

TO THE MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS:

ACTION ITEM

For Meeting of July 19, 2005

**AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE
CAPITAL IMPROVEMENT PROGRAM FOR DAVIS HALL NORTH REPLACEMENT
BUILDING, BERKELEY CAMPUS**

EXECUTIVE SUMMARY

- Campus: Berkeley
- Project: Davis Hall North Replacement Building
- Action: Approval of budget augmentation
- Total Cost: \$161,490,000 to be funded from the State through the California Institutes for Science and Innovation program (\$87,325,000), gifts (\$54,165,000), and external financing (\$20,000,000)
- Previous Actions: September 2001: P-only funding approval for project (\$6,300,000)
January 2002: Certification of EIR and LRDP amendment
January 2003: Approval of project budget (\$117,650,000)
February 2003: Approval of project design
- Project Summary:
- The project would construct a 78,000 asf building for the Center for Information Technology Research in the Interest of Society (CITRIS).
- Issues:
- Budget augmentation of \$43,840,000
 - External financing of \$20,000,000
 - Average building cost per gsf of \$673

RECOMMENDATION

The President recommends that the Committee on Grounds and Buildings recommend to The Regents that, subject to the concurrence of the Committee on Finance:

- (1) The 2005-06 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

From: Berkeley: Davis Hall North Replacement Building – preliminary plans, working drawings, construction, and equipment – \$117,650,000, to be funded from the State through the California Institutes for Science and Innovation program (\$87,325,000) and gifts (\$30,325,000)

To: Berkeley: Davis Hall North Replacement Building – preliminary plans, working drawings, construction, and equipment – \$161,490,000, to be funded from the State through the California Institutes for Science and Innovation program (\$87,325,000), gifts (\$54,165,000), and external financing (\$20,000,000).

A Key to abbreviations and the project description are attached.

KEY
Capital Improvement Program Abbreviations

S	Studies
P	Preliminary Plans
W	Working Drawings
C	Construction
E	Equipment
-	State Funds (no abbreviation)
F	Federal Funds
G	Gifts
HR	Hospital Reserve Funds
I	California Institutes for Science and Innovation
LB	Bank Loans or Bonds (External Financing includes Garamendi, Bonds, Stand-By, Interim and Bank Loans)
LR	Regents' Loans (Internal Loans)
N	Reserves other than University Registration Fee (Housing and Parking Reserves)
R	University Registration Fee Reserves
U	Regents' Appropriations (President's Funds, Educational Fund)
X	Campus Funds
CCCI	California Construction Cost Index
EPI	Equipment Price Index

2005-06 Budget for Capital Improvements
 and Capital Improvement Program
 Scheduled for
 Regents' Allocations, Loans, Income Reserves,
 University Registration Fee Reserves, Gift Funds,
 and Miscellaneous Funds

Campus and Project Title (Total Cost)					<u>Approved</u>			<u>Proposed</u> <u>2005-06</u>
<u>Berkeley</u>	P	\$	6,200,000	I	P		3,300,000	G
	W	\$	6,001,000	I	W		3,200,000	G
Davis Hall North Replacement	C	\$	75,124,000	I	C		\$17,340,000	G
Building	C	\$	12,325,000	G	C		\$20,000,000	LB
	E	\$	18,000,000	G				

(\$161,490,000)

BACKGROUND

In September 2001, The Regents amended the Budget for Capital Improvements and Capital Improvement to include preliminary plans for the Davis Hall North Replacement Building project, to be funded by the State through the California Institutes for Science and Innovation (\$6,200,000) and gifts (\$100,000). In January 2003, The Regents amended the Budget for Capital Improvements and Capital Improvement Program to include a total budget for the project of \$117,650,000 at CCCI 4375, to be funded from the State through the California Institutes for Science and Innovation program (\$87,325,000) and gifts (\$30,325,000). The Regents approved the project's design in February 2003. Approval is now requested to augment the existing budget by \$43,840,000 and to obtain external financing for the project, in order to accommodate recent increases in construction costs and market conditions that were unanticipated at the time the project was originally budgeted.

Status and Need for Augmentation

To expedite the construction schedule, the project was planned in two phases. The construction contract for the first phase (Bid Package No. 1) was awarded in May 2004 at a cost of \$15,281,000, which was \$1,200,000 above the pre-bid estimate. This work, which consists of site preparation, is substantially complete.

Bids for the new building (Bid Package No. 2) were received in July 2004 and exceeded the pre-bid estimate by about 60 percent. The campus examined the bids and undertook a strategy to redesign to reduce cost, while also pursuing additional gifts and alternative funding strategies.

After careful consideration of alternatives, the campus began redesign by selecting a new Executive Architect and thoroughly reviewing the project in order to identify cost-reduction opportunities. This review identified 18 major changes that could save money and improve

constructability. On the basis of these proposed changes, and with heightened emphasis on cost-effective design, a comprehensive redesign was begun in November 2004 to substantially reduce the cost of Bid Package No. 2. The result is a project that has a more efficient internal circulation plan and space layout, and is more straightforward in terms of architectural, structural, and mechanical systems. The campus has now achieved an estimated bid cost reduction for Bid Package No. 2 of some \$20 million compared to the July 2004 bid results.

The current project cost estimate is \$161,490,000. The increase in project cost is the combined result of a significant change in the construction cost environment, of cost escalation during the redesign and re-bidding period, and of increased project soft costs related to redesign and re-bidding.

Of the \$33,227,000 increase in construction cost, \$1,200,000 is a result of high bids on Bid Package No. 1. The bulk of the construction cost increase, \$32,027,000 for Bid Package No. 2, is due to extraordinary shifts in the national and regional construction markets that occurred in mid-2004. This shift reflected a significant change in the construction market context at time of bid. Among the factors related to this market dislocation are the declining relative value of the U.S. dollar, increased worldwide demand for commodities such as oil, steel, and cement, and intense statewide and regional competition for construction services, notably in the hospital, institutional, residential, and infrastructure sectors. A portion of the increase is also a result of a higher-than-anticipated premium associated with the small scale of the two-story microfab component of the project, an essential research facility that requires special systems and construction.

The increase of \$3,073,000 in external fees is a result of retaining a new architectural firm and aspects of the substantial redesign process. The increase of \$1,135,000 in internal fees reflects the extended duration of the project schedule for redesign and re-bidding. Surveys, plans, tests, and specifications increased by \$110,000 owing to the implementation of two discontinuous bid packages and increased advertising and printing costs.

Special items increased by \$700,000 owing to additional financing costs during construction. The project contingency has been increased by \$5,595,000 to reflect continuing volatility in the construction market.

Internal and external soft costs associated with the initial design effort total approximately \$7,442,000. The campus was forced to abandon these costs in order to secure the services of a new Executive Architect, and to achieve significant project cost savings. Standard accounting and University policies hold that it is inappropriate to capitalize such costs. Accordingly, the campus has provided funds from non-capital sources to cover the costs associated with the original design effort, and they are excluded from the total project budget of \$161,490,000 proposed for approval with this item.

The revised project would be re-bid in October 2005, with construction to begin January 2006 and to be complete May 2008.

This project would comply with the University of California Policy on Green Building Design and Clean Energy Standards dated June 16, 2004. 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.

CEQA Classification

In January 2002 The Regents certified the Northeast Quadrant Science and Safety (NEQSS) projects Environmental Impact Report in accordance with the California Environmental Quality Act (CEQA) that analyzed this project and other planned developments in the northeast quadrant of the campus and approved an amendment to the campus's Long Range Development Plan. In February 2003 The Regents adopted Findings and approved the project's design. The design has no substantial changes from the design as approved in 2003 and is substantially same analyzed in the NEQSS EIR.

(Attachments)

**PROJECT STATISTICS
DAVIS HALL NORTH REPLACEMENT BUILDING
CAPITAL IMPROVEMENT BUDGET
BERKELEY CAMPUS – CCCI 4375**

<u>Cost Category</u>	<u>Microfab Lab (\$)</u>	<u>Dry Research, Office, and Lecture Hall (\$)</u>	<u>Total Amount (\$)</u>	<u>% of Total</u>
Site Clearance	2,097,000	2,271,000	4,368,000	3.0%
Building	46,711,000	50,603,000	97,314,000	67.8%
Exterior Utilities	1,326,000	1,436,000	2,762,000	1.9%
Site Development	2,586,000	2,802,000	5,388,000	3.8%
A/E Fees ^(a)	4,717,000	5,111,000	9,828,000	6.8%
Campus Administration ^(b)	1,680,000	1,820,000	3,500,000	2.4%
Surveys, Tests	458,000	494,000	950,000	0.7%
Special Items ^(c)	4,742,000	5,138,000	9,880,000	6.9%
Contingency	4,560,000	4,940,000	9,500,000	6.6%
Total	68,875,000	74,615,000	143,490,000	100%
Groups 2 & 3 Equipment	16,000,000	2,000,000	18,000,000	
Total Project^(f)	84,875,000	76,615,000	161,490,000	

Statistics

	<u>Microfabrication Laboratory</u>	<u>Dry Research, Office, and Lecture Hall</u>	<u>Total</u>
Gross Square Feet (GSF) ^(d)	29,830	111,991	141,821
Assignable Square Feet (ASF) ^(d)	18,232	59,768	78,000
Ratio ASF/GSF (%)	61%	53%	55%
Building Cost/GSF ^(d, e)	\$1,566	\$436	\$673

Comparable University Projects at CCCI 4375

UC Benchmark was not applied for comparison purposes for this project due to the complex scope and site issues.

<u>Latest Approval*</u>	<u>Campus</u>	<u>Project</u>	<u>Total Ratio gsf/asf</u>	<u>Total Building Cost/GSF</u>
6/4/2003	Berkeley	Stanley Quantitative Biosciences and Bioengineering Facility	54%	\$418
11/29/2004	Los Angeles	CNSI Court of Sciences Building	63%	\$534
6/4/2003	San Francisco	California Institute for Bioengineering, Biotechnology and Quantitative Biomedical Research (QB3) Building	62%	\$460

* Date of latest approved CIB

- (a) A/E fees are the executive architect basic services contract at 8.9% of the contracted construction cost and a small reserve for “additional” basic services and reimbursables.
- (b) Campus administration includes project management and inspection.
- (c) Special items include special consultants, code compliance fees, hazardous materials assessment, advance planning and environmental reviews, project reviews, and relocations, totaling \$9,880,000, and interest expense totaling \$1,900,000.
- (d) 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.
- (e) Reflects cost excluding work done in Davis Hall south required by building site.
- (f) Excludes soft costs of \$7,442,000 related to the original design of the project.

FINANCIAL FEASIBILITY

(For Information Only)

The total project cost is \$161,490,000 at CCCI 4375 and would be funded from the State through the California Institutes for Science and Innovation program (\$87,325,000), gifts (\$54,165,000), and external financing (\$20,000,000).

As of June 15, 2005, the receipt of gifts was as follows:

Gifts Received	\$ 0
Pledges Received	\$27,115,000
Gifts To Be Raised	<u>\$12,050,000</u>
(Subtotal)	<u>\$39,165,000</u>
<hr/>	
Equipment Grants Received	\$ 1,540,000
Equipment Pledges Received	0
Equipment Grants To be Raised	<u>\$13,460,000</u>
Total	\$54,165,000

Approval of stand-by financing of \$18,754,000 (an increase of \$3,429,000) and interim financing of \$12,050,000 is requested for PWC, and the campus will transfer \$5,361,000 in funds to the plant account prior to going out to bid, in order to meet Regental policy to have funds on hand for bid advertisement. No financing is required for the \$18,000,000 of research equipment, the balance of funds and grants for which are expected to be raised as the building nears completion. To the extent gifts are received prior to completion of the project, the amount discretionary funds and stand-by and interim financing will be reduced and outstanding balances will be repaid. The campus anticipates that it will be able to raise the total amount of gifts, but in the event the collection is insufficient, the campus has pledged the Berkeley campus Opportunity Fund as a source of repayment. Opportunity Funds are a portion of the indirect costs recovered from federal contracts and grants. Should the campus be unable to raise the additional gifts, up to \$12,050,000 of interim financing may have to be repaid over 30 years at 6.125 percent for potential annual debt service of \$887,000, which is included in Attachment 2, Summary Financial Feasibility Analysis. Should it prove necessary, the campus will return to The Regents at the end of construction to request the conversion of any remaining portion of the interim financing to external financing.

Based on long-term debt of \$20,000,000 amortized over 30 years at 6.125 percent interest, the estimated average annual debt service would be \$1,472,000. The campus has pledged its share of the University Opportunity Fund as a source of repayment. The University Opportunity Fund Debt Repayment Policy requires that campuses meet two financial tests: (1) that the amount pledged for debt payments shall not exceed 65 percent of the campus's total Opportunity Funds allocated each year, and (2) that no more than 33 percent of the campus's total Opportunity Funds allocated each year are used for debt service payment. The Berkeley campus meets both tests. In fiscal year 2009-10, the second full year of occupancy and first full year of principal and interest for the project, 53 percent of the campus's total Opportunity Funds allocated would be pledged for debt service.

In compliance with Regents' policy, all funds necessary to complete construction will be in hand prior to issuing the project for bid.

ATTACHMENT 2

SUMMARY FINANCIAL FEASIBILITY ANALYSIS

Project Title: Davis Hall North Replacement Building

Total Estimated Project Cost: \$161,490,000

Proposed Sources of Funding:

State	\$ 87,325,000
Gifts	\$ 54,165,000
External financing	<u>\$ 20,000,000</u>
Total	\$161,490,000

Proposed Financing Terms:

Interest Rate: 6.125%
External Financing Duration: 30 years

Campus Opportunity Fund Information (2009-10)¹:

Estimated Revenue

Pre- Off-the-Top-Generated Existing Garamendi Projects	\$ 2,742,000
Opportunity Funds Generated	<u>\$ 23,730,000</u>
Total	\$ 26,472,000

Estimated Debt Service

Long Term Financing Davis North	\$ 1,472,000
Potential Long Term Financing Davis North	\$ 887,000
Existing Garamendi Projects Debt Service and OMP	\$ 2,742,000
Other existing projects – debt service	<u>\$ 8,910,000</u>
Total	\$ 14,011,000

% Opportunity Funds Pledged 53%

Debt Service Coverage 1.89x

¹Fiscal year 2009-10 represents first full year of principal and interest payments.