plan (CFP) focusses on projects in the current fiscal year (2018-19) and the next five years (2019-20 to 2023-24). The Santa Cruz CFP identifies a total need of approximately \$2.3 billion in the current term. Of this, \$1.2 billion has been identified to support the most critical shortages of housing, classroom, and laboratory space.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

	2018-19*	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	1,020,000	88,000	85,000	16,000	5,000	4,000	1,218,000	127,000
Capital Need with Funding Not Identified	8,000	98,000	727,000	65,000	57,000	78,000	1,033,000	982,000
Total (\$000s)	1,028,000	186,000	812,000	81,000	62,000	82,000	2,251,000	1,109,000

^{*}Includes estimated budget for a P3 housing project.

Priorities

Three overarching strategic goals inform the Santa Cruz CFP: 1) expand academic facilities to support critical instruction and research; 2) perform selective renovations to support faculty recruitment, expand research opportunities, and champion changing pedagogies; and 3) provide oncampus housing to accommodate a diverse and growing student body.

Current term projects were prioritized by principal officers and the Academic Senate on criteria for fulfilling academic program requirements, satisfying life-safety or regulatory requirements (seismic, ADA, etc.), and aligning with the campus's strategic academic goals. For example, two current fiscal year projects focus on the academic capacity and infrastructure needs of recent enrollment growth and faculty hires.

The Kresge College Academic project, currently undergoing preliminary plans, begins to address a

critical shortage of classroom space by providing a new large lecture hall for instruction. Faculty offices and support space will provide replacement space for film and digital media, history of art and visual culture, writing, and science communications programs. This academic space is part of significant programmatic upgrades and major maintenance on the entire 3.5-acre college site.

Three telecommunications infrastructure upgrade projects included in the current term are part of a multi-year initiative to improve capacity and performance. Additional infrastructure and energy efficiency projects include the Statewide Energy Partnership Program (renewals/retrofits of building systems, system monitoring, and efficiency upgrades), and the Solar Voltaic Installation East Remote Parking project (reconstruction of an existing surface parking lot including enhanced storm water management, solar photovoltaic arrays, and electric vehicle charging stations).

Student Housing

Housing projects are informed by a two-pronged strategy blending new construction and capital renewal to address growing student enrollments and deferred maintenance. Student Housing West, a public private partnership under the President's Housing Initiative, will construct approximately 3,000 new and replacement student beds by 2023-24. To maximize the life of existing residential buildings, the Kresge College Non-Academic project will provide 187 additional student beds, renovate existing apartments (150 beds), and redesign Kresge student services facilities to address contemporary needs. With the completion of these projects, the campus will house approximately 30% more students than housed today.

Deferred Maintenance

Capital renewal and programmatic upgrades are planned 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. Several infrastructure projects (12kV B-Feeder Reinforcement project, Extension and West Campus 21kV Development project, and Circulation System Safety Upgrades) are also planned to extend the life of existing systems and to prevent potential system failure.

Capital investment allowances in recent years have not kept pace with the renewal demands of aging campus facilities and infrastructure. While the campus invests annually to address urgent deferred maintenance (DM), our highest priority Statesupportable DM backlog exceeds \$96.3 million. Long-term lack of basic ongoing maintenance has exacerbated the campus's backlog and reduced the useful life of building systems.

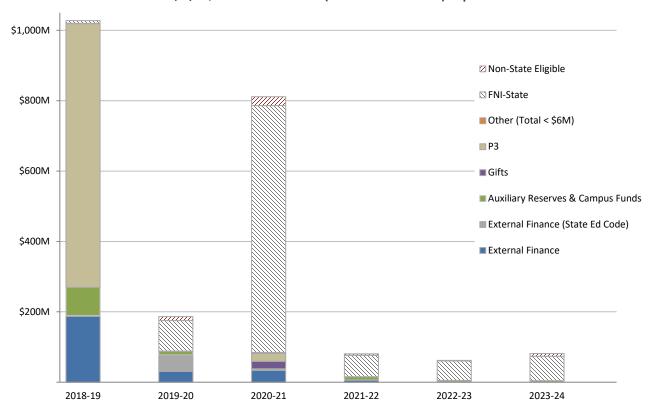
Funding Challenges

The campus's physical environment poses a challenge for construction. The terrain, geologic conditions, and remoteness of the region lend themselves to higher costs. While Santa Cruz continues to make progress on capital projects by utilizing available State funding mechanisms, pressing needs outpace resources. It has been 12 years since the campus has had a capital project funded by a State General Obligation (GO) or Lease Revenue (LR) bond, yet enrollment has increased by 14% since 2008-09.

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, envisioned multi-use development (such as the Kresge College redevelopment) to maximally leverage available resources. To the extent possible, campus resources are invested in the planning and early design phases of capital projects, but external financing or State funds will be required for construction costs. Private support has played a key role for select capital projects such as the multi-phase renovation of the Science and Engineering Library, which has received approximately \$5 million in donor funding.

- \$1.11 billion in funding is needed for State eligible space
- \$127 million has been identified, of which \$77 million (61%) will come from non-State resources.
- \$982 million of State eligible space has no funding.

Display 2. \$2.3B Current Term (2018-19 to 2023-24) Capital Need



Display 3. Santa Cruz Campus Capital Need with Funding

			Ė									
						Cur	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seismic								State	
			S	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Kresge College Academic		•	•	SG	SG					50,000	100%	
Telecommunications Infrastructure Improvements Phase D		•		CF, UR, AR, EF						14,000	70%	
Statewide Energy Partnership (SEP) Program	1			CF, EF			CF, EF			16,000	100%	
Science & Engineering Library Student Study Space Level 3	1					GF				19,000	100%	
Capital Projects \$750K to \$10M (E&G)				CF, EF	CF, EF	CF	CF	CF	CF	32,000	100%	
							Total Ed	ucation and G	ieneral:	131,000		
AUXILIARY PROJECTS												
Kresge College Non-Academic Housing and Student Support)		•	•	AR, CF, EF						192,000		
Student Housing Telecommunications Infra. Upgrades Phase 2	1 2	•		AR						14,000		
Rachel Carson College Dining Expansion	1			AR	AR	EF				36,000		
Student Housing West (P3)	1 2			Р3						750,000		
Crown Merrill, Redwood Grove, and Graduate Housing Apartments Capital Renewal		•			AR, EF					31,000		

	te		jc			Curi	rent Term (20	18-19 to 2023	-24)			
	Update	M	Seisn	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
Ranch View Terrace Phase 2 (P3)						Р3				23,000		
Capital Projects \$750K to \$10M (Auxil)				CF, AR, OG	AR, OG	AR, OG, GF	AR, UR	AR, OG	AR	41,000		
								Tot	al Auxiliary:	1,087,000		
Campus Projects Total (\$000s)				1,020,000	88,000	85,000	16,000	5,000	4,000	1,218,000	127,000	

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

	ate		ij			Cur	rent Term (20	18-19 to 2023	-24)			
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Phase 3 Life-Safety Upgrades	3	•		S						8,000	100%	
Alterations for Academic Programs Phase 2 (2300 Delaware)		•			S					22,000	100%	
Phase 4 Life-Safety Upgrades	3	•			S					9,000	100%	
University House Redevelopment			•		NS					11,000		
West Campus 21kV Development	1 2				S					56,000	100%	
12kV B-Feeder Reinforcement and Extension	1					S, NS				10,000	70%	
Alterations for Academic Programs Phase 3 (JBEB & Thimann)		•				S				20,000	100%	
Alterations for Physical, Biological, and Social Sciences (Soc Sci 1 & Thimann)		•				S				19,000	100%	
Engineering 3	3					S				138,000	100%	
Instruction and Research Building 1						S				90,000	100%	
Instruction and Research Building 2						S				90,000	100%	
Instructional Facilities (Includes All Infrastructure and Parking)	1 2					S, NS				84,000	98%	
Instructional Facilities Upgrades		•				S				22,000	100%	
Infrastructure Improvements Phase 3	2					S				11,000	100%	
Integrated Teaching and Learning Complex	3					S				46,000	100%	

	ate		nic			Cur	rent Term (20:	18-19 to 2023	-24)			
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
Phase 5 Life-Safety Upgrades	3	•				S				10,000	100%	
Social Sciences 3 (Includes All Infrastructure and Parking)	1 2					S	NS			142,000	98%	
UCO Instrumentation Facility						S				12,000	100%	
Infrastructure Improvements Phase 4	2						S			22,000	100%	
Phase 6 Life-Safety Upgrades	3						S			8,000	100%	
Science & Engineering Library Information Commons							S			13,000	100%	
Infrastructure Improvements Phase 5	2							S		21,000	100%	
Science & Engineering Library Collaborative Learning Hub		•						S		16,000	100%	
Science & Engineering Library 1 Student Study Space Level		•							S	21,000	100%	
Resource Recovery Facility Phase 2											50%	NS
West Jordan Gulch Pedestrian Bridge											50%	S, NS
Oakes College Academic Capital Renewal		•	•								100%	S
Deferred Maintenance and Capital Renewal Program	1	•				S	S	S	S	65,000	100%	
Seismic Safety Program	3		•				S, NS	S, NS	S, NS	47,000	64%	
							Tota	al Education a	nd General:	1,013,000		
AUXILIARY PROJECTS												
Student Health Services Expansion						NS				20,000		
Oakes College Apartments Capital Renewal		•	•									NS
Science & Engineering Library Café		•										NS
								Tot	al Auxiliary:	20,000		
Campus Projects Total (\$000s)				8,000	98,000	727,000	65,000	57,000	78,000	1,033,000	982,000	

NOTES					
Update Codes:	1 = Budget Update	2 = Scope Update	3 = New Project	Blank = no change f	rom prior year
Projects Listed in 2017-27 Plan and now removed from Program:	Capital Renewal Chinquapin Road Parkii Circulation and Infrastr Phase 1 (within SS3)	,	Core East Electrical Infra: Improvements (within In Facilities)		Student Housing Infrastructure for P3
Projects from \$750k - \$10 million:	2300 Delaware A/B Off (east) 2300 Delaware A/B Off (west) Annual Budget Placeho	ice Renovations	Biomedical Sciences Buil- Improvements CSC Telecommunications Upgrades Hay Barn Phase 2B	ŭ	Ranch View Terrace Gas Pipe Replacement Science & Engineering Library Student Study Space, Level 3 Silicon Valley Campus Improvements
	Renovations for New F	aculty Hires, etc.			



2018-28 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 a \$45 million capital program for the current term (2018-19 to 2023-24), for which \$27 million in funding is identified.

Display 1. Summary of Current Term (2018-19 to 2023-24) Capital Need

								State
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	Eligible
Capital Need with Funding	450	20,000	1,000	1,000	1,000	4,000	27,450	22,000
Capital Need with Funding Not Identified		4,000	4,000	4,000	3,000	3,000	18,000	18,000
Total (\$000s)	450	24,000	5,000	5,000	4,000	7,000	45,450	40,000

Priorities

To achieve the mission of the Division of Agriculture and Natural Resources, in 2016, UC ANR developed Strategic Objectives, including a goal to modernize technology and facilities infrastructure. These facilities include all nine Research and Extension Centers (RECs), the Elkus Youth Ranch, and recently acquired property in Davis. Modernizing the facilities will attract new research and strengthen extension efforts to the people of California.

A needs assessment conducted for each of the facilities identified deferred maintenance, capital renewal, and capital improvement projects. From a list of over 100 projects, improvements at six locations have been identified as the highest priority. The priorities include life safety projects, including: fire suppression renovation, hazardous materials abatement, road and bridge renewal, emergency response infrastructure upgrade,

removal of pesticide washdown facilities, and building accessibility.

Challenges

Deferred maintenance backlog continues to grow for UC ANR, with a current estimate of \$16 million. The deferred maintenance figures will feed into the new comprehensive Integrated Capital Asset Management Program (ICAMP). Several of the highest priority projects will address some of these needs, but additional funding is needed to maintain facilities to the highest quality expected for the University.

Funding

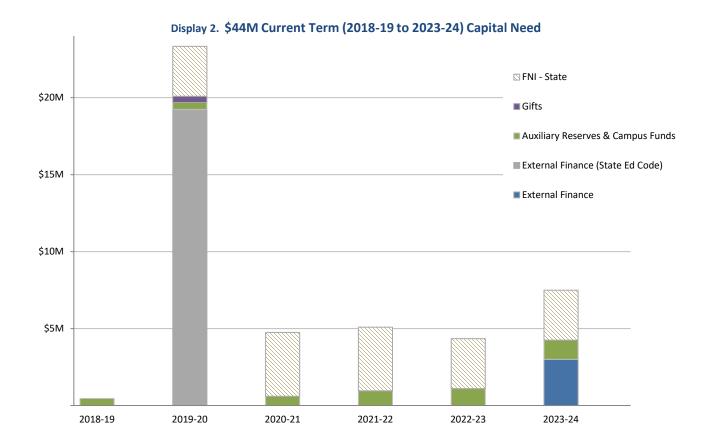
UC ANR is in the process of assessing the debt capacity for the division that would determine the ability to finance needs and commitments.

Additionally, a new capital campaign is being

defined and is expected to generate funding in later years.

It has been ten years since the Division has had a capital project funded by a State General Obligation (GO) or Lease Revenue (LR) bond. The Division's Current Term of the CFP identifies \$40 million of

capital projects that would be State-supportable and eligible for State GO or LR bond funding. UC ANR does not have alumni, student fees, or auxiliary income to support facility projects and relies heavily on State support.



Display 3. Division of Agriculture and Natural Resources Campus Capital Need with Funding

							<u> </u>					
	ē		ii _	Current Term (2018-19 to 2023-24)								
	Update	M	Seism	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Facilities Renewal and Improvements	3	•			SG					19,000	100%	
Elkus Ranch Environmental Education Center Program Improvements	3								EF	3,000	25%	GF
Energy Efficiency Program	3						CF	CF	CF	1,000	25%	CF
Capital Improvement Program	3			CF	CF	CF	CF	CF	CF	4,000	25%	
Hansen Research and Extension Center Barn Renovation	3				GF					400	25%	
Campus Projects Total (\$000s)				450	20,000	1,000	1,000	1,000	4,000	27,450	22,000	

Funding Not Identified (FNI)

The projects identified in the below table as 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 ANR. There continues to be pressure to improve aging facilities and infrastructure, to provide space for expanding programs, and continue to address life safety deficiencies in existing buildings. ANR continues to evaluate the critical facility needs and to identify appropriate and financially feasible solutions.

Display 4. Division of Agriculture and Natural Resources Capital Need with Funding Not Identified

	te		Ji.	Current Term (2018-19 to 2023-24)								
	Update	DM	Seisn	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State- Eligible	2024-28
EDUCATION AND GENERAL PROJ	ECTS											
Desert Research and Extension Center Water Infrastructure Upgrade	3					S	S			1,000	100%	
Kearney Research and Extension Center Road Infrastructure	3					S	S			1,000	100%	
Deferred Maintenance Program	3	•			S	S	S	S	S	16,000	100%	
Campus Projects Total (\$000s)					4,000	4,000	4,000	3,000	3,000	18,000	18,000	

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



2018-28 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 (2018-19 to 2023-24) Capital Need

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible
Capital Need with Funding	115,000	55,000	5,000				175,000	135,000

Priorities

Systemwide and OP projects prioritize greater efficiencies by supporting common services to all UC campuses, addressing deferred maintenance, and consolidating operations. The Office of the President supports the need for the following capital investments in the coming years:

- Northern Regional Library Facility Phase 4 Expansion (NRLF) expansion space will allow campus libraries to save on local costs, build shared collections, support long-term preservation of materials, and utilize valuable core campus space in other ways.
- The 2nd floor Tenant Improvements in the Meridian Parkway building will provide expansion for the final phase of UCPATH implementation as well as warm shell expansion space for emergency exiting, energy efficiency, and future UC tenants.
- 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

At all campuses there is still strong demand for new print resources, especially the arts, humanities, and historical topic areas, and for foreign language materials. In addition, libraries are being pressed to move more of their existing collections off-campus to free up space for other campus priorities, including the creation of technology-rich teaching and learning spaces and collaborative work environments.

UC Libraries' need for additional off-site storage is projected to be 300,000 volumes annually for the next decade. By building the NRLF expansion now, the system will stay just ahead of a systemwide library storage shortage and avoid campus costs and disruption of planned uses of campus space for the next decade.

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

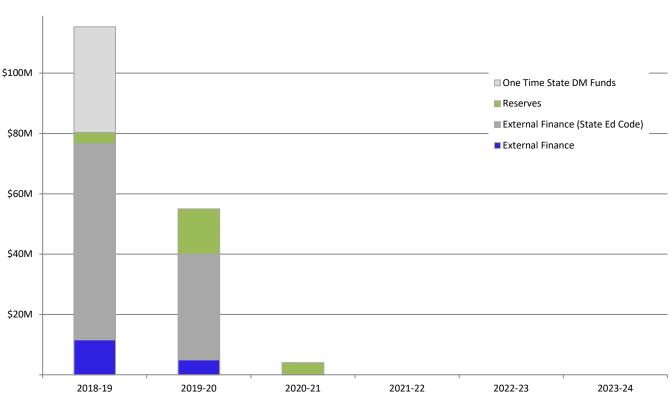
The NRLF Phase 4 Expansion will be funded from OP's Strategic Priority Reserve for preliminary plans and working drawings, and construction will be funded through external financing supported by State General Funds.

OP, Blake House and Meridian parkway projects will not use any direct state appropriation, tuition, or fees. 1100 Broadway, 1111 Franklin and Blake House will use deferred maintenance reserve funds, and Meridian Parkway will be funded through external financing secured by lease revenues.

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 not identified unfunded needs for the current term.

Real Estate and Public Private Partnerships



Display 2. \$175M Current Term (2018-19 to 2023-24) Capital Need

Display 3. Systemwide Campus Capital Need with Funding

	o o		U	Current Term (2018-19 to 2023-24)								
	Update	Σ	Seismic	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total	State Eligible	2024-28
EDUCATION AND GENERAL PRO	JECTS											
1100 Broadway Tenant Improvements	1			BMR	BMR	BMR				10,000		
Blake House		•	•	BMR	BMR					1,000		
Facilities Modernization & Deferred Maintenance 1111 Franklin	1 2			BMR	BMR	BMR				12,000		
Meridian Parkway 2nd Floor Tenant Improvements	1			EF	EF					17,000		
Northern Regional Library Facility Phase 4 Expansion	1			SG						30,000	100%	
Systemwide State Deferred Maintenance One Time Funding	3	•		SPG						35,000	100%	
Systemwide State Deferred Maintenance Program		•		SG	SG					70,000	100%	
Campus Projects Total (\$000s)				115,000	55,000	5,000				175,000	135,000	

NOTES

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

The systemwide improvements use funds from specific reserves noted below. These reserves are designated as Other University Systemwide funds (OUS) in the summary sections on this Source Codes:

report.

BMR: Building Deferred Maintenance Reserve

