

Office of the President

TO MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS:

ACTION ITEM

For Meeting of May 20, 2015

AMENDMENT OF THE BUDGET AND SCOPE, APPROVAL OF EXTERNAL FINANCING, AND APPROVAL OF THE DESIGN FOLLOWING ACTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, BERKELEY WAY WEST PROJECT (TOLMAN HALL SEISMIC REPLACEMENT), BERKELEY CAMPUS

EXECUTIVE SUMMARY

The proposed Berkeley Way West (Tolman Hall Seismic Replacement) project would be for replacement of the seismically poor (V¹) Tolman Hall with a new eight-story building that will provide approximately 325,000 gross square feet (gsf), including 230,000 gsf of academic and research space and 95,000 of leasable space. The academic and research space would house the Graduate School of Education, Department of Psychology, and School of Public Health. The leasable space would house and consolidate several campus administrative functions, currently dispersed throughout the City of Berkeley, and provide rental space for affiliated third-party tenants. The project will also provide a small amount of retail space on the ground floor. This project includes the demolition of the existing Tolman Hall building, which will occur once the new building is constructed and occupied.

At their March 2014 meeting, the Regents approved a total project budget of \$150 million, funded with external financing (\$75 million) and external financing supported by State appropriations (\$75 million). The March 2014 approved budget and scope was for a 230,000 gsf, five-story building that would support only the academic and research component, as well as the small amount of retail. Subsequent site analysis determined that adding three additional, partial floors on the southern side of the site, totaling approximately 95,000 gsf, would maximize the development potential of the site pursuant to the City of Berkeley Downtown Area Plan.

The Regents are being asked to: (1) approve the project budget of \$185 million; (2) approve external financing (\$110 million); (3) certify the environmental documentation under the California Environmental Quality Act; and (4) approve the design for the Berkeley Way West project.

¹ This level of “V” is a defined category of expected Earthquake Performance Levels for Existing Buildings and equates to a historic UC risk rating of “Poor.” (Refer to the UC Seismic Safety Policy, Appendix A.)

RECOMMENDATION

1. The President of the University recommends that the Committee on Grounds and Buildings recommend to the Regents that:
 - A. The 2014-2015 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

From: Berkeley: Tolman Hall Seismic Replacement – preliminary plans, working drawings, construction, and equipment - \$150 million to be funded from external financing (\$75 million) and external financing supported by State appropriations (\$75 million).

To: Berkeley: Berkeley Way West (Tolman Hall Seismic Replacement) – preliminary plans, working drawings, construction, and equipment – \$185 million to be funded from external financing (\$110 million) and external financing supported by State appropriations (\$75 million).
 - B. The scope of the Berkeley Way West (Tolman Hall Seismic Replacement) project shall consist of constructing an eight-story, 325,000 gross square foot (gsf) building that will provide approximately 230,000 gsf of academic and research space and approximately 95,000 gsf of leasable space.
 - C. Authorize the President of the University to obtain external financing not to exceed \$110 million. The President of the University shall require that:
 - (1) Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.
 - (2) As long as the debt is outstanding, the general revenues of the Berkeley campus shall be maintained in amounts sufficient to pay the debt service and to meet the requirements of the authorized financing.
 - (3) The general credit of the Regents shall not be pledged.
2. The President of the University recommends that, following review and consideration of the environmental consequences of the proposed Berkeley Way West project, as required by the California Environmental Quality Act (CEQA), including any written information addressing this item received by the Office of the Secretary and Chief of Staff no less than 24 hours in advance of the beginning of this Regents meeting, testimony or written materials presented to the Regents during the scheduled public comment period, and the item presentation, the Committee on Grounds and Buildings:
 - A. Adopt CEQA Findings based on analysis of the environmental impacts presented in the *UC Berkeley 2020 Long Range Development Plan Environmental Impact*

Report as updated by Amendment #1 and accompanying Addendum #5 addressing Climate Change, and Addendum #12.

- B. Approve the design of the Berkeley Way West (Tolman Hall Seismic Replacement) project for the Berkeley campus.

BACKGROUND

Completed in 1962, Tolman Hall is a seismically ‘poor’ (V) reinforced structure. At 138,600 assignable square feet (asf), or 247,000 gross square feet (gsf), Tolman Hall is one of the largest academic buildings on the Berkeley campus. The primary occupants are the Graduate School of Education and the Department of Psychology, but Tolman Hall also contains two research institutes, the Education-Psychology Library, and 13 general assignment classrooms. In recognition of the life-safety risk, the 13 classrooms have been relocated to other spaces on campus.

Considering its size and number of campus users, and its structural characteristics, Tolman Hall is the campus’ most urgent seismic priority. To address the serious seismic and functional deficiencies posed by the existing Tolman Hall, the campus has evaluated a wide range of options, and has determined the best strategy is to construct a new building on the western portion of the block defined by Oxford Street, Hearst Avenue, Shattuck Avenue, and Berkeley Way (the Berkeley Way West site).

At the same time, the campus also determined this strategy should address the space needs of the School of Public Health, which was relocated from Warren Hall to interim space in University Hall. This allowed Warren Hall – another building with seismic and functional deficiencies – to be demolished to make way for the construction of the Li Ka Shing Center.

Initial site analysis conducted during the concept design phase was focused on utilizing the site as a replacement for the Tolman Hall occupants, plus the integration of the School of Public Health. Subsequent to that initial analysis, the campus determined it would be beneficial to study the maximum building envelope of the site after receiving interest from third-party users, affiliated with the three academic programs mentioned above, to lease space in the same complex. Additionally, the campus was researching opportunities to reduce the amount of leased space in the City of Berkeley by campus administration from third-party landlords. Campus administrative and research units are currently dispersed in over 210,000 square feet in leased space throughout downtown Berkeley, paying over \$6 million annually in rent.

In the fall of 2014, during the preliminary design phase, the City’s zoning requirements were further analyzed, and it was determined that the site capacity could be increased to 325,000 gsf. This would allow for three additional floors and up to 95,000 gsf of additional space to be occupied by third-party tenants and campus administrative units.

The budget for the project was approved at the March 2014 Regents meeting for a total project budget of \$150 million, funded with external financing (\$75 million) and external financing supported by State appropriations (\$75 million). The external financing supported by State

appropriations was approved in a separate, systemwide item that was presented to the Committee on Finance in March 2014.

PROJECT DESCRIPTION

The Berkeley Way West project would maximize the development potential of the site to provide for current and future campus needs. The new eight-story building would provide 230,000 gsf (150,000 asf) of academic and research space and up to 95,000 gsf (61,000 asf) in additional space that could be leased to administration and third-party tenants. The new building will house the occupants of Tolman Hall (the Graduate School of Education, the Department of Psychology, and two research institutes) and, through improved space utilization, will also accommodate teaching and research units in the School of Public Health, currently occupying 52,000 asf in University Hall and Haviland Hall. The Education-Psychology Library will not be located in the new building but will be incorporated into the Social Research Library in Haviland Hall, as part of campus-wide library consolidation efforts. The majority of the Library move is included in the project budget. All incidental costs related to the move will be shared by the campus and Library.

The proposed building will provide a significantly more efficient layout than the current building being occupied by the aforementioned schools and department. The building will be able to improve utilization and accommodate more people in less square footage by providing workspaces that fit today's functions and work styles, and layouts designed to accommodate future change. The academic and research space will provide a flexible layout that will utilize a multi-level, open, connective space that aims to bring together the academic floors through movement, light, and views. The Department of Psychology, the Graduate School of Education, and the School of Public Health will be able to engage both undergraduate and graduate students in interactive, collaborative, problem- and project-based learning, using technology resources and floor models now commonplace in other schools, universities, and the private sector. This interactive space is not available in Tolman Hall, University Hall, or Haviland Hall.

The supplemental 95,000 gsf of leasable office space will include space that will provide important synergies for the third-party and administrative programs occupying the space. The ground floor retail spaces will allow additional business activity in bustling Downtown Berkeley.

Upon completion of the Berkeley Way West project, Tolman Hall would be demolished. At this time, the future use of the Tolman site is unknown; however, an interim use as surface parking is under consideration. The project budget includes the demolition of the building and site clearance but does not include the cost of preparing the site and constructing surface parking. The use of the existing space that Public Health now occupies in University Hall and Haviland Hall is yet to be determined.

Program

The ground floor will be comprised of shared classrooms and colloquia space, retail space, building support, and a sky-lit multipurpose forum. A major corridor will connect two main entries – one at the Shattuck Avenue frontage and one at the east side facing the campus.

The second level will house the Psychology Clinic and procedure/testing space, a student lounge, a shared student services center, and student study space. Levels 3-5 will be comprised of offices, workstations, and conference rooms for faculty, staff, and graduate students.

Levels 6-8 will provide additional leasable space for other campus needs as discussed above. It is anticipated the uses on these floors will be office-oriented, with an emphasis on the open office format that most developers and tenants are now utilizing. The initial cost for the tenant improvements on these floors is included in the augmented budget amount. The campus may incur a nominal cost associated with tenant improvements in the future. The tenants will be responsible for any cost associated with substantial tenant improvements that are made at their request.

Table 1. Program Summary

Levels 1-5	ASF
Offices/workstation/conference	88,490
Classrooms	15,750
Student Lounge & Support Space	4,000
Specialty Spaces – Psychology clinic & procedure space	24,000
Amenities – bike parking, showers, wellness/lactation	4,960
Building Support & Services	2,300
Retail	7,500
Forum	3,000
Subtotal	150,000
Levels 6-8	
Leasable Office Space	61,000
Total	211,000

Location

As shown on the Location Map in Figure 1, the building site is the University-owned western half of the city block defined by Oxford Street, Hearst Avenue, Shattuck Avenue, and Berkeley Way. Future expansion of the Berkeley campus was planned to occur on these and other downtown blocks in the *UC Berkeley 2020 LRDP*, adopted in January 2005, which anticipated 800,000 net new gsf in downtown Berkeley by 2020. The Energy Biosciences Building (EBB), completed in 2012, is located on the eastern half of the block.

Building Design

The building design responds to the dual nature of its context, being located at the transition point on Shattuck Avenue between the core of downtown Berkeley to the south and residential neighborhoods to the north. The building is comprised of two interlocking L-shaped forms of different heights. The south portion reaches to eight stories or 112 feet at the southwest, relating to the higher density planned for the downtown. The north portion reaches five stories, stepping

down to four stories at the northeast corner to address the lower scale residential neighborhood across Hearst Avenue.

The design of the Berkeley Way Building conforms to the campus' *Physical Design Framework* principles, including in particular:

- Compose new buildings primarily of orthogonal forms with orthogonal relationships to existing buildings.
- Design buildings over three stories to include an articulated base, middle, and top: variations in color, texture, or wall/window ratio may be used to articulate base and top.
- Use glass walls primarily for special features or spaces, or where program merits greater transparency.
- Clad solid walls primarily in stone.
- Conceal rooftop equipment with enclosures integral to the building architecture.

The building retains an orthogonal relationship to EBB and to the surrounding urban context. It has a clear base-middle-top composition, with surface treatments informed by program as well as design. Strong vertical pilasters, clad in tile or terra cotta, and glazing along the ground floor Shattuck Avenue frontage emphasize the retail component. The more robust treatment of the base anchors the building to the site. The upper floors, which house offices and workspace, are clad with a system of high performance glazing and decorative spandrels in order to maximize daylight and mitigate thermal heat gain. The building will be topped with a mechanical penthouse wrapped in light grey metal panels, set back from the building edge to minimize visual impact.

A sky-lit forum fills the space where the two L-shaped forms interlock, bringing daylight into the center of the first five levels. The forum is an interactive, collaborative, problem- and project-based learning space using technology resources now commonplace in other schools, universities, and the private sector. The east side of the building has a more transparent quality, due to the location of the public forum space that opens out to the plaza on the east, and the student lounge, a casual seating study area, on the second level that overlooks the plaza and has views toward the campus.

Project Schedule

It is anticipated that project construction would commence in November 2015 and be completed in fall 2017. Tenant improvements would overlap with the end of construction. Occupancy is anticipated for January 2018.

Financial Feasibility

The total project budget for preliminary plans, working drawings, construction, and equipment is estimated to be \$185 million, funded from external financing (\$110 million) and external financing supported by State appropriations under the AB 94 mechanism (\$75 million).

Financing of the \$75 million supported by State appropriations was approved by the Regents in a March 2014 action item that approved external financing for the systemwide 2014-15 State Capital Program. That action constitutes financing approval for only that portion supported by State appropriations. At the same March 2014 meeting, the Regents also approved \$75 million in external financing. This project was approved by the State in July 2014 under Senate Bill 860.

This action is proposing approval of \$110 million in external financing, a \$35 million increase from that approved in March 2014. The increase is associated with the proposed 95,000 gsf in leasable space.

The campus has received significant interest for the additional space from both campus administration and third-party research groups (the majority of which are non-profits) associated with the academic units occupying the building, particularly the School of Public Health. The campus is currently renting over 200,000 square feet for administration in downtown Berkeley from third-party landlords. Although the proposed additional square footage is not large enough to accommodate all these users, the campus is in favor of allocating such rent payments to its own building to service the additional debt. Additionally, most administration units would prefer to be located in new, flexible space that is campus-owned in lieu of the older, less flexible space currently being leased. Regarding the potential third-party tenants, many have expressed interest in the co-location opportunities the facility will provide between the academic units and their associated research. In order to provide flexibility with regard to potential private use in the building, a portion of the external financing will be issued taxable.

The current market rent for Class A space in downtown Berkeley is at or above the projected rents for the additional proposed three floors, and brokers are stating those rents will continue to rise over the next few years. The anticipated increase in rents is partly associated with the current low vacancy rate in the area and low number of constructions projects coming on line that will open additional office space.

Based on long-term debt of \$110 million amortized over 30 years at 6.0 percent interest for the tax-exempt portion (\$75 million) and 7.25 percent interest for the taxable portion (\$35 million), the estimated annual principal and interest debt service payment for the project would be approximately \$8,340,000. The Summary of Financial Feasibility is provided in Attachment 3.

ENVIRONMENTAL IMPACT SUMMARY

In accordance with University procedures and the requirements of the California Environmental Quality Act (CEQA), the Project was evaluated in relation to the original analysis of the environmental impacts of implementation of the UC Berkeley 2020 Long Range Development Plan (LRDP) in the 2020 LRDP Environmental Impact Report (EIR) (SCH #2003082131). The analysis concluded that the Project is consistent with the 2020 LRDP EIR, certified by the Regents in January 2005, as well as with Amendment #1 and Addendum #5 addressing Climate Change. Based on documentation included in the 2020 LRDP EIR Addendum #12 for Berkeley Way West, the University determined the potential impacts from construction and operation of the Project do not constitute new information of substantial importance regarding significant

environmental impacts. Construction and operation of the Berkeley Way West project would not cause new significant environmental impacts.

Key to Acronyms

ASF	Assignable Square Feet
C	Construction
CEQA	California Environmental Quality Act
E	Equipment
EIR	Environmental Impact Report
GSF	Gross Square Feet
LRDP	Long Range Development Plan
P	Preliminary Plans
W	Working Drawings

ATTACHMENTS:

Attachment 1: Project Budget - below

Attachment 2: Funding Plan - below

Attachment 3: Summary of Financial Feasibility - below

Attachment 4: 2020 LRDP EIR (http://www.cp.berkeley.edu/LRDP_2020final.htm) Attachment 5:
2020 LRDP EIR Amendment #1 and Addendum #5

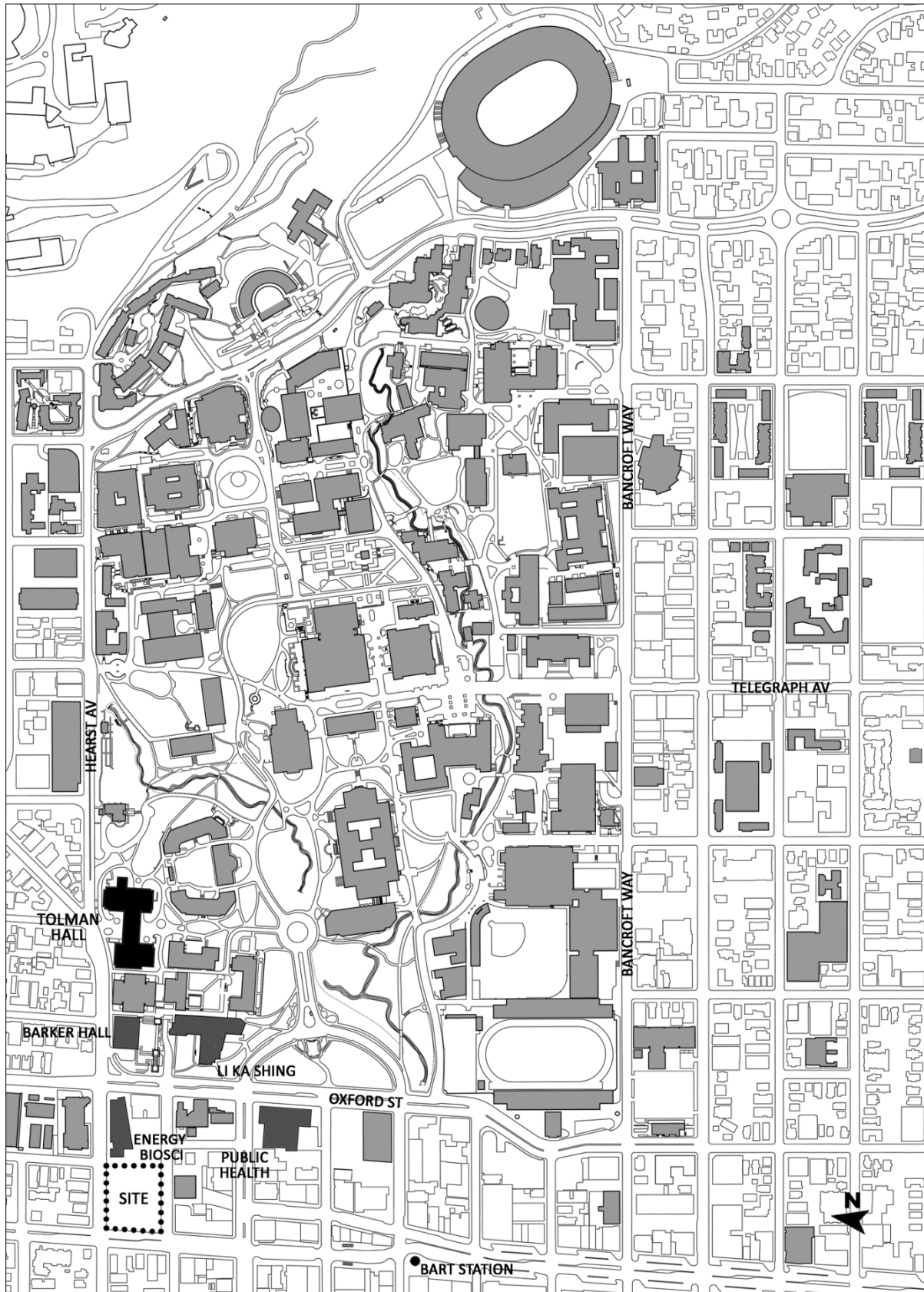
(<http://www.cp.berkeley.edu/LRDP/2020LRDP/ClimateChange.htm>)

Attachment 6: Addendum #12 (http://realestate.berkeley.edu/sites/default/files/bww_final.pdf)

Attachment 7: CEQA Findings

Attachment 8: Project Graphics

Figure 1. Location Map (UC buildings in gray)



PROJECT BUDGET
BERKELEY WAY WEST (TOLMAN HALL SEISMIC REPLACEMENT)
CCCI 6151

Cost Category	Approved Budget March. 2014	Amendment Request	Proposed Budget May 2015	% of Total
Site Clearance	\$500,000	\$6,750,000	\$7,250,000	4.2
Building	103,500,000	27,326,000	130,826,000	76.4
Exterior Utilities	1,000,000	370,000	1,370,000	0.8
Site Development	4,000,000	(4,000,000)	0	0.0
A/E Fees ⁽¹⁾	9,550,000	(772,000)	8,778,000	5.1
Campus Administration ⁽²⁾	2,925,000	515,000	3,440,000	2.0
Surveys, Tests, Plans	880,000	90,000	970,000	0.6
Special Items (excl. financing costs) ⁽³⁾	6,750,000	(3,105,000)	3,645,000	2.1
Financing Costs	1,880,000	6,111,000	7,991,000	4.8
Contingency	5,375,000	1,525,000	6,900,000	4.0
<i>Total P-W-C</i>	136,360,000	\$33,342,000	\$169,702,000	100%
Groups 2 & 3 Equipment	13,640,000	40,000	13,680,000	
Total Project	\$150,000,000	\$35,000,000	\$185,000,000	

Project Statistics:	Approved Budget March 2014	Proposed Budget May 2015
GSF ⁽⁴⁾	230,000	325,000
ASF ⁽⁴⁾	138,000	211,000
Efficiency Ratio: ASF/GSF	60%	65%
Building Cost/GSF	\$ 450	\$ 403
Project Cost/GSF ⁽⁵⁾	\$ 652	\$ 569

Notes

- ⁽¹⁾ Fees include Executive Architect and other professional design contract costs.
- ⁽²⁾ Campus Administration includes project manager, planning, engineering and design review, and contracts administration.
- ⁽³⁾ Special items include environmental review and documentation, plan check fees, peer reviews, and specialty consultants (seismic, ADA compliance, enhanced commissioning).
- ⁽⁴⁾ Gross square feet [GSF] is the total area, including usable area, stairways, and space occupied by the structure itself. Assignable square feet [ASF] is the net usable area.
- ⁽⁵⁾ Project Cost includes Group 2 & 3 Equipment.

COMPARABLE PROJECTS

The Office of the President maintains a database of cost data for university office and classroom projects through 2012. From this list, nine reference construction projects were selected that (1) are over 75,000 gsf and (2) have budgets within the last ten years. Building cost/gsf was determined to be the most relevant, since it excludes many variances in site conditions reflected in construction cost.

When the cost data are calibrated to a common CCCI of 6151, the average building cost/gsf for the 12 reference projects is \$417, compared with \$403 for this project. The comparable projects are identified in the table below:

Campus	Project	Original CCCI	GSF	Adjusted Bldg Cost/GSF	Adjusted Const Cost/GSF
San Diego	Management School Facility	4019	81,892	\$411	\$539
Davis	Graduate Studies Building	5592	78,982	\$316	\$430
Irvine	Business Unit 2	5732	120,000	\$413	\$601
Los Angeles	Teaching and Learning Center for Health Sciences	6452	77,273	\$624	\$832
Merced	Classroom and Academic Office Building	5950	101,569	\$482	\$655
Merced	Social Sciences and Management Building	4890	75,000	\$430	\$545
San Diego	East Campus Office Building	5296	165,812	\$258	\$485
San Diego	Structural & Materials Engineering Building	4632	251,000	\$488	\$596
San Francisco	MB Block 25A Academic Building	5880	164,634	\$329	\$430
AVERAGE				\$417	\$568

ATTACHMENT 2

FUNDING PLAN

Project Cost	Approved March 2014	Amendment Request	Proposed May 2015
External Financing	\$75,000,000	\$35,000,000	\$110,000,000
External Financing: State Appropriations	\$75,000,000	0	\$75,000,000
Total	\$150,000,000	\$35,000,000	\$185,000,000

Funding Schedule	Approved March 2014	Amendment Request	Proposed May 2015
Preliminary Plans (P)	\$9,595,000	\$0	\$9,595,000
Working Drawings (W)	\$14,392,000	(\$5,982,000)	\$8,410,000
Construction (C)	\$112,373,000	\$40,942,000	\$153,315,000
Equipment (E)	\$13,640,000	\$40,000	\$13,680,000
Total	\$150,000,000	\$35,000,000	\$185,000,000

SUMMARY OF FINANCIAL FEASIBILITY

Berkeley Campus	
Project Name	Berkeley Way West (Tolman Hall Seismic Replacement)
Project ID	912629
Total Estimated Project Costs	\$185,000,000
Anticipated Interest During Construction (included in estimated project cost)	\$7,991,000
Proposed Sources of Funding	
External Financing – Tax-Exempt	\$75,000,000
External Financing – Taxable	\$35,000,000
External Financing – State Appropriations under AB 94 Funding Mechanism	\$75,000,000
Total	\$185,000,000

Fund sources for external financing shall adhere to University policy on repayment for capital projects.

Long-term external financing assumptions are listed below

Financing Assumptions	
External Financing Amount	\$110,000,000
Anticipated Repayment Source	General Revenues of the Berkeley Campus
Anticipated Fund Source	Campus Unrestricted Funds
Financial Feasibility Rate	6.00% Tax Exempt (\$75,000,000) 7.25% Taxable (\$35,000,000)
First Year of Principal (e.g. year 10)	FY 2018
Term (e.g. 30 years)	30 years
Final Maturity	FY 2047
Estimated Average Annual Debt Service	\$8,340,000

Below are results of the financial feasibility analysis for the proposed project using the campus' Debt Affordability Model. External financing approval requires the campus to meet the debt service to operations benchmark and one of the two other benchmarks for approval. The financial projections take into consideration market conditions, new sources of revenue and all previously approved projects. The corresponding campus Debt Affordability Model has been submitted to Capital Markets Finance at UCOP. Capital Markets Finance is working on a revised version of the Debt Affordability Model for campuses that may have revised benchmarks and approval thresholds as a result of general revenue pledge changes.

Measure	Campus Financing Benchmarks	
	10 Year Projections (as of 4/20/2015)	Approval Threshold
Debt Service to Operations	5.3% (max, FY 2018)	6.0% (max)
Expendable Resources to Debt	1.2x (FY 2014)	1.0x

The metrics used to determine financing feasibility are defined below.

Measure	Definition
Debt Service to Operations (%)	$\frac{\text{Annual Debt Service}}{\text{Total Operating Expenses}}$
Debt Service Coverage (x)	$\frac{\text{Operating Income} + \text{Depreciation} + \text{Interest}}{\text{Annual Debt Service}}$
Expendable Resources to Debt (x)	$\frac{\text{Expendable Financial Resources (unrestricted net assets} + \text{temporarily restricted net assets} - \text{net investment in plant)}}{\text{Total Debt Outstanding}}$