UNIVERSITY OF CALIFORNIA

Capita Financial Plan

2013-23

ii.

WILLIAM J GILLESPIE NEUROSCIENCE RESEARCH FACILITY



FOREWORD

This 2013-23 Capital Financial Plan delineates the University's multi-year program of proposed capital construction and renovation. Submitted annually for acceptance by the Regents, the 2013-23 Capital Financial Plan incorporates the following required reports:

- The Annual Budget for State Capital Improvements;
- The University of California Five-Year Capital Outlay Plan for State Funds; and
- The Annual Report on Campuses' Ten-Year Capital Financial Plans.

Subsequent to the Regents acceptance, the 2013-23 Capital Financial *Plan* will be submitted to the State of California to comply with the statutory requirement for providing the five-year capital outlay plan.

The 2013-23 Capital Financial Plan presents proposed capital projects on each campus, in the larger context of goals and needs, current economic conditions, and specific circumstances. This document demonstrates the University's efforts to align its capital proposals to anticipated demographics, academic initiatives, safety-code requirements, financial resources, and the public service needs of California.

The 2013-23 Capital Financial Plan provides a perspective for the University's overall capital program followed by a chapter for each campus presenting the capital projects necessary to achieve its goals. The report includes State-eligible projects the University expects to propose for the ten year timeframe. Although the last general obligation (GO) bond was approved in 2006, the University is hopeful that there will be a GO bond measure for higher education on the ballot in the near future. The *Plan* also includes the projects planned to be funded from non-State sources for 2013-14 and the following nine years. More detailed project information may be viewed at http://www.ucop.edu/ capital-planning/resources/2013-23-capital-financial-plan.html.

The Regents are responsible for the capital program and traditionally most major capital projects were presented for their review. As a result of recent changes in delegations of authority, a much smaller cohort of projects are directly reviewed by the Regents. In spring 2013, the delegation of authority to the Chancellor's for project approvals was raised from \$5 million to \$10 million.

Additionally, the Pilot Process of the Delegated Process for Capital Improvement Projects ("Delegated Process") was approved by the Regents in March 2010. Campuses may - for projects eligible under the Delegated Process, including budgets less than or equal to \$60 million - complete a checklist verifying due diligence consistent with UC policies and procedures. Once the project and checklist are confirmed by UCOP, the President recommends that the project may be approved by the Chancellor. Through this process, the Regents exercise portfolio oversight of capital projects. The Office of the President provides due diligence regarding legal, financial, or policy issues, and the campuses have the responsibility and accountability for the successful delivery of capital projects.

Since acceptance of the 2010-20 Capital Financial Plan in November 2010, 72 project approvals totaling \$1.56 billion have been forwarded for Chancellors' approvals through the Delegated Process. The reporting on these delegated projects, as well as all other active projects, are presented to the Regents as part of the Annual Report on Major Capital Projects Implementation. The Delegated Process is scheduled to sunset in March 2014, and UCOP is working with campuses to insure continuation of this program.

The projects included in this 2013-23 Capital Financial Plan have been reviewed for suitability of their scope, and budget. The Plan includes projects funded with debt financing, campus funds, gifts, auxiliary reserves, federal funds, and State funds. As campuses continually update their plans and take advantage of new opportunities, the proposals included in this report may be updated.

These campus *Capital Financial Plans*, however, do not encompass all of the University's capital needs. The broader spectrum of needs to be addressed in future capital programs is included in each campus's discussion of its goals, priorities, and long range capital planning.



UNIVERSITY OF CALIFORNIA - CAPITAL FINANCIAL PLAN 2013-23

UC Merced's Science and Engineering 2



TABLE OF CONTENTS

	Foreword	1
	Table of Contents	3
	Perspective	5
	2013-23 Capital Financial Plan	12
	Berkeley	16
	Davis	20
	Irvine	
	Los Angeles	
	Merced	
	Riverside	
	San Diego	42
	San Francisco	46
	Santa Barbara	50
	Santa Cruz	54
	Division of Agriculture and Natural Resources	58
_		

Definitions and Legend

UNIVERSITY OF CALIFORNIA - CAPITAL FINANCIAL PLAN 2013-23



PERSPECTIVE

The University of California (UC) was founded in 1868 as a public, State-supported land grant institution. The State Constitution' establishes UC as a public trust to be administered under the authority of an independent governing board, the Regents of the University of California. Designated as the primary State-supported academic institution for research, the University is the public segment primarily responsible for awarding the doctorate and many professional degrees in areas such as medicine and law. The 1960 Master Plan for Higher Education articulated the University's three primary missions:

- Instruction of qualified individuals through undergraduate, graduate, professional, and post-doctoral programs.
- Research programs with an emphasis on teaching research at both the undergraduate and graduate levels.
- Public service, including outreach and K-14 improvement programs, cooperative agricultural extension programs, and healthsciences clinical care programs.

The University maintains ten campuses: Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco, Santa Barbara, and Santa Cruz. Nine of the campuses offer undergraduate, graduate, and professional education; San Francisco is devoted exclusively to health sciences graduate and professional instruction. The University's five medical centers (Davis, Irvine, Los Angeles, San Diego, and San Francisco) support the clinical teaching programs of UC's medical and health sciences schools.

The curriculum outlined in the University's Charter² has been embodied also at dozens of ancillary sites throughout the State – institutes, research stations, cultural centers, ecological preserves, hospitals and clinics, observatories, agricultural-extension offices, conference centers, a scholarly press, super-computing installations, and overseas affiliates. The University's Agricultural Field Stations, Cooperative Extension offices, and the Natural Reserve System benefit all Californians. In addition, the University manages the Lawrence Berkeley National Laboratory and is a member of limited-liability corporations that oversee Lawrence Livermore National Security and Los Alamos National Security.

The capital improvement program for the University of California stems from the University's Charter of 1868:

Sec. 25. The Regents shall devise, and with the funds appropriated for that purpose cause to be constructed, such buildings as shall be needed for the immediate use of the University.³

UC's first permanent building, South Hall, was completed in 1873 in Berkeley and remains in daily use. It is home currently to the School of Information, a fitting assignment because the University's founders intended their new institution to encompass the entire scope of human knowledge.

By the start of the twentieth century, the University's programs in Berkeley and San Francisco had risen to national prominence and were recognized as major contributors to California's successes in agriculture, engineering, commerce, and the arts. In 1919, the University's "Southern Branch" was established in Los Angeles, and quickly became a major resource in the development of southern California. Other regions of the State soon recognized the benefits of higher education to both their economies and their communities, leading some

1868, ch. 244, §§ 1-26. 3 Ibid.



UC Merced Campus

of UC's affiliated sites to rise to the status of independent campuses.

After the Second World War, it was widely acknowledged that California had assumed national leadership in technological innovation. New industries and new population centers recognized that higher education and incisive research could be keys to their success. The University benefited from demographic shifts, economic growth, government sponsorship of research, faculty receipt of Nobel prizes and other awards, and legislative support to expand its facilities and to plan and build new campuses – the latest of which, Merced, admitted its first class of undergraduates in 2005. During the twentieth century, enrollments at UC campuses grew both significantly and rapidly, and the University evolved into what Clark Kerr famously called "the multiversity."

Since the construction of South Hall in 1873, the inventory of the Regents' capital assets has grown to include over 5,700 structures enclosing approximately 130 million gross square feet on approximately 30,000 acres. Over the course of 140 years, the University of California has grown to become the nation's most diversified and eminent public institution for acquiring and disseminating knowledge.

THE UNIVERSITY'S CONTRIBUTIONS TO CALIFORNIA

The University of California continues to make fundamental contributions to the State's economy and the quality of life of its citizens. Through its instruction, research, and public service programs, the University provides social, cultural, and economic benefits to the people of California by:

- contributing a highly educated workforce needed by high-tech business, agriculture, health care, education, and other sectors of the economy;
- conducting research that creates jobs, generates new products and services, and increases productivity, leading to higher standards of living;
- performing research to address major issues and challenges confronting Californians;
- encouraging innovation and an entrepreneurial spirit, essential elements for the businesses that drive California's competitiveness;
- providing an unmatched combination of state-of-the-art patient

¹ Constitution of California, Article 9, § 9.

² Organic Act-- Statutes of California, Seventeenth Session. 1867-

care services and facilities, leading-edge research programs, and high-quality health education programs for Californians; and

working with K-14 schools to improve the quality of instruction and expand educational opportunities for future generations.

The excellence of the University's programs leverages billions of dollars in federal and private funding, and promotes the discovery and dissemination of new knowledge that fuels economic growth. To maintain California's leadership role, and to meet the changing needs of future generations, California must continue to invest in its University.

ECONOMIC IMPACT OF UC CAPITAL INVESTMENT

A 2011 report by Economic and Planning Systems (EPS) estimated that the \$25 billion in annual direct spending attributable to UC generates significant economic activity in California in economic multiplier effects, as it ripples through the economy in successive rounds of both consumers and businesses, producing a total economic impact of \$46.3 billion. The report further indicated that the State's \$3.35 billion investment in UC-related spending is leveraged by UC to bring in \$17 billion in federal aid and research grants. This State investment is the foundation for the total economic impact of \$46.3 billion, resulting in UC generating approximately \$13.80 in economic output for every \$1 of State investment.



UC Riverside's Solar Array

In addition to the economic benefits to the State arising from the instruction and research enterprise, benefits also accrue from capital investment in the University. UC expenditures for construction create jobs and income for suppliers such as architects, engineers, builders and construction workers, who in turn recirculate these earning in the local and regional economies. A construction program such as the one proposed by the University of California in the *2013-23 Capital Financial Plan*, with an average annual expenditure of \$1.56 billion, could generate approximately 28,200 full time equivalent (FTE) jobs per year.

CAPITAL PLANNING

To fully fund the University's capital needs, UC must look to the State for funding. The major factors that guide capital planning for the University of California are:

- preservation of existing capital assets through investment in renewal of facilities— including seismic correction and systems modernization;
- enrollment demand, consistent with the University's commitment to student access under the *Master Plan for Higher Education*; and
- obsolescence and change in academic and research-program needs.

STATE FUNDING FOR UC CAPITAL NEEDS

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 goal to reduce overall bond debt. The University had anticipated approval of general obligation bond measures in the past few voting cycles, yet legislation to place bond measures on the ballot was not enacted. The last general obligation bond measure was passed in November 2006.

With the successful passage of Proposition 30 in November 2012, the 2013-14 State Budget Act includes a renewed commitment from the State to UC. The Legislature approved the Governor's recommendation for a multi-year funding plan that grows the University's base budget by 5 percent in the 2014–15 fiscal year, and by 4 percent in each of the two years after that.

The State also took action to pass legislation in 2013-14, 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 of California 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 Statefunded debt service for capital outlay – both that related to general obligation bonds and to lease revenue bonds – is now contained in the University's 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 on 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 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.



UC Davis's Welcome Center

2013-14 Budget for State Capital Improvements (\$000s)

Criteria	Campus	Project	Phase	2013-14 Request	Future State Funds	Non-State Funds
Shovel Ready	MC	Classroom and Academic Office Building	С	45,144	4,079	
Equipment	MC	Science and Engineering Building 2	Е	4,220		
Infrastructure	SD	SIO Nimitz Marine Facility Berthing Wharf and Pier Replacement	С	5,000		20,053
Total Appropriated (2013-14	Budget Act)		54,364	4,079	20,053
Capital Renewal	ANR	Ext Centers Renewal and Improvements	PWC	1,850		200
Seismic/Life Safety	DV	Walker Hall Renewal and Seismic Corrections	PW	2,731	28,081	
Shovel Ready	LA	CHS Seismic Correction and Fire Life Safety	С	48,349		3,806
Infrastructure	MC	Central Plant/Telecom Reliability Upgrade	PW	1,400	15,000	
Seismic/Life Safety	SF	Clinical Sciences Building Seismic Retrofit	W	2,800	21,735	66,933
Shovel Ready	SB	Academic Support Facility	С	26,505		7,395
Previous Growth	SC	Coastal Biology Building	W	3,530	64,443	3,985
Total Proposed (AB 94)				87,165	129,259	82,319
TOTAL STATE PROGRAM				141,529	133,338	102,372

2013-14 STATE CAPITAL OUTLAY

The 2013-14 State Budget Act included the Classroom and Academic Office Building (CAOB) at Merced for \$45 million for the construction phase, to be financed under the provisions of AB 94. In addition to CAOB, the 2013-14 Budget included Science and Engineering Building 2 equipment phase at Merced for \$4.2 million, and the Scripps Institute of Oceanography Nimitz Marine Facility Berthing Wharf and Pier Replacement at UCSD for \$5 million towards all phases of the project.

AB 94 required that the University submit its 2013-14 State Capital Outlay request by August 1, 2013. UC submitted seven additional projects that totaled \$87.2 million for approval as early as December 2013.

Together, the seven projects plus the projects previously approved total \$141.5 million This proposal represents only a small subset of the University's total funding need of \$788.6 million in State-eligible capital improvements for 2013-14.



2014-15 Budget for State Capital Improvements (\$000s)

Criteria	Campus	Project	Phase	2014-15 Request	Future State Funds	Non-State Funds
Modernization	ANR	Intermountain Research Extension Center	PW	200	1,786	100
Seismic/Life Safety	DV	Walker Hall Renewal and Seismic Corrections	С	27,917	509	
Seismic/Life Safety	DV	Chemistry Seismic and Life Safety Corrections	PW	3,482	30,418	
Equipment	IR	Business Unit 2	E	1,094		3,281
Infrastructure	IR	Primary Electrical Improvements Step 4	DC	19,462		
Infrastructure	MC	Central Plant/Telecomm Reliability Upgrade	С	15,183		
Seismic/Life Safety	SD	Campus Life Safety Improvements	WC	49,010		
Infrastructure	SB	Infrastructure Renewal Phase 1	С	12,136		
Previous Growth	SC	Coastal Biology Building	С	64,127	1,100	
Seismic/Life Safety	SC	Life Safety Upgrades	PWC	10,201		
TOTAL STATE PROGRAM				202,812	33,813	3,381

2014-15 STATE CAPITAL OUTLAY

Assembly Bill 94 also required that the University submit its 2014-15 State Capital Outlay request by September 1, 2013. The submittal totaled \$202.8 million and may be approved as early as April 2014.

UC's proposal for 2014-15 focuses on critical infrastructure priorities and seismic and life safety needs. This proposal represents 27% of the University's total funding need of \$741 million for State-eligible capital improvement projects for 2014-15. Even with the unprecedented funding mechanism provided by AB 94 for funding capital projects, the University is faced with a growing backlog of capital projects over the coming years. The University's projected need for capital improvements for State-eligible projects for the four-year period from 2014-15 through 2018-19 is \$3.3 billion.

This level of capital need is beyond the University's resources to fund. The University has traditionally looked to the State for the funding of capital improvements necessary to support UC's educational mission and the University will continue to work with the State towards this goal.



(\$M)	Additional Need	Equipment	Seismic Life Safety	Previous Growth	Modernization	Infrastructure
State-Eligible Capital Improvements	\$538.2	\$1.1	\$90.6	\$64.1	\$0.2	\$46.8

State and Non-State Maintained Space by Decade of Construction (GSF in millions)



PRESERVATION OF CAPITAL ASSETS

As campus facilities age, the need to maintain and improve their physical condition and functional utility becomes a high funding priority for capital outlay. Regular funding is needed for the systematic renewal of building systems that wear out under normal use and require periodic replacement. These systems - including mechanical systems for heating, ventilation, and air conditioning; plumbing; elevators; electrical equipment; fire protection; roofs; and built-in equipment generally have useful lives of 20 to 40 years and may require replacement two or three times over the life of a building. As illustrated in the figure above, 60 percent of the University's space is more than 30 years old.

The University also has a substantial backlog of deferred maintenance and repairs. This backlog is the result of insufficient funding for systematic renewal and replacement of building and infrastructure systems. In addition, long-term under funding of routine maintenance has exacerbated the effects of this shortfall of deferred maintenance funding by reducing the useful life of building systems. As a result, the University's annual facilities-renewal needs are projected to increase. The 2013-23 Capital Financial Plan (CFP) includes projects that address deferred maintenance and capital renewal, but because of funding constraints, it can only address a portion of this backlog. For further detail on deferred maintenance and capital renewal, please refer to UC's 2014-15 Budget for Current Operations.

The 2013-23 Capital Financial Plan continues a focus on seismic corrections. As of September 2012, approximately 24.4 million square feet of space has been seismically retrofitted, vacated, or has remediation underway.

ENROLLMENT DEMAND

In recent decades, enrollment growth—and the increasingly complex nature of the space required to support that growth—has been a critical determinant of the University's needs for new and renovated space. The University's undergraduate enrollment planning stems from UC's student access requirements under the Master Plan. These specify that the top 12.5% of California high-school graduates, as well as transfer students from the California Community Colleges who have successfully completed specific requirements, shall be eligible for admission to the University. Graduate and professional enrollment planning is based on assessments of State and national needs, program quality, and available financial support.

The facilities needed to accommodate enrollment growth at the University have become increasingly diverse and complex. Nearly half of

the University's State-supportable square footage is located in buildings that require complex utility systems. Typical examples include biological laboratories, high-energy physics laboratories, climatecontrolled research facilities, and specialized greenhouses. The high proportion of laboratory and specialized research space reflects the University's role as California's primary academic-research institution and the State's emphasis on instruction and research in the sciences, engineering, and other technical areas.

Aiming to balance the University's continuing commitment to maintaining access under the Master Plan with the need to maintain quality in a period of declining State resources, the University is developing a new long-range enrollment plan through 2020-21. Based on initial proposals from the campuses, the University expects modest growth in California resident undergraduates, with many of those enrollments at the Merced campus. All campuses are concerned with aligning enrollments and resources, and many are proposing significant nonresident undergraduate enrollment growth as a means of preserving quality for all students. The campuses remain interested in increasing graduate academic enrollments, with most campuses planning to meet 12% or higher graduate academic enrollment. Graduate professional programs, both State-supported Professional Degree Supplemental Tuition-charging programs and self-supported programs, are anticipated to grow. These programs generate additional revenue for their academic departments, helping to support academic quality for all students. While negotiation between the campuses and the Office of the President will be necessary to further develop a systemwide long-range enrollment plan, the University will endeavor to preserve access, affordability, and quality within the constraints of its resources.

CHANGING NATURE OF ACADEMIC AND RESEARCH PROGRAMS

The University's need for different types of specialized space has been influenced by both rapid advances in technology and the changing nature of academic programs. Academic programs must continue to operate at the forefront of learning by developing and using innovative processes and technologies that support discovery and expand knowledge that fuels economic growth in California. As science, industry, and commerce evolve with knowledge and opportunities, so must the academic programs responsible for preparing students and conducting research. To accomplish this, academic facilities must be renovated and updated to accommodate those changes.

RECENT DEVELOPMENTS IN THE CAPITAL PROGRAM

In May 2010, the Regents adopted the recommendations in the report *Transforming Capital Asset Utilization: Opportunities for Reducing Project Costs and Achieving More Program for the University's Capital Dollar*. The recommendations included:

- ownership and accountability for capital asset utilization, delivery, and performance;
- a capital planning and decision-making process based on formal business case analysis;
- a shorter, simpler capital project process;
- pursuit of a more robust, more flexible contracting environment; and
- development of systemwide building and project measurables, standards, and data.

Subsequent related initiatives included a process to provide the Regents with timely notice on changes to project budgets and scope, increased reporting for high-risk projects, and the establishment of an Office of the President/Campus Capital Program Leadership Forum. Under the auspices of the Forum, several Work Groups were formed, with representation from all campuses and the Office of the President, to support implementation of the five recommendations. The Forum and the Work Groups are responsible, in large part, for the progress made in implementing the recommendations. The group's discussions have also included proactive strategies to address State funding constraints, additional ways to streamline project approvals, legislative initiatives, and development of capital program priorities.

Improvements that have been implemented in these areas include:

In support of a shorter, simpler capital project process, the Regents, in March 2008, approved the creation of a "Pilot Phase" of the process redesign (Pilot Phase of the Delegated Process) for approving capital improvement projects. Projects that are consistent with a campus's ten-year *Capital Financial Plan, Long-Range Development Plan*, and *Physical Design Framework* are eligible for the Delegated Process. This process gives the President authority to approve budgets, design, and to obtain external financing for eligible projects up to and including \$60 million.

As of September 2013, there have been 72 project approvals totaling 1.56 billion under the Delegated Process. The Pilot Phase is scheduled to sunset in March 2014, but efforts are underway to request Regental approval of a continuation of the program. In support of this request for continuation, an audit has been completed on the submittal due diligence process.

To build a more robust, flexible contracting environment, UC sponsored legislation, Senate Bill (SB835), extending Best Value Contracting to all UC campuses and Medical Centers as a pilot program for an additional five years, for use on all projects with budgets in excess of \$1 million.

UC also has updated guidelines and provided training on a variety of alternative construction delivery methods, including Design/ Build, Construction Manager at Risk, and job order contracting. The University also has worked at sharing best practices across the system in the areas of Building Information Modeling (BIM), Lean Construction, and Integrated Project Delivery.

In 2013, UC introduced bill SB502, authored by Senator Marty Block, to raise the thresholds for informal competitive bidding for UC construction projects. The legislative proposal would allow construction projects up to \$1 million to be bid using competitive informal bidding procedures, with pre-qualification required for general contractors and MEP (mechanical, electrical, and plumbing) subcontractors for projects exceeding \$400,000. The current threshold, set in the 1990s, is \$100,000. The University worked diligently with industry partners

to achieve a solid compromise, yet the bill was opposed by AFSCME at the last moment. Senator Block and UC agreed to withhold the bill from committee in 2013, and are hopeful to pursue its successful passage in 2014. Informal competitive bidding follows all the requirements of the Public Contract Code, including awarding to the lowest responsible bidder, yet reduces administrative burdens, thereby saving time and money associated with the lengthy formal bid process.

PUBLIC-PRIVATE PARTNERSHIPS

The University has utilized a variety of privatized development techniques for nearly 30 years. To date, 81 projects are complete or actively being planned; many of these projects have multiple phases. Projects include programmatic space (primarily office/instructional, research and clinical); auxiliary facilities (revenue based, primarily student housing, faculty for-sale housing, and hotels); and projects designed to generate income from UC land. Transactions generally include ground leasing (auxiliaries), lease–lease back, purchase of build-tosuit projects, and donor development (programmatic space). Privatized development most commonly occurs on Regents' land, but privatized projects for UC use also may be built on privately-owned land.

BUDGET CHALLENGES

The University's capital program has been faced with an especially challenging and uncertain fiscal environment arising from an unpredictable construction market and the absence of a general-obligation bond measure since 2006.

Although the University anticipated approval of a two-year general obligation bond measure in November 2008, legislation was not enacted. The University did receive State funds in 2008-09, of \$261.3 million, primarily from lease-revenue bonds, and \$30.9 million in 2009-10 from general obligation bond funds remaining from prior bond measures reserved to support medical education and telemedicine projects. In 2010, the University again sought legislative approval of a bond measure, but this was not enacted in response to the State's ongoing fiscal crisis. In 2010-11, the University received \$352.7 million, primarily from lease-revenue bonds. Over the three year period of 2008 to 2010, less than half of the funding for high-priority needs that was anticipated from the two proposed bond measures was actually provided to the University, resulting in a significant backlog of unfunded projects. In 2011-12, the University requested \$768.6 million in State project funding; of that amount, only \$54.6 million was included in the 2011-12 Budget Act. The 2012-13 Budget Act the construction phase of the Infrastructure Improvements Phase 2 project on the Santa Cruz Campus of \$7.7 million.

In the absence of significant State funding, campuses must make urgent funding decisions for critical projects that cannot be delayed. In some cases, those campuses with available resources may choose to redirect non-State funds to projects that would otherwise have been funded with State resources. To the extent non-State funds are used to support core academic capital needs, less funding is available to support high priority operating needs.

Predictability and sufficiency in the amount of State funding available in the future is necessary for the campuses to develop reasonable capital improvement plans. Although the new legislation, AB 94, provides the University with increased flexibility to pursue capital outlay projects through the use of limited State General Funds, the University is hopeful that there will be a general obligation bond measure for higher education on the ballot in the near future.

These challenges require each campus to consider carefully how to deploy resources to benefit its academic programs and the campus as a whole. The Office of the President partners with the campuses in this process, providing guidance and perspective on Regental and State policies and expectations. The resulting decisions reflect campus priorities and are incorporated in the schedule of projects included in the multi-year capital financial plan for each campus.

COMPANION REPORTS

A separate volume, the 2014-15 Budget for Current Operations, provides information about the University's revenue needs and expenditure plans for all aspects of the University's operating budget.

The *Annual Report on Major Capital Projects Implementation* provides an update on the University's active Capital Improvement Program, including budget and schedule changes and completion of projects.

UC Berkeley's Residence Halls





2013-23 CAPITAL FINANCIAL PLAN

Throughout most of its history, the University has relied on a wide range of fund sources to support its capital program, including State funds, gifts, grants, University equity funds (derived from auxiliary enterprise revenues, certain fees and other discretionary resources), and long-term debt financing. A description of the University's major fund sources is found at the end of this book. All of these sources are critical to the success of the University's capital program. Over the past few decades, however, State funds and long-term debt financing are two sources that have played a more prominent role in achieving the University's capital goals.



UC Merced Campus

STATE FUNDING

State funds traditionally have supported the general campus and medical education facility needs. Because the University has been without new funding from a general obligation bond since the voters approved a two-year bond in 2006, the University has been forced to rely on lease-revenue bonds and the remaining unspent balances of previously approved general obligation bonds. While welcome, the availability of these funds has been very limited.

The 2013-14 State Budget Act shows a renewed affirmation from the State to make funding of Higher Education a priority. The Legislature approved the Governor's recommendations for a multi-year funding plan for UC that will provide annual base budget increases over the next four years, by 5 percent in the 2014-15 fiscal year, and by 4 percent in each of the two years after that. Another key component of the 2013-14 State Budget explicitly concerns capital. Specifically, the State took action to pass legislation in 2013-14, Assembly Bill No. 94, Chapter 50, Section 8 which adds, among other provisions, sections 92493 et seq. to the Education Code. Under the new legislation, UC is eligible to provide financing for urgently needed projects utilizing a portion of its State General Fund appropriations. The ultimate use of the General Funds is still under discussion, but this action by the State does provide a mechanism for use of the funds for capital. Even with this unprecedented mechanism for funding capital projects, the University is faced with a growing backlog of capital projects over the coming years.

NON-STATE FUNDING

Non-State funding represents a diverse set of fund sources to support capital projects. Campuses continue to explore innovative funding solutions including the use of grants and privatized development to leverage campus resources. As a result, proposed capital projects will often be supported by several fund sources. Definitions of non-State funding may be found in the Definitions and Legend chapter.

Self-supporting activities such as housing, parking, athletics, and medical enterprises generally are not eligible for State funding and must be supported from other sources. The use of long-term debt (external financing) has played an increasingly pivotal role in supporting the University's capital program in recent years.



UC Berkeley Campus

FUNDING PLAN

The projects proposed in this 2013-23 Capital Financial Plan continue to rely on this diverse array of State and non-State fund sources. As shown in Display 1, approximately \$8.7 billion of the funding is composed of anticipated State resources. Nearly \$8.0 billion of the funding plan is expected to come from external financing. The Plan shows a dramatic increase in State-eligible projects, partly because of the backlog of projects unfunded since the economic downturn in 2008. The funding for many of these projects is dependent on a future voter approved general obligation bond measure. Another significant portion of the *Plan* is dependent on long-term debt (external financing), taking advantage of the Unversity's favorable borrowing costs.

Display 1: 2013-23 Fund Sources (\$000s)



External Finance (EF)	Campus Funds (CF)	Gift Funds (GF)	State Eligible (SE)
\$8,000,742	\$2,224,156	\$2,543,467	\$8,688,503
Auxiliary Reserves	Hospital Reserves	Grants	Privitized
(ÅR)	(HR)	(CG,FG,OG)	(DD,PR)
\$876.880	\$1.713.094	\$186.890	\$60.000

Each campus has proposed a funding plan it considers financially feasible within the context of that campus's resources. A by-campus summary of funding plans, as broadly seperated into the categories of State and non-State funding, is shown in Display 2.



PRIMARY PROJECT OBJECTIVES

State

The 2013-23 Capital Financial Plan proposes approximately \$16.5 billion in funding to address identified primary project objectives that can be grouped in four categories, generally reflecting the State categories for capital improvements (please refer to the Definitions and Legend chapter for the category characteristics). Please note that some projects may have elements that fall under more than one category, but for this, only the primary category was tallied. All the projects within the Infrastructure Deficiencies category address seismic and other life safety needs, and total approximately \$3.2 billion. Space to accommodate prior and potential Enrollment Growth at several campuses total approximately \$3.4 billion. Approximately \$5.5 billion would support Program Improvements, that include projects to address program changes or new programs. Projects that address technological obsolescence, systems improvements, and space functionality are included in the Facilities Modernization category and total approximately \$4.4 billion. Display 3 illustrates the breakdown of project by objectives addressed.

Display 3: 2013-23 Primary Project Objectives (\$000s)



Enrollment Growth			Program Improvements
\$3,447,779	\$3,248,223	\$4,351,803	\$5,474,253

The proposed funding in the 2013-23 Capital Financial Plan can be broken down into three primary program catgories (refer to the Definitions and Legend chapter for a detailed description). Nearly \$10.6 billion of the funding in this plan is for Education and General projects that support the academic mission of the University. Approximately \$3.3 billion of the funding is associated with Auxiliary and Student-Feesupported projects. The remaining project funding of approximately \$2.6 billion is targeted for Medical Centers. Display 4 illustrates proportionately the Program Categories.

Display 4: 2013-23 Program Categories (\$000s)



TYPES OF CONSTRUCTION

Of approximately \$16.5 billion in proposed funding, more than \$9.3 billion is for new construction, and over \$3.0 billion is associated with renovation. The remaining \$4.2 billion is shared almost equally between infrastructure projects and those comprised of both new construction and renovation. See Display 5 on the following page.

Display 5: 2013-23 Construction Type (\$000s)



It is important to note that this 2013-23 Capital Financial Plan is constrained by the availability of resources over the next ten years. The University's capital needs far exceed what is financially feasible at this time. Currently, the University estimates more than \$3.3 billion is required over the four year period from 2014-15 through 2018-19 to address its most pressing State-supportable facility needs. These include facilities which support core academic programs, including seismic renovation of existing facilities, expansion and renewal of critical infrastructure, and new construction and renovation of instruction and research facilities. Support also is required to address other urgent needs in areas traditionally not supported by the State, such as student and faculty housing, medical facilities, parking, and other facilities serving the public as well as the University.

In this context of contrained State and non-State capital resources, when a potential capital need is identified, campuses prepare a rigorous business case analysis to determine the optimal solution to address that need. Campuses typically evaluate a range of alternatives to address identified programmatic objectives, which may include reallocation and/or renovation of existing space, leasing off-campus space, operational solutions, or a new capital project. Various project delivery methods are evaluated also, including University-implemented and public-private partnerships.

In the capital planning process, the availability of funding for maintenance costs is carefully scrutinized. The State's current fiscal circumstances have severely impacted the campuses' operating budgets. While operations and maintenance (OMP) costs are taken into consideration when evaluating a project's financial feasibility, in this period of budget reductions, campuses are developing detailed strategic plans to ensure funding for OMP costs.

Funding and project volume, broken down by fiscal year and State/non-State funding source, is shown on the graph below. The trends displayed assume that all projects proposed for each year are funded and realized. To the extent that the actual number of projects approved falls below the annual request, the unfulfilled funding would add to the already significant backlog in projects necessary to meet the mission and goals of the University.

The chapters that follow provide a plan for capital development by campus, with a summary of capital projects to be funded from State and non-State resources between 2013-14 and 2023-24. Each chapter provides the context for the campus's capital financial plan including:

- strategic goals;
- capital program priorities; and
- challenges and constraints impacting the plan; and
- a summary table of State and non-State projects expected to be funded.

An expanded online edition of the *CFP* provides detailed descriptions for each project proposed for the next two years; the expanded online edition is located at:

http://www.ucop.edu/capital-planning/resources/2013-23-capital-financial-plan.html

A key to the symbols referenced in the following chapters is found in the Definitions and Legend chapter.



Display 6: Five-Year Forecast

Capital Financial Plan

2013-23

By Campus





University of California, Berkeley

Challenges

As the founding campus of the University of California, UC Berkeley today remains a national and international leader in education, research, and public service. Because Berkeley is also a densely developed urban campus, its capital investment program combines a strong focus on reinvestment with selective new construction.

The Berkeley *Capital Financial Plan (CFP)* is based on the objectives, policies, and guidelines identified in the 2020 Long Range Development Plan which, in turn, are based on the principles of excellence articulated in the Strategic Academic Plan.

The 2013-23 *CFP* reflects the campus's ongoing strategy to sustain and advance these principles in a changing economic environment. Foremost among these changes is the uncertain future of state capital funding for the University. In this context, the need for capital investment must be weighed against the many other demands on campus resources. This *CFP* reflects this new paradigm in its strategic and focused use of campus funds.

Strategic Goals

The 2013-23 CFP for the Berkeley campus reflects four strategic goals, which together establish a framework for capital investment over the next decade, and ensure each capital investment represents the optimal use of campus resources.

1. Leverage campus funds with external funds to maximize their impact.

If the Berkeley campus were to receive an infusion of state capital funds, those funds would be directed primarily toward seismic and life safety upgrades for academic projects, for which there are few other fund sources.

For the balance of capital investment needs at Berkeley, however, the future lies in the use of gifts, other external funds, and campus funds. The Berkeley *CFP* is based on a framework in which each funding source is optimized for the types of projects to which it is most suited:

Base Investment Program: Campus funds, including debt serviced by those funds, are prioritized for reinvestment in existing core instructional and research facilities, including building and infrastructure renewal, life safety upgrades, and resource conservation and related operational savings.

Enhanced Investment Program: The major sources of capital funds for other new construction and for major, transformational renovations are external and auxiliary funds:

• State funds for seismic replacement or renovation of education and research facilities.

6	Established	1873
re	FTE Enrollment 2012-13	
Figures	Undergraduates	27,997
Fi	Graduate Students	8,078
8	Health Science Students	749
ts	Campus Land Area	1,290 acres
Facts	Campus Buildings	10.5 million ASF
μ.	Nobel Laureates (active & emeritus)	9



- Gifts and grants for construction or renovation of education and research facilities (including new program initiatives).
- Student-fee referenda for construction or renovation of student life facilities.
- Auxiliary revenues for construction or renovation of housing and parking facilities.

Campus funds may be used to make strategic, leveraged contributions when projects address key mission goals-for example, as the 'final' increment of funding for a project otherwise supported by gifts.

Seismic risk remains a high priority at Berkeley where, although over 75% of space determined to require improvement is complete or underway, over 1.6 million gsf remains. Because some potential exists for a 2014 or 2016 general obligation bond measure, the campus has identified several seismic priorities in its *CFP* as state-eligible.

2. Require each project budget to cover its entire useful life.

Historically, capital investment featured not only state funds dedicated to new construction, but also incremental increases in the annual state contribution to cover the operation, maintenance and renewal of new facilities (OMP). Because the state contribution no longer has a direct link to OMP, the campus has assumed future such expenses would be borne by the campus budget.

At Berkeley, the financial strategy for each new project creating net new space must cover not only the initial capital cost of the project, but also the ongoing, incremental cost of operation, maintenance and renewal over its useful life. Each project also has an obligation to contribute to the campus-wide infrastructure of utilities, roads and landscape, which are outside the scope of the project itself yet essential to its function. At Berkeley, each new project over \$100,000 is assessed a fee of 4 percent of project cost for this purpose.

The long-term goal at Berkeley is to establish a specific capital renewal plan for each major campus asset. The first priority for these long-term renewal plans are the campus's new high-performance buildings.

3. Commit to sustained investment in capital renewal of buildings and infrastructure.

The Berkeley campus has made several major capital investments over the past decade to house exciting new initiatives in education and research: investments that leverage campus funds with state funds, grants, gifts, and student-fee referenda. It has also committed to a significant and sustained effort to renew its inventory of existing buildings and infrastructure by establishing two ongoing programs: Capital Renewal and the 'Capital Bank.'

Capital Renewal of buildings and infrastructure is key to the campus's





ability to recruit and retain exceptional students, faculty, and researchers, and to pursue new topics of research and new models of instruction. The CFP includes a program of up to \$30 million per year in campus equity and debt directed toward reinvestment in existing facilities, to:

- Renew existing building and infrastructure systems at or beyond the end of their useful lives.
- Upgrade existing building and infrastructure systems unable to meet current performance demands.
- Improve existing systems to reduce operation cost and resource consumption.
- Perform code and seismic upgrades where modest investments can yield significant risk reductions.
- Renew and enhance roads, paths, landscapes, and places of interaction.

Whereas the Capital Renewal program is driven primarily by the age and performance of core building, utility, and information systems, the 'Capital Bank' is designed to respond primarily to changes driven by program needs: new fields of instruction, new paths of research, and changes in methods and workstyles. The CFP envisions a program of up to \$15 million per year in central campus equity funds directed toward reinvestment in existing facilities, to:

- Renovate existing spaces to accommodate new initiatives and changes in methods and workstyles.
- Renovate existing spaces to improve function and space utilization.

Evaluate and implement alternative strategies to meet programdriven needs.

To the extent feasible, Capital Bank funds are leveraged with external and departmental funds, to maximize the impact of limited central campus resources.

4. Utilize private-sector partnerships to reduce cost and risk.

The University has implemented private-sector partnerships in a variety of forms, from groundlease-leasebacks to donor developments, and for a variety of project types, from student housing to research labs. In general, the advantages tend to be greater in project types that are more generic and similar to private-sector models. The Berkeley campus routinely considers private-sector partnerships as a potential delivery model in every major new construction project, as well as in renovation projects where the scope and logistics are conducive to this delivery model.

Achievements

Given the imperative to reduce seismic risk at Berkeley, the capital investment program strives to combine significant improvements in quality and performance with significant improvements in life safety. Four major projects are under construction in late summer 2013:

- The seismically deficient Eshleman Hall is being replaced with a new center for student life as part of the Lower Sproul Projects.
- The seismically deficient Campbell Hall is being replaced with a new facility for physics and astronomy.
- The seismically deficient Berkeley Art Museum is being replaced with a new complex for art and film in downtown Berkeley.
- Twelve early-1960s residence halls are being strengthened with seismic upgrades.

The Capital Renewal program is now in its second year, with another \$30 million in priority reinvestment projects to begin in 2013-2014. Meanwhile, the Berkeley campus continues to pursue several privatesector partnerships, including: construction of a new addition to Haas Business School; construction of a new Aquatics Center; renovation of the historic Bowles Residence Hall; and construction of a new parking structure and sport field at Maxwell Field.





2013-23 Berkeley Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Haas School Addition	E&G		DD							DD
Girton Hall Relocation	E&G		1,000 GF							1,000
Soda Hall Addition	E&G		23,700 GF							23,700
Maxwell Field Parking Structure	AUX		PR							PR
Bowles Hall Renovation	AUX		PR							PR
Wellness Center	AUX		29,200 EF							29,200
Etcheverry Hall Renovation	E&G		27,600 GF							27,600
Haviland Hall Renovation	E&G		12,500 GF							12,500
2223 Fulton Seismic Demolition	E&G		2,000 CF							2,000
Arch & Engr Bldg Seismic Demolition	E&G			420 CF						420
Tolman Hall Seismic Replacement	E&G			193,100 SE				15,500 SE		208,600
Moffitt Library Renovation	E&G			50,000 GF						50,000
Southside Student Apartments	AUX			PR						PR
Dwinelle Annex Seismic Renovation	E&G					5,800 SE				5,800
Wellman Hall Seismic Renovation	E&G					28,700 SE				28,700
Hearst Gymnasium Seismic Renovation	E&G						53,000 SE 53,000 GF			106,000
Evans Hall Seismic Retrofit	E&G							51,100 SE		51,100
McLaughlin Hall Seismic Renovation	E&G							32,200 SE		32,200
Giannini Hall Seismic Renovation	E&G								44,900 SE	44,900
Edwards Stadium Seismic Renovation	E&G								8,900 GF	8,900
Donner Addition Seismic Retrofit	E&G								17,800 SE	17,800
Campus Capital Renewal (Includes SEP)	E&G		30,000 EF	30,000 EF	30,000 EF	30,000 EF	30,000 EF	30,000 EF	120,000 EF	300,000
Capital Projects \$750K to \$5M (E&G)	E&G		17,500 CF	15,000 CF	15,000 CF	15,000 CF	15,000 CF	15,000 CF	60,000 CF	152,000
Total Capital Program			143,500	288,520	45,000	79,500	151,000	143,800	251,600	1,102,920





UC Davis offers more than 100 undergraduate majors in four colleges and advanced degrees from six professional schools. The campus has 13 specialized research centers, a comprehensive medical center, and research funding of more than \$750 million in 2012-13. Graduate study and research opportunities are offered in nearly 90 programs, along with a number of interdisciplinary graduate study programs, especially laboratory-intensive science programs.

Strategic Goals

Chancellor Katehi has advanced a "A Vision of Excellence" to lead and inspire UC Davis's journey over the next decade and ensure that the campus is recognized for its diverse educational opportunities, its innovative, interdisciplinary and collaborative research endeavors, and its leadership of enterprises that support social responsibility and a sustainable global environment. In support of the Chancellor's vision, the 2013-23 Capital Financial Plan (CFP) represents UC Davis's prioritization of scarce resources to advance continued growth and to improve campus facilities. The CFP represents a balance of investment in existing facilities - necessary for responsible stewardship of capital resources to maintain excellence - with investment in new construction in support of program expansion.

Capital Investment Strategies

Driven by program priorities, the campus bundles capital project investments that leverage support from a variety of sources, both internal and external. These investments provide benefits across discip-

6	Established	1905
Figures	FTE Enrollment 2012-13	
	Undergraduates	25,759
.00	Graduate Students	4,159
Ц N	Health Science Students	2,058
∞	Campus Land Area	5,330 acres
sts	Campus Buildings	8.1 million ASF
Facts	Hosptial, Clinics & School of Medicine	2.0 million ASF

Jan Shrem and Maria Manetti Shrem Museum of Art (Rendering)

lines and function to improve the quality of place for all members of the campus community.

Capital Program Priorities

Capital investment in recent years has niether kept pace with campus facility needs nor addressed the renewal demands of an aging campus. Capital priorities for Davis's main campus address a number of needs: capital investment to achieve program expansion; a building renovation and deferred maintenance program to maintain excellence; and the renewal of infrastructure systems to increase capacity and reliability. The Sacramento campus, which includes the Medical Center, seeks to balance the need to provide adequate funding to support its multi-faceted mission of patient care, education, and research with the demand for new and renovated facilities to support its research and teaching enterprises.

Capital Investment in Programs

New academic facilities are necessary both to support academic and research excellence and to accommodate growth that has already occurred. The CFP includes more than \$1.5 billion in program-centric investment on the Davis and Sacramento campuses. The Jan Shrem and Maria Manetti Shrem Museum of Art and the Classroom and Recital Hall projects together symbolize a significant investment in the arts, and the California Hall project will deliver much anticipated new general assignment classroom space. Other notable projects that will further program excellence include investment in facilities to serve Chemistry and Chemical Engineering, the Veterinary Medicine Teaching Hospital replacement, and the International Complex. On the Sacramento campus, a project at the Institute for Regenerative Cures and a remodel of the Translational Science Center provide for research growth.

Building Renewal and Stewardship

Of the approximately 10 million gross square foot located in more than 1,200 buildings on the Davis main campus, sixty percent is more than 25 years old and most buildings have not benefited from significant renovation. The CFP includes more than \$400 million of stewardship-related investment at UC Davis, and the campus continues to assess the resources needed to address remaining building system renewal costs.



The *CFP* also includes projects necessary to comply with the *University's Seismic Safety Policy*. UC Davis is planning improvements to address seismic deficiencies, including the high-priority projects of Walker Hall and the Chemistry Building and Chemistry Annex. On the Sacramento campus, the medical center has developed a comprehensive compliance plan to achieve seismic safety mandates as outlined in SB 1953. Of the five planned East Wing projects related to the future demolition of the North/South Wing, the first has been approved, and four additional projects are identified in the 2013-23 *CFP* totaling approximately \$50 million. Additional projects in the *Plan* include the expansion of services to satisfy seismic mandates. Because some potential exists for a 2014 or 2016 general obligation bond measure, the campus has identified several seismic priorities in its *CFP* as 'state eligible.'

Infrastructure Renewal

UC Davis owns and operates most of its infrastructure, and those systems require significant investment to maintain and to serve growth. The *CFP* includes over \$130 million of investment in infrastructure renewal, including renewable energy systems. On the Sacramento campus, the Emergency Power Upgrade Phase 2 will provide code-mandated emergency power to all medical and research buildings.

Challenges

Amidst program requirements to plan for growth, maintain existing facilities, and meet increasing infrastructure needs, the climate remains challenging for developing and implementing a capital program. The backlog of deferred maintenance at the main campus alone is approximately \$1.2 billion, among the highest of peer public higher education institutions. Based on the uncertainty of future State support, the campus must fund projects historically funded by the State with scarce non-State resources at the expense of projects that would further the Chancellor's Vision of Excellence.

Planning for the Sacramento campus's capital program is complicated by the current economic climate of uncertainty regarding federal and state sources for health care reimbursements, the ongoing health care public policy debate, and a policy to advance seismic compliance projects. These additional pressures continue to strain Medical Center resources.

Capital Program Achievements

During the past decade, the Davis campus has invested more than \$1.6 billion of both State and non-State funds in capital construction. During fiscal year 2012-13, the campus delivered the Veterinary Medicine 3B project, a facility that provides biomedical research laboratories, laboratory support, and office space for students and faculty. The campus also opened the new Welcome Center, a destination for prospective students and their families, and where Undergraduate Admissions showcases UC Davis's programs and services. The design competition and contract award for the new Jan Shrem and Maria Manetti Shrem Museum of Art represents another capital milestone of the past year.



Classroom and Recital Hall (Rendering)

Davis

2013-23 Davis Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2020-23	Total Project Budget
Jan Shrem and Maria Manetti Shrem Museum of Art	E&G	15,900 EF 14,100 GF								30,000
Smart Lighting Initiative Phase 2	E&G	5,870 EF 1,922 EF								7,792
Animal Science Teaching Facility Relocation	E&G		4,600 EF 5,000 CF							9,600
Classroom and Recital Hall	E&G	1,000 X	9,000 EF 5,000 GF							15,000
Campus Solar Power Plant	E&G		PR							PR
Dairy Relocation	E&G		15,700 EF							15,700
Hospital Seismic Upgrade Stair Tower & Exit Corridor Upgrades (Sacramento Campus)	MC		18,400 HR							18,400
Data Center Upgrades (Sacramento Campus)	MC		12,000 HR							12,000
International Complex Phase I	AUX		11,700 EF 14,300 EF							26,000
Memorial Union Renewal	AUX		13,200 EF 5,000 UR							18,200
SVM Student Services and Administration Center (Scrubs Dining Facility)	E&G		11,000 EF 2,500 CF 7,800 EF							21,300
Seismic Corrections Phase 5	E&G		7,500 EF							7,500
California Hall	E&G		15,000 EF							15,000
Activities and Recreation Center Expansion	AUX		10,000 AR							10,000
Cruess Hall Pilot Plant Expansion	E&G		8,500 CF							8,500
Freeborn Hall Seismic Replacement	AUX		15,000 AR							15,000
Hospital Seismic Upgrade Univer- sity Tower (Sacramento Campus)	MC		12,800 HR							12,800
Tercero Student Housing Phase 4	AUX		43,000 EF 5,000 AR							48,000
Laboratory for Energy-related Health Research (LEHR) Remediation	E&G			10,800 CF						10,800
Translational Science Center (Sacramento Campus)	E&G			12,300 CF						12,300
UC Davis Institute for Regenerative Cures Phase 5 (Sacramento Campus)	E&G			5,700 CF						5,700
Briggs Hall Safety Improvements and Building Renewal	E&G			2,718 SE	24,358 SE					27,076
Chemistry Seismic and Life Safety Corrections	E&G			3,482 SE	30,418 SE					33,900
Walker Hall Renewal and Seismic Corrections	E&G		2,731 SE	27,917 SE	509 SE					31,157
UCDMC Portion Data Center	E&G			56,000 EF 21,500 EF						77,500
Emergency Power Upgrade Phase 2 (Sacramento Campus)	MC			12,500 HR						12,500
Engineering 4	E&G	2,350 CF		55,583 SE 509 CF						58,442
Health Sciences Education Expansion Phase 1 (Sacramento Campus)	E&G			10,000 GF 40,500 EF						50,500
Critical Infrastructure Phase 2	E&G			25,000 EF						25,000

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
La Rue Bridge Renewal	E&G			800 CF 5,200 FG						6,000
Main Hospital Seismic Compli- ance Children's Surgery Replace- ment (Sacramento Campus)	MC			20,000 SG 5,600 GF						25,600
Main Hospital Seismic Compli- ance Hospital Based Physicians (Sacramento Campus)	MC			10,680 EF						10,680
Seismic Corrections Thurman Laboratory	E&G			816 SE						816
Steam Improvements Phase 1	E&G			5,000 EF						5,000
North Addition Office Building (Sacramento Campus)	MC			45,000 EF						45,000
Softball Complex Relocation	AUX			7,500 GF						7,500
Chemistry Building Renovations Phase 2	E&G				9,766 SE					9,766
Intercollegiate Athletics Administrative Space	AUX				14,000 GF					14,000
Aggie Stadium Phase 2	AUX				40,000 GF					40,000
Orchard Park Redevelopment	AUX				PR					PR
Chemistry Annex Building Renovations	E&G					29,298 SE				29,298
Building Priority Phase 1	E&G					50,000 SE				50,000
Building Renewal Phase 1	E&G					30,000 SE				30,000
UC Davis Institute for Regenerative Cures Phase 6 (Sacramento Campus)	E&G					11,000 CF				11,000
Chemistry and Chemical Engineering Facility	E&G					150,000 EF 50,000 GF				200,000
Sciences Building	E&G					40,000 EF 10,000 GF				50,000
Chemistry Building Renovations Phase 3	E&G					9,766 SE				9,766
Deferred Maintenance	E&G					15,000 EF		15,000 EF	15,000 EF	45,000
Vet Med Teaching Hospital (VMTH) Replacement	E&G					65,000 GF				65,000
Social Sciences Building	E&G					15,000 EF				15,000
Baseball, Softball, and Soccer Clubhouse	AUX					10,000 GF				10,000
Seismic Corrections Phase 6	E&G						15,000 SE			15,000
Chemistry Building Renovations Phase 4	E&G						9,766 SE			9,766
Environmental Sciences Facility	E&G						10,000 CF 20,000 GF 55,000 EF			85,000
Graduate and Professional Student Center	E&G						10,000 CF			10,000
Surface Water Project	E&G						20,000 SE			20,000
Vet Med Teaching Hospital (VMTH) Renewal	E&G						35,000 GF			35,000
Research IV Building (Sacramento Campus)	MC							4,000 CF 47,000 EF		51,000
Crititcal Infrastructure Phase 3	E&G							25,000 SE		25,000
Governor's Hall Remodel (Sacramento Campus)	E&G							10,000 SE		10,000

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
MIND Prevention and Treatment Research Building (Sacramento Campus)	E&G							28,539 SE		28,539
Health Sciences Education Expansion Phase 2 (Sacramento Campus)	E&G							72,000 SE		72,000
Hospital Seismic Upgrade East Wing Facsade Replacement (Sacramento Campus)	МС								22,600 HR	22,600
Research V Building (Sacramento Campus)	MC								70,000 SE	70,000
Ambulatory Care Center Phase 2 (Sacramento Campus)	MC								66,000 EF 20,000 GF	86,000
Parking Structure 4 (Sacramento Campus)	MC								35,000 EF	35,000
Track Relocation	AUX								15,000 GF	15,000
Seismic Corrections Phase 7	E&G								15,000 SE	15,000
Research VI Building (Sacramento Campus)	MC								70,000 SE	70,000
Webster Hall Replacement	AUX								18,800 EF 6,200 AR	25,000
Basketball/Volleyball Practice Facility	AUX								10,000 GF	10,000
World Food Center	E&G								PR	PR
Center for Agriculture, Health, and Nutrition	E&G								PR	PR
Acute Rehabilitation Hospital (Sacramento Campus)	MC								30,000 EF	30,000
UC Davis Health System Priority Phase 1 (Sacramento Campus)	E&G								60,877 SE	60,877
Health System Projects \$750K to \$5M	MC		22,000 HR	20,000 HR	20,000 HR	20,000 HR	20,000 HR	18,000 HR	72,000 HR	192,000
Student Affairs Recreation, MU, Unitrans Projects \$750K to \$5M	AUX		6,750 AR	750 AR	750 AR	750 AR	750 AR	750 AR	8,250 AR	18,750
Intercollegiate Athletics Projects \$750K to \$5M	AUX		5,000 GF	1,500 GF	5,000 GF	1,500 GF	5,000 GF	1,500 GF	13,000 GF	32,500
Capital Projects \$750K to \$5M (E&G)	E&G		14,000 CF	14,000 CF	14,000 CF	14,000 CF	14,000 CF	14,000 CF	56,000 CF	140,000
Student Housing Projects \$750K to \$5M	AUX		6,000 AR	5,700 AR	2,400 AR	1,600 AR	1,000 AR	1,000 AR	4,000 AR	21,700
Student Affairs Division-Wide System Renewal \$750K to \$5M	AUX		1,000 AR 1,000 UR	700 AR 700 UR	1,000 AR 1,000 UR	1,000 AR 1,000 UR	1,000 AR 1,000 UR	1,000 AR 1,000 UR	5,000 AR 5,000 UR	21,400
Total Capital Program			258,481	478,155	269,201	433,914	293,516	124,250	641,266	2,498,783



UNIVERSITY OF CALIFORNIA - CAPITAL FINANCIAL PLAN 2013-23

"As a Top Ten public university, UC Davis has worked diligently and creatively over its first century of existence to become one of our nation's great, trailblazing institutions of higher education, advancing the human condition through research, scholarship and public service.

Now, for UC Davis to continue its upward trajectory and fully meet the needs of our students, faculty, staff and of the state of California, we must also make sure that we have the kinds of diverse and excellent facilities required by a university known for its innovative, interdisciplinary research endeavors, social responsibility and sustainability.

To enhance UC Davis' historic academic and research excellence and to accommodate growth that has already occurred and will in the future, we must be as diligent and as creative tomorrow as we have been so far in making sure our facilities at the campus in Davis and at the Health System campus in Sacramento are as outstanding, up to date and excellent as the students, faculty and staff who've made this the great university it is today."

> - Linda Katehi, Chancellor

Student Community Center



University of California, Irvine



In fewer than 50 years, the Irvine campus has grown into an internationally distinguished research university, consistently ranking among the nation's best public institutions and among the top 50 universities overall. Its status as the youngest institution to be elected to the Association of American Universities is an indicator of Irvine's stature in the academic community and of its rapid development.

Strategic Goals

UC Irvine's 2013-23 Capital Financial Plan (CFP) is predicated on the 2006 Strategic Academic Plan (SAP). Key objectives of the SAP include: maintaining and strengthening core academic disciplines; enrolling 32,000 students, with graduate students comprising 25 percent of enrollment; developing innovative programs in emerging disciplines and supporting interdisciplinary collaboration; and expanding on-campus housing to accommodate 50 percent of graduate and undergraduate students. Although the campus's original plan for achieving these goals by 2015 has been slowed by the budget uncertainties of recent years, significant progress has been made with the addition of new programs in law, nursing, public health and pharmaceutical sciences, and the construction of additional housing to accommodate approximately 48 percent of current enrollment on campus.

Capital Program Priorities

Capital program priorities support the campus's strategic goals as articulated in the *Strategic Academic Plan*, the development objectives outlined in the *2007 Long Range Development Plan*, and the context of the *Physical Design Framework*. The capital program provides the new facilities necessary to accommodate the academic mission and other

10	Established	1965
ē	FTE Enrollment 2012-13	
Figures	Undergraduates	23,574
<u>.</u>	Graduate Students	3,701
μ μ	Health Science Students	1,511
8	Campus Land Area	1,543 acres
Facts	Campus Buildings	7.3 million ASF
aC	Nobel Laureates (active & emeritus)	2
Г Г	University Professors (active & emeritus)	1

campus needs, with projects such as the Health Sciences Instruction and Research Building; Law Building; University Extension Classroom Building; and Mesa Court Expansion. The program also addresses the aging of existing facilities through projects such as the Capital Renewal and Infrastructure Improvement Program; Engineering Renovations; and Med Surge Replacement. The *CFP* also includes infrastructure projects that will address existing deficiencies and growth needs, keep the campus functioning efficiently, and further reduce the campus's carbon footprint. Examples of this type include the Primary Electrical Improvements Step 4 and the Central Plant Renewal projects.

UC Irvine strives to be a leader in environmental stewardship, and continues to incorporate conservation and energy-efficiency goals into the capital program. To date, eight UCI buildings have been certified LEEDTM Gold, and ten buildings have been certified Platinum.



Challenges

The campus faces several major challenges in the implementation of its capital program. The foremost obstacle is the lack of sufficient funding to support the program. Irvine's proposed 2013-23 *Capital Financial Plan* totals over \$1.6 billion. A little more than \$649 million, or about 40 percent of the total capital program, consists of projects eligible for State funding. The remaining projects would be funded from non-State sources, including gifts, external financing, campus funds, auxiliary reserves, and hospital reserves. The economic conditions of the last few years have resulted in fewer funding opportunities for both the State-funded and non-State-funded programs. The campus is working to cultivate additional fund sources while continuing to make the best use of available capital resources. Given these funding difficulties, a continuing priority - and challenge - is managing existing space to make the most efficient use of current facilities.

The critical need for deferred maintenance, safety, and utility infrastructure repairs is a challenge confronting the campus on a daily basis. The UCI campus is now almost 50 years old and over 20 percent of its space is in buildings more than 40 years old, and nearly 40 percent is in buildings from 20 to 40 years old. The campus has a backlog of approximately \$350 million in deferred maintenance needs, according to the UCOP Facilities Infrastructure Renewal Model, which the campus is proposing to address with a number of projects in the 2013-23 CFP, including Med Sci Renovations, Building Renewal Phases 1 & 2, Fire and Life Safety Improvements, etc. In addition, UCI Facilities Management has prioritized \$72 million in projects within the next one to three years that address issues of safety or imminent failure. To begin to address the most urgent of these priorities, the campus is proposing \$20 million in external financing in 2013-14 for a Capital Renewal and Infrastructure Improvement program. As this program is implemented over the next three years, the campus will consider whether to add additional debt funded renewal projects to future editions of the CFP.

Achievements

Three building projects were completed on the Irvine campus in 2012-13. The Newkirk Alumni Center provides consolidated facilities in a more visible location for alumni services and activities. Completion of the Verano Unit 4 Replacement project provides 400 student beds in modern, high-density apartments, replacing deteriorated apartments built in 1976. The Gavin Herbert Eye Institute provides research and clinical space for the School of Medicine. In addition, construction

began on Business Unit 2, which will provide critically needed space for the instruction and research programs of the Paul Merage School of Business.





2013-23 Irvine Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Capital Renewal and Infrastruc- ture Improvement Program	E&G		20,000 EF							20,000
Hewitt Hall Basement Buildout - Laboratory Shell	E&G		7,740 GF							7,740
Child Development Center	E&G		13,000 GF							13,000
University Extension Classroom Building	AUX		35,000 EF							35,000
Medical Center Parking Structure	MC		30,000 EF							30,000
Mesa Court Expansion	AUX		110,000 EF 10,000 AR							120,000
Law Building	E&G		85,000 GF							85,000
Center for Awareness, Reflection, and Meditation	E&G		8,300 GF							8,300
Office/Classroom Building	E&G		25,000 EF 5,000 CF							30,000
Business Unit 2	E&G	39,595 LR 4,656 GF		1,068 SE 3,205 GF						48,524
Primary Electrical Improvements Step 4	E&G			19,462 SE						19,462
Outpatient Clinical Center	MC			50,600 GF						50,600
East Campus Commerical Development	E&G			PR						PR
On-Campus Hotel	E&G			PR						PR
Health Sciences Instruction and Research Building	E&G				52,482 SE		3,166 SE			55,648
Engineering Renovations	E&G	92 CF			20,000 SE					20,092
Med Surge Replacement	E&G				79,100 SE		3,700 SE			82,800
Central Plant Renewal	E&G					9,300 SE				9,300
Sciences Instruction & Research Building 1	E&G					20,000 SE 20,000 GF		2,000 SE		42,000
Fire and Life Safety Improve- ments	E&G					17,400 SE				17,400
Med Sci Renovations	E&G						46,600 SE			46,600
Chilled Water System Expansion	E&G						14,500 SE			14,500
Humanities and Social Sciences Classroom Renovations	E&G						2,654 SE			2,654
Athletics Facilities Improvements	AUX						8,300 GF			8,300
Sciences Instruction & Research Building 2	E&G							73,400 SE	4,200 SE 4,200 CF	81,800
Athletics Department Building	AUX							15,500 GF		15,500
Building Renewal Phase 1	E&G								31,400 SE	31,400
Water, Sewer, and Storm Drain Improvements	E&G								15,193 SE	15,193
Biological Sciences Greenhouse Replacement	E&G								15,500 SE	15,500
Shellmaker Island Boathouse Replacement	AUX								7,000 GF	7,000
Student Apartments	AUX								PR	PR
Sciences Buildings Renovations	E&G								22,000 SE	22,000
Academic Building	E&G								39,000 SE 21,000 GF	60,000

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Institute for Memory Impair- ments and Neurological Disorders	E&G								52,000 GF	52,000
ARC Expansion Phase 4	AUX								52,000 EF	52,000
Social & Behavioral Sciences 2	E&G								52,000 SE	52,000
Building Renewal Phase 2	E&G								26,000 SE	26,000
Health Sciences Instruction and Research Building 2	E&G								43,000 SE 2,500 CF	45,500
Transportation Infrastructure Safety Improvements	E&G								4,100 SE	4,100
Art Museum	E&G								41,000 GF	41,000
Parking Structure 5	AUX								44,000 EF	44,000
Events Center	E&G								PR	PR
Capital Renewal Program	E&G			6,400 SE	3,200 SE	3,200 SE	3,200 SE	3,200 SE	12,800 SE	32,000
Capital Projects \$750K to \$5M (E&G)	E&G		10,000 CF	10,000 CF	15,000 CF	15,000 CF	15,000 CF	15,000 CF	60,000 CF	140,000
Capital Projects \$750K to \$5M (MC)	МС		15,000 HR	60,000 HR	150,000					
Total Capital Program			374,040	105,735	184,782	99,900	112,120	124,100	608,893	1,609,570

Biomedical Research Center





University of California, Los Angeles

The UCLA's 2013-23 Capital Financial Plan (CFP) framework guides the campus in prioritizing capital investments in support of its mission and identifies facilities needs aligned with the 2002 Long Range Development Plan, as amended in March 2009, and the 2009 Physical Design Framework. The updated plan is based on three strategic capital initiatives included in the accepted 2012-22 CFP: completion of the seismic correction of all remaining structures by 2019; transformation of the campus into a residential academic community; and development of a sustainable campus. The updated CFP also includes allocations for capital investments in the UCLA Medical Center.

Strategic Goals

Complete the Seismic Correction Program: Since the mid-1980s, UCLA has implemented a comprehensive seismic safety program to correct buildings with Level V or Level VI seismic performance ratings (formerly "Poor" or "Very Poor.") Since the 1994 Northridge earthquake, UCLA has allocated 92 percent of its State general obligation bond funding to seismic and life-safety upgrades in campus buildings and \$180 million of State lease revenue bond funding to replace seismically unsafe hospital facilities. An additional \$129 million in State lease revenue bond funding was approved in 2010-11 for seismic renovation of the South Tower in the Center for the Health Sciences (CHS).

To date, seismic renovations of most general campus structures have been completed, and detailed planning is underway for remaining facilities on and off the campus. The campus has completed seismic corrections to 49 structures totaling 7.8 million gsf, and has work in progress on seven structures totaling 1.28 million gsf, including the seismic renovation of the 443,000 gsf South Tower and a 340,000 gsf parking structure. Five structures totaling 772,000 gsf remain in the Center for the Health Sciences complex.

Transform UCLA into a Residential Academic Community: During the past 20 years, UCLA has been evolving from a commuter campus to a residential campus by accommodating over 10,000 students in on-campus housing and approximately 2,500 in Universityowned off-campus housing. The campus continues to experience housing demand generated by for its undergraduate and graduate students, to be met in part by projects completed in 2013 for 1,500 additional undergraduate beds in the Northwest zone and 500 studio apartments for single graduate students in the Southwest zone.

Build a Sustainable Campus: UCLA's Sustainability Committee, active since 2005, continues to advance campus sustainability practices and initiatives consistent with University policy. The campus's *Climate Action Plan* identifies initiatives to reduce green-house-gas emissions below 1990 levels by 2014, six years ahead of goals established in the UC Sustainability Policy. The Green Building Program and other initiatives have allowed the campus to reduce the amount of energy used on a square-foot basis in both its new construction and its renovation projects. Additionally, there has been a 20 percent reduction in vehi-

S	Established	1919
ĕ	FTE Enrollment 2012-13	
nr	Undergraduates	27,911
60	Graduate Students	7,894
Figures	Health Science Students	3,902
8	Campus Land Area	419 acres
	Campus Buildings	12 million ASF
ct	Hospitals and Clinics	3.1 million ASF
Facts	Nobel Laureates (active & emeritus)	3
	University Professors (active & emeritus)	2



Teaching and Learning Center for the Health Sciences (Rendering)

cle trips to and from the campus since 1990 as a result of the Transportation Demand Management Program and the development of additional on-campus housing. In the coming years, UCLA's challenge will be continued reduction of its carbon footprint as the campus expands and the demand for energy increases.

Capital Program Priorities

In support the campus's strategic goals, UCLA capital program priorities have been developed by a number of campus units, review committees and approval mechanisms.

Seismic Program: The campus is proceeding with an accelerated program to complete seismic corrections and fire/life-safety mitigations in the remainder of the CHS complex. High-priority projects include the seismic renovation of the CHS South Tower (currently underway), the seismic renovation of structures adjacent to the South Tower, installation of backbone fire-suppression and fire alarm systems in the CHS complex, renovations to the Life Sciences Building to accommodate occupants of seismically deficient space in the CHS; and construction of replacement facilities for medical and health sciences educational programs of the School of Medicine that occupy seismically deficient space in the CHS.

Residential Community: The campus is proposing construction of additional beds for undergraduate students in the Northwest zone of the campus, renovation of existing on-campus residence halls and dining facilities, and upgrades to off-campus apartment buildings. The additional undergraduate beds will help meet the goals of the LRDP to guarantee four years of housing to incoming freshmen and two years of housing to transfer students.

Sustainability: The campus will continue to advance sustainability practices and initiatives. UCLA is striving for LEED[™] Gold certification for all new construction and major refurbishment projects. Of thir-

Pauley Pavilion





UCLA Campus

teen projects that have received green building certifications, one achieved Platinum, seven achieved Gold and five achieved the University minimum of Silver. Another twenty-five projects are registered to receive certification. Other energy conservation programs, transportation, housing, information systems and waste diversion initiatives are underway.

Medical Center: Capital investments in the UCLA Medical Center include a proposed patient bed tower on the Westwood campus to meet the demand for patient beds; capital equipment replacement to ensure that the hospital system is equipped with state-of-the-art technology; improvements to the building envelope and infrastructure to the Merle Norman Pavilion that were not part of the recently completed UCLA Santa Monica Orthopaedic Hospital project; and the construction of additional administrative and clinical support facilities at the Santa Monica hospital.

Challenges

Since the 1994 Northridge earthquake, the Los Angeles campus has used 92 percent of its State general obligation bond funds for seismic and life-safety projects. Dramatic reductions in the State capital program since 2008 require the campus to use even more of its own resources to complete its seismic correction and infrastructure renewal program—at the expense of critically important projects that support academic growth and modernize or replace older buildings. Capital renewal and maintenance projects have not received adequate funding for many years, and the potential for future funding is uncertain. For a mature campus with over 200 buildings, it will be severely challenging to keep pace with investments necessary to ensure continuous advancements in research and teaching.

While the current 2013-23 Capital Financial Plan includes State-eligible

projects based on allocations from previous plans, it has also identified high-priority State-eligible projects that cannot be deferred until State funding is available. The Engineering VI - Phase 2, Clark Library Seismic Correction, and the Jules Stein Seismic Correction (75% Stateeligible) projects now are anticipated to proceed with funding from non-State resources.

The Electrical Distribution System Expansion Step 6C project will be implemented as a series of Chancellor-approved projects to address critical infrastructure deficiencies in the CHS and Southwest campus. The campus has also funded the installation of fire sprinklers and a fire alarm system in the Life Sciences Building to improve life safety in that facility. While the completion of the seismic correction program during the next ten years is largely dependent on the availability of State funds, the campus is aggressively pursuing non-State fund sources t support appropriate projects.

Achievements/Successes

In the past year, successful outcomes relative to the campus' three strategic initiatives and fundraising include the following:

Seismic Program: Seismic corrections to five structures totaling 2 million gsf were completed. In addition, the Regents approved the construction of a Teaching and Learning Center for the Health Sciences to accommodate programs of the School of Medicine that occupy seismically deficient space in the CHS.

Residential Community: Construction of 700 beds for undergraduate students and 500 studio apartments for graduate students were completed on-campus, and a 178 bed apartment complex for undergraduate students within walking distance to campus was purchased, in support of the transformation of UCLA from a commuter to a resi



Luskin Conference and Guest Center (Rendering)

dential campus.

Sustainability: The completed Hershey Hall project, involving the seismic renovation of an historic structure built in 1931, received LEED[™] platinum certification.

Philanthropy: In fiscal year 2012, UCLA raised \$402 million in gifts. Since 2006, the campus has raised an average of \$413 million annually.





2013-23 Los Angeles Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
CHS Seismic Correction and Fire Safety	E&G	458 CF	48,349 SE 3,348 CF							52,155
Engineering VI - Phase 2	E&G		70,000 GF							70,000
Jules Stein Seismic Correction and Program Improvements	E&G		57,000 GF							57,000
DeNeve Dining Renovation	AUX		9,500 AR							9,500
Saxon Suites Renovation	AUX		31,970 EF							31,970
Clark Library Seismic Correction	E&G		7,700 CF							7,700
UNEX Building Seismic Correction	E&G	325 CF	7,975 CF							8,300
Botanical Garden Enhancements	E&G			20,000 GF						20,000
Poolside Residence Hall	AUX			70,000 EF 2,000 AR						72,000
Northwest Campus Recreation and Maintenance Facilities	AUX			35,000 EF 17,500 AR						52,500
CHS South Tower Post- Occupancy Improvements	E&G			50,000 EF						50,000
Spaulding Field Football Building	E&G			50,000 GF						50,000
Theater, Film & Television Expansion and Renovation Phase 1	E&G				75,000 GF					75,000
Southern Regional Library Phase 3	E&G				36,438 SE					36,438
Student Services / Welcome Center	AUX				50,000 EF					50,000
CHS - SOM East Seismic Correction	E&G				5,000 SE	66,500 SE				71,500
CHS - SOM West Seismic Correction	E&G				2,000 SE	2,500 SE	25,500 SE			30,000
SMH Office Building	MC					40,000 EF				40,000
CHS - Biomedical Library Tower Seismic Renovations	E&G						1,500 SE	38,500 SE		40,000
SMH Courtyards Clinical and Administrative Support Building	MC								50,000 EF	50,000
SMH Merle Norman Pavilion Renovation	MC								60,000 EF	60,000
RRUMC Bed Tower	MC								500,000 EF	500,000
Life Sciences Building Renovation Phase 2	E&G								42,500 SE	42,500
CHS - School of Public Health Building Renovation	E&G								28,500 SE	28,500
Capital Renewal	E&G				10,000 SE	5,000 SE	5,000 SE	4,000 SE	16,000 SE	40,000
Capital Projects \$750K to \$5M	E&G		15,000 CF	15,000 CF	60,000 SE	150,000				
Capital Projects \$750K to \$5M	AUX		15,700 AR	12,700 AR	7,500 AR	7,500 AR	7,500 AR	4,580 AR	18,320 AR	73,800
Capital Equipment Replacement Lease Financing	МС		25,000 EF 40,000 HR	10,000 EF 40,000 HR	10,000 EF 40,000 HR	10,000 EF 40,000 HR	10,000 EF 40,000 HR	5,000 EF 35,000 HR	20,000 EF 140,000 HR	465,000
Capital Projects \$750K to \$5M	MC		5,000 HR	6,400 HR	25,600 HR	57,000				
Total Capital Program			336,542	327,200	255,938	191,500	109,500	108,480	960,920	2,290,080



University of California, Merced



Strategic Goals and Challenges

UC Merced's greatest challenge to accomodate enrollment growth, both graduate and undergraduate, is sufficient and timely capital development. The campus is faced with a growing gap between the strong student demand for admission and the campus's limited capacity to provide the capital and infrastructure needed to support that demand. Development of the facilities necessary to accommodate 10,000 students is critical to the success of the Merced campus, its economic viability and the ability of the University of California to provide access to all eligible resident students.

In May 2013, the Regents approved an Amendment to the UC Merced 2009 Long Range Development Plan (LRDP) to create a planning framework that identifies a Central Campus District and adds a new "Campus Mixed Use" (CMU) designation that would provide greater land use flexibility to design and deliver a master-planned development. The CMU designation includes 219 acres, which includes the current 104-acre site and adjacent areas immediately to the east of campus. The campus anticipates developing its Phase 2 facilities (2020 Project) within the boundaries of the CMU, a reduction of 136 acres as compared with the campus' original 2009 LRDP.

Capital Program Priorities

The UC Merced *Capital Financial Plan (CFP)* reflects the nature and degree of investment required to continue campus development consistent with the campus pre-amendment *LRDP*, and thus reflects the campus physical development strategy prior to that approved by the Regents with the recent *LRDP* amendment. It therefore reflects development of the 2020 Project on 355 acres. The campus anticipates that its capital financial plan will be updated and revised to reflect feasible proposals for the development of the 2020 Project.

The 2020 Project includes the facilities needed to support an enrollment level of 10,000 students, including academic, administrative, research, recreational buildings, student residences, student services buildings, utilities, infrastructure, outdoor recreation areas, and associated roadways, parking, and landscaping.

Se	Established	1998
ure	FTE Enrollment 2012-13	
Figu	Undergraduates	5,431
	Graduate Students	329
8		
its	Campus Land Area	2,000 acres
Facts	Campus Buildings	775,000 ASF
Г <mark>Р</mark>		

Notwithstanding ongoing planning for the 2020 Project, the campus has continued to design and construct several additional facilities. The new phase 4 of student housing residences and the first section of a new Student Services Building opened in the fall of 2013.

The completion of the new Student Services Building in the spring of 2014, and the additional facilities currently under development (the Science and Engineering Building 2 and the Classroom and Academic Office Building) will put a significant strain on campus infrastructure that will impact the reliability of the campus central plant and telecommunications infrastructure. The campus must upgrade its central plant and telecommunications facilities in the near-term to avoid significant operating risk when buildings under construction are completed. This is a project proposed for State approval for planning funds to be initiated in 2013 and approval for construction funds in 2014.

The University must also comply with the environmental mitigation requirements under its Section 404 permit. Efforts are currently underway to determine possible solutions to address these mitigation requirements, and the extent in which capital investment might be required. Finally, the campus plans to evaluate whether it can finance renovations to its initial Science and Engineering 1, Castle Building System Improvements, and specific outdoor recreation facilities for students.

2020 Project Next Steps

In addition to the development of its near-term priorities, the campus plans to release a *Request for Qualifications (RFQ)* to identify a "short-list" of potential development partners capable of delivering a project of the size and scope of the 2020 Project. Upon identification of the "short-list," the campus will confer with senior leadership on the qualifying firms, proposed funding approaches, and project delivery methods.




2013-23 Merced Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Science and Engineering 2	E&G	3,700 CF 81,040 SE	4,220 SE							88,960
Classroom and Academic Office Building	E&G	4,750 SE	45,144 SE		4,151 SE					54,045
Central Plant/Telecom Reliability Upgrade	E&G		1,400 SE	15,183 SE						16,583
Science and Engineering Building 1 Space Renovations	E&G			4,995 EF						4,995
Instruction and Research Building 1	E&G			12,000 SE	16,000 SE	258,425 SE		12,400 SE		298,825
Multipurpose Recreation Field	AUX			4,050 EF						4,050
Outdoor Recreation Courts	AUX			1,520 EF						1,520
Campus Parking Lot 1	AUX				2,500 EF					2,500
Castle Building Systems Improvements	E&G				4,085 EF					4,085
Bellevue Roadway and Intersection Improvements	E&G				2,200 SE	19,770 SE				21,970
Ranchers Road West Step 1	E&G				1,450 SE	13,030 SE				14,480
Bellevue District Infrastructure	AUX				1,012 EF	9,108 EF				10,120
Student Housing Phase 5	AUX				3,796 EF	82,244 EF				86,040
Dining 2	AUX				1,518 EF	28,852 EF				30,370
Campus Parking Lot 2	AUX				2,700 EF					2,700
Upper South Bowl Site Development and Infrastructure	E&G				25,840 SE					25,840
Campus Parking Lot 3	AUX					2,700 EF				2,700
Student Housing Phase 6	AUX						3,543 EF	67,308 EF		70,850
Campus Parking Lot 4	AUX							2,700 EF		2,700
Lower South Bowl Site Development and Infrastructure	E&G							31,020 SE		31,020
Student Academic Services Building	E&G							2,430 SE	51,560 SE	56,830
EHS, Facilities Management, and Public Safety Facility	E&G							1,530 SE	32,470 SE	35,140
Campus Parking Lot 5	AUX								2,700 EF	2,700
Central Plant Expansion	E&G								40,490 SE	40,490
Classroom and Academic Office Building 2	E&G								50,120 SE	50,120
Organized Research Building	E&G								100,770 EF	100,770
Student Housing Phase 7	AUX								75,910 EF	75,910
Bellevue Gateway Recreation Facility	AUX								35,425 EF	35,425

UNIVERSITY OF CALIFORNIA - CAPITAL FINANCIAL PLAN 2013-23

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Student Union	AUX								50,100 EF	50,100
Student Aquatics Center	AUX								14,170 EF 1,000 GF	15,170
Early Childhood Education Center 2	AUX								13,440 EF	13,440
Central Campus West Site Development and Infrastructure	E&G								46,520 SE	46,520
Instruction and Research Building 2	E&G								4,050 SE	100,000
Baseball and Softball Competition Complex	AUX								9,620 EF	9,620
Capital Projects \$750 to \$5M	E&G		1,000 CF	1,050 CF	1,050 CF	1,050 CF	1,050 CF	1,100 CF	4,700 CF	11,000
Total Capital Program			51,764	38,798	66,302	415,179	4,593	118,488	534,905	1,230,029

Mitigation Measures

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Lake Road/Bellevue Road Intersection Improvements	MIT		400 TBD	400 TBD						800
Lake Road/Yosemite Avenue Intersection Improvements	MIT				100 TBD					100
Federal Environmental Mitigation	MIT						11,200 TBD			11,200
Transportation Improvements	MIT						30,200 TBD			30,200
Total Mitigation Program			400	400	100		41,400			42,300





University of California, Riverside



Founded in 1907 as the UC Citrus Experiment Station, UC Riverside (UCR) became a general campus of the University of California in 1959. Today, UCR has almost 22,000 students; the student body is among the most diverse in the nation. Nearly 60 percent of undergraduate students are the first in their families to pursue college degrees.

The faculty of 700 scholars is recognized internationally for teaching, research, and public service in a wide variety of fields. The campus offers 80 bachelor degree programs, 46 master's degree programs, 38 Ph.D. programs and 17 California teaching and administrative credential programs. Approximately one in every eight students is involved in faculty-mentored research. UCR contributes approximately \$1.4 billion annually to the regional economy.

Strategic Goals

In UCR 2020: The Path to Preeminence, the campus commits to transforming the lives of the diverse people of California, the nation and the world, thereby enriching the State's economic, social, cultural and environmental future. The strategic goals identified include:

Academic Excellence
Diversity
Access
Engagement

These strategic goals are the framework for which UCR's capital program is implemented.

Significant Programmatic Initiatives

UCR School of Medicine (SOM): The UCR SOM enrolled its first cohort of 50 four-year medical students in the fall of 2013. The long-term home of the SOM is the West Campus, although East Campus facilities, such as the recently completed SOM Research Building and SOM Education Building, have supported SOM's launch. Significant planning is underway to develop new ambulatory care facilities on the West Campus, as well as at UCR's Palm Desert Center 70 miles east of the UCR campus. These facilities are consistent with the vision for the SOM,

es	Established	1907
nr	FTE Enrollment 2012-13	
Figure	Undergraduates	18,539
	Graduate Students	2,408
8	Health Science Students	58
Facts	Campus Land Area	1,125 acres
ac	Campus Buildings	4.7 million ASF
ET 1		

and are intended to be realized via public/private partnerhips. Realization of near term delivery of instructional programs and clinical services for UCR's SOM relies upon deployment of interactive Telemedicine technology at UCR, Palm Desert, and other Inland Empire sites.

The School of Public Policy. Approved as a graduate academic program in 2008, the School of Public Policy has broken new ground by providing the first public policy major in the UC system. Recruitment of faculty is underway, and "launch space" was assigned to the program in 2012-13. The establishment of the school leverages UCR's key strengths in health / population policy, social / cultural / family policy, economic policy, urban / environmental policy, policy institutions and processes, and international / foreign policy. Development of long term facilities for the School of Public Policy will also leverage opportunities for collaborative instruction and research with UCR's other Schools and Colleges.

Capital Program Priorities

Riverside's 2013-23 *Capital Financial Plan* priorities continue to be guided by UCR 2020 and ongoing campus deliberation, and include:

• Strategic investment in campus instruction and research capacity. While this investment still assumes facilities that would otherwise be eligible for State funding, UCR is actively evaluating public/ private partnerships, or other funding and delivery opportunities to realize highest priority facilities. In the first three years of this plan, UCR will embark on a detailed programming effort for a new Interdisciplinary Research Building and new classroom facility. The campus will also evaluate developing graduate and professional program facilities, student housing and multi-purpose facilities on the West Campus via public/private partnerships.

• Strategic investment in the quality of the student environment. Two such investments in the current plan include a program of seismic improvements to the Lothian Hall student residence complex and a new Campus Health and Counseling Center slated to replace the existing, inadequate facility. Both improvements are needed in order to sustain housing and student life. The campus is also increasing the portfolio of on-campus student housing opportunities that allows UCR to satisfy the related objective of continued transition from a commuter campus to a residential campus. Additional benefits accruing from these projects include decreased student commuting and a reduction in UCR's environmental footprint, thereby satisfying sustainability objectives.



 Reshaping of UCR's resource portfolio to increase the availability of discretionary funds and provide the campus with greater flexibility to realize strategic objectives. UCR is in the initial phase of a multi-year strategy to increase contract and grant activity to align with Association of American University expectations.

Challenges

Risks associated with the UCR's 2013-23 Capital Financial Plan include impacts to the following areas of capital investment:

Providing needed instruction and research infrastructure: UCR continues to cope with meeting demand for space and facilities due to past rapid growth in enrollment coupled with an absence of State Funding for these types of needs since Proposition 1D in 2006. The lack of State funds for capital has resulted in multi-year delays in the completion of planned instructional and research infrastructure. In some cases, this has constrained researchers' abilities to pursue grant opportunities. Similarly, teaching environments remain oversubscribed. Classrooms and teaching labs that are ill equipped or over-utilized can diminish the quality of the learning experience. Additionally, inadequate facilities can limit course offerings, which can impact a student's time to degree.

Meeting the need for student housing and living environments: The 2005 Long Range Development Plan (LRDP) goal is to house 50 percent of students, including 75 percent of freshmen and transfer students, and transform the Riverside campus from a commuter campus to a residential campus with student life activities. This is a result of UCR students recognizing the value on-campus housing and student amenities provide as well as the goal of the campus to reduce automobile trips. As a result UCR has made significant investments in improving the quality of the students' environs. Completion of the Glen Mor 2 student housing project and the Student Recreation Center expansion in 2014 will be key to addressing these needs within the ten-year plan. The existing Bookstore is being renovated and reprogrammed to addressed multiple program needs, and Lothian Hall student residence complex is slated for a multi-year seismic improvement program, first phase completed in Summer 2013.

Deferred Maintenance Backlog: The campus has a substantial backlog of deferred maintenance in State-supportable facilities. The project cost of "mission critical" deferred maintenance and renewal projects totals over \$280 million, while the total cost of deferred maintenance exceeds \$400 million. Long-term State underfunding of basic ongoing maintenance has exacerbated the campus's backlog and reduced the useful life of building systems.

Development of the West Campus: The long-term viability of UCR's graduate and professional schools, including the School of Medicine, is dependent on the development of the West Campus. Initial planning



2013-23 Riverside Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Batchelor Hall Building Systems Renewal	E&G	402 SE		15,739 SE						16,141
Barn Expansion	AUX		30,371 EF 1,607 AR							31,978
Solar Farm	AUX		PR							PR
Lothian Seismic Upgrade	AUX		11,477 EF 428 AR							11,905
Classroom Building	E&G		25,000 CF							25,000
Interdisciplinary Research Building	E&G			125,000 EF						125,000
A-I Residential Restaurant Replacement	AUX			34,834 EF 2,000 AR						36,834
A-I RSO and Market at Aber- deen	AUX			13,516 EF 500 AR						14,016
C-Center	AUX			PR						PR
Engineering Building Unit 3	E&G			81,712 SE			4,606 SE 1,111 CF			87,429
Palm Desert Ambulatory Care Facilties	E&G			PR						PR
Pierce Hall Improvements	E&G			24,551 SE						24,551
Psychology Building Phase 2	E&G			19,362 SE			965 SE			20,318
Interdisciplinary Research and Instruction Building	E&G				125,000 SE					125,000
Campus Health and Counseling Center	AUX				8,000 UR 8,000 GF 22,100 EF					38,100
Highlander Hall Replacement Facilities	E&G				PR					PR
School of Medicine (SOM) Infrastructure Improvements 1	E&G				27,260 SE					27,260
West Campus Ambulatory Care Facilities	E&G				PR					PR
SOM Instruction and Research 1	E&G				88,070 SE					88,070
Dundee Residence Hall	AUX					94,907 EF 3,750 AR				98,657
Lothian Infrastructure Improve- ment Program	AUX					19,600 AR				19,600
SOM Instruction and Research 2	E&G					324,920 SE				324,920
SOM Infrastructure Improv- ments 2	E&G					43,520 SE				43,520
West Campus Graduate and Professional Center, Phase 1	E&G						3,824 SE	4,445 SE	49,674 SE	57,943
West Campus Infrastructure Improvements	E&G						611 SE	817 SE	15,163 SE	16,591

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Proj- ect Budget
East Campus Infrastructure Improvements Phase 3	E&G						7,420 SE			7,420
Academic Facilities Improvements	E&G						7,900 SE			7,900
Academic Facilities Improvements 2	E&G							21,870 SE		21,870
East Campus Infrastructure Improvements, Phase 4	E&G							10,940 SE		10,940
West Campus Infrastructure Improvements 2	E&G								14,280 SE	14,280
West Campus Graduate and Professional Center, Phase 2	E&G								58,084 SE	58,084
East Campus Core Research Facilities	E&G								64,800 SE	64,800
Academic Facilities Improvements 3	E&G								11,360 SE	11,360
Capital Projects \$750K to \$5M	E&G		5,740 CF	5,912 CF	6,090 CF	6,272 CF	6,460 CF	6,654 CF	28,673 CF	65,801
Capital Projects \$750K to \$5M	AUX		4,000 AR	4,120 AR	4,244 AR	4,371 AR	4,502 AR	4,637AR	19,981 AR	45,855
Total Capital Program			78,623	327,246	288,764	497,340	37,399	49,363	262,015	1,540,750

envisions facilities to accommodate the Graduate School of Education and School of Public Policy, as well as new facilities for the long-term build-out of the School of Medicine.

Each of these initiatives requires a significant investment in infrastructure. Risks associated with an inability to develop the West Campus include operational constraints for graduate and professional programs or SOM programs housed in inadequate space, or in locations that do not leverage collaboration amoung programs.

- School of Medicine received accredidation and welcomed the first class in August 2013.
- School of Public Policy was officially lauched and will accept graduate students in the Winter of 2014.
- Completion of the Glen Mor 2 Student Apartments project that will provide 814 beds and help achieve the LRDP requirement of housing 50 percent of students on campus.
- The Telemedicine program expanded access in connected to remote clinics in Inyo County.

Achievements

Recent developments of significance for UCR include:

C- Center (Rendering)





University of California, San Diego



UC San Diego's origins date to 1912 when the Scripps Institution of Oceanography became part of the University of California. Established as a comprehensive general campus in 1960, UC San Diego has evolved into an internationally renowned research university. A distinguishing academic feature of the campus is found in its six semi-autonomous undergraduate colleges. Each college, with its own residential and academic facilities, has a distinctive educational philosophy that provides academic and extramural opportunities typically found only in small liberal arts colleges.

Professional and advanced degrees, as well as research opportunities, are provided by the general campus's divisions and graduate programs, the Graduate School of International Relations and Pacific Studies, the Rady School of Management, the Scripps Institution of Oceanography, the School of Medicine, the Skaggs School of Pharmacy and Pharmaceutical Sciences, and the UC San Diego Health System.

Strategic Goals

UC San Diego has embarked on an update to its strategic plan, involving input from students, faculty, and staff. Although the planning process is still underway, common themes materializing are excellence in teaching, research, and patient care. Support of the goals emerging in the campus strategic plan process will require the ongoing renewal of existing buildings and infrastructure and the construction of new facilities to ensure that appropriate opportunities and conditions exist for students and faculty to flourish.

Capital Program Priorities

UC San Diego endeavors to be especially creative, prudent and resourceful in its efforts to obtain funding for construction and maintenance of the campus's building and infrastructure inventory. While the

S	Established	1960
Ğ	FTE Enrollment 2012-13	
nr	Undergraduates	23,822
Figure	Graduate Students	4,054
Ē	Health Science Students	1,746
8	Campus Land Area	2,143 acres
	Campus Buildings	9.8 million ASF
ct	Hospitals and Clinics	1.3 million ASF
Facts	Nobel Laureates (active & emeritus)	8
	University Professors (active & emeritus)	7

priorities for the capital improvement program will continue to evolve to support the resulting goals of the strategic plan, the projects included in the *2013-23 Capital Financial Plan (CFP)* support the emerging strategic planning themes mentioned above.

Projects identified in the 2013-23 *CFP* will support new and expanding instruction and research programs, address critical systems renewal needs, improve capacity and distribution of utilities, and further enhance community relationships. These projects include: renovation of existing outdated teaching and research spaces, and housing and dining facilities; new construction to provide critical instruction and research space in biological and physical sciences disciplines, and for patient wellness and outpatient care for the Health System; and improvements for fire and life safety and utility infrastructure to address campus safety.

Challenges

Aged facilities: Many of the buildings serving the general campus and the health science programs are over 40 years old; a few at the Scripps Institution of Oceanography are nearly 100 years old. Renewal and upgrades are required to respond to health and safety requirements, obsolescence, and changing academic programs. Without renewal or replacement, many older buildings cannot support modern teaching and research activities effectively.

Deferred Maintenance Backlog: The campus has a substantial backlog of deferred maintenance in State-supportable facilities. The project cost of "mission critical" deferred maintenance and renewal projects totals over \$62 million, while the total cost of deferred maintenance exceeds \$300 million. Long-term State underfunding of basic ongoing maintenance has exacerbated the campus's backlog and reduced the useful life of building systems.

Academic Space Shortages: The campus has faced a shortage of academic space over the last decade, because State funding for construction of new facilities has not kept pace with the evolution of academic programs and campus enrollment growth. Without new construction, the campus will continue to grapple with space shortages and some currently expanding programs will be constrained given the limited space available for their operations.

Funding: State funding is proposed for several projects identified in the *CFP*. These projects include new academic buildings, renovation and renewal of existing academic buildings, and infrastructure improvements that support academic facilities. Should State funding not



be available, the list and priority of projects would change and the campus would be unable to pursue many projects that support its mission.

The campus funds many projects through external financing, including projects that meet the needs of the health system, research programs, student housing, parking, infrastructure, and capital renewal. The campus also has a long history of successful fundraising efforts; however, due to current constraints on the capacity of donors to fund capital projects, the timing for the gift-funded projects is shown conservatively in the *CFP*.

The UC San Diego 2013-23 *CFP* reflects a set of projects that will not meet all existing capital needs. A number of other extremely important projects have been excluded from the ten-year plan, including many eligible for State support. These can advance only if the State resumes its investment in and support for capital projects.

Achievements/Successes

Achievements of the UC San Diego capital program in 2012-13 include enhancements to the electrical power supply and renewal and repurposing of existing space to address instructional needs.

Approximately 32,000 gross square feet of space in Galbraith Hall (constructed in 1965) was renovated to convert library space to instructional uses. In order to consolidate library services and achieve operational efficiencies, the Center for Library and Instructional Computing Services (CLICS), formerly located in Galbraith Hall, was closed in June 2011. This space consisted primarily of study rooms, computer areas for distance learning, and offices. With completion of the Galbraith Lecture Hall and Interior Renovation project, the space released by CLICS was repurposed to provide an over 400-seat lecture hall, student study

rooms, theatre and dance studios, and academic office and support space.

In addition, the campus initiated multiple power integrity projects in order to enhance its ability to respond during interruptions to the normal electrical power supply. These projects include enhancements to the Central Utility Plant, high-voltage power system, and fuel cell, as well as installation of additional automatic emergency power transfer switches.

The campus continues to look for ways to improve use of existing space with limited financial resources by addressing capital renewal needs and space renovations to support instruction and research.

Galbraith Hall (before renovation)



2013-23 San Diego Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
UCSD Medical Center East Campus Bed Tower	МС	391,800 EF 131,000 GF 106,100 HR 69,000 CG	143,000 EF (1,740) HR							839,360
Central Research Services Facility	E&G	14,286 FG 12,845 CF	3,427 CF							30,558
University House Rehabilitation	AUX	9,054 GF 1,450 CF	800 GF							11,304
SIO Research Support Facilities	E&G	6,348 SE 300 CF	400 CF							7,048
Campus Life Safety Improvements	E&G		2,045 CF	49,010 SE						51,055
East Campus Parking Structure 2	AUX		25,000 EF 5,500 CF							30,500
Outpatient Pavilion	MC		95,000 EF 25,000 HR							120,000
Nimitz Marine Facility Berthing Wharf and Pier Replacement	E&G		12,040 CF 8,013 EF 5,000 SE							25,053
Interstate 5 / Gilman Bridge	E&G		PR							PR
Revelle Plaza Cafe Renewal	AUX		15,000 AR							15,000
UCSDMC Hillcrest Main O.R.s HVAC Upgrade	MC		11,500 HR							11,500
Argo Hall Renewal	AUX		13,560 AR							13,560
Southwest Fisheries Sciences Center, Building D Renovations	E&G		8,850 EF							8,850
York Hall Instructional Laboratories Renovation	E&G		6,500 CF							6,500
Muir Biology Building Third Floor Laboratory Renovation	E&G		5,800 CF							5,800
Center for Novel Therapeutics Building	E&G		PR							PR
Biological and Physical Sciences Building	E&G			4,100 SE	89,650 SE		3,000 SE			96,750
Single Graduate and Professional Student Housing	AUX			87,500 EF 5,500 AR						93,000
Revelle Electrical Switch Station Improvements	E&G			11,800 EF						11,800
Main 69kV Substation Expansion	E&G			7,500 EF						7,500
Satellite Utilities Plant Phase1	E&G			5,500 EF						5,500
International Center Redevelopment	AUX			18,000 GF 2,200 CF						20,200
Muir Biology Building Renovation	E&G				5,900 SE	53,870 SE				59,770
Sverdrup Hall Renewal	E&G				1,265 SE	11,385 SE				12,650
Infrastructure Renewal Phase 1 Medical Teaching Facility Renewal	E&G E&G				1,400 SE 6,720 SE	12,520 SE 60,600 SE				13,920 67,320
Academic and Administrative Building	E&G				80,000 EF					80,000
Scripps Earth Exploration Center	E&G				76,000 GF					76,000
Single Undergraduate Student Housing	AUX				47,000 EF 3,000 AR					50,000
Alumni Center	AUX				20,000 GF					20,000
Satellite Utilities Plant Phase 2	E&G					2,900 SE	26,060 SE			28,960
SIO Seawater System Replacement	E&G					830 SE	7,460 SE			8,290

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Economics Building Replacement	E&G					5,230 SE	47,000 SE			52,230
Marine Biomedical Sciences Building	E&G					22,000 GF 21,225 FG				43,225
Building Systems Improvements Phase 1	E&G						1,365 SE	12,295 SE		13,660
School of Medicine Instruction and Research Laboratory Renovation	E&G						790 SE	7,100 SE		7,890
Institute for Molecular and Nano-Imaging	E&G						20,000 FG 6,400 CF			26,400
Graduate Professional, and Fam- ily Housing Fire and Life Safety Improvements	AUX						13,000 AR			13,000
Scripps Coastal Ocean Atmosphere Research Facility	E&G						10,000 FG 2,500 CF			12,500
Clean Water Utility Initiative	E&G						12,500 OG			12,500
Medical Teaching Facility Renovation of Neural Circuits and Behavior Core	E&G						8,600 FG			8,600
Urey Hall Renovation to Expand and Enhance Biomedical Research Facilities	E&G						8,200 FG			8,200
Algae Biofuel Test Facility	E&G						7,000 OG			7,000
Urey Hall Renovation	E&G							3,480 SE	31,340 SE	34,820
Engineering Interdisciplinary Facility	E&G							12,580 SE	113,270 SE	125,850
Marine and Earth Sciences Building	E&G								37,730 SE	37,730
Building Systems Improvements Phase 2	E&G								11,900 SE	11,900
Center for Integrative Neurosciences	E&G								75,000 GF	75,000
Extended Studies Public Pro- grams (ESPP) Expansion	E&G								34,500 EF 35,000 GF	69,500
Institute for Trans-scale Theory	E&G								75,500 GF	75,500
Scripps Second Century Research Building	E&G								60,000 EF	60,000
Infrastructure Renewal Phase 2	E&G								13,920 SE	13,920
SIO Utilities System Improvements Phase 2	E&G								9,870 SE	9,870
Mandeville Center Renovation	E&G								13,500 EF 13,500 GF	26,500
Humanities and Social Sciences Office Building	E&G								67,890 SE	67,890
Clinical Teaching Space Replacement	E&G								59,440 SE	59,440
Center for Biosystems Engineering	E&G								22,000 GF	22,000
Capital Projects \$750K to \$5M	E&G		10,000 HR 10,000 CF 5,000 AR	40,000 HR 40,000 CF 20,000 AR	250,000					
Facilities Renewal	E&G		10,000 EF		10,000 EF		10,000 EF		20,000 EF	50,000
State-Funded Capital Renewal Program	E&G		3,900 SE	14,400 SE	37,800					
Total Capital Program			423,595	220,010	369,835	219,460	212,775	64,355	808,760	2,318,790



University of California, San Francisco

Founded in 1873, the San Francisco campus is the only campus in the University of California system dedicated exclusively to health sciences. Today, the campus is a leading institution dedicated to promoting health worldwide through advanced biomedical and translational research; graduate-level education in the life sciences and health professions; and excellence in patient care.

UCSF operates three major campus sites at Parnassus Heights, Mission Bay and Mount Zion. Other smaller sites include Laurel Heights, the Mission Center building, the Minnesota Street building and the Buchanan Dental Clinic. UCSF also occupies space at San Francisco General Hospital (SFGH) and at more than two dozen leased sites throughout the city. The majority of buildings at Parnassus, Mount Zion and SFGH were constructed prior to 1980 and are in the process of undergoing substantial modernization, repair and improvement to continue to advance UCSF's strategic goals.

Among the UC campuses, UCSF is unique in that it has multiple medical research and clinical sites, located in densely developed areas and distributed throughout San Francisco. A part of the urban fabric of the neighborhoods in which they are located, all of UCSF's locations have public streets surrounding, adjoining and, in some cases, running through them. The densely urban context of San Francisco and the highly complex nature of UCSF's medical research and clinical facilities pose considerable construction challenges and contribute to higher project costs at UCSF relative to other UC locations.

Strategic Goals

UCSF's vision is to be the world's preeminent health sciences innovator and is committed to the following five goals:

- Provide unparalleled care to our patients
- Improve health worldwide through innovative science
- Attract and support the most talented and diverse trainees in the health sciences
- Be the workplace of choice for diverse, top-tier talent
- Create a financially sustainable enterprise-wide business model

These goals inform UCSF's *Capital Financial Plan (CFP)* and will inform the update and revisions to the 1996 *Long Range Development Plan (LRDP)*, scheduled to be completed by November 2014.

Capital Program Priorities

Unlike other UC campuses, UCSF does not have a large undergraduate student body, but has a small population of graduate and professional students in health-science-related fields and research endeavors. Didactic teaching facilities are few in comparison to the number of

	Established	1873
.e.	FTE Enrollment 2012-13	
Figures	Health Science Students	4,645
<u>1</u> 6.	Campus Land Area	198 acres
Гц N	Hospitals and Clinics	1.4 million ASF
8	All Campus Buildings (owned & leased)	8.9 million ASF
Facts		
ac	Nobel Laureates (active & emeritus)	6
ы	University Professors (active & emeritus)	1

clinical and research facilities. As a consequence, most of UCSF's capital program is focused on clinical and research needs.

Over the past ten years, the bulk of capital investment has been devoted to constructing new buildings for program growth. UCSF's commitment to the new Medical Center facilities at Mission Bay highlights a period of major facility expansion with an emphasis on new clinical and academic research facilities.

The 2013-23 *CFP* includes a series of backfill projects of clinical facilities at the Parnassus and Mount Zion campuses, which will allow other clinical programs to expand after the new Medical Center at Mission Bay opens in 2015.

Over the next ten years, most capital expenditures will be directed toward seismic repair, renovations, and replacement of obsolete research and clinical-care facilities. UCSF's *CFP* gives priority to capital projects that address the seismic problems and infrastructure deficiencies at the historic Parnassus Heights campus site and the SFGH site. Such capital investment will reinforce campus priorities for modernization of space and infrastructure to support evolving clinical and research programs.

Challenges

The lack of available capital funding will defer construction of major new facilities. These include a new academic facility for the School of Pharmacy; a new Mission Bay cancer outpatient building to provide continuity of care for cancer patients at the new clinical facilities complex; an educational commons to nurture collaboration and interaction; and renovations to the School of Nursing building.

The campus has a substantial backlog of deferred maintenance in Statesupportable facilities. The project cost of "mission critical" deferred maintenance and renewal projects totals over \$1.13 billion, while the total cost of deferred maintenance exceeds \$460 million. Long-term State underfunding of basic ongoing maintenance has exacerbated the campus's backlog and reduced the useful life of building systems.

Because of a lack of funding, the campus will also defer construction of some scheduled renewal projects, a utility distribution system at Parnassus needed to provide reliability of service, as well as completion of a central utilities system at Mission Bay to reduce costs. Deferring these major projects may inhibit the development of some academic programs at Parnassus and Mission Bay, as well as prolong the unreliable distribution of utility services at Parnassus and costly utility distribution at Mission Bay.

2012-13 Summary of Achievements

Sixteen new major capital projects with a total budget of just under \$200 million were approved in 2012-13. This included approval of two projects that will provide net new academic space to the Mission Bay campus: Mission Bay Block 25A Academic Building that will house faculty and staff needed to support the new Medical Center Mission Bay Clinical Facilities scheduled to open in early 2015, and the build-out of the entire fourth floor of the Helen Diller Family Cancer Research Building for cancer research. Five major renovation and five major infrastructure projects were approved for San Francisco's main Parnassus Heights' campus including the Medical Center's Hematology Clinic and Treatment Center Renovation project, and the campus' Electrical Distribution System Improvements Phase 2A project required to meet critical life safety code requirements. Two renovation projects were approved for our Mount Zion campus, and one each at the UCSF Fresno



site and the Buchanan Dental Clinic. In addition, the campus secured Regents approval for Preliminary Plans for the \$91 million Parnassus Heights Clinical Sciences Building Seismic Retrofit and Renovation project.

Health Health Parnassus Heights - Annotated Aerial Photograph Sciences West (HSW) East (HSE) Dolby Hall Regeneration Medicine Nursing Building Moffitt Hospital Koret Research Building Medical Sciences Building Clinical Science Sciences Building UC Hall Building Millberry Union al sort arhaśsus Ave.

2013-23 San Francisco Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Clinical Sciences Building (CSB) Seismic Retrofit and Renovation	E&G	2,400 CF	2,800 SE 1,386 EF	56,366 EF	21,735 SE 6,781 CF					91,468
Long Hospital 4th Floor Hybrid Operating Room & Intraoperative MRI	MC		23,200 HR							23,200
Health Sciences East 8th Floor Renovation	E&G		8,323 EF							8,323
Health Sciences East 7th Floor Renovation	E&G		8,323 EF							8,323
Health Sciences West 8th Floor Renovation	E&G		8,853 EF							8,853
Health Sciences West 7th Floor Renovation	E&G		8,853 EF							8,853
Parnassus and Fifth Housing	AUX		16,896 EF							16,896
Electrical Distribution Improve- ments Phase 2b	E&G			8,622 CF 227 HR						8,849
UC Hall Seismic Program	E&G			46,928 CF 114,135 EF						161,063
ACC 5 Heart & Vascular	MC			8,000 HR						8,000
Moffitt / Long 3 Imaging Recovery Remodel	MC			5,000 HR						5,000
Ophthalmology Clinic Consolidation	MC			8,938 HR 9,000 CF						17,938
Moffitt / Long 4 Surgery Expansion	MC			11,000 HR						11,000
Long 12 BMT Expansion	MC			5,000 HR						5,000
Long 11 BMT Upgrades & PIP	MC			5,000 HR						5,000
SFGH Academic Building Seismic Program	E&G				80,340 SE 4,700 CF 59,988 EF					145,028
Moffitt / Long 4 West PACU Expansion	МС				5,000 HR					5,000
Moffitt 7 North 6 Bed ICU	MC				9,000 HR					9,000
ACC 2 Release Space Build-Out	MC				16,000 HR					16,000
Mt Zion Imaging Expansion	MC				8,000 HR					8,000
Emergency Power Fuel Oil Tank Upgrades	E&G					6,867 SE 3,433 HR				10,300
Moffitt 6 Ancillary Expansion	MC					5,000 HR				5,000
Mt Zion Hellman Decant	MC					16,500 HR				16,500
Parnassus Underground Utility Reliability Upgrades - Phase 1	E&G						10,921 SE 5,379 HR			16,300
Parnassus Fire line Seismic Upgrade Phase 2	E&G							8,040 SE 3,960 HR		12,000
Long 6 - 32 Bed Acute Care Unit	MC							6,000 HR		6,000
Moffitt 14 - 14 Bed ICU	MC								18,000 HR	18,000
Moffitt 15 Acute Care Unit	MC								22,000 HR	22,000
Capital Projects \$750K to \$5M - Renovation	E&G		20,500 CF 10,000 EF	20,500 CF 8,440 EF	20,500 CF	21,500 CF	20,500 CF	20,500 CF	82,000 CF	224,440

Project	Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Capital Projects \$750K to \$5M - Infrastructure	E&G	23,156 CF	21,544 CF	12,178 CF	18,453 CF 1,460 EF	17,445 CF	17,000 CF	33,350 CF 16,900 EF	161,486
Capital Projects \$750K to \$5M - Parking	AUX		4,000 EF		13,000 EF				17,000
Capital Projects \$750K to \$5M - Renovation	MC	13,400 HR	7,500 HR	4,900 HR	5,500 HR	6,300 HR	7,640 HR	30,560 HR	75,800
Capital Projects \$750K to \$5M - Infrastructure	MC	6,600 HR	3,700 HR	2,400 HR	2,700 HR	3,100 HR	3,740 HR	14,960 HR	37,200
Total Capital Program		152,290	343,900	251,522	94,413	63,645	66,880	217,770	1,190,420

UCSF Mission Bay Site Map





University of California, Santa Barbara



UC Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Teaching and research go hand in hand, ensuring that UCSB students are full participants in an educational journey of discovery that stimulates independent thought, critical reasoning, and creativity. The campus's academic community of students, faculty and staff is characterized by a culture of interdisciplinary collaboration responsive to the needs of a multicultural and global society. Its commitment to public service is manifested through the creation and distribution of art, culture and knowledge that advance the well-being of California, the nation, and the world.

All of this takes place within a unique living and learning environment. Students, faculty, staff, and the public seek opportunities, and draw inspiration from, the beauty and resources of UC Santa Barbara's extraordinary location at the edge of the Pacific Ocean.

Strategic Goals

UCSB's current level of academic distinction is the result of years of collaborative hard work and the investment of significant resources. To continue to advance academic excellence, the campus must grow and accommodate new and interdisciplinary programs and initiatives.

In response to current economic uncertainties, the campus is employing a managed growth strategy focused on the most pressing capital needs and demands, yet responsive to enrollment pressures and California's demand for excellence. Santa Barbara's 2013-23 *Capital Financial Plan (CFP)* charts this path of balanced campus development.

The academic planning objectives described in UC Santa Barbara's *Strategic Academic Plan (SAP)* guide this future growth. The *SAP* also informs the campus's 2010-2025 *Long Range Development Plan (LRDP)*, which governs the physical development of the campus. Of particular note, the *LRDP* includes growth to accomodate 5,000 additional students over its planning horizon, which would expand total enrollment at Santa Barbara to 25,000 students.

An overarching goal of both the *SAP* and the *LRDP* is the development of a sustainable, master-planned academic community that delivers world-class teaching to students, performs cutting edge research, and attracts the highest quality faculty and staff.

Figures	Established	1944
nr	FTE Enrollment 2012-13	
jo	Undergraduates	19,512
	Graduate Students	2,950
Facts &	Campus Land Area	1,118 acres
Ict	Campus Buildings	4.7 million ASF
Ба	Nobel Laureates (active & emeritus)	6

Capital Program Priorities

The UCSB capital program presented in the 2013-23 *CFP* supports the campus's priorities of promoting the teaching and research mission; addressing critical safety upgrades to facilities and infrastructure; providing affordable housing for faculty, staff and students; and meeting modern support needs for the campus community in health, public safety and recreation. Several projects proposed for the near-term support these objectives:

- The Bioengineering Building is the highest campus priority and represents the campus's commitment to a rapidly expanding area of research, teaching, and entrepreneurship.
- The Jeff & Judy Henley Hall will be a laboratory facility for the Institute for Energy Efficiency committed to research aimed at achieving a clean and sustainable energy future, and will benefit from the largest single capital development gift received by the campus.
- The Campbell Hall Replacement Building will replace the existing Campbell Hall facility, which houses the largest (860 seats) and most indispensable classroom on the campus. The building also accommodates UCSB's robust arts and lectures programming.
- Affordable housing for faculty and staff is critical to the campus's future success. With an estimated 40 percent of current personnel expected to retire by 2020, affordable housing is essential to the recruitment and retention of new faculty and staff. North Campus Faculty Housing Phase III through Phase V will deliver 98 additional affordable for-sale homes for the campus community.

Marine Science Research Building



SANTA BARBAR



Project Key

- 1. Davidson Library Addition and Renewal
- 2. Faculty Club Renovation and Guest House Addition
- 3. KITP Residence
- 4. North Campus Faculty Housing
- 5. Bioengineering Building and Academic Support Facility
- 6. Aquatics Center
- 7. Campbell Hall Replacement
- 8. Institute for Energy Efficiency Building
- 9 . Sierra Madre Apartments
- 10. San Joaquin Apartments
- 11. Santa Cruz Fire Safety & Renewal
- 12. Phelps Hall Renovation
- 13. Music Building Seismic Correction / Academic Building
- 14. Physics / Engineering Building
- Much of the campus infrastructure is over 40 years old, with some dating back to when the site was a Marine Air Base. Immediate renewal priorities include Infrastructure Renewal Phases 1 and 2. Through the upgrade of the most deficient sewer, natural gas, and potable-water lines, and the replacement of selected storm-drain segments, the renewal efforts will reduce maintenance costs, improve reliability, and provide the capacity necessary for future growth.

Capital Program Status Updates

The campus's capital program has made steady progress over the past year.

- The Ocean Science Education Building, the Arts Building, and Anacapa Hall projects have been completed.
- The Bioengineering Building and Academic Support Facility is a shovel-ready project funded by Garamendi, donor and State Eligible funds.
- The Sierra Madre project will provide 515 beds in 115 apartments for undergraduates; and approximately 115 beds in 36 apartments

to be leased to student, faculty, and staff families.

- The San Joaquin apartments project received preliminary plans approval by the Regents in March 2013 and will deliver 1,000 student bed spaces to address both unmet demand and planned student growth. The project is in the design development phase and, after full project approval, is scheduled to start construction in fall 2014.
- Davidson Library Addition and Renewal, a State funded project, is currently under construction. The project is scheduled for completion in winter 2015.

Challenges

The greatest challenge to realizing UCSB's capital program for 2013-23 is the identification of sufficient resources to fund the plan. With State funding of capital projects uncertain, Santa Barbara's 2013-23 *CFP* addresses immediate needs and growth, while endeavoring to strike the right balance between advancing new building initiatives and strategically renovating existing facilities. The campus acts aggressively to maximize capital resources in pursuit of strategic goals and will continue to pursue other sources of capital funding.



2013-23 Santa Barbara Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Davidson LIbrary Addition and Renewal	E&G	75,165 SE 2,778 CF		1,094 SE						79,037
Faculty Club Renovation and Guest House Addition	AUX		3,340 AR 940 GF 13,200 EF							17,480
KITP Residence	AUX		30,000 DD							30,000
North Campus Faculty Housing Phase III	AUX		15,051 EF							15,051
Bioengineering Building and Academic Support Facility	E&G	3,074 EF 2,393 CF 304 GF	241 GF	26,828 SE 1,287 CF 39,035 EF 6,707 GF	830 CF 1,265 EF					81,964
Infrastructure Renewal Phase 1	E&G	741 SE 3,150 CF 2,800 EF		12,136 SE						18,827
Infrastructure Renewal Phase 2	E&G	216 CF		14,195 SE 4,953 CF						19,364
Aquatics Center	AUX			18,000 GF						18,000
Campbell Hall Replacement Building	E&G			30,906 SE						30,906
Jeff and Judy Henley Hall	E&G			50,000 GF						50,000
North Campus Faculty Housing Phase IV	AUX			12,500 EF						12,500
San Joaquin Apartments	AUX	7,760 AR		167,240 EF						175,000
Santa Cruz Fire Safety & Renewal	AUX			5,000 EF 2,800 AR						7,800
Phelps Hall Renovation	E&G	1,100 SE			11,893 SE					12,993
Ortega Dining Commons Renovation	AUX				10,000 EF 1,500 AR					11,500
North Campus Faculty Housing V	AUX				17,000 EF					17,000
Music Building Seismic Correction/Academic Building Addition	E&G				4,278 SE	65,722 SE				70,000
Physics/Engineering Building	E&G				20,000 SE	230,000 SE				250,000
Bioengineering 2	E&G						55,000 GF			55,000
Ellison Hall Renovation	E&G					2,400 SE	27,600 SE			30,000
Expansion of University Center	E&G						25,000 EF			25,000
Broida Renovation	E&G							40,000 SE		40,000
College of Creative Studies	E&G							35,000 GF		35,000
Engineering II Renovation	E&G							40,000 SE		40,000
South Hall and HSSB Renovation	E&G							40,000 SE		40,000
Buchanan Hall Renovation	E&G								20,000 SE	20,000

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Proj- ect Budget
Parking Structure	AUX								15,000 EF 5,000 AR	20,000
Public Safety Building Expansion	E&G								10,383 SE	10,383
Mesa Verde Apartments 1	AUX								84,000 EF 6,000 AR	90,000
Student Services Building	AUX								25,000 EF	25,000
Climate Research Building	E&G								50,000 GF	50,000
Mesa Verde Apartments 2	AUX								84,000 EF 6,000 AR	90,000
Recreation Facility	AUX								25,000 EF	25,000
Student Life Services	AUX								25,000 EF	25,000
West Campus Ranch House	E&G								26,000 GF	26,000
Mesa Verde Apartments 3	AUX								84,000 EF 6,000 AR	90,000
Capital Projects \$750K to \$5M (E&G)	E&G		5,000 GF 2,000 CF	5,000 GF 2,000 CF	4,000 CF	2,000 CF	4,000 CF		9,000 CF	33,000
Capital Projects \$750K to \$5M (AUX)	AUX		5,000 AR	8,000 AR	3,000 AR	3,000 AF	1,000 AR	1,000 AR	12,800 AR 5,750 CF	39,550
Total Capital Program			74,772	407,680	73,766	303,122	112,600	156,000	498,933	1,626,873

Ocean Science Education Building





University of California, Santa Cruz

Strategic Goals

As a leading research university, UC Santa Cruz is best known for its innovative approach to the education of students and its campus values of social and environmental responsibility. In recent decades UCSC has emerged as a research powerhouse and, in a 2012 analysis of the world's top universities, was ranked second in research influence as measured by the number of times its published work is cited by scholars around the world. The campus's ten residential colleges provide vibrant living and learning communities where students can experience the intimacy of a small liberal arts school, while benefiting from all the advantages of a major research university.

The proposed capital projects in UC Santa Cruz's 2013-23 Capital Financial Plan (CFP) support the academic mission, while respecting the exceptional setting of the main campus and the 100-acre Marine Science Campus (MSC) on the edge of Monterey Bay.

Capital Program Priorities

The Santa Cruz *CFP* addresses critical needs for new instruction and research space to address past enrollment growth, the renewal of aging infrastructure and campus facilities nearing the half-century mark, and new student housing for future growth anticipated in the *Long Range Development Plan (LRDP)*. As a measure of the campus's commitment to environmental stewardship, the proposed projects embrace the principles of energy efficiency and sustainability.

The Coastal Biology Building (CBB) is the campus's highest capital priority, representing an unparalleled opportunity to advance research, teaching and public service in the field of Ecology and Evolutionary Biology (EEB), one of the fastest-growing programs at UCSC (undergraduate declared majors more than tripled over the past ten years). The CBB project will enrich and expand UCSC's Marine Science Campus research and instruction and further catapult the EEB program into the top tier of programs nationally.

EEB programs have a far-reaching, transformative impact, as exemplified by two senior students whose discovery of the flowering of seagrass in the Mediterranean while on an immersion field course in fall 2012 led to a National Science Foundation grant and collaborations with European researchers. The Coastal Biology Building will support UCSC's emergence as a leading voice in marine and coastal-related science, with a research focus on environmental threats to coastal zones around the world.

The Life Safety Upgrades project is another high priority for the campus and will install fire sprinklers and upgrade fire alarms, emergency generators and exterior lighting in selected campus areas.

Social Sciences 3 is an academic building that will physically link existing humanities and social sciences hubs and establish a gateway for potential future academic and residential buildings. By incorporating innovative water and energy conservation features, Social Sciences 3 has the potential to earn LEED[™] Platinum certification and stand as a model for future development.

	Established	1965
5	FTE Enrollment 2012-13	
	Undergraduates	16,168
3	Graduate Students	1,390
	Campus Land Area	2,000 acres
5	Campus Buildings	3.7 million ASF

The Instructional Facilities project will address UCSC's critical shortage of instructional space. New construction will provide up to 1,200 new classroom seats in varied configurations to address large classroom needs.

Future housing projects include the demolition and reconstruction of Family Student Housing; construction of additional student apartment bedspaces on the west campus (to help offset bedspace requirements outlined in the LRDP); and the capital renewal of residential units at Kresge College with the possibility of an increase in bedspaces (to help offset bedspace requirements outlined in the LRDP if they are needed at the time of the project).

The Telecommunications Infrastructure Improvements projects will remedy the immediate risk of failure posed by campus communications systems that have exceeded their life expectancy.

The campus has taken aggressive steps over the years to address its seismic and life-safety needs. Seismic corrections have been completed for all instruction and research buildings, all housing facilities, and the larger student life facilities. The Student Life Seismic Corrections Phase 2 project will complete this work by upgrading the remaining smaller student life facilities.

Challenges

As UC Santa Cruz approaches its 50th anniversary in 2015, the campus is more popular than ever. UCSC received a record number of applications from prospective students eager to enroll in fall 2013, and the campus continues to garner recognition for the global impact of its research.

The campus's growing appeal comes at a time of dimished State funding for capital projects. This presents a very real challenge for the campus to accommodate past enrollment growth and renew existing buildings and infrastructure. The campus's regionally isolated location presents telecommunications and power-delivery challenges, and its topography often demands creative construction and land-use solutions.



The campus has a substantial backlog of deferred maintenance in State-supportable facilities. The project cost of deferred maintenance exceeds \$155 million. Long-term State underfunding of basic ongoing maintenance has exacerbated the campus's backlog and reduced the useful life of building systems.

facts & Figures



Coastal Biology Building (Rendering)

2013-23 Santa Cruz Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Biomedical Sciences Building NIH Improvements	E&G	4,116 FG 2,686 CF	613 CF 320 OG							7,735
Coastal Biology Building	E&G	2,110 CF	1,875 CF 3,530 SE	64,127 SE		1,100 SE				72,742
Merrill College Capital Renewal	AUX	35,476 EF 8,981 AR	4,684 AR							49,141
Infill Apartments Repairs	AUX		25,000 EF 7,982 AR							32,982
Telecommunications Infrastruc- ture Improvements Phase A	E&G		13,320 EF 1,305 CF 1,749 AR							16,374
Long Marine Lab Marine Mammal Pools	E&G		3,000 GF 3,750 CF							6,750
Student Life Seismic Corrections Phase 2	AUX		6,175 EF 2,075 UR							8,250
Energy Improvements	E&G			750 CF 2,250 EF			750 CF 2,250 EF		750 CF 2,250 EF	9,000
Environmental Health and Safety Facility	E&G			19,026 SE						19,026
Infrastructure Improvements Phase 3	E&G			8,474 SE						8,474
Life Safety Upgrades	E&G			10,201 SE						10,201
Telecommunications Infrastruc- ture Improvements Phase B	E&G			13,308 EF 1,538 CF 50 UR						14,896
UC Instrumentation Facility	E&G			10,930 EF 300 CF						11,230
Circulation and Infrastructure Extensions Phase 1	E&G				20,131 SE					20,131
Infrastructure Improvements Phase 4	E&G				1,408 SE	693 SE	15,249 SE			17,350
Instructional Facilities	E&G				41,874 SE		610 SE			42,484
Social Sciences 3	E&G				69,514 SE		2,035 SE			71,549
Telecommunications Infrastruc- ture Improvements Phase C	E&G				8,014 EF 220 AR 1,022 UR 986 CF					10,242
West Campus Student Housing Development Phase 1	AUX				186,341 EF 15,845 AR					202,186
Alterations for Academic Programs	E&G					17,958 SE				17,958
Early Education and Care Center	AUX					9,451 EF 250 GF 2,522 CF				12,223
Off-Campus Administration Building Acquisition	E&G					28,000 EF				28,000
Parking for Social Sciences 3	AUX					1,787 EF 100 AR				1,887
Ranch View Terrace Phase 2	AUX					PR				PR
Silicon Valley Center	E&G					1,029 SE	19,478 SE 470 SE			20,977
Expansion of the Center for Ocean Health	E&G						11,958 GF 645 CF			12,603

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
Institute of the Arts and Sciences	E&G						47,500 GF			47,500
Kresge College Renovation	AUX						91,875 EF 8,125 AR			100,000
Kresge Non-Residential ADA and Capital Renewal	E&G						12,000 EF			12,000
Sciences & Engineering Library Renovations	E&G						18,000 GF			18,000
Upper Quarry Amphitheater Renovation and Expansion Phase 2	AUX						6,400 GF			6,400
West Campus Student Housing Development Phase 2	AUX						65,325 EF 6,761 AR			72,086
West Jordan Gulch Pedestrian Bridge	E&G						7,000 EF			7,000
Alterations for Physical, Biological, and Social Sciences	E&G							16,031 SE		16,031
Instruction and Research Building	E&G							26,212 SE	1,117 SE	27,329
Lower East Field Improvements	AUX							9,230 EF 3,090 GF		12,320
Infrastructure Improvements Phase 5	E&G								13,121 SE	13,121
Capital Projects \$750K to \$5M	E&G		8,207 CF 3,000 OG	7,000 CF	6,190 CF	2,000 CF	2,000 CF	2,000 CF 3,000 GF	8,000 CF	41,397
Capital Projects \$750K to \$5M	AUX		2,000 AR 3,000 UR	4,990 AR	5,890 AR 80 UR	6,218 AR	5,559 AR	2,000 AR	8,000 AR	37,737
Total Capital Program			91,585	142,944	357,515	71,108	323,990	61,563	33,238	1,081,943

Meeting the Challenges

In an effort to develop alternatives to State funding, UCSC has integrated capital projects into its first-ever comprehensive fundraising campaign. The increasingly critical role of external research funds was evident in the recently completed \$84 million Biomedical Sciences Building, which was funded in part by a \$7 million grant from the California Institute of Regenerative Medicine and a \$4 million grant from the National Institutes of Health.

The campus-funded Cogeneration Plant Replacement Phase 1 project will increase the campus' uninterrupted backup power capacity for

emergency responders, laboratory life/safety systems, and sensitive instruction and research equipment. When not used for backup power, the electricity generated by the cogeneration system reduces campus utility expenses. The byproduct heat of the cogeneration operation conserves energy by heating the campus hot water distribution loop to supplement the less efficient campus boilers.

Finally, UC Santa Cruz remains committed to working with community partners to address issues surrounding the prospect of campus growth. The campus will continue to meet its local obligations as it pursues capital projects that are central to UCSC's ability to serve the people of the State of California.





University of California, Division of Agriculture and Natural Resources



The Division of Agriculture and Natural Resources (ANR) delivers healthier food systems, healthier environments and healthier Californians. From more bountiful berries to safer food to cleaner water, ANR turns science into solutions.

ANR is the bridge between local issues and the power of UC research. ANR's advisors, specialists, and faculty bring practical, science-based answers to Californians by working hand in hand with industry to enhance agricultural markets, help the balance of trade, address environmental concerns, protect plant health, and provide farmers with scientifically tested production techniques.

ANR envisions a thriving California in 2025 where healthy people and communities, healthy food systems, and healthy environments are strengthened by a close partnership between the University of California and its research and extension programs and the people of the state. The University remains connected and committed to the people of California, who enjoy a high quality of life, a healthy environment, and economic success in a global economy. This vision statement will guide ANR in developing research, education and service programs to meet the needs of California for the next 15 to 20 years.

Capital Program Priorities

The primary drivers of ANR's 2013-23 *Capital Financial Plan (CFP)* are: support of modern research, sustainability and renewal of existing facilities; and expanding outreach. The nine Research and Extension Centers (RECs) are the main facility component of ANR and are the primary focus of the proposed capital improvement projects. The RECs have been heavily utilized for both research and outreach in the last several years. However, many the facilities currently at the RECs are obsolete, outdated, and limited in research and outreach capacity. The projects included in the *CFP* will address these drivers:

Modern Research: The RECs support multi-disciplinary initiatives in growing methods, pest control, water management, resource conservation and other subjects necessary to respond to critical needs and potential new issues facing the State. Swift changes in technology and environments in these fields drive the need for modern chemistry labo-

Established	1952	
Research and Extension Centers	9	
Land Area	12,653 acres	
Buildings	540,000 ASF	
	Research and Extension Centers Land Area	Research and Extension Centers 9 Land Area 12,653 acres

ratories and equipment to support this type of research. The CFP proposes two REC facilities renewal projects that will renovate obsolete buildings in most of the RECs into multipurpose space, which includes space for modern research. Additionally, ANR is proposing three multipurpose facilities that will provide modern laboratory space.

Sustainability and Renewal of Existing Facilities: One of ANR's primary capital planning goals is to have all buildings and infrastructure be sustainable and energy-efficient and to minimize operating and maintenance costs. ANR's 2013-23 *Capital Financial Plan (CFP)* proposes two REC capital renewal projects in support of this goal. The first proposed project will renovate the aging irrigation system at the West Side REC. Outdated, inefficient, and inadequate, the existing system requires constant maintenance frequently resulting in wasted water and impacted research. The project also includes replacement of HVAC and roof systems at several buildings across the State. These buildings have an average age of 35 years, and systems have reached the end of their useful lives. The second project will continue the HVAC system and roof replacement efforts, as well as repair roads and renovate outdated laboratories at additional sites.

Expanding Outreach: ANR's outreach program provides hands-on opportunities for researchers and their students to evaluate field trials via community and industry interaction. ANR provides members of the community with meeting room and classroom space otherwise not readily available in remote surroundings. Currently, ANR holds these meetings and classes in small rooms or, in some cases, basic conference rooms that have limited technological capabilities. The 2013-23 *CFP* proposes projects that will provide large, modern multi-purpose rooms at RECs that will accommodate educational sessions, community meetings and community-industry interaction forums.

Challenges

ANR must rely on the State as the main source of funds to support its capital program. Although ANR receives some industry and philanthropic support for research, such support for capital projects and equipment is very limited and does not fund all capital needs.

Of critical concern to ANR is the operation and maintenance of the physical plant. As utilities and other costs rise, ANR has focused on the development of capital renewal projects to modernize facilities, as well as stabilize or reduce the utility costs of the Research and Extension Centers.

58

2013-23 Division of Agriculture and Natural Resources Capital Program (\$000s)

Project		Previously Funded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 to 2022-23	Total Project Budget
REC Facilities Renewal and Improvements	E&G		1,850 SE	200 GF						2,050
Intermountain REC Field Labora- tory and Multipurpose Facility	E&G			1,986 SE 50 GF						2,036
West Side REC Field Laboratory and Multipurpose Facility	E&G					1,590 SE 175 GF 45 CF				1,810
Kearney REC Insectary Facility	E&G						1,808 SE 200 GF 75 CF			2,083
Hansen Agricultural Learning Center Research Facility	E&G						7,200 CF			7,200
Desert REC Field Laboratory and Multipurpose Facility	E&G							1,502 SE 200 GF		1,702
REC Facilities Renewal and Improvements Phase 2	E&G								1,120 SE	1,120
Sierra Foothills REC Laboratory and Extension Facility	E&G								1,891 SE 150 GF	2,041
South Coast REC Laboratory and Extension Facility	E&G								1,502 SE 100 GF	1,602
Total Capital Program			1,850	2,236	0	1,810	9,283	1,702	4,763	21,644



DEFINITIONS and LEGEND

ABBREVIATIONS

AR	Auxiliary Reserves (Housing, Parking and Other)
ASF	Assigned Square Footage
AUX	Auxiliary (Program Category)
C	Construction (Project Phase)
CF	Campus Funds
CG	Children's Hospital Grant Funds
DD	Donor Development (Private)
E	Equipment (Project Phase)
E&G	Education & General (Program Category)
EF	External Finance (including Capital Leases)
FG	Federal Grant
GF	Gift Funds
GSF	Gross Square Footage
GO	General Obligation Bonds (State)
HR	Hospital Reserves
LR	Lease Revenue Bonds (State)
MC	Medical Centers (Program Category)
OG	Other Grants
Р	Preliminary Plans (Project Phase)
PR	Privatized
SE	State-Eligible
SG	General Funds (State)
UR	University Fee Reserves (Voted, Life Safety and Regis-
	tration)
W	Working Drawings (Project Phase)

PROGRAM CATEGORIES

Projects are identified by three program categories.

Education & General (E&G): New construction and renovation of core instruction, research, general campus academic space, academic support space, student support space, institutional support space, infrastructure, and seismic/life safety.

Auxiliary (AUX): New construction and renovation of student housing/dining, faculty/staff housing, student activities, recreation or athletic facilities, student health centers, parking and roads, seismic/life safety, child care facilities, fee-supported facilities and other enterprises.

Medical Centers (MC): New construction, renovation and remediation of patient care facilities, infrastructure, seismic/life safety, and medical center support space.

Mitigation (MIT): Actions to reduce, avoid or offset the potential adverse environmental consequences of development activities.

PROJECT OBJECTIVES

Identifies the primary purpose of each project.

Enrollment Growth: To provide capacity related to student and faculty growth.

Infrastructure Deficiencies: To correct seismic hazards meeting Performance Levels V, VI, or VII (formerly expressed as Poor or Very Poor) and other life-safety deficiencies.

Facilities Modernization: To address unsatisfactory conditions in existing buildings or infrastructure systems. This may include code deficiencies, systems obsolescence, technological obsolescence, or program modernization needs.

Program Improvements: To accommodate new or expanding pro-

grams that are not necessarily related to enrollment growth. Examples are new research centers or institutes or the initiation of new schools or degree programs.

FUND SOURCES

The University depends on a wide range of fund sources to support proposed projects, including State funds, gifts, grants, University equity funds (derived from auxiliary enterprise revenues, certain fees and other discretionary resources), and external financing (long-term debt).

Campus funds include reserves generated from specific operations and funds available to each Chancellor.

Gifts include those in-hand, pledged, and to be raised. The University's goals for philanthropic support remain highly successful. Projects dependent upon gifts are advanced when funding targets have been achieved.

Grants include federal, State, and private awards. Campuses are aggressively pursuing State and federal grants to fund capital projects. Grant funds can be used to cover direct capital expenditures.

External Financing (Long-Term Debt Financing) Given the implications of long-term financing commitments, campuses provide a pro forma analysis of the financial feasibility of debt-financed projects. For the 2013-23 Capital Financial Plan (CFP), campuses analyzed the affordability of debt-funded projects on a ten-year pro forma basis for their respective CFPs, with the additional debt burden measured against metrics such as debt service to operations, debt service coverage and expendable resources to debt. The campus metrics are analyzed again when debt is at the approval stage, as a general matter when a project budget is approved through the Regents or delegated approval process. Medical center projects with a debt component are analyzed at the stage of debt approval based on the respective medical center pro forma business plan with the additional debt burden. Metrics such as pro forma debt service coverage and days cash are taken into account in the analysis. Educational fee (tuition) is prohibited by policy for debt service or capital projects.

UC Berkeley's Li Ka Shing Center





University of California Office of the President Budget and Capital Resources 1111 Franklin Street, 6th Floor Oakland, California 94607-5200 510-987-3351 http://budget.ucop.edu

Cover photo: The Biomedical Research Center (Gillespie Hall left foreground, Gross Hall behind, Sprague Hall right foreground), Irvine campus