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February 27, 2018

## THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

Enclosed for your information is the *Annual Report on Major Capital Projects Implementation, Fiscal Year 2016-17*. This report describes the aggregate status of major capital projects underway at the end of the 2016-17 fiscal year and summarizes management initiatives and market conditions affecting project implementation.

Included in this report are three supplemental items: the List of Completed Major Capital Projects in 2016-17, the List of Active Major Capital Projects as of June 30, 2017, and the 2017-19 Capital Projects Look-Ahead List, an excerpt of the first two years of projects listed in the *2017-27 Capital Financial Plan*.

If you have any questions about the report, please contact Associate Vice President and Systemwide Controller Peggy Arrivas at (510) 987-9067.

Yours very truly,

A handwritten signature in black ink, appearing to read "Janet Napolitano", with a horizontal line extending to the right.

Janet Napolitano  
President

Enclosure

cc: Chancellors

A photograph of a modern university building at dusk. The building features large glass windows and a prominent glass-enclosed staircase on its side, which is illuminated from within. The interior lights are on, showing multiple floors of activity. In the foreground, there is a paved plaza with some people walking and a grassy area. To the right, another similar building is visible, and further back, a building with a 'MINI' sign can be seen. The sky is a deep blue, indicating twilight.

UNIVERSITY  
OF  
CALIFORNIA

## Annual Report on Major Capital Projects Implementation, Fiscal Year 2016-17

# Annual Report on Major Capital Projects Implementation, Fiscal Year 2016-17

University of California  
Office of the President  
Capital Asset Strategies & Finance

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Cover

## Mesa Court Expansion, UC Irvine

Residence halls, study rooms, flexible classrooms, dining hall and recreational facilities for 884 students.

\$126.3 million (\$7.5 million under budget) | Design/Build delivery | LEED Platinum

*“Mesa Court Towers was designed to create a first in class experience in a residential ‘living-learning community’ which blends together student life and co-curricular learning to provide a safe and fulfilling campus living environment. The design combines residential and dining facilities combined with numerous amenities and public spaces to promote peer-to-peer learning and social connections that help our incoming students adjust to campus life and support their academic success.”*

- Thomas Parham, UCI Vice Chancellor of Student Affairs



## EXECUTIVE SUMMARY

The 2016-17 Annual Report on Major Capital Projects provides an update on the progress of the University's Capital Improvements Program. The report provides the status of all major capital projects (projects with budgets in excess of \$750,000) that were completed in fiscal year 2016-17 and active projects that have approved budgets and are in design or construction as of June 30, 2017. The report also summarizes the status of active projects to meet University facilities needs through public private partnerships.

**Completed Projects:** 93 major capital projects with a cumulative budget of \$790 million were completed in fiscal year 2016-17, including 13 projects with budgets over \$10 million. Although 14 of the 93 completed projects required budget augmentations, current budget projections indicate that the aggregate final budget for completed projects will be less than 1% over their original approved budget. Schedule control remains challenging with 53% of projects completed behind schedule by 90 days or more. However, there has been some progress in schedule control compared to 66% and 58% of projects completed behind schedule in 2015-16 and 2014-15, respectively.

The quality of projects completed last year remains exceptional by many measures, including innovative design to support world-class academic and research programs, high

user satisfaction levels, energy efficiency, LEED Platinum and Gold certifications, and numerous professional and construction industry awards.

**Active Projects:** Fiscal year 2016-17 saw a significant increase in the number and size of active projects. There were 306 active projects with a cumulative budget of \$6.1 billion as of June 30, 2017, compared to \$4.7 billion in active projects on June 30, 2016. Large programs at San Diego and San Francisco accounted for almost 50% of the total. Health sciences and medical centers accounted for 46% of the total active project investment. The cumulative augmentation rate to date for the active projects is 2.6% of their original approved budgets, excepting a large hospital project augmentation. However, budget control is increasingly challenging, reflecting unfavorable bid conditions in the over-heated California construction market, particularly in the San Francisco and Los Angeles regions. As of June 30, 2017, 95 active projects have been delayed more than 90 days beyond their original schedules, equal to 31% of the total active portfolio. Delays required to re-design and re-bid to stay on budget are increasing.

**Delegated Projects:** In 2008, the Regents delegated authority for budget and design approvals for capital projects to the Chancellors, via the President, for projects in the \$10 million to \$60 million (now \$70 million) range that meet eligibility criteria. From initiation through the end of fiscal year 2016-

17, 109 project budgets totaling \$2.6 billion were reviewed and approved via the Delegated Process, compared to 101 project budgets totaling \$6.6 billion approved under the Standard Process. The 2016-17 budget and schedule reports for active and completed projects continue to show that projects approved under the Delegated Process have had, on a percentage basis, fewer budget augmentations and fewer schedule delays than projects approved under the Standard Process.

**Student Housing:** About 900 beds of student housing were delivered by major capital projects completed in 2016-17. The President's Student Housing Initiative goal is on track to provide 14,000 new affordable student beds by 2020 and the total of new affordable student beds is anticipated to reach 28,000 by 2022. Approximately 50% of the new beds will be provided by major capital projects and 50% by public private partnerships.

**Capital Program Initiatives:** Two new project delivery methods are currently in development. The "progressive" design/build delivery method is a variation of the highly successful traditional design/build delivery method that provides increased flexibility to adjust scope before the guaranteed maximum price is established. In addition, an innovative hybrid project delivery method is under development to incentivize stronger control of budgets and schedules for large, complex, and high-risk projects such as acute care hospital facilities.

## COMPLETED PROJECTS

93 major capital projects with a cumulative budget of approximately \$790 million were completed in fiscal year 2016-17. “Completed” is defined by the issuance of the Notice of Substantial Completion and/or Certificate of Occupancy.

The value of completed projects was down from 2014-15 (\$1.3 billion) and 2015-16 (\$1.4 billion). The reduction in completed projects was offset by a significant increase in active projects.

New construction comprised 56% of the cumulative budget for completed projects. 80 of the 93 projects had budgets under \$10 million, consisting mostly of renovations. 13 projects, primarily new construction, had budgets over \$10 million:

- Mesa Court Expansion, UCI
- Geffen Hall, UCLA
- Jules Stein Eye Institute Improvements, UCLA
- Betty Irene Moore Hall, UCD
- Manetti Shrem Museum of Art, UCD
- East Campus Parking Structure, UCSD
- International Complex Phase 1, UCD
- Vet Med Student & Admin. Center, UCD
- Memorial Union Renewal, UCD
- Ann E. Pitzer Center, UCD
- Telecom Infrastructure Improvements, UCSC
- Moffit Library 4<sup>th</sup> & 5<sup>th</sup> Flr Renovations, UCB
- Hillcrest Main Operating Rooms, UCSD

Photographs and Information about the nine largest completed projects is presented on the cover and the following pages. The entire list of completed major capital projects in 2016-17 is in Appendix A.

### Budgets

As of the end of the fiscal year, 79 of the 93 projects were on or under their approved budget.

Augmentations were required for 14 projects, equal to less than 1% of the total original budgets.

Reasons for augmentations are often the same as the reasons for delay, as discussed in detail in the next section on schedules.

Current budget projections indicate that future cost reversions for projects completed in 2016-17 may offset cumulative augmentations, with final costs close to the original approved aggregate budget. Remaining costs, change orders and claims will be finalized in the coming months and ending budgets will be reported in the Annual Report on Major Capital Projects Implementation for 2017-18.

### Schedules

Schedule performance for projects completed in 2016-17 showed some improvement from previous years, but schedules clearly remain a major challenge with opportunity for improvement. The percentage of late projects, defined as more than 90 days behind their original approval schedule, was 53% in 2016-17, compared to 66% in 2015-16 and 58% in 2014-15.

Delays have impacts to both cost and program. Delays during design increase construction bids due to inflation. Delays during construction increase interest costs for debt-financed projects and increase project inspection and management costs. Delays also have adverse impacts on academic programs, research programs, grant obligations and revenue generation for auxiliaries and health services.

Common reasons for delays include:

- Scope change - new donor or grant funds
- Scope change - programmatic changes
- Scope change - technology changes
- Delay in funding availability
- Re-design & re-bidding to meet budget
- Contractor performance default
- Hidden conditions and weather

Protracted processes to define the original project scope and subsequent changes in scope are the leading causes of extended project durations. Improved processes for scope definition and change control are therefore a significant opportunity to reduce cost and delay.

Some scope changes, such as required to incorporate new donor or grant funds, are positive. Other scope changes are necessary or desirable due to changes in academic programs, business needs or changes in research focus and technology. Delays in donor funding campaigns or delays in the release of funding may be necessary. Delays also occur in design if re-design or re-bidding is required to stay within the budget. Delays during construction may be unavoidable (such as for hidden conditions, weather or labor strikes) or they may incur financial penalties to the contractor if caused by the poor performance of the contractor or subcontractors.

### Project Quality

The quality of projects completed last year remains exceptional by many measures, including energy efficiency, user satisfaction, and a high percentage of LEED Platinum and Gold certifications.

University projects also continued to garner many awards from architectural and engineering professional societies, construction industry organizations and publications. The UC Irvine Mesa Court Expansion project earned the 2017 National Project of the Year award from the Design Build Institute of America. The UC Davis Manetti Shrem Museum of Art was named one of the top ten best buildings of 2017 by both the Wall Street Journal and the LA Times, with the LA Times critic proclaiming that this relatively small project is not what you might expect “to boost your faith in the future of American architecture, but is accomplished enough, in its precise and unhurried way, to do just that.”

**Table 1 - Completed Major Capital Projects, Fiscal Year 2016-17**

	# of projects	Budget *	Augmentations **	Delays ***	Budget *																
						\$20M	\$40M	\$60M	\$80M	\$100M	\$120M	\$140M	\$160M	\$180M	\$200M	\$220M	\$240M	\$260M	\$280M	\$300M	
Ag & Nat Res	0	n/a	n/a	n/a																	
Berkeley	11	\$37,500,000	4%	64%	<div><div></div><div></div><div></div></div>																
Davis	14	\$213,300,000	2%	64%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>																
Irvine	9	\$142,600,000	-5%	33%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> <div></div>																
Los Angeles	23	\$248,400,000	1%	61%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>																
Merced	0	n/a	n/a	n/a																	
Riverside	1	\$1,000,000	0%	100%																	
San Diego	22	\$93,900,000	0%	27%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>																
San Francisco	11	\$35,400,000	5%	73%	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>																
Santa Barbara	0	n/a	n/a	n/a																	
Santa Cruz	2	\$17,500,000	0%	50%	<div><div></div><div></div><div></div></div>																
System-wide	0	n/a	n/a	n/a																	
TOTAL	93	\$789,600,000	0%	53%																	

\* Budget = Budget as of June 30, 2017

\*\* Augmentations = % increase to original approved budget

\*\*\* Delays = % of projects delayed more than 90 days from original approved schedule

## Ann E. Pitzer Center, UC Davis

New music center with a 400 seat recital hall featuring exceptional acoustics, 11 practice rooms and audio recording facilities. Recital hall serves as a classroom lecture hall when not required for performances.

\$17.8 million | Design/Build delivery | LEED Gold



***“We are thrilled to open a facility where students, faculty and guest artists will be able to enjoy more and better space for learning, a state-of-the-art recording studio and a splendid, professional venue for performances, along with many other amenities.”***

- Carol Hess, Music Department Chair

## Geffen Hall, David Geffen School of Medicine, UCLA

New health sciences teaching facility supporting innovative teaching styles, state of the art health sciences teaching technology, and collaboration between students, faculty, and the broader community.

\$103.5 million | Construction Manager delivery | LEED Platinum



***“We are seeking to create world leaders in health and science. Part of that is recruiting those individuals. You can imagine a student coming to the David Geffen School of Medicine, already knowing about the strength of our program, but then seeing this building and thinking I could be a part of this community.”***

- Clarence Braddock, Vice Dean of Education



## Manetti Shrem Museum of Art, UC Davis

New art museum featuring state of the art exhibition galleries, teaching facilities, maker spaces, lecture hall & community room, and outdoor gathering and display spaces.

\$30.5 million | Design/Build delivery | LEED Platinum



***“Born of a distinctive legacy, the Manetti Shrem Museum is committed to the interdisciplinary experimentation that makes UC Davis a leading university. The museum’s dedication to impactful education is evident in every aspect, from programming to architecture.”***

- Rachel Teagle, Director of Manetti Shrem Museum of Art

## Memorial Union Renewal, UC Davis

Renovation and expansion of the existing student Memorial Union to provide much-needed informal study space, a re-imagined bookstore, student services and indoor recreational activities.

\$23.4 million | Construction Manager delivery | LEED Gold pending



***“This comprehensive renovation took the historic Memorial Union and celebrated its history as the home of ASUCD and a dynamic on-campus destination for students and the campus community.”***

- Emily Prieto-Tseregounis, AVC for Student Affairs



## International Center, UC Davis

New building featuring classrooms, computer labs, conference rooms, advising and administrative spaces, a multi-purpose room and a large commons area connected to an outdoor courtyard.

\$29.8 million | Design/Build delivery | LEED Gold



***“The UC Davis International Center serves as a hub for the university’s worldwide presence and impact by establishing a centralized, welcoming environment for key international programs and creating opportunities for international and domestic students, faculty, staff, scholars and others in the campus community to collaborate.”***

## Jules Stein Eye Institute, UCLA

Renovation of the Jules Stein Eye Institute building to improve seismic and life safety, provide modern laboratories for vision science research, and to create a new 3 story atrium lobby providing a sense of community and better access.

\$56.6 million | Construction Manager delivery | LEED Gold pending



***“More space allows us to create revolutionary new programs in treating eye disease, using techniques such as stem cells, gene therapy, and even “big data,” to help us gain a 360-degree view of a patient’s health problems, leading to new findings, novel treatment plans and more accurate diagnosis.”***

- Dr. Bartly Mondino, Ophthalmology Department Chair

## Betty Irene Moore Hall, UC Davis

New academic building supports the graduate programs of the School of Nursing and inter-disciplinary professional health sciences education. It features collaborative learning spaces and clinical simulation suites.

\$54.1 million | Design/Build delivery | LEED Platinum



***“This new home for the Betty Irene Moore School of Nursing and health sciences education is a learning space unlike any other at UC Davis. We don’t want passive students who just take in information and regurgitate it. We want active learners with a quest to make a difference in health care.”***

- Gary S. May, UC Davis Chancellor

## Veterinary Medicine Student & Admin Center, UC Davis

New building provides a center for services and community for veterinary school students, staff, faculty and administration with new offices, meeting spaces and a health sciences district dining facility.

\$27.9 million | Construction Manager delivery | LEED Gold



***“We are proud that this new building, which completes the circle in our veterinary school campus, is fittingly dedicated to the support of our students.”***

- Michael Lairmore, Dean of School of Veterinary Medicine

## ACTIVE PROJECTS

There were 306 active major capital projects with a cumulative budget of about \$6.14 billion in design or construction as of June 30, 2017. “Active” projects are defined as projects with approved preliminary plan funding or full budget approval that are not yet complete.

As shown in Table 2, the end of fiscal year 2016-17 volume of active projects is a major increase from the \$4.75 billion in design or construction at the end of fiscal year 2015-16, representing a 20% increase in quantity of projects and a 30% increase of cumulative investment.

**Table 2 - Active Major Capital Projects**

Year	2014-15	2015-16	2016-17
<b>Active projects</b>	248	256	306
<b>Original budgets</b>	\$4.75b	\$4.35b	\$5.73b
<b>Current Budgets</b>	\$5.18b	\$4.74b	\$6.14b
<b>% change from original</b>	9%	9%	7%
<b>% of projects delayed &gt; 90 days</b>	20%	38%	38%

The complete list of Active Major Capital Projects as of June 30, 2017 is in Appendix B.

### Investment by Use

As shown in Table 3, total investment increased significantly in Medical Center & Health Sciences and moderately in Auxiliary, primarily for student housing.

**Table 3 - Investment by Use**

Type	2015-16		2016-17	
	Budget	% Mix	Budget	% Mix
<b>Education &amp; General Use</b>	\$2.17B	46%	\$2.16b	35%
<b>Auxiliary</b>	\$0.75B	16%	\$1.15b	19%
<b>Med Cntr/ Health Sci</b>	\$1.82B	38%	\$2.83b	46%
<b>Total Investment</b>	\$4.74B	100%	\$6.14b	100%

Compared to the previous fiscal year, the percentage of investment in Medical Center & Health Sciences facilities increased significantly to 46% of the total, Auxiliary increased slightly to 19% of the total and Education & General Use declined to 35% of the total.

About 77% of the total investment is for new buildings and infrastructure and about 23% is for building renovation and infrastructure renewal.

### Investment by Campus

As shown on Table 4, capital project investment varies by campus, with the two largest programs at San Diego and San Francisco accounting for almost 50% of the total value.

### Budget Performance

As of June 30, 2017, augmentations have been required for 43 projects, equal to 13% of the active project portfolio, for an aggregate budget increase of about 7% over the original approved budgets.

However, a large augmentation for a hospital project at San Diego accounted for \$279 million of the cumulative augmentation total of \$411 million.

The cumulative augmentation rate for the other 305 projects is 2.6%.

The reasons for augmentations are generally the same reasons for schedule delay discussed in the previous section on Completed Projects. Scope change remains a primary cause, although construction bids exceeding budget projections are more common at campuses experiencing the strongest decline in market competition.

### Schedule Performance

As of June 30, 2017, 95 active projects have been delayed more than 90 days beyond their original schedules, equal to 31% of the total active portfolio. The reasons for schedule delays are as discussed in the previous section on Completed Projects, although there is an increasing frequency of delays required to re-design and/or re-bid projects to stay within the approved budget.

### Construction Cost Trends

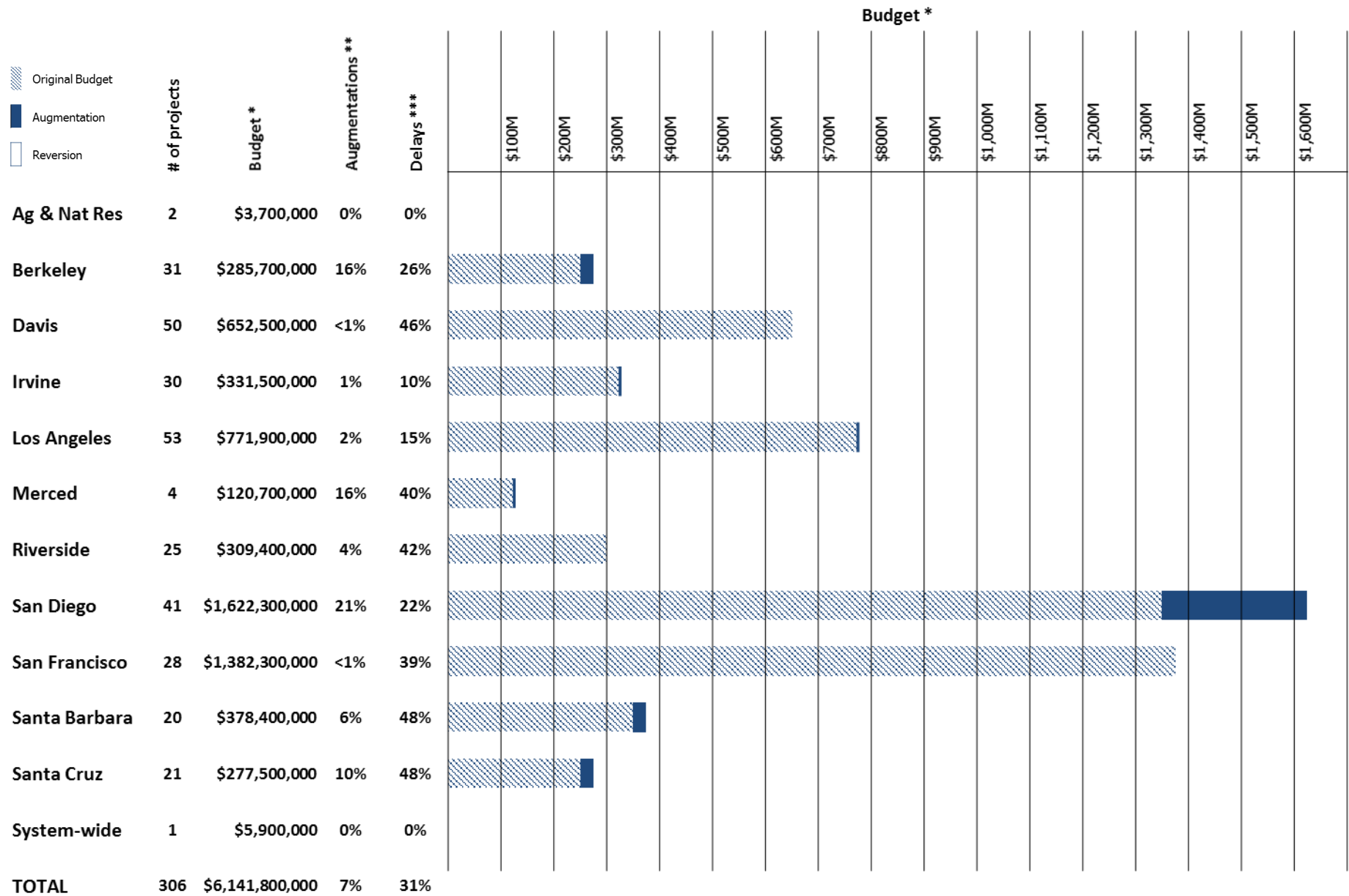
Utilizing a variety of contract delivery methods, University capital projects are publicly advertised, competitively bid to all qualified bidders, and awarded to the lowest responsive bidder or the bidder offering the best value.

Target budgets are set at the onset of a project and must therefore attempt to predict construction market conditions years in advance of the bid date. Construction costs are strongly influenced by the bid climate at the time the project is out for bid.

**Bid climate:** The “bid climate” for a project is essentially the level of competition for profit and overhead by the general contractor, 1<sup>st</sup> tier subcontractors (usually 20-30) and the 2<sup>nd</sup> tier subcontractors and suppliers. The bid climate is highly volatile and largely independent from the underlying direct cost of construction materials and wages.



**Table 4 - Active Major Capital Projects as of June 30, 2017**



\* Budget = Budget as of June 30, 2017

\*\* Augmentations = % increase to original approved budget

\*\*\* Delays = % of projects delayed more than 90 days from original approved schedule

In the aftermath of the recession of 2008-09, some University projects bid 10% to 30% under budget due to the favorable bid climate, even though the underlying cost of wages and materials remained largely unchanged. Although this example is an extreme situation where bidders were taking projects at or below cost just to stay in business, it illustrates the degree to which costs are influenced by the bid climate.

**Materials and Wages:** Cost indexes for construction materials and wages indicate an average increase of 4.5% in 2016-17 for University locations in California, compared to a national increase of approximately 4.3%. In absolute terms, the costs of construction materials and labor in California averages 15% higher than the national average. As shown in the chart in Table 5, there are significant differences in the cost of materials and wages between University locations, ranging from 9% higher than the national average in San Diego to over 28% higher than the national average in San Francisco.

Leading indicators such as a moderate decrease in design professional billings in late 2017 and interest rate increases may portend a softening of the national construction market. However, there are currently no indications that the California construction market will become more competitive in the near term.

## Strategies for Budget Control

The campuses are exploring a number of strategies to address budget control in the current market:

**Market timing:** Due to their funding structure, public agencies, including the University, tend to increase the size of their capital programs when the construction market is least favorable and tend to slash their capital programs when the market is most favorable. Due to the pressing need to address growth and renewal as soon as funds are available, it is difficult to align most University projects with

the most competitive bid conditions. However, some long-term programs such as deferred maintenance, capital renewal and infrastructure improvements may have the flexibility to take a more strategic approach to investment timing.

**Initial scoping:** It is essential that the programming and design process for facilities for world-class academic programs and cutting edge research and health care include close engagement by faculty, staff and students to insure that these investments are optimized to meet needs. However, campuses take anywhere from several months to several years to define the scope of a capital project before design even begins. Effective strategies to make this engagement more efficient and more effective include personal involvement by campus leadership, intensive workshops rather than protracted committee meeting schedules, alignment of the project schedule with the many limitations of the academic schedule, and a realistic understanding of budget constraints relative to program aspirations.

**Scope changes:** Although many scope changes are unavoidable or even desirable, the campus leadership should be fully informed of the potential cost and schedule consequences before mandating project scope changes during design or construction.

**Project delivery method:** The University employs many different project delivery methods, described in detail in the Capital Program Initiatives section on page 14. Each has its pros and cons. Campuses carefully consider the options and are continuously exploring refinements and new delivery methods.

Traditional Design/Bid/Build (“Lump Sum”) may be the most competitive delivery method, but it requires an adequate and willing bid pool, strong bid documents, and strong project management and inspection resources to be successful. In addition, the savings from a low bid may be eroded by delays, claims and poor quality. This method can adapt to scope change, but often at very high cost.

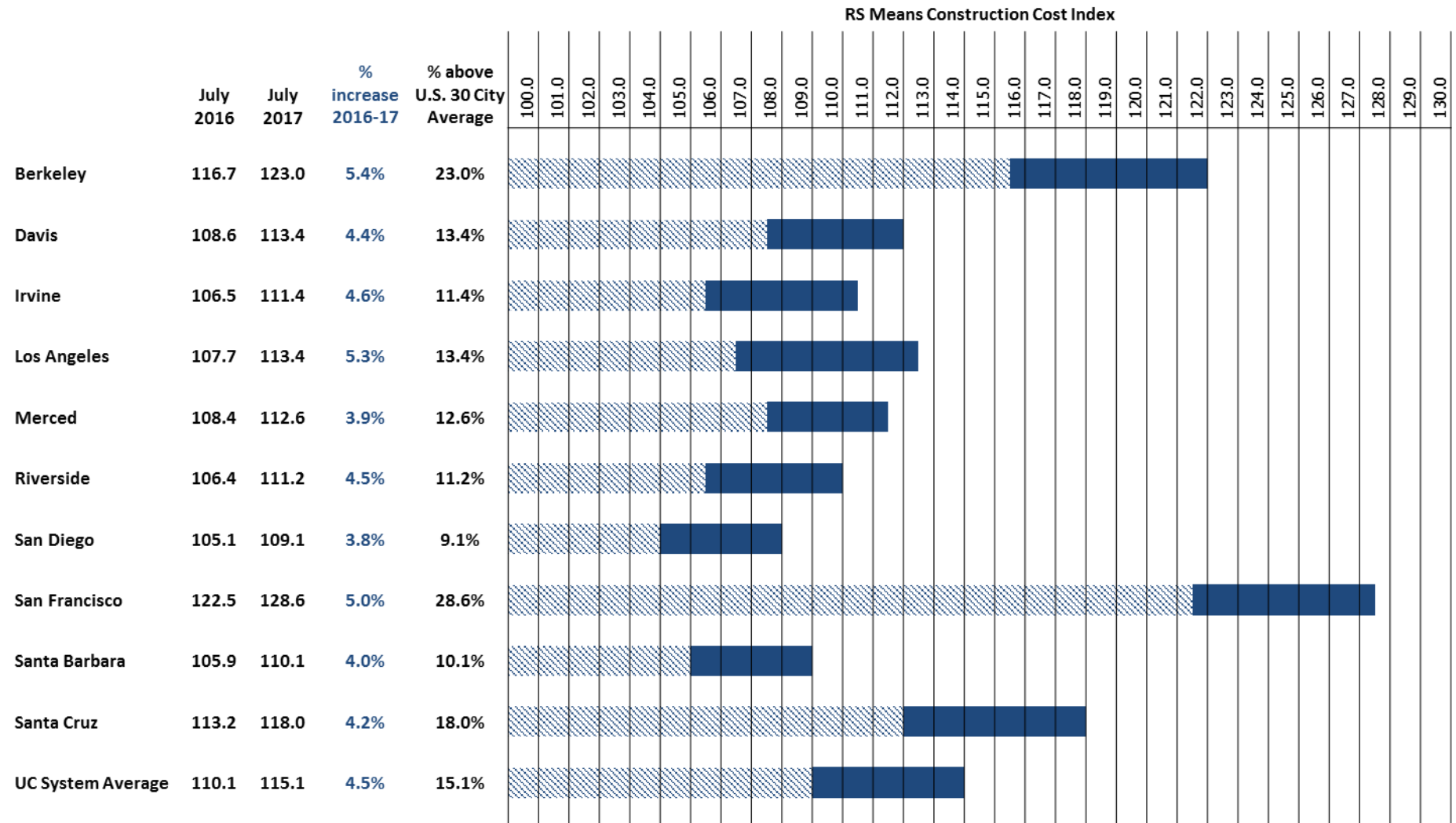
The Design/Build method is also highly competitive, and has additional opportunities for savings and schedule compaction resulting from a highly collaborative design and construction process. University Design/Build projects have an excellent track record for budget and schedule control. Design/Build projects also shift the risk for budget control to the design/build entity very early in the project schedule, providing assurance that the project will be delivered on budget prior to University investment in time and funds for full design. Design/Build requires that the campus fully define the scope of the project at the onset. However, this method is relatively inflexible if the scope cannot be defined early, or if changes in scope are later necessary.

In non-competitive construction markets such as currently exist in the San Francisco region and, more recently, Los Angeles, Design/Bid/Build and Design/Build projects are not attractive to potential bidders because they have higher risk and lower profit margins than private sector projects awarded by negotiation rather than by competitive bidding. Campuses in non-competitive markets must therefore use other delivery methods in order to attract qualified bidders.

Various forms of the Construction Manager delivery method are attractive to contractors because of the lower cost to participate in the selection process, less competition from poorly qualified bidders and less financial risk to them. Apart from the issue of attracting qualified bidders, the Construction Manager delivery method often provides several other advantages to the University, particularly for projects where there is a higher risk of scope change or a greater need for control of design, schedule and quality. A new version of the Design/Build method, called Progressive Design/Build, is currently under development to combine some of the advantages of the Design/Build and Construction Management methods. This new method is discussed in more detail on page 14.

# Table 5 - Construction Materials and Labor Costs

Source: RS Means July 2017 (100.0 = U.S. 30 city average in July 2016)





## UPCOMING PROJECTS

### Public Private Partnerships

Public private partnerships (P3) are currently underway or in planning to provide over 14,000 beds of student housing on six campuses by 2022. In addition, public private partnerships are underway to provide academic, research and student support facilities at UC Merced and outpatient clinical facilities at UC Riverside.

### Major Capital Projects

Over 220 major capital projects with funding plans are scheduled to begin planning or preliminary design in fiscal years 2017-18 and 2018-19. The complete list of upcoming major capital projects, grouped by campus, is in Appendix C.

**Table 6**

#### P3 Student Housing Projects

	Student Beds	Gross Sq. Ft.	Status	First Phase Delivery Date
<b>Santa Cruz:</b> Family Student Housing	154	135,100	Planning	2020-21
<b>Santa Cruz:</b> Student Housing West	2,876	961,809	Planning	2021-22
<b>Davis:</b> West Village Student Hsg.	3,680	1,323,747	Planning	2020-21
<b>Davis:</b> Orchard Park Grad Student Housing	1,520	642,374	Planning	2020-21
<b>Riverside:</b> Dundee-Glasgow	808	227,215	Planning	2020-21
<b>Riverside:</b> North District Phase 1	1,500	600,000	Planning	TBD
<b>Berkeley:</b> Bancroft Hall	779	185,855	Construction	2018-19
<b>Merced:</b> Project 2020 Phase 1	700	252,648	Construction	2018-19
<b>Merced:</b> Project 2020 Phase 3	1,000	721,587	Planning	2020-21
<b>Irvine:</b> East Campus Phase IV	1,440	568,930	Construction	2019-20
<b>Total:</b>	<b>14,457</b>	<b>4,428,265</b>		

#### Other P3 Projects

	Student Beds	Gross Sq. Ft.	Status	First Phase Delivery Date
<b>Riverside:</b> Outpatient Pavilion	N/A	155,000	Planning	2021-2022
<b>San Francisco:</b> 2130 Third Street	N/A	170,000	Construction	2019-2020
<b>Merced:</b> Project 2020 Phase 2	N/A	216,775	Construction	2019-20
<b>Total:</b>		<b>541,775</b>		

## DELEGATED PROJECTS

The pilot phase of the Delegated Process for Capital Improvement Projects (Delegated Process) was initiated in 2008. The Delegated Process is an alternative to Regental approval for projects with a total project cost of between \$10 million and \$70 million. Chancellors have had existing authority to approve projects with total budgets up to \$10 million without oversight from the Office of the President. The Regents delegated authority for budget and design approvals for capital projects to the Chancellors, via the President, for the portfolio of projects in the \$10 million to \$60 million (now \$70 million) range that meet eligibility criteria. This option increases campus autonomy, and provides for campus accountability for capital project delivery, while adhering to protocols for compliance with statutory and policy requirements established for Regental approvals. The pilot phase of the Delegated Process sunsets on March 31, 2018.

As shown in Table 7, from initiation through the end of fiscal year 2016-17, 109 project budgets totaling about \$2.6 billion were reviewed and approved via the Delegated Process, compared to 101 project budgets totaling about \$6.6 billion approved by the Regents under the Standard Process. All currently active projects approved under the Delegated Process are highlighted in Appendix B – List of Active Major Capital Projects.

As reported in previous years and as shown in Table 8, the 2016-17 budget and schedule performance reports for active and completed projects over \$10 million indicate that projects approved under the Delegated Process had (on a percentage basis) fewer and smaller budget augmentations and fewer schedule delays than projects approved under the standard process.

**Table 7 - FY 2009-10 to FY 2016-17 Delegated and Regent's Budget Actions**

Fiscal Year	Delegated Process		Standard Process	
	Budgets	Actions	Budgets	Actions
2009-10	\$199 M	8	\$2,014 M	13
2010-11	\$317 M	17	\$351 M	14
2011-12	\$276 M	15	\$320 M	8
2012-13	\$221 M	12	\$589 M	11
2013-14	\$314 M	14	\$688 M	20
2014-15	\$504 M	18	\$502 M	13
2015-16	\$356 M	10	\$164 M	3
2016-17	\$382 M	15	\$1,995 M	19
<b>Total</b>	<b>\$2,569 M</b>	<b>109</b>	<b>\$6,623 M</b>	<b>101</b>

**Table 8 - FY 2016-17 Active and Completed Projects Over \$10 Million**

	Delegated Process	Standard Process
Number of projects	40	52
Amount of original budgets	\$1,204 M	\$4,294 M
Cumulative approved budget changes	\$23 M	\$359 M
Year-end budget	\$1,227 M	\$4,653 M
Percent change from original budget	2%	8%
Projects with budget changes	8	18
Percent of projects with budget savings	3%	6%
Percent of projects with budget augmentation	18%	30%
Completed projects > 90 days behind schedule	20	28

## CAPITAL PROGRAM INITIATIVES

### Delivery Methods

Facilities to support University operations are provided through a variety of delivery methods. Major capital projects are projects over \$750K that are financed, designed, constructed, and operated by the University. All major capital projects are publicly advertised and awarded to the qualified bidder with either the lowest lump sum project cost or, under the “Best Value” process, the lowest cost per unit of value.

Although several methods of project delivery are allowed under the California public contract code, University major capital projects are most commonly delivered using one of three general methods.

Other projects, primarily housing, are increasingly delivered through public/private partnerships. The following summarizes the most common project delivery methods:

**Design/Bid/Build:** Complete and detailed drawings and specifications are prepared by design professionals under contract to the University. The construction contract is publicly advertised for lump sum bids from qualified general contractors. The lowest responsive bidder is awarded the contract to construct the project.

**Design/Build:** Detailed program and performance requirements (but not detailed drawing and specifications) are prepared by design professionals under contract to the University and publicly advertised for bids and schematic design proposals from qualified teams composed of a general contractor, architect, engineers, and subcontractors. The design proposals are scored for points by technical experts and a selection committee prior to opening the bids. The bids are

then opened and the bid amounts are divided by each score. Under the optional “best and final offer process”, the campus may at this point elect to revise the scope of the project and request revised bids from all teams. The team with the lowest cost per point is awarded the contract to complete the design and to construct the project.

**Construction Manager:** Complete and detailed drawings and specifications are prepared by design professionals under contract to the University. During the design phase, the University obtains bids from qualified general contractors to provide construction management services, including review of the design as it progresses. Bids for construction management services are based on fees for management, overhead, and profit but do not include the direct cost of the work performed by the subcontractors. The construction manager contract is awarded on the basis of the lowest fee or, using the “Best Value” selection method, the lowest cost per point scored for experience, qualifications, and capabilities. Upon completion of the design by the University’s design professionals, the construction manager publicly advertises each trade package and awards the trade packages to subcontractors on the basis of the lowest qualified bid or the lowest cost per point of value. The construction manager completes construction of the project with the awarded subcontractors.

**Public Private Partnerships:** There are many variations of public private partnerships used to provide facilities to support University purposes. The most common form of the University’s public private partnerships involves the lease of University land to a third party entity for the purpose of providing facilities for University purposes, primarily student housing. The facilities are generally financed entirely or partially by the third party, which is also typically responsible for the design, construction, and operation of the completed

facility for the term of the ground lease, at which point the ownership reverts to the University.

**Emerging project delivery methods:** There are many variations of the methods described above, as well as new delivery methods emerging in the industry. The Office of the President and the campuses collaborate to continuously review new options and develop new methods and contracts to better meet the needs of the capital program. The University is currently developing a “Progressive” Design/Build delivery method that differs from the traditional design/build delivery method by delaying the finalization of the construction contract amount until the University and design/build team have collaborated over an extended preliminary design phase to refine the program and design to achieve best value. The University is also developing an innovative hybrid project delivery method combining aspects of the construction manager, design/build, and cost-plus delivery methods to achieve more successful control of budgets and schedules for very large, complex, and high-risk projects such as acute care hospital facilities.

**Criteria for selecting the project delivery method:** Every project delivery method has advantages and disadvantages. The optimum method for a particular project depends upon many factors. Factors considered by campus architects, capital planners and campus leadership in selecting the project delivery method for a project include the following:

- Debt limits and capital investment strategies
- Market conditions and bidder availability
- Project priorities for cost, quality, and schedule
- Likelihood and risk tolerance for scope changes
- Project management capability to execute unfamiliar delivery methods requiring different types of skillsets and experience



*The Office of the President provides a wide range of support services for the campus capital programs, including training, policy development, legal agreements, legislative and code advocacy, contractor dispute resolution, state agency coordination, oversight of regulatory compliance programs and administration of reviews and approval processes for campus capital financial plans, long-range development plans, project budgets, financing, design, and environmental quality.*

## Training and Best Practices

**Capital Programs Institute:** The Capital Programs Institute (CPI) continues to provide a wide range of in-depth training sessions and webinars for managers of the capital programs. Sessions range from two-hour webinars to multiple day conferences. In 2016-17, CPI offered nine training sessions and served more than 680 staff from ten campuses, five medical centers, the national laboratories, and UCOP.

CPI events are vehicles for inter-departmental and inter-campus sharing of best practices. The training sessions attract a variety of campus and UCOP personnel including safety managers, energy professionals, project managers, environmental planners, capital planners, contract administrators, architects, engineers, building officials, and real estate officers. Some workshops have also attracted other state public agencies resulting in cross-agency sharing of best practices and program strategies. These valuable sessions help ensure communication and understanding of regulatory and policy requirements, as well as consistent management procedures from project planning through design and construction.

CPI session topics are suggested by campus capital program professionals, UCOP Design and Construction Services, the Office of General Counsel, the Office of Risk Services, and other UCOP units. Notable sessions in FY 2016-17 included:

- Capital Asset Delivery – Programming and Financing a Project
- Best Practices for Managing Small Projects
- Best Value Procurement
- Understanding UC Contract General Conditions – a six-part webinar series.

CPI leverages current web-based technology for training and information sharing, but in-person meetings with colleagues still proves to be highly valuable for networking, sharing best practices, and sparking innovation.

**Capital Programs Summit:** In October 2016, CPI hosted the first-ever UC Integrated Capital Strategies Summit at the UCLA Luskin Conference Center, convening over 320 leaders from all parts of the capital program, including Design & Construction Services, Capital Planning, Physical and Environmental Planning, and Real Estate Services and Strategies. The Summit addressed pertinent issues such as increasing enrollment, providing affordable housing, expanding research, and maintaining critical infrastructure in furtherance of the UC mission. In addition to thought-provoking keynote speakers, the Summit provided numerous breakout sessions on a wide range of specialized capital programs issues, panel discussions, networking opportunities, and tours of the UCLA campus. Planning is currently underway for the next Capital Programs Summit in the spring of 2019.

**UC Facilities Manual:** The web-based UC Facilities Manual is the central resource for capital programs policies, procedures, template contract agreements, and best practices. The manual is continuously updated to reflect changes in policy, delegations of authority, recent legislation, and implementation of

new project delivery methods. The Facilities Manual and its associated template documents are essential for the successful delivery of the University's large and complex capital program.

## Legislative and Code Advocacy

The Office of the President monitors legislative proposals and advocates for legislation to benefit the University's capital program, and was successful in securing legislative approval to extend the "Best Value" option for contractor selection. OP and campus staff also participate on several building code advisory committees to advocate for the interests of the University's capital program.

## Capital Program Analytics

The University is working to improve its systems and processes for project data collection and analysis in 2017-18, with primary focus on three areas:

**Construction cost benchmarking:** Expand the range of available data to include peer institutions and private sector comparables. Provide easy campus access to consistent and reliable data to inform the development of project budgets, facilitate budget approvals and benchmark performance.

**Project delivery method metrics:** Develop objective performance metrics to compare the relative strengths and weaknesses of the University's project delivery methods. Metrics to include cost, budget control, schedule duration, schedule control, life cycle value, and sustainability. These metrics will assist campuses in identifying the optimum delivery method for a given set of conditions as well as assist in establishing realistic performance goals.

**Project management processes:** Track all non-construction project costs to benchmark against peers within and without the University system and to identify opportunities for enhanced training and process improvements.

## Regulatory Autonomy

The University has significant regulatory autonomy for the enforcement of building codes and other codes for fire/life safety, accessibility, and energy efficiency relating to its projects. This autonomy provides major benefits to the University capital program in reducing regulatory delays and inconsistency in interpretations and enforcement protocols. The Office of the President continuously coordinates with state agencies and the campuses to insure the integrity of the campus building official and campus fire marshal programs and to meet the conditions for renewal of delegations of authority to the University. In the past year, several agreements extending authority to the University from the Office of the State Fire Marshal and the Office of Statewide Health Planning & Development (OSHDP) were successfully executed.

## Sustainability

The inventory of the University's buildings and facilities is rapidly increasing in response to growth in enrollment, research funding and the health system. This growth poses significant challenges and opportunities to meet the University's environmental sustainability goals and the President's Carbon Neutrality Initiative.

### LEED (Leadership in Energy Efficiency and Design)

**(Design):** All new University buildings have the policy goal of meeting LEED Gold, with LEED Silver as a minimum requirement. In 2017, the University was awarded five LEED Silver, 11 LEED Gold, and five LEED Platinum certifications, bringing the University's total to 276 certifications system-wide. The latest LEED version includes strong incentives related to energy efficiency. In addition, LEED incentives related to water conservation are an increasingly urgent focus on many campuses in response to long term local and state water shortages resulting from growth and adverse climate change.

**Energy efficiency:** All new University buildings are required to outperform California's stringent energy code by at least 20%. University projects completed in 2017 outperformed code by 27% on average. In addition, the University's Sustainable Practices Policy requires all new construction and major renovation projects to register with *Savings by Design*, a program that provides financial incentives for exceeding the energy code. In 2016, 23 projects received a total of \$1.7 million in incentives and those projects are projected to avoid over \$600,000 annually in energy costs due to their energy-efficient design strategies.

**Carbon Neutrality Initiative:** The President's Carbon Neutrality Initiative has set the goal of reaching carbon neutrality by 2025. As the capital program continues to add new buildings at an accelerating pace, the energy efficiency of new buildings and the procurement of carbon-neutral energy sources are critical to achieving carbon neutrality at the lowest cost to the university. Strategies to design new buildings to carbon neutral standards, including all-electric buildings using carbon neutral electricity, are being explored. In addition, many campuses have central heating, chilling, and co-generation plants that need to be replaced and/or expanded to meet the increasing demand in the near future. A system-wide planning meeting to explore new and alternative central plant strategies in alignment with the carbon neutrality initiative is being planned for early 2018.

# Appendices

Appendix A – List of Completed Major Capital Projects 2016-17

Appendix B – List of Active Major Capital Projects as of June 30, 2017

Appendix C – List of Upcoming Projects 2017-2019



## Appendix A – List of Completed Major Capital Projects 2016-17

Notice of Substantial Completion or Certificate of Occupancy issued between July 1, 2016 and June 30, 2017

Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Reversions as of 06/30/17	%	Reasons for Augmentation
ALL PROJECTS			\$789,155,991	\$789,637,996	\$482,005	0.1%	
UCI	Mesa Court Expansion	New	\$133,757,000	\$126,257,000	(\$7,500,000)	-5.6%	
UCLA	Geffen Hall (formerly Teach. & Learn. Cntr. for Health Sci.)	New	\$104,700,000	\$103,521,000	(\$1,179,000)	-1.1%	
UCLA	Jules Stein Seismic Correction and Program Improvements	Renovation	\$57,000,000	\$56,634,000	(\$366,000)	-0.6%	
UCD	Betty Ann Moore Hall (formerly Health Sci. Education Exp.)	New	\$54,084,000	\$54,084,000	\$0	0.0%	
UCD	Jan Shrem and Maria Manetti Shrem Museum of Art	New	\$30,000,000	\$30,500,000	\$500,000	1.7%	Scope added by Chancellor
UCSD	East Campus Parking Structure 2	New	\$29,000,000	\$29,000,000	\$0	0.0%	
UCD	International Complex Phase 1	New	\$28,367,000	\$29,808,000	\$1,441,000	5.1%	User request for enhancements
UCD	Veterinary Medicine Student Services and Admin. Center	New	\$27,638,000	\$27,933,000	\$295,000	1.1%	
UCD	Memorial Union Renewal	Reno & New	\$23,446,000	\$23,446,000	\$0	0.0%	
UCD	Ann E. Pitzer Center (formerly Classroom & Recital Hall)	New	\$17,027,000	\$17,784,000	\$757,000	4.4%	3-year delay in obtaining donor funding
UCSC	Telecommunications Infrastructure Improvements Phase A	Renovation	\$16,374,000	\$16,374,000	\$0	0.0%	
UCB	Moffitt Library 4th and 5th Floor Renovation	Renovation	\$14,400,000	\$14,400,000	\$0	0.0%	
UCSD	UCSDMC Hillcrest Main Operating Rooms HVAC Upgrade	Renovation	\$11,500,000	\$11,500,000	\$0	0.0%	
UCD	University Tower Intensive Care Unit 5th Floor Remodel	Renovation	\$9,996,000	\$9,996,000	\$0	0.0%	
UCSD	Muir College Tuolumne Apts Life Safety Improvements	Renovation	\$9,500,000	\$9,500,000	\$0	0.0%	
UCD	Administrative Support Building 2nd Floor Renovations	Renovation	\$9,150,000	\$9,150,000	\$0	0.0%	
UCLA	Sunset Village - Delta Terrace Renovation	Renovation	\$8,679,000	\$8,679,000	\$0	0.0%	
UCLA	Hedrick Hall Dining/Study Renovation	Renovation	\$8,240,000	\$9,100,000	\$860,000	10.4%	User requests
UCSF	MC A-5 Heart and Vascular Renovation	Renovation	\$8,000,000	\$8,365,000	\$365,000	4.6%	User requests for enhancements
UCLA	27235 Tourney Road First Floor Radiology Improvements	Renovation	\$7,900,000	\$7,900,000	\$0	0.0%	
UCSF	ACC Generator & Emergency Power Upgrade	Renovation	\$7,690,769	\$7,690,769	\$0	0.0%	
UCSD	Marshall Ocean View Terrace Renovation	Renovation	\$7,500,000	\$7,500,000	\$0	0.0%	
UCLA	Clark Library Seismic Correction	Renovation	\$7,300,000	\$9,104,000	\$1,804,000	24.7%	Field conditions.
UCLA	Geffen Hall Furniture and Equipment	New	\$7,000,000	\$7,000,000	\$0	0.0%	
UCSF	Parnassus Utilities Relocation Phase 1	Renovation	\$6,640,000	\$6,640,000	\$0	0.0%	
UCLA	Jules Stein Lab Casework and Interior Improvements	Renovation	\$6,500,000	\$6,500,000	\$0	0.0%	
UCSD	Robinson Bldg Complex - Global Pol. & Strat. Reno 1	Renovation	\$6,000,000	\$6,000,000	\$0	0.0%	
UCLA	TLC Site Preparation	New	\$4,300,000	\$4,300,000	\$0	0.0%	
UCSD	Geisel Teaching and Learning Commons	Renovation	\$4,268,000	\$4,268,000	\$0	0.0%	
UCLA	Botanical Garden Pavilion	New	\$4,250,000	\$4,980,000	\$730,000	17.2%	High bids
UCLA	Keystone-Mentone Apartment Units Renovation Step 2	Renovation	\$4,150,000	\$4,150,000	\$0	0.0%	
UCD	Earth and Planetary Sciences Shockwave Lab	New	\$3,958,000	\$4,023,000	\$65,000	1.6%	User requests
UCI	UCIMC B1A IR Expansion	Renovation	\$3,822,000	\$3,822,000	\$0	0.0%	
UCSD	Scripps Institute of Oceanography Eckart Bldg 2nd Flr	Renovation	\$3,800,000	\$3,800,000	\$0	0.0%	
UCLA	Sproul Hall Finish Refurbishment	Renovation	\$3,783,000	\$3,783,000	\$0	0.0%	
UCB	Cal Memorial Stadium TI	Renovation	\$3,706,871	\$4,788,678	\$1,081,807	29.2%	User request for visitor enhancement
UCLA	Rolfe Hall HVAC Installation	Renovation	\$3,306,000	\$3,306,000	\$0	0.0%	
UCB	12 KV Switching Stations #1 & #2 Replacement	Renovation	\$3,300,000	\$3,330,000	\$30,000	0.9%	Phasing to avoid service disruption
UCI	Site Improvements & Infrastructure - Phase 1	Infrastructure	\$3,225,000	\$3,225,000	\$0	0.0%	
UCB	Tang Center Renovation	Renovation	\$3,210,000	\$3,210,000	\$0	0.0%	
UCSD	Medical Center La Jolla - Thornton Hospital CT Scanner	Renovation	\$3,166,000	\$3,166,000	\$0	0.0%	
UCI	Building 1A HVAC Upgrades	Infrastructure	\$3,010,000	\$3,010,000	\$0	0.0%	
UCB	Evans Hall-CRP15 South Bank Elevators Renewal	Infrastructure	\$3,000,000	\$3,000,000	\$0	0.0%	
UCB	Moffitt CRP15 HVAC Central Plant Replacement	Renovation	\$3,000,000	\$3,000,000	\$0	0.0%	
UCLA	RRUMC - Emergency Department Expansion	New	\$3,000,000	\$3,000,000	\$0	0.0%	

## Appendix A – List of Completed Major Capital Projects 2016-17

Notice of Substantial Completion or Certificate of Occupancy issued between July 1, 2016 and June 30, 2017

Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Revisions as of 06/30/17	%	Reasons for Augmentation
ALL PROJECTS			\$789,155,991	\$789,637,996	\$482,005	0.1%	
UCSD	Urey Hall AH-1 and SupplyFan S-1 Renewal	Renovation	\$3,000,000	\$3,000,000	\$0	0.0%	
UCLA	Wilshire Center Fire Sprinkler Riser Replacement	Renovation	\$2,590,000	\$2,590,000	\$0	0.0%	
UCLA	Lab School Improvements Phase 1	Renovation	\$2,568,000	\$2,568,000	\$0	0.0%	
UCSD	Central Utilities Plant Fire Sprinkler Installation	Renovation	\$2,556,000	\$2,556,000	\$0	0.0%	
UCLA	10889 Wilshire Building - Telecom Installation Phase 1	Renovation	\$2,550,000	\$2,550,000	\$0	0.0%	
UCD	Radiation Oncology Remodel	Renovation	\$2,317,000	\$2,317,000	\$0	0.0%	
UCLA	Ackerman Loading Dock Replacement	Renovation	\$2,060,000	\$2,060,000	\$0	0.0%	
UCSD	Medical Cntr. La Jolla - Thornton Hosp. Env. Services Bldg	New	\$1,885,000	\$1,885,000	\$0	0.0%	
UCSF	M-10 West Wing S/M Pulmonary Dept Upgrades	Renovation	\$1,880,000	\$2,168,198	\$288,198	15.3%	High bids
UCSF	M,L-4 OR2 & OR3 Equipment Installation	Renovation	\$1,700,000	\$2,125,000	\$425,000	25.0%	
UCSF	MC L-B CT Replacement	Renovation	\$1,700,000	\$1,700,000	\$0	0.0%	
UCSF	University House Improvements 2015	Renovation	\$1,699,000	\$1,699,000	\$0	0.0%	
UCI	UCIMC B30A ENT Remodel	Renovation	\$1,672,000	\$1,672,000	\$0	0.0%	
UCLA	Sunset Village Emergency Generator Replacement	Renovation	\$1,598,000	\$1,598,000	\$0	0.0%	
UCLA	Clark Library Book Storage Expansion	Renovation	\$1,558,000	\$1,738,000	\$180,000	11.6%	High bids
UCSD	Medical Cntr Hillcrest - Central Plant Chilled Water Line	Renovation	\$1,455,000	\$1,455,000	\$0	0.0%	
UCSF	S/D PHTs MSB Suite 534 Lab Upgrade	Renovation	\$1,400,000	\$1,400,000	\$0	0.0%	
UCB	Lewis Lab Renovation Michelle Chang	Renovation	\$1,341,800	\$1,341,800	\$0	0.0%	
UCLA	Wooden Center AHU 1,2,3 Replacement	Renovation	\$1,300,000	\$1,160,000	(\$140,000)	-10.8%	
UCSD	San Diego Supercomputer Cntr. Basement Dist. System	Renovation	\$1,300,000	\$1,300,000	\$0	0.0%	
UCI	Building 1A Emergency Power Upgrades	Infrastructure	\$1,285,000	\$1,285,000	\$0	0.0%	
UCSD	MC LJ Jacobs Medical Center Digital Signage	New	\$1,275,000	\$1,275,000	\$0	0.0%	
UCI	Renovate Athletics for NFL	Renovation	\$1,200,000	\$1,200,000	\$0	0.0%	
UCSF	M-5 Adult BMT Lab Remodel	Renovation	\$1,200,000	\$1,535,000	\$335,000	27.9%	Regulatory requirements
UCSD	Medical Center La Jolla - Telemetry War Room	Renovation	\$1,175,000	\$1,175,000	\$0	0.0%	
UCLA	Wasserman - Neurosurgery Audiovisual Installation	Renovation	\$1,165,000	\$1,165,000	\$0	0.0%	
UCI	UCIMC B25A Outpatient Pharmacy	Renovation	\$1,162,000	\$1,162,000	\$0	0.0%	
UCD	UCDHS Telecom Fiber Upgrade	Renovation	\$1,160,000	\$1,160,000	\$0	0.0%	
UCD	Coffee House Kitchen Expansion	Renovation	\$1,152,000	\$1,152,000	\$0	0.0%	
UCSF	HSW-15 Hooper Lab Upgrades	Renovation	\$1,150,000	\$1,150,000	\$0	0.0%	
UCB	Kroeber Hall PA Hearst Museum Gallery Ren	Renovation	\$1,130,311	\$1,130,311	\$0	0.0%	
UCSD	San Diego Supercomputer Cntr. Data Cntr. Emerg. Power	Renovation	\$1,120,000	\$1,120,000	\$0	0.0%	
UCSC	Resource Recovery Facility Phase 1	New	\$1,100,000	\$1,100,000	\$0	0.0%	
UCB	Dwinelle Hall Rms 156 & 160 Renovation	Renovation	\$1,082,000	\$1,082,000	\$0	0.0%	
UCR	Highlander Union Bldg Complex Signage	Renovation	\$1,048,000	\$1,048,000	\$0	0.0%	
UCLA	Ostin AV Equipment Installation	Renovation	\$1,044,000	\$1,044,000	\$0	0.0%	
UCB	Wurster Hall 7th Flr Studio Renovation	Renovation	\$1,040,040	\$1,040,040	\$0	0.0%	
UCB	Sproul Hall Rms 103 & 110 Renovations	Renovation	\$1,000,000	\$1,216,000	\$216,000	21.6%	User requests
UCSD	Medical Cntr. Hillcrest - Nuclear Med Camera Rms Reno.	Renovation	\$1,000,000	\$1,000,000	\$0	0.0%	
UCSD	Medical Cntr La Jolla - Thornton Hosp. EVS Int Reno	Renovation	\$956,000	\$956,000	\$0	0.0%	
UCI	UCIMC B23 Electrical Substation	Infrastructure	\$945,200	\$945,200	\$0	0.0%	
UCSD	Athena Way Improvements	New	\$923,000	\$923,000	\$0	0.0%	
UCSD	Trade Street Integrated Photovoltaic Energy Storage	New	\$888,000	\$888,000	\$0	0.0%	
UCSD	Urey Hall 3130-3132 Lab Renovation	Renovation	\$878,000	\$878,000	\$0	0.0%	
UCD	Kemper Hall Room 2211 ECE Wet Lab Remodel	Renovation	\$876,000	\$1,056,000	\$180,000	20.5%	User requests

## Appendix A – List of Completed Major Capital Projects 2016-17

*Notice of Substantial Completion or Certificate of Occupancy issued between July 1, 2016 and June 30, 2017*

Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Revisions as of 06/30/17	%	Reasons for Augmentation
ALL PROJECTS			\$789,155,991	\$789,637,996	\$482,005	0.1%	
UCD	Robbins Hall Room 283 Lab Renovation	Renovation	\$852,000	\$852,000	\$0	0.0%	
UCSF	M-7 Neurosurgery 3-D Media Room Renovation	Renovation	\$813,000	\$927,000	\$114,000	14.0%	High bids
UCSD	EBU-1 Air Handler Unit Renewal	Renovation	\$763,000	\$763,000	\$0	0.0%	

## Appendix B – List of Active Major Capital Projects as of June 30, 2017

*Projects in design or construction with approved budgets (excludes projects in planning, programming and design without approved budgets) / Delegated projects highlighted in blue*

Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Reversions as of 06/30/17	%	Reasons for Augmentation
ALL PROJECTS			\$5,731,187,000	\$6,141,799,000	\$410,612,000	7.2%	
UCSD	UCSD Medical Center East Campus Bed Tower	New	\$663,883,000	\$942,790,000	\$278,907,000	42.0%	
UCSF	Joan and Sanford I. Weil Neurosciences Building	New	\$357,600,000	\$357,600,000	\$0	0.0%	
UCSF	Precision Cancer Medicine Building at Mission Bay	New	\$275,000,000	\$275,000,000	\$0	0.0%	
UCSF	Mission Bay East Campus Phase 1 Building (Block 33)	New	\$237,130,000	\$237,130,000	\$0	0.0%	
UCSF	Minnesota Street Graduate Student and Trainee Housing	New	\$222,700,000	\$222,700,000	\$0	0.0%	
UCSD	Nuevo West Graduate Student Housing	New	\$178,292,000	\$178,292,000	\$0	0.0%	
UCSB	San Joaquin Apartments	New	\$175,000,000	\$182,544,000	\$7,544,000	4.3%	
UCB	Berkeley Way West (Tolman Hall Seismic Replacement)	Renovation	\$150,000,000	\$185,000,000	\$35,000,000	23.3%	Approved March 2015
UCR	Multidisciplinary Research Building I	New	\$150,000,000	\$150,000,000	\$0	0.0%	
UCSD	Outpatient Pavilion	New	\$140,000,000	\$140,000,000	\$0	0.0%	
UCSD	Biological and Physical Sciences Building	New	\$111,600,000	\$115,500,000	\$3,900,000	3.5%	
UCSF	Clinical Sciences Building (CSB) Seismic Building	Renovation	\$91,468,000	\$95,812,000	\$4,344,000	4.7%	
UCD	North Addition Office Building (UCDMC)	New	\$87,500,000	\$87,500,000	\$0	0.0%	
UCSC	Coastal Biology Building	New	\$73,642,000	\$79,122,000	\$5,480,000	7.4%	
UCLA	Engineering VI - Phase 2	New	\$72,700,000	\$72,700,000	\$0	0.0%	
UCLA	Anderson School of Management Addition	New	\$70,835,000	\$70,835,000	\$0	0.0%	
UCI	Classroom Office Building	New	\$66,874,000	\$66,874,000	\$0	0.0%	
UCSF	FY 2015-16 Deferred Maintenance and Facility Investment	Renovation	\$59,828,000	\$59,828,000	\$0	0.0%	
UCD	Tercero Student Housing Phase 4	New	\$59,120,000	\$59,120,000	\$0	0.0%	
UCM	Classroom and Academic Office Building	New	\$53,973,000	\$53,973,000	\$0	0.0%	
UCI	University Extension Classroom Building	New	\$52,253,000	\$52,253,000	\$0	0.0%	
UCLA	CHS Seismic Correction and Fire Safety	Renovation	\$52,155,000	\$52,155,000	\$0	0.0%	
UCSD	Campus Life Safety Improvements	Renovation	\$51,055,000	\$51,055,000	\$0	0.0%	
UCLA	Football Performance Center	New	\$50,000,000	\$56,000,000	\$6,000,000	12.0%	Additional scope
UCLA	Franz Hall Tower Seismic Renovation	Renovation	\$50,000,000	\$50,000,000	\$0	0.0%	
UCD	Webster Hall Replacement	New	\$49,851,000	\$49,851,000	\$0	0.0%	
UCD	South Valley Animal Health Laboratory – Tulare	New	\$49,778,000	\$49,778,000	\$0	0.0%	
UCSB	Bioengineering Building	New	\$47,884,000	\$58,485,000	\$10,601,000	22.1%	Additional scope
UCSD	Osler Parking Structure	New	\$46,799,000	\$46,799,000	\$0	0.0%	
UCSC	Crown College Residence Halls Major Maintenance	Renovation	\$44,300,000	\$54,992,000	\$10,692,000	24.1%	
UCLA	CHS South Tower Post-Occ Improvements (Levels 2-7)	Renovation	\$43,100,000	\$43,100,000	\$0	0.0%	
UCLA	Margan Apartments Redevelopment	New	\$42,000,000	\$42,000,000	\$0	0.0%	
UCM	Downtown Center	New	\$41,998,000	\$45,116,000	\$3,118,000	7.4%	
UCLA	CHS - SOM West Seismic Renovation	Renovation	\$40,000,000	\$40,000,000	\$0	0.0%	
UCLA	CHS-NPI Seismic Correction	Renovation	\$40,000,000	\$40,000,000	\$0	0.0%	
UCLA	Basketball Practice Facility	New	\$35,000,000	\$35,000,000	\$0	0.0%	
UCLA	Geffen Academy at UCLA	Renovation	\$35,000,000	\$35,000,000	\$0	0.0%	
UCR	Pierce Hall Infrastructure Improvements	Renovation	\$34,680,000	\$34,680,000	\$0	0.0%	
UCI	Fire and Lifely Safety Improvements	Renovation	\$34,290,000	\$34,290,000	\$0	0.0%	
UCD	Chemistry Seismic and Life Safety Corrections	Renovation	\$33,900,000	\$33,900,000	\$0	0.0%	
UCSB	Academic Support Facility	New	\$33,757,000	\$33,757,000	\$0	0.0%	
UCI	UCIMC Central Chiller Plant Expansion	New	\$33,708,000	\$33,708,000	\$0	0.0%	
UCI	UCIMC Electrical Plant	New	\$33,178,000	\$33,178,000	\$0	0.0%	
UCSF	MC M,L 7, 11, 12, 15 Nursing Unit Renovations	Renovation	\$32,317,000	\$32,317,000	\$0	0.0%	
UCSB	Campbell Hall Replacement Building	New	\$31,574,000	\$31,574,000	\$0	0.0%	
UCD	Walker Hall Renewal and Seismic Corrections	Renovation	\$31,157,000	\$33,369,000	\$2,212,000	7.1%	



## Appendix B – List of Active Major Capital Projects as of June 30, 2017

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Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Reversions as of 06/30/17	%	Reasons for Augmentation
<b>ALL PROJECTS</b>			<b>\$6,874,037,000</b>	<b>\$7,480,279,000</b>	<b>\$606,242,000</b>	<b>8.8%</b>	
UCLA	Warner Graduate Art Studio Renovation and Addition	Both	\$30,000,000	\$30,000,000	\$0	0.0%	
UCR	Barn Expansion	Both	\$28,700,000	\$28,700,000	\$0	0.0%	
UCD	MHSC - Children's Surgery 3rd Floor	Both	\$28,400,000	\$28,400,000	\$0	0.0%	
UCSC	Alterations for Academic Programs Phase 1	Renovation	\$25,988,000	\$27,540,000	\$1,552,000	6.0%	
UCD	Electrical Substation Transformer Addition	New	\$23,351,000	\$23,351,000	\$0	0.0%	
UCSD	North Torrey Pines Living and Learning Center	New	\$22,250,000	\$22,250,000	\$0	0.0%	
UCD	Large Lecture Hall	New	\$22,000,000	\$22,000,000	\$0	0.0%	
UCSF	M,L-3 Radiology Renovation Project	Renovation	\$21,300,000	\$21,300,000	\$0	0.0%	
UCD	Cruess Hall North Renovation	Both	\$21,250,000	\$21,250,000	\$0	0.0%	
UCD	University Tower 2nd Floor Operating Room Remodel	Renovation	\$21,214,000	\$21,214,000	\$0	0.0%	
UCB	Wheeler Hall CRP15 Renewal CD and Phase II Const.	Renovation	\$20,500,000	\$20,500,000	\$0	0.0%	
UCI	Primary Electrical Improvements Step 4	Renovation	\$19,462,000	\$19,462,000	\$0	0.0%	
UCSC	Environmental Health and Safety Facility	New	\$19,437,000	\$19,437,000	\$0	0.0%	
UCI	Chao Comprehensive Digestive Disease Center Expansion	Both	\$17,500,000	\$19,776,000	\$2,276,000	13.0%	
UCSB	Faculty Club Renovation and Guest House Addition	Both	\$17,480,000	\$17,480,000	\$0	0.0%	
UCM	Central Plant Completion/Telecom Reliability Upgrade	Renovation	\$16,583,000	\$16,583,000	\$0	0.0%	
UCI	Transmission Electron Microscopy Facility	Renovation	\$16,430,000	\$17,634,000	\$1,204,000	7.3%	
UCLA	SMUMC MNP A-Level Medical Surgical Unit Renovation	Renovation	\$15,942,000	\$15,942,000	\$0	0.0%	
UCD	Main Hospital East 2 and 3 Pulmonary and GI Remodel	Renovation	\$15,700,000	\$15,700,000	\$0	0.0%	
UCSB	Infrastructure Renewal Phase 1	Renovation	\$15,150,000	\$18,827,000	\$3,677,000	24.3%	
UCSF	MC M/L 4th Floor OR 29 Hybrid Build-Out	Renovation	\$15,118,000	\$15,118,000	\$0	0.0%	
UCD	Activities and Recreation Center Expansion	Both	\$15,000,000	\$15,000,000	\$0	0.0%	
UCSC	Telecommunication Infrastructure Improvements Phase C	Renovation	\$14,602,000	\$14,602,000	\$0	0.0%	
UCSC	Telecommunications Infrastructure Improvements Phase B	Renovation	\$14,600,000	\$14,342,000	(\$258,000)	-1.8%	
UCD	Main Hospital Seismic Compliance University Tower 1	Renovation	\$13,603,000	\$13,603,000	\$0	0.0%	
UCD	Hospital Seismic Upgrade Stair Tower & Exit	Renovation	\$12,945,000	\$12,945,000	\$0	0.0%	
UCSF	Mission Bay Utility Distribution System Extension Project	New	\$12,500,000	\$12,500,000	\$0	0.0%	
UCD	Cage Wash Facility	New	\$12,182,000	\$12,182,000	\$0	0.0%	
UCR	Lothian Seismic Upgrades	Renovation	\$11,630,000	\$14,359,000	\$2,729,000	23.5%	Unforeseen conditions and delay
UCR	Batchelor Hall Building System	Renovation	\$11,512,000	\$18,179,000	\$6,667,000	57.9%	
UCD	MHSC - 2nd Floor Hospitalists	Both	\$10,779,000	\$10,779,000	\$0	0.0%	
UCSC	Life Safety Upgrades	Renovation	\$10,201,000	\$10,201,000	\$0	0.0%	
UCR	BCOE Wet Labs	Renovation	\$10,000,000	\$12,400,000	\$2,400,000	24.0%	Existing mechanical system deficiencies
UCD	Recreation Pool Renovation	Renovation	\$9,999,000	\$9,999,000	\$0	0.0%	
UCSD	Tuolumne Apts Ph 2 Fire Life Safety Renos	Renovation	\$9,990,000	\$9,990,000	\$0	0.0%	
UCSD	Gilman Drive Sewer Improvements	Renovation	\$9,900,000	\$9,900,000	\$0	0.0%	
UCSF	Mission Bay Childcare Relocation	New	\$9,619,000	\$9,619,000	\$0	0.0%	
UCR	SOM Research First Floor Fit-out	Both	\$9,600,000	\$9,600,000	\$0	0.0%	
UCSD	East Campus Switch Station Transformers, Banks 31 and 32	New	\$9,500,000	\$9,500,000	\$0	0.0%	
UCLA	10889 Wilshire Building - Ext Affairs Tenant Refurbishment	Renovation	\$9,130,000	\$9,130,000	\$0	0.0%	
UCD	Hospital East 7 Reactivation	Renovation	\$9,035,000	\$9,035,000	\$0	0.0%	
UCD	Kemper Hall Clean Room Improvements 2016	Renovation	\$9,030,000	\$9,030,000	\$0	0.0%	
UCLA	DeNeve Bakery and Kitchen Renovation	Renovation	\$8,820,000	\$8,820,000	\$0	0.0%	
UCLA	PS 5 Seismic Correction Step 2	Renovation	\$8,813,000	\$8,813,000	\$0	0.0%	
UCD	Hospital Seismic Fire, Life, Safety Upgrades	Renovation	\$8,763,000	\$8,763,000	\$0	0.0%	
UCLA	Bradley Hall Commissary Renovation	Renovation	\$8,700,000	\$8,700,000	\$0	0.0%	
UCI	UCIMC Emergency Power Upgrade	Renovation	\$8,667,000	\$8,667,000	\$0	0.0%	

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Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Reversions as of 06/30/17	%	Reasons for Augmentation
<b>ALL PROJECTS</b>			<b>\$6,874,037,000</b>	<b>\$7,480,279,000</b>	<b>\$606,242,000</b>	<b>8.8%</b>	
UCLA	Central Zone Site and Infrastructure Improvements	Renovation	\$8,667,000	\$9,555,000	\$888,000	10.2%	High bids/field conditions
UCR	Commons Mall & Bookstore Renovation	Renovation	\$8,460,000	\$8,460,000	\$0	0.0%	
UCSC	Student Housing Telecom Infrastructure Upgrades Ph 1	Renovation	\$8,265,000	\$8,265,000	\$0	0.0%	
UCSF	Laboratory of Radiobiology Partial Demo and Alternate Use	Renovation	\$8,247,000	\$8,247,000	\$0	0.0%	
UCLA	CHS South Tower Lab Furniture Installation	Renovation	\$8,225,000	\$8,225,000	\$0	0.0%	
UCSD	MC LJ Thornton Hospital LL Envir & Materials Mngmt Reno	Renovation	\$8,212,000	\$8,212,000	\$0	0.0%	
UCSC	Upper Quarry Amphitheater Renovation and Expansion	Both	\$8,000,000	\$8,000,000	\$0	0.0%	
UCLA	26585 Agoura Road 2nd Floor Tenant Improvements	Renovation	\$7,970,000	\$7,970,000	\$0	0.0%	
UCLA	27235 Tourney Road Second Floor Clinic Improvements	Renovation	\$7,900,000	\$7,900,000	\$0	0.0%	
UCSB	North Campus Open Space – Grading	Renovation	\$7,890,000	\$7,890,000	\$0	0.0%	
UCD	Silo South Renovation	Renovation	\$7,730,000	\$7,730,000	\$0	0.0%	
UCD	Surface Water Pipeline and Pump Station	New	\$7,700,000	\$7,700,000	\$0	0.0%	
UCD	Electrical Improvements Phase 6	Infrastructure	\$7,670,000	\$7,670,000	\$0	0.0%	
UCD	Hospital Seismic Upgrade Phase I	Infrastructure	\$7,511,000	\$7,511,000	\$0	0.0%	
UCSD	Scripps Institution of Oceanography Emerg Power Improve	Renovation	\$7,500,000	\$7,500,000	\$0	0.0%	
UCB	Anna Head Buildings E & F Renovation	Both	\$7,352,000	\$8,037,000	\$685,000	9.3%	High bids
UCD	La Rue Avenue Bridge Replacement	Renovation	\$7,287,000	\$7,287,000	\$0	0.0%	
UCB	Silver Lab Exterior Facade Replacement	Renovation	\$7,100,000	\$7,100,000	\$0	0.0%	
UCSC	Long Marine Lab Marine Mammal Pools Reno & Exp	Renovation	\$7,034,000	\$9,736,000	\$2,702,000	38.4%	
UCLA	CHS South Tower Post-Occupancy Furn & equip (Flrs 2-7)	Renovation	\$7,000,000	\$7,000,000	\$0	0.0%	
UCD	Tercero Dining Commons Renovation	Renovation	\$6,990,000	\$6,990,000	\$0	0.0%	
UCB	Wheeler Hall CRP15 Renewal CD and Phase I Const.	Renovation	\$6,950,000	\$8,965,000	\$2,015,000	29.0%	
UCLA	Medical Plaza Site Improvements	New	\$6,900,000	\$6,900,000	\$0	0.0%	
UCD	UT CPU Basement	Renovation	\$6,865,000	\$6,865,000	\$0	0.0%	
UCD	Pavilion 1st Floor 3T MRI Installation	Renovation	\$6,615,000	\$6,615,000	\$0	0.0%	
UCD	Controlled Environment Facility Expansion	Renovation	\$6,562,000	\$6,562,000	\$0	0.0%	
UCLA	27235 Tourney Road 1st Floor Clinic Improvements	Renovation	\$6,530,000	\$6,530,000	\$0	0.0%	
UCLA	Tiverton House Interior Refurbishment	Renovation	\$6,168,000	\$6,729,000	\$561,000	9.1%	
UCSC	Active Learning Classroom	Renovation	\$6,129,000	\$6,129,000	\$0	0.0%	
UCSD	SIO Center for Coastal Studies	Renovation	\$6,100,000	\$6,100,000	\$0	0.0%	
UCD	Hospital Seismic Elevator Upgrades	Renovation	\$6,065,000	\$6,065,000	\$0	0.0%	
UCR	Fmri	New	\$5,990,000	\$5,990,000	\$0	0.0%	
UC	14350 Meridian Parkway 1st Flr S. Wing Tenant Improve.	Renovation	\$5,947,000	\$5,947,000	\$0	0.0%	
UCB	IS&T - ICCS and Riser Projects	Infrastructure	\$5,945,000	\$5,945,000	\$0	0.0%	
UCSD	Computer Science & Engin. Bldg Renovation and Expansion	Both	\$5,924,000	\$5,924,000	\$0	0.0%	
UCLA	Electrical System Distribution Step 6C	Renovation	\$5,700,000	\$5,700,000	\$0	0.0%	
UCLA	North Athletic Field Spectator Improvements	Renovation	\$5,600,000	\$5,600,000	\$0	0.0%	
UCB	Information Infrastructure Improvements	Renovation	\$5,500,000	\$5,500,000	\$0	0.0%	
UCSD	MC LJ Thornton Hospital L2 North Renovation	Renovation	\$5,395,000	\$5,395,000	\$0	0.0%	
UCLA	Football Performance Center Furn. & Equip Install	Renovation	\$5,144,000	\$5,144,000	\$0	0.0%	
UCI	Neuroimaging Facility Improvements SBGS	Renovation	\$5,000,000	\$5,000,000	\$0	0.0%	
UCLA	Lot 36 KREC Replacement Facility	Renovation	\$5,000,000	\$5,000,000	\$0	0.0%	
UCM	North Bowl Parking Lot, Phase 2	New	\$5,000,000	\$5,000,000	\$0	0.0%	
UCI	Bison Ave Surface Parking Lot	New	\$4,985,000	\$4,985,000	\$0	0.0%	
UCLA	Keystone Mentone Apartment Units Renovation Step 4	Renovation	\$4,920,000	\$4,920,000	\$0	0.0%	
UCI	Building 1A, Bsmt, Rm 0107, Interven Radiology Repl	Renovation	\$4,900,000	\$4,900,000	\$0	0.0%	
UCSD	Graduate and Professional Student Housing - East Campus	New	\$4,871,000	\$4,871,000	\$0	0.0%	

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UCLA	Keystone-Mentone Apartment Units Renovation Step 3	Renovation	\$4,868,000	\$4,868,000	\$0	0.0%	
UCLA	Venice/Barry Apartment Units Renovation Step 2	Renovation	\$4,840,000	\$4,840,000	\$0	0.0%	
UCLA	Rieber Hall Finish Refurbishment	Renovation	\$4,837,000	\$4,837,000	\$0	0.0%	
UCSB	Bio II Fourth Floor Renovation	Renovation	\$4,783,000	\$4,783,000	\$0	0.0%	
UCSD	Main Campus CUP Site Work & Make Ready	Renovation	\$4,781,000	\$4,781,000	\$0	0.0%	
UCSF	Mission Bay Northwest Parking Lots	New	\$4,720,000	\$4,720,000	\$0	0.0%	
UCB	Greek Theatre Improvement Plan 2016	New	\$4,668,000	\$4,668,000	\$0	0.0%	
UCSD	Reclaimed Water Expansion - Phase 2	New	\$4,500,000	\$4,500,000	\$0	0.0%	
UCSB	Bio II - HVAC Modernization	Renovation	\$4,445,000	\$4,445,000	\$0	0.0%	
UCSC	Merrill Cultural Center Improvements	Renovation	\$4,335,000	\$8,343,000	\$4,008,000	92.5%	Hidden conditions, scope, weather
UCLA	MP 100 170 Clinic Renovation	Renovation	\$4,326,000	\$4,326,000	\$0	0.0%	
UCSD	MC Hillcrest - Central Plant Steam Line Replacement	Renovation	\$4,321,000	\$4,321,000	\$0	0.0%	
UCSD	MC Hillcrest South Wing Elevators 11-13 Modernization	Renovation	\$4,064,000	\$4,064,000	\$0	0.0%	
UCR	Classroom and Class Lab Renewal	Renovation	\$4,005,000	\$4,005,000	\$0	0.0%	
UCI	UCIMC B1, DH66 Convert ICTS to Med Surg	Renovation	\$3,990,000	\$3,990,000	\$0	0.0%	
UCSD	Ludwig Groups 1 & 2 Modernization @ CMME	Renovation	\$3,846,000	\$3,846,000	\$0	0.0%	
UCB	VLSB Chiller Replacement	Renovation	\$3,806,000	\$3,806,000	\$0	0.0%	
UCI	UCIMC B1A ED Renovations	Renovation	\$3,761,000	\$3,761,000	\$0	0.0%	
UCLA	Dodd Hall HVAC Installation	Renovation	\$3,752,000	\$4,619,000	\$867,000	23.1%	High bids
UCI	UCIMC Site Security Enhancements	Renovation	\$3,704,000	\$3,704,000	\$0	0.0%	
UCB	Koshland NWAFC CRP15 Chiller Replacement	Renovation	\$3,700,000	\$4,200,000	\$500,000	13.5%	Added funds to restore original scope
UCSD	CSC Environmental Management Facility (EMF) Expansion	New	\$3,689,000	\$3,689,000	\$0	0.0%	
UCLA	RRUMC 2434 Hybrid OR Renovation	Renovation	\$3,500,000	\$3,500,000	\$0	0.0%	
UCSD	East Campus Central Plant Fourth Chiller Installation	New	\$3,500,000	\$3,500,000	\$0	0.0%	
UCSD	Geisel Library Restrooms Renovation	Renovation	\$3,483,000	\$3,483,000	\$0	0.0%	
UCSF	M,L-5 Heart Center Fluoroscopy System Upgrades	Renovation	\$3,443,000	\$3,443,000	\$0	0.0%	
UCLA	MP200 B165-71 MRI Replacement	Renovation	\$3,322,000	\$3,322,000	\$0	0.0%	
UCD	Fish Conservation and Culture Laboratory Project		\$3,224,000	\$6,398,000	\$3,174,000	98.4%	
UCSC	Materials Sciences Laboratories Phase 1	Renovation	\$3,150,000	\$3,150,000	\$0	0.0%	
UCI	Calit2 Irvine Materials Research Institute (IMRI)	Renovation	\$3,145,000	\$3,553,000	\$408,000	13.0%	Add shielding for research equipment
UCD	Primary Sanitary Sewer & Storm Drain Lift Stations Improve	Infrastructure	\$3,119,000	\$3,119,000	\$0	0.0%	
UCSC	Big Creek Reserve Prop 84 Improvements	Both	\$3,107,000	\$3,119,000	\$12,000	0.4%	Campus funded a bid alternate
UCSB	Storke Rd improvements & Undergrounding	Renovation	\$3,092,000	\$3,092,000	\$0	0.0%	
UCB	Soda Hall CRP Roof Replacement	Renovation	\$3,087,000	\$3,087,000	\$0	0.0%	
UCSF	S-7 Laboratory/S-1, MU-4E Office/ACC-C Classroom Reno	Renovation	\$3,071,000	\$3,071,000	\$0	0.0%	
UCLA	Spaulding Field Improvements	Renovation	\$3,050,000	\$3,050,000	\$0	0.0%	
UCB	Unit 3 Dining Commons Seismic Upgrade	Renovation	\$3,000,000	\$3,000,000	\$0	0.0%	
UCSB	Pauley Track Renovation	Renovation	\$2,909,000	\$2,909,000	\$0	0.0%	
UCLA	Tiverton House HVAC Replacement	Renovation	\$2,875,000	\$2,875,000	\$0	0.0%	
UCR	ADA Improvements	Renovation	\$2,840,000	\$2,840,000	\$0	0.0%	
UCLA	10889 Wilshire Building - Floor 10-16 Tel. Bldg Improve.	Renovation	\$2,800,000	\$2,800,000	\$0	0.0%	
UCB	GB Suites 400 & 450 Remodel for UDAR	Renovation	\$2,751,000	\$2,751,000	\$0	0.0%	
UCSF	Telemedicine and PRIME-US Education Facilities Phase 2	Renovation	\$2,750,000	\$2,750,000	\$0	0.0%	
UCLA	10889 Wilshire Building - Plumbing Riser Replacement	Renovation	\$2,722,000	\$2,722,000	\$0	0.0%	
UCLA	MP200 Public Area Improvements	Renovation	\$2,700,000	\$5,529,000	\$2,829,000	104.8%	
UCSF	UCSF Medical Center M, L Fire Sprinklers Upgrade	Renovation	\$2,675,000	\$3,200,000	\$525,000	19.6%	
UCSD	Gilman Road Utilities Expansion	New	\$2,575,000	\$2,575,000	\$0	0.0%	

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UCLA	SMUMC MNP Roof Replacement	Renovation	\$2,500,000	\$2,794,000	\$294,000	11.8%	
UCI	University Club Renovation	Renovation	\$2,450,000	\$2,450,000	\$0	0.0%	
UCB	Wheeler Hall Auditorium Improvement	Renovation	\$2,404,000	\$2,404,000	\$0	0.0%	
UCSB	Broida Hall Lab Renovation 1251	Renovation	\$2,351,000	\$2,351,000	\$0	0.0%	
UCSD	MC LJ Outpatient Pav. Heat. Hot Water & Oxygen Install.	New	\$2,300,000	\$2,300,000	\$0	0.0%	
UCLA	Dentistry 20-133 Clinic Renovation	Renovation	\$2,285,000	\$2,285,000	\$0	0.0%	
UCLA	PS1 Autoramp and Elevator Improvements	Renovation	\$2,220,000	\$2,220,000	\$0	0.0%	
UCSF	MRIV Demolition and Alternate Use	Demolition	\$2,211,000	\$2,211,000	\$0	0.0%	
UCR	Sweeney Granite Mountain Desert Research Cntr Improve.	Both	\$2,203,000	\$2,233,000	\$30,000	1.4%	Correction of budget approval error
UCR	School of Medicine BSL-3 Research Suite	Renovation	\$2,200,000	\$2,590,000	\$390,000	17.7%	
UCSB	Storke/El Colegio Road Improvements	New	\$2,112,000	\$2,112,000	\$0	0.0%	
UCR	SOM Trailer Replacement	New	\$2,100,000	\$2,100,000	\$0	0.0%	
UCD	Memorial Union North Courtyard	Renovation	\$2,065,000	\$2,065,000	\$0	0.0%	
UCSD	Student Center Pub and Event Space		\$2,053,000	\$2,053,000	\$0	0.0%	
UCSF	ACC-6 Ophthalmology Relocation	Renovation	\$2,050,000	\$2,050,000	\$0	0.0%	
UCSF	Parnassus Heights Millberry Union 1W Student Acad Affairs	Renovation	\$2,038,000	\$2,038,000	\$0	0.0%	
UCSD	HSS Building AHU Renewal	Renovation	\$2,036,000	\$2,036,000	\$0	0.0%	
UCLA	MP300 B130G MRI Renovation	Renovation	\$2,015,000	\$2,015,000	\$0	0.0%	
UCD	Chemistry Rooms 1,3,92 Lab Remodel	Renovation	\$2,000,000	\$2,000,000	\$0	0.0%	
UCD	Hospital Seismic Facade (UC Davis Health)	Renovation	\$2,000,000	\$2,000,000	\$0	0.0%	
UCLA	DeNeve Commons Finish Refurbishment	Renovation	\$2,000,000	\$2,000,000	\$0	0.0%	
UCSC	Science Hill Standby Power Modifications	Renovation	\$2,000,000	\$2,000,000	\$0	0.0%	
UCSD	Geisel 8th Floor Renovations	Renovation	\$2,000,000	\$2,000,000	\$0	0.0%	
UCSD	MC LJ JMC Enterprise Trailer Repurpose	Renovation	\$2,000,000	\$2,000,000	\$0	0.0%	
UCSD	Osler Temporary Surface Parking Lot	New	\$2,000,000	\$2,000,000	\$0	0.0%	
UCD	Davis Tower 1835A Pediatric Fluoroscopy	Renovation	\$1,965,000	\$1,965,000	\$0	0.0%	
UCD	Waste Water Treatment Plant Improvements	Renovation	\$1,950,000	\$1,950,000	\$0	0.0%	
UCR	Highlander Hall Demolition	Demolition	\$1,878,000	\$1,878,000	\$0	0.0%	
UCB	UC Botanical Garden Accessibility Improvements	Renovation	\$1,861,000	\$1,861,000	\$0	0.0%	
ANR	Research & Ext. Center Facilities Renewal & Improvements	Renovation	\$1,850,000	\$1,850,000	\$0	0.0%	
UCSF	M-14 Pride in Place Cosmetic Upgrade	Renovation	\$1,850,000	\$1,850,000	\$0	0.0%	
DANR	Intermountain REC Field Lab & Multipurpose Facility	Both	\$1,808,000	\$1,808,000	\$0	0.0%	
UCSB	Sedgwick Reserve Ranch House Renovation	Renovation	\$1,780,000	\$1,780,000	\$0	0.0%	
UCI	Building 29 (Pavilion III) Renovations	Renovation	\$1,768,000	\$2,108,000	\$340,000	19.2%	
UCB	Morgan Hall 2nd Flr Lab Renovation	Renovation	\$1,758,000	\$1,758,000	\$0	0.0%	
UCSF	PHTs CSB & N Emerg. Power Feed & HSIR MCC Replace.	Renovation	\$1,656,000	\$1,656,000	\$0	0.0%	
UCB	Campus Classroom CRP17 Reno. and Tech. Upgrades	Renovation	\$1,650,000	\$1,650,000	\$0	0.0%	
UCB	Moffitt Library East Terrace Renovation	Renovation	\$1,641,000	\$1,850,000	\$209,000	12.7%	Added design elements
UCB	Gilman Hall Pitzer Center Annex	Renovation	\$1,618,000	\$1,618,000	\$0	0.0%	
UCSC	Marine Science Campus Parking Phase 1	New	\$1,611,000	\$1,611,000	\$0	0.0%	
UCD	Eye Center (UC Davis Health)	New	\$1,600,000	\$1,600,000	\$0	0.0%	
UCSF	MB Hospital Outfitting ORs 10 and 11	Renovation	\$1,600,000	\$1,600,000	\$0	0.0%	
UCSF	MZ 2330 Post Street-2 Pediatric Primary Care Expansion	Renovation	\$1,600,000	\$1,600,000	\$0	0.0%	
UCD	Bainer Hall Room 1308 Lab Remodel	Renovation	\$1,597,000	\$1,597,000	\$0	0.0%	
UCSD	MC H Central Plant Chilled Water Pump Addition	New	\$1,590,000	\$1,590,000	\$0	0.0%	
UCR	Boyd -Deep Canyon Desert Reserve Center	Both	\$1,576,000	\$1,576,000	\$0	0.0%	
UCD	Hopkins Building Renovation	Renovation	\$1,568,000	\$1,568,000	\$0	0.0%	



## Appendix B – List of Active Major Capital Projects as of June 30, 2017

*Projects in design or construction with approved budgets (excludes projects in planning, programming and design without approved budgets) / Delegated projects highlighted in blue*

Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Reversions as of 06/30/17	%	Reasons for Augmentation
<b>ALL PROJECTS</b>			<b>\$6,874,037,000</b>	<b>\$7,480,279,000</b>	<b>\$606,242,000</b>	<b>8.8%</b>	
UCD	Main Hospital East 1 Interventional Radiology Equip. Install.	Renovation	\$1,555,000	\$1,555,000	\$0	0.0%	
UCSF	Parnassus Streetscape Phase 1.1	New	\$1,540,000	\$1,540,000	\$0	0.0%	
UCLA	SMUMC MNP Suite A576 CT Scanner Replacement	Renovation	\$1,537,000	\$1,537,000	\$0	0.0%	
UCSD	MC Hillcrest - Exterior Signage Update	Renovation	\$1,522,000	\$1,522,000	\$0	0.0%	
UCLA	Basketball Practice Facility Furn. and Equip. Install	Renovation	\$1,500,000	\$1,500,000	\$0	0.0%	
UCR	Chilled Water Coil Replacements – Various	Renovation	\$1,500,000	\$1,500,000	\$0	0.0%	
UCSC	Materials Sciences Laboratories Phase 2	Renovation	\$1,500,000	\$1,500,000	\$0	0.0%	
UCD	Chemistry Safety Improvements	Renovation	\$1,482,000	\$1,402,000	(\$80,000)	-5.4%	
UCSC	Coastal Science Campus Public Access Improvements	New	\$1,479,000	\$1,479,000	\$0	0.0%	
UCSF	M,L-8,9,10,11,13 Ceiling Lifts Installation	Renovation	\$1,447,000	\$1,447,000	\$0	0.0%	
UCB	Koshland Hall Fan Rm Coil Replacement	Renovation	\$1,430,000	\$1,430,000	\$0	0.0%	
UCB	Etchevery Hall Café	Both	\$1,410,000	\$1,612,000	\$202,000	14.3%	Bids came in higher than expected
UCSB	Fly Neuroscience Lab rm. 2159	Renovation	\$1,400,000	\$1,452,000	\$52,000	3.7%	
UCD	Surgery and Emergency Services Pavilion CPU Upgrade	Renovation	\$1,397,000	\$1,397,000	\$0	0.0%	
UCSD	Medical Cntr Hillcrest - Med Offices North S-24 & EF-47	Renovation	\$1,397,000	\$1,397,000	\$0	0.0%	
UCD	Walker Hall South Hall Plaza Improvements	New	\$1,390,000	\$1,390,000	\$0	0.0%	
UCR	Boyce Hall Vivarium Restoration	Renovation	\$1,373,000	\$1,670,000	\$297,000	21.6%	Existing conditions & scope refined
UCSC	E&MS C580/584 Lab Alterations	Renovation	\$1,371,000	\$1,937,000	\$566,000	41.3%	
UCLA	Sproul First Floor Laundry and Office Renovation	Renovation	\$1,334,000	\$1,334,000	\$0	0.0%	
UCB	Gustafson Annual Plan CRP15-Multiple Buildings	Renovation	\$1,200,000	\$1,200,000	\$0	0.0%	
UCSB	Coal Oil Point Reserve Building 7060	Renovation	\$1,175,000	\$1,175,000	\$0	0.0%	
UCI	Croul Hall Laboratory Basement Build-Out	Renovation	\$1,165,000	\$1,165,000	\$0	0.0%	
UCSC	ERC Storm Water Outfall	New	\$1,160,000	\$1,160,000	\$0	0.0%	
UCSB	Cloud Lab Building Improvements	New	\$1,119,000	\$1,119,000	\$0	0.0%	
UCSD	MC H 410 Dickinson St AHU Replacement	Renovation	\$1,103,000	\$1,103,000	\$0	0.0%	
UCI	Engineering Tower 1st Floor Expansion	Both	\$1,100,000	\$1,100,000	\$0	0.0%	
UCSD	MC Hillcrest - Med Offices 3rd Flr Owens Clinic Reno	Renovation	\$1,100,000	\$1,100,000	\$0	0.0%	
UCI	Central Plant Recycled Water Conversion	New	\$1,060,000	\$1,060,000	\$0	0.0%	
UCD	Noel-Nordfelt Animal Science Goat Dairy and Creamery	New	\$1,050,000	\$1,050,000	\$0	0.0%	
UCB	Womens Faculty Club Garden & Patio Renovation	Both	\$1,043,000	\$1,043,000	\$0	0.0%	
UCSF	Parnassus Emergency Fire Water Pump	New	\$1,040,000	\$1,040,000	\$0	0.0%	
UCR	Std Rec Ctr North Digital Controls Upgrades	Renovation	\$1,034,000	\$1,034,000	\$0	0.0%	
UCR	Batchelor Hall 2215 Renovation	Renovation	\$1,033,000	\$1,033,000	\$0	0.0%	User requested additional scope
UCD	ARS M3 Sterilizer Replacement	Renovation	\$1,027,000	\$1,027,000	\$0	0.0%	
UCI	Rowland Hall Loading Dock Build-Out	Renovation	\$1,025,000	\$1,025,000	\$0	0.0%	
UCI	Engineering Hall Renovations 3121 & 3131	Renovation	\$1,013,000	\$1,013,000	\$0	0.0%	
UCB	Lewis Hall Upgrades CRP FY14	Renovation	\$1,000,000	\$1,000,000	\$0	0.0%	
UCLA	SMUMC B504 Clinical Lab Expansion	Renovation	\$1,000,000	\$1,000,000	\$0	0.0%	
UCD	3rd & A Street Interior Renovations	Renovation	\$996,000	\$996,000	\$0	0.0%	
UCR	Oban Site Improvements	Renovation	\$984,000	\$984,000	\$0	0.0%	
UCI	Bio Sci Plaza Improvements	New	\$981,000	\$981,000	\$0	0.0%	
UCSD	Medical Teaching Facility Densification 2nd Flr West Wing	Renovation	\$976,000	\$976,000	\$0	0.0%	
UCR	SRC North Locker Room Renovation	Renovation	\$964,000	\$964,000	\$0	0.0%	
UCSD	MC LJ JMC Telecom Redundant Loop	New	\$950,000	\$950,000	\$0	0.0%	
UCSB	Ellison Hall 1620/1629 Lab Renovation	Renovation	\$924,000	\$924,000	\$0	0.0%	
UCI	UCIMC B23 OSS AHU #3	Renovation	\$900,000	\$900,000	\$0	0.0%	
UCSB	Cabrillo Business Park Landscape and Buffer Improvements	New	\$897,000	\$897,000	\$0	0.0%	

## Appendix B – List of Active Major Capital Projects as of June 30, 2017

*Projects in design or construction with approved budgets (excludes projects in planning, programming and design without approved budgets) / Delegated projects highlighted in blue*

Campus	Project	New or Reno	Original Approved Budget	Current Budget as of 06/30/17	Augmentations and Reversions as of 06/30/17	%	Reasons for Augmentation
<b>ALL PROJECTS</b>			<b>\$6,874,037,000</b>	<b>\$7,480,279,000</b>	<b>\$606,242,000</b>	<b>8.8%</b>	
UCB	Clark Kerr Campus Building 12 - Roof and Balconies Repairs	Renovation	\$882,000	\$882,000	\$0	0.0%	
UCSF	MZ Radiology Mammography - Cancer Center & J Building	Renovation	\$882,000	\$882,000	\$0	0.0%	
UCR	Oban Addressable Fire Alarm	Renovation	\$875,000	\$875,000	\$0	0.0%	
UCSC	BSOE Electrical Engineering Research Lab (JBEB 216)	Renovation	\$872,000	\$872,000	\$0	0.0%	
UCB	North Gate Hall Library Renovations	Renovation	\$872,000	\$872,000	\$0	0.0%	
UCLA	26585 Agoura Road Site Improvements	New	\$856,000	\$1,016,000	\$160,000	18.7%	High cost estimate at W phase
UCR	Life Science Suite 429 Neuroscience Lab Reno	Renovation	\$850,000	\$850,000	\$0	0.0%	
UCSD	Cognitive Sciences Building 204 Lab Renovation	Renovation	\$850,000	\$850,000	\$0	0.0%	
UCD	Tupper Hall Rooms 4452 & 4460 Lab Renovation	Renovation	\$844,000	\$844,000	\$0	0.0%	
UCI	Crawford Athletic Field Irrigation Upgrade	Renovation	\$830,000	\$830,000	\$0	0.0%	
UCB	Moffitt Library CRP16 & CRP17 Flrs 1-3 Controls Conversion	Renovation	\$825,000	\$825,000	\$0	0.0%	
UCSB	Psychology New Modular and Bldg. 387 Remodal	Both	\$821,000	\$821,000	\$0	0.0%	
UCD	Olson Hall Room 250 Classroom Conversion	Renovation	\$819,000	\$819,000	\$0	0.0%	
UCSD	Warren Lecture Hall Air Handler Renewal	Renovation	\$811,000	\$811,000	\$0	0.0%	
UCI	McGaugh Hall Lab 4311 Renovation	Renovation	\$807,000	\$807,000	\$0	0.0%	
UCB	CRP16 Campus Classroom Renovations	Renovation	\$800,000	\$800,000	\$0	0.0%	
UCB	CRP17 Gustafson - Path of Travel Access Improvements	Renovation	\$800,000	\$800,000	\$0	0.0%	
UCLA	MP 200 & 300 Communication Rooms Cooling Upgrade	Renovation	\$790,000	\$1,525,000	\$735,000	93.0%	
UCI	Engineering Gateway Laboratory Renovations 2105 & 3108	Renovation	\$790,000	\$790,000	\$0	0.0%	
UCB	CMS Synthetic Field Replacement	Renovation	\$784,000	\$784,000	\$0	0.0%	
UCB	Angelo Reserve - Phase 2 Renovation	New	\$779,000	\$779,000	\$0	0.0%	
UCSD	Price Center West Bldgs 2 & 4 Re-Roof	Renovation	\$775,000	\$775,000	\$0	0.0%	
UCI	Engineering Lab Facility 134 Renovation	Renovation	\$757,000	\$757,000	\$0	0.0%	
UCI	Calit2 TEMPR Properties Facility Renovation	Renovation	\$755,000	\$755,000	\$0	0.0%	
UCR	Health Service HVAC Upgrade	Renovation	\$710,000	\$908,000	\$198,000	27.9%	High construction cost estimate

## Appendix C – 2017-19 Capital Projects Look-Ahead List

Capital projects with a funding plan / see page 33 for key to abbreviations / funding total is in \$000

Project	Program Category	Type	Fund Source		Total
			2017-18	2018-19	
BERKELEY CAMPUS					
2223 Fulton Seismic Demolition	E&G	I	SG		3,000
Basketball Practice Facility	AUX	N			-
Campus Capital Renewal	E&G	R	CF	CF	20,000
Deferred Maintenance	E&G	R	CF	CF	30,000
Evans Hall Seismic Renovation or Replacement (P Phase)	E&G	R	SG		1,000
Giannini Hall Seismic Renovation	E&G	R	SG	SG	39,000
Goldman School Expansion	AUX	N			-
Hearst Gymnasium Seismic Renovation (P Phase)	E&G	R	SG		1,000
Housing	AUX	N	CF		1,000
Joint Chemistry, Engineering and CNR Lab Bldg.	E&G	N			-
Moffitt Library Renovation Phase 2	E&G	R			-
Parking	AUX	N			-
University Hall Seismic Replacement	E&G	N			TBD
Woo Hon Fai Hall Seismic Renovation and Program Improvements	E&G	R		DD	5,000
Capital Projects \$5M to \$10M (E&G)	E&G		GF	GF	4,000
Capital Projects \$750K to \$5M (E&G)	E&G	R	CF	CF	10,000
Berkeley Campus Total			36,000	78,000	114,000
DAVIS CAMPUS					
Briggs Hall First Floor Lab Renovation	E&G	I			-
Central Cage Wash Facility Budget Increase	E&G	N	EF		5,000
Chemistry Addition and Phase 1 Renovation Vision	E&G	B	CF, EF		56,000
Computational and Data Sciences	E&G	N		GF	50,000
Critical Infrastructure Improvements	E&G	I	EF		30,000
Deferred Maintenance	E&G	R	EF	EF	30,000
Discovery Hub (Research)	E&G	N			-
Emerson Hall Replacement	AUX	N			-
Engineering Student Design Center	E&G	B	GF		21,000
Freeborn Hall Renewal	AUX	R	EF, UR		34,000
Hunt Hall 2nd Floor Renovation	E&G	R		CF	15,000
Laboratory for Energy-related Health Research (LEHR) Remediation	E&G	R		EF	15,000
Library Renovations	E&G	R			-
Museum of Biodiversity and Environment	E&G	N			-
Orchard Park Redevelopment	AUX	N	P3		240,000
Physical Sciences & Engineering Library Seismic and QMAP Renovation	E&G	R	EF		17,000
Research Animal Facility	E&G	N		EF	50,000
Research Faculty & Teaching Laboratory	E&G	N			-
Seismic Corrections	E&G	R	CF	CF	20,000
Solano Park Redevelopment	AUX	N		P3	TBD
Stadium Expansion & Strength and Conditioning Facility	AUX	B			-
Teaching and Learning Complex	E&G	N	EF	EF, SG	66,000
Tercero Dining Commons 2	AUX	N	AR, EF		33,000
Third & A Mixed Use	E&G	N		EF	82,000
Veterinary Medical Center	E&G	B	CF, GF	GF	279,000
West Village Faculty/Staff For-Sale Homes	AUX	N	CF, EF		59,000
West Village Transfer Student Housing	AUX	N	P3		500,000
Winery Expansion Phase 1	E&G	N			-

## Appendix C – 2017-19 Capital Projects Look-Ahead List

Capital projects with a funding plan / see page 33 for key to abbreviations / funding total is in \$000

Project	Program Category	Type	Fund Source		Total
			2017-18	2018-19	
Intercollegiate Athletics Initiatives <\$10M	AUX	B	AR, CF, GF	GF	37,000
Student Affairs Division <\$10M	AUX	B	AR, UR	AR	11,000
Student Housing Projects <\$10M	AUX	R	AR, EF	AR	7,000
Capital Projects < \$10M	E&G	B	EF	EF	25,000
<b>Davis Campus Total</b>			<b>1,126,000</b>	<b>556,000</b>	<b>1,682,000</b>
<b>UC DAVIS HEALTH</b>					
Ambulatory Care Center Expansion (Sacramento Campus)	MC	B			-
California Tower (Sacramento Campus)	MC	N		HR	30,000
Cancer Center Linear Accelerator (Sacramento Campus)	MC	R		HR	20,000
Compounding, Life Safety, & Utilities Compliance Upgrades	MC	B		HR	15,000
Eye Center (Sacramento Campus)	E&G	B		CF, EF, GF, HR	46,000
Health System Projects \$5M to \$10M	MC	B	HR	HR	48,000
Health System Projects \$750K to \$5M	MC	B	HR	HR	44,000
Hospital 2020 Priority 1 (Sacramento Campus)	MC	B	HR		11,000
Hospital Seismic Façade (Sacramento Campus)	MC	N	HR		11,000
Roseville PCN (Sacramento Campus)	MC	N	HR		39,000
<b>UC Davis Health Total</b>			<b>110,000</b>	<b>154,000</b>	<b>264,000</b>
<b>IRVINE CAMPUS</b>					
ARC Field Expansion	AUX	N			-
Art Museum	E&G	N		GF	55,000
Athletics Facilities Improvements	AUX	B		GF	47,000
Beall Center Expansion and Renovation	E&G	B		GF	6,000
Beckman Laser Expansion and Renovation	E&G	B		GF	31,000
Buildout of Shell Space - Interdisciplinary Science & Engineering	E&G	R			-
Capital Renewal and Infrastructure Improvements Program Phase 3B	E&G	I	CF, EF		37,000
Capital Renewal and Infrastructure Improvements Program Phase 4	E&G	I			-
College of Health Sciences Building	E&G	N		EF, GF	105,000
Facilities Management/Campus Services Relocation	E&G	N		P3	TBD
Health Sciences Parking Lot Expansion	AUX	I	EF		6,000
Interdisciplinary Science & Engineering Building 2	E&G	N	CF, EF, GF, SG		155,000
Parking Structure 5	AUX	N		EF	48,000
Sciences Buildings Renovations, Phase 1	E&G	R		EF	25,000
Shellmaker Island Boathouse Replacement	AUX	N			-
Sue & Bill Gross Nursing & Health Sciences Hall (994275)	E&G	N		EF, GF	60,000
Verano Unit 7 Apartments, Phase 2	AUX	N			-
Wellness, Health, Career & Counseling Building	E&G	N		CF, EF	75,000
Capital Projects \$750K to \$5M (E&G)	E&G	B	CF	CF	30,000
<b>Irvine Campus Total</b>			<b>213,000</b>	<b>467,000</b>	<b>680,000</b>
<b>UC IRVINE HEALTH</b>					
Douglas Hospital Inpatient Capacity	MC	R			-
FQHC Anaheim Replacement	MC	B		HR, OG	53,000
Irvine Campus Outpatient Clinic & Ambulatory Surgery Center	MC	N		EF, GF	48,000
Orange Campus Ambulatory Replacement	MC	N			-
Capital Projects \$5M to \$10M (MC)	MC	R		HR	13,000
Capital Projects \$750K to \$5M (MC)	MC	B	HR	HR	48,000
<b>UC Irvine Health Total</b>			<b>29,000</b>	<b>133,000</b>	<b>162,000</b>



## Appendix C – 2017-19 Capital Projects Look-Ahead List

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Project	Program Category	Type	Fund Source		Total
			2017-18	2018-19	
LOS ANGELES CAMPUS					
10995 Le Conte Apartments	AUX	N	AR, EF	-	210,000
CHS Emergency Generator Replacement	E&G	I	EF, SG		22,000
CHS NPI Seismic Correction	E&G	R	EF, HR, SG		38,000
CHS South Tower Post-Occupancy Improvements (Levels 8-10)	E&G	R	EF		30,000
Faculty Center Renovation	AUX	R	CF		15,000
Fielding School of Public Health Building Interior Renovation	E&G	R		CF, GF	50,000
Franz Hall Tower Seismic Renovation	E&G	R	EF, SG		46,000
Lot 15 Residence Hall	AUX	N	AR, EF		240,000
North Campus Infrastructure Improvements	E&G	I	EF		20,000
Public Affairs Building Renovation	E&G	R		CF	35,000
Real Estate Acquisition No. 1	AUX	N	AR, EF		25,000
Real Estate Acquisition No. 2	AUX	N		AR, EF	25,000
Southwest Campus Apartments	AUX	N	AR, EF	-	375,000
Capital Projects \$5M to \$10M (AUX)	AUX	B	AR	AR	30,000
Capital Projects \$5M to \$10M (E&G)	E&G	B	CF	CF	50,000
Capital Projects \$750K to \$5M (AUX)	AUX	R	AR	AR	29,000
Capital Projects \$750K to \$5M (E&G)	E&G	B	CF	CF	30,000
Los Angeles Campus Total			1,092,000	178,000	1,270,000
UC LOS ANGELES HEALTH					
CHS South Tower Post-Occupancy Improvements (Levels A&B)	MC	R			-
RRUMC Utility Building	MC	I		HR	70,000
SMH 1223 16TH Street Medical Office Building	MC	N			-
Westwood Patient Tower Addition	MC	N			-
Annual Capital Equipment Replacement	MC	N	HR	HR	225,000
Capital Projects \$5M to \$10M	MC	R	HR	HR	20,000
Capital Projects \$750K to \$5M	MC	R	HR	HR	10,000
UC Los Angeles Health Total			140,000	185,000	325,000
MERCED CAMPUS					
Federal Environmental Mitigation	E&G	B	CF	CF	5,700
Capital Projects \$750K to \$5M (E&G)	E&G	B	CF	CF	4,000
Merced Campus Total			4,000	5,700	9,700
RIVERSIDE CAMPUS					
Barn Expansion	AUX	B	AR, EF		27,000
Batchelor Hall Interior Improvements	E&G	R	CF, EF		9,000
Canyon Crest Housing Demolition	AUX	N		CF	5,000
Deferred Maintenance and Capital Renewal	E&G	R	CF, EF		15,000
Multidisciplinary Research Building 2	E&G	N	EF		150,000
North District Ph 1 - Student Housing, Dining, and Recreation	AUX	N	P3		550,000
Parking Structure 1/Outpatient Parking Lot	AUX	I	P3		TBD
Pierce Hall Interior Improvements	E&G	R	EF		23,000
Plant Growth Environments Facility 1	E&G	N	EF		27,000
Professional School 1 (School of Business Administration)	E&G	N			-
Student Success Center	E&G	N		AR, CF, SG	60,000
UCR Health Outpatient Pavilion	E&G	N	EF, P3		85,000
UCR Mobility Hub and Central Campus Neighborhood	AUX	N	EF, OG		15,000

## Appendix C – 2017-19 Capital Projects Look-Ahead List

Capital projects with a funding plan / see page 33 for key to abbreviations / funding total is in \$000

Project	Program Category	Type	Fund Source		Total
			2017-18	2018-19	
Capital Projects \$750K to \$5M (AUX)	AUX	B	AR	AR	10,000
Capital Projects \$750K to \$5M (E&G)	E&G	B	CF, EF	CF, EF	13,000
<b>Riverside Campus Total</b>			<b>913,000</b>	<b>76,000</b>	<b>989,000</b>
<b>SAN DIEGO CAMPUS</b>					
Design & Innovation Building	E&G	N	EF, GF		64,000
East Campus Loop Road - Medical Center Drive	E&G	I			-
Faculty / Staff Housing & Mixed-Use, Regents Road	AUX	N			-
Franklin Antonio Hall (Engineering Interdisciplinary Facility)	E&G	N		EF, GF	200,000
Fire Station	E&G	N	CF		23,000
Hillcrest Parking Structure	AUX	N		CF, EF	120,000
Hotel / Conference Center - East Campus	AUX	N			TBD
I-5 Switch Station	AUX	I	CF		18,000
Mesa Housing Pedestrian and Bike Bridge	AUX	I	EF		12,000
Muir Biology Building 1st & 2nd Floor Renovation	E&G	R	CF		11,000
North Campus Childcare Facility	AUX	N		CF	15,000
North Torrey Pines Living and Learning Neighborhood (NTP LLN)	AUX	N	AR, EF, GF		509,000
Nuevo East Student Housing	AUX	N	AR, CF, EF		266,000
Park & Market Tenant Improvements	E&G	N		CF	14,000
Research and Clinical Facility (includes Vision Research Institute)	E&G	N		P3	356,000
Ridge Walk Academic Complex at NTP LLN	E&G	N	EF	SG	118,000
Ridge Walk Improvements	E&G	N	CF		15,000
Scripps Visit Outreach Center	E&G	N			-
SIO Oceans and Human Health Research Building	E&G	N			-
SIO Parking Structure & Entry Improvements	AUX	N		CF	20,000
Spanos Facility Expansion	AUX	N		GF, UR	15,000
University Center Gateway	E&G	N		CF, EF, GF	190,000
University Center Multi-Modal Connections	E&G	I		CF	21,000
Voigt Parking Structure	AUX	N	CF		45,000
Deferred Maintenance \$750K to \$5M	E&G	B	CF	CF	30,000
Capital Projects \$5M to \$10M (AUX)	AUX	B	AR, CF, UR	AR, CF	75,000
Capital Projects \$5M to \$10M (E&G)	E&G	B	CF	CF	48,000
Capital Projects \$750K to \$5M (AUX)	AUX	B	AR	AR	10,000
Capital Projects \$750K to \$5M (E&G)	E&G	B	CF	CF	20,000
<b>San Diego Campus Total</b>			<b>1,159,000</b>	<b>1,056,000</b>	<b>2,215,000</b>
<b>UC SAN DIEGO HEALTH</b>					
Hillcrest Outpatient Facility	MC	R		EF	250,000
La Jolla - Perlman Renovations, HVAC, and ADA Improvements	MC	I	HR		20,000
La Jolla - Thornton Hospital East Entry and Imaging	MC	R	GF, HR		22,000
La Jolla - Thornton Hospital Emergency and Radiology Intake	MC	R	GF, HR		17,000
Medical Office Building Acquisition	MC	N	CF		50,000
Capital Projects \$5M to \$10M (MC)	MC	B	HR	HR	20,000
Capital Projects \$750K to \$5M (MC)	MC	B	HR	HR	30,000
<b>UC San Diego Health Total</b>			<b>134,000</b>	<b>275,000</b>	<b>409,000</b>
<b>SAN FRANCISCO CAMPUS</b>					
Clinical Sciences Building Seismic Retrofit and Renovation	E&G	R	EF		30,000
Millberry Union / Ambulatory Care Center Garage Spall Repair	E&G	R		EF	18,000
Mission Bay Childcare Relocation	AUX	N	CF		1,000

## Appendix C – 2017-19 Capital Projects Look-Ahead List

Capital projects with a funding plan / see page 33 for key to abbreviations / funding total is in \$000)

Project	Program Category	Type	Fund Source		Total
			2017-18	2018-19	
Mission Bay Utility Loop Distribution Extension	E&G	I	EF		13,000
Parnassus Health Sciences Instruction and Research Life Safety	E&G	R	CF, SG	SG	60,000
Parnassus Library Renewal	E&G	I		CF	25,000
Police Consolidation at 654 Minnesota Street	E&G	R		EF	13,000
UC Hall Stabilize, Close and Secure Project	E&G	R		EF	15,000
ZSFG Research Building Seismic Replacement	E&G	N	CF, EF, GF		231,000
ZSFG Wet Laboratory Tenant Improvements and Relocations	E&G	R		EF	38,000
Capital Projects \$5M to \$10M	E&G	I	CF		19,000
Capital Projects \$750K to \$5M - Facility Investment Needs	E&G	I	AR, CF, EF, HR	AR, CF, EF, HR	52,000
Capital Projects \$750K to \$5M - Infrastructure	E&G	I	CF	CF	22,000
Capital Projects \$750K to \$5M - Parking & Housing	AUX	I			-
Capital Projects \$750K to \$5M - Renovation	E&G	R	CF, HR	CF	61,000
<b>San Francisco Campus Total</b>			<b>379,000</b>	<b>219,000</b>	<b>598,000</b>
<b>UC San Francisco HEALTH</b>					
ACC 7 Transplant Remodel	MC	R	GF, HR		13,000
Clinical Space Renovation and Expansion Program	MC	R		HR	65,000
Inpatient Psych Unit	MC	R			-
Moffitt 15 Acute Care Nursing Unit	MC	R	HR		40,000
Precision Cancer Medicine Building at Mission Bay	MC	N	CF		10,000
Capital Projects \$5M to \$10M - Medical Center	MC	B	HR	HR	40,000
Capital Projects \$750K to \$5M - Infrastructure	MC	I	HR	HR	14,000
Capital Projects \$750K to \$5M - Renovation	MC	R	HR	HR	27,000
<b>UC San Francisco Health Total</b>			<b>120,000</b>	<b>89,000</b>	<b>209,000</b>
<b>SANTA BARBARA CAMPUS</b>					
Bioengineering Building Equipment	E&G	N	CF, EF		2,000
Jeff and Judy Henley Hall	E&G	N	GF		56,000
Mesa Verde Apartments 1	AUX	N			-
North Campus Faculty Housing Phase IV & V	AUX	N	P3		36,000
North Campus Open Space	E&G	R	OG		10,000
Ocean Science Education Bldg (OSEB) Ph 2	E&G	B		GF	20,000
Capital Projects \$750K to \$5M (Auxil)	AUX	B	AR	AR, CF	7,000
Capital Projects \$750K to \$5M (E&G)	E&G	R	CF, GF	CF, GF	19,000
<b>Santa Barbara Campus Total</b>			<b>116,000</b>	<b>34,000</b>	<b>150,000</b>
<b>SANTA CRUZ CAMPUS</b>					
12kV B-Feeder Reinforcement and Extension	E&G	I	AR, CF		9,000
Capital Renewal	E&G	R	EF	EF	10,000
Crown College Residence Halls Major Maintenance-Budget Increase	AUX	R	AR, EF		14,000
Crown Merrill, Redwood Grove, and Grad Housing Apartments	AUX	R			-
East Remote Parking Renovation	AUX	R	EF		2,000
Engineering Smart Power and Robotics Laboratories	E&G	R	CF		5,000
Kresge College Academic	E&G	B	CF	SG	6,000
Kresge College Non-Academic	AUX	B	AR, CF, UR	AR, CF, EF	202,000
Porter College Dining Expansion	AUX	R	AR, EF		8,000
Rachel Carson College Dining Expansion	AUX	R		AR	1,000
Ranch View Terrace Phase 2	AUX	N			-
Science & Engineering Library Student Study Space Level 3	E&G	R			-
Statewide Energy Partnership (SEP) Program	E&G	R		CF, EF	8,000

## Appendix C – 2017-19 Capital Projects Look-Ahead List

Capital projects with a funding plan / see page 33 for key to abbreviations / funding total is in \$000

Project	Program Category	Type	Fund Source		Total
			2017-18	2018-19	
Student Housing Infrastructure for P3	AUX	I	AR		40,000
Student Housing Telecommunications Upgrades Phase 2	AUX	I	AR		15,000
Student Housing West (P3)	AUX	N	P3		640,000
Student Life Seismic Corrections Phase 2B	AUX	R	CF, UR		14,000
Telecommunications Infrastructure Improvements Phase D	E&G	I	AR, CF, UR	AR, CF, EF, UR	12,000
West Campus 21kV Development	E&G	R	CF		54,000
Capital Projects \$750K to \$5M (Auxil)	AUX	R	AR, UR	AR, UR	11,000
Capital Projects \$750K to \$5M (E&G)	E&G	R	CF, GF	CF	22,000
<b>Santa Cruz Campus Total</b>			<b>843,000</b>	<b>230,000</b>	<b>1,073,000</b>
<b>DIVISION OF AGRICULTURE AND NATURAL RESOURCES</b>					
ANR Davis Parking Lot Expansion	E&G	N	EF	-	1,000
<b>Division of Agriculture and Natural Resources Total</b>			<b>1,000</b>		<b>1,000</b>
<b>SYSTEMWIDE AND OFFICE OF THE PRESIDENT</b>					
1100 Broadway Tenant Improvements	E&G	R	OUS	OUS	1,000
Blake House	E&G	R	OUS		1,000
Deferred Maintenance	E&G	R	SG	SG	85,000
Facilities Modernization & Deferred Maintenance (1111 Franklin Building)	E&G	R	OUS		1,000
Meridian Parkway 2nd Floor Tenant Improvements	E&G	N	OUS	OUS	10,000
Northern Regional Library Facility Phase 4 Expansion SYSTEMWIDE	E&G	N	OUS	SG	33,000
<b>Systemwide and Office of the President Total</b>			<b>55,000</b>	<b>76,000</b>	<b>131,000</b>

### Abbreviations

Program Category: E&G – Education & General  
 AUX – Auxiliary (housing, dining, student activities, etc.)  
 MC – Medical Centers

Type: B – Combination of new construction and renovation  
 I – Infrastructure  
 N – New Construction  
 R – Renovation

Funding Source: AR – Auxiliary Reserves  
 CF – Campus Funds  
 EF – External Finance  
 GF – Gift Funds  
 HR – Hospital Reserves  
 OG – Other Grant  
 P3 – Public Private Partnership  
 SG – General Funds (State)  
 UR – University Fee Reserves