

University of California

ANNUAL REPORT ON MAJOR CAPITAL PROJECTS IMPLEMENTATION

Fiscal Year 2008-09

Budget and Capital Resources
University of California, Office of the President

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EXECUTIVE SUMMARY

The *Annual Report on Major Capital Projects Implementation* provides a status update for the University's major capital projects for FY 2008-09. During this period, the value of the active project portfolio of 291 projects was \$9.2 billion, representing a 13 percent increase over the previous year's total of \$8.1 billion for 280 projects. One hundred and twenty-nine projects were completed and 140 new projects added.

Active project budget augmentations, as a percentage of original budgets, decreased from 14.9 percent the previous year to 9.8 percent for FY 2008-09. This decrease was the result of favorable bidding conditions in FY 2008-09 as compared to the previous year when materials prices and contractor premiums reached record highs. The percentage of projects with schedule changes increased from 33.2 percent to 38.8 percent, due primarily to the State's economic crisis and the resulting suspension of State-funded projects.

In December 2008, the poor cash position of the State of California forced its Pooled Money Investment Board to freeze disbursements of capital outlay funds for state and local government entities. Sixty-eight UC projects totaling \$983 million were initially halted or suspended as a result of the freeze. A combination of State general obligation bond sales and the University's sale of short-term commercial paper to purchase a privately placed State of California general obligation bond, has allowed 44 projects to restart. Funding for the remaining 24 projects, totaling \$413 million, remains suspended.

The economic downturn and the US credit crisis in FY 2008-09 led to a dramatic drop in US construction spending. The major construction cost indices showed unprecedented declines, especially the "selling" indices that include overhead and profit. Unlike the previous year when bidders were scarce and sought after, this year brought about intense competition among contractors who vied for fewer and fewer jobs.

These downward pressures on overall construction costs were clearly beneficial to owners who had liquidity. Bids received on UC projects during this period were generally 12 to 30 percent lower than pre-bid estimates. However, this severe competition for projects has resulted in a 40 percent increase in bid protests as compared to each of the previous two years and has resulted in delays in awarding contracts.

The Architecture Billings Index which reflects the nine to twelve month lag between architecture billings and construction spending has continued to decline since early 2008. The forecast for FY 2009-10 indicates that construction spending will also continue to decline, although at a slower rate of 10 to 12 percent as the economy recovers.

University initiatives related to process improvement, cost management, and project delivery included the following:

- Streamlining of the capital approval process,
- Monitoring of the UCSF Best Value Method of Contractor Selection Pilot Program,
- Development of risk management strategies for complex projects,

- Expansion of the Statewide Energy Partnership Program, and
- Development of strategies for a greater range of private-public partnerships.

In addition to these initiatives, the University also addressed a number of capital project delivery issues relative to sustainability, consultant fees, housing goals, and the sharing of best practices.

With respect to sustainability, new major capital projects and renovation projects with a total project cost of over \$5 million, which received budget approval in FY 2008-09, complied with the *UC Policy on Sustainable Practices*. Of these projects, 67 percent are targeting a Silver rating or higher through the U.S. Green Building Council or the UC equivalency process, with the remaining projects targeting a Certified rating. A number of important revisions to the Green Building Design section of the *UC Policy on Sustainable Practices* also went into effect on July 1, 2009. These included increasing (for all but acute care facilities) the minimum certification level from LEED Certified to LEED Silver, and to address the state's water emergency, requirements were added to mandate at least two water efficiency credits for new construction projects.

ANNUAL REPORT ON MAJOR CAPITAL PROJECTS IMPLEMENTATION

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I. INTRODUCTION

A. Background and Purpose

The University of California *Annual Report on Major Capital Projects Implementation*, first presented in 1991, provides broad indicators of project delivery performance for major capital projects, defined as projects with a total project cost of over \$400,000¹. This Report presents the status of major capital projects underway at the end of FY 2008-09 with a cumulative portfolio budget of \$9.2 billion. Construction market conditions and future trends in the construction industry are also analyzed, as well as University initiatives undertaken to improve processes and manage project cost and risk.

The measures or indicators used to assess the general condition of the UC capital program are: 1) project budget change, and 2) project schedule change. It should be noted that the University's ability to implement its capital program is affected by a number of factors, only some of which are within the control of the University. Those within University control include project delivery methods, academic program changes, and budgeting and funding strategies. Factors beyond University control include the construction industry bid climate, local and global market conditions, building code changes, State and non-State funding requirements, and unforeseen physical and environmental conditions.

It should also be recognized that some project budget and schedule changes are driven by circumstances that are intentional, necessary and beneficial to the University's mission—such as incorporating program improvements, multiple project phasing, and leveraging of new funding opportunities.

Because these variables affect project delivery, simple indicators do not fully represent the complexity of factors that influence University capital project implementation. Nevertheless these key indicators of budget and schedule change provide valuable insights into program trends and where anticipatory or remedial action may be required.

B. Impact of Economic Downturn on State-Funded Projects

In December 2008, the poor cash position of the State of California forced its Pooled Money Investment Board to freeze disbursements of capital outlay funds for state and local government entities. Sixty-eight UC projects totaling \$983 million were initially halted or suspended as a result of the freeze. Of these, eleven projects received an exemption from the freeze and partial funding to continue.

¹ This threshold was increased to \$750,000 in 2009.

In April 2009, the University received proceeds from two general obligation bond sales totaling \$62.8 million and \$164.8 million respectively as well as lease-revenue bond sales totaling \$142.6 million. These funds allowed the eleven exempted projects to continue and fifteen additional projects to restart. In July 2009, the University raised \$199.8 million through the sale of short-term commercial paper and purchased a privately placed State of California general obligation bond that funded eighteen additional projects.

A total of \$413 million in funding for the remaining 24 projects, including seven to be funded from lease-revenue bonds, remains suspended.

II. STATUS OF THE FY 2008-09 CAPITAL PROGRAM

A. ACTIVE PROJECTS

In FY 2008-09, the cumulative budgets of the active project portfolio of 291 projects was \$9.2 billion, establishing a historic high and representing a 13 percent increase over the previous year's total of \$8.1 billion for 280 projects. This increase can be attributed primarily to the addition of the new \$1.69 billion Mission Bay Hospital at the San Francisco campus. The seismic correction or replacement of existing hospitals is mandated by Senate Bill 1953.

Figure 1 below illustrates the key program components of the FY 2008-09 active projects portfolio. The system-wide budget distribution reflects the impact of enrollment growth, seismic and life safety improvements, health sciences expansion, research development, and the statutory deadlines of SB 1953 for medical facility construction.

Fig 1: FY 2008-09 Active Projects Portfolio Program Components

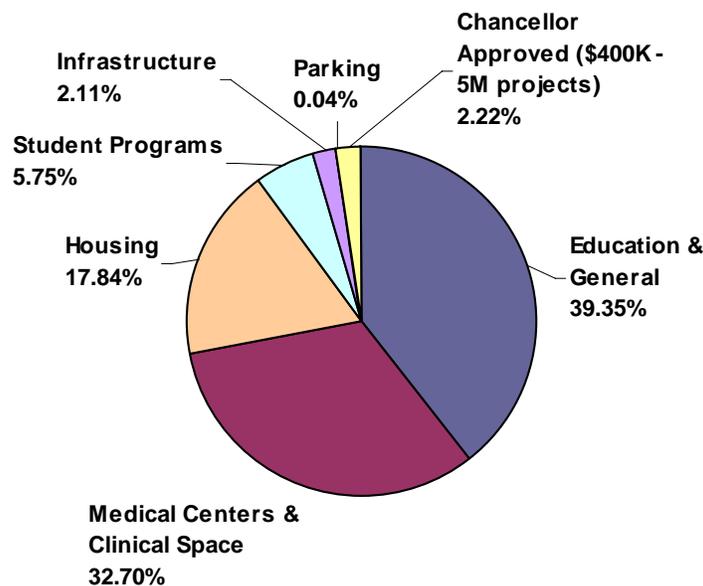


Table 1 below provides a summary of the status of major capital project activity at the end of fiscal year 2008-09 as compared to the previous year. All figures that refer to either budget or schedule changes, represent the cumulative changes from project budget approval until completion and do not include data prior to official budget approval.

Table 1: Summary Data of all Active Major Capital Projects at Fiscal Years Ending 2007-08 and 2008-09

	2007-08	2008-09
1. Total number of active projects	280	291
2. Total amount of original budgets	\$6,998,867,570	\$8,317,866,490
3. Cumulative approved budget changes	\$1,044,535,000	\$816,330,000
4. Total year-end budget (adjusted for inflation)*	\$8,043,402,570	\$9,134,196,490
5. Percent change from original budget	14.9%	9.8%
6. Total year-end budget (including inflation) *	\$8,125,619,570	\$9,181,802,490
7. Projects with budget changes	70	57
8. Projects with schedule changes (over 90 days)	93	113

*Adjusted for inflation excludes state inflation adjustments in the budget. Including inflation includes state inflation adjustment in the budget.

One hundred and twenty-nine projects were completed in FY 2008-09 and 140 new projects were added. With the addition of these new projects and augmentations to previously approved projects, the total value of active projects increased by \$1.1 billion.

Fig. 2: Total Budget and Number of Projects

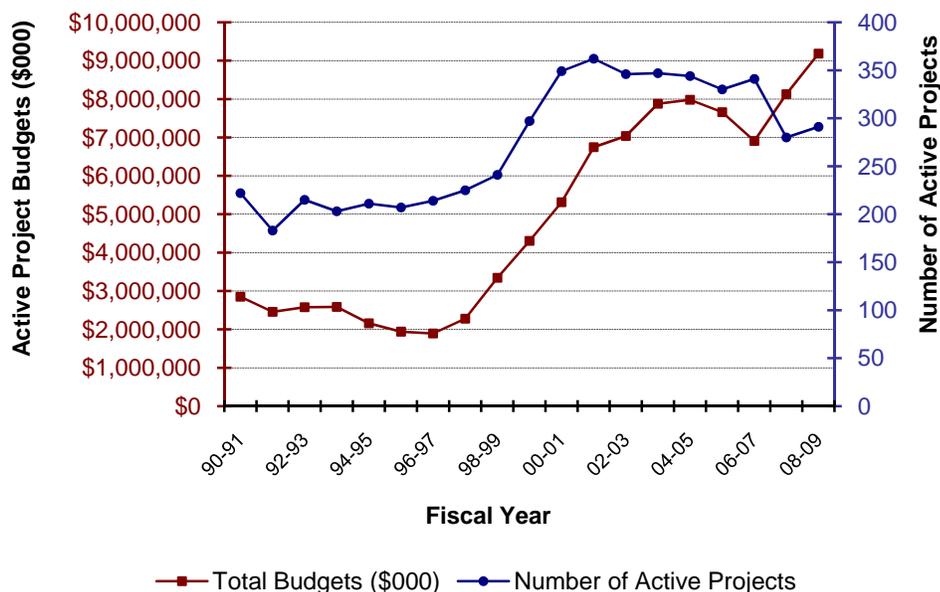
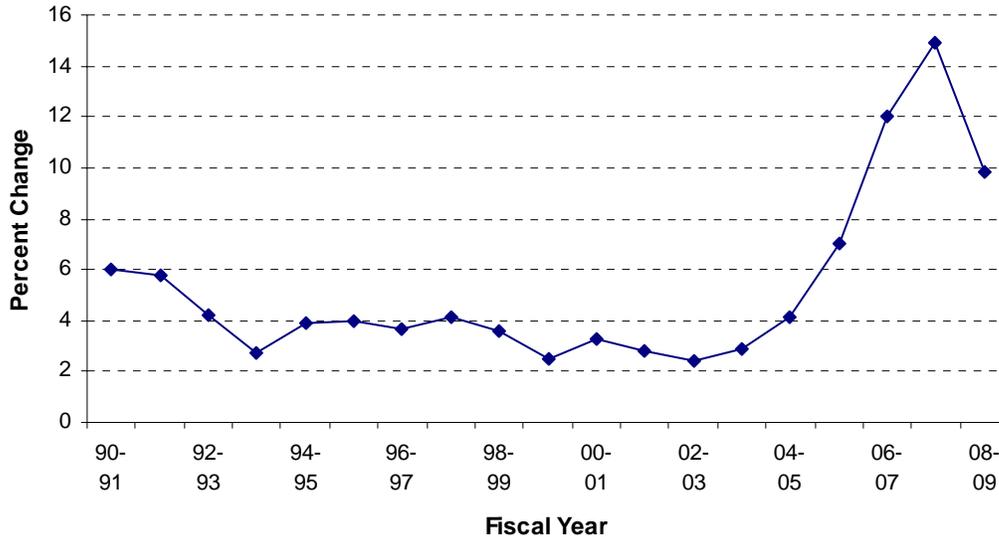


Figure 2 displays trends for the year-end budget totals and for the number of active projects for each fiscal year from FY 1990-91 through FY 2008-09. The large increase in the total project budget in FY 2008-09, and the corresponding slight increase in the number of projects from the previous year, is due primarily to the addition of the \$1.69 billion UCSF Mission Bay Hospital.

1) Budget Augmentations

Figure 3 displays trends in the percent change in inflation-adjusted project budgets (net changes divided by total amount of original budgets).

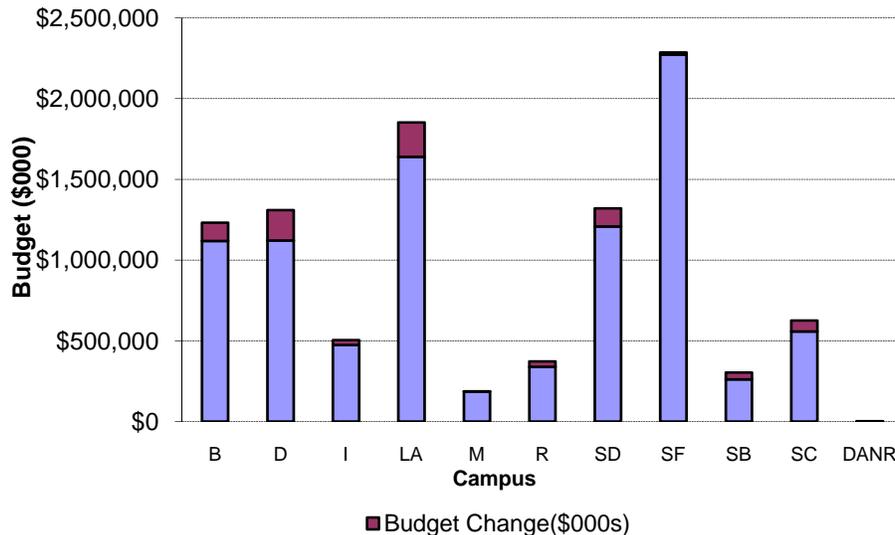
Fig. 3: Percent Change to Active Project Budgets



The reduction in budget augmentations in FY 2008-09 from 14.9 percent the previous year to 9.8 percent can be attributed primarily to the downturn in the economy that led to bids that were below pre-bid estimates.

Fig. 4 displays budget changes by campus.

Fig. 4: Budget Change by Campus



Unforeseen site conditions, market conditions, errors and omissions in construction documents, and design and construction delays are factors that contribute to the need for augmentations. However budget augmentations on a number of projects were due to scope increases determined to be beneficial to the project and made feasible through the availability of additional funding. For example, on the San Diego campus, a \$90.82 million augmentation for the Sulpizio Cardiovascular Center and Thornton Hospital Expansion project included the build-out of previously shelled space, expansion of the central plant, modifications to create inpatient rooms and procurement of additional equipment.

2) Schedule Changes

Fig. 5 displays trends for the percentage of projects with schedule changes from FY 1990-91 through FY 2008-09. The percentage of projects with schedule changes increased from 33.2 percent to 38.8 percent, due primarily suspension of State-funded projects.

Fig. 5: Project Schedule Changes

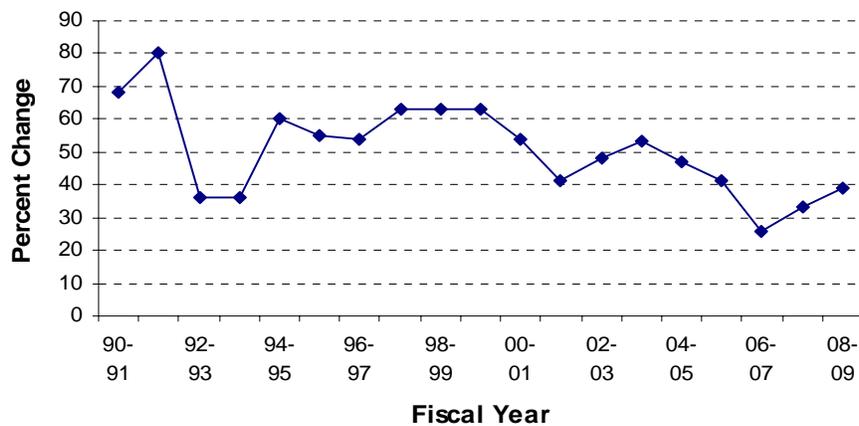
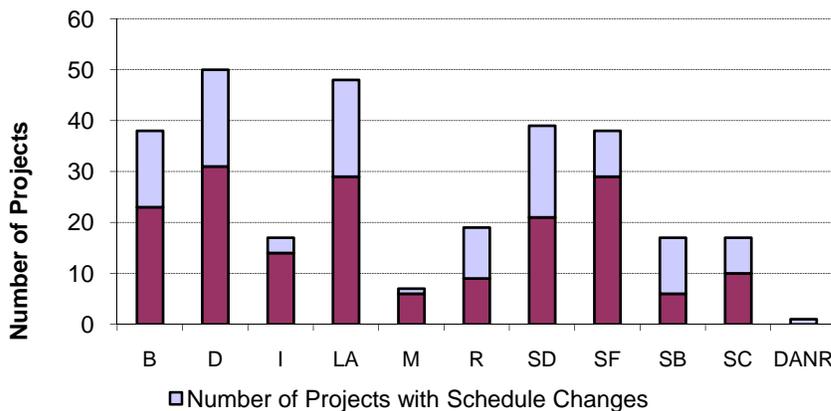


Figure 6 below displays the number of projects with schedule changes by campus.

Fig. 6: Number of Projects with Schedule Changes by Campus



The suspension of State-funding affected projects on every campus and resulted in schedule delays with potential budget impacts. In addition, some projects such as the Student Athletic High Performance Center at the Berkeley Campus and the Biomedical Sciences Facility at Santa Cruz, experienced delays due to protests and ensuing litigation.

B. COMPLETED PROJECTS

While the preceding statistics consider all active projects as of the last day of the fiscal year, it is important to examine projects completed during the fiscal year in order to discern more period-specific trends in the percentage of change to original budgets, as well as to examine the average number of days over the original schedule.

During FY 2008-09, 129 projects with budgets totaling \$ 1.69 billion were completed. Completed projects are those for which Notices of Completion were filed or a Notice of Substantial Completion was received with no major outstanding financial or contract issues.

Table 2: Summary Data of Completed Major Capital Projects

	2007-08	2008-09
1. Total number of projects completed	119	129
2. Total amount of original budgets of projects completed	\$ 826,917,740	\$ 1,445,863,770
3. Approved budget changes (adjusted for inflation)*	\$ 76,344,980	\$ 133,407,510
4. Total year-end budgets (adjusted for inflation)*	\$ 903,262,720	\$ 1,579,271,280
5. Percent net change from original budget	9.2%	9.2%
6. Total year-end budget (including inflation)*	\$ 914,259,720	\$ 1,691,229,280
7. Number of completed projects within original schedule	45	52
8. Number of completed projects over original schedule**	74	72
9. Average number of days over original schedule***	363	251

* "Adjusted for inflation" excludes state inflation adjustments in the budget. "Including inflation" includes state inflation adjustment in the budget.

** "over schedule" if over more than 90 days

***Average number of days exceeding the original schedule for the entire portfolio

The percent change in original budgets for projects completed in FY 2008-09 continued at 9.2 percent. This increase in budgets is due to the fact that many of these projects were budgeted prior to the market volatility of the years 2005 to 2007. As noted earlier, project changes can represent a benefit for the project, such as program updates that require redesign, new funding opportunities, shifts in funding strategies, and coordination with other projects.

III. CONSTRUCTION MARKET CONDITIONS FY 2008-09 AND FORECAST FOR FY 2009-10

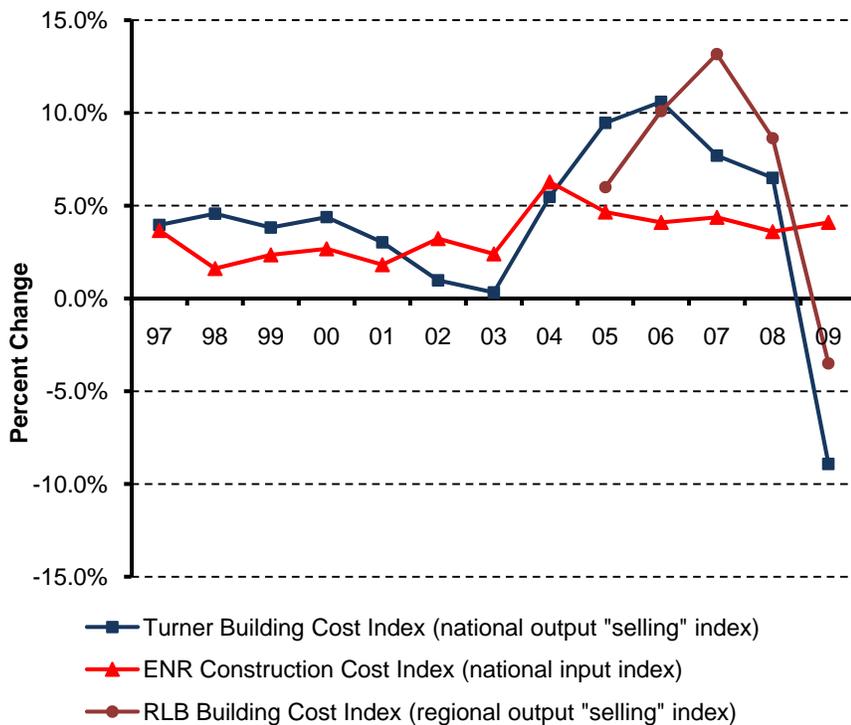
The economic downturn and the US credit crisis in FY 2008-09 led to a dramatic drop in construction spending. Unusually low bids, at 20 to 40 percent below estimates, during the second quarter of 2008 began to reveal the full impact of the financial crisis and the tightening of the credit market on the construction industry. The major construction cost indices showed unprecedented declines, especially the "selling" indices that include materials and labor as well as overhead and profit. Unlike the previous year when

bidders were scarce and sought after, this year brought about intense competition between contractors who vied for fewer and fewer jobs often including zero or negative margins in their bids.

As can be seen in Figure 7, the Turner Building Cost Index, a selling index that measures both material and labor costs and contractor overhead and profit, indicates a -8.9 percent decrease from the second quarter of 2008. Similarly the Rider Levett Bucknall's (RLB) selling index shows a -3.5 percent drop from a year ago.²

The Engineering News Record (ENR) Construction Cost Index, a regional input index that measures the cost of materials and labor that comprise a contractor's bid but does not include overhead and profit, showed an increase of 3.3 percent over this same period.³ This reflects the small gains and losses in material prices during this 12-month period. However a sustained price rise is forecast for the latter part of 2009.⁴ Labor costs have increased slightly due primarily to two-year union contracts negotiated prior to the financial crisis of 2008.

Fig. 7: Input and Output Cost Indices and Percent Change in Index



The difference between the input and output indices reflects the continuing impact of low margins charged by contractors. Thus, in FY 2007-08 California contractors continued to charge higher than normal premiums to protect themselves from material and fuel cost fluctuations, even as the overall construction market was tightening. In FY 2008-09, however, these margins were drastically cut, sometimes to zero or even a negative number, as contractors bid jobs simply to protect key personnel and stay in business.

² ENR 2nd Quarterly Cost Report: Hard Bids and Low Costs, June 29, 2009.

³ Ibid.

⁴ Reed Construction Data, Sept. 15, 2009.

These downward pressures on overall construction costs were clearly beneficial to owners who had liquidity. Whereas in the previous years UC projects often received one or two bids (and sometimes no bids), projects in this fiscal year typically received twelve to fifteen bids, generally twelve to thirty percent lower than pre-bid estimates as competition became fierce and pricing aggressive. Non-State funded projects were thus in a position to most benefit from these highly competitive bids while state funded projects faced serious funding challenges.

The cut-throat nature of competition posed risks as well. One result was a 40 percent increase in bid protests this fiscal year as compared to the past two years, which have in turn caused delays in awarding contracts. More litigation is also likely as contractors find their low bids will not cover eventual construction costs. As John Marino, Chief Estimator with Sierra West that compiles the two Lee Saylor indices, notes, "We have people coming in short and underbidding projects just to get work. It is likely they are counting on change orders to save them."⁵

Massive budget shortfalls in California have severely affected the housing and commercial sectors and contractors have migrated to the more stable institutional work funded by bonds passed in previous years. Los Angeles Unified School District's \$20 billion construction and modernization plan continues to be a major source of work.⁶ San Francisco's Proposition A provides \$887.4 million for the rebuilding of San Francisco General Hospital and hospitals across the State, including UC's medical centers, continue to either seismically upgrade or replace their buildings in order to comply with deadlines set by Senate Bill 1953.

The forecast for FY 2009-10 indicates that construction spending will continue to decline, although at a slower rate of 10 to 12 percent as the economy recovers. Karl Almstead, Turner Construction Company, Vice President responsible for the Turner Building Cost Index, notes: "With construction starts down in most sectors, market competition continues to drive declines in construction costs. However global and domestic economies appear to be stabilizing."⁷

The Architecture Billings Index, which reflects the nine to twelve month lag between architecture billings and construction activity, dropped precipitously in January 2009, then rose in March but dropped again in June. This downward trend has continued into the third quarter of 2009. Kermit Baker, Chief Economist for the AIA and responsible for the Architecture Billings Index, observes, "We may not have reached the bottom of this construction downturn. Architectural firms are struggling and concerned that the construction market will not improve even as soon as next year."⁸

IV. UNIVERSITY INITIATIVES RELATED TO PROJECT DELIVERY

Over the past five years, the University has implemented strategies to address construction market conditions, improve the University's working relationship with the construction industry, improve contract delivery methods, and optimize building design.

⁵ ENR 2nd Quarterly Cost Report: Hard Bids and Low Costs, June 29, 2009.

⁶ Bruce Buckley, Shaky Economy Leaves Firms Unsettled About What Lies Ahead, ENR September 2009.

⁷ Turner Construction Company, 3rd Quarter Cost Index.

⁸ AIA Construction Forecast Panel, July 29, 2009.

In FY 2008-09, the University continued to develop initiatives related to process improvement, cost control, and risk management that address the continued volatility of the construction market. The following are ongoing initiatives:

A. Capital Projects Approval Process Improvements

In March 2008 a delegated capital projects approval process was implemented with the purpose of allowing the Regents to focus their efforts on system-wide issues at a strategic level, rather than through project-by-project detailed reviews. This process improvement required campuses to develop a “portfolio” comprising a Ten Year Capital Financial Plan, a Physical Design Framework, and a Long Range Development Plan. Upon completion and approval by the Regents of these portfolios, Chancellors could approve non-state funded projects with a project cost of under \$60 million.

Streamlining of the capital approval process included development of guidelines and templates for campus portfolios, amendments of Standing Orders and Regents’ policy to allow for increased campus authority and the creation of a checklist of requirements for delegated projects.

As of this report date, the portfolios of three campuses, San Diego, Davis and Los Angeles, have been accepted by the Regents, and three delegated projects (under \$60 million) have been approved. Within these three sets of campus portfolios, approximately 25 projects have the potential to participate in the delegated process. Two additional campuses, Berkeley and Riverside, will present their portfolios to the Regents in November 2009 with the remaining campuses intending to present their portfolios in the first half of 2010.

In a future action, an accountability framework will be developed that includes an *Annual Campus Capital Program Report*. Key components of this report—a project data report, a physical environment review and an audit—will report on the campuses’ adherence to portfolios and performance on specific metrics of interest to the Regents and the President. The highest level capital program metrics developed in this Report will be considered for inclusion into the *President’s Annual Accountability Report*.

A second process improvement to the Regents’ review of capital projects was the development of templates for budget and design items. These new templates provide information to the Regents in a succinct, efficient manner that requires less time and effort for preparation as well as review.

B. Best Value Method of Contractor Selection Pilot Program

The San Francisco campus continues to successfully deliver projects using the Best Value Method of Contractor Selection that was authorized by Senate Bill 667 in 2007. This process allows the University to award contracts based on an optimum balance of price and performance rather than through price alone. Since the start of the program twelve projects valued at \$1.59 billion have used the Best Value project delivery method.

In FY 2008-09, six projects with project costs at \$1.3 billion (including a number of major contracts for the new Mission Bay Hospital) utilized Best Value for this purpose. Results to date include increased participation by contractors who have previously not bid UC work, improved on-schedule performance, better teamwork, coordination and cooperation between the contractor and the University, fewer claims for costs or time increases, and better quality of work.

An Interim Report to the Legislature on the UCSF Best Value Method of Contractor Selection Pilot Program will be made by January 2010.

C. Risk Management Strategies for Complex Projects

Past experience has shown that complex projects such as research laboratories and hospitals are prone to cost overruns, delays and litigation due to the difficulty of project coordination between the numerous specialty consultants and trades. The typical separation of disciplines and trades during the design and construction phases makes coordination particularly challenging often resulting in change orders and claims.

The following are two innovative approaches that the San Francisco campus is using to address this issue:

1) The Integrated Center for Design and Construction

Advances in software technologies have allowed for better team collaboration and document coordination, and currently many campuses utilize 3-D virtual programs such as Building Information Modeling (BIM) to detect errors or “clashes” in the design.

The UCSF Mission Bay Hospital team has taken this concept further by establishing an Integrated Center for Design and Construction (ICDC) during the design phase. The ICDC functions as a collaborative virtual organization located in a “big room” that houses UC staff, designers, contractors, and subcontractors, who act as a single entity. Members are provided with incentives to work together to reduce costs, develop innovative ideas to increase productivity, and minimize materials and labor.

Both the Irvine campus (in its New Hospital Project) and the San Francisco campus (in the Cardiovascular Research Building) utilized the “big room” concept but because of timing were able to initiate the process only during the construction and construction documents phases of the respective projects rather than during the design phase.

Collaboration at the early design stage of a project allows for input into cost targets by those who will be responsible for designing and building the work. Because the project is being designed in virtual 3-D and the design process includes those who will build the building, problem issues are expected to be resolved in the ICDC rather than during construction.

UCSF has also been the beneficiary of lessons learned and sharing of best practices at the Los Angeles, Davis, and Irvine campuses where new hospital projects are under construction or have been recently completed. These include the critical issues of change management control, equipment procurement, transition planning, and overall design standards.

2) Lean Production Techniques⁹

The San Francisco campus has extended the advantages of Best Value contracting and BIM into construction production techniques that are typically employed in manufacturing. Generally in complex projects, poor construction logistics and the lack of cooperation among subcontractors are the cause for change orders, delays, and litigation.

Using lean production techniques subcontractors plan their logistics as they develop and complete their design and are usually able to fabricate directly out of the BIM model. The logistics of subassembly delivery and installation thus can proceed smoothly resulting in a high rate of production.

With the project divided into sequential components that terminate in incentive milestone dates, the project derives benefits from cooperative production planning, informational feedback and, the opportunity for continuous improvement. The Cardiovascular Research Building at the San Francisco Mission Bay Campus, currently under construction, is a successful example of the use of this combination of project delivery techniques. The result is few change orders, timely problem solving, and a high level of transparency.

D. The Statewide Energy Partnership Program

The Statewide Energy Partnership Program (SEP) includes over 900 energy efficiency projects at the campuses and medical centers. Over three years this program is expected to reduce annual system-wide energy costs by \$36 million and deliver an eleven percent reduction of total electricity usage and eight percent of natural gas usage system-wide.

Of these projects one hundred and five are major capital projects totaling approximately \$150,000,000. All of these energy efficiency projects are separate from any major capital outlay projects proposed for State funding by the University in FY 2010-11. Projects with short payback periods are given priority and include data center upgrades, climate control enhancements and monitor-based commissioning.¹⁰

⁹ “Lean” production, popularized by the Toyota Motor Corporation, is based on the key principles of eliminating waste and adding value through just-in-time, pull production and continuous improvement.

¹⁰ Monitor-based commissioning is a systematic, documented process where monitoring equipment is used for ongoing diagnostics to ensure that building systems are performing efficiently.

In March 2009, the Regents authorized \$247 million for SEP program funding of which approximately \$61 million will be provided through utility grants over the next three years. To date campuses have submitted applications for 132 projects with a portfolio cost of \$54.5 million. Approximately \$15 million of this amount will be offset by utility incentive grants.

E. Private-Public Partnerships

Donor development projects, where a donor assumes responsibility for funding and construction of 100 percent of a project, have now been employed at four UC campuses and at two agricultural field stations.

Privatized development employing a ground lease-leaseback structure, with an innovative approach to tax-exempt financing, is underway at the San Francisco campus and is in the planning stage at the Berkeley campus.

V. STRATEGIC GOALS AND POLICY IMPLEMENTATION

In addition to the initiatives and ongoing efforts to control capital costs through project management, design and construction delivery methods, the University also addressed the following capital project delivery issues during the year:

A. Sustainability

Every major capital new construction project, and renovation project with a project cost over \$5 million, which received budget approval during FY 2008-09, will comply with the *UC Policy on Sustainable Practices*. Of these projects, 67 percent are targeting a Silver rating or higher through the U.S. Green Building Council or UC equivalency process, with the remaining projects targeting a Certified rating. Six buildings received LEED¹¹ for New Construction (NC) certifications in FY 2008-09, bringing the total of LEED-NC project certifications on UC campuses to seventeen. All six of the buildings certified in FY 2008-09 earned LEED Gold ratings.

In FY 2008-09, 167 UC projects representing over 20.7 million square feet have been registered with the Savings by Design program. Through this program, utility companies are able to provide the University with design guidance regarding energy efficiency as well as incentives for actual energy savings. Expected incentives currently total \$6.8 million and \$4.8 million in energy avoidance costs will accrue to the University every year.

A number of important revisions to the Green Building Design section of the *UC Policy on Sustainable Practices* went into effect on July 1, 2009. These included increasing (for all but acute care facilities) the minimum certification level from LEED Certified to LEED Silver with a target of a LEED Gold rating. Campuses are also encouraged, where possible, to design and construct projects that

¹¹ LEED is a green building rating system developed and administered by the non-profit U.S. Green Building Council. The four levels of LEED certification, from lowest to highest, are Certified, Silver, Gold, and Platinum.

achieve energy efficiencies that outperform the state's energy code by at least 30 percent.

To address the state's water emergency, the policy now mandates at least two water efficiency credits in the LEED-NC rating system. In addition, revisions to the policy clarified sustainability requirements for privatized development projects and leased space.

B. Housing Goals

To ensure a greater sense of community and reduce greenhouse gas emissions from commuting, campuses have set targets for the percentage of students who live on campus. In FY 2008-09 the University has continued to address these housing targets by approving the design of housing projects that will add approximately 3,800 new beds.

C. Executive Design Professional Fees

The University reviewed and approved 33 requests for Executive Design Professional approvals for capital projects that have a total project value over \$5 million. The total construction value of these projects was \$795,089,680. The total amount of fees for basic architectural services totaled \$57,691,740, representing an overall weighted average fee percentage of approximately 7.2 percent of the construction value. All fees were within the current University fee guidelines.

D. Sharing Best Practices

The suspension of the Project Management Institute pending OP reorganization has curtailed the dissemination of best practices and other project management training that was available in previous years. Compared to fifteen trainings provided in 2007-08, in 2008-09 three trainings, funded by the UC/CSU/Investor Owned Utilities Energy Efficiency Partnership, were held regarding LEED Volume Certification and the use of LEED for Commercial Interiors for the greening of campus renovations.

In addition, a Contract Administrators Forum and two "UC and the Law" seminars (one in Northern California and one in Southern California) were held by the Office of General Counsel (OGC). OGC has also begun issuing a quarterly newsletter and a best practice bulletin that address legal and administrative issues. Because of the high volume of bid protests, a bulletin was issued on best practices with respect to minimizing bid protests.

Bi-monthly meetings among UC medical center project directors, Office of the President (OP) staff, and the Office of Statewide Health Planning and Development have continued as well as bi-monthly conference calls among UC Fire Marshals and OP staff. These meetings and conference calls provide a forum for the sharing of best practices and provide outreach to State agencies.

ATTACHMENT 1: ALL ACTIVE MAJOR CAPITAL PROJECTS AT FY END - 2008-09

Cumulative Changes to Budget (dollars) and Schedule Subsequent to Project Approval

	1	2	3	4	5	6	7	8	9
	Active Projects	Original Budget	Budget at End of 08-09	Inflation Adjusted Budget 08-09	Total # with Budget Changes	Changes to Original Budget	% Change from Original Budget	# with Schedule Changes	% with Schedule Change
Berkeley	38	1,002,017,000	1,118,722,000	1,115,434,000	6	113,417,000	11.3%	a 15	39.5%
Davis	50	929,763,000	1,121,177,000	1,118,729,000	7	188,966,000	20.3%	b 19	38.0%
Irvine	17	439,662,200	474,246,200	470,375,200	4	30,713,000	7.0%	3	17.6%
Los Angeles	48	1,421,106,000	1,640,300,000	1,633,203,000	7	212,097,000	14.9%	c 19	39.6%
Merced	7	181,258,000	185,939,000	182,948,000	2	1,690,000	0.9%	1	14.3%
Riverside	19	299,753,000	338,961,000	333,572,000	5	33,819,000	11.3%	10	52.6%
San Diego	39	1,094,987,000	1,208,438,000	1,206,771,000	9	111,784,000	10.2%	d 18	46.2%
San Fran	38	2,258,755,469	2,272,502,469	2,272,502,469	4	13,747,000	0.6%	9	23.7%
Santa Barbara	17	215,630,820	261,799,820	257,309,820	3	41,679,000	19.3%	e 11	64.7%
Santa Cruz	17	473,226,000	557,667,000	541,302,000	9	68,076,000	14.4%	f 7	41.2%
DANR	1	1,708,000	2,050,000	2,050,000	1	342,000	20.0%	1	100.0%
	291	8,317,866,489	9,181,802,489	9,134,196,489	57	816,330,000	9.8%	113	38.8%
BUDGET CHANGES			<i>Inflation Adjustments:</i>	<i>47,606,000</i>					
Reduced					6				
Increased					51				
SCHEDULE									
On Schedule								178	
Schedule Changed								113	
State	57	2,851,028,000	3,464,654,000	3,417,048,000					
Non-state	234	5,466,838,489	5,717,148,489	5,717,148,489					
TOTALS	291	8,317,866,489	9,181,802,489	9,134,196,489	57	816,330,000	9.8%	113	38.8%

Notes:

- (1) Active Projects: Projects with budgets exceeding \$400,000 on which funds were expended in 2008-2009 and had not been completed (no Notice of Completion filed) by June 30, 2009.
- (2) Original Budget: The sum of the original budgets for the active projects officially approved.
- (3) Budget at End of 2008-2009: 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. *Value of inflation adjustments shown in italics.*
- (5) Total # with Budget Changes: the number of active projects that 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 the percent of change from the original budget, due to revised program scope or market conditions.
- (8) # with Schedule Changes: The number of projects that have had changes in their schedule since original approval ("scheidung change" is defined as being "over schedule" by more than 90 days).
- (9) % with Schedule Changes: The percentage of the total campus projects with schedule changes.

- (a) Includes a budget increase for the Computational Research & Theory Building that includes costs for a highly efficient cooling of the supercomputers. Schedule delays are due to State funding suspension for a number of projects (Campbell Hall, Durant etc.) as well as litigation for the Student Athletic High Performance Center.
- (b) Includes augmentations for UCDMC Surgery and Emergency Services Pavilion that was budgeted before the 2004 cost escalations, and bid during the volatile construction market.
- (c) Includes augmentations for Santa Monica Orthopaedic Replacement Hospital due to design changes, unforeseen construction delays, and claim settlements. Added program for the Life Science Replacement Building is also included.
- (d) Includes a \$90.82 M augmentation for the Sulpizio Cardiovascular Center and Thorntom Hospital Expansion project that covers the build out of previously shelled space, expansion of the central plant, modification to create inpatient rooms, procurement of additional equipment, as well as adjustment for market conditions when the project was bid and financing cost.
- (e) Includes augmentations for Education and Social Science Building that was budgeted before the 2004 cost escalations, and bid during the volatile construction market. Schedule delays for a number of buildings including the Arts Buildign are due to the State suspension or freeze of funding.
- (f) Includes augmentations for scope added to two large projects (one housing and one State) and for two large State projects that were budgeted before the 2004 cost escalations, and bid during the volatile construction market.