



1111 Franklin Street
Oakland, California 94607-5200
Phone: (510) 987-9074
Fax: (510) 987-9086
<http://www.ucop.edu>

November 5, 2013

MEMBERS OF THE REGENTS' COMMITTEE ON GROUNDS AND BUILDINGS

Enclosed for your information is the *Annual Report on Major Capital Projects Implementation, Fiscal Year 2012-13*. This report describes the aggregate status of major capital projects underway at the end of the 2012-13 fiscal year and summarizes management initiatives and market conditions affecting project implementation.

Also enclosed are two supplemental items to the report. One is the *2012-13 Active Major Capital Projects Report (Projects over \$10M)*; and the other is the *2013-15 Capital Projects Look-Ahead List*, an excerpt of the first two years of proposed projects in the *2013-23 Capital Financial Plan*. At your request, these supplemental items were provided to you in the last fiscal year and have been updated, consistent with the updated reports to The Regents.

If you have any questions about the report, Vice President Patrick Lenz would be pleased to speak with you. He can be reached by telephone at (510) 987-9101, or by email at patrick.lenz@ucop.edu.

Yours very truly,



Janet Napolitano
President

Enclosures

cc: All Regents
Chancellors

University of California

ANNUAL REPORT ON MAJOR CAPITAL PROJECTS IMPLEMENTATION

Fiscal Year 2012-13

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

October 2013

Table of Contents

I.	EXECUTIVE SUMMARY	3
II.	INTRODUCTION	3
III.	UC CAPITAL PROCESS	4
IV.	CAPITAL PROGRAM FY 2012-13	6
V.	CONSTRUCTION MARKET CONDITIONS	8
VI.	UC CAPITAL PROGRAM INITIATIVES	11

ANNUAL REPORT ON MAJOR CAPITAL PROJECTS IMPLEMENTATION

Fiscal Year 2012-13

I. EXECUTIVE SUMMARY

The 2012-13 *Annual Report on Major Capital Projects Implementation* provides an update on the University's in-progress Capital Improvements Program. The report provides the status of major capital projects (projects over \$750,000), including budget and schedule changes and projects completed in the last fiscal year, as well as overviews of campus capital programs and project achievements, past and forecast construction market conditions, and University initiatives for improving project planning and delivery.

University-wide, 195 major capital projects totaling \$6 billion were active in Fiscal Year 2012-13, representing a fourteen percent dollar-volume decrease from the \$7 billion total for 208 active projects in FY 2011-12. Continuing last year's trend, this year there was again a net decrease in the cumulative changes to the total active project budgets. Cumulative project savings were greater than cumulative project augmentations, resulting in total active project budgets being reduced by two percent compared to their original budgeted amounts. By contrast, in 2011-12 aggregate budgets for active capital projects had decreased by 2.2 percent, and in 2010-11, they had *increased* by 3.4 percent. Thirty-five percent of projects had schedule extensions compared to twenty-nine percent last year.

State funding for capital improvement projects has been reduced over the past five years as a result of the economic downturn and the State's goal to reduce overall bond debt. With the last voter-approved general obligation bond measure in 2006, the University had anticipated approval of a new general obligation bond measures in the past few voting cycles, but legislation to place bond measures on the ballot was not enacted. However, in 2013, AB 94 was enacted to fund State-funded debt service on capital outlay in the University's base budget, allowing the University to refinance State-funded debt and providing unprecedented flexibility in its State-funded budget.

The economic downturn that began in 2008 has severely affected the capacity of the construction industry even though economic recovery has begun. Many construction firms did not survive the extended recession, and many that did survive have less financial strength than before the downturn. This has resulted in decreased competition for major projects in many markets. Construction costs rose three percent overall in California over the last year. Campuses are generally seeing more projects bid at or over budget, compared with very low bids during the downturn. Construction costs are expected to continue trending up in the 2013-14 fiscal year.

The University will continue to employ an array of contracting strategies to deliver construction projects successfully. Such strategies include using Design/Build for the entire project, or early award of Design/Build contracts for selected critical trades, if the project funding schedule allows. UC San Francisco is pioneering Integrated Project Delivery (IPD) which incentivizes cooperation among owner, architect, and contractor, and is well-suited to address volatile market conditions. The University continues to explore new options for project delivery strategies that address the great diversity and complexity of project types in its capital program, with a goal of delivering projects that optimize value, quality, cost, schedule, and risk management. The University has 81 privatized projects to date planned, in progress, or completed, and continues to explore the use of this project delivery option as opportunities permit.

II. INTRODUCTION

Background and Purpose

The University of California (UC) *Annual Report on Major Capital Projects Implementation* provides broad indicators of project delivery performance for active and newly-completed major capital projects. This report documents major capital projects underway at the end of FY 2012-13 with a cumulative portfolio budget of \$6 billion. The report also assesses construction market conditions, trends, and UC initiatives to improve processes while managing project cost and risk.

The measures or indicators used to assess the general condition of the UC capital program are project budget changes and project schedule changes. It

should be recognized 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, program changes, and budgeting and funding strategies. Factors beyond University control include the construction industry bid climate, local and global market conditions, regulatory 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 many 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 provide valuable insights into program trends and can highlight where anticipatory or remedial action may be required.

Status of State-Funded Projects

State funding for capital improvement projects for the University has been reduced over the last five years as a result of the economic downturn and the State's objective to reduce over-all bond debt. The University had anticipated approval of general obligation bond measures in the past few voting cycles, but legislation to place bond measures on the ballot was not enacted.

General Obligation Bond funded projects

The last general obligation (GO) bond approved was in 2006, and the University has exhausted almost all remaining balances from available bond funds. The minor amounts remaining will fund the small budget for equipment for Merced's Science and Engineering 2 building and San Diego's SIO Research Support Facilities, appropriated in the 2013-14 Budget Act.

Assembly Bill No. 94

The State took action in 2013-14 to pass legislation, Assembly Bill No. 94, Chapter 50, Section 8 (AB 94), which adds, among other provisions, sections 92495 et seq. to the Education Code. This action provides unprecedented and exceptional flexibility to the

University that no other State agency has been given. The University is fortunate to have the benefit of this new change in how debt service funding for capital outlay is being handled at the State level. All State-funded debt service for UC capital outlay—both that related to general obligation bonds and to lease revenue bonds—is now included in the University's base budget. This addition to the base budget will be subject to any future general increases to the base budget.

The State lease revenue bond debt previously issued for the University's projects was restructured in October 2013 by the University to achieve cash flow savings to be used to help fund the employer's contribution into the University of California Retirement Plan, thereby allowing the potential for General Funds to be redirected to other University priorities.

Also with this legislation, the University will be able to use a limited portion of its State General Fund allocation to finance the design, construction, and equipment of academic facilities to address seismic and life-safety needs, enrollment growth, modernization of out-of-date facilities, or infrastructure expansion to serve academic programs. AB 94 also includes a restructured legislative review and simplified project approval process for capital projects eligible for State funding. The ultimate use of the general funds is still under discussion within the University, but this action by the State does provide a mechanism for use of the funds for capital projects.

The flexibility on the use of funds and the commitment to annual budget increases over four years combine to give the University a degree of stability and predictability that has been absent in recent years, and allows the University to proceed with the planning needed to address high priority capital improvement needs.

III. UC CAPITAL PROCESS

Capital Project Delivery in the University Context

The UC Office of the President (UCOP) and the individual campuses have unique roles and responsibilities to coordinate and to deliver a successful capital development program. At UCOP, Capital Resources Management (CRM) provides coordination and oversight for the campuses. CRM serves to evaluate and recommend courses of action to the campuses and to UCOP leadership, to ensure

policy compliance, and to provide accountability reporting to the Regents and other stakeholders.

The campuses, in turn, have experienced staffs of budget officers, planners, design managers, construction managers, and construction building code and quality assurance inspectors. In its capital program planning, each campus develops a ten-year Capital Financial Plan—a strategic plan of specific projects prioritized to meet the campus mission, academic, and support needs—that fits within the context of physical and funding opportunities and constraints.

The public contract environment in which the University operates can be challenging in its constraints. UC capital projects are subject to the California Public Contract Code (PCC) to promote a fair, transparent, and competitive bidding environment. Some of the areas governed by the PCC include bidding procedures and strict restrictions on sole-sourcing of products. The campuses and CRM work together for continuous improvement in the delivery of quality facilities in the most cost-effective and timely manner, consistent with the research university environment and the constraints of public work. Different campuses may use a given project delivery method more often than others, depending on the particular circumstances of the local construction climate and individual projects. Factors such as skilled labor supply and cost, geographic proximity or remoteness to large metropolitan areas, local custom, and expertise in the contracting community influence these decisions, as well as project-specific factors such as size, complexity, prominence (in terms of location, design, or use), perceived risk factors, and schedule. For example, Design/Build may be considered for projects with tight schedules and well-defined programs and design parameters; CM-at-Risk takes advantage of early input and commitment by the contractor for complex projects; Multiple Prime Trade contracting can give the campus more hands-on control during construction to mitigate the costs and impacts of changes and delays, and can increase bid competition; and traditional Design/Bid/Build is often suitable for projects in competitive markets.

In a culmination of a successful effort by UCOP to sponsor legislation to expand campus options for better project delivery, legislation was enacted in October 2011 that extended the Best Value selection process beyond the successful pilot program at UCSF

to all the other campuses for an additional five-year term. Best Value allows the University to award construction contracts based on quality as well as low price, to help ensure project success; this method is especially well-suited to complex projects and specialized facility types.

Campuses coordinate with CRM in the early stages of projects to discuss business case analysis, scope, schedule, budget, justification, and other issues specific to each project. CRM provides guidance to campuses on project schedule and approval milestones, budget and funding feasibility, alternatives analysis, environmental and physical planning requirements, delivery methods, contracting and other policy requirements, and on any special issues that might rise to the level of Regental concern. When projects are submitted to UCOP for Regental or senior administrative action, CRM provides staff analysis and recommendations, and coordinates issues related to the action with associated UCOP offices as needed, including the Office of the General Counsel, Office of the Secretary and Chief of Staff to The Regents, Capital Markets Finance, and senior administrators. The types of actions (which may occur separately and/or in different combinations) include budget, design, environmental, physical planning, finance, and real estate approvals. Projects with any funding provided directly by the State additionally and separately require approval of Preliminary Plans by the California State Public Works Board (SPWB), approval of Construction Documents with permission to proceed to bid by California State Department of Finance (DOF), and permission for award of bids by DOF. These are also subject to a Labor Compliance Program.

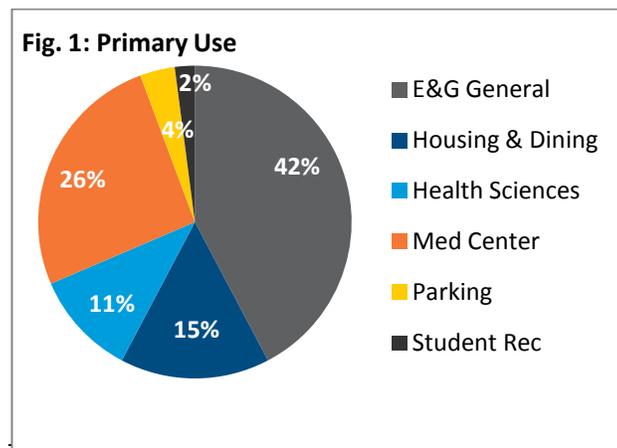
Under new legislation passed in 2013, AB 94, the University has been given flexibility in the allocation of savings in State-funded debt service for capital projects. The savings are available for use in funding State-eligible capital projects; for such projects, the University will be responsible, on behalf of the State, to review and approve projects at suitable milestones, and provide ongoing monitoring and reporting to the State.

Once a project receives necessary approvals and project funding, responsibility for successful completion rests with each campus. Regular project reporting for status of budget and schedule occurs annually for projects without State funding, and

quarterly for State-funded projects. CRM has established protocols to communicate with each campus monthly to provide early notification to the President and the Regents of significant project challenges and potential changes. In addition, this annual Major Capital Projects Implementation Report provides information on the overall performance and status of the University's capital program.

IV. CAPITAL PROGRAM FY 2012-13

Overall, campuses continue successfully to deliver a large and active capital program, using a variety of strategies to respond to local market conditions, manage risk, and complete projects in furtherance of the University's mission and the campuses' academic and support needs.



Primary use represented is a percentage of dollar value.

Active Projects

All projects that were active (with approved budgets and in design or construction as of June 30, 2013) are included in this report. Thus, the data represent a snapshot of a cumulative process representing several years of ongoing efforts, and are not confined to the events of FY 2012-13.

The primary building types included in the FY 2012-13 active projects portfolio are shown in Figure 1. The systemwide distribution reflects the impact of enrollment growth, health sciences expansion, research development, capital renewal, provision of more on-campus housing, and the statutory deadlines of Senate Bill 1953¹ for medical facility construction.

¹ Senate Bill 1953 requires seismic evaluations and compliance plans that will attain specified performance

The cumulative budget of the portfolio of 195 active projects was \$6 billion, a fourteen percent dollar-volume decrease from the previous year's total of \$7 billion for 208 projects.

Table 1 provides the aggregate status of major capital project activity at the end of fiscal year 2012-13, as compared to the previous fiscal year end. All values that refer to either budget or schedule changes represent the cumulative changes from project budget approval until that fiscal year-end, and do not include data prior to official budget approval.

Table 1: Active Major Cap Projects at Year End

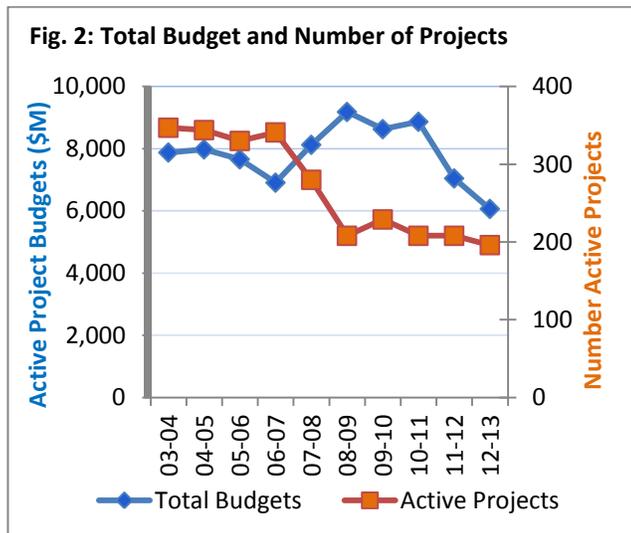
	2011-12	2012-13
Number of active projects	208	195
Amount of original budgets	\$7,181 M	\$6,142 M
Cumulative approved budget changes	*-\$171 M	*-\$125 M
Year-end budget (excludes inflation**)	\$7,010 M	\$6,017 M
Percent change from original budget	-2.40%	-2.00%
Projects with budget changes	39	26
Projects with schedule changes (over 90 days)***	60	69
* LA & SF had cumulative savings of \$287M, off-setting augments at other campuses		
** "Inflation" refers to authorized inflation adjustments on State-funded projects		
*** "over schedule" if over more than 90 days		

In FY 2012-13, 114 projects were completed and 101 new projects were added. With the completion of older projects, the addition of new projects, cumulative augmentations to previously approved projects, and reversions of funding or reductions in budgets due to bid savings, the total value of active projects decreased by \$1 billion (excluding adjustments for inflation). Figure 2 displays trends for the year-end budget totals and for the number of active projects for each fiscal year from FY 2003-04 through FY 2012-13.

While the total number of active projects was reduced by about six percent between FY 2011-12 and FY 2012-13, the total dollar value of active projects

categories for structural and non-structural elements at all acute care hospitals within a specified timeframe.

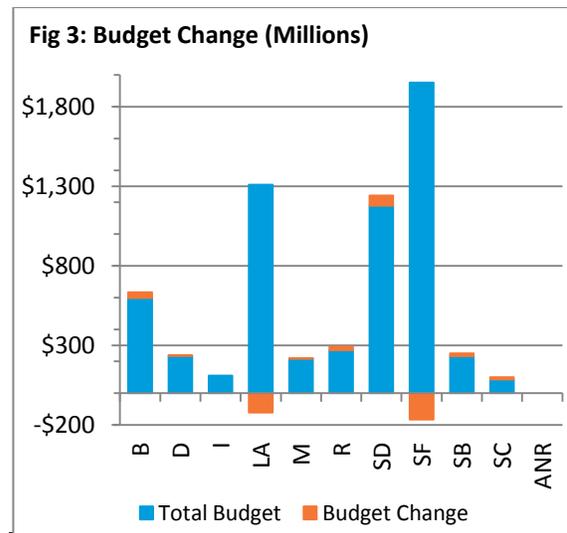
decreased by fourteen percent. This was primarily due to the completion of 12 large projects (all over \$60 million) totaling \$1.7 billion.



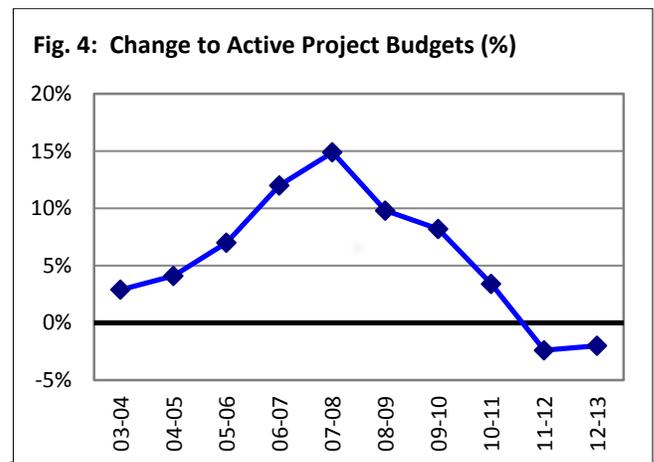
Budget Augmentations

Project budgets are augmented as necessary to cover additional scope, unforeseen conditions, or other unexpected events during design and construction. Project budget decreases occur primarily when construction bids come in under budget. The net of these increases and decreases is displayed in Figure 3 reflecting the trend in the percent change in inflation-adjusted project budgets (net changes divided by total amount of original budgets) over a ten-year period.

For the second year in a row, there was a net decrease in the cumulative changes to the total active project budgets—cumulative project savings were greater than cumulative project augmentations. The large bid savings in prior years for the UCSF Mission Bay Hospital and UCLA’s Northwest Campus Student Housing Infill project (footnoted in Table 1 above), combined with the completion of 12 large projects, are primarily responsible for total active project budgets being reduced by one percent compared to their original budgeted amounts as displayed in Figure 4. This compares with a total 2.2 percent reduction in FY 2011-12.



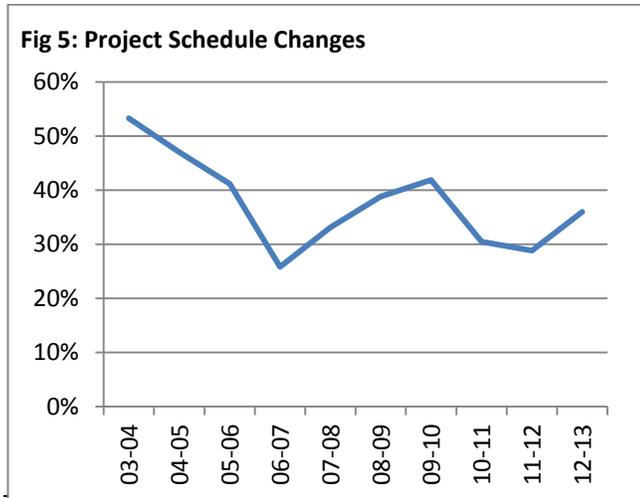
For those projects that were augmented, unforeseen site conditions, market conditions, errors and omissions in construction documents, design and construction delays, and for a few remaining projects, extended costs due to the State funding freeze starting in 2008 were contributing factors.



Schedule Changes

A project is considered “over schedule” if completion is delayed more than 90 days beyond the initially scheduled completion date. The suspension of State funding affected a few remaining active projects, resulting in schedule delays with budget impacts. Other types of delays include those caused by unforeseen conditions; protracted agency reviews—especially for hospitals; and campus and contractor performance during construction.

Figure 5 displays trends for the percentage of projects with schedule changes from FY 2003-04 through FY 2012-13. The percentage of projects with schedule changes increased from 28.8 percent in 2011-12 to 35.4 percent this past year. No particular pattern of causes is evident; however, higher bids resulting from market forces, and lengthy reviews by regulatory agencies for hospital projects have played a part.



Completed Projects

The compiled statistics for all active projects as of the last day of the fiscal year (June 30) are reported in Table 1 above. However, it is also of interest to examine the projects completed during the fiscal year (i.e., projects that are not included in the analysis of active projects, above) in order to discern specific project trends, if any, related to the percentage of change to original budgets, and the average number of days over the original schedule.

There were 114 projects with budgets totaling \$2.5 billion completed in FY 2012-13. 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.

The aggregate original budgets for projects completed in FY 2012-13 increased by one percent over the time they were active. Three projects² with

² UCD Chilled Water System; UCLA Pauley Pavilion Renovation and Expansion; and UCLA Weyburn Terrace Graduate Student Housing.

significant budget savings or reversions were completed, balanced by other projects with small-to-significant increases in their budgets. However, 79 percent of projects completed in 2012-13 never had any augmentations.

Table 2: Completed Major Cap Projects at Year End

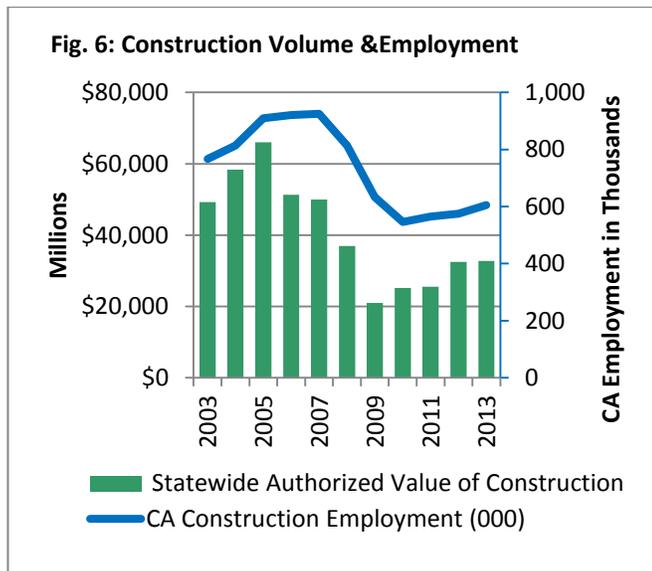
	2011-12	2012-13
Number of complete projects	92	114
Amount of original budgets	\$1,729 B	\$2,462 B
Cumulative approved budget changes	\$470 M	\$12M
Year-end budgets (excludes Inflation)	\$2,179 M	\$2,474 M
Percent net change from original budget	27.20%	1.00%
Total year-end budget (includes inflation/reversion)*	\$2,211 M	\$2,474 M
Number of completed projects within original schedule	44	79
Number of completed projects over original schedule**	48	35
Average number of days over original schedule***	471	432
<i>**"Inflation/reversion" refers to State inflation or reversion adjustments to project budgets</i>		
<i>**"over schedule" if over more than 90 days</i>		
<i>***Average number of days exceeding the original schedule for the entire portfolio</i>		

Also, as noted earlier, some project changes can represent a benefit for the project, though possibly extending the project time as well. These can be new funding opportunities, shifts in funding strategies, program updates that require redesign, and coordination with other projects.

V. CONSTRUCTION MARKET CONDITIONS AND COST DRIVERS

The economic recession that began in late 2008 has significant lingering effects on the construction industry in California. The California construction

market is beginning to recover from the recession that began in 2008.³



The recession was so severe that it has left some structural deficits in its wake. “Construction firms, once starved for work during the downturn, now say they cannot find enough qualified talent to take on new projects. The problem is likely to get worse, firms say.”⁴ These construction firms have lost key staff members, many of which are not returning to the construction industry. This is especially true in specific trades, as well as in the design professions. In many cases the seasoned professionals, skilled workers, project architects, and construction managers are simply not available. Karl F. Almstead of Turner Construction noted “contributing to the increase in construction costs is the limited capacity among trade contractors with the available resources to manage and work on large, complex projects.”⁵ *Engineering News Record* magazine reported that in a recent Associated General Contractors of America (AGC) survey that “of the skilled trades, contractors ranked laborers, carpenters, equipment operators, cement

³ California Department of Finance: www.dof.ca.gov/html/fs_data/indicatr/ei_home.htm, Retrieved 9/25/2013

⁴ Shortages of Craft Workers, Engineers Plague Contractors, *Engineering News Record*, Sept 16/23, 2013, p18.

⁵ Turner Construction Cost Index: <http://www.turnerconstruction.com/cost-index>, Retrieved 9/18/2013.

masons, and pipefitters and welders as the top five positions needing to be filled.”

The tightened financial market has made it difficult for contractors to regain the bonding levels they had before the recession, limiting both the number and the size of projects they can bid and perform.

Nationally, overall construction materials costs have risen only 1.4 percent in the last year,⁶ yet some materials such as concrete, roofing materials, and lumber as well as energy costs, rose 3-10 percent, and campuses are finding spikes in specific materials based on regional issues. There is competition in certain markets with very large construction projects (e.g., Apple headquarters and the Stanford replacement hospital), coupled with a depleted labor force that is not readily able to assume previous levels of construction. As the industry begins to recover, urban campuses are the first to experience construction escalation, while the campuses that are more remote from urban construction markets (Riverside, Santa Cruz, Santa Barbara, and Merced) are seeing fewer contractors interested in bidding on campus projects. The major indices consistently show an average 3 percent construction cost increase in the last year, and approximately 40 percent over the last decade.^{7, 8, 9, 10}

⁶ <http://www.amerisurv.com/content/view/11768/2/> Retrieved 9/16/2013

⁷ Turner Construction Cost Index: <http://www.turnerconstruction.com/cost-index>, Retrieved 9/18/2013.

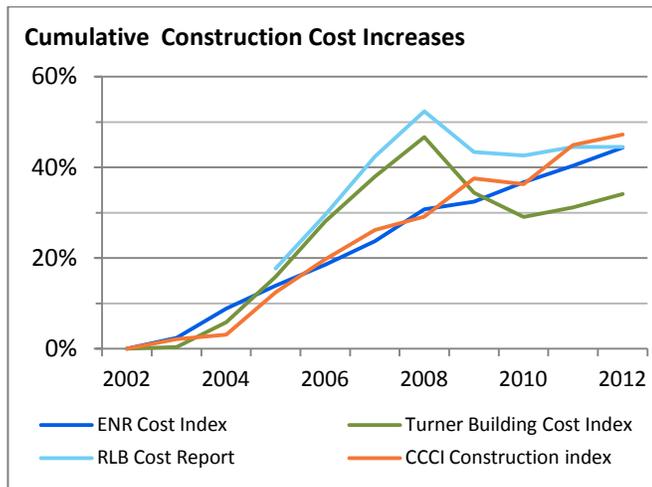
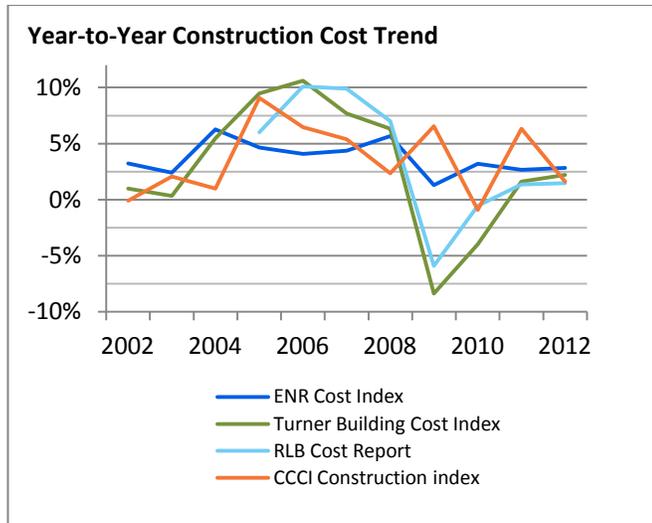
⁸ RLB Rider Levett Bucknall Construction Cost Report: <http://www.rlb.com/index.php/usa-and-canada/> Retrieved 9/18/2013.

⁹ *Engineering News Record* (ENR) Construction Cost Report http://enr.construction.com/economics/current_costs/ Retrieved 7/17/2013

¹⁰ California Department of General Services: <http://www.documents.dgs.ca.gov/resd/pmb/ccci/ccctable.pdf> Retrieved 7/17/2013

UC Trends

UC campus architects share recent bid results from their campuses each month on a round-table phone call. During the last year, a significant proportion of bids came in above construction estimates.



The trend over the previous few years with a majority of projects receiving favorable bids below cost estimate has ended. As of summer 2013, UC campus bid results are decidedly mixed. Approximately half of UC projects are bidding on (or under) budget, though bid savings, when there are any, are minimal. A number of campuses are seeing bids over budget by ten percent or more. All campuses are intently focused on getting tight, solid cost estimates, value engineering, and preparing bid packages with additive

and deductive alternates in response to bidding uncertainties.

In years 2005-08, bid protests averaged six per year. In FY 2010-11 there were thirteen bid protests and in FY 2011-12 there were 33 bid protests with seven bid protests advancing to a hearing, denoting significant competition for contract awards. While the University received 39 bid protests in FY 2012-13, only three protests advanced to public hearings, an indication that, while contractors may still be seeking to win bids through protests, campuses are able to resolve such issues in a way most contractors see as fair.

Contractors, as well as owners, are wary of the speed and strength of any economic recovery. Contractors are reflecting this caution with higher bids, to mitigate their perceived risk in delivery of a project that will complete two years or more after submittal of their bid. The University, as the owner, has few options to limit this bid hedging in such uncertain markets. Options to lock in project costs earlier and to reduce uncertainty include contracting the entire project earlier (Design-Build); simpler, repetitive design (only applicable on certain projects such as housing); and the potential for privatized development. The privatized development option often entails a protracted development procurement and negotiation phase that, due to the time involved, can negate any cost savings anticipated under this delivery method; and in many cases after protracted negotiations, privatized deals are abandoned because they don't "pencil out."

All UC campuses are increasingly using a variety of project contracting methods to best match delivery strategies to specific project needs. Such strategies, which may include Building Information Modeling (BIM), can facilitate cross-disciplinary coordination both before construction begins and throughout the construction phase, allowing faster and more timely resolution of design and constructability issues in lieu of expensive field solutions during construction. BIM can be used with all alternative delivery methods such as design-build; design-assist; and various forms of partnering during design and construction.

Contractor and Market Capacity

Many general contractors and subcontractors did not survive the recession; most major construction markets around the State have shortages of qualified

trade contractors with the size and financial stability to bid and bond major projects. Many of the trade contractors who are still in business are unable or unwilling to post bid bonds on multiple projects at any one time. They must pick and choose the projects that they commit to by bidding—generally, projects located near their home offices, and that are less complex, more repetitive and/or with less perceived risk. UC campuses located further from large cities, such as Riverside, Santa Barbara, Santa Cruz, and Merced, are experiencing difficulty in getting bid coverage as contractors are bidding projects closer to home that require less travel time for their staff, workers, and subcontractors. Campuses in or near large cities have difficulty in attracting sub-trades on more complicated/custom projects, such as art museums with complicated and unique structural systems or medical centers requiring specialty and high-quality contractors. All campuses are experiencing issues with specific trades at times. For example, in the past year Berkeley had difficulty attracting bidders for structural steel and elevators, at a time when there were large projects (Apple, Google) bidding at the same time.

New California Energy Code Impacts

In early 2013, the California Energy Commission (CEC) enacted significant changes in the energy standards of the California Building Code (CBC; also called “Title 24”). The new energy code takes effect on January 1, 2014; it increases requirements for energy conservation in new and renovated buildings, and is a major step forward in the CEC’s expressed intention of revising future energy codes (generally they are updated every three years) such that all new residential buildings will be required to achieve zero net energy by 2020 and all new commercial buildings to achieve zero net energy by 2030. Net-zero energy buildings (NZEBS) are buildings whose total annual energy use is provided by renewable energy sources; in the design and construction industry, NZEBs are usually designed to be extremely energy-efficient and sometimes have their own on-site renewable energy sources (e.g., solar, wind, and geothermal). Most of the University’s buildings fall into the “commercial” category under the code, but low-rise (3 stories or less) residential buildings—dormitories, graduate student housing, faculty housing, and most other types of low-rise housing—fall under the “residential” designation.

The CEC’s progression toward requiring all new buildings to be ZNEBs is in alignment with the climate action goals of the State of California and supports the University’s climate action and carbon neutrality goals. Given the significant current and future changes in the energy code requirements, CRM is commissioning a study in 2013-14 to examine the project cost impact of the latest code change and the University’s policy of improving building energy performance by 20 percent more than the code requires. The information will be of use to campuses in budgeting capital projects subject to the new code, and also will be useful in considering whether, and how, the University’s building energy requirements in the Sustainable Practices Policy should evolve as the California energy code continues to become stricter over the next several triennial code cycles.

VI. UC CAPITAL PROGRAM INITIATIVES

In FY 2012-13, the University made continued progress in process improvement, cost control, and risk management. Specific gains were made in the following areas:

- Passage of AB 94 to provide flexibility of funding for State-supportable capital investment
- Improved business case analyses
- Continuing use of the Delegated Process
- Best Value implementation by additional campuses
- Additional system-wide training
- Support for individual campuses utilizing new delivery methods

There are a number of ongoing efforts and initiatives related to the University’s capital program. The progress over the last year is described below.

Capital Program Leadership Forum (Forum)

The Forum, chaired by Vice President for Budget and Capital Resources Lenz (VP), comprises an individual from each campus appointed by the Chancellor to speak on his or her behalf for the campus capital program. The Forum met twice during the last year to address ongoing issues affecting the Capital Program.

The Forum discussed options in the absence of traditional State funding for capital projects, including debt restructuring. UCOP provided updates on capital process improvements including ongoing system-wide

training; assisting campuses with the implementation of best value and alternative delivery methods; raising the delegation of authority to Chancellors from \$5M to \$10M; and increased campus awareness of CEQA requirements to reduce risk.

The Pilot Delegated Process, for eligible projects \$60 million and under, continued this fiscal year. To date, the Chancellors have approved 72 projects, representing \$1.56 billion in total project costs; these projects previously would have gone to the Regents for budget, financing, and design/CEQA approval. CRM, Office of the General Counsel, and Capital Markets Finance review proposed projects to assess eligibility, documentation of adherence to policy, CEQA compliance, and financial feasibility. The campus is notified within 15 working days whether the project is eligible to be delegated to the Chancellor for approval. As the campuses and UCOP gain more experience with the process, streamlining refinements are being incorporated.

In spring 2013, the President increased the delegation of authority to Chancellors, the LBNL Director, and the Vice President for Agriculture and Natural Resources (ANR) for project budget approval to \$10 million project cost and under, from the \$5 million limit that had been in place for many years (Delegation of Authority 2574). In a related delegation, DA 2575, the President likewise delegated authority to the Chancellors, LBNL Director, VP-ANR and the Executive Vice President for design and CEQA approval for projects \$10 million and under—the previous limit for these approvals also had been \$5 million in project costs. These delegations have streamlined the approval process for campuses, improving efficiency, saving time, and allocating accountability to a level appropriate to the enterprise risk.

Within CRM, Capital Planning and Design Services have been collaborating over the last two years to combine two obsolete legacy capital project databases into a single new, more powerful database, while increasing ease of use and improved data analysis and reporting capability. The new database now enables campuses to enter all pertinent project data—from project conception through completion—into a single database. The new Capital Projects Database streamlines data collection, retrieval, and analysis by eliminating duplicative data entry, storing relevant data in one repository available to all with a need to

access capital project information, and providing a powerful capability for standard and ad-hoc reports—including information on the performance and status of the University's overall capital program in this annual report.

The Capital Programs Institute (CPI) has continued its robust training program, and has added additional programs as needed. Often, these are suggested by other UCOP units (e.g., Office of General Counsel or Risk Management Services), or requested by campuses. Notable sessions this year included:

- Contract Administrators workshop focusing on best practices in bidding, design contracts, and procurement
- Training in the new California energy code, covering significant new standards and requirements that are moving toward zero net energy buildings
- Training in energy audits for buildings
- Training in alternative delivery methods such as Best Value, Design-Build, and Integrated Project Delivery

Best Value Selection Process

A 5-year pilot program allowing Best Value selection at all ten UC campuses and medical centers became effective in January 2012. UC worked with representatives from the construction industry and UC governmental relations staff to develop mutually agreeable legislative language. Since enactment, five campuses and one medical center have begun developing projects to utilize this contractor bid and selection process. UCOP is working very closely in the development of appropriate documents, reviewing and approving all bid results before award, and compiling project/bid information and data for use in a legislative report by January 2016. Since the expansion of Best Value to the ten campuses, \$68 million worth of construction contracts have been awarded based on Best Value contractor bid and selection.

Alternative Delivery Methods

UC San Francisco continues to lead in areas of alternative delivery and sharing their expertise with the other campuses. The campus has used Integrated Project Delivery (IPD), the principles of Lean Construction, Design-Assist, and CM-at-Risk. In a number of these methods they have devised incentive programs to encourage and reward collaboration,

leading to project budget and/or schedule savings. A number of other UC campuses are beginning to explore these methods, and UCOP has been instrumental in advising them and arranging for ‘shadowing’ at UCSF, or scheduling specific experienced staff to visit/share their experience with the new entrants to these methods. Recently UCSF expertise has been shared with UC Santa Barbara and UCLA as they move into these areas.

CRM also works with campuses to develop and disseminate best practices, and to update standard UC construction contracts to reflect these practices, while continuing to mitigate risk to UC interests. UCOP’s CPI has tapped the considerable strength of UC San Diego’s construction program expertise and UCLA’s contract administration sophistication to support a curriculum that seeks to advance continual improvements in these areas at all the campuses.

UCOP Construction Services serves as a clearinghouse, when requested by campuses, to help structure the best contracting method for each campus’ specific projects in their unique contracting environment. Construction Services’ success in this effort is supported by staying current with all campuses on delivery methods, individual successes, and developing relationships with construction manager and contract administrators.

Construction Quality Assurance and Code Compliance

The University of California has its own authority to enforce building codes and standards. Nine of the ten campuses have their own building inspection departments and certified building inspection staffs (the remaining campus is seeking to bring these services in-house) who not only perform plan checking and construction code inspection in the same way municipalities and counties do, but undertake the added responsibility to inspect contractors’ work for conformance to plans and specifications—including quality assurance review of workmanship and installations. Such quality assurance review by the University does not relieve contractors of their responsibility to install work correctly, but can help catch problems and errors at a stage where they are more readily corrected. Some cases of latent construction defects in recent years involved outside-contracted, rather than in-house inspectors, on the affected projects. Some contractor errors might have

been observed and corrected by quality assurance inspection, and campuses have taken note of the advantages of including such oversight in the job duties of their construction inspectors. It has become a best practice within the University to involve waterproofing experts in the design phase of projects for which there are elevated risks for water infiltration—for example, exterior curtain walls or wood frame construction—and to call in special continuous waterproofing quality inspection during construction for such projects, or those with complex waterproofing detailing.

CRM is leading an effort to establish a Building Official Working Group to discuss and share standards and best practices for plan review, construction permitting, and construction inspection.

The Statewide Energy Partnership Program

The Statewide Energy Partnership Program (SEP) was re-authorized by the Regents on January 16, 2013 for a two-year period ending on December 31, 2014. The program includes 180 energy efficiency projects at the participating campuses. Over the two years, this program is expected to reduce system-wide energy costs by \$10.8 million annually and deliver reductions of four percent of total electricity usage and three percent of natural gas usage system-wide. It is also projected to yield a four percent reduction in the University’s purchased utilities “carbon footprint.”

By December 2013, the SEP will complete eight major capital projects with a total contract value of \$18.9 million. This project portfolio includes one new construction project (Vet Med 3B at UC Davis) that adds approximately \$1 million in incremental SEP funding for energy efficiency enhancements. The seven remaining energy efficiency projects are separate from any major capital outlay projects proposed for State funding. Projects include data center and lighting upgrades, climate control enhancements, and monitoring-based commissioning.¹¹

Altogether, the Regents authorized \$102.3 million for SEP program funding for 2013 and 2014, of which

¹¹ Monitoring-based commissioning is a systematic, documented process where monitoring equipment is used for ongoing diagnostics to ensure that building systems are performing efficiently.

approximately \$20.8 million would be provided through utility grants in 2013 and 2014. The Regents will be asked to authorize a continuation of the SEP in 2014. The next program cycle will span calendar year 2015, subject to California Public Utility Commission direction. Pending code and regulatory changes may impact program design and financial viability. Therefore, neither a program budget nor assurance of utility participation in grants for 2015 can be certain at this time.

Privatized Development

To date, 81 public-private partnerships (privatized projects), using a variety of transaction structures, have been developed or are in planning at UC to deliver facilities that meet campus needs.

Projects include instructional and office space, and research and clinical space; student housing, faculty for-sale housing, hotels, a recreational facility, and parking structures; and projects designed primarily to generate income from UC land.

Four key privatized project transaction structures (and the uses to which they are most applicable) include:

- Ground Lease (auxiliary uses—i.e., revenue producing from third party tenants/buyers);
- Ground Lease-Leasebacks (programmatic use by UC);
- Donor Development (donor controls project delivery; typically programmatic use on or off UC land); and
- Developer Build-to-Suit for purchase by UC on completion (aka: turnkey projects—typically programmatic use off UC land).

Privatized project ventures are considered to be financial transactions, rather than capital projects, because the University does not fund the design and construction; typically, budget and financing approvals are reviewed and approved by the Committee on Finance as real estate transactions. Thus, privatized projects are not tracked in the capital program and are not evaluated in this Report. However, design and CEQA approvals for these projects follow the usual, established practices of Chancellorial or Regental action, as applicable.

Ground Lease projects for auxiliary purposes include fifteen student and faculty rental housing projects, six faculty for-sale housing projects (representing multiple phases and product types), seven motel and hotel projects, and one parking structure. Donor development projects, where a donor assumes complete financial responsibility for funding and constructing a project, have now been employed at six UC campuses, at two agricultural field stations, and one natural reserve.

Given the University's success in executing privatized projects, this capital project delivery method is now evaluated alongside traditional delivery methods permitted under the Public Contract Code, particularly for auxiliary uses. The privatized project method has the potential to deliver facility design and construction quickly; however, the time to complete team selection and negotiate arrangements can offset some or all of these time savings. While the University's excellent financing makes it unlikely that a privatized project can produce significant savings compared to an effectively implemented UC delivery method, particularly for programmatic projects, the privatized approach may allow the University to augment its capital delivery system and shift project construction and operating risk, albeit by relinquishing overall project control.

University Controlled Insurance Program (UCIP)

The University Controlled Insurance Program (UCIP) provides general liability, excess liability, and workers' compensation for all enrolled projects with construction budgets of over \$25 million. The program has been in place since January 2010 and is a Working Smarter initiative that was designed to reduce the cost of insurance for University construction projects. In addition to savings that can range from one to three percent of construction costs, benefits of the program also include higher limits; dedicated per-project limits for construction defects; broad, uniform and consistent coverage; enhanced and coordinated safety; and potentially reduced cross-litigation expenses.

The project savings are audited as projects complete, so assessing UCIP's success and overall savings is not possible until a significant proportion of enrolled projects finish. As of June 30, 2013, the University

has enrolled 23 projects with a combined construction value of just under \$1.6 billion, but only two smaller projects to date are complete. Several more projects are expected to close out in the 2013-14 fiscal year, with the majority of the current 21 enrolled projects completing within three years. Meanwhile, more projects are expected to enroll in coming years as they reach the bid and construction phases.

The audited savings (as compared to estimated contractor insurance costs and not including UCIP program administrative costs) on the two projects that have completed is \$603,000. Savings have the potential to increase as contractors face a hardening insurance marketplace. In particular, the California worker's compensation insurance rates for construction risks have increased by more than 50 percent since 2010. In contrast, the UCIP costs have risen only about 2 percent and are locked in for projects that complete by January 2018.

In addition to the projects enrolled in the UCIP, the UCSF Mission Bay Medical Center project is covered by a stand-alone UCIP program that was placed separately. Initial estimates expect this project to reach more than \$835 million in construction value, with the project anticipated to close out in two years.

ALL ACTIVE MAJOR CAPITAL PROJECTS AT FY END - 2012-13
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 12-13	Inflation Adjusted Budget 12-13	Total # with Budget Changes	Changes to Original Budget	% Change from Original Budget	# with Schedule Changes	% with Schedule Changes	
UC Berkeley	22	\$598,124,000	\$632,624,000	\$632,624,000	1	\$34,500,000	5.8%	10	a	45.5%
UC Davis	23	\$188,745,006	\$192,830,006	\$192,830,006	1	\$4,085,000	2.2%	8	b	34.8%
UC Irvine	14	\$110,984,000	\$110,984,000	\$110,984,000	0	\$0	0.0%	6	c	42.9%
UC Los Angeles	51	\$1,308,526,000	\$1,186,857,000	\$1,186,857,000	8	(\$121,669,000)	(9.3%)	20	d	39.2%
UC Merced	5	\$216,812,000	\$221,444,000	\$221,408,000	3	\$4,632,000	2.1%	1	e	20.0%
UC Riverside	11	\$270,025,000	\$292,515,000	\$292,515,000	4	\$22,490,000	8.3%	9	f	81.8%
UC San Diego	23	\$1,178,082,000	\$1,241,393,000	\$1,241,172,000	3	\$63,311,000	5.4%	8	g	34.8%
UC San Francisco	28	\$1,951,160,000	\$1,786,557,000	\$1,786,557,000	3	(\$164,603,000)	(8.4%)	2	h	7.1%
UC Santa Barbara	11	\$231,729,764	\$251,147,764	\$251,147,764	1	\$19,418,000	8.4%	3	i	27.3%
UC Santa Cruz	7	\$87,452,000	\$100,559,000	\$98,915,000	2	\$13,107,000	15.0%	2	j	28.6%
TOTALS	195	\$6,141,639,770	\$6,016,910,770	\$6,015,009,770	26	(\$124,729,000)	(2.0%)	69		35.4%
<i>Inflation Adjustments:</i>				<i>\$1,901,000</i>						
BUDGET CHANGES										
Reduced	3									
Increased	23									
SCHEDULE										
On Schedule	126									
Schedule Changed	69									
	State	19	\$809,052,000	\$854,124,000						
	Non-State	176	\$5,332,587,770	\$5,162,786,770						
TOTALS		195	\$6,141,639,770	\$6,016,910,770						

- (1) Active Projects: Projects with budgets exceeding \$750,000 on which funds were expended in 2012-13 and had not been completed (no Notice of Completion filed) by June 30, 2013.
- (2) Original Budget: The sum of the original budgets for the active projects officially approved.
- (3) Budget at End of 2012-13: 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 ("schedule 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.

Reasons for Delay

- (a) Berkeley: Unforeseen conditions, contractor delays, redesign
- (b) Davis: Contractor delays, OSHPD review, design delay
- (c) Irvine: OSHPD delays, contractor delays, beneficial scope change
- (d) Los Angeles: OSHPD delays, contractor delays, rebidding
- (e) Merced: Redesign to accommodate building site change
- (f) Riverside: Rebidding, contractor non-performance
- (g) San Diego: Unforeseen conditions, rebidding, coordination in occupied facility, redesign, site access negotiations
- (h) San Francisco: Unforeseen condition
- (i) Santa Barbara: Redesign, rebidding
- (j) Santa Cruz: No new delays

2012-13 ACTIVE MAJOR CAPITAL PROJECTS SUMMARY (Projects over \$10M)

PROJECT			FUND		TYPE and USE		BUDGET			SCHEDULE			COMMENTS
Campus	PAN	Project Name	State	Non-State	Primary Use	Type	Total Original Bud	Cumulative Augments or Savings	Total with Adjustments	Approved Substantial completion	Actual or Revised Substantial Completion	Schedule Delays over 90 Days	
BERKELEY													
BK	912259	Berkeley Art Museum and Pacific Film Archive Seismic Replacement		X	Cultural	Reno	\$95,000,000		\$95,000,000	3/1/15	5/15/15		
BK	912017	Campbell Hall Seismic Replacement Building	X		Laboratory/Hospital	New	\$63,694,000		\$63,694,000	8/31/12	8/29/14	638	Delay in State bond sale, no change since 11/12
BK	912314	Computational Research and Theory Facility		X	Laboratory/Hospital	New	\$90,444,000	\$34,500,000	\$124,944,000	5/31/11	10/23/14	1,151	Augment occurred prior to 12/13; Schedule delay resulting from CEQA legal issues.
BK	912399	Electrical Switching Station 6		X	Infrastructure	Infra	\$15,200,000		\$15,200,000	7/31/12	12/2/13	399	Post-installation inspection revealed damaged high-voltage cables. Extensive forensics indicated damage at installation. Cables have been replaced, but final work delayed by unrelated campus wide electrical failures on Sept 12 & 30
BK	912562	Lower Sproul Improvements		X	Student Life	Combo	\$30,000,000		\$30,000,000	6/10/15	6/10/15		
BK	912520	Lower Sproul Projects		X	Student Life	Combo	\$193,000,000		\$193,000,000	6/10/15	6/10/15		
BK	912501	Solar Energy Research Center	X		Laboratory/Hospital	New	\$54,400,000		\$54,400,000	4/30/12	7/31/14	732	Initial delays from bid overruns in 2012. Additional delays result from owner-initiated changes to support evolving scientific needs.
DAVIS													
DV	951820	CNPRC Respiratory Disease center		X	Laboratory/Hospital	New	\$14,228,000	\$4,085,000	\$18,313,000	4/1/13	4/1/14	275	Project delays result from poor performing pre-engineered structure contractor. Campus scheduling concurrent commissioning and completion to meet revised schedule.
DV	952110	Jan Shrem and Maria Manetti Shrem Museum of Art	X		Cultural	New	\$30,000,000		\$30,000,000	9/1/16	9/1/16		
DV	951800	Tercero Student Housing Phase III		X	Housing/Dining	New	\$80,243,000		\$80,243,000	7/1/14	6/15/14		
IRVINE													
IR	990500	Business Unit 2	X		Classroom/Offices	New	\$48,371,000		\$48,371,000	11/1/14	12/11/14		
IR	994233	UCIMC Building 1A Renovation, Floors 2 and 3		X	Laboratory/Hospital	Reno	\$13,612,000		\$13,612,000	1/31/11	10/31/13	914	Licensing and OSPHD approvals were delayed. There was a late compliance requirement to provide additional fire-rated areas for trash storage.

LEGEND
 Project reviewed via Delegated Process
 Projects ahead of schedule or under budget

2012-13 ACTIVE MAJOR CAPITAL PROJECTS SUMMARY (Projects over \$10M)

PROJECT			FUND		TYPE and USE		BUDGET			SCHEDULE			COMMENTS
Campus	PAN	Project Name	State	Non-State	Primary Use	Type	Total Original Bud	Cumulative Augments or Savings	Total with Adjustments	Approved Substantial completion	Actual or Revised Substantial Completion	Schedule Delays over 90 Days	
LOS ANGELES													
LA	942610	Boelter Hall Lab Renovation		X	Laboratory/Hospital	Reno	\$11,900,000		\$11,900,000	6/30/13	11/30/13	63	No change in budget or schedule since 11/12
LA	945920	CHS South Tower Seismic Renovation	X		Laboratory/Hospital	Reno	\$219,902,000		\$219,902,000	3/31/13	12/31/14	550	No change in budget or schedule since 11/12
LA	940250	Engineering VI - Phase 1		X	Laboratory/Hospital	New	\$53,000,000	\$4,500,000	\$57,500,000	9/30/14	12/31/14		
LA	946485	Hitch Suite Renovation		X	Housing/Dining	Combo	\$24,300,000		\$24,300,000	9/30/14	9/30/14		
LA	948273	Landfair and Glenrock Apartments Redevelopment		X	Housing/Dining	New	\$57,538,000	\$8,292,000	\$65,830,000	8/31/14	8/31/14		No change in budget or schedule since 11/12
LA	948375	Northwest Campus Student Housing Infill		X	Housing/Dining	New	\$375,000,000	(\$150,000,000)	\$225,000,000	12/31/12	9/30/13	183	Beneficial occupancy of most buildings on time. Final building delayed by contractor, but campus managed occupancy needs.
LA	940177	Ostin Music Center		X	Classroom/Offices	New	\$20,000,000		\$20,000,000	2/28/14	2/28/14		
LA	944665	Semel - IPCN Renovation		X	Laboratory/Hospital	Reno	\$14,920,000	\$3,068,000	\$17,988,000	10/31/12	11/30/13	305	No change in budget or schedule since 11/12
LA	945895	SMRH Post-Occupancy Scope		X	Laboratory/Hospital	New	\$18,834,000		\$18,834,000	12/31/13	12/31/13		
LA	944030	Telemedicine and PRIME Facilities Phase 1	X		Laboratory/Hospital	Other	\$20,200,000		\$20,200,000	6/30/10	12/31/13	1,190	Funding freeze delayed equipment schedule by 9 mo. Telem program delayed by telehealth network secure data connection service (more than 2 years) Some clinics in the initial program closed during the recession, requiring campus to contract with other clinics in those communities.
LA	944036	Telemedicine and PRIME Facilities Phase 2	X		Laboratory/Hospital	Reno	\$25,300,000		\$25,300,000	12/31/11	7/14/14	836	See note above
LA	948456	Wasserman Tenant Improvements		X	Laboratory/Hospital	Reno	\$43,782,000		\$43,782,000	2/28/14	2/28/14		
LA	943930	Wilshire Center Exterior Repairs and Refurbishment		X	Classroom/Offices	Reno	\$12,346,000		\$12,346,000	3/30/11	11/30/13	886	Contractors delays in procuring materials. Phase 1 reskinning is complete
LA	946375	Luskin Conference and Guest Center		X	Classroom/Offices	New	\$162,425,000		\$162,425,000	6/30/16	6/30/16		
LA	944020	Teaching and Learning Cener for Health Sciences		X	Classroom/Offices	New	\$104,700,000		\$104,700,000	8/31/16	8/31/16		
MERCED													
MC	900290	Classroom and Academic Office Building	X		Classroom/Offices	New	\$53,000,000		\$53,000,000	4/30/16	4/30/16		
MC	900020	Science and Engineering Building 2	X		Laboratory/Hospital	New	\$88,819,000	\$141,000	\$88,960,000	4/30/14	4/30/14		
MC	900120	Student Services Building		X	Classroom/Offices	New	\$19,820,000		\$19,820,000	12/31/13	12/31/13		

LEGEND
 Project reviewed via Delegated Process
 Projects ahead of schedule or under budget

2012-13 ACTIVE MAJOR CAPITAL PROJECTS SUMMARY (Projects over \$10M)

PROJECT			FUND		TYPE and USE		BUDGET			SCHEDULE			COMMENTS
Campus	PAN	Project Name	State	Non-State	Primary Use	Type	Total Original Bud	Cumulative Augments or Savings	Total with Adjustments	Approved Substantial completion	Actual or Revised Substantial Completion	Schedule Delays over 90 Days	
RIVERSIDE													
RV	950462	Boyce Hall and Webber Hall Renovations	X		Classroom/Offices	Infra	\$31,000,000	\$1,676,000	\$32,676,000	9/30/10	10/4/14	1,375	There was an initial delay of 2 years from the state bond freeze. On the re-start, the campus changed the delivery method and many of the design professionals had left the firm. These issues added to the initial delay
RV	950463	East Campus Infrastructure Improvements Phase 2	X		Infrastructure	Infra	\$11,702,000	\$3,500,000	\$15,202,000	6/30/09	1/10/14	1,565	There was an initial delay of 2 years from the state bond freeze. On the re-start, the project bid over estimate and resulting schedule delays resulted from the value engineering and augment required to complete the project.
RV	950456	Environmental Health & Safety Expansion	X		Classroom/Offices	New	\$11,964,000	\$7,476,000	\$19,440,000	3/31/09	3/31/15	2,101	Campus suspended project in June '10 to re-site the project. This resulted in CEQA litigation that delayed the state appropriation. Litigation was resolved in September 2013.
RV	956334	Glen Mor 2 Student Apartments		X	Housing/Dining	New	\$144,462,000	\$9,838,000	\$154,300,000	6/30/13	7/3/14	278	Initial project drawings were incomplete, and campus was unhappy with the selected CM@Risk. Campus began VE process, but architect had closed their office. Many months were lost as the design professionals re-grouped. Project now delivered as Design-Bid-Build.
RV	950523	Student Recreation Center Expansion		X	Student Life	Combo	\$52,200,000		\$52,200,000	5/31/13	12/17/14	475	Incomplete construction docs required additional quality control. Constructability review indicated longer construction duration to accommodate ongoing operations in connected building
SAN DIEGO													
SD	963970	Central Research Services Facility		X	Laboratory/Hospital	New	\$27,131,000		\$27,131,000	5/31/13	6/30/14	305	Partial re-design and unforeseen conditions
SD	964710	Clinical and Translational Research Institute Building		X	Laboratory/Hospital	New	\$269,000,000		\$269,000,000	7/31/15	1/31/16	94	Partial re-design and value engineering related to MEP issues
SD	963810	Health Sciences Biomedical Research Facility 2		X	Laboratory/Hospital	New	\$150,890,000	\$28,690,000	\$179,580,000	1/1/13	9/30/13	182	40,000 gsf added to building per owner request, requiring re-design
SD	963870	Phase 1 and 2 of the University House Rehabilitation		X	Housing/Dining	Reno	\$10,504,000		\$10,504,000	10/31/13	11/30/13		
SD	964580	UCSD Medical Center East Campus Bed Tower		X	Laboratory/Hospital	New	\$663,800,000	\$34,100,000	\$697,900,000	10/7/16	3/30/18	449	Schedule delay results from revised scope and construction phasing
SAN FRANCISCO													
SF	911944	A-4 Hematology Clinic and treatment Center Renovation		X	Laboratory/Hospital	Reno	\$15,500,000		\$15,500,000	10/31/13	10/31/13		
SF	970411	MB 4th Street Public Plaza		X	Laboratory/Hospital	Infra	\$13,645,000		\$13,645,000	6/2/14	8/22/14		
SF	970152	Medical Center Mission Bay Clinical Facilities		X	Laboratory/Hospital	New	\$1,686,000,000	(\$166,000,000)	\$1,520,000,000	10/31/14	6/30/14		
SF	924919	S/M Helen Diller Family Cancer Research Building 4th Floor Build-Out		X	Laboratory/Hospital	Reno	\$17,900,000		\$17,900,000	3/15/14	2/21/14		
SANTA BARBARA													
SB	981230	Davidson Library Addition and Renewal		X	Classroom/Offices	Reno	\$59,600,000	\$11,478,000	\$71,078,000	1/1/15	10/7/15	189	Project augments result from 3 factors: CCCI escalation, additional scope to remediate seismic deficiencies, and bid overages. Delay results from added seismic scope and working around campus operations.
SANTA CRUZ													
SC	976120	Cogeneration Plant Replacement Phase 1		X	Infrastructure	New	\$26,046,000	\$11,054,000	\$37,100,000	4/30/14	8/30/14	122	Delays and augment result from unforeseen geology conditions
SC	976328	Merrill College Capital Renewal		X	Housing/Dining	Reno	\$44,457,000		\$44,457,000	1/31/15	1/31/15		

LEGEND

 Project reviewed via Delegated Process

 Projects ahead of schedule or under budget

2013-15 CAPITAL PROJECTS LOOK-AHEAD LIST

Campus	Project	Program Category	Type	2013-14		2014-15		Total Project Budget (in \$000s)
				CFP (in \$000s)	Fund Source	CFP (in \$000s)	Fund Source	
BERKELEY								
BK	Haas School Addition	E&G	New		DD			DD
BK	Soda Hall Addition	E&G	New	23,700	GF			23,700
BK	Maxwell Field Parking Structure	AUX	New		PR			PR
BK	Bowles Hall Renovation	AUX	Reno		PR			PR
BK	Wellness Center	AUX	New	29,200	EF			29,200
BK	Etcheverry Hall Renovation	E&G	Reno	27,600	GF			27,600
BK	Haviland Hall Renovation (Multiyear)	E&G	Reno	12,500	GF			12,500
BK	Tolman Hall Seismic Replacement	E&G	New			193,100	SE	208,600
BK	Moffitt Library Renovation	E&G	Reno			50,000	GF	50,000
DAVIS								
DV	Animal Science Teaching Facility Relocation	E&G	New	4,600	EF			
				5,000	CF			9,600
DV	Classroom and Recital Hall	E&G	New	9,000	EF			
				5,000	GF			15,000
DV	Dairy Relocation	E&G	New	15,700	EF			15,700
DV	Hospital Seismic Upgrade Phase 4 (Sacramento)	MC	Reno	18,400	HR			18,400
DV	International Complex Phase I	E&G	New	11,700	EF			
		AUX	New	14,300	EF			26,000
DV	Memorial Union Renewal	AUX	Reno	13,200	EF			
				5,000	UR			18,200
DV	SVM Student Services & Admin Center (Scrubs Dining)	E&G	New	11,000	EF			
		E&G	New	2,500	CF			
		AUX	New	7,800	EF			21,300
DV	California Lecture Hall	E&G	New	15,000	EF			15,000
DV	Activities and Recreation Center Expansion	AUX	Reno	10,000	AR			10,000
DV	Freeborn Hall Seismic Replacement	AUX	New	15,000	AR			15,000
DV	Lab for Energy-Related Health Research (LEHR)	E&G	Reno			10,800	CF	10,800
DV	Translational Science Center (Sacramento Campus)	E&G	Reno			12,300	CF	12,300
DV	Walker Hall Renewal and Seismic Corrections	E&G	Reno	2,731	SE	27,917	SE	31,157
DV	Data Center (UCDMC Portion)	E&G	New			56,000	EF	
						21,500	EF	77,500
DV	Emergency Power Upgrade Phase 2 (Sacramento)	MC	Infra			12,500	HR	12,500
DV	Engineering 4	E&G	New			55,583	SE	
						509	CF	58,442
DV	Health Sciences Education Expansion Phase 1 (Sacramento)	E&G	New			10,000	GF	
						40,500	EF	50,500
DV	Hosp Seismic Upgrade Univ Tower (Sacramento)	MC	Reno	12,800	HR			12,800
DV	Critical Infrastructure Phase 2	E&G	Infra			25,000	EF	25,000
DV	Main Hosp Seismic Compliance Children's Surgery Replacement (Sacramento)	MC	New			20,000	EF	
						5,600	GF	25,600
DV	Main Hosp Seismic Compliance Hospital Based Physicians	MC	Infra			10,680	EF	10,680
DV	North Addition Office Building (Sacramento Campus)	MC	New			45,000	EF	45,000
DV	Softball Complex Relocation	AUX	New			7,500	GF	7,500
DV	Tercero Student Housing Phase 4	AUX	New			44,700	EF	
						5,000	AR	49,700
IRVINE								
IR	Campus Utility Improvements and Capital Renewal	E&G	Infra	20,000	EF			20,000
IR	Child Development Center	E&G	New	13,000	GF			13,000
IR	University Extension Classroom Building	AUX	New	35,000	EF			35,000
IR	Medical Center Parking	MC	New	30,000	EF			30,000
IR	Mesa Court Expansion Structure	AUX	New	110,000	EF			
				10,000	AR			120,000
IR	Law Building	E&G	New	85,000	GF			85,000
IR	Office/Classroom Building	E&G	Combo	25,000	EF			
				5,000	CF			30,000
IR	Business Unit 2	E&G	New			1,068	SE	
						3,205	GF	48,524
IR	Primary Electrical Improvements Step 4	E&G	Infra			19,462	SE	19,462
IR	Outpatient Clinical Center	MC	New			50,600	GF	50,600

2013-15 CAPITAL PROJECTS LOOK-AHEAD LIST

Campus	Project	Program Category	Type	2013-14		2014-15		Total Project Budget (in \$000s)
				CFP (in \$000s)	Fund Source	CFP (in \$000s)	Fund Source	
LOS ANGELES								
LA	CHS Seismic Correction and Fire Safety	E&G	Infra	48,349 3,348	SE CF			52,155
LA	Engineering VI - Phase 2 (State-eligible)	E&G	New	70,000	GF			70,000
LA	Jules Stein Seismic Correction and Program Improvements	E&G	Infra	57,000	GF			57,000
LA	Saxon Suites Renovation	AUX	Reno	31,970	EF			31,970
LA	Botanical Garden Enhancements	E&G	Combo			20,000	GF	20,000
LA	Poolside Residence Hall	AUX	New			70,000 2,000	EF AR	72,000
LA	Northwest Campus Recreation Center Replacement	AUX	New			35,000 17,500	EF AR	52,500
LA	CHS South Tower Post-Occupancy Improvements	E&G	Reno			50,000	EF	50,000
LA	Spaulding Field Foothill Building	E&G	New			50,000	GF	50,000
MERCED								
MC	Classroom and Academic Office Building	E&G	New	45,144	SE			54,045
MC	Telecom Reliability Upgrade	E&G	Infra	1,400	SE	15,183	SE	16,583
MC	Instruction and Research Building 1	E&G	New			12,000	SE	298,825
RIVERSIDE								
RV	Batchelor Hall Building Systems Renewal	E&G	Infra			15,739	SE	16,141
RV	Barn Expansion	AUX	Reno	30,371 1,607	EF AR			31,978
RV	Solar Farm	AUX	New		PR			PR
RV	Lothian Seismic Upgrade	AUX	Reno	11,477 428	EF AR			11,905
RV	Classroom Building	E&G	New	25,000	CF			25,000
RV	Interdisciplinary Research Building	E&G	New			125,000	EF	125,000
RV	Engineering Building Unit 3	E&G	New			81,712	SE	87,429
RV	Pierce Hall Improvements	E&G	Reno			24,551	SE	24,551
RV	Psychology Building Phase 2	E&G	New			19,362	SE	20,318
RV	C-Center	AUX	New				PR	PR
RV	A-I RSO and Market at Aberdeen	AUX	Reno			13,516 500	EF AR	14,016
RV	A-I Residential Restaurant Replacement	AUX	New			34,834 2,000	EF AR	36,834
SAN DIEGO								
SD	Central Research Services Facility	E&G	New	3,427	CF			30,558
SD	East Campus Parking Structure 2	AUX	New	25,000 5,500	EF CF			30,500
SD	Outpatient Pavilion	MC	New	95,000 25,000	EF HR			120,000
SD	Nimitz Marine Facility Wharf & Pier Replacement	E&G	New	8,013 12,040 5,000	EF CF SE			25,053
SD	International Center Redevelopment	AUX	New			18,000 2,200	GF CF	20,200
SD	Interstate 5 / Gilman Bridge	E&G	Infra		PR			PR
SD	Revelle Plaza Café Renewal	AUX	Reno	15,000	AR			15,000
SD	UCSDMC Hillcrest Main OR HVAC Upgrade	MC	Infra	11,500	HR			11,500
SD	Argo Hall Renewal	AUX	New	13,560	AR			13,560
SD	Revelle Electrical Switch Station Improvements	E&G	Infra			11,800	EF	11,800
SD	Center for Novel Therapeutics Building	E&G	New		PR			PR
SD	Biological and Physical Sciences Building	E&G	New			4,100	SE	96,750
SD	Campus Life Safety Improvements	E&G	Infra	2,045	CF	49,010	SE	51,055
SD	Single Graduate and Professional Student Housing	AUX	New			87,500 5,500	EF AR	93,000

2013-15 CAPITAL PROJECTS LOOK-AHEAD LIST

Campus	Project	Program Category	Type	2013-14		2014-15		Total Project Budget (in \$000s)
				CFP (in \$000s)	Fund Source	CFP (in \$000s)	Fund Source	
SAN FRANCISCO								
SF	Clinical Sciences Building (CSB) Seismic Retrofit and Renovation	E&G	Infra	1,386 2,800	EF SE	56,366	EF	91,468
SF	Long Hospital 4th Floor Hybrid OR & Intraop. MRI	MC	Reno	23,200	HR			23,200
SF	Parnassus and Fifth Housing	AUX	New	16,896	EF			16,896
SF	UC Hall Seismic Program	E&G	Infra			46,928 114,135	CF EF	161,063
SF	Ophthalmology Clinic Consolidation	MC	Reno			8,938 9,000	HR CF	17,938
SF	Moffitt / Long 4 Surgery Expansion	MC	Reno			11,000	HR	11,000
SANTA BARBARA								
SB	Faculty Club Renovation and Guest House Addition	AUX	Combo	3,340 13,200 940	AR EF GF			17,480
SB	KITP Residence	AUX	New	30,000	DD			30,000
SB	North Campus Faculty Housing Phase III	AUX	New	15,051	EF			15,051
SB	Bioengineering Building and Academic Support Facility	E&G	New	241	GF	26,828 1,287 39,035 6,707	SE CF EF GF	81,964
SB	Infrastructure Renewal Phase 1	E&G	Infra			12,136	SE	18,827
SB	Infrastructure Renewal Phase 2	E&G	Infra			4,953 14,195	CF SE	19,364
SB	Aquatics Center	AUX	New			18,000	GF	18,000
SB	Campbell Hall Replacement Building	E&G	New			30,906	SE	30,906
SB	Institute for Energy Efficiency Building	E&G	New			50,000	GF	50,000
SB	North Campus Faculty Housing Phase IV	AUX	New			12,500	EF	12,500
SB	San Joaquin Apartments	AUX	New			167,240	EF	175,000
SANTA CRUZ								
SC	Coastal Biology Building	E&G	New	1,875 3,530	CF SE	64,127	SE	72,742
SC	Telecom Infra Improvements Phase B	E&G	Infra			13,308 1,538 50	EF CF UR	14,896
SC	Environmental Health and Safety Facility	E&G	New			19,026	SE	19,026
SC	Life Safety Upgrades	E&G	Reno			10,201	SE	10,201
SC	Telecom Infra Improvements Phase A	E&G	Infra	13,320 1,305 1,749	EF CF AR			16,374
SC	Merrill College Capital Renewal	AUX	Combo	4,684	AR			49,141
SC	Infill Apartments Repairs	AUX	Reno	25,000 7,982	EF AR			32,982
SC	UCO Instrumentation Facility	E&G	New			10,930 300	EF CF	11,230

Note: Some projects have prior funding, or future funding beyond 2014/15. The total project budget reflects the complete project budget at this time

ABBREVIATIONS

AR	Auxiliary Reserves	HR	Hospital Reserves
AUX	Auxiliary	MC	Medical Centers
CF	Campus Funds	MR	Medical Reserves
Combo	Combination (New Construction & Renovation)	New	New Construction
DD	Donor Development	PR	Privatized Development
E&G	Education & General	Reno	Renovation
EF	External Finance	SE	State Eligible
I	Infrastructure	SG	General Funds (state)
GF	Gift Funds	UR	University Fee Reserves