

UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

EXECUTIVE VICE PRESIDENT—
CHIEF FINANCIAL OFFICER

OFFICE OF THE PRESIDENT
1111 Franklin Street, 6th Floor
Oakland, California 94607-5200
510/987-9029

August 25, 2017

The Honorable Holly J. Mitchell
Chair, Joint Legislative Budget Committee
State Capitol, Room 5080
Sacramento, CA 95814

Mr. Michael Cohen
Director of Finance
State Capitol, Room 1145
Sacramento, CA 95814

Dear Senator Mitchell and Director Cohen:

In accordance with Sections 92493 through 92496 of the Education Code, the University of California is submitting for your review and approval the University's 2018-19 State Capital Outlay proposal. The proposal totals \$300.8 million of State resources and includes \$265.8 million for eight capital projects and \$35 million for the second phase of a systemwide deferred maintenance program. Capital projects are also supported with \$109.6 million of non-State resources. The projects address seismic and life safety corrections at Berkeley, San Diego, and San Francisco campuses; enrollment growth at Davis, Riverside, and Santa Cruz campuses; and systemwide library storage needs. A Capital Outlay Budget Change Proposal Report for the deferred maintenance program and each project is attached.

Your consideration and support of the University's 2018-19 Capital Outlay request is appreciated and I look forward to discussing this proposal with you. Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Nathan Brostrom".

Nathan Brostrom
Executive Vice President-Chief Financial Officer

Attachment

cc: President Napolitano (*electronic attachment only*)
Deputy Chief of Staff Jones (*electronic attachment only*)
Associate Vice President Kim
Interim Associate Vice President Flaherty
Interim Associate Vice President Alcocer (*electronic attachment only*)
Chief of Staff Gabriel

Chief of Staff Werdick
Executive Director Stimpson
Director Dahl
Director Santa Cruz
Director Yin (*electronic attachment only*)
Assistant Director Diaz (*electronic attachment only*)
Manager Kennedy
Budget Analyst Olmos (*electronic attachment only*)
Ms. Finn, Program Budget Manager, Department of Finance (*electronic attachment only*)
Mr. Lief, Principal Program Analyst, Department of Finance
Ms. Lukenbill, Principal Program Analyst, Department of Finance
Mr. Katz, Finance Analyst, Department of Finance
Mr. Osmena, Finance Analyst, Department of Finance (*electronic attachment only*)
Mr. Constantouros, Legislative Analyst's Office
Ms. Collins, Joint Legislative Budget Committee
Ms. Huynh, Budget Consultant for Senator Mitchell
Ms. Black, Senate Republican Caucus
Ms. Lee, Senate Budget and Fiscal Review Subcommittee
Mr. Martin, Assembly Budget Subcommittee #2

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
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Budget Request Name	Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)
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Project Title Berkeley – Giannini Hall Seismic Safety Corrections	Project Status and Type Status: <input type="checkbox"/> New <input checked="" type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
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Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$35,950	Phase(s) to be Funded C	Estimated Total Project Cost (in thousands) \$39,200
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Budget Request Summary
Giannini Hall Seismic Safety Corrections – \$35,950,000 for Construction. The project includes reinforcing the structural components of historic Giannini Hall to improve its resistance to seismic forces and provide substantial life safety protection to its occupants during a large seismic event. Giannini Hall is home to the: College of Natural Resources; Departments of Environmental Science, Policy, and Management; and Agricultural and Resource Economics. Total project costs are estimated at \$39,200,000, including preliminary plans (\$1,000,000), working drawings (\$2,250,000), and construction (\$35,950,000). The construction amount includes \$32,274,000 for the construction contract, \$2,267,000 for contingency, and \$1,409,000 for architectural and engineering services. The current project schedule estimates preliminary plans began in July 2017 and be completed in September 2017. The working drawings are estimated to begin in October 2017 and be completed in April 2018. Construction is scheduled to begin in October 2018 and will be completed in March 2020.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
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Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
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Impact on Support Budget

One-Time Costs Yes No Future Costs Yes No
 Future Savings Yes No Revenue Yes No

If proposal affects another department, does other department concur with proposal? Yes No
 Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Dana Santa Cruz	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

Project Planning Guide Addendum
Giannini Hall Seismic Safety Corrections

Account 912051
July 2017

Approved for Campus:

Emily Marthinsen

Emily Marthinsen AIA
Assistant Vice Chancellor
Physical and Environmental Planning, Campus Architect

BACKGROUND

Giannini Hall is a four-story, 46,000 assignable square foot (asf) concrete building located at the northwest quadrant of the Berkeley campus, approximately one-half mile west of the seismically active Hayward Fault. The building was originally constructed in 1930 and has had no significant structural modifications since that time. Giannini Hall was placed on the National Register of Historic Places in March 1982. It is a notable element of the central campus as well as an integral part of the historic Agriculture Complex, which comprises Giannini, Wellman, and Hilgard Halls.

Giannini Hall is rated “V” or “Poor.” A large earthquake is expected to create appreciable life hazards to those in Giannini Hall in the building's current condition. The building has an inadequate lateral force-resisting system and does not meet modern standards for what is considered a seismically safe structure. In a major earthquake, the performance of Giannini Hall is anticipated to result in significant structural damage, and falling hazards from the building's components would create safety risk to its occupants.

In accordance with sections 92493 through 92496 of the Education Code, UC submitted a report on August 31, 2016, to the Legislature and the Department of Finance indicating UC's intent to use its State General Fund support appropriation for capital expenditures. That report included the scope and cost for the preliminary plans and working drawings phases for the Giannini Hall Seismic Safety Corrections project. On April 24, 2017, Department of Finance conveyed the final approval for the two phases.

PROJECT SCOPE

The proposed retrofit strategy provides the upgraded structure with the strength and ductility to meet the University's seismic performance rating of “III” or “Good” for a major seismic event. The structural strengthening work will require selective demolition and associated repair or replacement of building components and finishes when necessary to gain access and to accomplish the structural corrections. The project will provide the following improvements:

- Strengthening the structure:
 - Constructing steel-reinforced concrete grade beams and footings with soil anchors, shear walls, and collector beams to reduce stresses in the building to acceptable levels.
 - Extending foundations beyond the building's perimeter to facilitate installation of grouted soil anchors and improve overturning resistance.
 - Constructing interior shear walls (up to 24 inches thick) in both the transverse and longitudinal directions to provide the necessary seismic strengthening. The longitudinal shear walls will be located at the eastern wall of the central corridor and will include openings to maintain access into adjoining rooms. The transverse concrete shear walls will be located on the exterior side of the north and south walls of the building. These

walls will extend from the foundations to the underside of the third floor and will include openings that correspond to the existing windows.

- Providing proper anchorage for potential falling hazards such as roof tiles, light fixtures, ceilings, and improperly braced equipment throughout the building.
- Addressing fire, life safety and code requirements and systems impacted by the structural work:
 - Relocating or repairing electrical, mechanical, plumbing, and communications systems impacted by structural work.
 - Performing mandatory work to correct fire and life safety deficiencies including upgraded fire alarm system, an automatic fire sprinkler system, and correcting deficiencies in rated occupancy separations, improving exit signs and exiting lighting.
 - Providing an acceptable, code compliant accessible path of travel in compliance with the Americans with Disabilities Act (ADA). This may involve modifying existing doorways and ramps and installing a new elevator and shaft because the existing elevator shaft is too small to accommodate the required cab size. Additional modifications to meet building code requirements for accessibility to interior doors, door hardware, and other interior features will be required in those rooms that are directly impacted by the seismic correction work.

Giannini Hall is registered on the National Register of Historic Places, the State Historic Resources Inventory and is a City of Berkeley Landmark. In accordance with the campus' 2014 Long Range Development Plan, any construction done on buildings either registered on the National Register or eligible for registration has to comply with the Secretary of Interior Standards for the Treatment of Historic Properties. The University works closely to coordinate with the State Office of Historic Preservation (SHPO) on retrofit projects of historic campus buildings. Coordination of seismic work with historic elements will be undertaken in order to protect and retain significant historic characteristics of the building in compliance with the Secretary of the Interior Standards. This includes sending drawings and project descriptions to the SHPO for review, as well as inviting them to the campus to observe project sites and assess project options.

As construction can be done more quickly and safely in an un-occupied building, and to maintain the ability to continue critical instructional programs during the construction period, the current occupants will be moved temporarily from Giannini during construction, at campus expense.

PROJECT SCHEDULE

The schedule is consistent with the approved August 2016 Project Planning Guide. Construction of the project is projected to begin in the spring or fall of 2018, depending on surge options for the building occupants. Finalization of design plans would begin in July 2017, followed by required reviews, preparation of working drawings, and bidding in early 2018. The construction is estimated to take 18

months and will be completed in March 2020.

COST BASIS AND SUSTAINABILITY

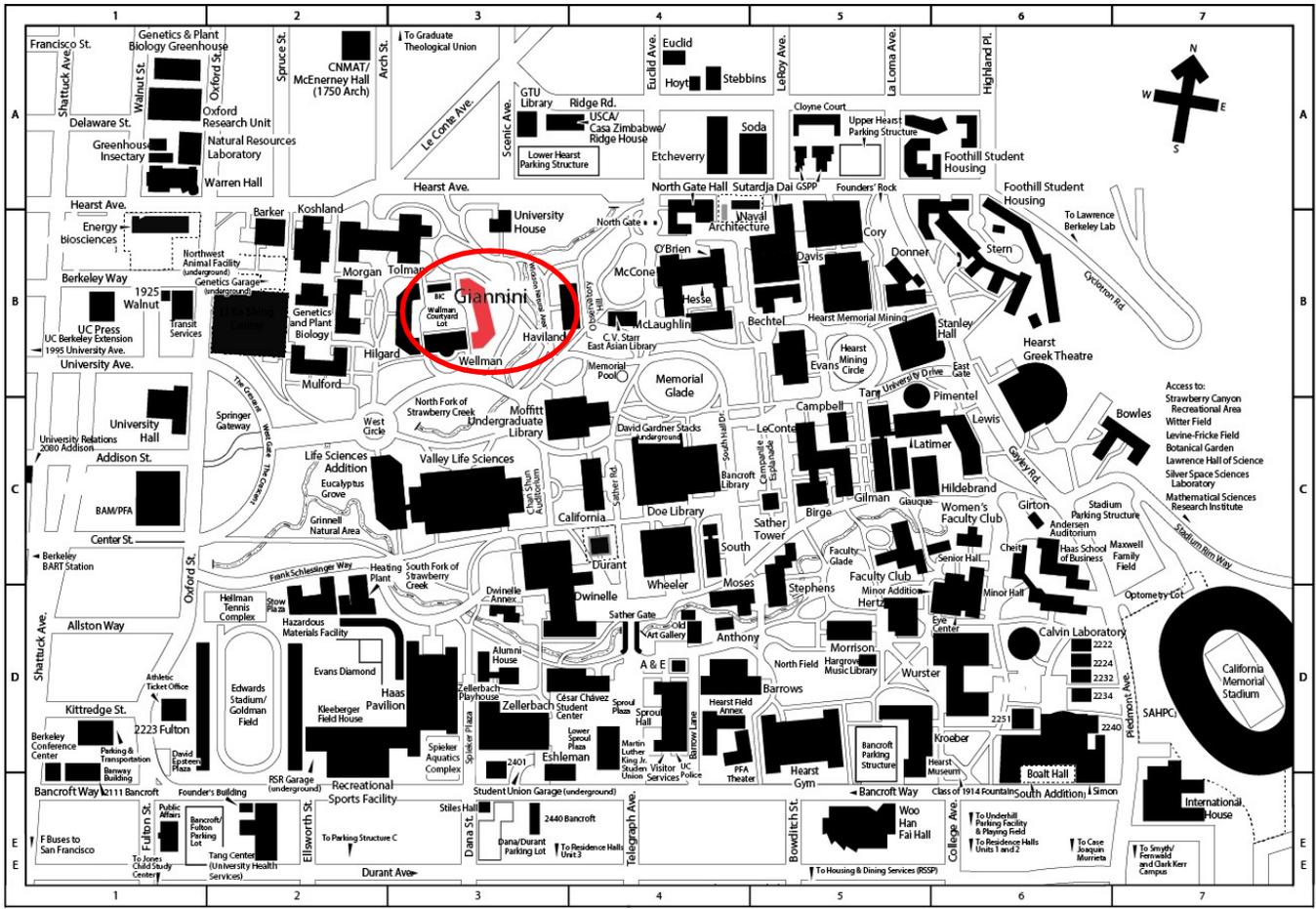
The campus has completed planning studies and cost analyses for the project. Project costs will be further refined during detailed programming. The project will comply with the University of California Policy on Sustainable Practices. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, and plan to achieve a minimum of LEED-ID+C Certified rating and register with the utilities' Savings by Design program, if eligible, consistent with budgetary constraints and regulatory and programmatic requirements.

Surge costs associated with the implementation of the project will be funded by campus resources in a separately funded project.

RELATIONSHIP WITH UNIVERSITY MISSION AND OBJECTIVES

The University's capital improvement program addresses seismic, fire, and other life-safety hazards; renewing obsolete and aging facilities; renovating facilities to meet changing program needs; and expanding critical infrastructure and utility systems to meet program requirements. This project supports the mission of the University of California by addressing seismic remediation for a heavily utilized facility on the Berkeley campus.

LOCATION MAP



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**CAPITAL IMPROVEMENT BUDGET
ANALYTICAL DATA**

UNIVERSITY OF CALIFORNIA
BERKELEY
Campus

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Seismic Safety Corrections - Giannini Hall	912051	0	CCCI: 6566 EPI:
Project Title	Campus Reference	Asset No.	Cost Indexes

F ANALYTICAL DATA

	Column (1)			ALL	
ASF per PPG	7/16	46,009 ASF	46,009 ASF	46,009 ASF	46,009 ASF
ASF Current		ASF	ASF	ASF	ASF
OGSF		0 OGSF	OGSF	OGSF	69,564 OGSF
Ratio (ASF Current/OGSF)		to 1.00	0.00 to 1.00	to 1.00	0.66 to 1.00
Construction Cost per ASF		/ASF	#DIV/0! /ASF	#DIV/0! /ASF	701.47 /ASF
Construction Cos/ OGSF		/OGSF	#DIV/0! /OGSF	#DIV/0! /OGSF	463.95 /OGSF
Total PWC Cost per ASF		/ASF	#DIV/0! /ASF	#DIV/0! /ASF	852.01 /ASF
Total PWC Cost per OGSF		/OGSF	#DIV/0! /OGSF	#DIV/0! /OGSF	563.51 /OGSF
Gr 2&3 Equip. Cos/ ASF		/ASF	#DIV/0! /ASF	/ASF	0.00 /ASF

G CONSTRUCTION COST ANALYSIS

	COSTS	UNIT COSTS		%	REMARKS
		\$/ASF	\$/OGSF		
• Concrete & Structure • • •	\$				
• Closing -in • • • • •					
• Finishing • • • • •					
• Group 1 Equipment •					
a SUBTOTAL-Gen Constr •	\$	\$	\$		
b HVAC • • • • •					
c Plumbing • • • • •					
d Electrical • • • • •					
e Elevators • • • • •					
f Other • • • • •					
TOTAL BUILDING COST ONLY • • • • •	\$	\$	\$		
g Additional Bldg. Costs					
TOTAL BUILDING + ADDITIONAL COSTS • • •	\$	\$	\$		
h Other Construction • •					• Identify
i Other Construction • • •					• Identify
TOTAL CONSTRUCTION COST • • • • •	\$				• Same as Schedule C, Item1 (line 24) Page 1

H NOTES: CB Special Items (000s).

Advanced Planning Expenses	20	
Special Consultants	200	
Hazardous Materials Assessment	130	
Preconstruction Services	75	
Project Reviews	50	
Code Compliance Fees	175	
TOTAL:	650	

Budget No	1
Issue Date	08/25/16
Revised	06/21/17
Revised	
Revised	
Revised	

Prepared By: J. Chavez

Project Schedule
UNIVERSITY OF CALIFORNIA, BERKELEY

PROJECT: Seismic Safety Corrections, Giannini Hall
 ACCOUNT NO.: 912051

DATE: June 21, 2017

ACTIVITY	No. of Months	Jan 2017			July 2017-18			July 2018-19			July 2019-20			July 2020-21					
		J	F	M	J	A	S	O	N	D	J	F	M	J	A	S	O	N	D
Preliminary Plans	3																		
Preliminary Plans Review	1																		
Working Drawings	7																		
Agency Review	2																		
Working Dwg Review	1																		
Bid/Award	3																		
Construction	18																		
Equipment	0																		
Cumulative Calendar Months	33																		

Approved: 
 Title: Director, Construction & Design

UNIVERSITY OF CALIFORNIA ENVIRONMENTAL IMPACT CLASSIFICATION

Campus/Field Station/Division BERKELEY Project Account 912051

Project Title Giannini Hall Seismic Safety Corrections

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map with your submission.

I. EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 - When it can be seen with certainty that there is no possibility the action will result in physical change to the environment (15061(b)(3)), or the action is specifically exempted by statute (15260-15285), the project is classified as generally exempt from CEQA. General/Statutory Exemption: § [Insert applicable CEQA Guidelines Section]

II. CATEGORICALLY EXEMPT - This project falls under the indicated Class(es) of Exemption(s), none of the exceptions to the exemption apply (15300.2), and there is no significant effect on the environment (for complete list see CEQA Guidelines Section 15300):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 17: Open Space Contracts or Easements |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 23: Normal Operation of Facilities for Public Gatherings |
| <input type="checkbox"/> Class 3: New Construction or Small Structures | <input type="checkbox"/> Class 25: Transfer of Land: Natural Conditions/Historical Resources |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 30: Minor Actions: Prevent Hazardous Waste/Substances |
| <input type="checkbox"/> Class 6: Information Collection | <input checked="" type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 13: Acquisition for Conservation | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership for Parks | <input type="checkbox"/> Other: <u>[If other, identify which class under Section 15300]</u> |

III. INITIAL STUDY - This project is not statutorily or categorically exempt from CEQA; an Initial Study is to be prepared to determine if the project may have a significant effect on the environment.

Stand-Alone Tiered Initial Study (15152): _____

IV. ENVIRONMENTAL IMPACT REPORT (EIR) - It is known that the project will have a direct or cumulatively significant effect on the environment and an EIR will be/has been prepared. Identify the type of EIR:

Programmatic Stand-Alone (Project-Specific) _____

Additional project analysis:

None/Findings Only Addendum Subsequent Supplement to EIR: _____

PROJECT DESCRIPTION -

Per the 1997 Preliminary Seismic Evaluation, Giannini Hall is identified as seismically poor and in need of retrofit to address structural and life safety hazards. The project will conduct seismic upgrade of the buildings to improve the seismic safety rating to "good". The project will provide structural strengthening and associated repair of any disturbed areas. The building is listed in the National Register of Historic Places.

The project is exempt under Class 31, Historical Resources Restoration/Rehabilitation. The building's renovation/rehabilitation would implement the recommendations in the Historic Structures Report, dated December 20, 2002, developed in accordance with the Secretary of the Interior Standards, specifically as they relate to restoration of windows, doors, building finishes, and integration of code measures. No expansion or change of use is proposed.

ALSO EXEMPT UNDER CLASS 2 ON SEPARATE AND INDEPENDENT BASIS.

V. Does this project conform to the approved LRDP? YES NO NA [If NO or NA, include explanation in Project Description above]

VI. Judy Chess 8/17/17 Emily Martinson 8/18/17
 Prepared by Date Local Approved by Date

VII. OFFICE OF THE PRESIDENT

Concur with Classification Do not concur with Classification

[Signature] 8/18/2017
 Signed Date

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
Budget Request Name		Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)

Project Title San Francisco – Health Sciences Instruction & Research Life Safety Improvements	Project Status and Type Status: <input type="checkbox"/> New <input checked="" type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
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Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$10,000	Phase(s) to be Funded C	Estimated Total Project Cost (in thousands) \$13,000
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Budget Request Summary

Health Sciences Instruction & Research Life Safety Improvements – \$10,000,000 for Construction. The project would remediate life-safety egress impediments with selective and strategic renovations on multiple floors in the Health Sciences Instruction & Research complex, specifically in the Health Sciences East and Health Sciences West towers. The towers house a combined total of approximately 283,000 assignable square feet. Total project costs are estimated at \$13,000,000, including design (\$3,000,000) and construction (\$10,000,000). The construction amount includes \$9,400,000 for the construction contract and \$600,000 for contingency. The current project schedule estimates design will began in July 2017 will be completed in March 2018. Construction is scheduled to begin in September 2018 and will be completed in August 2019.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
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Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
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Impact on Support Budget

One-Time Costs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Future Costs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Future Savings <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Revenue <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If proposal affects another department, does other department concur with proposal? Yes No
 Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Carey Barker	Date 8/25/2017	Reviewed By Dana Santa Cruz	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

**UNIVERSITY OF CALIFORNIA
SAN FRANCISCO**

Project Planning Guide Addendum

**UCSF
Parnassus Heights Campus Site
Health Sciences Instruction & Research
Life Safety Improvements**

August 2017

2017-20 Capital Improvement Program
S.F. Account No. 9002945

Approved:

DocuSigned by:

Lori Yamauchi

75DD899B28F84CF...

Lori Yamauchi
Associate Vice Chancellor
Campus Planning

Distribution

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P. Jenny	Senior Vice Chancellor, Finance and Administration
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M. Bade	Associate Vice Chancellor, Capital Programs and Campus Architect
B. Smith	Associate Vice Chancellor, Research Infrastructure and Operations
L. Yamauchi	Associate Vice Chancellor, Campus Planning

ADDENDUM TO THE PROJECT PLANNING GUIDE

HEALTH SCIENCES INSTRUCTION & RESEARCH LIFE SAFETY IMPROVEMENTS

This project will remediate life-safety egress impediments through selective and strategic renovations of multiple floors in the Health Sciences Instruction & Research (HSIR) complex, specifically in the Health Sciences East (HSE) and Health Sciences West (HSW) towers, at the University of California, San Francisco (UCSF) Parnassus Heights campus site. The proposed project will address the most critical egress issues associated with exiting through multiple rooms and dead-end corridors on as many floors in HSIR as possible, within available funding. The scope of work includes demolition and reconstruction of walls, ceilings, and floors as part of reconfiguring paths of travel; relocation of utilities and infrastructure, as needed; and installation of directional signage as appropriate. In addition, as the budget allows, new sprinklers would be installed within the area of work as needed to ensure safe exiting from the high-rise towers.

The HSIR towers are high-rise buildings that will remain occupied during construction. This requires additional coordination in order to minimize disruption to the ongoing research and instruction activities.

In accordance with sections 92493 et seq. of the Education Code, UC submitted a report on August 31, 2016, to the Legislature and the Department of Finance indicating UC's intent to use its State General Fund support appropriation for capital expenditures. That report included the design phase for the Health Sciences Instruction & Research Life Safety Improvements project. On April 24, 2017, Department of Finance conveyed the final approval for the design phase. The project budget, scope and schedule remain as approved.

RELATIONSHIP TO UNIVERSITY OBJECTIVES

The project supports the instruction and research mission of the University of California by providing safe facilities for teaching and research in a campus academic building.

SUSTAINABILITY

This project would comply with the *University of California Policy on Sustainable Practices*. As required by this policy, the project would adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

COST BASIS AND SCHEDULE

The campus has conducted general pre-design studies and cost analyses based on historical data of project components. The design process began in July 2017 and the first step will be to review the current code requirements and identify the most critical areas for improvement within the proposed scope of work that could be accomplished within the budget. The approved schedule remains unchanged with completion of construction anticipated in August 2019.

CAPITAL IMPROVEMENT BUDGET BUDGET DATA



University of California
San Francisco

PHTS HSIR Life Safety Improvements	9002945		3008/3009	CCCI 6815 EPI
Project Title	Campus Reference		Asset No.	Cost Indexes

A FUNDING SCHEDULE							Univ. Priority No.
Totals (000's)	Prefunded	2016-17	2017-18	2018-19	2019-20	2020-21	
D 3,000			3,000 SG				
C 10,000				10,000 SG			
E							
(Tot. 13,000)	0	0	3,000	10,000	0	0	

B FUNDING REFERENCES						
	Column (1)	Column (2)	Column (3)	Column (4)	Total all Sources (5)	
Account No					9002945	
Source						

C COSTS							%
0	Site Clearance	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	0.0
1	Construction	9,400,000	0	0	0	9,400,000	72.3
2	Exterior Utilities	0	0	0	0	0	0.0
4	Site Development	0	0	0	0	0	0.0
5	Fees	714,000	0	0	0	714,000	5.5
6	A&E/PP&C	753,000	0	0	0	753,000	5.8
7	Surveys, Tests, Plans					0	
	Specifications	420,000	0	0	0	420,000	3.2
8	Special Items	1,113,000	0	0	0	1,113,000	8.6
	SUBTOTAL	\$ 12,400,000	\$ 0	\$ 0	0	\$ 12,400,000	95.4
9	Conti 6.4%	600,000	0	0	0	600,000	4.6
	TOTAL P-W-C	\$ 13,000,000	\$ 0	\$ 0	0	\$ 13,000,000	100.0
3	Group 2&3 Equipmen	0	0	0	0	0	0.0
	TOTAL PROJECT	\$ 13,000,000	\$ 0	\$ 0	0	\$ 13,000,000	
	Available Funding					0	
	Anticipated Surplus						
	(Deficit)	\$	\$	\$		\$ 0	

D FINANCING		
	State General Fund Financing	13,000,000
	TOTAL	\$ 13,000,000

E STATUS OF PROJECT: PPG Addendum			
		Budget No.	2
Name:	Signature:	Issue Date	8/16
Title: Associate Vice Chancellor, Campus Planning	Title: Associate VC, Capital Programs	Revised	7/17
Prepared By: (DK/PM)	Approved for Campus, Date:	Revised	
Signature:	Signature:	Revised	
Title: Sr. Vice Chancellor, Finance & Administration	Title:	Revised	
Approved for Campus, Date:	Approved AVP-PPC, Date:	Revised	

CAPITAL IMPROVEMENT BUDGET BUDGET DATA



University of California
San Francisco

PHts HSIR Life Safety Improvements	9002945	3008/3009	CCCI 6815
Project Title	Campus Reference	Asset No.	Cost Indexes

F ANALYTICAL DATA						
	Column (1)	Column (2)	Column (3)	Column (4)		
ASF per PPG		ASF	ASF	ASF	283,052	ASF
ASF Current		ASF	ASF	ASF	283,052	ASF
OGSF		OGSF	OGSF	OGSF	441,785	OGSF
Ratio (ASF Current/OGSF)	to 1.00	to 1.00	to 1.00	to 1.00	0.64	to 1.00
Construction Cost per ASF	/ASF	/ASF	/ASF	/ASF	33.21	/ASF
Construction Cost/ OGSF	/OGSF	/OGSF	/OGSF	/OGSF	21.28	/OGSF
Total PWC Cost per ASF	/ASF	/ASF	/ASF	/ASF	45.93	/ASF
Total PWC Cost per OGSF	/OGSF	/OGSF	/OGSF	/OGSF	29.43	/OGSF
Gr. 2&3 Equip. Cost/ ASF	/ASF	/ASF	/ASF	/ASF	0	/ASF

G CONSTRUCTION COST ANALYSIS					
	COSTS	UNIT COSTS		%	REMARKS
		\$/ASF	\$/OGSF		
Concrete & Structure	\$				
Closing -in					
Finishing					
Group 1 Equipment					
a. SUBTOTAL-Gen. Const.	\$				
b. HVAC					
c. Plumbing					
d. Electrical					
e. Elevators					
f. Other					Identify
TOTAL BUILDING COST ONLY	\$				
g. Additional Bldg. Costs					Identify
TOTAL BUILDING + ADDITIONAL COSTS	\$				
h. Other Construction		Identify			
i. Other Construction		Identify			
TOTAL CONSTRUCTION COST	\$	Same as Schedule C, Item1 (line 24) Page 1			

H NOTES:	Fee percentage is higher due to construction in an occupied high rise lab building
	Additional A/E and PM coordination is critical to maintain occupancy. Project would be delivered as
	<u>Sub 8 Special Items</u> Design/Build.
	Surge Space \$100,000
	Moving Expenses (Lab) \$155,000
	Plan Check Fees \$50,000
	Environ Mitigation Monitoring \$78,000
	Interior Design Consultant \$25,000
	Structural Peer Review \$50,000
	Haz Mat Survey \$55,000
	Haz Mat Abatement \$100,000
	<u>Special Engineering \$500,000</u>
	\$1,113,000

Budget No.	2
Issue Date	8/16
Revised	7/17
Revised	
Revised	
Revised	

Prepared By: _____

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
------------------------	-----------------------	--	--------------

Budget Request Name	Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)
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Project Title Davis – Teaching and Learning Complex	Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
---	--

Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$50,000	Phase(s) to be Funded C	Estimated Total Project Cost (in thousands) \$64,200
---	----------------------------	---

Budget Request Summary
Teaching and Learning Complex – \$50,000,000 for Construction. The project includes a new facility for general assignment classrooms. The project provides approximately 55,000-65,000 gross square feet of classroom space and adds approximately 2,000 instructional seats. Total project costs are estimated at \$66,000,000, including preliminary plans (\$2,200,000), working drawings (\$4,000,000), construction (\$58,000,000) and equipment (\$1,800,000). The construction amount includes \$52,000,000 for the construction contract, \$2,600,000 for contingency, and \$3,400,000 for architectural and engineering services. The current project schedule estimates preparation of design build contracts documents will begin in September 2017. The working drawings are estimated to begin in January 2019 and be completed in July 2019. Construction is scheduled to begin in September 2019 and will be completed in March 2021.

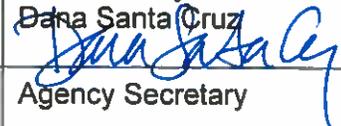
Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
---	--	---------------------

Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
--	---

Impact on Support Budget

One-Time Costs Yes No Future Costs Yes No
 Future Savings Yes No Revenue Yes No

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Dana Santa Cruz	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

Teaching and Learning Complex
Project Planning Guide

2018-2019 Budget for Capital Improvement

Project Account #9532700

Prepared By: Capital and Space Planning

August 2017

Approved By:

 8/24/17

Christine McUmb
Director-
Capital and Space Planning

Date

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Capital Improvement Budget

CAPITAL IMPROVEMENT BUDGET
BUDGET DATA

UNIVERSITY OF CALIFORNIA 1

CAMPUS: DAVIS 2

Project Title: Teaching and Learning Complex		Account Number: Campus Reference - 953270		Asset No.	CCCI: 8815 EPI: 8471 Cost Indexes
A FUNDING SCHEDULE					
Totals (000's)		Prefunded (2016-17)		(2017-18)	(2018-19)
P	\$2,200			P \$2,200	
W	\$4,000				W \$4,000
C	\$50,000				C \$50,000 (GFF)
C	\$8,000				C \$8,000
E	\$1,800				E \$1,800
Total Project \$66,000				\$2,200	\$63,800
B FUNDING REFERENCES					
Account No.	Column (1)	Column (2)	Column (3)	Total All Sources	
Source					
C COSTS					
					%
0	Site Clearance			\$1,200,000	1.9%
1	Construction			\$44,000,000	68.5%
2	Exterior Utilities			\$3,600,000	5.6%
4	Site Development			\$3,200,000	5.0%
5	Fees			\$4,800,000	7.5%
6	A&E/PP&C			\$2,500,000	3.9%
7	Surveys, Tests, Plans & Specifications			\$819,500	1.3%
8	Special Items			\$1,480,500	2.3%
	SUBTOTAL			\$61,600,000	96.0%
9	Contingency 5.0%			\$2,600,000	4.0%
	TOTAL P_W_C			\$64,200,000	100.0%
3	Group 2 & 3 Equipment			\$1,800,000	2.8%
	TOTAL PROJECT			\$66,000,000	
	Available Funding			\$66,000,000	
	Available Surplus/(Deficit)				
D FINANCING					
				State Funds (GFF)	\$50,000,000
				External Financing	\$16,000,000
				TOTAL	\$66,000,000
E STATUS OF PROJECT					
Project Planning Guide					
Name: Clayton Halliday		Signature: <i>Christine McUmber</i>		Budget No.	1
Title: Campus Architect		Name: Christine McUmber		Issue Date	8/16/17
Prepared By: A.Timm		Title: Director, Capital & Space Planning		Revised	
		Approved for Campus, Date: 8/24/17		Revised	
Program: Fiscal:		Signature: _____			
Cost:		Title: _____			
		Approved AVP_PPC, Date: _____			

Capital Improvement Budget

**CAPITAL IMPROVEMENT BUDGET
BUDGET DATA**

UNIVERSITY OF CALIFORNIA 1
CAMPUS: DAVIS 2

Project Title: Teaching and Learning Complex	Account Number: Campus Reference - 953270	Asset No.	CCCI: 6815 EPI: 6471 Cost Indexes	
F ANALYTICAL DATA				
	Column (1)	Column (2)	Column (3)	Total All Sources
ASF Per PPG	ASF	ASF	ASF	41,000 ASF
ASF Current	ASF	ASF	ASF	41,000 ASF
OGSF	OGSF	OGSF	OGSF	60,000 OGSF
Ratio (ASF Current / OGSF)	to 1.00	to 1.00	to 1.00	0.68 to 1.00
Construction Cost Per ASF	/ASF	/ASF	/ASF	\$1,073.17 /ASF
Construction Cost Per OGSF	/OGSF	/OGSF	/OGSF	\$733.33 /OGSF
Total PWC Cost Per ASF	/ASF	/ASF	/ASF	\$1,565.85 /ASF
Total PWC Cost Per OGSF	/OGSF	/OGSF	/OGSF	\$1,070.00 /OGSF
Grp. 2 & 3 Equip Cost / ASF	/ASF	/ASF	/ASF	\$43.90 /ASF
G CONSTRUCTION COST ANALYSIS				
H Notes:				
Sub B Items:				
Detailed Project Program	250,000			
Environmental / EIR Services	50,000			
Value Engineering / Constructibility Review	75,000			
Agency Review (DSA & Fire Marshall)	50,000			
Haz. Mat. Surveys & Testing	20,000			
Labor Compliance Reporting	15,000			
Special Consultant - Communications Resources	50,000			
Commissioning	75,000			
Independent Structural / Seismic Review	35,000			
Design Review Advisory Workshop	5,000			
Air Quality Credits	2,500			
Design Renderings	20,000			
Archeological Monitoring	15,000			
Specialty Inspection - Code Compliance	150,000			
Special Consultant - Furnishings	30,000			
Special Consultant - Signage	10,000			
Special Consultant - Audio Visual	75,000			
Special Consultant - Code Compliance	25,000			
Subtotal	962,600			
Interest During Construction	528,000			
Total Sub B	1,480,500			
Prepared By: A.Timm				

Budget No.	1
Issue Date	8/16/17
Revised	
Revised	

Executive Summary

The Teaching and Learning Complex project would develop a new facility on the central UC Davis campus for general assignment classrooms. The project would demolish and build on a site along Hutchison Drive currently occupied by Surge IV, a collection of one-story modular structures installed in 1972. The project would provide approximately 55,000 – 65,000 gross square feet (gsf) of modern, efficient classroom space. Classroom sizes would be designed to meet the needs based on classroom utilization. Classroom configurations and amenities, such as study space, would be designed to meet the needs of emerging pedagogy.

Classroom capacity is currently a factor limiting student access to courses necessary to support their timely progress toward graduation. Current classrooms are oversubscribed. Campus plans to upgrade existing classrooms to meet accessibility requirements would result in reducing the number of seats available, exacerbating the capacity issue. For these reasons, along with University plans to increase enrollment, additional classroom capacity is necessary to support the University mission.

Background & Statement of Need

The primary project driver for the Teaching and Learning Complex is to provide space for instruction in order to meet current demand and to accommodate campus growth. Redeveloping the Surge IV site as a new classroom facility helps keep the core campus active and vital, increases core campus urban density, and places these student-serving uses in an appropriate zone, while providing much needed space to accommodate campus growth and provide facilities that are essential to the campus' core mission.

Need for Space to Accommodate Campus Growth

The campus has grown rapidly over the last decade and faces a continued period of growth. Though the campus has pursued an aggressive capital program over this time period, development of faculty and instructional space has not kept pace with demand, nor is the campus poised to accommodate planned growth without an additional investment in facilities to support these core functions.

In March 2013, the campus launched the “2020 Initiative,” an ambitious plan to build on the institution’s excellence and create a more diverse community of scholars. The 2020 Initiative puts the campus on a path toward adding up to 5,000 new undergraduate students by 2020, along with corresponding increases in graduate students, faculty, staff, and facilities. The 2020 Initiative anticipated the need for additional space to accommodate this growth. However, current State enrollment priorities have caused faster-than-anticipated growth in the numbers of California resident students. As of fall 2016, the campus has already added 675 more California resident students than the total number of California residents planned through 2020-21. The unique front-loaded enrollment growth of fall 2016 resulted in greater-than-anticipated near-term space and

facilities challenges for the campus. The campus now faces a critical shortage of classrooms and student support spaces.

Need for Instructional Space

Faster-than-anticipated growth in student enrollment has resulted in classroom capacity limiting student access to courses that are necessary to support their timely progress toward graduation. The campus is currently constructing a 600-seat lecture hall, anticipated for completion in 2018, that addresses the need for a large classroom, and renovations in Cruess and Walker Halls will deliver approximately 600 seats in five new classrooms. The campus has also identified limited opportunities to deliver new general assignment classrooms within existing facilities; however, these do not adequately address critical needs for small and medium-sized classrooms.

In response to the effects of enrollment growth on classroom availability, the campus has identified creative solutions that facilitate the use of non-general assignment classroom space for general assignment instruction to meet interim needs. While the campus constructs classrooms to meet its seat goal, the campus is adapting temporary spaces for general assignment classroom use all over campus, including Jackson Hall at the Mondavi Center, the Welcome Center, Wright Hall, Gallagher Hall, and the Music Building. These adaptations represent approximately 1,000 available classroom seats for the growing campus community. These spaces are providing some relief but do not function well as a permanent solution as their availability is limited, other uses are being displaced from these spaces to accommodate instruction, the acoustics and configurations are often not ideal for instruction, and some spaces are particularly unfit to support emerging pedagogies, including interactive instructional techniques.

The California Postsecondary Education Commission (CPEC) has established guidelines for classroom utilization as a measure of productive classroom use. As illustrated in Table 1, when measured using CPEC guidelines, classrooms of most sizes on the Davis campus are near or exceed 100 percent utilization.

Table 1
Davis Campus Classroom Utilization—Fall Quarter 2015

Number of Seats	Total Number Rooms	Total Number Seats	Utilization as a % of CPEC Standard
1-15	9	135	46.4%
16-25	12	271	117.3%
26-50	55	2,194	92.5%
51-100	27	2,014	93.0%
101-200	19	2,798	107.3%
201-300	4	1,099	135.9%
300+	3	1,296	164.4%

Small classrooms with 15 or fewer seats represent less than seven percent of classrooms and two

percent of all classroom seats on the Davis campus. This segment of classrooms is the only group that this is not highly utilized; this is primarily because these rooms are not well suited to current instructional practices. With the exception of this outlier, classrooms of all sizes are highly utilized. The Teaching and Learning Complex would provide additional capacity across most room sizes (with the exception of the 300+ seat range, which would see relief with the new 600-seat lecture hall delivered as a separate project). Additional projected student enrollment growth would further constrain classroom use, and factoring the time to delivery for classroom projects, it is incumbent upon the campus to develop additional instructional capacity in the near term.

Another factor contributing to the need for more classroom space results from the impact that renovations will have on existing classrooms elsewhere on campus. The buildings that house the majority of the campus's general assignment classrooms were built in the 1960s and are in need of renovation. As part of their renovation, new accessibility requirements would reduce the number of seats, exacerbating the existing capacity issue.

Alternatives Considered

The campus evaluated a number of alternatives to identify a path toward meeting space needs for instruction. These included the following:

1. Pursuing non-capital solutions

The campus has already employed a number of strategies in order to maximize use of existing classrooms, including early morning and evening instruction and using non-general assignment space for instruction (e.g., performance venues and department-controlled seminar rooms). These strategies have helped manage near-term demand; however, the campus is not able to identify enough additional opportunities to provide adequate capacity to meet campus needs as enrollment increases.

2. Pursuing off-campus space

Typically, in evaluating options to meet additional space needs, the campus considers potential opportunities to deliver the space more quickly or cost-effectively by locating certain functions outside of the main UC Davis campus. Instructional space is core to the campus mission and needs to be located in close proximity to other instructional facilities to allow for easy access for students living on campus, students living proximate to campus, and students relying on bicycles or public transportation. Any new instructional facilities need to be within ten minutes of existing facilities to ensure that students are able to travel between classes during the allocated class change time. For these reasons, it is ideal that new classrooms be located on the core campus.

3. Renovate an existing campus facility

The campus has evaluated core campus buildings to assess their current utilization and the maximum occupancy they could support both with and without renovations, as well as to assess the condition of these buildings. Through this process, Haring Hall was identified as one of the opportunities to be renovated to accommodate campus growth needs for non-laboratory space, specifically faculty offices and classrooms. Although a feasibility study of Haring Hall determined that renovation work on the building would cost approximately 80 percent or less than the cost of

demolition and construction of a facility of equal size and use, it was determined that Haring Hall did not provide the desired density on a site of its size. The configuration of the central wing, envisioned to hold classrooms, limited the design flexibility.

Other buildings that might accommodate this need have similar building system issues and deficiencies with comparable estimated costs to correct, but are not centrally located on campus. These buildings are currently occupied and would require multiple space moves to prepare the space to be renovated for the proposed uses. These buildings also would require future renewal, and many satisfy other programmatic and adjacency needs. For these reasons, the campus has concluded these buildings should be considered for renovations that maintain their primary functions as research laboratory and teaching spaces.

4. Developing a new on-campus facility

This is the proposed solution. Additional classroom and office space could be effectively delivered in a new building. A new building provides the maximum flexibility for designing a space specifically to suit the needs of the intended uses. A new facility with classrooms must be located on the core UC Davis campus, in close proximity to other classroom buildings and transportation hubs. The site selected must also consider the desired size of the development, which would need to be at least 55,000 gross-square-feet to accommodate the desired program, and be of a right scale and density for the area of campus. There are “infill” type sites on the campus that could accommodate this development.

The proposed Surge IV site provides such an opportunity. The development of the Teaching and Learning Complex on this site enables the demolition of modular structures that are deteriorating and do not efficiently use the site. Constructing the proposed project on this site revitalizes a student-centric area on the core campus, located close to transportation. The proposed project delivers the anticipated number of seats to satisfy the demand through 2030 and would provide the design flexibility to accommodate varied sizes and instructional configurations of classrooms.

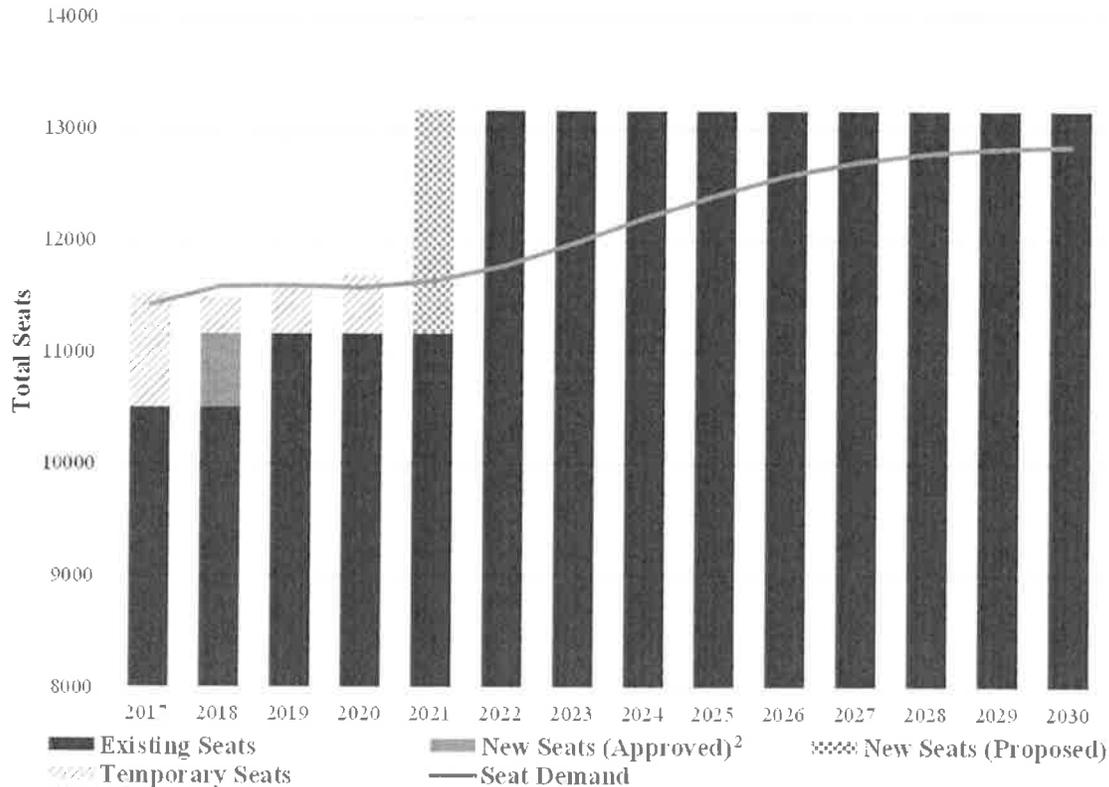
Proposed Solution

Additional instructional facilities are necessary in order for the Davis campus to continue to serve its core educational mission without negatively impacting students by further restricting access to necessary courses and time to degree. The campus plans for investments in instructional facilities over the long-term, periodically reassessing needs based on emerging enrollment trends and evolving instructional pedagogy.

As demonstrated in Figure 1 below, additional classroom seats are necessary for the campus to keep pace with the instructional demands associated with growth. The graph illustrates the campus’ plan to provide instructional space in the coming years. There will continue to be a shortage of classrooms seats over the next three years, which the campus will bridge using the interim strategies described above. In addition to the classrooms already in the campus development pipeline, an additional 2,000 seats are necessary to accommodate growth anticipated through 2030.

Figure 1

Classroom Seat Growth and Enrollment Seat Demand¹



Project Description

The Teaching and Learning Complex demolishes the existing Surge IV facility, which was largely vacated by the School of Veterinary Medicine Dean's office relocation to the Veterinary Medicine and Student Services facility in early 2017. Small units in several of the Surge IV structures are scheduled for relocation over the next few months. Surge IV is located on Hutchison Drive near the Silo food service complex and many academic buildings in the heart of core campus.

The Teaching and Learning will include the following:

- New building of 55,000 – 65,000 gsf with approximately 2,000 seats, envisioned to be a combination of lecture and interactive learning configurations. Classroom sizes would be

¹Campus classroom seat standard: 0.4 seats/student; Growth based on undergraduate enrollment projections

²New Permanent Seats:

2018: Large Lecture Hall (600); Walker Hall (367); Cruess Hall (250); Haring Hall offline (-555)

2021: Teaching and Learning Complex (2,000)

determined as the program is refined in consideration of utilization factors and instructional pedagogies.

- Lobby, restroom, and other ancillary spaces to serve the classrooms. Study spaces to serve the students will be included.
- Landscaping and bicycle parking consistent with neighborhood development and the Davis campus Physical Design Framework.

Consistency with Campus Plans

Long Range Development Plan

The Long Range Development Plan (LRDP) is a comprehensive policy and land use plan that guides campus' growth. The improvements of the Teaching and Learning Complex project will be located on the core UC Davis campus and will be consistent with the land use designation and policy objectives in the UC Davis LRDP.

UC Davis Physical Design Framework

The UC Davis Physical Design Framework (PhDF) envisions the development of a campus physical environment that supports the academic mission, enhances personal and environmental health, and brings meaning and enjoyment to participants in the campus community. The PhDF establishes the criteria the campus uses to judge the success of proposed projects with regard to planning and design. The project is consistent with the planning goals set forth in the PhDF as evidenced by the conformance with the following PhDF principle:

- *Creating Sustainable Places—Wise Resource Use (Planning and Design Principle 1.6)*
This principle recognizes the need to foster healthy conditions for social, economic, environmental, and educational pursuits through building and landscape design that promote healthy conditions and ensure the environment will be able to serve future generations. In deference to the need for wise resource use, the project represents an example of compact land use, fitting the project on a small site on the core campus. The selected site keeps the overall footprint of the campus compact, enhances interaction, conserves land, demolishes antiquated structures, and utilizes existing building corridors.
- *Reinvest in the Heart of the Campus (Campus Context Principle 2.9).*
The campus is continually evaluating existing buildings in an effort to bring them into consistency with the PhDF principles. Constructing the Teaching and Learning Complex on this core campus site will allow for removal of vacant antiquated facilities and foster connectivity between the surrounding facilities and will contribute to a vital, active campus core.
- *Building Elements (Campus Fabric Principle 4.3)*
Develop a fabric of common building and site elements and campus-wide systems that make the campus a cohesive environment. To foster this development, the Campus Physical Design Framework outlines standards for new exterior lighting, paving, site furniture, and other elements. Project improvements will comply with these standards.

- *Create Public Outdoor Spaces (5.11)*

The Davis campus has a comprehensive network of open spaces, ranging from the very large (the Arboretum) to small-scale building courtyards. The Framework calls for the campus to plan buildings to give form and create hierarchy in the public outdoor space network so that there are scaled spaces for various types of gatherings, to activate public spaces, and to increase density while maintaining an intimate connection between the building and the landscape.

The Teaching and Learning Complex will include a number of outdoor elements that complement the programmed space within the facility and serve the campus community.

Ten Year Capital Financial Plan

The UC Davis Ten Year Capital Financial Plan provides the context and framework for guiding campus capital investment and outlines a series of objectives for capital planning. This project will be included in the 2017-27 Capital Financial Plan anticipated to be accepted by The Regents in November 2017 as the line item “Teaching and Learning Complex.”

Sustainability

The Teaching and Learning Complex will meet or exceed the guidelines set forth in the University of California Policy on Sustainable Practices. The project is targeting LEED Gold certification under LEED for New Construction Version 4 as a minimum. As required by the policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, and will explore possible strategies for achieving net-zero energy, consistent with budgetary constraints and regulatory and programmatic requirements.

Relationship to University Mission and Objectives

The Project supports the instructional and research missions of the University of California by providing essential campus facilities to support the academic enterprise while also contributing to a holistic vision of student success. General assignment classrooms serve a broad section of the student population, often housing foundational courses necessary across academic disciplines.

Funding Plan

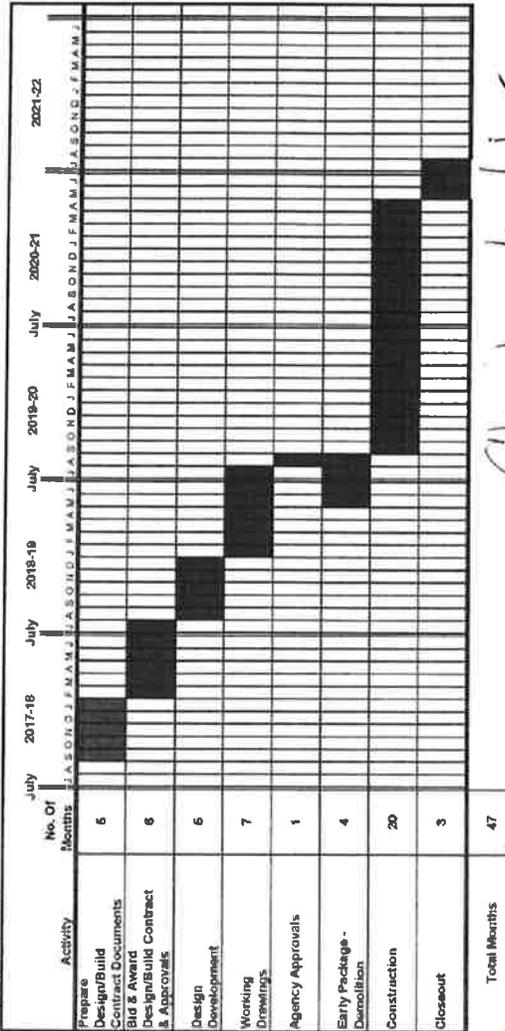
The project cost for the Teaching and Learning Complex is \$66,000,000. The project will be funded by external financing repaid with general revenues of the Davis campus (\$16,000,000) and funds available under Sections 92493 through 92496 of the Education Code as added by Chapter 50, Statutes of 2013 (Assembly Bill 94) and amended by Chapter 2, Statutes of 2015 (Senate Bill 81), (\$50,000,000).

Project Schedule

Project Schedule

PROJECT SCHEDULE
UNIVERSITY OF CALIFORNIA, DAVIS

Project Title: Teaching & Learning Complex
Project No. - 9632700

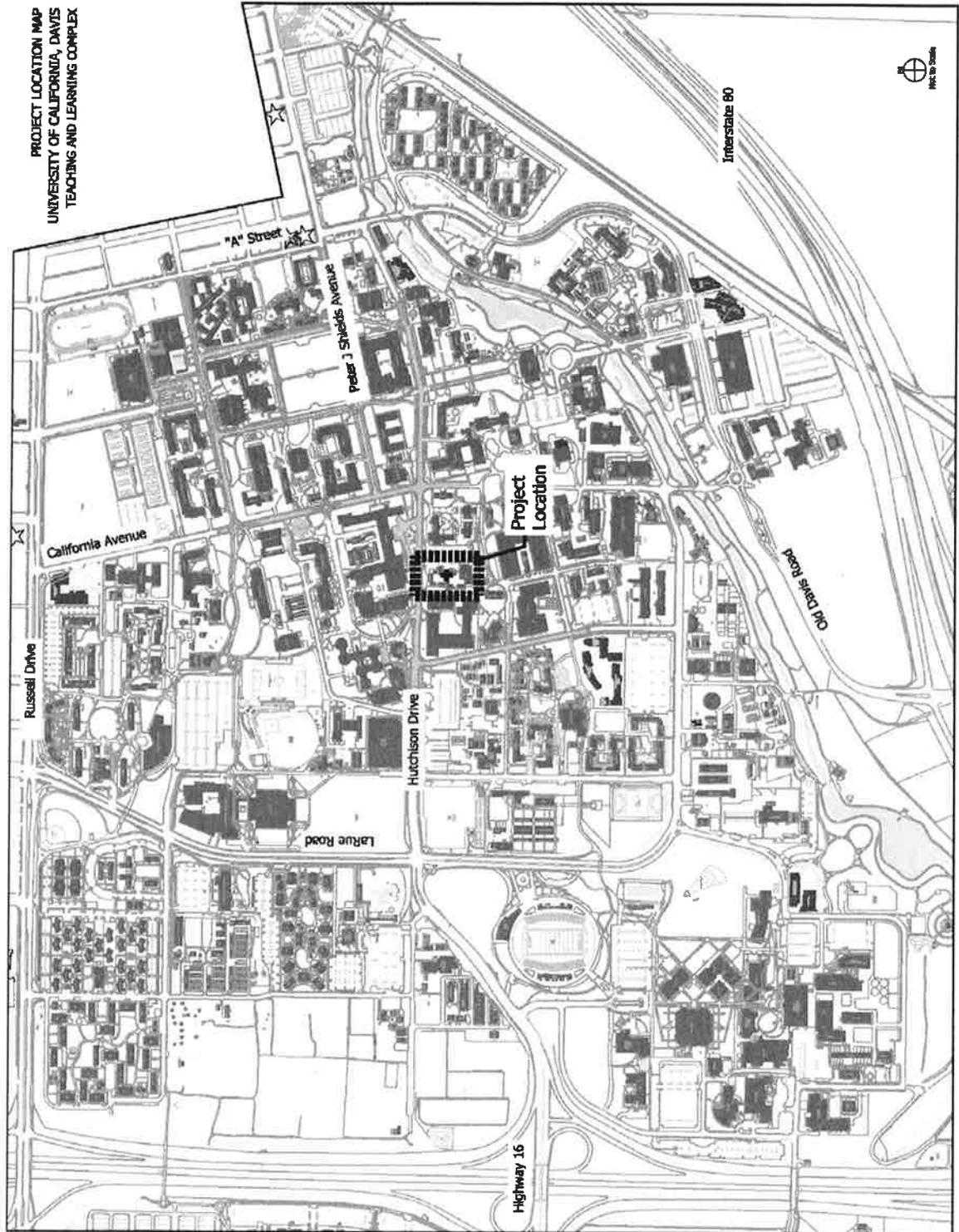


NOTE:

Approved By: *Christine McKeown*
Christine McKeown
Director, Capital & Space Planning
Date: 8/04/17

7/13/2017

Project Location Map



Environmental Impact Classification

UNIVERSITY OF CALIFORNIA ENVIRONMENTAL IMPACT CLASSIFICATION

Campus/Field Station/Division Davis Project Account 9532700
Project Title Teaching and Learning Complex

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map with your submission.

I. EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 - When it can be seen with certainty that there is no possibility the action will result in physical change to the environment (15061(b)(3)), or the action is specifically exempted by statute (15260-15285), the project is classified as generally exempt from CEQA. General/Statutory Exemption: § _____

II. CATEGORICALLY EXEMPT - This project falls under the indicated Class(es) of Exemption(s), none of the exceptions to the exemption apply (15300.2), and there is no significant effect on the environment (for complete list see CEQA Guidelines Section 15300):

- | | |
|---|--|
| <input type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 17: Open Space Contracts or Easements |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 23: Normal Operation of Facilities for Public Gatherings |
| <input type="checkbox"/> Class 3: New Construction or Small Structures | <input type="checkbox"/> Class 25: Transfer of Land: Natural Conditions/Historical Resources |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 30: Minor Actions: Prevent Hazardous Waste/Substances |
| <input type="checkbox"/> Class 6: Information Collection | <input type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 13: Acquisition for Conservation | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership for Parks | <input type="checkbox"/> Other: _____ |

III. INITIAL STUDY - This project is not statutorily or categorically exempt from CEQA; an Initial Study is to be prepared to determine if the project may have a significant effect on the environment.

Stand-Alone Tiered Initial Study (15152): Tiered Initial Study to be tiered from 2017 LRDP EIR

IV. ENVIRONMENTAL IMPACT REPORT (EIR) - It is known that the project will have a direct or cumulatively significant effect on the environment and an EIR will be/have been prepared. Identify the type of EIR:

Programmatic Stand-Alone (Project-Specific) _____

Additional project analysis:
 None/Findings Only Addendum Subsequent Supplement to EIR: _____

PROJECT DESCRIPTION - (Insert brief project description, provide supporting documentation as appropriate.)

The Teaching and Learning Complex project would develop a new facility on the central UC Davis campus for general assignment classrooms. The project would demolish and build on a site along Hutchison Boulevard currently occupied by Surge IV, a series of modular structures installed in 1972. The project would provide approximately 65,000 gross square feet (gsf) of modern, efficient classroom space. Classroom sizes would be designed to meet the needs based on classroom utilization. Classroom configurations and amenities, such as study space, would be designed to optimize use of the building.

This project would be evaluated for potential impacts to the environment in accordance with the requirements of the California Environmental Quality Act (CEQA). CEQA compliance is expected to take place as a tiered document with the 2017 Long Range Development Plan (LRDP) Environmental Impact Report (EIR) serving as the programmatic CEQA EIR. The proposed project is consistent with the land use designation in the 2003 LRDP and is consistent with the land uses in the currently drafted, but not yet adopted, 2017 LRDP proposal.

V. Does this project conform to the approved LRDP? YES NO NA (If NO or NA, include explanation in Project Description above)

Prepared by Matt Dulcich Date 7/13/17 Local Approval by Christine McUmber for Date 7/14/17

VII. OFFICE OF THE PRESIDENT

Concur with Classification Do not concur with Classification

Signed Ben Hanauer Date 8/16/2017

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
Budget Request Name		Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)

Project Title Riverside – Student Success Center	Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
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Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$50,000	Phase(s) to be Funded PWCE	Estimated Total Project Cost (in thousands) \$60,225
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Budget Request Summary

Student Success Center – \$50,000,000 for Preliminary Plans, Working Drawings, Construction, and Equipment. The project includes approximately 39,000 assignable-square-feet of general assignment classrooms, co-located student advising offices, multipurpose spaces available for use by student organizations, informal study and lounge areas, and support spaces. Total project costs are estimated at \$60,225,000, including preliminary plans (\$4,042,000), working drawings (\$2,928,000), and construction (\$48,350,000). The construction amount includes \$45,038,000 for the construction contract, \$2,252,000 for contingency, and \$1,060,000 for architectural and engineering services. The current project schedule estimates preliminary plans will begin in July 2018 and be completed in December 2018. The working drawings are estimated to begin in January 2019 and be completed in June 2019. Construction is scheduled to begin in July 2019 and will be completed in January 2021.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
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Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
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Impact on Support Budget

One-Time Costs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Future Costs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Future Savings <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Revenue <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If proposal affects another department, does other department concur with proposal? Yes No
 Attach comments of affected department, signed and dated by the department director or designee.

Prepared By <i>Carey Barker</i>	Date 8/25/2017	Reviewed By <i>Dana Santa Cruz</i>	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature



PROJECT PLANNING GUIDE

**STUDENT SUCCESS CENTER
PROJECT NUMBER 950512**

August 2017

APPROVAL:

Jeff Kaplan
Jeff Kaplan (Aug 25, 2017)

Aug 25, 2017

University of California, Riverside

Date

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PROJECT PLANNING GUIDE

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**Capital Improvement Budget
Budget Data**

UNIVERSITY OF CALIFORNIA
Riverside
Campus

Student Success Center	950512	P5823	CCCI: 6815
	Blythe R Wilson		EPI: 3471
Project Title	Campus Reference	Asset No.	Cost Indexes

A FUNDING SCHEDULE					
Totals	2017-2018	2018-2019	2019-2020	2020-2021	
S \$425	S \$425 CF				
P \$4,042		P \$414 UR			
		P \$3,529 GFF			
		P \$99 AR			
W \$2,928		W \$415 UR			
		W \$2,414 GFF			
		W \$99 AR			
C \$48,350		C \$6,691 UR			
		C \$40,057 GFF			
		C \$1,602 AR			
E \$4,480		E \$480 UR			
		E \$4,000 GFF			
\$60,225	\$425	\$59,800			

B FUNDING REFERENCES					
	Column (1)	(2)	(3)	(4)	(5) Total All Sources
Account No.				Classrooms and	950512
Source	Study (CF)	Dining/Retail (AR)	Student Life (UR)	Advising (AB 94)	

C COSTS*						
					Totals	%
0 Site Clearance	\$0	\$0	\$0	\$1,000,000	\$1,000,000	1.8%
1 Building Construction	\$0	\$1,526,000	\$6,372,000	\$31,040,000	\$38,938,000	70.4%
2 Exterior Utilities	\$0	\$0	\$0	\$2,100,000	\$2,100,000	3.8%
4 Site Development	\$0	\$0	\$0	\$3,000,000	\$3,000,000	5.4%
5 Fees	\$0	\$111,000	\$462,000	\$2,693,000	\$3,266,000	5.9%
6 ODC	\$0	\$72,000	\$303,000	\$1,764,000	\$2,139,000	3.9%
7 Survey & Testing	\$0	\$15,000	\$64,000	\$371,000	\$450,000	0.8%
8 Special Items	\$425,000	\$0	\$0	\$2,175,000	\$2,600,000	4.7%
SUBTOTAL	\$425,000	\$1,724,000	\$7,201,000	\$44,143,000	\$53,493,000	96.7%
9 Contingency 5.0%	\$0	\$76,000	\$319,000	\$1,857,000	\$2,252,000	4.1%
TOTAL P-W-C	\$425,000	\$1,800,000	\$7,520,000	\$46,000,000	\$55,320,000	100.8%
3 Group 2&3 equipment	\$0	\$0	\$480,000	\$4,000,000	\$4,480,000	
TOTAL PROJECT	\$425,000	\$1,800,000	\$8,000,000	\$50,000,000	\$60,225,000	
Available Funding						

D FINANCING	
	General Funds Finance \$50,000,000
	University Fee Reserves \$8,000,000
	Auxiliary Reserves \$1,800,000
	Campus Funds \$425,000
	Total \$60,225,000

E STATUS OF PROJECT: Project Planning Guide					
Campus	Prepared by:	Name: Blythe R Wilson	Budget No.	1	//
		Title: Principal Project Manager	Issue Date	8/24/2017	//
		Signature: <u>Blythe R Wilson</u>	Revised	//	//
	Approved for Campus:	Name: John A Casey	Revised	//	//
		Title: Exec Dir Construction & Project Mgmt	Revised	//	//
		Signature: <u>John A Casey</u>	Revised	//	//

**Capital Improvement Budget
Analytical Data**

UNIVERSITY OF CALIFORNIA
Riverside
Campus

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Student Success Center	950512	P5823	CCCI: 6815
	Blythe R Wilson		EPI: 3471
Project Title	Campus Reference	Asset No.	Cost Indexes

F ANALYTICAL DATA				
	Column (1)	(2)	(3)	(4) Total All Sources
ASF per PPG Dated: 8/24/2017				39,000 ASF
ASF Current				39,000 ASF
OGSF				57,000 OGSF
Ratio (ASF Current/OGSF)				0.68 to 1.00
Building Construction Cost per ASF				\$998.41 /ASF
Building Construction Cost per OGSF				\$683.12 /OGSF
Total P-W-C Cost per ASF				\$1,418.46 /ASF
Total P-W-C Cost per OGSF				\$970.53 /OGSF
Gr. 2&3 Equip. Cost per ASF				\$114.87 /ASF

Special Items: Sub 8	
Specality AV Consultant	\$50,000
Value Engineering/Construction Estimating	\$80,000
Agency Review Fees	\$20,000
LEED Documention Agent	\$50,000
Enhanced Commissioning	\$80,000
Builders Risk	\$200,000
UCIP	\$860,000
Design Build Team Stipends	\$825,000
Independent seismic peer review	\$10,000
DPP/Study (958056)	\$425,000
TOTAL	\$2,600,000

Budget No.	1	//
Issue Date	8/24/2017	//
Revised	//	//

I. EXECUTIVE SUMMARY

The University of California, Riverside (UCR) proposes to develop the Student Success Center (Project), a new facility of approximately 39,000 assignable square feet (ASF) / 57,000 gross square feet (GSF). The Project will support the UCR academic mission through its explicit focus on “student success”: academic achievement, retention, and timely graduation for students from all economic and ethnic backgrounds. by providing general assignment classrooms, co-located academic advising space, and student life support spaces in the campus academic core.

In addition to enhancing student success at UCR, this Project will help address a shortfall in classroom capacity. The student population at UCR has increased by 36% in the past decade and is expected to continue to grow. At the current pace, without significant improvement in capacity, all classroom size categories will exceed 100% utilization by 2023.

The project will accomplish these goals by providing three elements that are essential to student success: (1) general assignment classrooms designed for modern pedagogy and technology, (2) easily accessible and centralized academic advising space, and (3) multipurpose student life space to support academic and co-curricular activities – all located within the campus academic core.

Approximately 900-1,000 general assignment classroom stations will be provided by constructing a large lecture hall (approximately 400+ seats), two smaller lecture halls (approximately 150+ seats each), and medium-to-large classrooms designed for flexible teaching configurations. These seats represent replacement of current capacity that will be lost at the end of an off-site lease in late 2021 and net new stations to support ongoing enrollment growth. The classrooms will be built with physical flexibility and technological adaptability in mind to support advances in higher education pedagogy. The Project will also provide co-located offices for student advising services and multipurpose spaces for studying and student organization events and meetings.

The Project is proposed to be sited within the campus’s academic core on the western edge of what is known as East Campus (see **Project Location Map**). This area was selected largely based on its accessibility to undergraduate students; proximity to other classrooms, the student union, and other student support functions; and suitability of program based on near-term and long-term campus development plans. The construction of the Student Success Center at this location will help activate the immediate area and complete an existing corridor of student-centered facilities.

The total project budget is \$60,225,000: \$50,000,000 of State (AB 94) Funds, \$8,000,000 of University Fee Reserve funds, \$1,800,000 of Auxiliary Reserve funds, and \$425,000 of Central Campus funds. The Study phase is underway. The Preliminary Plans phase is anticipated to start in mid-2018 and Construction is anticipated to start in mid-2019 and complete in early 2021.

II. BACKGROUND AND STATEMENT OF NEED

The University of California, Riverside is situated in the heart of the Inland Empire; an area that includes western Riverside and San Bernardino counties and that is one of the fastest growing areas in California. This growth has brought an increasingly diverse population to the region with resulting diversity in business and industry development in the surrounding communities. UCR serves as one of the most important economic, educational, and cultural resources for the area. The Campus has likewise been experiencing substantial growth that is expected to continue as reflected in the *UCR 2005 Long Range Development Plan (LRDP) Amendment 2*¹ and the recently completed *UCR Physical Master Plan Study*².

UCR's *Strategic Plan*³ affirms that every student should expect inspirational instruction and personalized faculty mentorship; accessible academic support programs and student services; opportunities for intellectual engagement, including international experiences and undergraduate research and creative activity; experiential learning and career exploration; and training to become a leader in California and the world.

The fundamental goal of this Project is to support excellence in undergraduate education as outlined in UCR's *Strategic Plan*. This will be accomplished by providing high-quality classroom space to support a growing student population, by facilitating student access to academic advising and other support services, and by providing opportunities for enrichment and engagement via participation in student organizations and other extracurricular activities.

Classroom Capacity

Two drivers related to general assignment classroom space contribute to the need for this project: continuing student enrollment growth which will push the existing inventory of general assignment classrooms at UCR beyond maximum classroom utilization capacity in the very near future, and the impending end of an off-campus lease agreement which contributes a significant portion of that existing classroom inventory.

Recent enrollment growth at UCR has been significant and continued growth is expected. Over the past decade, total enrollment increased 36% from 16,875 students in Fall 2006 to 22,990 students in Fall 2016. **Table 1** shows actual and projected student enrollment figures from 2016-17 through 2023-24, two years after the expected project occupancy. As shown in the table, undergraduates currently comprise a large majority of the campus population (86%) and are expected to continue to do so in the future. These students will be the primary users of general assignment classrooms and other services housed in the Student Success Center. The

¹ *UCR 2005 Long Range Development Plan*. <http://lrpd.ucr.edu/>

² *UCR Physical Master Plan Study* (May 2016). <http://cpp.ucr.edu/studies.html>

³ *UCR 2020: The Path to Preeminence* (July 2010). <http://strategicplan.ucr.edu>

campus community has been resourceful and continues to provide quality instruction and student services in aging and overextended facilities; however, this situation is not ideal.

Table 1
UC Riverside General Campus
Projected Total Student Enrollment (Headcount)⁴

	Actual 2016-17	Project Occupancy: Projected 2021-22	Two Years Post-Occupancy: Projected 2023-24	Projected % Growth 16-17 to 23-24
General Campus:				
Undergraduate FTE	19,799	21,213	22,018	11%
Graduate FTE	3,122	4,186	4,186	34%
Total Campus	22,921	25,399	26,204	14%

The California Postsecondary Education Commission (CPEC) has established standards for classroom utilization as a measure of productive classroom use. Utilization is calculated based on available classroom stations, number of students taught, and hours per week of active instruction. A utilization rate in excess of 100 percent represents an impact on resources that can negatively affect quality of instruction.⁵

Due to sustained enrollment growth, UCR is reaching, and in some cases exceeding, maximum utilization of its general assignment classrooms, with particular demand for both lecture hall and technologically-enhanced and flexibly-configured classrooms. These facilities play an integral role in the delivery of the curriculum for all degree programs at UCR, but most crucially for undergraduate students.

Table 2 shows that general assignment classrooms are already heavily utilized, with some classroom size categories exceeding 100% utilization. Without creation of new general assignment classroom space, enrollment will soon outpace classroom capacity across-the-board: the table shows that with the current inventory of classrooms, all categories are projected to exceed 100% utilization by 2023.

⁴ UCR Institutional Research: Campus Fall Headcount Enrollments, Actual and Planned – 2011-12 through 2025-26 – 25k by 2020, 27k by 2025 (April 2017).

⁵ *Classroom Utilization – University of California | Office of the President* (October 2007).
www.ucop.edu/operating-budget/_files/legreports/0708/clssrm_utilzn.pdf

Table 2
UC Riverside General Campus
General Assignment Classroom Utilization Rates (Without Project)

Classroom # of Stations	Actual Utilization Fall 2016 ⁶	Projected Utilization, 2021-22, Retain Leased Space ⁷	Projected Utilization 2023-24, Retain Leased Space ⁸	Projected Utilization 2023-24, No Lease Renewal ⁹
1-15	101%	108%	115%	115%
16-25	117%	126%	134%	134%
26-50	89%	96%	102%	102%
51-100	99%	106%	112%	112%
101-200	122%	131%	139%	*168%
201-200	91%	98%	104%	104%
300+	98%	105%	111%	*181%
Total	98%	105%	111%	127%

*Classroom seats in these categories are currently provided via an off-campus lease ending in 2021

An off-campus lease at a movie theater complex currently supplies the equivalent of 530 general assignment classroom seats in three movie theater auditoriums being used as lecture halls. Hours of use are restricted; classes cannot be scheduled into evening hours due to the shared use of the space as theaters. The leased space was not designed for teaching and consistently receives negative feedback from both students and instructors due to inadequate or nonfunctioning equipment and furnishings, and distance from central campus.

This space was leased beginning in 1997 as part of a partnership with the surrounding community to both support redevelopment of a blighted neighborhood adjacent to campus and to increase the inventory of general assignment classroom space for campus. The partnership to improve the area has largely succeeded and Campus strongly believes that general assignment classrooms appropriately belong on campus. This lease is set to expire at the end of 2021 and, as a consequence, the campus must either continue to lease this space or formulate an alternate strategy for providing the necessary classroom stations currently being provided via this lease.

⁶ UCR Registrar: Fall 2016 Classroom (110/130) Utilization (December 2016).

⁷ Projections: UCR Capital Asset Strategies based on Fall 2016 Utilization provided by Registrar and enrollment forecast provided by Institutional Research (Table 1). 2021-22 column assumes retention of current off-campus leased classrooms but no project (and no net new stations).

⁸ Projection: UCR Capital Asset Strategies based on Fall 2016 Utilization provided by UCR Registrar and enrollment forecast provided by UCR Institutional Research. This scenario assumes retention of current off-campus leased classrooms but no project (and no net new stations).

⁹ Projection: UCR Capital Asset Strategies based on Fall 2016 Utilization provided by UCR Registrar and enrollment forecast provided by UCR Institutional Research. This scenario assumes no project and no renewal of off-campus lease.

Alternate facilities appropriate for hosting large undergraduate lectures are difficult to find within reasonable proximity of campus. In addition, leasing incurs significant operating cost without the benefits of ownership. Continuing instruction in this space is highly undesirable; at the same time, if this seat capacity is lost, the shortage of general-assignment classroom seats becomes even more dire, as reflected in the far right column of **Table 2**.

The campus is currently implementing a multi-year classroom renovation program to improve the quality and efficiency of existing small-to-medium classrooms; however, the need for high-quality medium-to-large and lecture hall-sized classrooms remains to be addressed.

The Project proposes to alleviate campus space constraints and quality concerns by providing about 900-1,000 seats in new classrooms designed in collaboration with students and instructors. Shortages in the larger classroom size categories will be addressed by providing three new lecture halls, and in the medium classroom size categories through flexibly designed, technologically enhanced “flat floored” classrooms to accommodate a variety of modern pedagogical approaches. High demand for smaller classrooms is anticipated to be accommodated in other near-term development plans.

Co-Located Student Advising

Academic advising staff help students define their educational and career goals, develop a strategy of well-informed academic choices to reach these goals, and guide them to campus resources available to optimize their time at university. The majority of UCR’s student population includes first-generation, transfer, and commuter students who benefit especially from professional academic advising.^{10 11}

Currently, advising offices are largely housed with their respective academic disciplines, located throughout campus. Students that have not yet crystallized their academic plans – and would most benefit from advising – lack a centralized area where they can easily locate and leverage advising services available to them. Additionally, individual advising offices in multiple locations means duplication of facilities or services which could be more efficiently provided in a shared location.

To support this student population, the Project proposes to provide office space for co-location of advising staff from various disciplines. Sited in close proximity to the existing Student Services Building, Highlander Union Building, and Costo Hall (which houses a variety of counseling and student organization offices), this Project completes a corridor of facilities providing a full spectrum of services to support student well-being.

¹⁰ Swecker, H. K., Fifolt, M., & Searby, L. (2013). Academic Advising and First-Generation College Students: A Quantitative Study on Student Retention. *NACADA Journal*, 33(1), 46-53. doi: 10.12930/NACADA-13-192

¹¹ Young-Jones, A. D., Burt, T. D., Dixon, S., Hawthorne, M. J. (2013) Academic advising: does it really impact student success? *Quality Assurance in Education*, 21(1), 7-19. Retrieved from <https://doi.org/10.1108/09684881311293034>

Multipurpose Student Life Spaces

It is well established that university students benefit greatly from extracurricular activities – out-of-classroom experiences which augment formal instruction and positively impact their emotional, intellectual, social, and interpersonal development.^{12 13} Involvement in student organizations allows opportunities to develop communication, leadership, and social skills – thus improving self-confidence, independence, and the ability to work with diverse groups of people, all tools essential in the real world.

Despite the recent completion of the new Highlander Union Building (HUB) complex, specifically built to provide space for student organizations and other extracurricular activities, there remains substantial unmet demand for student life space at UCR – demand that will only increase with expected enrollment growth. A HUB Expansion Study¹⁴ was commissioned by UCR in 2014 to identify and quantify the most urgent student life space needs. It was found that multipurpose spaces for meetings, performances, and other student organization activities were of highest priority. Demand for space to support independent study, dining, and student services were also identified.

III. PROJECT DESCRIPTION

Project Vision and Objectives

This Project would support the instructional and research missions of the University of California by providing essential campus facilities to support the academic enterprise. General assignment classrooms serve a broad section of the undergraduate population, often hosting foundational courses necessary across academic disciplines. Academic advising and student life programs help ensure students take maximum advantage of the resources made available to them by the University. The Student Success Center presents a unique opportunity to create synergies between these different facets of the student experience by housing them within one facility.

As a key part of the planning process for the proposed Project, the campus conducted a visioning workshop in April 2017 where 136 faculty, staff, and students came together to learn about the Project and provide feedback on its program and location. Following two brief presentations, moderated small group conversations facilitated feedback on key questions related to the future of instructional space at UCR. Feedback from this session also guided the creation of a subsequent campus-wide survey, distributed via e-mail and available online, which elicited 154 responses. The findings from the workshop and the survey directly informed the

¹² Astin, A. W. (1999). Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Development*, 40(5), 518-529. Retrieved from <https://www.middlesex.mass.edu/ace/downloads/astininv.pdf>

¹³ Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004) First-Generation College Students, *The Journal of Higher Education*, 75(3), 249-284. doi: 10.1353/jhe.2004.0016

¹⁴ Brailsford & Dunlavy: *UC Riverside HUB Expansion Analysis ("HUB Expansion Study")* (November 2014).

Project vision and program.

Taken together, classrooms, advising, and student life programs provide students with an enriched and engaged university experience, giving them the tools to achieve the intellectual, personal, and social development that will ensure success as a student and, after graduation, as a world citizen.

Project Site

An initial site selection analysis undertaken by campus staff studied five potential Project locations within the area of East Campus known as the “academic core”, which contains a high concentration of classroom and student-centered facilities. These five locations met basic suitability requirements: an unencumbered site, easy access for undergraduate students, proximity to related student support functions, and adequate land area for the program. Also considered were the potential connections to future planned development, such as the North District Redevelopment project, which will include several thousand beds of student housing, and the Mobility Hub, which will create a new transit plaza and connections to the wider community.

A campus-wide visioning workshop and online survey were used to solicit input from students, faculty, and staff on both the Project program and the initial set of five locations. This feedback, in conjunction with a deeper analysis of the potential sites by planning staff, yielded two preferred sites (see **Project Location Map**.) As programming continues, analysis of fit between program and site will be refined and a final site selected.

Project Program

The Student Success Center will provide approximately 39,000 ASF (57,000 GSF) of general assignment classrooms, co-located student advising offices, multipurpose spaces available for use by student organizations, informal study and lounge areas, and support spaces (see summary in **Table 3**.)

Table 3
UC Riverside Student Success Center
Space Program Summary – Assignable Square Feet

Space Type	ASF
General Assignment Classrooms:	
Classrooms	20,900
Classroom Service	2,000
Class Lab	1,000
Subtotal Classrooms	23,900
Academic Advising:	
Other Office	2,100
Office Service	400
Conference	500
Subtotal Advising:	3,000
Student Life:	
Conference (including Multipurpose Rooms)	6,000
Commons	2,100
Other Office	500
Storage	500
Subtotal Student Life:	9,100
Auxiliary Operations:	
Dining/Retail	3,000
Subtotal Auxiliary Operations:	3,000
TOTAL:	39,000

General Assignment Classrooms (23,900 ASF)

The Project will provide about 900-1,000 general assignment classroom stations. The classroom stations provided by this project will directly address the impending loss of three lecture halls (due to the expiration of an off-campus lease) by providing new lecture halls. In addition, construction of multiple “flat” classrooms will address continuing enrollment growth. All classrooms will be flexibly designed and technologically equipped to accommodate evolving pedagogy, maximizing their utility through the life of the space.

The proposed classrooms include one large sloped-floor lecture hall (approximately 400+ seats), two smaller lecture halls (approximately 150+ seats each), and multiple medium-to-large “flat” classrooms (maximum capacity approximately 100+ seats each). Overall, classroom design and

furniture configuration will seek to bring students closer to the instructor and facilitate better instructor-student engagement. The large lecture halls will incorporate elements of active learning, for example, desks and chairs selected to facilitate group interactions.

The flat classrooms are envisioned to accommodate a range of class sizes and teaching configurations via enriched instructional technology, modular and movable furnishings, and potential use of room dividers to maximize efficiency. Enhanced power and data connections will be provided. All classrooms will be designed for maximum flexibility to allow for a range of teaching methods and configurations and to support future advances in instructional technology and higher education pedagogy.

Anticipating greater use of alternatively taught (such as hybrid and online) instruction in the coming years, a computer lab (approximately 50 stations) will be included for both student academic use and to support those courses with a need for supervised central testing space.

Co-Located Student Advising (3,000 ASF)

To further support student success, the Project also proposes to provide office space for co-location of advising staff from various disciplines. Academic advisor offices will be sized to allow for confidential meetings between student and advisor. Conference rooms for larger meetings (for example, student plus family) and support spaces such as reception and a breakroom will be provided.

Student Life Spaces (9,100 ASF)

This Project will provide student life spaces in response to the needs identified by the study referenced above: study lounge space, informal lounge areas, multipurpose rooms available for the use of student organizations, and a student resource office.

Multipurpose spaces (included in Conference in **Table 3**) will be provided to allow students organizations to meet, hold events, and hold performance rehearsals. Rooms will range in size from small (accommodating up to 50 students) to large (accommodating up to 120 students).

Public lounge and lobby areas (included in Commons in **Table 3**) will be provided at the building entry and adjacent to the lecture halls. Interior as well as exterior public spaces will be designed to provide ample circulation space for high student traffic during class passing periods. Seating areas will be provided to facilitate informal class breakout sessions, social interactions, and independent study. A student lounge (included in Commons in **Table 3**), potentially for commuter or graduate students, will provide opportunities for independent study, and academic and social interactions.

The Project will also house a student resource center to assist an identified student population (for example, transfer students) in identifying and utilizing available campus resources to support their academic and personal growth. The resource center will include a study area (included in Commons in **Table 3**) and office space for a program coordinator and staff.

Auxiliary Operations (3,000 ASF)

Opportunities will also be studied for auxiliary uses to be operated by Campus Auxiliary Services. Potential improvements include dining space – likely leveraging interior and exterior public areas for seating – and retail space, such as a copy/business center for use by students and instructors. This program, currently estimated at roughly 3,000 ASF, will be refined during detailed programming and presented as a prospective design add for competing Design-Build teams. Auxiliary program would be funded fully by Auxiliary Reserve funds.

Delivery Method

Based on preliminary project analyses and in consideration of the budgetary and schedule constraints attached to the Project, an initial decision has been made to use the Design-Build delivery approach. This approach will help maximize value received in terms of total project budget, program capacity, facility life-cycle performance, and allow for quick and efficient delivery of the Project.

IV. RELATIONSHIP TO UNIVERSITY MISSION AND OBJECTIVES

The Project supports the instructional and research missions of the University of California by providing essential campus facilities to support the academic enterprise while also contributing to a holistic vision of student success. General assignment classrooms serve a broad section of the undergraduate population, often housing foundational courses necessary across academic disciplines. Academic advising and student life programs help ensure students take maximum advantage of the resources made available to them by the University.

Taken together, classrooms, advising, and student life programs provide students with an enriched and engaged university experience, giving them the tools to achieve the intellectual, personal, and social development that will ensure success as a student and, after graduation, as a world citizen.

V. ALTERNATIVES CONSIDERED**No Project**

In view of current classroom utilization rates and projections showing increased enrollment and need for this space, it would be untenable for the campus to lose the classroom stations currently provided through an off-campus lease during our ongoing enrollment growth without a strategy for off-setting the loss. The academic advising and student life programs likewise will continue to experience an increase in demand as the student population grows, and existing space shortages will only worsen.

This alternative is not acceptable.

Renovate Existing Space

Lecture halls and classrooms are specialized spaces not readily available in excess supply on or near campus. Existing classroom space is already heavily utilized. Projects are in progress to update these spaces for better operation and efficiency, but this solution would not provide new space in the quantity or quality needed to support enrollment growth. Research space is also in high demand due to the ongoing faculty expansion and thus conversion of that space to classrooms is not a viable option.

Renovation of other existing space is already being utilized by the Campus as a strategy to deliver additional space for advising and student life programs. However, these must be done as resources and vacancies of space allow. Therefore, they provide a limited and piecemeal solution, lacking the efficiencies and synergies created by strategically locating these programs together with classrooms.

This alternative is not acceptable.

Lease Off-Campus Space

Renewal of the existing leased classroom space is an option. However, leased space is viewed as, at best, a temporary solution for such a mission-critical function as undergraduate instruction. A lease incurs significant operating cost without the benefits of ownership, including the ability to fully access, control, and update the space. An off-campus location also creates challenges for students and instructors attempting to travel between classes within a limited time period.

Feedback from users regarding the current use of leased theater space as classrooms has been strongly negative, citing unsuitable space configurations, furniture, and equipment as detrimental to effective instruction and not meeting the quality standard expected of the University by students and instructors. Any lease of off-campus space not specifically designed as classrooms is likely to pose similar challenges.

As with the renovation alternative, off-campus leasing could be possible for the student life and advising programs, but removes the access and convenience for students and instructors that co-location with the classroom space provides. Additionally, the sites identified for the new construction Project specifically enhance the advising and student life components by proximity to related functions – an advantage lost by locating these programs off-campus.

This alternative is not acceptable.

New Construction

Construction of a new facility was considered as a project alternative. While most costly in immediate outlay of campus resources, it was felt to provide the best overall value. New construction would allow delivery of the quantity of space needed for the classroom, advising, and student life programs to the standards and specifications of users. It would allow for optimal siting of these programs to leverage existing campus facilities and programs, and future

planned development. New construction would allow these programs to be co-located in a single facility and take advantage of the efficiencies and synergies this confers.

Most importantly, design and construction of a new facility provides the Project with the best opportunity to achieve its fundamental goal of supporting excellence in undergraduate location in alignment with the campus *Strategic Plan* and the University mission.

This option was selected as the best alternative for the Project.

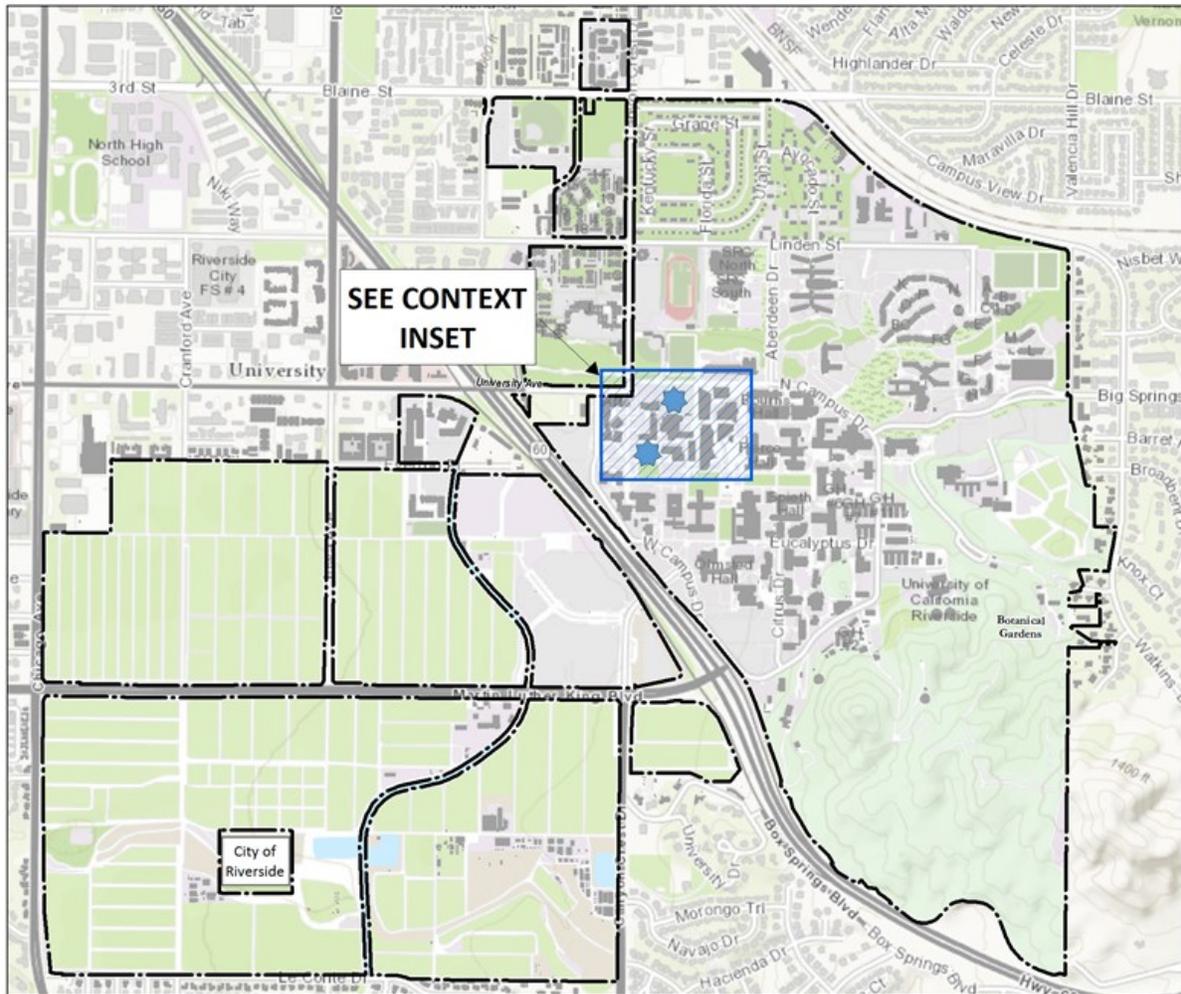
VI. SUSTAINABILITY PRINCIPLES AND COST BASIS

This project will comply with the *University of California Policy on Sustainable Practices*. As required by this policy, the Project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. The goal is to obtain a minimum LEED Silver rating. The campus has conducted pre-design studies and cost analyses and has prepared a detailed cost estimate.

VII. PROJECT FINANCIAL FEASIBILITY

The Project is proposed to be funded by State AB 94 funds (\$50,000,000) for general assignment classrooms and academic advising, University Fee Reserve funds (\$8,000,000) for student life programs, Auxiliary Reserve funds (\$1,800,000) for dining and other auxiliary program, and Central Campus funds (\$425,000) for the study phase, for a total project budget of \$60,225,000.

PROJECT LOCATION MAP



Legend

--- UCR Campus Boundary

★ Potential Project Site



V:\map_docs\mxd\KJordan\Student_Success_Ctr\regional_location_2017.mxd 6/29/2017

Campus/Field Station/Division Riverside Project Account 950512

Project Title Student Success Center

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map with your submission.

I. **EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970** - When it can be seen with certainty that there is no possibility the action will result in physical change to the environment (15061(b)(3)), or the action is specifically exempted by statute (15260-15285), the project is classified as generally or statutorily exempt from CEQA. General/Statutory Exemption: _____

II. **CATEGORICALLY EXEMPT** - This project falls under the indicated Class(es) of Exemption(s), none of the exceptions to the exemption apply (15300.2), and there is no significant effect on the environment (for complete list see CEQA Guidelines Section 15300):

- | | |
|---|--|
| <input type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 17: Open Space Contracts or Easements |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 23: Normal Operation of Facilities for Public Gatherings |
| <input type="checkbox"/> Class 3: New Construction or Small Structures | <input type="checkbox"/> Class 25: Transfer of Land: Natural Conditions/Historical Resources |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 30: Minor Actions: Prevent Hazardous Waste/Substances |
| <input type="checkbox"/> Class 6: Information Collection | <input type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 13: Acquisition for Conservation | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership for Parks | <input type="checkbox"/> Other: _____ |

III. **INITIAL STUDY** - This project is not statutorily or categorically exempt from CEQA; an Initial Study is to be prepared to determine if the project may have a significant effect on the environment.

Stand-Alone Tiered Initial Study (15152): _____

IV. **ENVIRONMENTAL IMPACT REPORT (EIR)** - It is known that the project will have a direct or cumulatively significant effect on the environment and an EIR will be/has been prepared. Identify the type of EIR:

Programmatic Stand-Alone (Project-Specific) _____

Additional project analysis:

None/Findings Only Addendum Subsequent Supplement to EIR: _____

PROJECT DESCRIPTION -

Real estate transaction type: Acquisition Sale Lease Easement License

The proposed project will construct an approximately ~~57,000~~ gross square feet building on the UCR campus. It will include facilities for general assignment classrooms, academic advising space, student life support spaces, administrative office spaces, as well as multipurpose spaces for informal study and student organization events and meetings.

V. Does this project conform to the approved LRD? YES NO NA [If NO or NA, include explanation in Project Description above]

VI. <u>Jaime Engbrecht</u>	<u>6-30-17</u>	<u>Tricia D. Thrasher</u>	<u>6/30/17</u>
Prepared by Jaime Engbrecht, MURP Planning Specialist Capital Asset Strategies	Date	Local Approved by Tricia D. Thrasher, ASLA, LEED AP Principal Environmental Planner Capital Asset Strategies	Date

VII. OFFICE OF THE PRESIDENT

Concur with Classification Do not concur with Classification

Signed Ben Haney Date 8/16/2017

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
Budget Request Name		Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)
Project Title San Diego – Ridge Walk Academic Complex		Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	
Project Category (Select one) <input type="checkbox"/> CRI (Critical Infrastructure) <input type="checkbox"/> WSD (Workload Space Deficiencies) <input checked="" type="checkbox"/> ECP (Enrollment Caseload Population) <input type="checkbox"/> SM (Seismic) <input type="checkbox"/> FLS (Fire Life Safety) <input type="checkbox"/> FM (Facility Modernization) <input type="checkbox"/> PAR (Public Access Recreation) <input type="checkbox"/> RC (Resource Conservation)			
Total Request (in thousands) \$50,000	Phase(s) to be Funded C	Estimated Total Project Cost (in thousands) \$117,409	

Budget Request Summary

Ridge Walk Academic Complex – \$50,000,000 for Construction. The project includes approximately 39,000 assignable square feet of general assignment classrooms and adds approximately 900-1,000 seats, with student advising offices, multipurpose spaces available for use by student organizations, informal study and lounge areas, and support spaces located in the same facility. Total project costs are estimated at \$117,409,000, including preliminary plans (\$4,000,000), working drawings (\$8,000,000), construction (\$94,678,000), and equipment (\$10,731,000). The construction amount includes \$89,734,000 for the construction contract, \$3,805,000 for contingency, and \$1,139,000 for architectural and engineering services. The current project schedule estimates schematic design began in April 2017 and will be completed in August 2017. The working drawings are estimated to begin in December 2017 and be completed in October 2018. Construction is scheduled to begin in July 2018 and will be completed in August 2020.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing	
Impact on Support Budget		
One-Time Costs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Future Costs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Future Savings <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Revenue <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

If proposal affects another department, does other department concur with proposal? Yes No
 Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Dana Santa Cruz	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

Project Planning Guide

**UC San Diego
Ridge Walk Academic Complex
Project Number: 962890**

2018-2019 Capital Improvement Program

August 2017

Approved: _____



Pradeep K. Khosla
Chancellor

8/08/17

Date

**Project Planning Guide
Ridge Walk Academic Complex**

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Exhibit 3: Project Schedule

Exhibit 4: Environmental Impact Classification

**CAPITAL IMPROVEMENT PROGRAM BUDGET
BUDGET DATA**

UNIVERSITY OF CALIFORNIA 1
SAN DIEGO 2
Campus 3

Ridge Walk Academic Complex	962890	7391-7392	CCCI: 6815
			EPI: 3471
Project Title	Campus Reference	Asset No.	Cost Indexes

A. FUNDING SCHEDULE

Totals	Prefunded	Per C.I.P., dated		2016-2017	2017-18	2017-18	2018-19
SP 4,000		\$P	4,000 CF	\$P	-4,000 CF	C	31,678 EF
W 8,000				\$P	4,000 EF	C	13,000 GF
C 94,678				W	8,000 CF	E	3,731 EF
E 10,731				W	-8,000 CF	E	7,000 GF
				W	8,000 EF		
117,409 (Tot. Proj.)			4,000		8,000		55,409
							50,000

B. FUNDING REFERENCES

	(1)	(2)	(3)	(4)	
Account No.					962890
Source					

C. COSTS

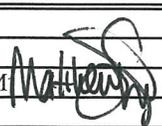
		Total	%
0. Site Clearance		\$200,000	0.2
1. Building Construction		\$88,034,000	82.5
2. Exterior Utilities		\$325,000	0.3
4. Site Development		\$1,175,000	1.1
5. A&E Fees		\$5,512,000	5.2
6. Campus Administration		\$1,566,000	1.5
7. Surveys/Tests/Plans & Specifications		\$557,000	0.5
8. Special Items		\$5,504,000	5.2
SUBTOTAL		\$102,873,000	96.5
9. Const Contingency	4.2%	\$3,805,000	3.5
TOTAL P-W-C		\$106,678,000	100.0
3. Group 2&3 Equipment		\$10,731,000	
TOTAL PROJECT		\$117,409,000	
Available Funding			
Anticipated Surplus (Deficit)			

D. FUNDING SOURCE

	State General Fund Financing	\$50,000,000
	External Financing	47,409,000
	Gift Funds	20,000,000
	TOTAL	\$117,409,000

E. STATUS OF PROJECT:

Project Planning Guide Submittal

Campus	Name: Randy Leopold	Signature: 	Budget No.	1
	Title: Sr. Director	Title: Wm. Joel King, Asst VC, Campus Architect	Issue Date	8/23/2017
AVP-PPC	Prepared by: Matthew Smith, PM 	Approved for Campus, Date: 08/23/17	Revised	
	Program:	Signature:	Revised	
	Fiscal:	Title:	Revised	
	Cost:	Approved for AVP-PPC, Date:	Revised	

Section 1: Executive Summary

The University of California, San Diego proposes to construct the Ridge Walk Academic Complex (Complex) to consolidate scattered departments and programs in UC San Diego’s Division of Social Sciences and Division of Arts and Humanities, creating academic synergies and connections across various disciplines. The project would also allow reassignment of released space to several growing departments significantly impacted by student enrollment growth.

Over the past decade, UC San Diego undergraduate and graduate student enrollment has increased by approximately 32 percent. Consistent with the UC system wide goal of adding an additional 10,000 California-resident students by the 2018-19 academic year, UC San Diego will continue to be significantly impacted by enrollment increases, in particular California residents.

The proposed project would provide approximately 128,000 assignable square feet for departments and programs within the Divisions of Social Sciences and Arts and Humanities. The new space would include research offices, scholarly activity, graduate student offices, active learning spaces, and conference and collaborative spaces.

The proposed Complex would be part of an innovative community (the “North Torrey Pines Living and Learning Neighborhood”) that would enrich the student experience by integrating housing, residential life, teaching, learning and social spaces in one location.

Section 2: Background

Established in 1960, UC San Diego has evolved into an internationally distinguished university. Six colleges, each with its own faculty, facilities, and distinctive educational philosophy, serve UC San Diego’s undergraduates. The campus awards graduate degrees through its general campus departments, the School of Medicine, Scripps Institution of Oceanography, the School of International Relations/Pacific Studies, the Skaggs School of Pharmacy, and the Rady School of Management. Additionally, joint doctoral programs are offered in conjunction with other academic and research institutions such as San Diego State University and the Salk Institute.

Over the past decade, there has been an increase in undergraduate and graduate student enrollment of approximately 32 percent. The campus has experienced recent growth of 3,317 undergraduate students from fall 2014 to fall 2016. Total undergraduate students are expected to grow by 13 percent from 2016-17 (27,097) to 2022-23 (30,500). This enrollment growth has been accompanied by growth in faculty numbers, increased academic program development, research activity, and cross-disciplinary interactions. Even though construction of new space has met some of the existing campus needs, serious space deficiencies have continued to be unrelieved – campus space has not been able to “catch up” to enrollments.

The campus is addressing these space needs with a careful prioritization and balancing of new construction and renovation. New buildings allow reassignment of space in older buildings and repurposing of these buildings to adapt to evolving space needs.

Division of Social Sciences

The Division of Social Sciences is home to ten academic departments, six interdisciplinary degree programs, 21 organized research units, and more than ten affiliated minors. Collaboration among the departments and programs takes place in all activities. The Division's educational mission serves society and solves complex problems from political, economic, sociological, human developmental, ethnic, anthropological, educational, and communication perspectives. The fields and subjects of study encompass the broadest range on campus, including but not limited to DNA and RNA in archaeological specimens, synapses in the nervous system, distributed and computational cognition, economic and political theory, studies in ethnography, societies, and religion, and training the teachers of tomorrow.

The Urban Studies and Planning (USP) Program would relocate to the proposed Complex. USP is an interdisciplinary undergraduate major that provides students with a variety of approaches and tools to understand the development, character, and culture of cities and communities. USP draws from the social sciences, arts and humanities, physical and life sciences, management and information sciences.

Division of Arts and Humanities

Some departments and programs under the Division of Arts and Humanities would also relocate to the Complex, including History, Literature, Philosophy, and the Institute for Arts and Humanities.

The Division of Arts and Humanities supports the academic, instruction, and research missions of six academic departments (Literature, History, Philosophy, Music, Visual Arts, and Theatre and Dance) and the newly launched Institute of Arts and Humanities (IAH). Established in 2015, IAH serves as a nexus for more than 11 multidisciplinary programs, and is home to 17 major and minor programs, and three small research centers. IAH provides administrative support services to a variety of students and faculty from a wide range of disciplines. As the IAH grows, it is anticipated that research activity would expand and thrive.

Existing Space

The existing space for the Division of Social Sciences and the Division of Arts and Humanities is shown in Table 1, illustrating how these departments and programs are fragmented in different locations across the campus. This Complex allows for a strategic consolidation, bringing together the Social Sciences and Art and Humanities Divisions' programs and departments that are currently housed in disparate locations across the campus.

Table 1
Existing Space by Department
Assignable Square Feet

Division	Program	Building	ASF
Division of Social Sciences	Education Studies	Pepper Canyon Hall	14,185
	Urban Studies and Planning	Social Sciences Building	1,825
	Outreach and Mentoring Programs	University Center 301	2,643
	CREATE/LCHC/CRLP	Social Sciences Research Building	5,114
	Dean’s Office	Social Sciences Building and Sequoyah Hall	4,925
		Subtotal	28,692
Division of Arts and Humanities	Institute for Arts & Humanities	Humanities & Social Sciences Building	4,559
	Analytical Writing Program	Mandeville Center and Literature Building	2,567
	History	Humanities & Social Sciences Building	13,885
	Literature	Literature Building	22,395
	Philosophy	Humanities & Social Sciences Building	8,435
	Dean’s Office	Literature Building	5,246
		Subtotal	57,087
	Total	85,779	

Section 3: Statement of Need

Undergraduate majors in the Social Sciences are very popular at UC San Diego. Social Sciences represents close to 50 percent of all majors at the campus. To accommodate this demand, 30 new Social Sciences faculty have been hired in the past five years with no increase in space during this period. The lack of space hinders efforts to expand current programs for instruction and research, and without new construction, the campus must continue to grapple with this problem.

Many Social Sciences departments now face a shortage of space, as construction of new facilities has not kept pace with changing programs and prior campus enrollment growth.

Urban Studies and Planning, an interdisciplinary program within the Division of Social Sciences, requires space to accommodate its expanded curriculum and a new degree program in real estate planning. The Division is also home to outreach and mentoring programs serving undergraduate students, including the Center for Research on Educational Equity, Assessment and Teaching Excellence (CREATE). Some of these outreach and mentoring programs are currently located in a 1942 structure slated to be demolished; the programs require replacement and expansion space for new student affairs officers and learning skills counselors which will be accommodated in the Complex. The Laboratory of Comparative Human Cognition (LCHC), also under the Division of Social Sciences, is a community of interdisciplinary scholars who share an interest in the study of the human mind in its cultural and historical contexts. The LCHC seeks to resolve theoretical and methodological problems associated with scholarly approaches that place culture and activity at the center of attempts to understand human nature with a particular focus on the sources of, and solutions to, problems of social inequality.

The Division of Arts and Humanities hires clusters of faculty working on a theme. One example of a theme would be Practical Ethics with areas of focus that include bioethics, environmental ethics, business ethics, and ethics of big data. One of the growth programs in the Division of Arts and Humanities is the Analytical Writing Program (AWP), which has grown since its inception. For the 2016-17 academic year, the AWP has 18 lecturers, three teaching assistants, and 10 to 14 undergraduate mentors serving 1,647 students. In order to keep pace with increased undergraduate enrollment, the program is projected to grow between five percent and ten percent annually. Currently, the AWP has insufficient space and often has four to six people assigned to a shared office.

Academic Staff Growth

Faculty growth has driven much of the space needs for the programs and departments planned to be housed in the Complex. Faculty positions (ladder rank faculty and lecturers) are expected to increase by approximately 20 percent for both the Division of Social Sciences and the Division of Arts and Humanities from 2016-17 to 2022-23 to fill current vacancies and meet future demands. This growth in academic staffing is critical to accommodating the instructional requirements of the disciplines.

Table 2
Academic Staffing Plan
Division of Social Sciences and Division of Arts and Humanities

	Budgeted 2016-17	Projected 2022-23
Division of Social Sciences		
Faculty FTE	225	287
Division of Arts & Humanities		
Faculty FTE	190	209
Total	415	496

Shortage of Active Learning, Flexible Teaching Spaces

Enrollment growth at UC San Diego in the past ten years has been significant and continued growth is expected. Over the past decade, there has been an increase in undergraduate and graduate student enrollment of approximately 30 percent. The total undergraduate FTE is expected to grow by 13 percent from 2016-17 (27,097) to 2022-23 (30,500). General campus faculty growth is driven by student growth, and the campus is projecting an increase of ladder-rank faculty from 999 (fall 2016) to 1,150 (fall 2020).

Table 3 shows actual and projected student enrollments figures from 2006-07 through 2022-23, two years after the expected project occupancy.

Table 3
UC San Diego General Campus
Projected Student Enrollment
Three Quarter Average Workload (Undergraduate FTE and Graduate Headcount)

	Actual 2006-07	Actual 2016-17	Projected 2022-23
Undergraduate FTE	20,972	27,097	30,500
Graduate Headcount	3,606	4,796	8,500
Total	24,578	31,893	39,000

Due to this sustained enrollment growth, there is a shortage of teaching spaces on the campus, in particular, spaces that are designed for active learning and allow for flexible configurations. At the same time as enrollments have increased, teaching methods have evolved and in order

to create an optimal learning experience for undergraduate students, UC San Diego has taken steps to keep educators on the cutting edge of pedagogical research.

For example, in 2015, UC San Diego established the Teaching and Learning Commons (TLC) to advance and improve how the campus teaches and learns. The program engages learners and teachers in the bidirectional modalities of teaching and learning – the teacher not only teaches but learns, and the learner not only learns but teaches. The campus is committed to delivering an educational experience that prepares students who are capable of solving problems, leading, and innovating in a diverse and interconnected world.

In fall 2016, renovations in existing library space were completed to create a centralized and contiguous space for the TLC in the heart of the campus. Due to high demand, the TLC has already outgrown this space. The success of the TLC indicates that the campus needs to adapt to a new wave of pedagogical change, including creating spaces that can accommodate new teaching methodologies.

Technologically-enhanced, flexible, active learning spaces that allow tables and chairs to be rearranged are needed to enable student-teacher and student-student collaboration. Currently the campus has only three flexible rooms designed to accommodate active learning, breakout sessions and one-on-one interactions between the lecturer, teaching assistant and students. They are heavily utilized throughout the day. General assignment classrooms do not allow for modifying the set up throughout the day since they are scheduled back-to-back. The three active learning rooms in the proposed project would play an integral role in the delivery of the curriculum for undergraduate students at UC San Diego and improve the quality of instruction and education.

Section 4: Project Description

The proposed Complex would provide a total of 128,000 ASF, including 108,300 ASF for departments and programs within the Divisions of Social Sciences and Arts and Humanities. The Complex would be built on a 1.5-acre parcel that is now a surface parking lot, adjacent to new undergraduate student housing, classroom, residential life, and administrative space supporting UC San Diego's Sixth College.

Proposed space would include academic and administrative offices, instructional and seminar spaces, areas to support scholarly activity, as well as conference and collaborative spaces. In addition, the project would provide three active learning spaces with flat floors and flexible configurations to accommodate varying teaching modalities among different departments.

The campus is utilizing the Design-Build delivery process, so the final numbers for the proposed space uses shown in Table 4 below may vary.

Table 4
Proposed Area Summary

Department/Program	Space Type	ASF
Division of Arts and Humanities (Institute for Arts & Humanities, Analytical Writing Program, History, Literature, Philosophy, Division Dean)	Instructional/Seminar	11,600
	Academic Office	39,600
	Administrative Office	9,100
	Office Support	4,400
	Scholarly Activity/Collaborative Space	2,200
	Conference Room	2,700
	Subtotal	69,600
Division of Social Sciences (Education Studies, Urban Studies and Planning, Outreach and Mentoring Programs, Division Dean)	Instructional/Seminar	8,300
	Academic Office	12,000
	Administrative Office	9,000
	Office Support	2,200
	Scholarly Activity/Collaborative Space	2,000
	Flex/Workshop Space	1,500
	Conference Room	3,700
Subtotal	38,700	
Medium Active Learning Room (1)	75 seats; flexible arrangement to accommodate different teaching modes	2,500
Small Active Learning Rooms (2)	50 seats each; flexible arrangement to accommodate different teaching modes	3,200
Community Serving Retail		8,000
Facilities Management (ancillary space for building operations)		6,000
	Total	128,000

The proposed project – together with the non-State funded North Torrey Pines Living and Learning Neighborhood project approved by the Regents in July 2017 – would provide an innovative community that integrates college facilities, residential, and social spaces with teaching and research space in the Divisions of Social Sciences and Arts and Humanities.

Secondary Benefits of Ridge Walk Academic Complex

The opportunity for repurposing vacated space for other campus priorities would be a secondary benefit of consolidating and relocating the Division of Social Sciences and Division of Arts and Humanities departments and programs to the proposed building. These opportunities

would include: 1) expansion space for departments experiencing significant growth due to increased enrollment, 2) space for the future seventh college, and 3) space to consolidate programs into one location. Released office and collaboration space would be reassigned to accommodate enrollment and faculty growth in departments such as Mathematics, Economics, Biology, and Political Science. After completion of the proposed Complex, approximately 86,000 ASF would be reassigned, repurposed/renewed, or demolished in eight buildings as shown in Table 5 below.

Table 5
Space Released After Project

Building	ASF
Literature Building	28,800
Humanities and Social Sciences Building	26,900
Pepper Canyon Hall	14,200
Social Sciences Building	6,500
Social Sciences Research Building	5,100
University Center 301	2,600
Mandeville Center	1,400
Sequoyah Hall	250
Total	85,750

With the space being released, the San Diego campus will be able to address deferred maintenance issues in some of the vacated space. For example, the Humanities and Social Sciences Building (26,900 ASF) is nearly 50 years old and has never had a significant renovation. Capital renewal of this building is a high priority, but due to the type and extent of refurbishment needed, the building would need to be at least partially vacated to accomplish the work.

Project Site

The proposed Complex would be built on a 1.5-acre parcel that is currently a surface parking lot. Construction of the proposed project would eliminate approximately 115 spaces. No parking is included as part of the proposed Complex scope and budget.

Section 5: Relationship to University Mission and Objectives

The University’s capital improvement program addresses seismic, fire, and other life-safety hazards; renewing obsolete and aging facilities; renovating facilities to meet changing program needs and Americans with Disabilities Act (ADA) regulations; and expanding critical infrastructure and utility systems to meet program requirements. This project supports the mission of the University of California by meeting the demand for modern facilities to sustain the instruction and research programs at the San Diego campus.

Section 6: Alternatives Considered

The campus investigated the following alternatives to meet the program needs of the Division of Social Sciences and the Division of Arts and Humanities.

Reassign Existing Space on Campus

With enrollment growth, the campus as a whole is experiencing space inadequacies in all functional areas: general academic campus, School of Medicine, Scripps Institution of Oceanography, and administrative and support units.

The campus continues to take steps to improve and maximize the utilization of existing facilities. These steps include renewal of existing instructional and research spaces to modernize building systems and improve efficiencies. For example, a renewal project completed in York Hall resulted in additional seats in teaching laboratories for courses in the Division of Biological Sciences and Chemistry/Biochemistry Department; also, an entire floor of the Muir Biology Building was renovated to improve building systems, modernize research laboratory space, and increase the number of faculty that can be supported in the space. Another two floors in Muir Biology Building is planned to be renovated. Even with continued improvements similar to these examples, net new space still remains critical for instruction and research on the campus.

Reassigning existing space is not feasible.

Build a Building of Smaller Size

The space program proposed for the new project reflects the critical needs to consolidate the departments and programs described previously. Constructing a smaller facility would not allow for a full consolidation and would present disadvantages for the expanding instruction and research programs, leading to restrictions on available course offerings and associated hands-on learning opportunities for students.

In addition, construction of small additions to multiple existing buildings could be done to accommodate the required square footage; however, this would increase the total project cost significantly and cause increased disruption to classroom and research activity in those buildings.

This alternative is not acceptable.

Section 7: Sustainability Principles and Cost Basis

Implementation of the proposed project will be coordinated with the separate but related North Torrey Pines Living and Learning Neighborhood project. The campus is utilizing the fixed-price Design-Build delivery process. The campus has completed cost analyses for the project.

The project will comply with the *University of California Policy on Sustainable Practices*. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements. The project would be designed to be LEED Platinum.

Section 8: Project Financial Feasibility

The project is proposed to be funded by State AB 94 funds (\$50,000,000), external financing (\$47,409,000), and gift funds (\$20,000,000), for a total budget of \$117,409,000.

PROJECT LOCATION

**SCRIPPS INSTITUTION
OF OCEANOGRAPHY**

UCSD WEST CAMPUS

EAST CAMPUS

GENESSEE AVENUE

NORTH TORREY PINES ROAD

GILMAN DRIVE

LA JOLLA VILLAGE DRIVE

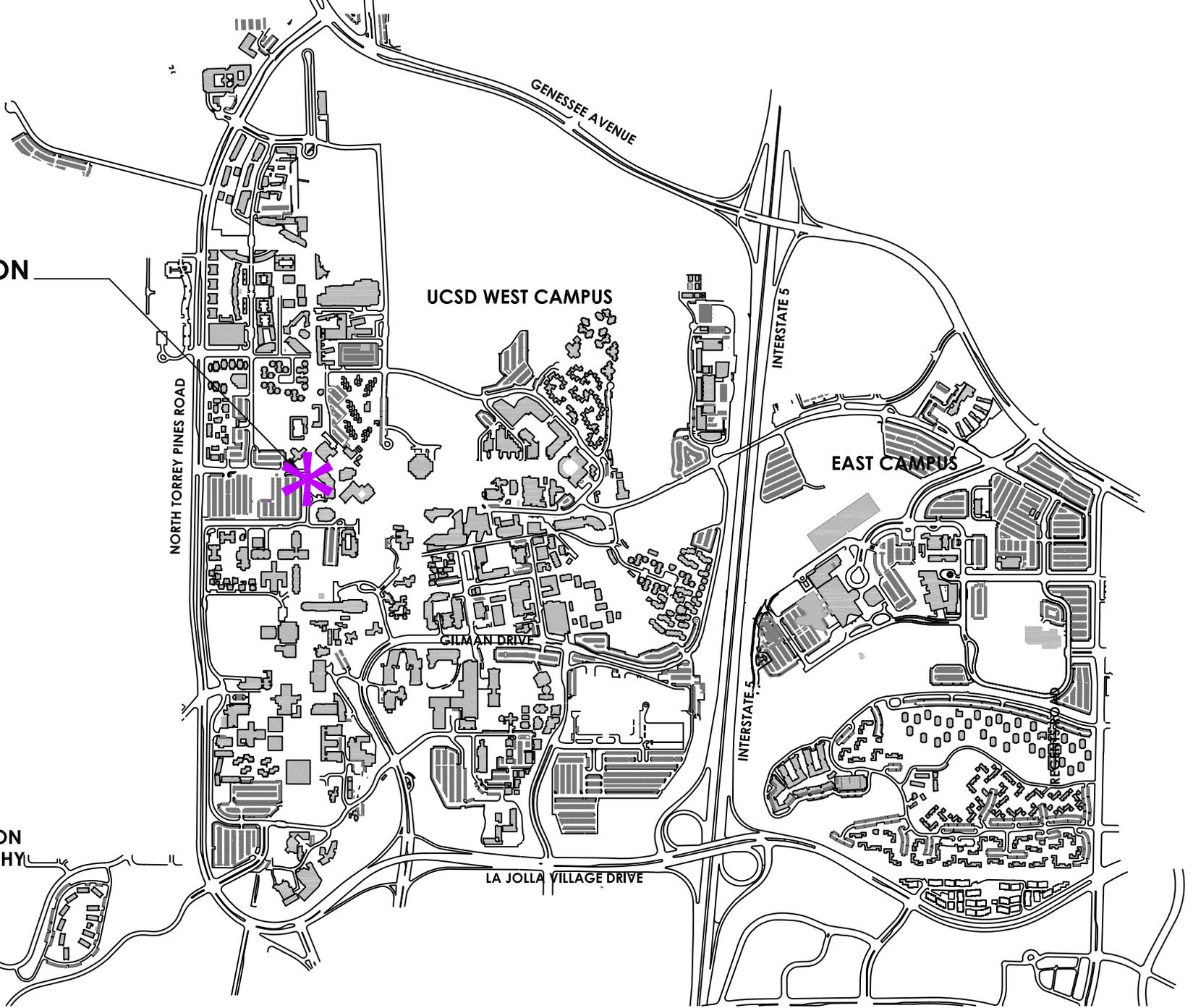
INTERSTATE 5

INTERSTATE 5



0 1200' 2400'

**RIDGE WALK ACADEMIC COMPLEX
UNIVERSITY OF CALIFORNIA, SAN DIEGO
PROJECT LOCATION**



PROJECT SITE

NORTH TORREY PINES ROAD

NORTH TORREY PINES ROAD

SCHOLARS DRIVE SOUTH

SCHOLARS DRIVE

MUIR COLLEGE DRIVE

MUIR COLLEGE DRIVE

MUIR LANE

0' 200' 400'

UCSD
EXTENSION
COMPLEX

SEQUOYAH
HALL

FUTURE MEDIA CNTR.
ADDITION

COMMUNICATIONS
& MEDIA CENTER

EUCALYPTUS
POINT (LA CASA)

102
MARSHALL C.

101
MARSHALL C.

MARSHALL
ADMIN.

Bubble
Building

CHEMISTRY
RESEARCH

SOLIS
HALL

COGNITIVE
SCIENCE

PETERSON
HALL

STUDENT
CENTER

STUDENT
HEALTH
CENTER

FACULTY
CLUB EXT.

FACULTY
CLUB

TENAYA
HALL

TIOGA
HALL

MANDLER
HALL

MUIR
COMMONS

McGILL
HALL

APPLIED
PHYSICS
& MATH

MUIR
COLLEGE
APTS.

HUMANITIES &
SOCIAL SCIENCES

BIOLOGY

**RIDGE WALK ACADEMIC COMPLEX
UNIVERSITY OF CALIFORNIA, SAN DIEGO
PROJECT SITE**

Campus/Field Station/Division UC San Diego Project Account 962660 & 962890
 Project Title North Torrey Pines Living and Learning Neighborhood & Ridge Walk Academic Complex

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map with your submission.

I. **EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970** - When it can be seen with certainty that there is no possibility the action will result in physical change to the environment (15061(b)(3)), or the action is specifically exempted by statute (15260-15285), the project is classified as generally exempt from CEQA. General/Statutory Exemption: § _____

II. **CATEGORICALLY EXEMPT** - This project falls under the indicated Class(es) of Exemption(s), none of the exceptions to the exemption apply (15300.2), and there is no significant effect on the environment (for complete list see CEQA Guidelines Section 15300):

- | | |
|--|--|
| <input type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 17: Open Space Contracts or Easements |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 23: Normal Operation of Facilities for Public Gatherings |
| <input type="checkbox"/> Class 3: New Construction or Small Structures (d) | <input type="checkbox"/> Class 25: Transfer of Land: Natural Conditions/Historical Resources |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 30: Minor Actions: Prevent Hazardous Waste/Substances |
| <input type="checkbox"/> Class 6: Information Collection | <input type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 13: Acquisition for Conservation | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership for Parks | <input type="checkbox"/> Other: _____ |

III. **INITIAL STUDY** - This project is not statutorily or categorically exempt from CEQA; an Initial Study is to be prepared to determine if the project may have a significant effect on the environment.

Stand-Alone Tiered Initial Study (15152): _____

IV. **ENVIRONMENTAL IMPACT REPORT (EIR)** - It is known that the project will have a direct or cumulatively significant effect on the environment and an EIR will be/has been prepared. Identify the type of EIR:

Programmatic Stand-Alone (Project-Specific) Tiered from 2004 LRDP EIR (as updated by ECBT 2010 Traffic Update)

Additional project analysis:

None/Findings Only Addendum Subsequent Supplement to EIR: _____

PROJECT DESCRIPTION

The proposed North Torrey Pines Living and Learning Neighborhood (NTPLLN) and Ridge Walk Academic Complex project, would develop approximately 1.1 million gross square feet (GSF) for student housing, academic and administrative spaces. The 10-acre project site is located on two existing surface parking lots on the west campus between North Torrey Pines Road, Muir College Drive, and Muir Lane. The NTPLLN project would be on 8.5 acres of the 10-acre site, and the Ridge Walk Academic Complex would be on 1.5 acres of the site. The NTPLLN would provide undergraduate student housing (2,000 new beds); residential support space; dining, market and retail; new lecture halls and classrooms; and residential life and administrative space for students and staff in Sixth College. Additionally approximately 1,250 below-grade parking spaces would be provided in a new parking structure. The Ridge Walk Academic Complex would provide academic and administrative offices, instructional and seminar spaces, conference and collaborative spaces, and three active learning classrooms for the Divisions of Social Sciences and Arts and Humanities. These developments would assist UC San Diego in meeting long-term student housing goals, enrich the students' experience by creating areas for collaboration and interaction between students and faculty across various disciplines, and provide an innovative community that integrates college facilities, residential, and social spaces with teaching and research space. Thoughtfully designed open space would be an integral part of the neighborhood, including pedestrian and bicycle-friendly pathways and elements. Landscape design would be consistent with campus sustainability goals, emphasizing drought tolerance. As part of the open space improvements, Scholars Drive would be realigned to provide a safer pedestrian and bike environment along Ridge Walk on the eastern edge of the neighborhood.

V. Does this project conform to the approved LRDP? YES NO NA

VI. Lisa Goodman 7/10/2017 Alvin Bruchley 7/18/2017
 Prepared by Date Local Approved by Date

VII. OFFICE OF THE PRESIDENT

Concur with Classification Do not concur with Classification

Signed _____ Date _____

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
------------------------	-----------------------	--	--------------

Budget Request Name	Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)
---------------------	---------------------------	--

Project Title San Francisco – Health Sciences Instruction & Research Buildings Seismic Improvements	Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
---	--

Project Category (Select one)

CRI (Critical Infrastructure)
 WSD (Workload Space Deficiencies)
 ECP (Enrollment Caseload Population)
 SM (Seismic)
 FLS (Fire Life Safety)
 FM (Facility Modernization)
 PAR (Public Access Recreation)
 RC (Resource Conservation)

Total Request (in thousands) \$37,000	Phase(s) to be Funded C	Estimated Total Project Cost (in thousands) \$47,432
---	----------------------------	--

Budget Request Summary

Health Sciences Instruction & Research Buildings Seismic Improvements– \$37,000,000 for Construction. The project includes seismic retrofit of the utilities and building systems to reduce laboratory down time, preserve valuable research, and improve functionality following an earthquake. The improvements would upgrade the seismic rating of the buildings to Level III. Total project costs are estimated at \$47,432,000, including preliminary plans (\$5,500,000), working drawings (\$4,932,000), and construction (\$37,000,000). The construction amount includes \$35,120,000 for the construction contract and \$1,880,000 for contingency. The current project schedule estimates preliminary plans will begin in November 2017 and be completed in August 2018. The working drawings are estimated to begin in October 2018 and be completed in April 2019. Construction is scheduled to begin in August 2019 and will be completed in July 2021.

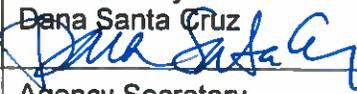
Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
---	--	---------------------

Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
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Impact on Support Budget

One-Time Costs Yes No
 Future Costs Yes No
 Future Savings Yes No
 Revenue Yes No

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Carey Barker 	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

**UNIVERSITY OF CALIFORNIA
SAN FRANCISCO**

Project Planning Guide

**UCSF
Parnassus Heights Campus Site
Health Sciences Instruction & Research Buildings
Seismic Improvements**

August 2017

2017-20 Capital Improvement Program
S.F. Account No. 9003033

Approved:

DocuSigned by:

Lori Yamauchi

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Lori Yamauchi
Associate Vice Chancellor
Campus Planning

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Distribution

S. Hawgood	Chancellor
P. Jenny	Senior Vice Chancellor, Finance and Administration
T. Costantinidis	Vice Chancellor and Chief Financial Officer
M. Bade	Associate Vice Chancellor, Capital Programs and Campus Architect
B. Smith	Associate Vice Chancellor, Research Infrastructure and Operations
L. Yamauchi	Associate Vice Chancellor, Campus Planning

EXECUTIVE SUMMARY

UCSF proposes to seismically improve utilities and building systems servicing the 440,000 gross-square-foot Health Sciences Instruction & Research complex at the Parnassus Heights campus site. Although the buildings have a seismic rating of Level IV, a major seismic event could cause significant damage and disruption in services if the utility systems and connections between the buildings are not seismically improved. The proposed improvements would upgrade the seismic rating to Level III, minimize risk to the utility infrastructure, ensure the preservation of invaluable research samples, and secure equipment during a seismic event.

BACKGROUND

UCSF operates three major campus sites across the city of San Francisco: Parnassus Heights, Mission Bay, and Mount Zion. Research, clinical care, and training are conducted at all three sites, and housing and education are located at the Parnassus and Mission Bay locations. In addition to multiple smaller sites throughout the city, UCSF occupies research space at Zuckerberg San Francisco General (ZSFG), where UCSF faculty provide services for the City/County hospital and train UCSF students, residents, and fellows.

The Parnassus Heights campus site is home to all four UCSF professional schools – Medicine, Pharmacy, Nursing, and Dentistry – as well as UCSF Medical Center inpatient and outpatient facilities in Moffitt/Long Hospitals and clinics. A significant number of students, faculty, physicians, and researchers in all four schools use the campus for biomedical and clinical research as well as instructional space. The Health Sciences Instruction and Research (HSIR) building complex is the largest facility devoted to instruction and laboratory research at the Parnassus campus site.

The HSIR building complex consists of two 17-story laboratory buildings each with an adjacent stairway and mechanical utility tower supplying heating and ventilation, electrical, and plumbing systems. An elevator and corridor tower connects the two laboratory buildings and the nearby Medical Sciences building (see attached site plan). The complex, constructed in 1963, provides approximately 440,000 gross square feet of space, primarily for research and education activities. HSIR has a prominent role as a hub for the campus, housing faculty who are leaders in their fields and providing participatory research settings that are essential for effective learning and producing graduates and discoveries that drive the California economy. With 180 principal investigators located at HSIR, the towers are used by a broad spectrum of instruction and research programs – such as anatomy, genetics, and bioengineering, to name a few. There are no clinical activities in the buildings.

The two laboratory towers are designated as Health Sciences East (HSE) and Health Sciences West (HSW). These towers are high-rise research and instructional buildings, comprised predominantly with biomedical research wet laboratory spaces for conducting basic and clinical translational research on floors two through 16 in HSE and floors four through 16 in HSW. Four tiered-floor lecture halls (two with 153 seats and two with 163 seats) are located on floors two and three of HSW. The distribution of assignable square feet of space in the two towers is shown in Table 1.

Table 1
Amount of Assignable Square Feet (ASF) of Space

Space Type	Amount of ASF	% of Total
Research and research service	224,000	79%
Academic and administrative	41,500	15%
Instruction and academic support	13,300	5%
Building service and support	3,400	1%
Total	282,200	

PROJECT DRIVERS

Although the structures of the individual buildings do not require major retrofitting to meet minimum code requirements for existing buildings per UC Seismic Safety Policy, there are significant risks to the stability of the utility systems serving HSE and HSW in the event of a seismic event. Additionally, existing fire sprinklers and research equipment that are not braced appropriately could cause damage and injury.

The primary driver for the project is to reduce the risk for interruptions or damage to critical research and assets during a seismic event. These risks include:

1. Risk to Infrastructure. The vertical distribution of electrical, HVAC, and plumbing systems is located in the two mechanical towers that are adjacent to the HSW and HSE research towers. The piping rises between the stair towers of HSE and HSW inside the building separation joint and then branches out at each floor. Analysis of the HSIR structures indicates that the laboratory buildings and mechanical towers deflect in opposite directions. During the course of an earthquake, the structures (laboratory and mechanical towers for both HSW and HSE) are expected to move out-of-phase, which would cause differential motion and pounding at the separation joints.

The largest concern for the mechanical, plumbing, and fire protection are related to the locations where piping crosses the separation joints without any expansion compensation, and piping that is installed in the seismic gap. Relative movement at the building separation joints could damage utilities contained in or crossing the joint; joints could entirely close in the largest ground motions, which could crush or break the utility lines. The column splices in the four corner columns (of each laboratory tower), between floors five and six and between floors seven and eight, will yield in tension and may not close again in compression, which also could cause a break in utility lines. Additionally, the utility lines do not have separation joint expansion compensation. Without the ability to flex and move with the buildings during a seismic event, the lines will break. The potential damage to the utility systems and connections may obstruct the stairways located in the mechanical towers, causing risk for exiting the buildings.

2. Risk to Research. The risk to ongoing research is significant, with possible circumstances ranging from disruption of research to complete dissolution of research projects. Much of

the research spans decades of work and is irreplaceable. Most samples are required to be stored at specific temperatures. A loss of power or damage to equipment would result in damaged, contaminated, or altogether destroyed samples; future tests on them would not be possible. The impact of damaged or lost research and inability to re-start quickly would negatively affect the potential scientific discovery and cause loss in revenue from grants and gifts. Faculty retention would also be impacted, with many potentially looking for opportunities elsewhere to re-start their programs, which would disrupt the education enterprise.

3. Risk to the Life Safety Systems (Fire Controls and Alarm). The building fire control system and fire alarm distribution panels were installed as part of a campus-wide fire and life safety system upgrade in the early 1990s; however, the anchorage was designed per the code requirements at the time and would be evaluated and upgraded as required. Most of the existing fire sprinklers are not braced appropriately, which could cause breaking of the pipes and further damage the buildings, their contents, or cause injury. Bracing of laboratory equipment (such as freezers, cabinets, and other large research equipment) would be evaluated and installed as needed to avoid costly damage and personal injury.

The seismic improvements included in the proposed project would allow for the circumstances described below, following a seismic event:

- Essential research activities could resume in days, with full research productivity resuming within weeks.
- Potential interruptions in power could be limited to hours.
- Potential interruptions to other building systems could be repaired in weeks.
- Significant cleanup of fallen items would be necessary.
- Some experiments could need to be re-set or re-run.
- No irreplaceable samples would be lost.
- Building would be acceptably safe to allow immediate emergency access to labs for clean-up and restoration of essential research or sample protection.

ALTERNATIVES

The project addresses deficiencies related to building systems at specific facilities, thus the only alternative to the proposed project is not to do the project. Deferring this work would compromise the integrity of the utility services to critical research experiments. Similarly, the options for implementing the scope are limited as the work described for this project cannot be done in phases, since a piecemeal approach would actually weaken the stability of the buildings.

RELATIONSHIP TO UNIVERSITY OBJECTIVES

The project supports the instruction and research mission of the University of California by providing safe facilities for teaching and research in a campus academic building.

PROJECT DESCRIPTION

The proposed retrofit of the utilities and systems would protect systems and equipment to reduce laboratory down time, preserve valuable research, and improve functionality following an earthquake. The proposed project would address the relative movement at building separation joints and address column splices. Retrofitting against the shear-governed behavior of the concrete walls in the mechanical tower also is considered. Following these improvements, the seismic rating would be upgraded to Level III.

Project elements in the HSIR complex include:

- Improve seismic performance of building separation joints between the mechanical and laboratory towers and construct dampers across joints.
- Install column splices between levels five and six and between levels seven and eight.
- Install mechanical tower dampers.
- Install damping frames around the perimeter of each level of the laboratory buildings, which would substantially reduce seismic drifts and accelerations.
- Improve bracing of existing fire sprinklers and other utilities.
- Replace or add bracing to existing laboratory equipment (such as freezers, cabinets, and other large research equipment).
- Improve fire control systems.

All of the proposed work can be accomplished while the building is occupied, with minor disruption to ongoing activities.

SUSTAINABILITY

This project would comply with the *University of California Policy on Sustainable Practices*. As required by this policy, the project would adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

COST BASIS AND SCHEDULE

The campus has conducted pre-design studies and cost analyses. The project components described above reflect the most critical facility needs for the project as identified during project planning. Construction is anticipated to start in spring 2019 and complete in March 2021.

UNIVERSITY OF CALIFORNIA ENVIRONMENTAL IMPACT CLASSIFICATION

Campus or Field Station: San Francisco Project Account: 9003033
Project Title: Parnassus Heights Health Sciences Instruction & Research Buildings Seismic Improvements

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map.

I. EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970

When it can be seen with certainty that there is no possibility the action will result in physical change to the environment [15061(b)(3)] or the action is specifically exempted by statute (15260 – 15285), the project is classified as exempt from CEQA.

X II. CATEGORICALLY EXEMPT

This project falls under the indicated class(es) of exemption(s), none of the exceptions to the exemption apply (15300.2) and there is no significant effect on the environment:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 18: Designation of Wilderness Areas |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 19: Annexation of Existing Facilities and Lots |
| <input type="checkbox"/> Class 3: New Construction Small Structures | <input type="checkbox"/> Class 20: Changes in Organization of Local Agencies |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 21: Regulatory Enforcement Actions |
| <input type="checkbox"/> Class 5: Alterations in Land Use Limitations | <input type="checkbox"/> Class 22: Educational or Training Programs |
| <input type="checkbox"/> Class 6: Information Collection | <input type="checkbox"/> Class 23: Normal Operations for Public Gatherings |
| <input type="checkbox"/> Class 7: Regulatory Protection of Natural Resources | <input type="checkbox"/> Class 24: Regulations of Working Conditions |
| <input type="checkbox"/> Class 8: Regulatory Protection of the Environment | <input type="checkbox"/> Class 25: Existing Natural Conditions/Historic Resources |
| <input type="checkbox"/> Class 9: Inspections | <input type="checkbox"/> Class 26: Acquisition of Housing for Housing Assistance |
| <input type="checkbox"/> Class 10: Loans | <input type="checkbox"/> Class 27: Leasing New Facilities |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 28: Small Hydroelectric Projects |
| <input type="checkbox"/> Class 12: Surplus Government Property Sales | <input type="checkbox"/> Class 29: Cogeneration Projects |
| <input type="checkbox"/> Class 13: Acquisition for Wildlife Conservation | <input type="checkbox"/> Class 30: Minor Actions to Mitigate Release of Hazards |
| <input type="checkbox"/> Class 14: Minor Additions to Schools | <input checked="" type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 15: Minor Land Divisions | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership to Create Parks | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 17: Open Space Contracts or Easements | |

III. INITIAL STUDY

This project is not Exempt from CEQA or Categorically Exempt; an Initial Study is to be prepared to determine if the project may have a significant effect on the environment that has not been substantially and adequately analyzed in a certified program EIR.

IV. ENVIRONMENTAL IMPACT REPORT (EIR)

It is known that the project will have a significant effect on the environment and has not been adequately and substantially analyzed in a certified program EIR.

PROJECT DESCRIPTION

The proposed project would involve seismic improvements to the Health Sciences Instruction and Research (HSIR) towers to protect systems and equipment to reduce laboratory down time, preserve valuable research, and improve functionality following an earthquake. The HSIR towers are considered historical resources under CEQA. Most work would occur within the interiors of the buildings and have no effect on the significance of the historical resources. However, damping frames around the perimeter of each level of the laboratory buildings may be proposed, which would likely affect the exterior appearance of the buildings. (continued on next page)

V. Does this project conform to the approved LRDP? YES NO

DocuSigned by: <u>Diane Wong</u>	8/17/2017	DocuSigned by: <u>Lori Yamauchi</u>	8/17/2017
Reviewed by: Environmental Coordinator	Date	Approved by: AVG Campus Planning	Date

VII. OFFICE OF THE PRESIDENT

COMMENTS

Concur with Classification

EXPECTED TO QUALIFY FOR BOTH CLASS 1 AND 31

Do not Concur

EXEMPTION ON SEPARATE AND INDEPENDENT BASIS

Signed *Brian Hansen*

Date 8/17/2017

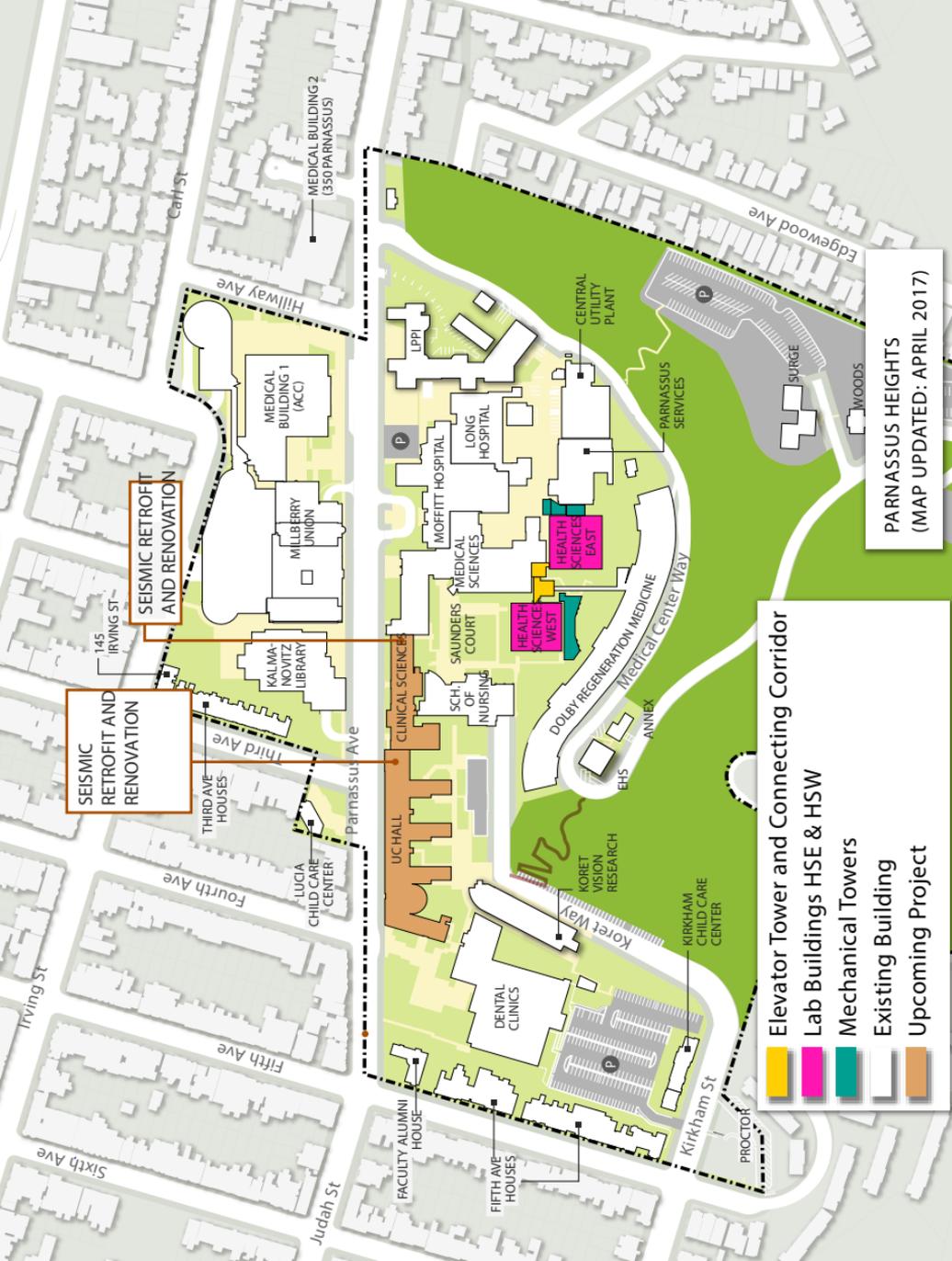
UNIVERSITY OF CALIFORNIA ENVIRONMENTAL IMPACT CLASSIFICATION

Campus or Field Station: San Francisco **Project Account:** 9003033

Project Title: Parnassus Heights Health Sciences Instruction & Research Buildings Seismic Improvements

A preservation architect will be retained as part of the design team to ensure the proposed project meets the Secretary of the Interior's Standards for the Treatment of Historic Properties. At this time, the project is expected to meet requirements for a categorical exemption from CEQA under Class 1 Existing Facilities, and Class 31 Historical Resource Restoration/Rehabilitation, with no significant adverse effect on historical resources. This will be confirmed when project design is undertaken.

[Faint handwritten notes and signatures at the bottom of the page]



PARNASSUS HEIGHTS
(MAP UPDATED: APRIL 2017)

- Elevator Tower and Connecting Corridor
- Lab Buildings HSE & HSW
- Mechanical Towers
- Existing Building
- Upcoming Project

SEISMIC RETROFIT AND RENOVATION

SEISMIC RETROFIT AND RENOVATION

MEDICAL BUILDING 2
(350 PARNASSUS)

145 IRVING ST

THIRD AVE HOUSES

FOURTH AVE

FIFTH AVE

SIXTH AVE

JUDAH ST

KIRKHAM ST

PROCTOR

CAR ST

HILLWAY AVE

EDGEWOOD AVE

MEDICAL BUILDING 1 (ACC)

MILBERRY UNION

KALMA-NOVITZ LIBRARY

LUCIA CHILD CARE CENTER

CLINICAL SCIENCES

UC HALL

DENTAL CLINICS

FIFTH AVE HOUSES

SAUNDERS COURT

SCH OF NURSING

MEDICAL SCIENCES

LONG HOSPITAL

LPPI

CENTRAL UTILITY PLANT

PARNASSUS SERVICES

SURGE

WOODS

HEALTH SCIENCES WEST

HEALTH SCIENCES EAST

DOLBY REGENERATION MEDICINE ANNEX

EHS

KORET VISION RESEARCH

KIRKHAM CHILD CARE CENTER

MEDICAL CENTER WAY

**CAPITAL IMPROVEMENT PROGRAM BUDGET
BUDGET DATA - GFF PROJECTS**

UNIVERSITY OF CALIFORNIA

San Francisco

Campus

PHts HSR Seismic Improvements	9003033	3008/3009	CCCI: 6815
Project Title	Campus Reference	Asset No.	Cost Indexes

A. FUNDING SCHEDULE

Totals	Per	C.I.P., dated		
	Prefunded	2017-18	2018-19	2019-20
\$P 5,500		P 5,500 CF		
W 4,932		W 4,932 CF		
C 37,000			C 37,000 SG	
E				
47,432 (Tot. Proj.)		10,432	37,000	

B. FUNDING REFERENCES

	Column (1)	(2)	(3)	(4) Total All Sources	
Account No.					//////////
Source					//////////
					//////////
					//////////
					//////////

C. COSTS

						%
0. Site Clearance		-			-	
1. Building		35,120			35,120	74.0
2. Exterior Utilities		-			-	
4. Site Development		-			-	
5. A&E Fees		4,303			4,303	9.1
6. Campus Administration		1,885			1,885	4.0
7. Surveys/Tests/Plans	//////////				//////////	//////////
& Specifications		719			719	1.5
8. Special Items		3,525			3,525	7.4
SUBTOTAL	\$	45,552	\$ -	\$ -	\$ 45,552	96.0
9. Const Contingency 5.4%		1,880			1,880	4.0
TOTAL P-W-C	\$	47,432	\$ -	\$ -	\$ 47,432	100.0
3. Group 2&3 Equipment		-			-	
TOTAL PROJECT	\$	47,432	\$ -	\$ -	\$ 47,432	//////////
Available Funding						//////////
Anticipated Surplus (Deficit)	//////////	//////////	//////////	//////////	//////////	//////////

D. FUNDING SOURCE

		General Funds Financed	\$37,000,000
		Campus Funds	10,432,000
		TOTAL	\$ 47,432,000

E. STATUS OF PROJECT: PPG Submission

Campus	Name:	Signature:	Budget No.	1
	Title:	Title:	Issue Date	
	Prepared by:	Approved for Campus, Date:	Revised	
AVP-PPC	Program:	Fiscal:	Signature:	Revised
			Title:	Revised
	Cost:		Approved for AVP-PPC, Date:	Revised

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
Budget Request Name		Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)

Project Title Santa Cruz – Kresge College Academic	Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
--	--

Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$2,800	Phase(s) to be Funded W	Estimated Total Project Cost (in thousands) \$53,000
--	----------------------------	---

Budget Request Summary

Kresge College Academic – \$2,800,000 for Working Drawings. The project would address campus-wide issues of enrollment growth by adding a new building at the north end of the site that would house academic programs including a lecture hall with approximately 600 seats. Total project costs are estimated at \$53,000,000, including preliminary plans (\$3,000,000), working drawings (\$2,800,000), and construction (\$46,000,000). The construction amount includes \$41,640,000 for the construction contract, \$2,170,000 for contingency, and \$2,190,000 for architectural and engineering services. The current project schedule estimates preliminary plans will begin in December 2017 and be completed in September 2018. The working drawings are estimated to begin in December 2018 and be completed in July 2019. Construction is scheduled to begin in November 2019 and will be completed in August 2021.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
---	--	--------------

Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
--	---

Impact on Support Budget

One-Time Costs Yes No Future Costs Yes No
 Future Savings Yes No Revenue Yes No

If proposal affects another department, does other department concur with proposal? Yes No
 Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Carey Barker 	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

University of California, Santa Cruz

PROJECT PLANNING GUIDE

KRESGE COLLEGE ACADEMIC PROJECT

(976483)

August 23, 2017

Kresge College Academic

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APPROVAL OF PROJECT PLANNING GUIDE:

8/25/17
Date


George R. Blumenthal, Chancellor
University of California, Santa Cruz

Kresge College Academic Project

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I. INTRODUCTION

The Santa Cruz campus proposes the *Kresge College Academic* project which will construct a new 25,000 ASF academic complex located within Kresge College. The project will provide general assignment classrooms, offices and research space for five academic programs, and administrative office space for the Kresge College Provost and academic advising staff. The *Kresge College Academic* project is part of a larger Kresge College project¹ that would re-program the entire Kresge College site and create an academic hub at the north end of the college. This will strengthen the academic presence in the college and its connections to the campus community, address functional deficiencies due to awkward programmatic adjacencies, and reinvigorate the living-learning environment of the College.

Kresge College provides a home to critical campus needs as well as opportunities for its affiliated students that are not offered elsewhere on campus. However, at over forty years of age, the college is outdated in need of major capital renewal. The physical building and college design issues have led to a waning sense of overall community.

After two committee processes in 2016 - one for Kresge College, and another that reviewed campus academic capital priorities - UC Santa Cruz proposes the General Funds Financed (GFF) mechanism to build new general assignment facilities at Kresge College. By addressing campus-wide capital issues at Kresge College, the campus could also contribute to the effort of revitalizing Kresge College itself.

This need for capital renewal at Kresge College intersects with a campus need for new general assignment teaching facilities. New general assignment classroom facilities have not been constructed on the Santa Cruz campus in ten years. In that timeframe, a 17 percent enrollment increase has caused courses to increase in size and section count. Faculty are required to teach multiple sections of the same courses and students have growing concerns about being able to take the classes they need in order to graduate on time.

By 2021, when this project is planned for completion, an additional 8-10% enrollment increase is projected (approx. 20,000 FTE²), and academic office, research and teaching needs will have increased. This project will address some of the pressing space needs generated by campus growth, especially in providing additional general assignment classroom space.

¹ Note: For purposes of CEQA, the entire Kresge College Project, which also includes non-academic components (proposed separately), will be evaluated as one project.

² UCSC Planning & Budget Preliminary LREP document – 11/14/2016

The campus proposes to address enrollment growth by building a new academic building, which will include a new 600-seat lecture hall. The project will bring the entire site up to current code, address ADA accessibility deficiencies, improve circulation, and locate the academic programs closer to the campus academic core. Doing so will create better connections from Kresge to core academic buildings and student facilities (e.g. the campus bookstore, health center, and wellness center) on the eastern side of campus, allowing for shorter travel times.

The project program is proposed as follows:

Space Type	ASF
Academic and Administrative Offices and Support Space	6,000
Research and Support Space	4,000
General Assignment Classroom / Instructional Computing Lab	15,000
Total Building ASF	25,000

II. STATEMENT OF NEED

Kresge College

Kresge College was the sixth college constructed (1973) on the Santa Cruz campus. The eight-acre site sits at the north-west portion of the campus within a grove of redwood trees on a hillside with an elevation change of approximately 40 feet. Designed by architect Charles Moore, founder of the firm Moore, Lyndon, Turnbull, Whitaker, and landscape architect Dan Kiley, Kresge College is based on the concept of an Italian hill-town, complete with a winding central pedestrian “street” and a piazzetta. The design principles of the site were regarded as progressive for their time and have been widely studied; however some aspects have become outmoded for current campus needs. The current building program includes approximately 95,000 assignable-square-foot (ASF) in 23 buildings. These buildings include 11 student housing buildings, a staff apartment building, four academic buildings, one classroom building for general assignment use, a library, a storage building, a lounge building, a recreation building (“mini gym”), a College House, and an assembly building with café. The proposed project will address those facilities providing academic space.

Programs housed in Kresge include campus-wide academic departments and student services, as well as college-specific programs. Existing programs within Kresge College include: Film and Digital Media, History of Arts and Visual Culture, Writing, Kresge College Academic (Core Course), and Science Communication; a support program for transfer, re-entry, veterans, and emancipated youth; Hispanic Serving Institution initiatives; and CARE (part of the President’s Task Force on Preventing and Responding to Sexual Violence and Sexual Assault); and student housing. For its college-affiliated undergraduates, Kresge offers a first-year core course that focuses on the themes of power and representation.

General Assignment Instructional Space:

Classrooms and Seminar Rooms

The Santa Cruz campus has 86 General Assignment classrooms and seminar rooms. These rooms are used for regularly scheduled course instruction, including lectures, seminars, and discussion sections. The classrooms range in size from seminar rooms as small as 15 seats to lecture halls as large as 472 seats. At Kresge College, there are two seminar rooms (rooms with 30 or fewer seats) and four classrooms – three with movable tablet-arm chairs and one with fixed lecture-style seating. The classrooms range in size from 21 to 142 seats.

Computing Labs

The campus computing labs are run by the Learning Technologies unit of the Information Technology Services (ITS) division. There are 12 total Learning Technologies computing labs and they range in size from 8-48 seats. When the computing labs opened in the 1990's, their original purpose was for open lab use. However, with the ever-increasing role of technology in classroom learning, the labs have evolved into classrooms that are utilized for regularly scheduled instruction. The last new Learning Technologies computing lab was constructed in 2004 and is one of the only labs used for only 24 hour, open access purposes so that students are able to study, work, and print at any time of day. No labs with 40 or more seats have been opened since spring of 2001.

III. PROBLEM ANALYSIS

Campus Academic Need

At the November 2015 meeting, the UC Board of Regents approved a budget plan that includes enrolling an additional 10,000 California (resident) undergraduate students (system-wide) over the next three years. The Santa Cruz campus was asked to enroll 300 more new California resident undergraduates in 2016-17 than were enrolled in 2014-15. The portion of resident undergraduate growth assigned to UC Santa Cruz over the subsequent two years is still undetermined; however, the campus anticipates overall enrollments will increase faster than originally planned.

The enrollment increases coupled with the lack of new academic space has created challenges to the ability to deliver academic instruction. The last academic project that included new general assignment classrooms was the *Humanities and Social Sciences Facility*, constructed in 2006. Therefore, instructional space has fallen behind in matching the growth of campus academic programs. Per the University of California Benchmark Results conducted by HGA Architects and Engineers and Facility Programming and Consulting in July 2015, UC Santa Cruz has the

lowest classroom/seminar space per student at 4.5 ASF of the nine campuses that participated in the study (excluded UCSF). Classroom utilization rates have risen from 101.4 percent in 2007-08 (after the Humanities Building was constructed) to 109.9 percent in 2014-15, (the campus's highest enrollment prior to shortening class times in 2016-17 to add additional sections), with the greatest utilization increase in large classrooms over 300 seats. Increased enrollments have already affected the demand and scheduling of classes. Students have cited a lack of adequate class options to complete required courses in their major. Therefore, the campus continues to emphasize the growing need for more large classrooms.

Program growth and change drive the need for new academic buildings and the renewal and/or replacement of obsolete facilities. Space needs continue to exceed available resources. Focused efforts to achieve greater resource efficiencies for its facilities and reduce its carbon footprint exert even more pressures on already scarce capital resources.

Capital planning for academic programs continues to be driven by increasing enrollments. Prior to 2009, the State-funded Major Capital Improvement Program (MCIP) used a quantitative analysis with an approximate comparison to the California Postsecondary Education Commission (CPEC) guidelines as a justification for additional academic space. The Santa Cruz campus continues to apply this quantitative analysis in conjunction with the academic plan. Based on the 2015-16 four quarter weighted enrollment, the existing campus General Assignment inventory of 79,430 ASF falls 20,654 ASF short of the CPEC estimated allowable of 100,084 ASF (or 79 percent of its allowable space). For office and research space, the campus is approximately 85 percent of its allowable space. Without significant new space, the campus is challenged to meet the needs of students, researchers, and the overall academic program.

Lack of Large Lecture and Computing Facilities

As mentioned above, the last new general assignment lecture hall on the Santa Cruz campus opened its doors in 2006. Since then, enrollment has increased by 17 percent³. Only two other academic facilities have been constructed on the campus since then: the Digital Arts Research Center (2009) and the Biomedical Sciences Building (2012). The Coastal Biology Building is under construction at the Coastal Science Campus. These facilities are alleviating some of the need for the research and office space, but neither address campus-wide need for additional academic space, nor do they address the critical need for large lecture space.

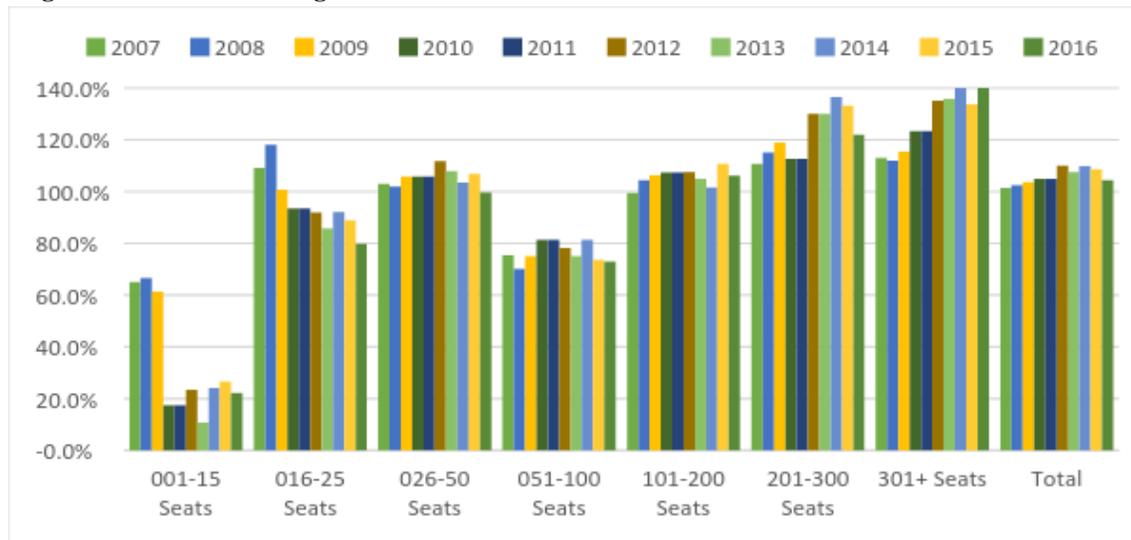
As enrollment has grown on the campus, so has the utilization of the larger classrooms⁴. Lecture halls with over 300 seats have the highest utilization of all the General Assignment classrooms, with a combined utilization of 141.9 percent in Fall 2016. There are just three lecture halls on the

³ Increase between fall 2007-08 and fall 2016-17

⁴ Classroom Utilization is based on Restudy Standards. 100 percent utilization is equivalent to 100 percent occupancy of a room for 35 hours a week. Lower rates of occupancy for more hours per week can also equate to 100 percent utilization.

campus with over 300 seats: Classroom Unit, room 2 (constructed in 1972, 476 seats), Humanities Auditorium (2006, 301 seats), and the Theater Arts Media Theater (1998, 382 seats).

Figure 1: All General Assignment Classroom Utilization: Fall 2007-2016



In the 2016-17 academic year, the campus implemented changes to class meeting times to be more in alignment with the class contact hours at the other UCs. In doing so, the campus was able to accommodate an additional time block and achieve more uniform and better utilized evening class times. Despite the increase in total class periods, utilization reports still show very high utilization for the campus's largest lecture halls.

Reviewing the past three academic years, some courses on the Santa Cruz campus have seen enrollments as high as 2,000 students over an academic year. With the lack of additional large classrooms, and specifically large *enough* classrooms, faculty are required to teach multiple sections of a course in order to keep up with course enrollments. In addition, there is no space available in the event that major repairs are needed in one of the older lecture halls – particularly if the oldest large lecture hall, Classroom Unit building room 2 – needs to be offline for any reason. At almost fifty years old, the Classroom Unit building room 2 lecture hall is utilized year round and is in need of capital renewal, including code upgrades. Were it to be shut-down for in an emergency, it would be difficult to find replacement space for the 472 seat auditorium.

Computing Labs

The Kresge computing lab is relatively small and does not see as much foot traffic as some of the other labs. However, there is a real need on the Santa Cruz campus for a computing lab of about 50 seats. There are three labs on campus with 40 seats, and only one lab on campus with 48 seats - which is the largest general assignment (“Learning Technologies”) computing lab on campus.

The utilization of the labs with 40 seats ranges from 110 percent – 215 percent, and the lab with 48 seats ranges between 190 percent - 250 percent between fall 2014 through fall 2017⁵. These labs are used for a range of subjects, including but not limited to computer science, computer engineering, statistics, psychology, environmental studies, and film and digital media.

Kresge College

All undergraduate students, regardless of whether they live on or off campus are affiliated with a college upon entry to UCSC. The colleges provide academic support, organized student activities, and a sense of community for their affiliates. The design of the Kresge facilities, although meant to foster community, has had mixed levels of success. Kresge College has some of the lowest number of students who choose it as their first choice for affiliation. The college's unique design and lack of community, not only amongst peers but also with the faculty who reside there, make the experience of being at Kresge College isolating for many.

Programmatic Issues

Academically, there is no strong single department with its home-base at Kresge College. When the Humanities and Social Sciences building was constructed, the Literature Department, which was the anchor department at Kresge College, moved to the new building. With the exception of the Science Communication (graduate) program, Kresge College became overflow space for departments rather than a “home” with which incoming students could identify. With among the smallest endowment of the colleges, Kresge does not have the resources some of the other colleges do for extra events and programs. It has been noted in outreach sessions that many of the other colleges on the campus have a strong connection to their academic residents, and those academic departments and divisions sponsor events within their college home. Without a strong anchor department at Kresge, collaborative college student life-academic opportunities are seldom at best. However, with the Santa Cruz campus's lack of additional academic space, it has been impossible to fulfill not only the kinds of programmatic needs Kresge has, but those campus-wide needs for new space for academic departments. In order to house a new academic department at Kresge, space for the existing departments would have to be built – but the capital resources have not been available in recent years to build the kind of space required.

In addition, staff, students, and faculty at Kresge have noted that when walking through certain portions of the college, the proximity of the apartments to the central “street” and academic functions of the college is uncomfortable for those just passing through to get to the classrooms and offices. Residents keep their curtains drawn through much of the day due to the lack of privacy, which promotes a feeling of isolation for the residents.

⁵ Based on CPEC Standards for class labs. 100 percent utilization is equivalent to 100 percent occupancy for 20 hours per week.

While in some areas privacy is an issue because of too much visibility, in other areas, there is not enough visibility. Finding student services and academic departments can be difficult due to the complicated interiors of the main academic building, lack of wayfinding, and few offices that are visible from the central street. In addition, departments are currently housed in facilities that were not originally intended for department use – e.g. faculty offices in former study spaces, and a conference room in a former dance studio. The change of room uses at Kresge Colleges over the years has only promoted the lack of identity and community amongst the academic and student services programs.

Major Maintenance

There are physical challenges with the buildings and the site. The following is an overview of the issues that need to be addressed at Kresge College:

Building Envelope/Structural

Kresge College is at the end of its useful life and demonstrates issues with water intrusion, siding dry rot and decay. Condensation in window frames and glazing, deteriorated gutters, severe plaster cracking. Sheer walls need to be reinforced or added per current code.

Accessibility

The Kresge College site is difficult to traverse for those with mobility impairments due to the slope of the site. In addition, restrooms, thresholds, clearances, handrails, and door widths are all not to current code. There are areas of the site that can only be accessed by stairs, and the rise of the stairs is not to current code. The drainage channels located throughout the site create non-compliant routes, and there are no restrooms in the classroom building.

Landscape

The site drainage needs is inadequate and needs to be corrected so that water moves away from the buildings. There is noticeable erosion to be corrected and additional irrigation is required for Redwood trees that are isolated from natural runoff.

Mechanical/Electrical/Plumbing

Some of the heating units have surpassed their useful lives, while others are nearing the end. These units range in age from original (45 years) to 13 years old. Mechanical ventilation improvements are also needed.

IV. PROJECT DESCRIPTION

The proposed *Kresge College Academic* project would be coordinated with a separate proposed housing and student services project, and would address improvements in the building program challenges and building condition. It would address campus-wide issues of enrollment growth by

adding a new academic building at the north end of the site that would house all academic programs, including a lecture hall with approximately 600 seats. The entire project proposes relocating programs so as to co-locate academic, student serving, and residential programs.

Campus Programming Process

Responding to the unique campus community sensitivity to this project and campuswide budgetary constraints, the Kresge College project Planning and Programming Committee was charged in February 2016 with identifying and defining the preliminary program elements to be included in all of the related projects at Kresge College, and to consider the extent to which buildings could be renovated, reconstructed, or replaced.

The following strategies were proposed for academic facilities:

1. Re-program the site so that academic functions would be clustered at the north end of the site. This would allow for better connection to the core academic buildings of the campus.
2. In order to address campus needs, provide a large lecture hall of approximately 600 seats at Kresge College. A 600 seat classroom will address enrollment growth and provide curricular efficiencies.
3. Provide flexible/active learning and/or a larger computing lab space. The campus currently has one grant-funded active learning classroom under constructed for the Physical and Biological Sciences Division. Flexible/active learning spaces are of interest to the campus community and having a space that could also possibly address needs for a 50 seat computing lab could increase underutilized facility usage at Kresge.
4. Provide additional academic space, if possible. The large lecture facility at Kresge College is the top priority for the campus. At the project's early programming level, it is assumed that additional academic space will not be achievable. However, the project team will work to make renovated space more flexible and efficient where possible, which may lead to the ability to add some space for department academic use.

Project Program

The project would relocate all academic programs to the north end of the site in a new, 25,000 ASF building, as well as associated infrastructure work necessary for accessibility. The north end of the site is located near the campus core and transit stops, which creates logical, more visible connections to the proposed lecture hall, general assignment facilities, and academic departments from many parts of the campus.

The following is a break-out of the proposed programmed space by division:

Arts Division – 5,200 ASF

The Arts Division currently holds the largest amount of academic space at Kresge College. The division would retain its existing programs in the new academic building. The space for Arts Division would include academic offices, graduate student and faculty research spaces, studio spaces, and related support spaces. Colocation would increase interdisciplinary collaboration.

Kresge College Academic Administration – 2,800 ASF

Kresge College Academic Administration has eight faculty/lecturer/TA academic offices, related support space, a large conference room and support space for academic and administrative meetings, colloquia, and guest speakers, and office and office support space for the Provost, and academic advisors. They would retain these program spaces, and share their conference space with other academic departments when not in use.

Physical and Biological Sciences - 1,300 ASF

The Science Communication Program has approximately 1,500 ASF at Kresge College. They would retain this approximate square footage in the new facility for academic/lecturer offices, a computing lab, a scholarly activity room for discussion and study, offices for the Director and Program Manager, and related office support space.

Humanities Division - 700 ASF

The Writing Program has approximately 700 ASF of academic office space at Kresge College, and would retain this square footage in the new proposed building.

Classrooms and Computing Lab for General Assignment Instruction - 15,000 ASF

The project proposes a new 600 seat lecture hall, and replacement classrooms with redistributed seat counts for the general assignment classrooms and computing lab to better meet course scheduling demands.

Infrastructure

Site infrastructure improvements are being proposed as part of the *Kresge College Academic* project to allow for adequate circulation and accessibility. In addition to upgrades and extension of standard utilities a new academic plaza would be constructed to support the academic program. The plaza would allow for informal gathering before and after classes at the north end of the site and would include amenities such as wireless network connections to allow for outdoor group study and informal break-out sessions.

Alternatives Considered

The following alternatives were considered:

Perform deferred maintenance and required code upgrades on existing buildings

The least expensive path to extend the usable life of Kresge College would be to perform deferred maintenance and required code upgrades. Doing so would address existing building condition deficiencies as well as perform code and accessibility upgrades. However, performing the minimum scope is not a prudent financial investment, as doing so would ignore the programmatic deficiencies of the Kresge College and would continue to place freshman in inappropriate living accommodations.

Also, a major renovation project of this scope is not a candidate for a summer-only project and thus, will have a significant impact on housing operations. Building envelope replacement, as well as anticipated repairs to building framing systems and infrastructure would take multiple months to complete. Subsequent to envelope repairs, interior work would need to take place. Each building would likely take 9-12 months for project scope completion. Performing this scope on all buildings is not feasible as there are no decanting options for the existing Kresge occupants. The campus does not have the residential, classroom, and administrative space required to phase a project of this magnitude.

Redevelop a portion of the site, and renovate some existing buildings

Constructing a new academic building and modifying the existing buildings is the recommended option. This option would be phased to allow decanting of existing programs into new buildings so that the existing buildings could subsequently be renovated and repurposed.

While this project budget would be higher than other alternatives, it would extend the usable life of the existing Kresge College buildings, while also addressing the fundamental programmatic issues. Doing so would address existing building condition deficiencies, as well as performing code and accessibility upgrades.

Defer the project

Given anticipated campus enrollment increases and serious existing space deficiencies, coupled with the physical state of Kresge College, the “no project” option is not considered reasonable. In addition, the rapid escalation trend in Santa Cruz construction costs would likely substantially increase the ultimate cost of the project.

V. RELATIONSHIP TO UNIVERSITY MISSION AND OBJECTIVES

This project supports the instructional and research mission of the University of California by providing essential facilities for instructional use. The campus recognizes the important benefits these programs provide to the State's economy, and the *Kresge College Academic* project would play a major role in fulfilling the University's efforts to accommodate increased enrollment by California State resident students.

VI. COST BASIS AND SUSTAINABILITY

The campus has conducted extensive pre-design studies and cost analyses and has prepared a detailed cost estimate. The University has developed strategies addressing both favorable and unfavorable market conditions to ensure the maximum amount of the project scope is built within available funds. The project components described above reflect the most critical facility needs for the project as identified during project planning, programming, and cost analysis. Implementation of all project components would be subject to further assessment during design and limited by construction market conditions at the time of bid.

This project will comply with the *University of California Policy on Sustainable Practices*. As required by this policy, the project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

Campus/Field Station/Division Santa Cruz

Project Account 976393

Project Title Kresge College Project

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map with your submission.

I. EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 - When it can be seen with certainty that there is no possibility the action will result in physical change to the environment (15061(b)(3)), or the action is specifically exempted by statute (15260-15285), the project is classified as generally exempt from CEQA. General/Statutory Exemption: 5 [Insert applicable CEQA Guidelines Section]

II. CATEGORICALLY EXEMPT - This project falls under the indicated Class(es) of Exemption(s), none of the exceptions to the exemption apply (15300.2), and there is no significant effect on the environment (for complete list see CEQA Guidelines Section 15300):

- | | |
|---|--|
| <input type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 17: Open Space Contracts or Easements |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 23: Normal Operation of Facilities for Public Gatherings |
| <input type="checkbox"/> Class 3: New Construction or Small Structures | <input type="checkbox"/> Class 25: Transfer of Land: Natural Conditions/Historical Resources |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 30: Minor Actions: Prevent Hazardous Waste/Substances |
| <input type="checkbox"/> Class 6: Information Collection | <input type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 13: Acquisition for Conservation | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership for Parks | <input type="checkbox"/> Other: <u>[If other, Identify which class under Section 15300]</u> |

III. INITIAL STUDY - This project is not statutorily or categorically exempt from CEQA; an Initial Study is to be prepared to determine if the project may have a significant effect on the environment.

Stand-Alone Tiered Initial Study (15152): [Identify EIR from which Initial Study is tiered]

IV. ENVIRONMENTAL IMPACT REPORT (EIR) - It is known that the project will have a direct or cumulatively significant effect on the environment and an EIR will be/has been prepared. Identify the type of EIR:

Programmatic Stand-Alone (Project-Specific) Kresge College Project EIR

Additional project analysis:

None/Findings Only Addendum Subsequent Supplement to EIR: Tiered from 2005 LRDP EIR

PROJECT DESCRIPTION - [Insert brief project description, provide supporting documentation as appropriate.]

Real estate transaction type: Acquisition Sale Lease Easement License [Include proposed use in project description below]

The proposed Kresge College Project would redevelop Kresge College through selective demolition, new construction and rehabilitation, and improve associated site infrastructure and utilities. Of the existing 24 buildings, approximately 9 would be demolished; they include the Town Hall/Owls Nest Café, two academic office buildings, five residential buildings, and the mini-gym. New construction would include an academic building with a 600-seat lecture hall, classrooms, and academic department offices; new residential buildings with approximately 400 new beds with shared social lounges and kitchens and a cafe space; and a new town hall which will function as a multi-purpose space for college students. The remaining 14 buildings would be reprogrammed and rehabilitated for residential and student services functions. The rehabilitation would require structural improvements, complete replacement of building envelopes and roofs, interior renovation, and replacement of HVAC and fire alarm systems. Selected buildings would be re-programmed to create separate zones within the college for academic, residential, and student life facilities, which are currently interspersed throughout the college. Site work would include re-grading and replacing pavement to improve circulation, provide ADA-compliant access and improve drainage; improvements to a pedestrian bridge; new outdoor recreational and gathering spaces; and parking.

V. Does this project conform to the approved LRDP? YES NO NA [If NO or NA, include explanation in Project Description above]

VI. Alisa Klaus August 4, 2017 Sarah C. Latham 8/4/2017
Prepared by Date Local Approved by Sarah C. Latham Date

VII. OFFICE OF THE PRESIDENT

Concur with Classification Do not concur with Classification

Brian [Signature] 8/16/2017
Signed Date

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
------------------------	-----------------------	--	--------------

Budget Request Name	Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)
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Project Title Systemwide – Northern Regional Library Facility Phase 4	Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
---	--

Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$30,000	Phase(s) to be Funded CE	Estimated Total Project Cost (in thousands) \$32,500
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Budget Request Summary
Northern Regional Library Facility Phase 4 – \$30,000,000 for Construction and Equipment. The project includes adding a fourth module to house 3.1 million volumes and an adjacent staff area to support program needs. Total project costs are estimated at \$32,500,000, including preliminary plans (\$600,000), working drawings (\$1,900,000), construction (\$29,400,000), and equipment (\$600,000). The construction amount includes \$24,940,000 for the construction contract, \$1,550,000 for contingency, and \$2,910,000 for architectural and engineering services. The current project schedule estimates preliminary plans will begin in October 2017 and be completed in December 2017. The working drawings are estimated to begin in April 2018 and be completed in October 2018. Construction is scheduled to begin in March 2019 and will be completed in August 2020.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
---	--	---------------------

Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
--	---

Impact on Support Budget

One-Time Costs Yes No Future Costs Yes No
 Future Savings Yes No Revenue Yes No

If proposal affects another department, does other department concur with proposal? Yes No
Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Dana Santa Cruz	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

**Project Planning Guide
Northern Regional Library Facility Phase 4 Expansion**

**Account 12684B
August 2017**

Approved for Office of the President:

A handwritten signature in black ink, appearing to read "Aimée Dorr", written over a horizontal line.

Aimée Dorr

Provost and Executive Vice President

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Northern Regional Library Facility Phase 4 Expansion

Summary

The University of California's 1977 Plan¹ for library development included the creation of two regional high-density storage facilities to cost-effectively house less-used library materials. Funding to construct the first phase of the Northern Regional Library Facility (NRLF) was appropriated in the Budget Act of 1980 and the facility opened for deposits from Berkeley, Davis, San Francisco, and Santa Cruz libraries in May 1983.

A Southern Regional Library Facility (SRLF), located on the UC Los Angeles campus, was funded later and began taking deposits from the five southern UC libraries in January 1983. The Regional Library Facilities (RLFs) were planned for periodic expansion to accommodate projected continuing deposits. NRLF was expanded twice, with additions opening in 1990 and 2005, respectively, and SRLF once, opening in 1996. At current deposit rates, the NRLF is projected to fill in 2018 and the SRLF between 2021 and 2022. With SRLF unable to expand due to seismic conditions at the site, a facility is required that will accommodate deposits from all ten campuses within a few years.

The NRLF consists of three large storage areas with a total capacity of approximately 7.78 million volumes, a staff processing area, and a user services area with a public reading room. Phase 1 and 2 are currently full and Phase 3 is scheduled to fill in late 2018.

The Northern Regional Library Facility Phase 4 Expansion project will expand the NRLF to add capacity to meet the deposit needs of all ten campus libraries for ten years, from approximately 2020 - 2030. This project would add a fourth shelving module to house 3.1 million print volumes and an adjacent staff area to support program needs.

This Project Planning Guide (PPG) outlines the proposal to construct the fourth phase of the NRLF to enable deposits to continue in a timely fashion. Unless additional regional storage capacity is added quickly, additional campus-based library space will be required for all campuses.

¹ University of California (System). Office of the Executive Director of Universitywide Library Planning. *The University of California Libraries: a plan for development, 1978-1988*. Berkeley: Office of the Executive Director of Universitywide Library Planning, 1977. Also called the *Salmon Report*.

Background

The library collections of the University of California constitute one of the great intellectual assets of the State of California and make a significant contribution to the world's record of scholarship and cultural and historical documentation. Totalling more than 40 million volumes, the physical collections are assessed at a capital worth of \$1.1 billion² and made available to the faculty and students of the University and others through campus libraries.

This collection is sustained in part through the utilization of shared RLFs that provide preservation-quality storage and access services for approximately 14 million of the 40 million volumes systemwide. The RLFs lower local library costs while simultaneously increasing access to, and preservation of, UC's unique library collections.

With continued collection growth, however, the NRLF will reach capacity in 2018 and the SRLF will reach capacity between 2021 and 2022 based on current deposit rates. The proposed NRLF expansion project responds to the need for storage for new and archival library collections as well as changing space needs in campus libraries. The proposed project will add capacity for an additional 3.1 million print volumes at the NRLF, meeting the deposit needs of all ten campus libraries for ten years, from approximately 2020 - 2030.

Following the 1977 Plan, the University adopted a two-tier approach to housing the collection:

- Two regional high density shelving facilities, one in the north and one in the south, to provide low cost housing for less-used research materials, and
- Campus libraries to house materials that must be directly accessible on campus.

The purpose of the NRLF is to house, preserve, and provide access to less-used material of research and educational value in an economical manner for the libraries of the University of California.

The NRLF has two main processing functions:

- To accept and process deposits from libraries, and
- To provide for efficient and timely retrieval and delivery of material requested for use.

The processing activities include transport from depositing libraries, inspecting for damage and infestation, cleaning, sorting items into shelving size categories, applying a unique barcode number to each item, creating or updating catalog records, and shelving. This work permits the efficient use and operation of the facility.

² University of California. Budget for Current Operations: Summary & Detail, 2017-18. Academic Support – Libraries, p. 137. <http://regents.universityofcalifornia.edu/regmeet/jan17/b1attach2.pdf>

Building Description

The existing NRLF structure consists of three prior phases which opened in 1983, 1990, and 2005 and which hold 2.9 million, 2.5 million, and 2.4 million volumes respectively for a total of approximately 7.78 million volumes. Phases 1 and 2 are currently full and Phase 3 is scheduled to fill in late 2018. The three shelving areas are accessed via a main spine corridor that separates the temperature and humidity-controlled stacks from the staff and user services areas. In addition, there is a staff area to process deposits and requests for materials, and a user services area that includes a public reading room.

The NRLF Phase 4 expansion will add a fourth shelving area and additional staff work space with a total of approximately 26,610 gross square feet (GSF) to the existing building. The facility expansion will provide space for approximately 3.1 million print volumes with an adjacent staff work area to accommodate processing.

The proposed project will feature a high-bay storage design with 30-foot tall shelves. This arrangement is known as the “High-Bay Storage System” (HBSS). To reach high shelves, operators will use person-aboard motorized lifts. An example of the system is shown in Attachment 1 and is described in more detail under the proposed project section.

The anticipated building would be designed to fit with the overall design of the current facility, drawing on existing infrastructure where appropriate.

Problem Description

The major driver behind the expansion of NRLF is the continuing need of UC Libraries for low-cost housing for research materials. NRLF expansion space will allow campus libraries to save on local costs, build shared collections, support long-term preservation of materials, and utilize valuable core campus space in other ways.

Storage Needs

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

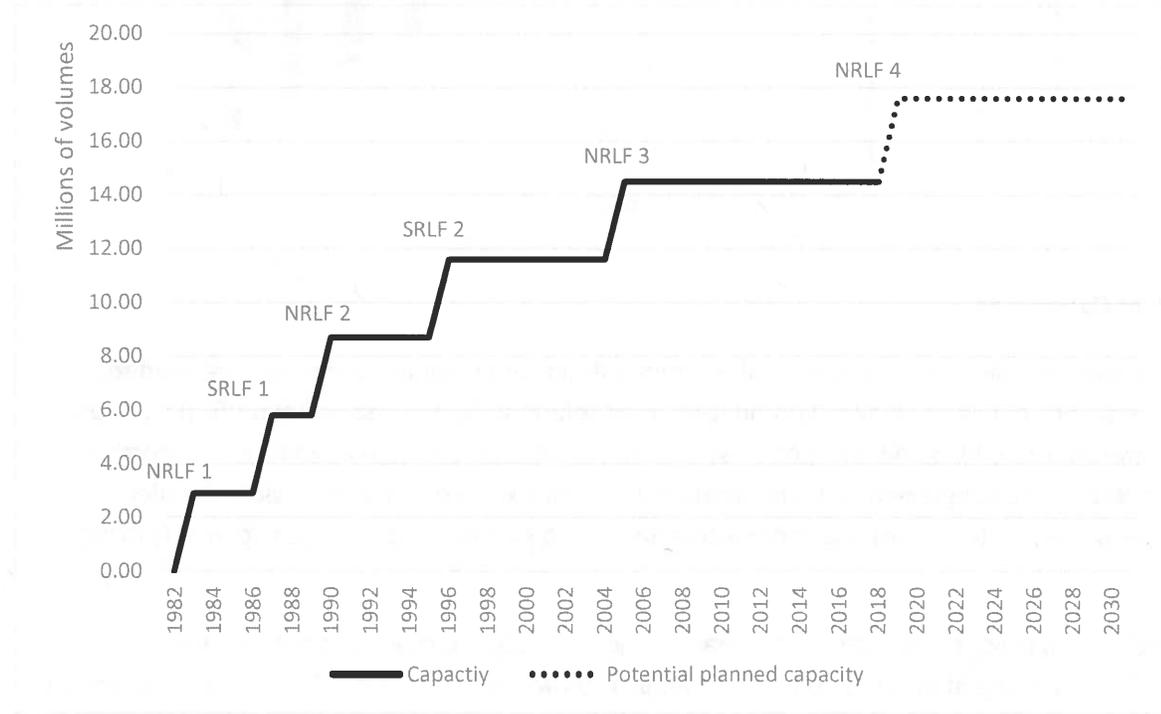
A 2012 survey of five-year collection growth in UC libraries indicated an anticipated need to store 300,000 volumes annually in the RLFs for a total of 1.7 million volumes by 2017³. This projection has proven to be accurate.

³ The survey of library needs was conducted by the Council of University Librarians in 2012. In a 2017 study of RLF deposits, a working group found that actual campus collection growth exceeded 300,000 volumes per year.

Given scholarship and publishing trends, as well as the expanding need for space on campuses, the UC libraries anticipate that the need for storage will continue at this rate for the next ten years. Chart 1 illustrates RLF growth in capacity from 1983, projected to include the NRLF Phase 4 expansion. The projected fill rate to 2031 is based on current RLF allocations and driven by the projected growth rate.

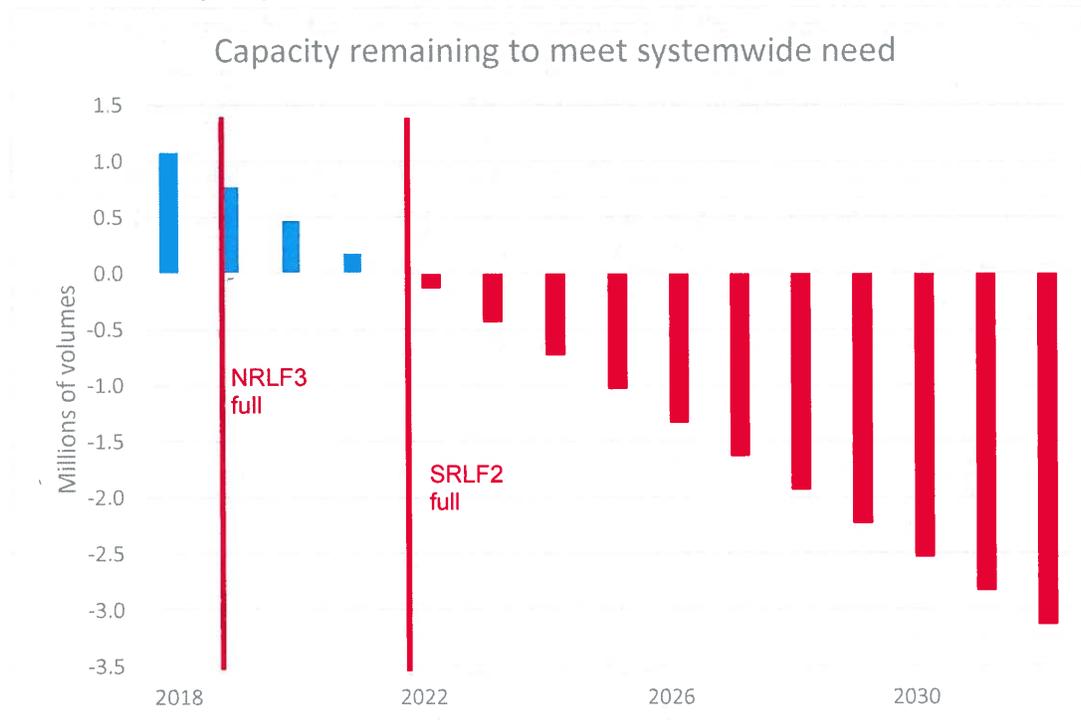
In addition, both RLFs are filling quickly – at the current deposit rate, NRLF in 2018 and SRLF between 2021 and 2022⁴ and expansion at the SRLF is not possible due to site issues. Chart 2 demonstrates when both RLFs will fill and the resulting deficits that will accrue without additional storage space. Building NRLF Phase 4 now allows the UC Libraries to stay ahead of this space crisis, and avoid campus costs and disruption of the planned use of campus space for the next decade.

Chart 1: Current & Projected RLF Capacity



⁴ This assumes that when NRLF reaches capacity all deposits will be directed to SRLF. With NRLF Phase 4, SRLF's deposit lifespan extends to approximately 2024.

Chart 2: RLF Capacity remaining to fill systemwide need



Alternatives Considered

The UC Librarians considered a number of alternative solutions to respond to the ongoing need for storage. These alternatives included: 1) vendor-sourced solutions, 2) non-capital solutions (i.e., to use space differently at the RLFs and on campuses), and 3) capital solutions such as adding on a storage module to NRLF or building a new regional library facility in a lower-cost location. More detailed descriptions of these alternatives and the ten criteria used to evaluate them are provided in Attachment 2.

Briefly, the criteria used to evaluate the alternatives included: cost comparisons over a 40-year timeframe, ability of the alternative to support campus storage needs, quality of the solution in terms of collection access, security and preservation, and overall risk and sustainability. Five alternatives were analyzed in-depth relative to meeting the ten criteria. These alternatives included a vendor-sourced solution, re-purposing of existing RLF space, the impact of not providing additional storage to campuses, a new RLF facility, and an expansion to NRLF (NRLF Phase 4).

Based on the alternatives analysis, the expansion of NRLF was determined to be the most feasible and cost-effective solution to meet systemwide needs. In comparison to NRLF Phase 4:

- Vendor-sourced solutions were more expensive on a per-volume basis and put the UC libraries at risk of service 'lock-in' given the high cost of exiting the service.

- Re-purposed RLF space did not meet the program need except for the very short-term and introduced significant collection-shifting costs and risks.
- Campus costs to store items, even in storage-optimized spaces, was found to be consistently higher than RLF-based solutions.
- The evaluation of construction and operating costs of a new RLF in a less expensive construction market location indicated that construction cost savings were more than offset in long-term operating, staffing and transportation costs.

The NRLF Phase 4 expansion was the only option that met all ten criteria, including the lowest capital and operating costs over a minimum 40-year time frame. Phase 4 utilizes a proven storage model that will allow the University, through this option, to capitalize on existing infrastructure and staffing, eliminating the need for significant new staffing costs. Importantly, it meets all project scope (i.e. the ability to serve UC library storage needs from 2020 to 2030), collection management, collection access, preservation and security requirements.

Proposed Project

The proposed NRLF Phase 4 Expansion project involves construction of a large high-bay storage facility of approximately 26,610 GSF. The facility expansion will provide space for approximately 3.1 million print volumes and the addition of staff work areas adjacent to the high-bay storage to accommodate processing and digital project workflows.

The main component of the project scope is the construction of a steel-frame building on an engineered concrete foundation, with appropriate site preparation and excavation. While connected to the existing facility, its systems will be stand-alone. The high-bay shelving will be included as a part of the construction scope. Further site improvements will include bio-swales and other measures to address storm water runoff and other environmental concerns.

High Bay Storage System

The proposed project will feature a high-bay storage facility to store paper materials (e.g. books, journals, maps, and manuscript collections), known as the "High-Bay Storage System" (HBSS). With shelves 30' high, operators will use motorized person-aboard lifts to reach them. An example of the system is shown in Attachment 1.

The HBSS allows for very dense storage of materials, lowering the cost of construction and ongoing operations. This is accomplished by using tall, one story stacks, sorting the materials into 11 sizes (by height and depth), placing them in variously sized archival cardboard trays, and shelving them two or three deep on 36" deep by 53" wide shelves. The archival trays provide better support for the materials and make shelving and retrieving easier than the current practice of shelving materials two deep directly on the shelves.

Equipment required for the HBSS includes person-aboard lifts and recharging stations plus custom book carts that ride the person-aboard lifts. The acid-free archival cardboard trays will require pallets and wire racks for storage.

Site Layout and Positioning

The NRLF Phase 4 expansion is positioned to the west of Phase 2 and south of Phase 3. It will continue the NRLF's main spine corridor, building on the modular design approach set out in previous phases of NRLF, and be designed to fit with the overall design of the facility. This design allows for future phases to extend the modular framework, with future potential capacity for two additional phases, storing up to 5 million volumes each.

Delivery Method and Schedule

The proposed project will be delivered by the Berkeley campus working in partnership with appropriate stakeholders across the UC system. The probable delivery method is construction manager-at-risk or design-build. The project completion is projected for May 2020.

Cost Basis and Sustainability

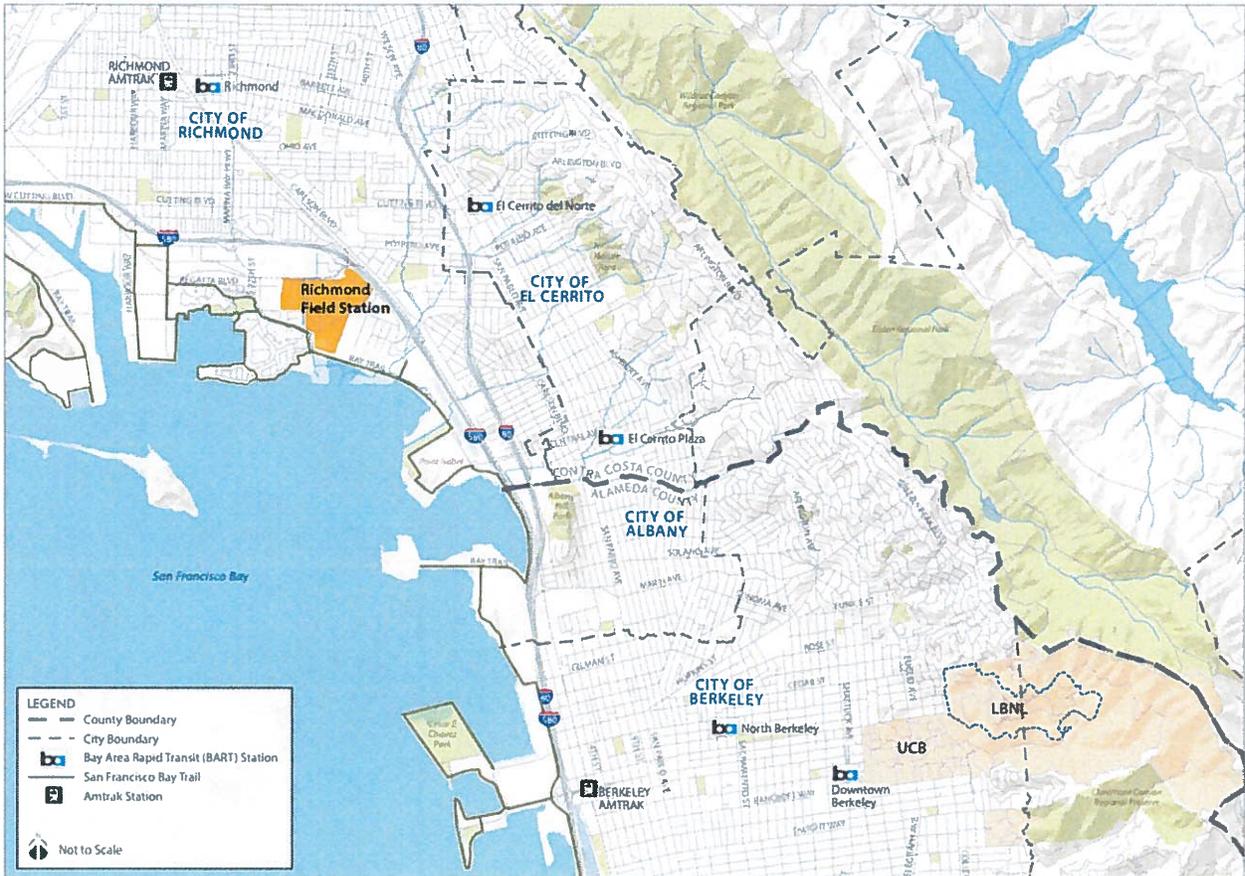
The project will comply with the University of California Policy on Sustainable Practices. The project will adopt the principles of energy efficiency and sustainability to the fullest extent possible, and plans to achieve a minimum of Leadership in Energy and Environmental Design (LEED) Silver and will strive to achieve certification at a United States Green Buildings Council (USGBC) LEED "Gold" rating or higher, whenever possible within the constraints of program needs and standard budget parameters, consistent with budgetary constraints and regulatory and programmatic requirement.

Relationship with Mission and Objectives

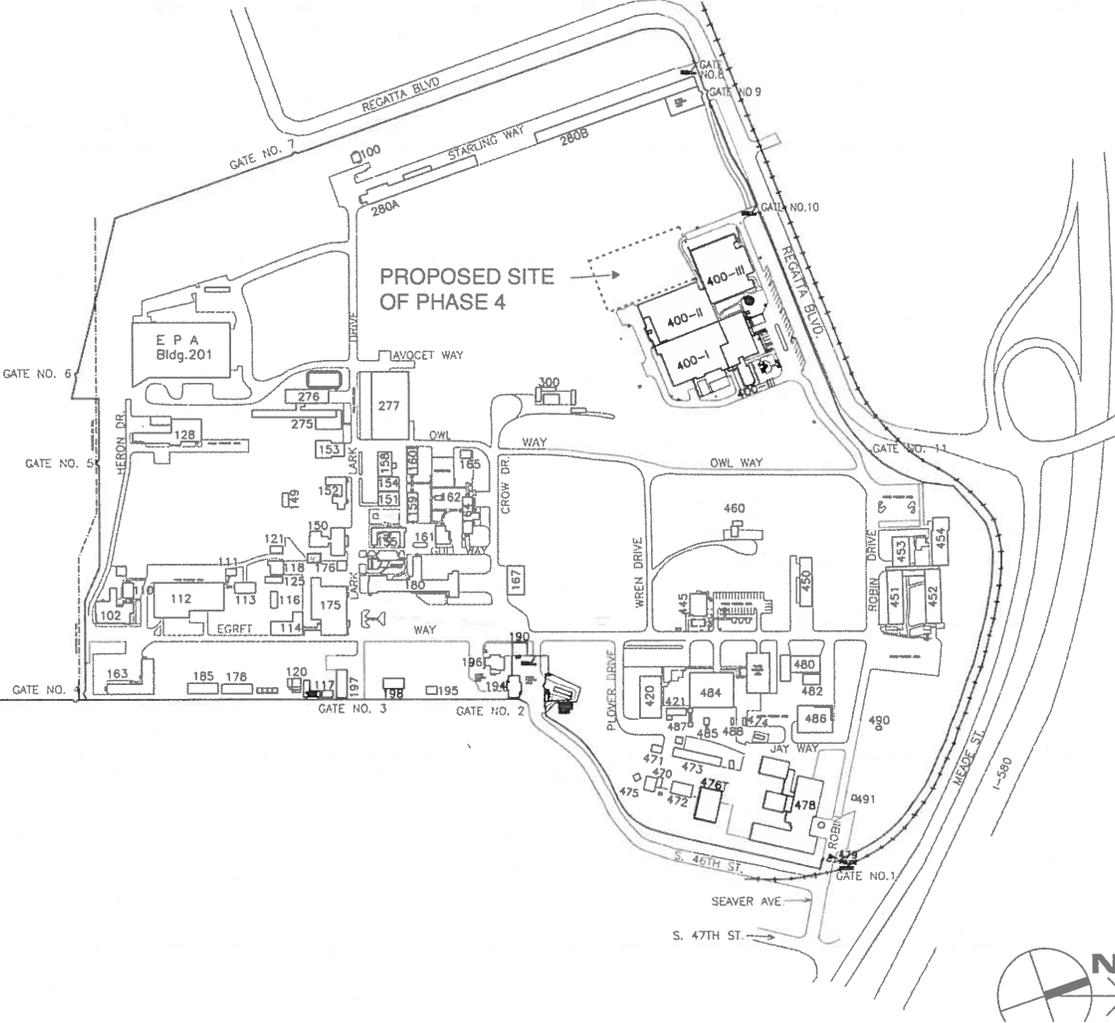
The three main elements of the University's mission are teaching, research, and public service. The Libraries acquire, organize, preserve, and make accessible the breadth and depth of scholarly resources to support the University's mission. The RLFs are a core element in housing and archiving valuable research materials for current and future faculty, students, and members of the public. These facilities provide low-cost preservation-quality housing and access to resources in an efficient manner. The proposed project recognizes the important role of the RLFs in enabling the success of UC's libraries in serving students and faculty.

Location Maps

Regional Site Map showing UC Berkeley campus and UC Richmond Field Station



Project Site Map: UC Richmond Field Station, Richmond, CA



**CAPITAL IMPROVEMENT BUDGET
 BUDGET DATA**

UNIVERSITY OF CALIFORNIA
 BERKELEY CAMPUS

NRLF Phase IV		12684B	9525	CCCI: 6815	EPI: 3471
Project Title		Project Number:	CAAN:	Cost Indexes:	
A FUNDING SCHEDULE					
Totals (000's)	Prefunded	2017-2018	2018-2019	2019-2020	
P		P 600 OP			
W		W 1,900 OP			
C			C 29,400 SF		
E			E 600 SF		
(Tot. Proj.) \$	0	0	2,500	30,000	
B FUNDING REFERENCES					
Account No	Column (1)	Column (2)	Column (3)	Total all Sources (4)	
Source:				12684B	
C COSTS					
					%
0 Site Clearance	\$	\$	\$	\$	0.0
1 Construction				24,940,000	78.2
2 Exterior Utilities				-	0.0
4 Site Development				-	0.0
5 Fees				2,600,000	8.0
6 A&E/PP&C				2,200,000	6.9
7 Surveys, Tests, Plans, Spec				285,000	0.9
8 Special Items				325,000	1.0
SUBTOTAL	\$	\$	\$	\$ 30,350,000	95.0
9 Contingency 6.2%				1,550,000	5.0
TOTAL P-W-C	\$	\$	\$	\$ 31,900,000	100.0
3 Group 2&3 Equipment				600,000	1.9
TOTAL PROJECT	\$	\$	\$	\$ 32,500,000	
Available Funding					
Anticipated Surplus (Deficit)	\$	\$	\$	\$	
D FINANCING					
OP Strategic Priority Reserve*			2,500,000		
State Funds (Sections 92493 et seq of Ed Code)			\$30,000,000		
*resulting from one-time budget savings in prior years					
TOTAL			\$ 32,500,000		
E STATUS OF PROJECT:					
Name: Shannon Holloway	Signature:	Budget No.			
Title: Director	Title: Director of Construction & Design	Date			
Prepared By: TL	Approved for Campus, Date:	Orig Date		2/22/2017	
Program:	Fiscal:	Signature:	Revised		7/13/2017
Cost:		Title:			
		Approved AVP-PPC, Date:			

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**CAPITAL IMPROVEMENT BUDGET
 ANALYTICAL DATA**

UNIVERSITY OF CALIFORNIA
 BERKELEY CAMPUS

NRLF Phase IV	12684B	9525	CCCE: 6815
Project Title:	0	CAAN:	EPI: 3471

F ANALYTICAL DATA						
	Column (1)	Column (2)	Column (3)	Total All Sources (4)		
ASF per PPG	1.00	ASF	ASF	ASF	23,500	ASF
ASF Current		ASF	ASF	ASF	23,500	ASF
OGSF		OGSF	OGSF	OGSF	26,500	OGSF
Ratio (ASF Current/OGSF)	to 1.00	to 1.00	to 1.00		0.89	to 1.00
Construction Cost per ASF		ASF	ASF	ASF	\$1,061.28	ASF
Construction Cost/OGSF		OGSF	OGSF	OGSF	\$941.13	OGSF
Total PWC Cost per ASF		ASF	ASF	ASF	\$1,357.45	ASF
Total PWC Cost per OGSF		OGSF	OGSF	OGSF	\$1,203.77	OGSF
Gr. 2&3 Equip. Cost/ASF		ASF	ASF	ASF	\$25.53	ASF

G CONSTRUCTION COST ANALYSIS					
	COSTS	UNIT COSTS		%	REMARKS
		\$/ASF	\$/OGSF		
• Concrete & Structure	\$				
• Closing in					
• Finishing					
• Group 1 Equipment					
a. SUBTOTAL-Gen Constr.	\$	\$	\$		
b. HVAC					
c. Plumbing					
d. Electrical					
e. Elevators					
f. Other					• Identify
TOTAL BUILDING COST ONLY	\$	\$	\$	0.0	• Identify
g. Additional Bldg. Costs					
TOTAL BUILDING + ADD'L COSTS	\$	\$	\$		
h. Other Construction		Identify			
i. Other Construction		Identify			
TOTAL CONSTRUCTION COST	\$	Same as Schedule C, Item 1 (line 24) Page 1			

G NOTES:									
Items included under 8.0 Special Items:									
Cost estimating and scheduling	10,000								
Seismic Review	25,000								
DSA Plan check fees	27,000								
Campus Fire Marshal	63,000								
Independent Commissioning Agent	200,000								
	325,000								
<table border="1"> <tr> <td>Budget No.</td> <td></td> </tr> <tr> <td>Date</td> <td></td> </tr> <tr> <td>Orig Date</td> <td>2/22/2017</td> </tr> <tr> <td>Revised</td> <td>7/13/2017</td> </tr> </table>		Budget No.		Date		Orig Date	2/22/2017	Revised	7/13/2017
Budget No.									
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Revised	7/13/2017								
Prepared By: TL									

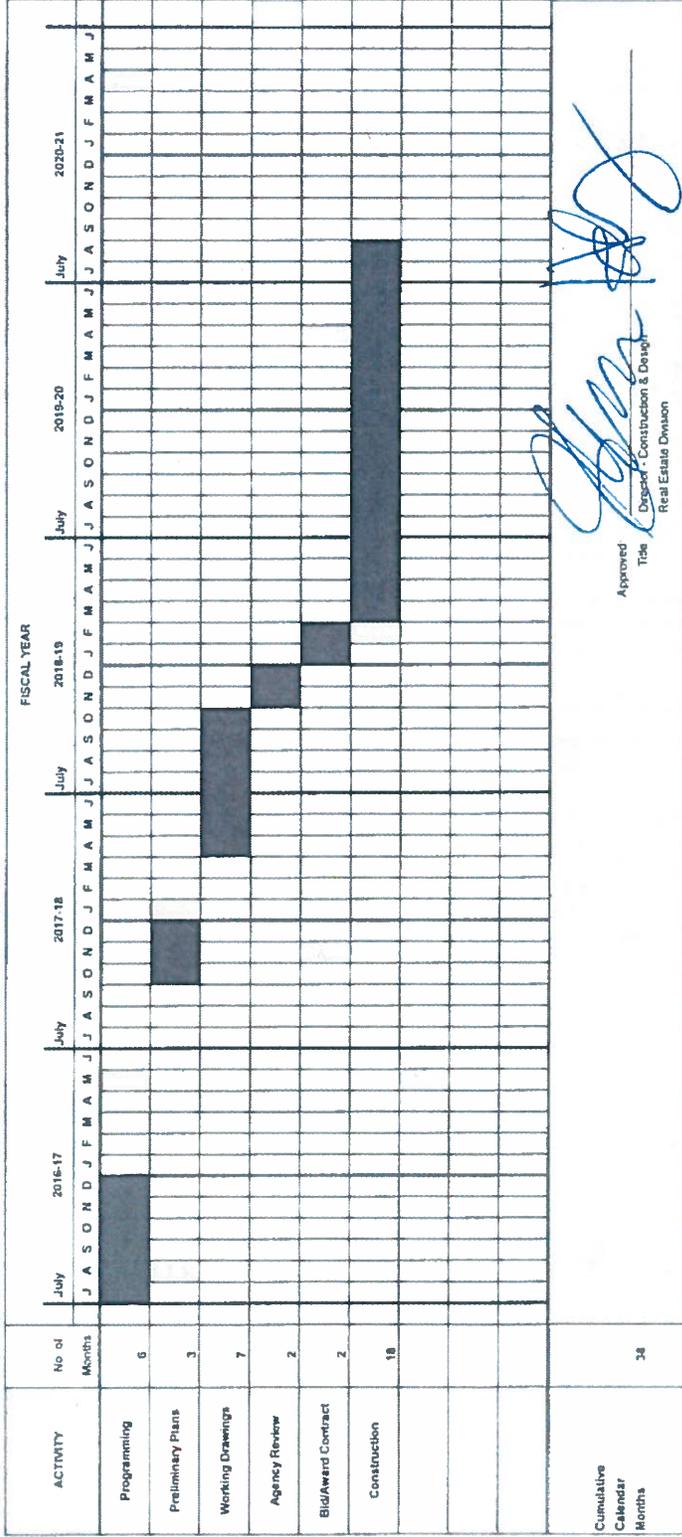
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PROJECT SCHEDULE
 UNIVERSITY OF CALIFORNIA, BERKELEY

PROJECT: NRLF Phase IV Study

ACCOUNT NO: 12684B

DATE: 6/19/2017



UNIVERSITY OF CALIFORNIA ENVIRONMENTAL IMPACT CLASSIFICATION

Campus/Field Station/Division University of California, Berkeley, Richmond Bay Campus Project Account 12684B
Project Title UC Northern Regional Library Facility Phase IV

For purposes of compliance with the California Environmental Quality Act of 1970 (CEQA), and Amended University of California Procedures for Implementation of CEQA, this project has been reviewed and initially classified as indicated below. Please check (X) as appropriate. Include project description and appropriate local map with your submission.

I. EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 - When it can be seen with certainty that there is no possibility the action will result in physical change to the environment (15061(b)(3)), or the action is specifically exempted by statute (15260-15285), the project is classified as generally exempt from CEQA. General/Statutory Exemption § [Insert applicable CEQA Guidelines Section]

II. CATEGORICALLY EXEMPT - This project falls under the indicated Class(es) of Exemption(s), none of the exceptions to the exemption apply (15300.2), and there is no significant effect on the environment (for complete list see CEQA Guidelines Section 15300)

- | | |
|---|--|
| <input type="checkbox"/> Class 1: Existing Facilities | <input type="checkbox"/> Class 17: Open Space Contracts or Easements |
| <input type="checkbox"/> Class 2: Replacement or Reconstruction | <input type="checkbox"/> Class 23: Normal Operation of Facilities for Public Gatherings |
| <input type="checkbox"/> Class 3: New Construction or Small Structures | <input type="checkbox"/> Class 25: Transfer of Land- Natural Conditions/Historical Resources |
| <input type="checkbox"/> Class 4: Minor Alterations to Land | <input type="checkbox"/> Class 30: Minor Actions - Prevent Hazardous Waste/Substances |
| <input type="checkbox"/> Class 6: Information Collection | <input type="checkbox"/> Class 31: Historical Resource Restoration/Rehabilitation |
| <input type="checkbox"/> Class 11: Accessory Structures | <input type="checkbox"/> Class 32: In-Fill Development Projects |
| <input type="checkbox"/> Class 13: Acquisition for Conservation | <input type="checkbox"/> Class 33: Small Habitat Restoration Projects |
| <input type="checkbox"/> Class 16: Transfer of Land Ownership for Parks | <input type="checkbox"/> Other: <u>[If other, identify which class under Section 15300]</u> |

III. INITIAL STUDY - This project is not statutorily or categorically exempt from CEQA, an Initial Study is to be prepared to determine if the project may have a significant effect on the environment

Stand-Alone Tiered Initial Study (15152): [Identify EIR from which Initial Study is tiered]

IV. ENVIRONMENTAL IMPACT REPORT (EIR) - It is known that the project will have a direct or cumulatively significant effect on the environment and an EIR will be/has been prepared. Identify the type of EIR

Programmatic Stand-Alone (Project-Specific) Richmond Bay Campus, LRDP (2014), State Clearinghouse No. 2013012007

Additional project analysis:

None/Findings Only Addendum Subsequent Supplement to EIR Richmond Bay Campus, LRDP (2014)

PROJECT DESCRIPTION - *[insert brief project description, provide supporting documentation as appropriate.]*

Real estate transaction type: Acquisition Sale Lease Easement License *[include proposed use in project description below]*

The UC Northern Regional Library Facility (NRLF) Phase IV is a major storage addition to the existing three phases of the NRLF at UC Berkeley's Richmond Bay Campus (Richmond Field Station), to provide 10 years of needed new storage capacity for low-use library materials of research value in the most cost effective, economical manner for the libraries of the University of California. Developing new space is required; it is expected that the existing space will be full November 2018. Phase IV will store 3.1 million volume equivalents in one story stacks and add staff work areas. An expansion of an existing access road turn-around is planned to accommodate emergency and maintenance access. Phase IV will be 26,610 GSF total. This project was identified and evaluated in the 2014 programmatic LRDP/EIR for the Richmond Bay Campus. A detailed NRLF IV project program was completed in April 2017.

V. Does this project conform to the approved LRDP? YES NO NA *[if NO or NA, include explanation in Project Description above]*

VI. Kira Stoll, Principal Planner June 28, 2017 Emily Martin 8/17/17
Prepared by Date Local Approved by Date

VII. OFFICE OF THE PRESIDENT

Concur with Classification Do not concur with Classification

Signed [Signature] Date 8/18/2017

Attachment 1: Example photographs of High Bay Storage System (HBSS)

Photo 1: In a HBSS items are stored in boxes and trays in tightly grouped sizes and then stored on high shelving. This approach maximizes the available storage space by minimizing shelving infrastructure and empty shelf space through variable layouts to accommodate grouped sizes.

Photo 2: Storage and retrieval in this type of facility is completed via a person-lift specially equipped to serve library materials. This lift raises and lowers as needed to locate items on the shelf.

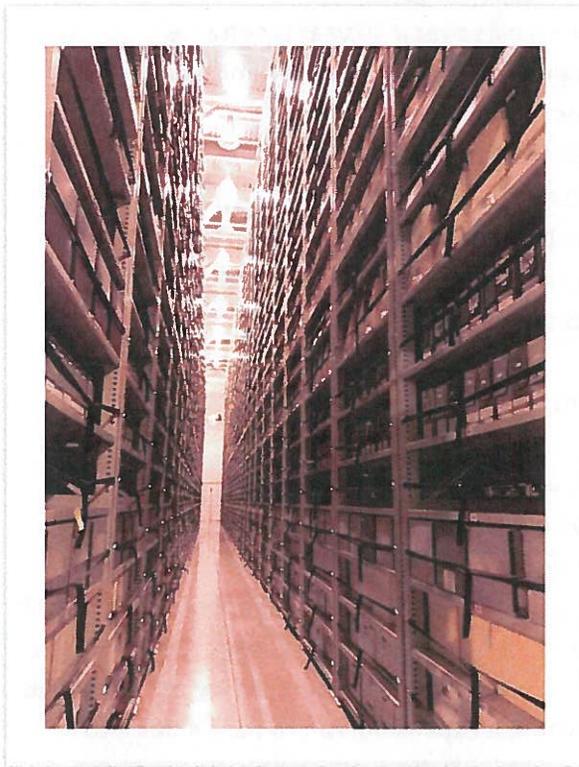


Photo 1

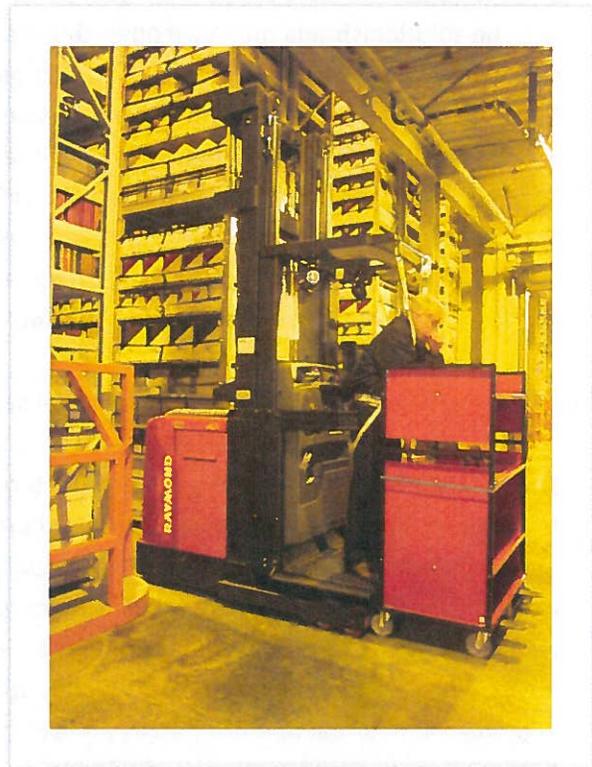


Photo2

Attachment 2: Alternatives Analysis

The UC libraries considered a number of alternative solutions to respond to the ongoing need for storage. These alternatives included: 1) vendor-sourced solutions, 2) non-capital solutions (i.e., to use space differently at the RLFs and on campuses), and 3) capital solutions such as adding on a storage module to NRLF or building a new regional library facility in a lower-cost location. The alternatives were evaluated using ten criteria:

1. The solution should be architecturally feasible (seismic, fire code, etc.)
2. The solution should support ten years of growth (3.1 million volumes)
3. The solution should minimize operating and capital costs over a 40 year timeframe
4. The solution should build on existing campus programs and services to minimize new costs
5. The solution should meet or exceed service needs for preservation
6. The solution should meet or exceed service needs for security
7. The solution should meet or exceed needs for access to collections
8. The solution should be achievable in a timeframe to meet campus needs (e.g. 2020)
9. The solution does not pose long term sustainable risk for UC library collections
10. The solution is in alignment with academic needs of the UC community

Using these evaluative criteria, the five potential solutions were analyzed in depth:

1. **Build NRLF Phase 4:** This is the preferred alternative as it meets all evaluation criteria. The feasibility study indicated that the proposed project would meet all seismic and fire code requirements, ensure capacity to meet campus storage needs, and minimize operating costs through the efficient use of space and by incorporation within existing building operations and staff workflows. Costs for this capital solution are minimized – as compared to a wholly new RLF – as no new staffing is required for Phase 4. Existing staff will continue the work of receiving new materials and only incremental operating costs are expected with the expansion. NRLF Phase 4 ties into existing security, preservation, and access services as well, and allows UC libraries to manage collections cohesively.
2. **Use commercial storage solutions**
 - a. **Storage vendor:** Multiple external storage provider alternatives were analyzed. External provider models were based on an annual per-volume cost that either bundled access and storage as a single fee or broke out storage and access services as separate pricing. From a cost perspective, vendor models were able to compete with the cost of NRLF Phase 4 in the short term but over a 40-plus year time frame would exceed the estimated Phase 4 costs. Vendor models also introduce new security, access, and preservation considerations and would require a strong service agreement to mitigate the risk associated with having an external entity

manage a portion of the UC library collection. It is worth noting that the UC libraries store materials on a scale that exceeds all other libraries in the country and as a result, well-tested vendor solutions that work at the scale of the RLFs do not exist. The risk associated with developing and testing solutions at the UC-required scale, as well as managing a long-term vendor agreement for high-value collections, is much higher than with a UC-controlled solution. The cost of exiting the service would also be considerable, presenting a stewardship cost to collections over time.

- b. **Major retailer storage service:** Storage services through a major online retailer were considered, but the offered solution was designed around short-term needs (i.e. less than six months) and there was not sufficient information regarding long-term storage, preservation, and environmental controls as well as access methods to fully consider this solution. As such, this is an untested solution that may prove viable for future needs.
3. **Building a new RLF in a different location:** Building a new RLF in an area with potentially lower construction costs was analyzed. An evaluation for a facility in the less expensive area was prepared based on the assumptions in the NRLF Phase 4 feasibility study. The estimate included additional staffing and space and land acquisition costs. The total cost of construction was approximately \$2 million less than NRLF Phase 4 but operating and staffing costs were higher, resulting in an overall long-term cost nearly 40 percent higher than NRLF Phase 4. This evaluation does not take into account the added cost of transportation of volumes to and from the facility that the campuses would face.
4. **Keep collections on campus:** Without any action, campuses will begin bearing the cost of storing content beginning in 2019. Based on the work of Courant and Nielsen the annual average cost of keeping a book on campus (as opposed to a high-density facility) is \$4.26 per book, per year. This number was determined to be the average cost in 2009. Adjusting for inflation, that cost would be approximately \$4.77 today. In contrast, the annual average cost of keeping a book in a high-density facility over the same period is \$0.86 (2009 dollars) to \$0.99 (2016 dollars) per book, per year.
5. **Increasing capacity of existing facilities:** The ability to increase capacity within existing NRLF facilities rather than through new construction was measured. Phase 1 was found to be at capacity, Phase 2 was found to have seismic risks associated with the increased weight associated with densification, and Phase 3 was found to have the capacity to handle up to approximately 400,000 more volumes. The feasibility study found that implementing this solution through Phase 3 would require moving over three million items, introducing risks to the operation of the facility and significant moving costs. Given the low yield, long timeline to complete, and relatively high cost, this alternative is not recommended.

Preferred Alternative

Of the considered solutions, NRLF Phase 4 is the preferred solution. In addition to being the least costly capital solution over a 40 year timeframe, it meets all of the evaluative measures. Of key importance is the fact that all known risks associated with managing collections at a RLF have been addressed and are handled with this solution. By comparison, each of the other alternatives introduces new risks to the collection and to libraries. Other solutions are also more costly.

The review of options found that, due to site issues, SRLF cannot grow its building footprint further. For this reason, NRLF Phase 4 is being proposed to accept new deposits for the entire UC system once SRLF fills. SRLF will continue to accept materials until it fills and will remain open as a service point indefinitely for deposited materials.

STATE OF CALIFORNIA
Capital Outlay Budget Change Proposal (COBCP) - Cover Sheet
 DF-151 (REV 06/17)

Fiscal Year 2018-19	Business Unit 6440	Department University of California	Priority No.
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Budget Request Name	Capital Outlay Program ID	Capital Outlay Project ID (7 digits. For new projects leave blank)
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Project Title Systemwide – 2018-19 Systemwide State Deferred Maintenance Program	Project Status and Type Status: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuing Type: <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor
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Project Category (Select one)

CRI (Critical Infrastructure) WSD (Workload Space Deficiencies) ECP (Enrollment Caseload Population) SM (Seismic)
 FLS (Fire Life Safety) FM (Facility Modernization) PAR (Public Access Recreation) RC (Resource Conservation)

Total Request (in thousands) \$50,000	Phase(s) to be Funded C	Estimated Total Project Cost (in thousands) \$50,000
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Budget Request Summary
 2018-19 Systemwide State Deferred Maintenance Program – \$50,000,000 for Construction. The project includes broad areas of deferred maintenance scope including repair or replacement of elevators, roofs, air ventilation units, hot water/chilled water distribution systems, air handlers, fire alarms, fume hoods, moisture barriers, electrical and switchgear, and others as appropriate.. Total project costs are estimated at \$50,000,000, including construction (\$50,000,000). The construction amount includes \$50,000,000 for the construction contract.

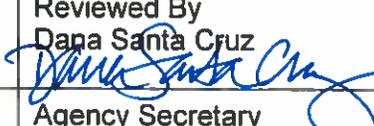
Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	CCCI 6815
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Requires Provisional Language <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Budget Package Status <input type="checkbox"/> Needed <input checked="" type="checkbox"/> Not Needed <input type="checkbox"/> Existing
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Impact on Support Budget

One-Time Costs Yes No Future Costs Yes No
 Future Savings Yes No Revenue Yes No

If proposal affects another department, does other department concur with proposal? Yes No
 Attach comments of affected department, signed and dated by the department director or designee.

Prepared By Dana Santa Cruz	Date 8/25/2017	Reviewed By Dana Santa Cruz 	Date 8/25/2017
Department Director	Date	Agency Secretary	Date

Department of Finance Use Only	
Principal Program Budget Analyst	Date submitted to the Legislature

PROJECT PLANNING GUIDE

2018-19 SYSTEMWIDE STATE DEFERRED MAINTENANCE PROGRAM

UNIVERSITY OF CALIFORNIA

August 2017

Approval of Project Planning Guide:



Douglas Stimpson
Executive Director – Capital Asset Strategies

2018-19 Systemwide State Deferred Maintenance Program

Project Planning Guide

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SUMMARY

The Governor and Legislature recognize that deferred maintenance is a serious issue for the State of California, as illustrated by one-time funding for deferred maintenance for the University in the 2015 and 2016 State Budget Acts. Over those years, the University of California (University) has been fortunate to benefit from funding of \$60 million from the State to address deferred maintenance. Although this is a significant amount of funds, the University's backlog of deferred maintenance is immense.

The 2017-18 Systemwide State Deferred Maintenance Program funded deferred maintenance work (\$35 million) and launched Facility Condition Assessments on State-eligible space (\$15 million). After review by the Legislature and Department of Finance (Finance), the program received its final approval by Finance in April 2017.

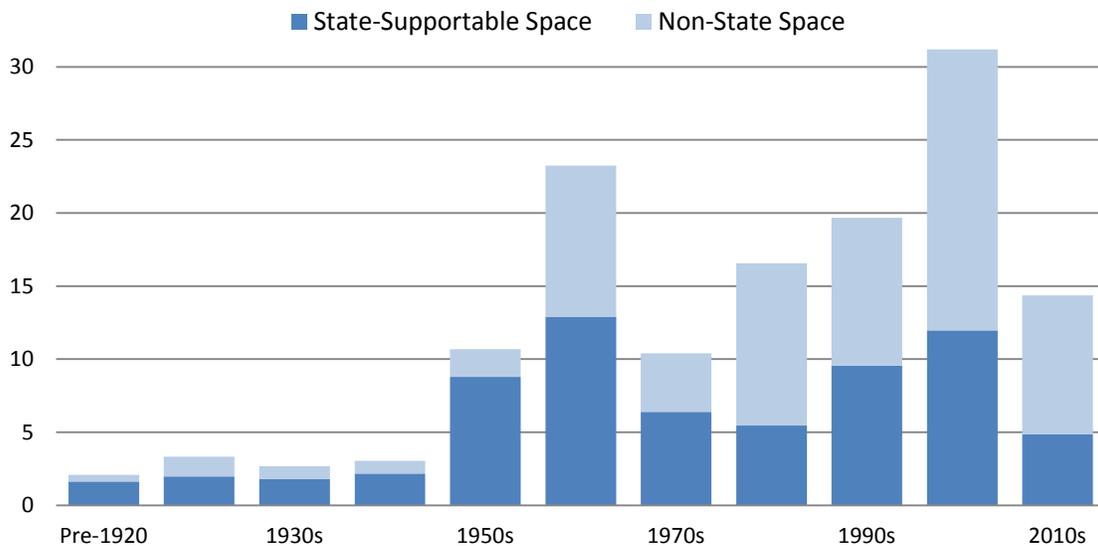
Building on previous efforts, the 2018-19 Systemwide State Deferred Maintenance Program proposes funding of \$35 million to address the next portion of deferred maintenance work.

BACKGROUND

An essential activity in support of the University of California’s (University) core mission of instruction, research, and public service is the operation and maintenance of facilities, grounds, and infrastructure. The University maintains and/or occupies approximately 137 million gross-square-feet of space in over 6,000 buildings, 1,949 of which are buildings that are at least 10,000 gross-square-feet (gsf). These buildings – spread across the ten campuses, five medical centers, and nine agricultural research and extension centers – include classrooms, offices, laboratories, animal housing facilities, libraries, and specialized research facilities. The State of California (State) has funded space according to use; space used for classrooms, laboratories, offices, and some research and support uses have been eligible for State support. Over 67 million square feet (approximately 49%) is eligible to be maintained with State funds.

Approximately 56% of the University’s State-supportable space is more than 30 years old, as shown in the display below.

Display: All Space by Decade of Construction (Gross-Square-Feet in Millions)



Deferred maintenance is the unaddressed backlog of renewal resulting from chronic underfunding of ongoing University’s operation and maintenance of plant (OMP) support and the lack of regular and predictable investment in capital renewal. The University’s aging facilities are more expensive to maintain, and, with building systems at or beyond their useful life, are a principal driver of the University’s escalating deferred maintenance and capital renewal needs. Moreover, specialized research facilities comprise a growing percentage of the University’s inventory of State-eligible space. These facilities strain limited OMP funds with higher maintenance and utility costs.

STATEMENT OF NEED AND RECENT HISTORY OF FUNDING

The University continues to have a great need for funding of deferred maintenance. As a result of many years of budget reductions, departments' annual operating budgets provide limited funding for facility maintenance. Recent budget cuts, compounded by years of underfunding, particularly for basic building maintenance, along with the historical absence of systematic funding of capital renewal have resulted in shorter than expected useful lives of building systems, exacerbating the maintenance needs of the University's aging facilities.

The lack of funding has made it difficult for departments to address large maintenance projects. Consequently, departments undertake only the most critical activities to keep facilities operational, and other maintenance items are deferred. Deferring routine maintenance can lead to facility deterioration – and ultimately failure – resulting sometimes in the need to replace the facility sooner than would have been required if it had been properly maintained.

Starting in the mid-1990s – in recognition of more than two decades of chronic underfunding of OMP needs – the State acknowledged the need to provide funding through various strategies. Funding agreements with three former Governors (Wilson in 1996-1999, Davis in 1999-2003, and Schwarzenegger in 2003-2011) attempted to tie OMP funding to annual base budget adjustments; however, ensuing fiscal crises prevented most of the augmentations from occurring. Similarly, OMP funding was eventually included in the renegotiated marginal cost of instruction formula (related to enrollment growth) in 2006-07, but marginal cost funding has not been provided since 2010-11.

The current Governor and Legislature have recognized that deferred maintenance is a serious issue. In 2015-16, the State designated \$120 million in one-time General Fund deferred maintenance funding, with \$25 million provided to the University. The Governor's 2016-17 budget for deferred maintenance provided \$500 million in one-time funding, where the University's proposed share increased to \$35 million. The approved 2017-18 Systemwide State Deferred Maintenance Program (Program) and this proposed 2018-19 Program proposes to build on these efforts.

In accordance with sections 92493 through 92496 of the Education Code, UC submitted a report on August 31, 2016, to the Legislature and the Department of Finance indicating UC's intent to use its State General Fund support appropriation for capital expenditures. That report included the Project Planning Guide (PPG) for the 2017-18 Systemwide Deferred Maintenance Program. On April 24, 2017, Department of Finance conveyed the final approval.

The 2017-18 PPG included deferred maintenance work and funding to perform Facility Condition Assessments (FCA) to evaluate the University's State-supportable capital asset portfolio. At the beginning of the 2017-18 fiscal year, the University will be submitting to the Department of Finance the list of deferred maintenance projects to be performed. The University will submit a list of deferred maintenance projects. In addition, the University will initiate the systemwide Facility Condition Assessments. The FCAs will deliver a credible deferred maintenance and capital renewal forecast for the approximately 67 million square feet of State-eligible space.

In the long term, failure to invest adequately in capital renewal and ongoing maintenance presents growing risks to the University, ranging from disruptions of programs that may be caused by a breakdown of a building mechanical system or a facility's underperformance, to the impact of a catastrophic failure of a mission-critical system, or utility distribution system that could shut down an entire campus.

2018-19 SYSTEMWIDE STATE DEFERRED MAINTENANCE PROGRAM

The projects in the proposed \$35 million 2018-19 Program for deferred maintenance funding would fall within the same general categories as they did in the 2017-18 Program. The broad areas of deferred maintenance scope include repair or replacement of: elevators, roofs, air ventilation units, hot water/chilled water distribution systems, air handlers, fire alarms, fume hoods moisture barriers, electrical and switchgear, and others as appropriate. The work will expand on the lists of projects submitted for the 2015, 2016, and 2017 State Budget Acts and will be for State-supportable space.

The University anticipates that the 2018-19 Program would be administered similarly to the previous year's Program. The University of California will provide the Department of Finance with a list of deferred maintenance projects, and the Department of Finance will, in turn, provide this list to the Chairperson of the Joint Legislative Budget Committee 30 days prior to allocating any funds.

SUSTAINABLE PRACTICES

The 2018-19 Systemwide State Deferred Maintenance Program will comply with the University of California Policy on Sustainable Practices. As required by this policy, the Program will adopt the principles of energy efficiency and sustainability to the fullest extent possible, consistent with budgetary constraints and regulatory and programmatic requirements.

CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

Environmental review and determination pursuant to the California Environmental Quality Act will be completed in conjunction with campus design approvals for individual projects proposed under the 2018-19 Program.

COST BASIS

Due to variable market conditions, the University has developed strategies addressing both favorable and unfavorable market conditions to ensure that the maximum amount of the deferred maintenance projects are completed within available funds. Implementation of all project components will be subject to further assessment during design and engineering analysis.

RELATIONSHIP TO UNIVERSITY MISSION AND OBJECTIVES

The University's capital improvement program includes projects to address fire, seismic, and other life safety hazards; accommodate increased numbers of students; and renew and expand critical infrastructure and utility systems to support academic programs. The 2018-19 Systemwide State

Deferred Maintenance Program will reduce hazards and long-term costs through maintenance of the University's State-supportable capital asset portfolio. Deferred maintenance is critical to maintaining the University's commitment to the highest standards for life safety.

Under the purview of UC's Integrated Capital Asset Management Program , one of the major outcomes expected from the University FCA is to provide sound, detailed capital renewal and deferred maintenance needs, cost estimates, and prioritization detail that will better inform the University's existing capital planning efforts and in particular, these efforts as they relate to the State-supportable space.