



UNIVERSITY
OF
CALIFORNIA

Michael V. Drake, MD
President

December 7, 2023

Office of the President
1111 Franklin St.
Oakland, CA 94607

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

universityofcalifornia.edu

Enclosed for your information is the Annual Report on Major Capital Projects Implementation, Fiscal Year 2022-2023. This report is prepared annually and provides an overview of the status of major capital projects that were underway at the end of the 2022-2023 fiscal year, with a focus on projects with budgets of \$20 million and above.

CAMPUSES

Berkeley
Davis
Irvine
UCLA
Merced
Riverside
San Diego
San Francisco
Santa Barbara
Santa Cruz

Included in this report are two appendices with information about specific projects: the List of Completed Major Capital Projects over \$20 Million, and the List of Active Major Capital Projects over \$20 Million.

If you have any questions about the report, please contact Associate Vice President David Phillips.

Sincerely,

Michael V. Drake, MD
President

MEDICAL CENTERS

Davis
Irvine
UCLA
San Diego
San Francisco

Enclosure

NATIONAL LABORATORIES

Lawrence Berkeley
Lawrence Livermore
Los Alamos

cc: Chancellors

DIVISION OF AGRICULTURE AND
NATURAL RESOURCES

bcc: Members, President's Cabinet
Executive Vice President & Chief Financial Officer Brostrom
Associate Vice President Phillips
Executive Director Friedman

UNIVERSITY
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Interactive Learning Pavilion

Major Capital Projects Implementation Report

2022-23



University of California
Office of the President
Capital Asset Strategies
1111 Franklin Street, 7th Floor
Oakland, California 94607-5200

Cover photo: UCSB Interactive Learning Pavilion
Photo credit: Elena Zhukova

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SUMMARY

The Annual Report on Major Capital Projects Implementation Fiscal Year 2022-23 provides an update on the progress of the University's Capital Improvements Program. The report provides the status of all major capital projects¹ that were completed in fiscal year 2022-23² and active major capital projects in design or construction as of June 30, 2023. Over \$1.6 billion of projects were completed and \$18.8 billion are in construction systemwide in fiscal year 2022-23. The document includes additional details for projects with a budget of over \$20 million.

Figures 1 and 2 illustrate the full range of capital projects (Figure 1 Completed Projects and Figure 2 Active Projects), grouped by thresholds of under \$10 million, \$10-\$20 million, and over \$20 million. Projects with budgets over \$20 million account for the majority of the funds related to capital. Reported budgets may vary from those initially approved, as a result of augmentations. The reasons for augmentations vary, but are generally caused by scope and programmatic changes, cost escalation in the over-heated California and national construction market, and unforeseen site conditions. Reported schedule delays result from reasons that include scope changes and redesign, lead time of equipment and material, unexpected site conditions, and work in occupied buildings that impacted schedules. The impacts from the COVID-19 pandemic that began in the second half of FY 2019-20 continued its effect through the end of FY 2022-23, mainly in the delays of lead time of equipment and material and cost escalation.



Photo: UCI Verano 8 Housing

Credit: Bruce Damonte

¹ Major Capital Projects are capital projects with budgets of \$1 million or more.

² Completion is measured at the point that the project achieves substantial completion.

Figure 1 – Project Distribution by Budget Category – All Complete

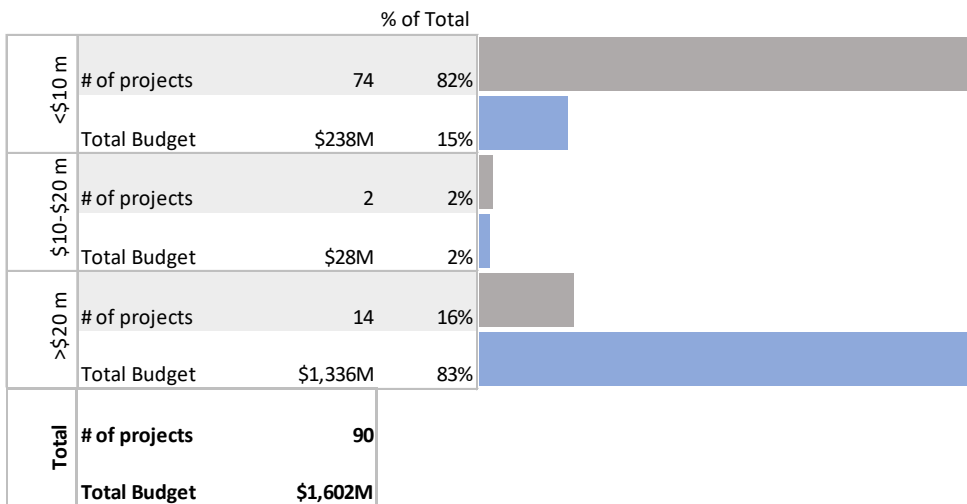
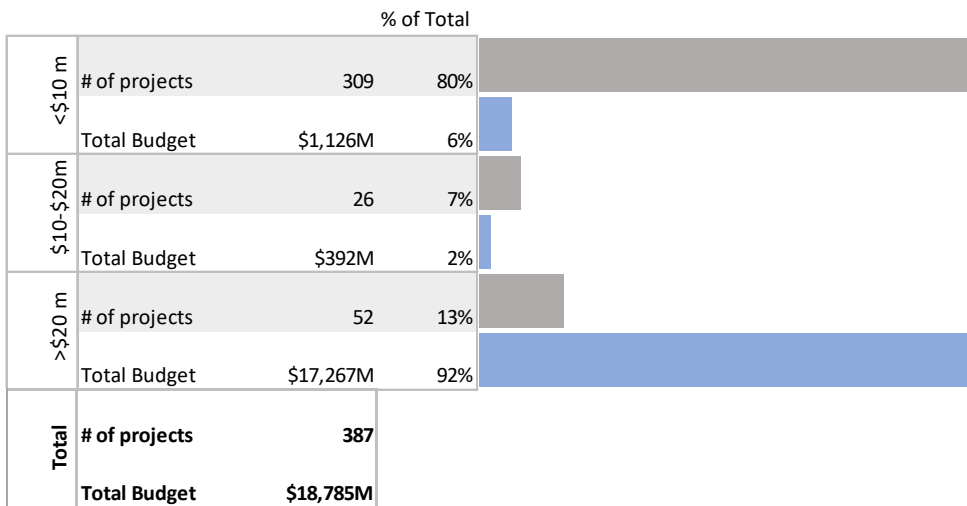


Figure 2 – Project Distribution by Budget Category – All Active



COMPLETED PROJECTS

The quality of projects completed last year remains exceptional by many measures including innovative and sustainable design to support world-class academic and research programs. Education and general campus renovation projects were an area of focus, as was delivery of housing.

All Completed Projects

Budget: 90 capital projects with a cumulative budget of \$1.6 billion were completed in fiscal year 2022-23. Of the 90 projects, 26 (29%) completed projects required budget augmentations, while 57 (63%) were on budget and 7 (8%) achieved budget savings. Budget projections provided at substantial completion indicate that the aggregate final budget for completed projects will be approximately \$9 million, or 1%, less than their original approved budget. This reduction was driven by a very large (\$35 million) single project reduction (LA-Southwest Campus Apartments).

The \$1.6 billion in completed projects in 2022-23 decreased from \$1.9 billion completed in 2021-22. New construction comprised 74 percent of the cumulative budget for completed projects. Of the 90 completed projects, 74 had budgets under \$10 million, and those were predominantly renovations and infrastructure projects, with a total completed budget of \$238 million. Seven projects that include seismic upgrade work were completed in FY 2022-23, with a total combined budget of \$90 million.

Schedules: On-time schedule performance for projects completed in 2022-23 declined compared to the previous year and remains a challenge. The percentage of late projects, defined as more than 90 days behind their approved schedule³, was 56 percent in 2022-23, 45 percent in 2021-22, 54 percent in 2019-20, and 59 percent in 2018-19.

Scope and programmatic changes were the leading cause of extended schedules, responsible for delays in 11 of the 50 delayed projects (22% of all delayed projects). Another major contributor was the lead time of materials and equipment (including shortages) which was linked to COVID-19 issues, and responsible for delays in 10 of the 50 delayed projects (20% of all delayed projects). Reasons for the remaining delays are similar to previous years, and include unforeseen conditions, coordination with other projects, and reviews by outside agencies.

Completed Projects with Budgets Over \$20 Million

Budget: The 14 completed projects with budgets over \$20 million totaled \$1.3 billion. Three required budget augmentations (Appendix A contains the list of major capital with budgets over \$20 million projects completed in FY2022-23) and two had budget savings. Figure 3 provides a comparison between fiscal year 2021-22 and fiscal year 2022-23 of complete projects with budgets over \$20 million. These figures indicate a decline in the number of projects completed as well as a decrease in the funds used for augmentations.

Schedules: Six projects encountered delays and four completed early as compared to the approved schedules. Reasons for delay were most often caused by lead time of materials but also by contractor issues and prolonged approvals.

Figure 3 – Completed Projects – Year over Year Comparison (Budget \$20+ million)			
	2021-22	2022-23	% Change
# of Complete Projects	22	14 ▼	-36%
Original Budgets Total	\$1.52B	\$1.36B ▼	-11%
Current Budgets Total	\$1.56B	\$1.34B ▼	-14%
% Budget Augmentation	3%	-1% ▼	-4%
% Projects Delayed 90+ Days	32%	43% ▲	11%

ACTIVE PROJECTS

All Active Projects

Budgets: Fiscal year 2022-23 saw a year-over-year increase in the number of active projects. There were 387 active projects with a cumulative budget of \$18.8 billion as of June 30, 2023, compared to 338 projects with a budget of \$17.4 billion in active projects on June 30, 2022.

³ The actual substantial completion date is compared to the substantial completion date estimated at the time of construction contract award to determine if a complete project is delayed.

Medical centers continue to dominate the total budget with 66 percent of the total active project investment. Other substantial portions of the investment portfolio include Education and General Use (14%) and Auxiliary projects (13%).

As of June 30, 2023, budget increases have been required for 87 of the 387 active projects, equal to 22 percent of the active project portfolio, for a cumulative budget increase of approximately 4 percent or \$735 million over the originally approved budgets of \$18.0 billion. Augmentations were not required for 299 active projects (77%) and 1 project (.03%) achieved budget savings.

Active Projects with Budgets Over \$20 Million

Budget: At the end of fiscal year 2022-23, 52 active projects with budgets of \$20 million or higher totaled \$17.3 billion. This represents a seven percent increase from the \$16.1 billion cumulative investment in fiscal year 2021-22. (refer to **Figure 4**).

Figure 4 – Active Projects – Year over Year Comparison (Budget \$20+ million)			
	2021-22	2022-23	% Change
# of Active Projects	53	52 ▼	-2%
Original Budgets Total	\$15.8B	\$16.6B ▲	5%
Current Budgets Total	\$16.1B	\$17.3B ▲	7%
% Budget Augmentation	2%	4% ▲	2%
% Projects Delayed 90+ Days	32%	38% ▲	6%

As of June 30, 2023, augmentations have been required for 20 of the 52 projects. However, two large augmentations accounted for the majority of the amount - Irvine – *the Center for Child Health*- accounts for \$189 million (29%) and Santa Cruz – *Kresge College Non-Academic* – accounts for \$224 million (34%) of the \$654 million in total augmentations. Bids higher than estimated and scope changes were cited as accounting for the majority of augmentations for projects with budgets over \$20 million.



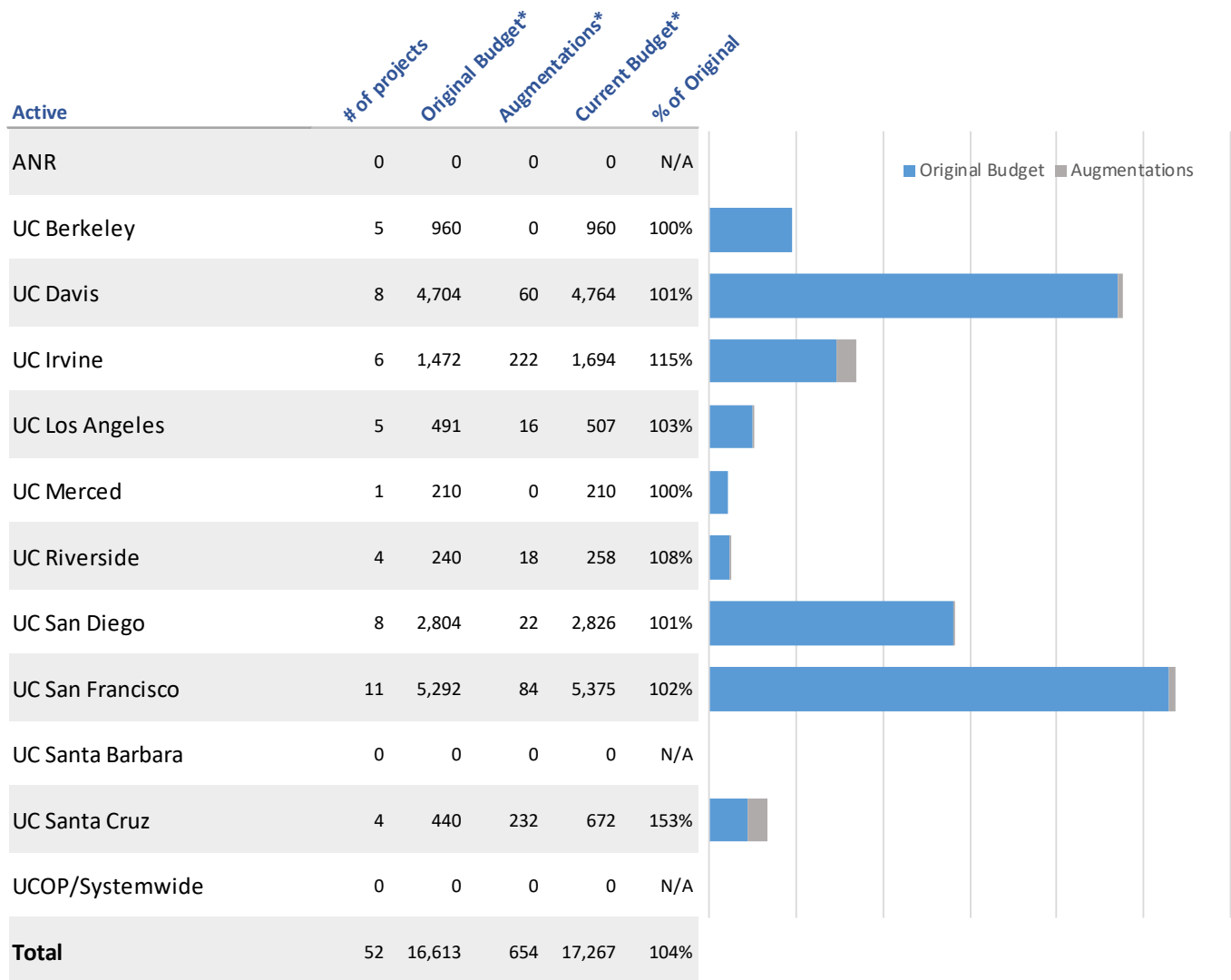
Photo: UCSC Kresge College

Credit: Carolyn Lagatutta © UC Regents

Schedules: Of the 52 active projects, 20 (38%) have experienced delays while 62 percent are currently anticipated to be completed either on time or ahead of schedule. Reasons to date for the reported delays included lead time of materials and equipment (including shortages), scope changes and redesign, unexpected site conditions, and weather delays due to this winter’s heavy rains.

Investment by Campus for Active Projects Over \$20 Million: As shown in **Figure 5**, capital project investment varies by campus, with the four largest programs at Davis, Irvine, San Diego and San Francisco accounting for 85 percent of the total dollar value for FY 2022-23.

Figure 5 – Active Major Capital Projects (Budget \$20+ million)



* in millions

Investment by Use for Active Projects Over \$20 Million: As illustrated in Figure 6, which shows investment by use category, the investment in Medical Center & Health Sciences facilities increased significantly (15%)

compared to FY 2021-22, Education and General Use saw a significant decrease (18%) and Auxiliary (e.g., housing, dining, and parking) stayed consistent (-2%).

About 90 percent (\$15.5 billion) of the total \$17.3 billion investment in projects over \$20 million is for new buildings and about 10 percent (\$1.8 billion) is for other project types including building renovation and infrastructure renewal. Two projects that include seismic upgrade work are included in the Active Projects with a total combined budget of \$105 million.

Figure 6 – Investment by Use – Active Projects (Budget \$20+ million)

	2021-22		2022-23		% Change
Education & General Use	\$2.4B	15%	\$2.0B	11%	-18%
Auxiliary	\$2.5B	16%	\$2.4B	14%	-2%
Med Center/Ed Health Science	\$11.2B	70%	\$12.8B	74%	15%
Total Investment	\$16.1B	100%	\$17.3B	100%	7%

In billions

PRESIDENTIAL PROCESS AND REGENTS PROCESS

The authority to approve projects from \$10 million up to \$70 million is delegated to the President when projects are consistent with the approved Capital Financial Plan and re-delegated to the Chancellors subject to a certification checklist review by the Office of the President to ensure policy compliance. This is referred to as the Presidential Process in this report. The authority to approve projects with budget above \$70 million lies with the Board of Regents and is referred to as the Regental Process in this report.

The Presidential Process increases campus autonomy and provides for campus accountability for capital project delivery while streamlining the capital approval process.

As reported in previous years, and as shown in **Figure 7** on the following page, the 2022-23 budget and schedule performance reports for active and completed projects over \$10 million indicate that projects approved under the Presidential Process were more likely to receive an augmentation (36%), than were those approved under the Regents Process (27%). Projects approved under the Presidential Process had a higher percentage of augmentation (11%) compared to their original budgets than did projects approved under the Regental Process (3%).



Photo: UCDH Sacramento Ambulatory Surgery Center

Credit: © UC Regents

Figure 7 – Presidential vs. Regental Process – Active & Complete (Budget \$10+ million)

	Presidential Process	Regental Process
# of Projects	61	33
Original Budget	\$1,617 M	\$16,749 M
Cumulative Approved Budget Changes (+/-)	\$177 M	\$481 M
Year-End Budget Change From Original	11%	3%
Projects with Budget Augmentations	22	9
Projects with Budget Savings	1	2
% of Projects with Budget Savings	2%	6%
% of Projects with Budget Augmentations	36%	27%

APPENDIX A – LIST OF COMPLETED MAJOR CAPITAL PROJECTS OVER \$20 MILLION (2022-23)

Notice of Substantial Completion or Certificate of Occupancy issued between July 1, 2022 and June 30, 2023

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	% Cost Increase	Reason(s) for Augmentation	Major Delays & Reason
Totals			1,355,704,000	(19,382,000)	1,336,322,000			
UCD	DV-Student-Athletics Performance Center	New Building Construction	52,328,000		52,328,000	0%		Contractor issues
UCD	DV-Engineering Student Design Center	Renovation	22,178,000		22,178,000	0%		Design changes and prolonged approvals, contractor delays
UCI	IR-Verano 8 Graduate Student Housing	New Building Construction	284,583,000		284,583,000	0%		
UCI	IR-Susan & Henry Samueli College of Health Sciences Building	New Building Construction	113,000,000		113,000,000	0%		Lead time of materials (including equipment/shortages)
UCI	IR-Sue and Bill Gross Nursing and Health Sciences Hall	New Building Construction	72,000,000		72,000,000	0%		Lead time of materials (including equipment/shortages)
UCI	IR-Health Sciences Parking Structure	New Building Construction	70,000,000		70,000,000	0%		
UCLA	LA-Southwest Campus Apartments	New Building Construction	383,290,000	(35,290,000)	348,000,000	-9%	Interest reduction and bids lower than estimate	
UCLA	LA-Public Affairs Building Seismic Improvements	Seismic Upgrade (Renovation)	28,800,000	(180,000)	28,620,000	-1%	Post construction budget reduction	
UCOP CAPITAL	OP-UC Sacramento Learning Complex	Both (New Construction & Renovation)	26,100,000	2,000,000	28,100,000	8%	Scope and programmatic changes	
UCSB	SB-Classroom Building	New Building Construction	97,133,000		97,133,000	0%		
UCSD	SD-Pepper Canyon Amphitheater, Public Realm, and Field House	New Building Construction	63,980,000	4,350,000	68,330,000	0%	Unforeseen site conditions	Lead time of materials (including equipment/shortages)
UCSD	SD-Central Utility Plant Expansion - Chiller Addition	Infrastructure	41,170,000	9,738,000	50,908,000	24%	Material escalation and labor shortages due to COVID	
UCSD	SD-York Hall Seismic Improvements	Seismic Upgrade (Renovation)	35,162,000		35,162,000	0%		

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	% Cost Increase	Reason(s) for Augmentation	Major Delays & Reason
UCSF	SF-MB Block 34 Parking Garage	New Building Construction	65,980,000		65,980,000	0%		Delay in permanent power

APPENDIX B – LIST OF ACTIVE MAJOR CAPITAL PROJECTS OVER \$20 MILLION (2022-23)

Projects in design or construction with approved budgets (excludes projects in planning, programming and design without approved budgets)

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	Reason(s) for Augmentation	Major Delays & Reason
Totals			16,613,005,600	653,934,000	17,266,939,600		
UCB	BK-Gateway	New Building Construction	550,000,000		550,000,000		
UCB	BK-Heathcock Hall	New Building Construction	150,000,000		150,000,000		
UCB	BK-Academic Replacement Building	New Building Construction	136,823,000		136,823,000		
UCB	BK-Bechtel Engineering Center Renovation and Addition	Both (New Construction & Renovation)	92,350,000		92,350,000		
UCB	BK-DM FY21 Campus High Voltage Infrastructure Replacement	Infrastructure	30,673,600		30,673,600		
UCD	DV-Hot Water Quad Loop and Hutchison Conversion	Infrastructure	55,200,000		55,200,000		Scope and programmatic changes and COVID-19 impacts
UCD	DVH-Hospital Seismic Upgrade Stair Tower & Exit	Seismic Upgrade (Renovation)	12,945,000	28,800,000	41,745,000	Construction cost increases, Unforeseen site conditions and scope and programmatic changes	Unforeseen site conditions and Scope and programmatic changes
UCD	DV-Veterinary Medical Center: All Species Imaging Center	Both (New Construction & Renovation)	22,650,000	2,150,000	24,800,000	Bids higher than estimate	Scope and programmatic changes
UCD HEALTH	DVH-California Hospital Tower	New Building Construction	3,773,251,000		3,773,251,000		
UCD HEALTH	DVH-Sacramento Ambulatory Surgery Center	New Building Construction	563,000,000	26,000,000	589,000,000	Programmatic changes due to revised projected growth volumes	
UCD HEALTH	DVH-Folsom Medical Office Building	New Building Construction	171,690,000		171,690,000		

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	Reason(s) for Augmentation	Major Delays & Reason
UCD HEALTH	DVH-Parking Structure 5	New Building Construction	58,900,000	2,800,000	61,700,000	Scope and programmatic changes	Scope and programmatic changes
UCD HEALTH	DVH-Pharmacy Shared Services Center	New Building Construction	46,700,000		46,700,000		
UCI	IRH-Irvine Campus Medical Complex	New Building Construction	1,073,000,000		1,073,000,000		
UCI	IR-Falling Leaves Foundation MIB (Formerly Seismic Replacement Lab. Bldg.)	New Building Construction	230,000,000	19,999,000	249,999,000	Bids higher than estimate	
UCI	IRH-Center for Child Health	New Building Construction	32,365,000	188,880,000	221,245,000	Scope and programmatic changes to expand the project from a 33,150 GSF pediatric center to a medical office building of about 168,500 GSF.	Lead time of materials (including equipment/shortages), Scope and programmatic changes
UCI	IR-Mesa Court Residence Hall Expansion	New Building Construction	80,659,000	12,000,000	92,659,000	Bids higher than estimate	
UCI	IR-Capital Renewal Infrastructure Improvement Program Phase 3B	Infrastructure	37,100,000		37,100,000		The project consists of dozens of smaller, prioritized infrastructure projects, some of which have been delayed due to COVID-19 impacts and reallocation of funding to other projects.
UCI	IR-Medical Education Building Renovations	Renovation	19,000,000	1,000,000	20,000,000	Bids higher than estimate and Scope and programmatic changes	Scope and programmatic changes and lead time of materials (including equipment/shortages)
UCLA	LA-Cogeneration Plant Equipment Replacement	Infrastructure	62,000,000		62,000,000		Approvals by outside agencies
UCLA	LA-Health Sciences Emergency Power System Upgrade	New Building Construction	23,395,000	16,400,000	39,795,000	Scope and programmatic changes and bids higher than estimate	
UCLA	LA-CHS B-Level GMP Facility	Renovation	29,200,000		29,200,000		

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	Reason(s) for Augmentation	Major Delays & Reason
UCLA	LA-Rosenfeld Hall Expansion and Renovation	Renovation	24,000,000		24,000,000		Weather delays and impacts, lead time of materials (including equipment/shortages) and unforeseen site conditions
UCLA HEALTH	LAH-Neuropsychiatric Replacement Hospital	Renovation	352,000,000		352,000,000		
UCM	MC-Medical Education Building	New Building Construction	210,400,000		210,400,000		
UCR	RV-School of Medicine Education Building II	New Building Construction	100,000,000		100,000,000		
UCR	RV-School of Business Building	New Building Construction	87,000,000		87,000,000		
UCR	RV-Bachelor Hall Building System	Renovation	18,083,000	18,185,000	36,268,000	Two projects in Bachelor Hall were combined	
UCR	RV-Student Health & Counseling Center	New Building Construction	34,750,000		34,750,000		Lead time of materials (including equipment/shortages)
UCSC	SC-Kresge College Non-Academic	Both (New Construction & Renovation)	205,650,000	223,944,000	429,594,000	Schedule shifts and impacts due to COVID-19; added scope to increase the approved bed count	
UCSC	SC-Kresge College Academic	Both (New Construction & Renovation)	53,000,000	7,850,000	60,850,000	Covid-19 impacts, Project schedule issues, and coordination of early bid packages with final documents, complexities and scope and programmatic changes	Lead time of materials (including equipment/shortages), Contractor issues, and Scope and programmatic changes
UCSC	SC-Rachel Carson College Dining Expansion	Renovation	36,200,000		36,200,000		Contractor issues and lead time of materials (including equipment/shortages)
UCSC	SC-Student Housing West Phase 1 – Hagar Development	New Building Construction	145,615,000		145,615,000		
UCSD	SD-Ridge Walk North Living and Learning Neighborhood	New Building Construction	683,000,000		683,000,000		

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	Reason(s) for Augmentation	Major Delays & Reason
UCSD	SD-Theatre District Living & Learning	New Building Construction	565,000,000		565,000,000		Lead time of materials (including equipment/shortages), prefabrication manufacturing issues, weather delays and impacts
UCSD	SD-Triton Center	New Building Construction	428,200,000		428,200,000		
UCSD	SD-Pepper Canyon West Student Housing	New Building Construction	365,000,000	20,000,000	385,000,000	Cost escalation and unforeseen site conditions	
UCSD	SD-Viterbi Family Vision Research Center	New Building Construction	152,000,000		152,000,000		Weather delays and impacts; lead time of materials (including equipment/shortages)
UCSD	SD-Distributed Energy Resources (DER) Connects and Microgrid	Infrastructure	29,500,000	2,004,000	31,504,000	Scope and programmatic changes	
UCSD HEALTH	SD-Hillcrest Outpatient Pavilion	New Building Construction	550,275,000		550,275,000		Weather delays and impacts; approvals by outside agencies
UCSD HEALTH	SDH-Shiley Eye Institute Renovation	Renovation	30,900,000		30,900,000		
UCSF	SF-UCSF Research Building at ZSFGH	New Building Construction	275,115,000		275,115,000		Department of Public Health use of site for COVID-19 testing site delayed start of construction
UCSF	SF-HSIR Seismic Improvements	Seismic Upgrade (Renovation)	47,432,000	16,068,000	63,500,000	Higher bids, extended project schedules and associated costs	
UCSF	SF-CUP Fuel Tanks Replacement	Infrastructure	34,300,000	9,800,000	44,100,000	Bids higher than estimate	Logistical coordination with other projects
UCSF	SF-HSIR Life Safety Improvements (AB94)	Renovation	13,000,000	12,700,000	25,700,000	Bids higher than estimate and project schedule issues	
UCSF	SF-UC Hall Interior Abatement and Demolition	Renovation	22,000,000		22,000,000		

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	Reason(s) for Augmentation	Major Delays & Reason
UCSF HEALTH	SFH-New Hospital at Helen Diller Medical Center at PHTs	New Building Construction	4,332,271,000		4,332,271,000		
UCSF HEALTH	SFH-MB Block 34 Clinical Building	New Building Construction	335,843,000	13,750,000	349,593,000	Increase in scope to build out part of shelled space.	
UCSF HEALTH	SFH-Peninsula Outpatient Center Tenant Improvements	Renovation	88,841,000	11,804,000	100,645,000	Bids higher than estimate	
UCSF HEALTH	SFH-Mt. Zion Main Hospital Bldgs. A & B 7 th Flr. Renovations for Inpatient Psychiatric Svcs.	Renovation	46,000,000	19,800,000	65,800,000	COVID-19 impacts, higher bids, and unforeseen conditions.	Weather delays and impacts.; lead time of materials (including equipment/shortages); Unforeseen site conditions; and Approvals by outside agencies
UCSF HEALTH	SFH-BCH Oakland Administrative Support Building	New Building Construction	63,000,000		63,000,000		
UCSF HEALTH	SFH-Langley Porter Psychiatric Institute Buildings Demolition	Other (add notes)	33,729,000		33,729,000		Work in occupied buildings

* This list does not include UCB's Housing Project #2 (on the current People's Park site) as the project is currently on hold due to legal issues.



Lecture Hall
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