

Office of the President
December 6, 2002

TO MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS:

ITEM FOR INFORMATION

MAJOR CAPITAL PROJECTS IMPLEMENTATION REPORT

Introduction

The Major Capital Projects Implementation Report, first presented in 1991, measures project delivery performance and identifies trends. This report describes the aggregate status of major capital projects underway at the end of fiscal year 2001-02, and summarizes management initiatives and market conditions affecting project implementation.

The University's ability to successfully implement its capital program depends on numerous factors. Factors within University control include project management and delivery strategies, academic program changes, and budgeting/funding strategies. Factors beyond University control include the construction industry bid climate and market conditions, code changes, requirements of state and other funding sources, and weather delays. This report will also address continuing volatility in the current construction market.

It is important to note that many project budget and schedule changes are driven by circumstances intentional, necessary, and beneficial to the University's interests (for example, program changes, the logistics of multiple project phasing, and incorporation of new funding opportunities). Because this mix of factors affects project delivery, simple indicators do not fully represent the complexity of factors affecting project implementation. Nonetheless, to assess the general condition of the program, to identify trends, and to develop initiatives to improve project delivery, two indicators are monitored: (1) project budget changes and (2) project schedule changes.

Status of the Capital Program

Major University capital project activity for fiscal year 2001-02 is shown in the summary table that follows. The compilation deals only with major capital projects, those over \$400,000 project cost (raised from \$250,000 for 2001-02). All figures referring to either budget or schedule changes represent the cumulative change over a project's duration (normally exceeding four years).

Summary of Major Capital Project Activity at Fiscal Year End

2001-2002

1. Total active projects	362
2. Total amount of original budgets	\$6,744,513,000
3. Cumulative approved budget changes (adj for inflation).....	\$189,400,000
4. Total year-end budget, (adj. for inflation).....	\$6,933,913,000
5. Percent Change from Original Budget	2.8%
6. Total year-end budget (including inflation)	\$6,942,326,000
7. Projects with budget changes	89
8. Projects with schedule changes	151

Table 1 following this item provides campus-level detail for the above categories. Attached Figures 1, 2, and 3 display eleven-year trends for the year-end budget totals, and for the number of active projects for each fiscal year; the percent change in project budgets (net changes divided by total amount of original budgets); and the percentage of projects with schedule changes.

From fiscal year 2000-01 to fiscal year 2001-02, the number of active projects increased by 51, from 311 to 362. During this time, 75 projects with budgets totaling \$436,809,150 filed Notices of Completion, while the total value of projects in design and construction (approved budgets) increased by a net of \$1.628 billion, from \$5.311 billion to \$6.933 billion (Figure 1). Projects related to enrollment growth, including housing, are reflected in the number of new projects in the program. Seismic improvements and renovation projects continue to represent a major component of the capital program.

The eleven-year trend in the percentage of net project budget augmentations shows an overall reduction from 6% in fiscal year 1990-91 to 2.8% in fiscal year 2001-02 (Figure 2). From fiscal year 2000-01 to fiscal year 2001-02 the percentage of net project budget augmentations decreased from 3.3% to 2.8%; 64 projects received budget increases and 25 projects received budget decreases. The percentage of projects with schedule changes decreased to 41% from 54% between 2000-01 and 2001-02 (Figure 3).

Conditions in the Construction Market place

Nationally, at the end of the third quarter 2002 Engineering News-Record (ENR) reported “year-to-date declines (in construction value) of 44% for office buildings, 29% for hotels, 25% for commercial buildings and 17% for the already depressed industrial market, according to the U.S. Department of Commerce. During the same period, public markets experienced year-to-date increases (in construction value) of 24% for hospitals and 16% for schools, while highway, water, and sewer work remained strong. In addition, low interest rates continued to keep the housing market growing.” Furthermore, ENR reported that the gap between the general building cost indices (which measure the production cost of labor and materials to the contractor) and contractor selling cost indices (which measure the amount that contractors are paid for completed buildings) has widened, indicating continued pressure on contractor margins.

In 2001-02, growth in the California economy moderated again in comparison to the previous

year, and non-housing construction costs leveled off or declined in some local markets after several years of rising costs and spiking phenomena. Housing construction remains strong, however, driven by pent up demand and declining mortgage interest rates. According to the California Department of Finance, valuation of new housing construction held steady at or near record levels in 2001-02, while valuation of non-residential construction contracted by 22% year-on-year. In general, cost pressures on UC projects moderated somewhat, although they continue to affect construction of student housing in some locations.

Initiatives Related to Cost Management and Project Delivery

The growing scale of the University's capital program and projected student enrollment increases continue to challenge the University to improve short- and long-range planning and implementation processes.

The Regents' Committee on Grounds and Buildings has continued to focus its attention on long-term planning, urban design, and development issues. The Berkeley and Davis campuses initiated a planned series of presentations by all campuses of their visions for long-term campus physical development, and will be followed by other campuses in turn through Fall 2003.

Specific areas to be addressed include:

- The vision guiding development of the character of the built environment on each campus
- Dedication of financial and human resources to achieve this vision
- How the campus is organized to ensure that this vision is addressed across all administrative activities and levels
- How the various physical planning elements are coordinated to support the vision, including Long-Range Development Plans, landscape and urban design concepts, Master Plans, precinct/neighborhood plans, and design guidelines
- Continuity of land use, infrastructure, and natural environment
- Integration of sustainability and life-cycle cost concerns in project development

In addition, during 2001-02 the University:

- Continued work on a new cycle of updates to campus Long Range Development Plans, to better accommodate projected enrollment growth;
- Responded to the ongoing effects of the energy crisis with initiatives to conserve energy, including participation in a statewide demand reduction program, bringing a large cogeneration project on-line at San Diego, and planning for co-generation capacity at additional campuses, including Irvine and Davis. A new thermal energy storage (TES) system was completed at Davis, and new TES projects were initiated at Los Angeles and Riverside. Berkeley and Santa Cruz have begun study of the costs and benefits of photovoltaic arrays;
- Continued to address a shortage of student housing through expansion of housing bed count, adding approximately 600 beds by Fall 2001, and anticipate approximately 3,000 additional beds by Fall 2002;

- Continued aggressive implementation of a new campus in Merced, scheduled to begin classes in Fall 2004;
- Continued to support the development of campus project management capabilities by expanding the range, scope, and frequency of training programs and courses for campus personnel through the UC Project Management Institute. The range of topics has expanded to include invited forums on specific building types (hospitals, laboratories, and research park developments).
- Increased application of new UC project delivery methods such as CM @ Risk and Design/Build during FY 2001-02, with CM @ Risk being used to contract for over \$1 billion worth of new construction, primarily sophisticated laboratory buildings and hospital projects.

Summary

The University's dollar value of active projects increased during 2001-02 by a net of \$1.622 billion. Between 1994-95 and 1999-2000, the percentage of projects with schedule changes remained relatively constant with a declining trend for the past two years. The percentage of net budget augmentations have decreased from 6% in 1990-91 to 2.8% this past year.

During the 2001-02 fiscal year, the University began to experience relief from rising construction costs in some markets (though not across the board). While the construction industry remains strong in some sectors, including housing and institutional construction, flat economic growth continues to moderate increases in construction costs.

Campus financial and staff resources continue to be challenged by growth of the capital program to the unprecedented scale of \$6.933 billion. Meeting this challenge will require further development of the University's project management capability to remain effective in this economic environment.

(Attachments)

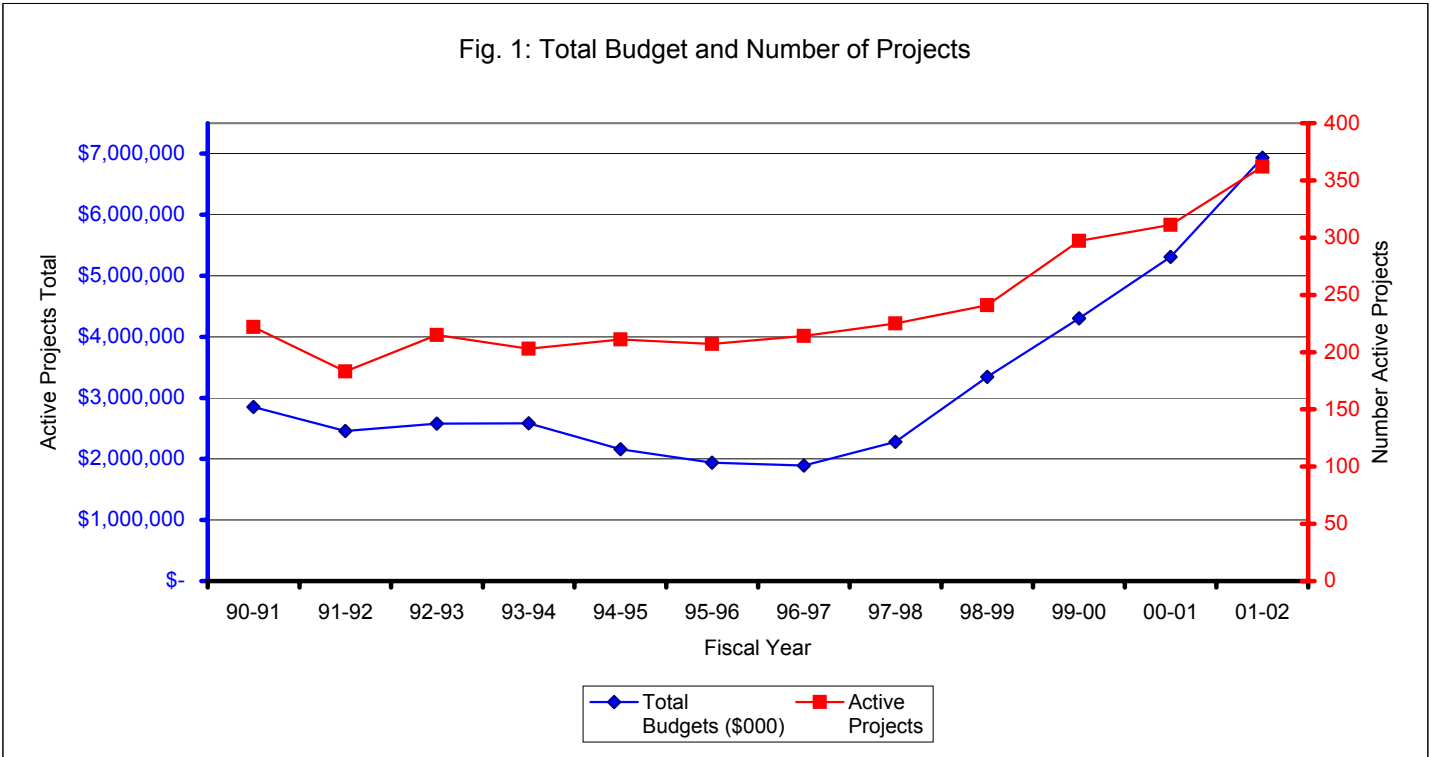
UNIVERSITY OF CALIFORNIA
MAJOR CAPITAL PROJECT SUMMARY
2001-2002

CUMULATIVE CHANGES TO BUDGET AND SCHEDULE SINCE PROJECT APPROVAL BY REGENTS

	1	2	3	4	5	6	7	8	9
	Active Projects	Original Budget (\$000's)	Budget at End of 01-02 (\$000's)	Inflation Adjusted Budget 01-02 (\$000's)	Total # with Budget Changes	Changes to Original Budget (\$000's)	% Change from Original Budget	# with Schedule Changes	% with Schedule Change
BERKELEY	56	722,029	758,612	754,699	12	32,670	4.5%	16	28.6%
DAVIS	61	796,994	816,056	813,915	23	16,921	2.1%	29	47.5%
IRVINE	28	643,070	658,764	658,764	1	15,694	2.4%	9	32.1%
LOS ANGELES	40	1,794,849	1,826,906	1,826,479	10	31,630	1.8%	25	62.5%
MERCED	7	263,117	269,056	269,056	3	5,939	2.3%	1	14.3%
RIVERSIDE	20	296,040	291,263	289,404	9	(6,636)	(2.2%)	4	20.0%
SAN DIEGO	49	728,800	782,681	782,673	15	53,873	7.4%	30	61.2%
SAN FRANCISCO	55	708,414	709,336	709,336	4	922	0.1%	18	32.7%
SANTA BARBARA	25	487,799	512,821	512,756	6	24,957	5.1%	9	36.0%
SANTA CRUZ	19	299,115	312,545	312,545	4	13,430	4.5%	8	42.1%
DANR	2	4,286	4,286	4,286	0	0	0.0%	2	100.0%
OP	0	0	0	0	0	0	0.0%	0	0.0%
	362	6,744,513	6,942,326	6,933,913	87	189,400	2.8%	151	41.7%
<u>BUDGET CHANGES</u>									
Reduced					25	(14,332)			
Increased					64	203,732			
<u>SCHEDULE</u>									
On schedule								211	
Schedule Changed								151	
STATE	78	2,371,627	2,431,232	2,422,819					
NON-STATE	284	4,372,886	4,511,094	4,511,094					
TOTALS	362	6,744,513	6,942,326	6,933,913	89	189,400	2.8%	151	41.7%

- (1) Active Projects: Projects with budgets exceeding \$400,000 on which funds were expended in 2001-2002 and had not been completed by June 30, 2002.
- (2) Original Budget: The sum of the original budgets for the active projects approved by The Regents.
- (3) Budget at End of 2001-2002: The sum of the project budgets at year end. This figure includes all increases and decreases made to the original budget since its approval.
- (4) Budget with inflation removed for state funded projects.
- (5) Total # with Budget Changes: How many of the active projects have had budget changes (increases or decreases) over the life of the project to date?
- (6) Changes to Original Budget: This is a net dollar amount of augmentations and decreases. State funded project budgets are adjusted to the original cost index for the project so that inflationary changes are not reflected as budget augmentations.
- (7) % Change Original Budget: The budget changes represent what percent change from the original budget, due to revised program scope or market conditions?
- (8) # with Schedule Changes: How many projects have had changes in their schedule since original approval?
- (9) % with Schedule Changes: The number of projects with schedule changes represents what percentage of the total campus projects?

Fig. 1: Total Budget and Number of Projects



Projects: All active projects with budgets exceeding \$400,000 for which funds were expended in 2000-01 and had not been completed (no Notice Of Completion filed) by June 30, 2002.

Dollars: This is the sum of all project budgets at end of 2000-01. The figure includes all increases and decreases adjusted to remove inflation made to the original budget since its initial approval.

Fig. 2: Percent Change to Active Project Budgets

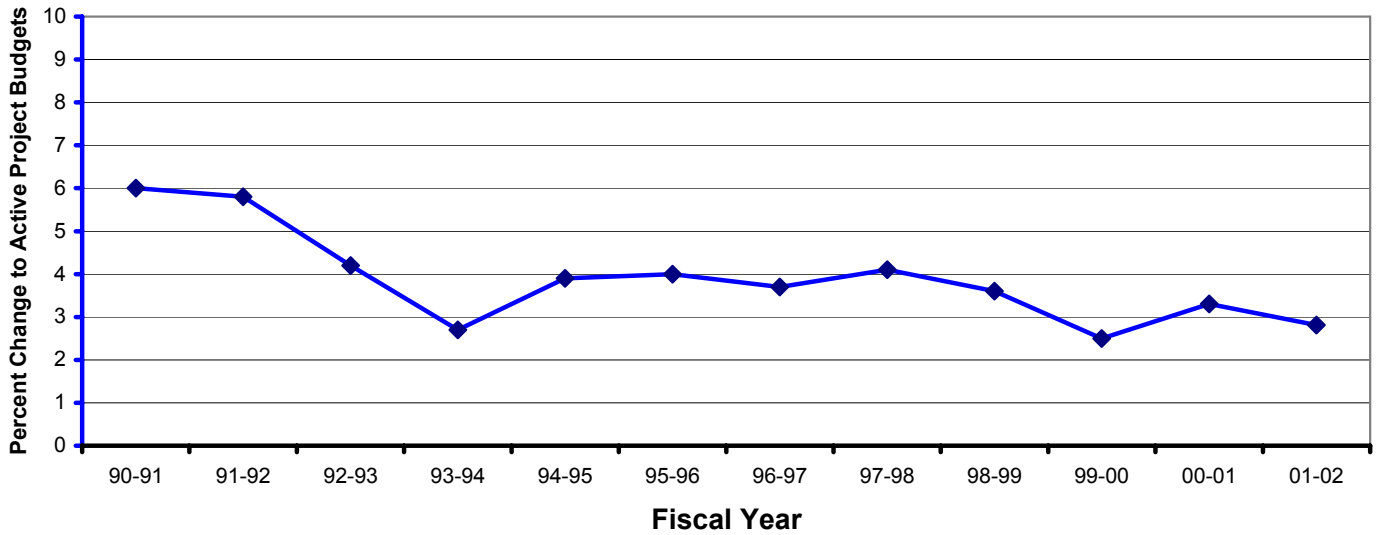
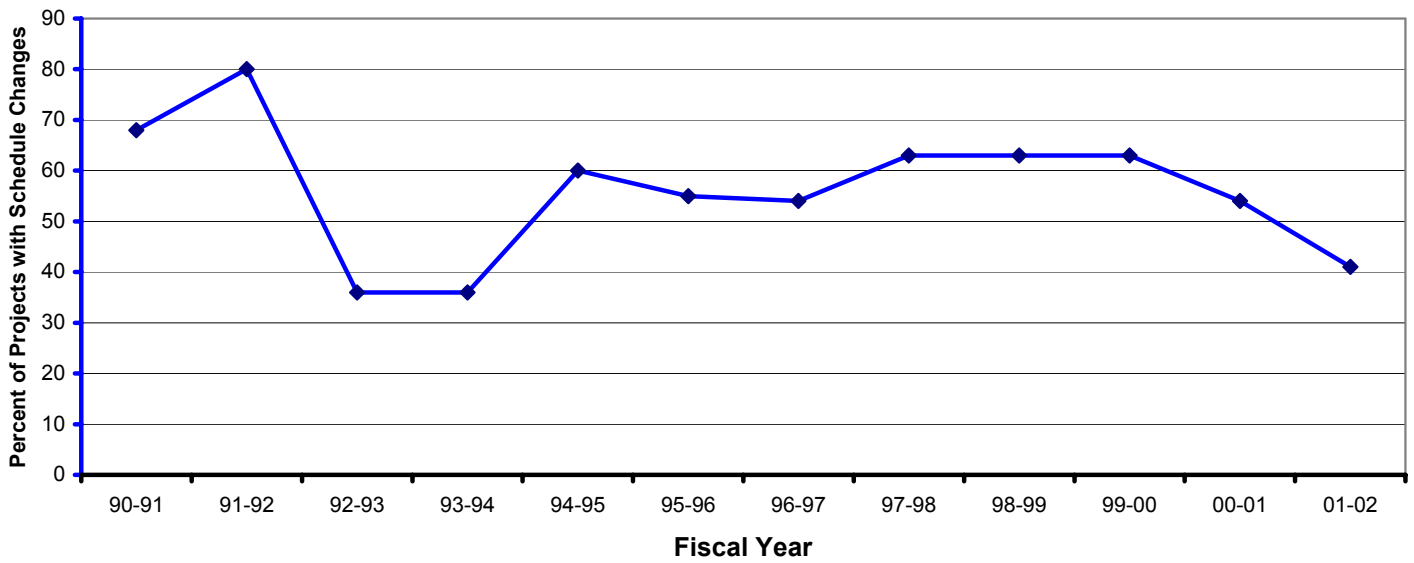


Fig. 3: Percent of Projects with Schedule Changes (%)



Projects: All active projects with budgets exceeding \$400,000 for which funds were expended in 2000-01 and had not been completed (no Notice Of Completion filed) by June 30, 2002.

Dollars: This is the sum of all project budgets at end of 2000-01. The figure includes all increases and decreases adjusted to remove inflation made to the original budget since its initial approval.