UNIVERSITY OF CALIFORNIA

2009-10 Budget for Current Operations
Budget Detail

AS PRESENTED TO THE REGENTS FOR APPROVAL

FOREWORD

The University of California 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. 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; one, San Francisco, is devoted exclusively to health sciences graduate and professional instruction. The University operates teaching hospitals and clinics on the Los Angeles and San Francisco campuses, and in Sacramento, San Diego, and Orange counties. Approximately 150 University institutes, centers, bureaus, and research laboratories operate throughout the state. The University's Agricultural Field Stations, Cooperative Extension offices, and the Natural Reserve System benefit all Californians. In addition, the University provides oversight of the Lawrence Berkeley Laboratory and is a partner in limited liability corporations that oversee two additional Department of Energy Laboratories.

Organization of the 2009-10 Budget for Current Operations — Budget Detail

The companion to this document, the *Summary of the Budget Request*, provides a brief overview of the major policy issues, revenue expectations, and expenditure plans and objectives of the University for 2009-10. This document provides explanatory detail for all aspects of the University budget.

The first chapter, *Perspectives on the 2009-10 Budget*, provides an overview of the University's contributions to the state both as an educator and as an economic driver, current budget perspective, and longer-term considerations.

The *Summary of University Funds* chapter presents a digest of the major fund sources that constitute the University's $19.6 billion in operating revenues. Of particular note is a discussion of the shifts in core funding for the University's mission of instruction, research, and public service due to the loss of State funds that has occurred over the last several decades.

Subsequent chapters discuss specific program areas in more detail and provide fuller justification of requests for funding increases. These include chapters covering the core

mission activities of instruction, research and public service, as well as all support activities. The *Cross-Cutting Issues* chapter provides budget detail for issues that cross functional areas — graduate student enrollment and financial support, information technology needs, and funding for core academic support activities.

As a significant and growing source of revenue in support of the teaching mission of the University, the *Student Fees* chapter provides information about the University's fee policy and practices.

Finally, an index appears at the end of this document to assist readers who are looking for a particular subject area.

TABLE OF CONTENTS

LIST OF DISPLAYS

Amended by The Regents, November 21, 2008.
Changes shown in red.

UNIVERSITY OF CALIFORNIA
2009-10 BUDGET FOR CURRENT OPERATIONS AND EXTRAMURALLY FUNDED OPERATIONS
(DOLLARS IN THOUSANDS)

EXPENDITURES

	2008-09 Budget	2009-10 Proposed	Change Amount	%
BUDGET FOR CURRENT OPERATIONS				
Instruction:				
General Campus	$ 2,470,901	$ 2,641,804	$ 170,903	6.9%
Health Sciences	1,068,086	1,120,579	52,493	4.9%
Summer Session	11,131	11,131	0	0.0%
University Extension	203,153	208,232	5,079	2.5%
Research	642,767	667,983	25,216	3.9%
Public Service	221,900	226,290	4,390	2.0%
Academic Support:				
Libraries	281,658	284,703	3,045	1.1%
Other	781,670	821,054	39,384	5.0%
Teaching Hospitals	4,881,164	5,170,822	289,658	5.9%
Student Services	582,052	610,229	28,177	4.8%
Institutional Support	725,329	744,846	19,517	2.7%
Operation and Maintenance of Plant	592,220	631,419	39,199	6.6%
Student Financial Aid	694,375	720,869	26,494	3.8%
Auxiliary Enterprises	945,476	1,002,205	56,729	6.0%
Provisions for Allocation	90,993	101,192	10,199	11.2%
University Opportunity Fund & Special Programs	205,000	211,000	6,000	2.9%
Program Maintenance: Cost Increases	--	496,849	496,849	--
TOTAL BUDGET FOR CURRENT OPERATIONS	$ 14,397,875	$ 15,671,207	$ 1,273,332	8.8%
EXTRAMURALLY FUNDED OPERATIONS				
Sponsored Research	$ 2,929,677	$ 2,933,214	$ 3,537	0.1%
Other Activities	1,624,353	1,629,610	5,257	0.3%
TOTAL EXTRAMURALLY FUNDED OPERATIONS	$ 4,554,030	$ 4,562,824	$ 8,794	0.2%
TOTAL OPERATIONS	$ 18,951,905	$ 20,234,031	$ 1,282,126	6.8%
DEPARTMENT OF ENERGY LABORATORY (LBNL)	$ 625,300	$ 625,300	$ 0	0.0%

INCOME

	2008-09 Budget	2009-10 Proposed	Change Amount	%
BUDGET FOR CURRENT OPERATIONS				
General Fund				
State of California	$ 3,217,297	$ 3,835,152	$ 617,855	19.2%
State of California / Possible Student Fee Increase	$ 0	$ 109,648	$ 109,648	--
UC Sources	616,872	609,528	(7,344)	-1.2%
Total General Funds	$ 3,834,169	$ 4,554,328	$ 720,159	18.8%
Restricted Funds				
State of California	$ 73,011	$ 73,354	$ 343	0.5%
U. S. Government Appropriations	17,250	17,250	0	0.0%
Student Fees:				
Educational, Registration & Professional School Fees	1,734,660	1,779,321	44,661	2.6%
Extension, Summer Session & Other Fees	511,240	537,106	25,866	5.1%
Teaching Hospitals	4,827,626	5,117,284	289,658	6.0%
Auxiliary Enterprises	945,476	1,002,205	56,729	6.0%
Endowment Earnings	215,983	215,983	0	0.0%
Other	2,238,460	2,374,376	135,916	6.1%
Total Restricted Funds	$ 10,563,706	$ 11,116,879	$ 553,173	5.2%
TOTAL BUDGET FOR CURRENT OPERATIONS	$ 14,397,875	$ 15,671,207	$ 1,273,332	8.8%
EXTRAMURALLY FUNDED OPERATIONS				
State of California	$ 289,832	$ 298,527	$ 8,695	3.0%
U.S. Government	2,298,935	2,333,419	34,484	1.5%
Private Gifts, Contracts & Grants	1,392,174	1,392,174	0	0.0%
Other	573,089	538,704	(34,385)	-6.0%
TOTAL EXTRAMURALLY FUNDED OPERATIONS	$ 4,554,030	$ 4,562,824	$ 8,794	0.2%
TOTAL OPERATIONS	$ 18,951,905	$ 20,234,031	$ 1,282,126	6.8%
DEPARTMENT OF ENERGY LABORATORY (LBNL)	$ 625,300	$ 625,300	$ 0	0.0%

PERSPECTIVE ON THE 2009-10 BUDGET

The University of California makes a vital contribution 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:

- UC educates the workforce needed by high-tech business, agriculture, health care, education, and other sectors of the economy.
- UC conducts research that fuels the economy, creates jobs, and increases productivity, leading to higher standards of living.
- UC is a key source of innovation and entrepreneurs, which are essential to the industries that drive California's competitiveness.
- UC provides an unmatched combination of state-of-the-art patient care facilities and path-breaking research programs, which are integrated with medical education programs to improve the health of Californians.
- UC works with K-12 schools to improve the quality of instruction and expand educational opportunities.

The University does more than educate over 220,000 students each year; it touches the lives of every Californian. Economic prosperity, social mobility and cultural opportunity — all have been fueled by far-sighted investments in higher education. 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. But to maintain California's leadership role and to meet the changing needs of future generations, California must continue to invest, including supporting the core budget of its world-class research university system.

In 2003, the University commissioned ICF Consulting to study the University's impact on the state's economy, on the health of its residents, and on the vitality of its communities. In the resulting report entitled "California's Future: It Starts Here", the international management consulting and strategic analysis firm concluded,

"Considering UC's contributions across the board, it is no exaggeration to say that perhaps no other institution in the state benefits the quality of life of more Californians in every sphere of their daily life learning, working, playing, living than the University of California.

The operating budget, totaling more than $19 billion, funds the University's core mission responsibilities of teaching, research and public service, as well as a wide range of activities in support of these responsibilities, including teaching hospitals, the National Laboratories, University Extension, housing and dining services, and sponsored research.

In recent years, other fund sources have helped to make up for declines in State support for UC. These other sources include revenue from student fees, UC General Funds, federal funds, teaching hospital revenue, gifts and endowments, and income from self-supporting enterprises. The University's budget plan is based on the best estimates of funding available from each of these sources.

Yet State General Funds remain extremely critical, for they support the core instructional mission and

make it possible to attract funds from other sources. For example, for every State dollar specifically invested in research, UC leverages nearly $5 more from the federal government and other non-State sources. State funds also help attract significant private funding, with one example being the California Institutes for Science and Innovation, a unique funding partnership between the State, industry, and the University.

Planning for the University's 2009-10 budget is proceeding in the context of the State's ongoing fiscal problems. The University further recognizes that it has an obligation to identify and capture savings from its ongoing review of operations and efficiencies to fund additional UC aspirations and obligations.

The Master Plan for Higher Education

The California Master Plan for Higher Education has been the blueprint for higher education in this state for nearly 50 years. It specifies the mission of each public higher education segment and defines the pool of high school graduates from which each segment will admit its undergraduate students. Consistent with the Master Plan, the University has a three-fold mission:

- **Teaching**, which consists of undergraduate, professional, and graduate academic education through the doctoral degree. Under the Master Plan, UC is responsible for educating all eligible students in the top 12.5% of the high school graduating class who choose to attend as well as providing access to eligible community college transfer students by maintaining at least a 60:40 ratio of upper division to lower division enrollment. Students develop analytic and communication skills, gain exposure to a wide range of intellectual traditions and emerging concepts, and develop in-depth knowledge in a particular area of study, all of which help prepare them for an increasingly knowledge-based society. In addition, UC has sole responsibility in public higher education for doctoral education and for professional education in law, medicine, veterinary medicine, and dentistry.[1]

- **Research.** The Master Plan designates UC as the primary State-supported academic agency for research. As one of the world's preeminent research universities, UC provides an environment in which leading scholars, researchers, and students, both undergraduate and graduate, work together to discover new knowledge and train California's future workforce in state-of-the-art technologies necessary to keep California on the cutting edge of economic, social, and cultural development. Teaching and research are inextricably tied together at the graduate level, and increasingly at the undergraduate level as well. This synergy helps to build the continuing and evolving creativity and critical thinking skills so important to successful professionals. University research also provides a vital link for the private sector to the development of new knowledge and the innovations that lead to new industries and the creation of more jobs.

- **Public Service.** The University's public service mission is to contribute to the well-being of the community, state, and nation. The University fulfills its public service mission by providing a broad range of services important to the state. Student academic preparation programs are designed to bolster academic performance and improve a student's chance of success in pursuing higher education. UC Agricultural Extension and Cooperative Extension programs benefit agriculture, consumers, and local communities by bringing to them new

[1] In 2007, the Legislature granted CSU the authority to offer a specific Ed.D. in educational leadership. CSU may also offer joint doctoral degree programs with UC or independent institutions.

technologies and the latest research findings. Health science programs, including UC's five major teaching hospitals and the outpatient clinical care programs they operate, provide state-of-the-art patient care. University Extension programs help retrain and expand learning for 300,000 students a year. Public service programs allow state policy makers to draw on the expertise of UC's faculty and staff to address important public policy issues.

The Pursuit of Excellence

The University of California is internationally renowned for the quality of its academic programs and consistently ranks among the world's leading institutions in the number of faculty and researchers singled out for awards and distinctions, election to academic and scientific organizations, and other honors.

- Fifty-four faculty and scientists affiliated with UC have been awarded Nobel Prizes, the pinnacle of achievement for groundbreaking research; 22 of the Nobel Prizes have been won since 1995. No public university has won more Nobel Prizes than UC.
- UC-affiliated researchers have received 59 Medals of Science, more than 10% of the medals presented since Congress created the award.
- UC boasts 232 members of the National Academy of Sciences, 372 members of the American Academy of Arts and Sciences, 115 members of the Institute of Medicine, and 585 members of the American Association for the Advancement of Science.
- In 2007, two researchers affiliated with UC received one of the nation's most coveted honors, a MacArthur Foundation Fellowship, which is often referred to as a "genius" grant. Since the first MacArthur Fellowships were bestowed in 1981, about 70 faculty, researchers, and others affiliated with UC have been awarded these prestigious grants.
- Also in 2007, 13 UC faculty were named Guggenheim Fellows on the basis of distinguished achievement in the past and exceptional promise for future accomplishment. More Guggenheim fellowships have been awarded to UC faculty than to any other university or college — approximately 1,450 since 1930. They include writers, painters, sculptors, photographers, filmmakers, choreographers, physical and biological scientists, social scientists, and scholars in the humanities.

In addition to individual faculty honors and awards, the University, its campuses, and individual academic departments are frequently cited for excellence. UC is among the top research institutions in the world:

- The most recent rankings of the prestigious National Research Council, which analyzed the doctoral programs of 274 universities, placed more than half of the University's 230 graduate programs at the nine campuses in the top 20 of their field — a performance unmatched by any university system in the country. New rankings are expected in the coming year.
- In 1997, a study of the rise of research universities placed UC campuses at the forefront of research productivity and in creating new knowledge. The Berkeley and Santa Barbara campuses were ranked first and second, respectively, with the six other general campuses ranked in the top 26, among the nation's public research universities.[2]
- This achievement in research productivity is affirmed by UC's leadership in intellectual

[2] Graham and Diamond, 1997. *The Rise of American Research Universities: Elites and Challengers in the Postwar Era.*

property licensing. Studies by the National Science Foundation (NSF) and the Milken Institute have confirmed that UC and its affiliated national laboratories produce more research leading to patented inventions than any other public or private research university or laboratory. The University ranked first for numbers of U.S. biotechnology patents issued and between 2000 and 2004, and during that time 20% of all nanotechnology patents came from UC.

The University also excels in its public service mission. A 2007 college ranking in *Washington Monthly* focused on how much an institution benefits the country — how well a college performs as an engine of social mobility, fosters scientific and humanistic research, and promotes an ethic of service to the country. The Los Angeles campus was ranked as the second best university in the nation, with the Berkeley, San Diego, and Davis campuses included in the top ten and the Irvine, Riverside, Santa Barbara and Santa Cruz campuses in the top 76.

These distinctions are evidence of the University's pre-eminence among the nation's leading universities, an accomplishment that benefits all of California. The quality of programs developed and maintained within the University over the years owes much to the citizens of California, who have long recognized and enjoyed the benefits to the State of supporting a public university of national and international distinction.

UC's Contribution to the State Economy

This state has had a long record of strong economic performance with a history of successful companies and high-paying jobs. If California were a country, its economy would be among the top 10 in the world. In comparison to other states, salaries in California have been well above the national average for the last three decades.

However, there are signs that California is losing its comparative advantage. Already, California's per capita personal income, relative to the U.S. average, has declined continuously from 118.2% of the U.S. average per capital personal income in 1980 to 106.9% of the U.S. average by 2005.

As Baby Boomers retire, they will be replaced by younger workers. These younger workers, however, have lower educational levels than today's retirees. According to the 2006 report, "Keeping California's Edge: The Growing Demand for Highly Educated Workers,"

> *"In recent history, California's education pipeline has always assured that the next cohort to enter the labor force would be better educated than current and previous cohorts. Employers could anticipate the ever-improving educational attainment of the labor force. Now, for the first time, projections of California's education pipeline indicate declining labor force quality compared to previous cohorts, which raises questions about our ability to supply the higher-educated labor force of the future."*

While 41% of California's 45 to 64 year olds hold an associate's degree or higher, only 36% of 25 to 34 year olds are as educated. The report projects, moreover, that occupations in California requiring a higher education degree (associates degree or higher) will grow by more than 46% between 2002 and 2022, while occupations not requiring higher education will grow by only 33.5%.

The industries that will be driving California's economic longer-term competitiveness will be knowledge-based industries. California's fastest growing occupational categories are professional and managerial jobs. In the early 1980s, one-fourth of all jobs in California were held by professionals and managers. Today, that fraction has grown to one-third of all jobs in the state. Most of these new professional and managerial

jobs require at least a bachelor's degree and often a master's or doctorate. The California Postsecondary Education Commission's 2007 "Public Higher Education Performance Accountability Framework Report" showed that occupations in critical need of highly educated professionals include computer occupations, engineering, teaching, nursing, and pharmacy.

California will also be in need of graduate students. Analysis conducted by the Public Policy Institute of California indicates that growth in the number of jobs requiring graduate degrees will surpass one million, a 68% increase from 2005.

The State's investment in higher education will impact the future of knowledge-based industries in California. The respected UCLA Anderson Forecast looked long-term at California's demography and economy in its September 2004 report. The Forecast attributed California's relative drop in income to a growing "education gap" with the rest of the United States. Between 1985 and 2003, the percentage of those with four or more years of college rose by 8% across the U.S., but only by 5% in California. While California's percentage remains higher than the national level, a lack of investment in education will continue to erode the economic advantages that California has enjoyed and the quality of life in the state.

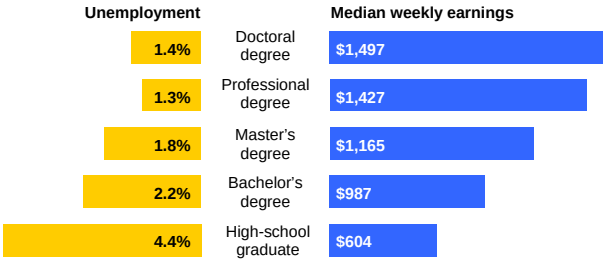
The state is at a crossroads. Where California was once and still is among the highest educated and earning states in the U.S., that advantage will not last if current trends in education continue. The University of California is one of the top universities in the world, as a research institution and as an engine of economic growth. Investment on the State's part in the University translates to investment in the future of California.

Current Perspective

The California Master Plan for Higher Education has produced the best system of public higher education in the world. The State's past investment in UC's development into a world-renowned institution must be renewed to preserve the University's excellence in the future. Adequate financial support for the University is essential if UC is to fulfill its missions under the Master Plan, contributing to a higher standard of living and better quality of life for citizens of the state.

DISPLAY I-1: EARNINGS AND UNEMPLOYMENT BY LEVEL OF EDUCATION

With the shift to a knowledge-based economy, individual income and employment are more closely linked to level of education. Average earnings are higher and unemployment rates are lower for those with more advanced levels of education.



California has been under-investing in higher education in recent years:

- The University's share of the State budget has decreased from 7% to 3.2% over the last 40 years.
- In inflation-adjusted dollars, the State contributed $15,860 to the cost of education for each UC general campus student in 1990, and now contributes only $9,560 per student per year, a reduction of nearly 40% over 17 years.
- Between 2000-01 and 2007-08, UC enrollment grew 31%. During that time, State support fell 15% through 2004-05 before recovering. State funding for UC in 2008-09 was $3.25 billion, less than 2% over support provided in 2000-01.
- The University's graduate and professional programs have not been keeping pace with California employers' workforce needs. UC graduate enrollment did not increase proportionately with undergraduate growth in the 1980s and early 1990s.

- Despite the need for more health care professionals to meet the needs of a growing and aging population, there has been very little increase in UC health sciences enrollments in nearly 30 years.
- Even though basic research is critical to knowledge-based industries, State support for UC research declined by $73 million (25%) during the State budget crisis earlier this decade.

A renewed commitment to funding for higher education in California is imperative to meeting future economic challenges and improving the quality of life for the citizens of California. If the University is to continue to be an engine of economic growth for the State, its quality must be protected as it increases both the production of new knowledge and the number of graduates.

The State has undergone fiscal crises in the beginning of each decade for at least the last 40 years — the early years of each decade have been characterized by funding shortfalls and budget cuts, followed by economic recovery and progress have occurred in the rest of the decade. The University has weathered these fiscal crises and prospered during better economic times. Unfortunately, budget cuts during the early 1990s and again in the early 2000s were so deep that while better economic times in the late 1990s resulted in improved budgets, full recovery from the devastating effects of earlier major funding shortfalls in the University's core operating budgets has not been possible.

Four years of further major reductions as part of the State's response to the fiscal crisis at the beginning of this decade again took a heavy toll on the University's ability to perform its missions under the Master Plan and contribute to the state's economic development. The University suffered more than $900 million in State funding reductions, less than half of which were offset by student fee increases, and another $550 million in unfunded workload and mandatory cost increases.

The Higher Education Compact with Governor Schwarzenegger

In the midst of the State fiscal crisis during the early part of this decade, the University clearly found itself at a crossroads. It was no longer possible to both maintain quality and accommodate all eligible students wishing to attend, and continue to recruit the highly-qualified graduate students needed to help conduct research and meet the State's workforce needs for highly-skilled workers in knowledge-based industries. The State appeared to be facing several more years of severe budgets.

Recognizing the importance of the University of California and the California State University systems to the economic and social well-being of the State, in May 2004 Governor Schwarzenegger entered into a new long-term Compact with the four-year institutions for the six-year period from 2005-06 through 2010-11. The funding agreement was a comprehensive statement of the *minimum* resources needed for the University to accommodate enrollment growth and sustain the quality of the institution to which students seek admission. The Compact is intended to provide fiscal stability and stop further erosion of the University's budget in the early years and allow the University to plan for the future and begin recovering lost ground in the later years. As with similar past accords, it is an agreement with the Governor for which the University and the Governor must seek the support of the Legislature through the normal budget process each year.

The fiscal provisions of the Compact are designed to provide necessary resources for base budget adjustments to help fund salary, health benefit, and non-salary price increases; enrollment growth consistent with the Master Plan at the agreed-upon marginal cost of instruction; funding to address chronic budgetary shortfalls in State funding for core academic support; and continued support for bond financing of at least $345 million annually to

meet capital outlay needs. The Compact also specified fee increases for undergraduates and graduate academic students for 2004-05 through 2006-07. Following that period, the Compact envisions fee increases equivalent to the annual increase in California per capita personal income, up to 10% per year, if fiscal circumstances require increases that exceed the rate of growth in per capita personal income to provide sufficient funding for programs and preserve quality. The Compact also calls for the University to develop a long-term plan for increasing professional school fees. Revenue from student fees will remain with the University and will not be used to offset reductions in State support.

In addition to the financial provisions specified above, the Compact includes accountability measures relating to issues that are high priorities for the State. Thus, the University agrees to maintain and improve where possible performance outcomes in a variety of areas, including maintaining student access and program quality, implementing predictable and moderate fee increases, enhancing community college transfer and articulation, improving graduation rates and time-to-degree, helping the State address the shortage in science and math K-12 teachers, returning to paying competitive salaries, closing long-term funding gaps in core areas of the budget, and maximizing funds from the federal government and other non-State sources. The University annually provides a report to the Administration and the Legislature on its progress in these areas.

This agreement with the Governor staved off the possibility of further budget cuts beyond those originally proposed in the Governor's Budget for 2004-05 and provided the basis for the University's budget plan for 2005-06 and beyond. The Compact was fully funded through 2007-08, including additional funding to avoid student fee increases in 2006-07, despite continuing constraints on the State budget. In fact, the University's increase in State funding under the Compact was 6.4% in 2007-08 while the overall State budget increased by only 0.5%.

Unfortunately, the State has continued to experience financial constraints. In developing the 2008-09 Governor's Budget, the Department of Finance first "funded" a normal workload budget consistent with the Compact, including funding for 5,000 FTE enrollment growth, and then proposed a 10% reduction to that higher budget to address the State's fiscal situation. Most of the net reduction was restored in the Governor's May revision, but the final budget included a reduction for UC of $48.7 million. While the Compact protected the University from budget reductions in 2008-09, the University was left with no new State funding to support enrollment and other program growth and mandatory cost increases.

For 2009-10, it is the University's hope that the State will return to its commitment to providing sufficient funding to ensure access and maintain quality. Such funding is an investment in California's future.

Planning for the Longer Term

While the swings of the State's economy and its impact on UC have created considerable fiscal uncertainty in recent years, it is prudent that the University look beyond the annual budget cycle to take a longer view, looking at least twenty years into the future. The University must consider what the State of California will need in the coming decades and identify the ways in which the University can contribute to meeting those needs. As part of this process, consideration should be given to the changing nature of the state's economy and demographics, the balance of the University's missions and roles, and global competition for intellectual capital.

A knowledge-based economy means that higher education is more important than ever to

economic competitiveness and the quality of life. Higher education is a pathway to upward social mobility for a changing population. More Californians will want and need a university bachelor's and advanced education for tomorrow's jobs. Innovations that result from the University's research and the creative solutions and visionary thinking of its graduates lead to new products, better processes, new companies, and sometimes entirely new industries. Both access to the University and protection of its quality are imperative if this valuable public asset is to continue to keep California competitive. The investments that the State makes over the next 10 years in California's competitiveness may well determine the state's economic fortunes for the next 40 or 50 years.

As such, the University has engaged in a long-range planning process, designed to create a vision of the University of California in twenty years and how it will best serve the state. Consideration is being given to what the intellectual capital and other needs of the State will be and how the University can help to meet those needs in 2025 and beyond. Recognizing the State's current financial difficulties, this budget, and those that will follow, will be consistent with the Compact with the Governor through 2010-11 and will be informed by the longer-term perspective as well.

The University routinely engages in a variety of planning efforts both on its campuses and through various systemwide bodies including The Board of Regents. Of note since 2006 has been the emphasis on a more integrated approach to planning — developed to ensure greater coherence and alignment around strategic initiatives, as well as better transparency in and accountability for decisions about both campus and systemwide goals and budget priorities. Fruits of this more integrated approach are already apparent:

- A long-range vision for the University, established by the Long Range Guidance Team and embraced by The Board of Regents, has acted as a touchstone against which campuses can plan their own developmental trajectories, in view of one another and recognizing the system's goals and priorities.
- A new budget process — for the system as well as for the Office of the President — engages the University community, The Board of Regents, and the public, in an open dialogue about the University's budget needs and priorities.
- Online information resources make detailed information about the University's progress routinely available via the web. One example is UC's Accountability Framework, which is the University's new initiative to comprehensively assess and share its progress in meeting key institutional goals across the 10 campuses. The annual report will help inform the strategic planning, budgeting, and performance management, as well as help focus the Regents on the most important policy issues facing UC.
- Focused or targeted planning efforts — such as the University's report, *Long Range Enrollment Planning*, the strategic plan of the University's IT Guidance Committee, and the efforts to improve the efficiency and reduce the size of the Office of the President — mobilize actions behind initiatives that reflect university strategies.

In 2007, The Regents established a Long Range Planning Committee embracing the vision of the Long Range Guidance Team, and articulating the following high level goals which, along with long-standing Regental priorities, would drive the development of strategic priorities:

- **reinvigorating UC's relationship with California** by restoring credibility, bringing research and educational capacities to bear in ways that meet the state's evolving needs, and ensuring that all Californians have access to a UC education;

- **building and maintaining the quality of UC's teaching and research** by planning for and investing in the people, programs, and facilities that ensure our continued academic and economic competitiveness on the world stage;
- **restructuring the way UC does business** to achieve the nimbleness and agility that modern organizations require to respond to rapidly changing needs and ensure that the maximum share of every dollar is spent helping to achieve academic and service goals.

Other focused planning activities and evolving processes address the long-term direction of the University. Among these are:

- the first phase of planning for long-range enrollment growth through 2020, described later in this section;
- Universitywide planning for information technology, addressing the broad physical and virtual infrastructure for instructional, research and administrative computing needs;
- health science workforce analysis and enrollment planning, to address expected shortfalls in key health professions;
- undergraduate education planning, which is addressing systemwide approaches to ensure the University's high quality undergraduate experience continues to be responsive to public interests and to an evolving world that will require different skills and knowledge; and
- comprehensive planning for continued improvements in diverse representation among student, faculty and staff populations.

Long Range Enrollment Projections

As part of its ongoing academic planning efforts, the University recently developed new long-term enrollment projections through 2020-21.

The University's previous long-term enrollment plan, revised in 1999, called for annual enrollment growth of 2.5%, or about 5,000 FTE, over this decade. This rapid rate of growth was necessary to accommodate growing numbers of qualified high school graduates as well as meet the state's need for expanded transfer opportunities and graduate education. As originally designed, by 2010-11, the University would reach its planned target of 216,500 FTE. However, in the early part of this decade, the University experienced far more rapid enrollment growth than projected in the 1999 plan. Following a pause in enrollment growth in the middle of the decade, the Compact

Vision Statement for the University of California Established by the Long Range Guidance Team

Drawing upon the ***power and promise of its ten campuses***, **The University of California of 2025** will be:

- **Research intensive**, with a marked increase in the multidisciplinary, cross-disciplinary, inter-campus, and global nature of our efforts.
- **Student centered** in ways that better leverage the depth, breadth, and diversity of our faculty's expertise systemwide. UC will leverage unparalleled experimental and research facilities, libraries, research data, and other tools that foster scholarly collaboration on a worldwide scale to create distinctive educational experiences for our students.
- **Responsive to and reflective of California** and its increasingly diverse population, and will be broadly engaged in a myriad of ways with the people, businesses, governments, and the environmental, social, and health-care services of California and the global communities of which they are part. Our campuses will continue to develop as vital cultural centers serving the regions where they are located with the highest-quality programming in the performing and visual arts, and in adult, continuing, and professional education.
- **The University of California of 2025 will:**
  - Emphasize the faculty and graduate students as the prime drivers of our intellectual creativity,
  - Emphasize our undergraduate students, in all their diversity of talents and backgrounds, as the promise of the future for California,
  - Harness the depth and breadth of the UC system's resources to meet the changing needs of California's diverse population.

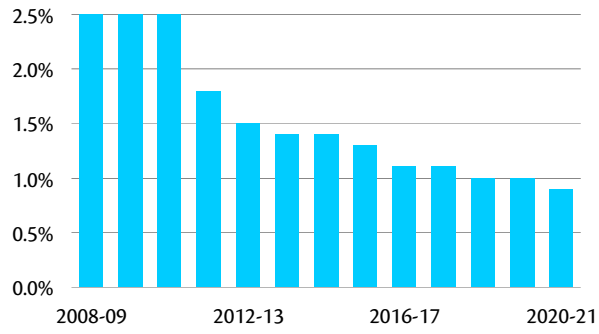
with Governor Schwarzenegger called for UC to return to its earlier estimates of 2.5% enrollment growth per year through 2010-11.

The University's projections for the next decade include more modest growth at the undergraduate level as numbers of high school graduates level off, but continued growth at the graduate level to meet the state's workforce needs. While individual campus plans and programs are still evolving — and must remain flexible to respond to new and emerging opportunities and challenges that will face California — the University's overall direction is clear:

- UC will continue to grow, though more slowly than in recent years. The University proposes total enrollment in 2020-21 of 265,000 FTE. Annual growth from 2010-11 through 2020-21 will slow and will be roughly 1.1%, considerably lower than the 2.5% annual growth planned and more than realized for the current decade.
- Undergraduate growth will expand opportunity to populations historically underserved by higher education. UC will take advantage of slower growth among high school graduates to offer opportunity to a broader group of California students, including low-income students, those who are the first in their families to complete a four-year degree, students from underserved communities, and transfer students. Proposed growth of 26,000 undergraduates through 2021 will increase the proportion of California public high school graduates enrolling at UC to an all-time high of 9.2%.
- Accelerated growth in graduate enrollments will fuel California's economy and provide social and economic mobility. To help the state remain competitive in a knowledge-based global economy, UC proposes to increase graduate enrollments by roughly 22,000 students by 20-21. More than a third of proposed growth is expected to occur in life and physical sciences, engineering, and math and more than a quarter in professional programs to train doctors, public health professionals, veterinarians, nurses, and other critical health professionals.
- Enrollment growth will enhance diversity. UC will expand in regions and in fields where underserved populations can most benefit. Undergraduate growth will be greatest in the Central Valley and Inland Empire — regions that lag the rest of the state in college opportunity and support diverse and growing populations. At the graduate level, campuses are increasing enrollments and proposing new programs in areas that both attract and serve diverse populations, such as programs that train doctors to serve underserved communities.
- Campus enrollment projections take into account the needs and concerns of neighboring communities. Campuses are proposing new programs that respond specifically to regional needs. Campuses that are approaching enrollment levels on which their long-range development plan is based will use a variety of strategies, including summer and off-campus enrollments, to minimize impacts on their local communities.

DISPLAY I-2 PROJECTED ANNUAL ENROLLMENT GROWTH RATES

Consistent with earlier plans and the Compact, student enrollment will grow 2.5% annually through the end of the decade to accommodate Tidal Wave II. In the next decade, UC will grow more slowly, but will expand opportunity for underserved populations while also increasing graduate enrollments to help meet the state's workforce needs.



Facilities Needs to Accommodate Enrollment Growth and Maintain Quality

Adequate facilities are a critical factor in the University's ability to accommodate the expected rapid growth of students and maintain the quality of the academic program. The State provided funding for capital outlay within the range of $100 million to $250 million per year for more than a decade from the mid-1980s to the late 1990s. More recently, the State has provided about $345 million per year for capital outlay needs of the general campuses, and in some years significantly more, related to seismic corrections at UC medical centers, construction of the new Merced campus, and establishment of four world-class science institutes (the California Institutes for Science and Innovation), and expansion of medical school programs.

General obligation bonds approved by the electorate have provided significant resources over the years. Between 1998 and 2007, total funding provided was $2.8 billion. The University also received capital funds from other State sources in recent years, including both State General Funds and lease revenue bonds totaling $1.6 billion. In addition, the University has used approximately $205.6 million of "Garamendi financing" to pursue development of research projects.

Because the State did not pursue a new General Obligation bond measure in 2008, funding for the University's 2008-09 capital budget was scaled back from $388 million to just $205 million for six projects funded from lease revenue bonds.

For 2009-10, the University is proposing a package of more than $842 million to fund the University's capital plan as well as to restore funding for projects included in the Governor's 2008 proposal that were not funded in the final budget act.

Future funding for capital outlay continues to be a major issue facing the University. Continued enrollment growth presents major challenges and the University has significant capital needs related to seismic and life-safety requirements, modernization of out-of-date facilities, new infrastructure for growing campuses, and renewal of infrastructure and other facility systems that are worn out and cannot accommodate present needs.

The University's capital program is particularly challenged by recent changes in the construction market that have resulted in an extraordinary increase in building cost, although in the last 12 months, this trend seems to be moderating. In response, the University has dramatically increased its emphasis on management of cost and cost risk, and improving the way projects are implemented. That said, it is clear that with the current volatility in the construction market, the State financing called for in the Compact does not support as many projects as originally envisioned.

The University estimates that it will require more than $1 billion per year over the next five years to address its most pressing facilities needs for core academic and support space traditionally funded by the State. Recognizing difficulties faced by the State, the University has committed to meeting a portion of this annual need through private fundraising and devoting a portion of the increase in UC General Funds to pay for debt service on long-term financing. In addition, there are other urgent needs in areas traditionally not supported by the State, such as student and faculty housing, parking, and other facilities that serve public as well as University needs. Unfortunately, the magnitude of these non-State funded facilities needs places significant pressure on the University's debt capacity.

While State funding does not meet all the University's needs, the $345 million per year proposed in the Compact is critical to the University's ability to respond to facilities needs. Resumption of that level of funding in 2010-11 and beyond would enable the University to address its most essential enrollment, life-safety,

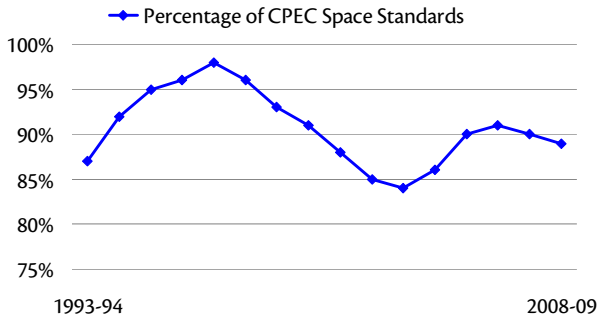
and renewal needs, priorities which are key to the University's ability to accommodate enrollment and maintain adequate facilities.

The Compact states that, as the State's fiscal situation permits and one-time funds become available, the State may provide "one-time funds to address high priority infrastructure needs, such as capital renewal of facilities and deferred maintenance." While the State's fiscal situation does not currently allow for additional support in this area, the problems continue to grow and impact campus programs, requiring additional support at the earliest opportunity.

The capital outlay budget and history are discussed in more detail in a companion document, *2009-10 Budget for State Capital Improvements.*

DISPLAY I-3: ADEQUACY OF FACILITIES BASED ON CPEC SPACE STANDARDS

In 2008-09, the University's space equals about 89% of CPEC space standards. The University's ability to continue to accommodate enrollment and maintain critical facilities to support academic programs is dependent upon funding for capital facilities.



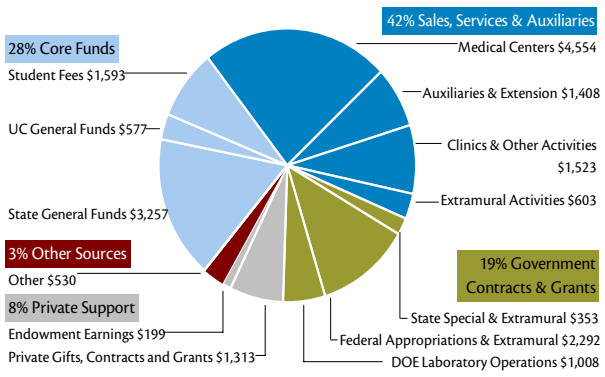
SOURCES OF UNIVERSITY FUNDS

The University's operating revenues, totaling more than $19.6 billion in 2008-09, support the University's core mission responsibilities of teaching, research, and public service, as well as a wide range of activities in support of and generated by these responsibilities, including teaching hospitals, the Lawrence Berkeley National Laboratory, University Extension, housing and dining services, and other functions.

These activities are funded from a wide range of sources, including State support, student fees, medical center and other self-supporting enterprise revenues, federal, State, local, and private contracts and grants, and private giving and endowment earnings, among others, as shown in Display II-1. The University's annual budget plan is based on the best estimates of funding available from each of these sources. Later chapters of this document describe the functional areas in which the University's funds are expended.

DISPLAY II-1: 2007-08 EXPENDITURES FROM ALL FUND SOURCES
(DOLLARS IN MILLIONS)

UC's operating expenditures, totaling $19.2 billion in 2007-08, consist of funds from a variety of sources. State support, which helps leverage other dollars, remains critical.

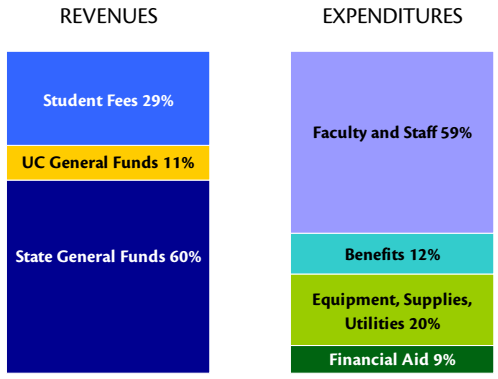


Core Operating Funds: General Funds and Student Fees

The University's "core funds," comprised of State General Funds, UC General Funds, and student fee revenue, provide permanent support for the core mission activities of the University: instruction, research, and public service, as well as the administrative and support services needed to carry out these activities. Totaling $5.6 billion in 2008-09, these funds represent 28% of the University's total budget. Much of the focus of the University's strategic budget process and negotiation with the State is dedicated to the use of these fund sources.

DISPLAY II-2: 2007-08 REVENUE AND EXPENDITURES FROM CORE FUNDS

Three major fund sources make up UC's core operating budget, with the majority of expenditures funding faculty and staff salaries and benefits.

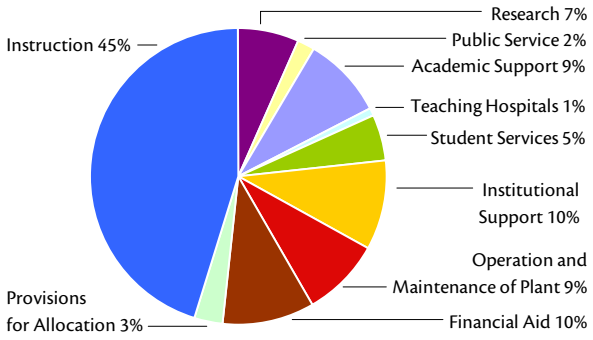


State General Funds

State General Fund support for UC, $3.3 billion in 2008-09, provides a critical base of permanent support for the University's core mission activities. While the majority of State General Funds are undesignated in the State budget act, approximately $78.5 million in funding is designated for specific

DISPLAY II-3: 2007-08 CORE FUNDS EXPENDITURES BY FUNCTION

Nearly half of core funds are spent in general campus and health sciences instruction.



programs and activities. In addition to funding for basic operations, the State appropriation includes funding for principal and interest payments associated with University facilities financed through lease-purchase agreements with the State Public Works Board. In 2008-09, the State is also providing a $10 million one-time allocation for start-up activities at UC Merced.

In recent years, State funding augmentations have been driven in large part by the Compact with Governor Schwarzenegger, although before the most recent State fiscal crisis, the University received funding above the Compact as well. In good fiscal times and bad, the Compact has served as a statement of the funding necessary to provide the *minimum* needed to accommodate enrollment growth and maintain academic quality.

UC General Funds

In addition to State General Fund support, certain other fund sources are unrestricted and provide general support for the University's core mission activities. Collectively referred to as UC General Funds, these include:

- a portion of overhead on federal and state contracts and grants;
- DOE laboratory operations overhead and management;
- nonresident tuition;
- fees for application for admission and other fees;
- a portion of patent royalty income; and
- interest on General Fund balances.

Based on recent trends and nonresident enrollment projections and tuition levels, the University expects to generate $594 million in UC General Funds during 2008-09. The largest sources of UC General Funds are nonresident tuition, accounting for $257 million, and indirect cost recovery on federal contracts and grants, totaling $252 million in 2008-09.

Student Fees

Also included in the core funds category are revenues generated from mandatory systemwide and professional school student fees. Three fees are included as core funds.

- Educational Fee revenue supports student services, student financial aid, and a share of the University's operating costs for instruction, libraries, operation and maintenance of plant, and institutional support. In 2008-09, Educational Fees range from $6,204 to $7,434, depending on student level, program, and residency status, and will generate $1.39 billion;
- University Registration Fee revenue provides funding for student services, other activities that provide extracurricular benefits for students, and capital improvements. In 2008-09, the $864 Registration Fee will generate $188 million.
- Professional school fee revenue helps fund instructional costs including hiring faculty, other instructional support, and student services, as well as student financial support. Professional school fees range from $3,685 to $22,049, depending on the program and campus, and will generate $155 million in 2008-09.

University student fees are discussed in detail in the *Student Fees* chapter of this document.

Historical Changes in Core Funds Support

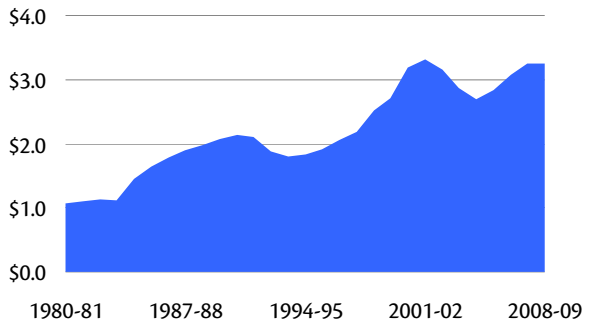
State funds represent a critical investment by the State, making it possible for the University to attract funds from other sources. For example, for every State dollar specifically invested in research, UC leverages nearly $5 more from the federal government and other non-State sources. State funds also help attract private funding, with one example being the California Institutes for Science and Innovation, a unique funding partnership between the State, industry, and the University.

State funding for UC has fluctuated over time, as shown in Display II-4. Funding increases and reductions have largely coincided with changes in the state's economy. In the 1980s, State funding for UC doubled due to the high priority placed on the University of California by Governor Deukmejian and the Legislature. Declines occurred during recessionary years in the early 1990s and again during the early 2000s. During the intervening years, under the first Compact with Governor Wilson and the first two years of the Partnership with Governor Davis, the State provided increased funding for the University's budget every year, totaling more than $1 billion. A State budget crisis at the beginning of this decade led to another decline, but State funding for UC rose from 2005-06 through 2007-08, under the Compact with Governor Schwarzenegger.

While funding from the State in real dollars has tripled since 1980-81, the University's share of the total State General Fund budget has declined markedly (see Display II-5). In 1980-81, the State dedicated 5% of the State General Fund toward the University's programs. In 2008-09, funding for UC represents just 3.2% of the State budget. Other State operations, and the prison system in particular, have taken larger shares. In 1990-91, the State's corrections budget was slightly less than State support for UC. Today, State funding for corrections nearly surpasses the combined State support of UC, CSU, and the community colleges.

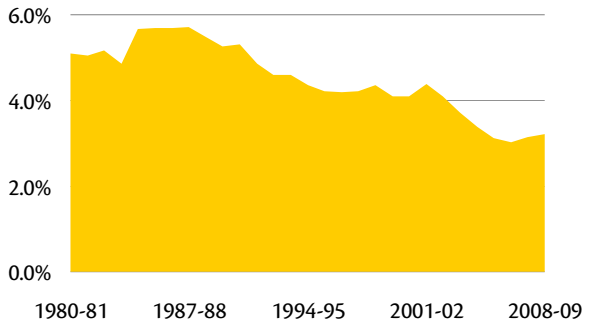
DISPLAY II-4: STATE GENERAL FUND SUPPORT
(DOLLARS IN BILLIONS)

State support for UC has fluctuated over time, coincident with the state's economy.



DISPLAY II-5: UC SHARE OF STATE BUDGET

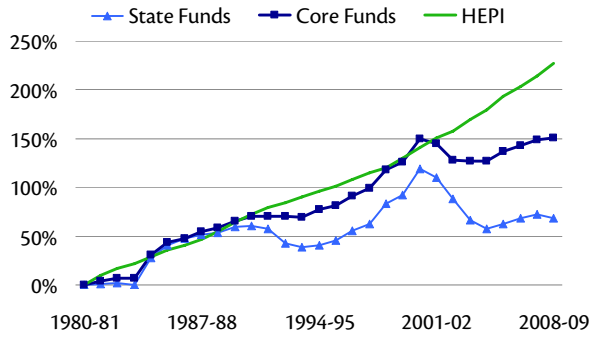
However, UC's share of the total state budget has declined markedly over the long term. In the late 1980s, more than 5% of the State General Fund was dedicated to UC. By 2008-09, the UC share had declined to 3.2%.



Another critical issue for the University is how well funding has kept pace with the costs of providing postsecondary instruction. Display II-6 shows the University's core funds budget on a per student basis relative to inflation as gauged by the Higher Education Price Index (HEPI). The University has fared better in some years and worse in others, when compared to inflation, but until this decade, total core funding generally kept pace with inflation. After 2000-01, the University experienced a precipitous decline over several years in funding per student when compared to the price index. The University is deeply concerned about this trend. The importance of having sufficient funds to maintain quality cannot be overstated. The erosion of the University's

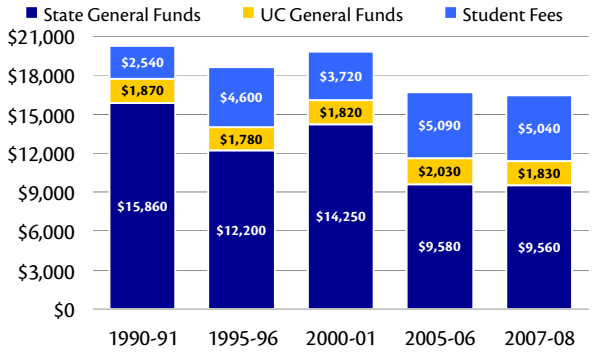
DISPLAY II-6: GROWTH IN CORE FUNDS PER STUDENT RELATIVE TO INFLATION

Most recently, growth in total core support, including State funds, UC General Funds and student fee revenue, have not kept pace with enrollment growth and inflation. State funding, relative to inflation, has fallen off sharply during the last decade.



DISPLAY II-7: PER STUDENT AVERAGE EXPENDITURES FOR EDUCATION
(2007-08 DOLLARS)

Since 1990-91, average inflation-adjusted expenditures for educating UC students declined 19%. The State's share of expenditures plunged even more steeply – 40%. Over this period, the student share, net of financial aid, has more than doubled, from 13% to 31%.



resources must be halted if the educational quality of the University is to be preserved.

Underlying the level of core funding relative to inflation, however, is the shift in the distribution of that funding among State support, UC general fund sources, and student fees. Display II-7 shows the core funding components of UC average per student expenditures for education in inflation-adjusted dollars and yields several key findings:

- The average expenditure per student for a UC education has declined over 17 years – by 19%, from $20,270 in 1990-91 to $16,430 in 2007-08 (using inflation adjusted dollars).
- The State subsidy per student declined significantly — by 40% over a 17-year period. In 1990-91, the State contributed $15,860 per student — 78% of the total cost. By 2007-08, the State share declined to $9,560, just 58%.
- As the State subsidy has declined, the share students must pay has tended to rise. While in 1990-91 students contributed 13% toward their education, they currently pay 31% of the cost of their education.

These findings raise several additional points. First, the funding gap that has developed since 1990-91 represents lost support totaling more than $750 million. Although the University has struggled to meet the challenge presented by this substantial decline in State funding, it must be recognized that certain elements of the educational, research, and public service functions have been steadily sacrificed in order to preserve the core missions of the University. It is unrealistic to assume that cuts of this magnitude sustained over time will not damage the state's brain trust, the California economy, and individual students' chances for educational advancement.

Second, recent national news coverage about skyrocketing costs of college tuition masks what has really happened at UC. University expenditures per student have not increased, but rather have fallen (in constant dollars). Instead, fees paid by students have risen as funding from the State has declined. Student fee increases have helped maintain quality during times of fiscal crisis, but have not fully compensated for the loss of State funds. Under better circumstances, if the State subsidy had not declined, student fees would have remained low.

Third, despite rising fees for students, the University has striven to maintain student access

and affordability. While fees have increased, the University has provided significant increases in financial aid to help ensure access for low-income students. UC has maintained affordability for lower-income students by sustaining a strong financial aid program.

Self-supporting Enterprises: Services and Auxiliaries

More than 40% of the University's current budget consists of revenues from various self-supporting enterprises operated by the University in support of its instruction, research, and public service missions. These revenues are largely restricted – that is, the funds generated are dedicated to the services being offered.

Teaching Hospitals

The University's academic medical centers generate three types of revenue:

- **Patient service revenues** are charges for services rendered to patients at a medical center's established rates, including rates charged for inpatient care, outpatient care, and ancillary services. Major sources of revenue are government-sponsored health care programs (i.e., Medicare, Medi-Cal), commercial insurance companies, managed care and other contracts, and self-pay patients.
- **Other operating revenues** are derived from the daily operations of the medical centers as a result of non-patient care activities, such as cafeteria sales and parking fees. The major source is Clinical Teaching Support ($53.5 million), provided by the State to help pay for the costs of the teaching programs at the medical centers.
- **Non-operating revenues** result from activities other than normal operations of the medical centers, such as interest income and salvage value from disposal of a capital asset.

Medical center revenues are used for operating expenses, including salaries and benefits, supplies and services, malpractice and workers' compensation insurance, and other expenditures. Remaining revenues are used to meet working capital needs, fund capital improvements, and provide a reserve for unanticipated downturns.

In 2008-09, expenditures of hospital income for current operations are projected to total $4.8 billion. The *Teaching Hospitals* chapter of this document discusses problems confronting the medical centers and how those problems have been, and will continue to be, addressed.

Auxiliary Enterprises

Auxiliary enterprises are non-instructional support services provided primarily to students, faculty, and staff. Programs include student residence and dining services, parking, intercollegiate athletics, bookstores, and faculty housing. No State funds are provided for auxiliary enterprises; revenues are derived from fees directly related to the costs of goods and services provided. Expenditures for auxiliary enterprises are estimated to total $945.5 million in 2008-09.

University Extension, Other Self-supporting Educational Programs, and Campus-based Fees

In addition to the fees charged for regular degree programs, the University also generates fee revenue from enrollment in University Extension courses and self-supporting graduate and professional degree programs, and enrollment of non-UC students in summer instruction. These programs are entirely self-supporting; they receive no State funding and fees are charged to cover the full costs of offering the courses and programs. Programs are dependent upon user demand. Campuses also charge fees for a variety of student-related expenses not supported by mandatory systemwide fees, such as student health insurance fees and course materials fees. Income from University Extension, other self-supporting instructional programs and campus-based fees is projected to be $511 million in 2008-09.

Sales and Services — Educational and Support Activities

Income from sales and services of educational and support activities is projected to total $1.54 billion in 2008-09. This includes income from the health sciences faculty compensation plans and a number of other sources, such as neuropsychiatric hospitals, the veterinary medical teaching hospital, dental clinics, fine arts productions, museum ticket sales, publication sales, and athletic facilities users. Similar to auxiliary enterprises and teaching hospitals, revenues are generally dedicated to support the activity operations.

Government Contracts, Grants, and Agency Appropriations

Contract and grant activity generates more than $4 billion in revenue for the University and plays a key role in the University's position as a major driver of the California economy. Primary sources of contract and grant funds are the federal government, including the Department of Energy, state agencies, local government and private entities. Contract and grant activity that is codified in legislation or based on long-standing agency agreements is permanently budgeted. In addition, extramural funds are provided for specified purposes. The majority of these funds is used for research and student financial aid.

Federal Funds

Federal funds provide support for the University in three primary ways: federal research contracts and grants, student financial aid, and federally-funded health care programs.

Federal funds are the University's single most important source of support for research, generating $1.8 billion and accounting for approximately 52% of all University research expenditures in 2007-08. While UC researchers receive support from virtually all federal agencies, the National Institutes of Health and the National Science Foundation are the two most important, accounting for nearly 80% of the University's federal research contract and grant awards in 2007-08. In the past, federal funds for UC research have grown dramatically, but during the last several years, increases have been modest due to constraints on federal spending. As described later in this chapter, indirect cost recovery funding from federal contract and grant activity is dedicated to support contract and grant administration, core mission activities (as UC General Funds) and special programs. Federal funds for research are discussed in more detail in the *Research* chapter of this document.

In addition to research contracts and grants, federal funds entirely support the Lawrence Berkeley National Laboratory, for which UC has management responsibility. In 2008-09, this support is projected to be $625.3 million.

In 2005-06, UC students received more than $1 billion in federal financial aid, including $225.3 million in gift aid and the remainder in the form of loans and work-study. The significance of the federal loan programs for UC students is demonstrated by the fact that these programs comprise more than three-quarters of all federally funded aid and 38% of the total financial support received by UC students in 2005-06. Federal aid also assists undergraduate and graduate students through a variety of other programs. Needy students are eligible for federally-funded grant programs such as Pell Grants and they may seek employment under the College Work-Study Program, through which the federal government subsidizes up to 75% of the student employee's earnings. Graduate students receive fellowships from a number of federal agencies such as the National Science Foundation and the National Institutes of Health. The *Student Financial Aid* chapter of this document provides additional detail.

Federal Indirect Cost Reimbursement

All federal contract and grant activity generates costs which are divided into two basic categories — direct and indirect. Direct costs are those expenditures that can be identified as directly benefiting and directly charged to a specific contract or grant. Indirect costs are those expenses which cannot be specifically identified as solely benefiting one particular contract or grant, but instead are incurred for common or joint objectives of several contracts or grants. Because these costs are not charged against a specific contract or grant, indirect costs initially must be financed by University funds, with reimbursement based on rates negotiated for each campus later provided by the federal government.

The University has an agreement with the State regarding the disbursal of federal reimbursement. Pursuant to this agreement, the first 19.9% of the reimbursement accrues directly to the University for costs of contract and grant administration in campus sponsored projects offices, academic departments, and Multi-Campus Research Units (MRUs). This is the source of the University's Off-the-Top Overhead Fund, estimated to be $111.5 million in 2008-09.

The remaining 80% of the federal reimbursement is split into two funds. The first 55% is budgeted as UC General Funds. It is used, along with State General Funds and student fee revenue, to help fund the University's basic budget (estimated to be $252 million in 2008-09). Since 2000, 94% of any increase generated is returned directly to source campuses. The remaining 6%, along with the amount generated prior to 2000, is pooled with all other General Funds and used to support base budget cost increases and special initiatives.

The remaining 45% is the source of the University Opportunity Fund (estimated to be $205 million in 2008-09). Approximately 6% of these funds supports special programs like the California Institutes of Science and Innovation, systemwide activities such as the Education Abroad Program and the Washington Academic Center, and other university-wide programs; the remainder is returned to source campuses.

In 1990, the State approved legislation (SB 1308, Garamendi) authorizing the use of indirect cost reimbursement for the acquisition, construction, renovation, equipping, and ongoing maintenance of certain research facilities and related infrastructure. Under the provisions of the legislation, the University is authorized to use the reimbursement received as a result of new research conducted in, or as a result of, the new facility to finance and maintain the facility. A total of 19 facilities have been fully financed using the Garamendi funding mechanism.

State Agency Agreements

Similar to federally-sponsored research, California state agencies provide contracts and grants to the University for a variety of activities. The largest area is research, but these agreements also support public service and instruction. In 2008-09, State agency agreements are expected to generate more than $289 million in revenue for the University. Major providers of state agency agreements are the Departments of Health Care Services, Social Services, Transportation, Food and Agriculture, and Education. Indirect cost recovery on State agency agreements is treated as UC General Fund income and supports the University's core mission activities.

State Special Funds

In addition to State General Fund support and state agency contracts, the University's budget for 2008-09 includes $73 million in appropriations from State special funds. These include:

- $30.1 million from the California State Lottery Education Fund, which is used to support instructional activities,
- $14.6 million from the Cigarette and Tobacco Products Surtax Fund to fund the Tobacco-Related Disease Research Program,
- $13.6 million for the Breast Cancer Research Program, also funded from the Cigarette and Tobacco Products Surtax Fund and from the Breast Cancer Research Fund, which derives revenue from the personal income tax check-off,
- $1.6 million from the Health Care Benefits Fund for analysis of health care-related legislation,
- $980,000 from the Public Transportation Account for support of the Institute of Transportation Studies,
- $2.5 million from the Earthquake Risk Reduction Fund and the Oil Spill Response Trust Fund, and
- $9.6 million in reimbursements for lease revenue bond repayments.

Private Support and Endowment Earnings

Private funds include gifts, private grants, and private contracts. Gifts and private grants are received from alumni, friends of the University, campus-related organizations, corporations, private foundations, and other nonprofit entities, with foundations often providing nearly half of total private gift and grant support. Private contracts are entered into with for-profit and other organizations to perform research or other services. The use of private funds, even gift funds, are highly restricted by source, and provide support for instruction, research, campus improvements, and student financial support, among other programs. Approximately half of all support is dedicated to health sciences activities.

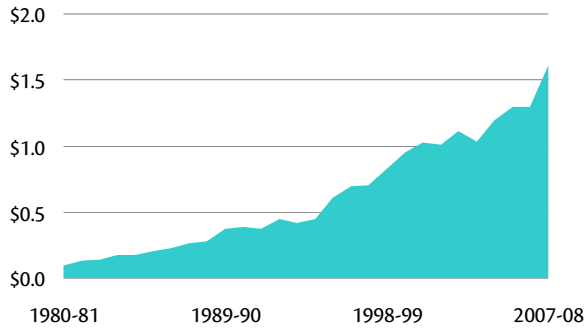
Over the last two decades, the University has experienced large, steady increases in private funds received. The University's remarkable achievement in obtaining private funding in recent years — even during state and national economic downturns — is a testament to UC's distinction as the leader in philanthropy among the nation's colleges and universities, and the high regard in which its alumni, corporations, foundations, and other supporters hold the University. Additionally, the results underscore the continued confidence among donors in the quality of UC's programs and the importance of its mission. In 2008-09, expenditures of private gifts, contracts, and grants to the University are estimated to be $1.4 billion, an increase of 7% over 2007-08. However, because of current economic and market conditions, this estimate may be optimistic.

Endowment Earnings

Combined Regents and campus foundation endowments are valued at $9.6 billion as of June 2007. Just as the use of private gifts is highly restricted by donor intention, expenditures of endowment payouts are also highly restricted, but provide support for a range of activities, including endowed faculty chairs, financial aid, and research.

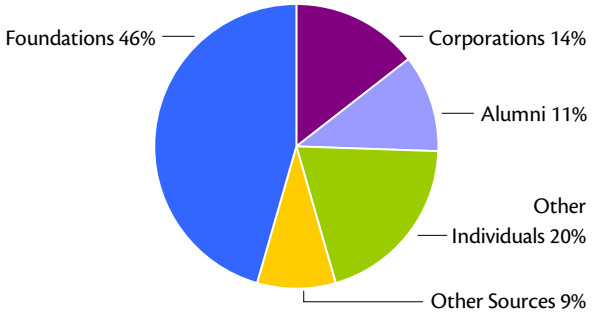
DISPLAY II-8: TOTAL PRIVATE GIFT AND GRANT SUPPORT

Private gift and grant support for the University has exceeded $1 billion per year for the last eight years. In 2007-08, new gifts and pledge payments totaled $1.6 billion.



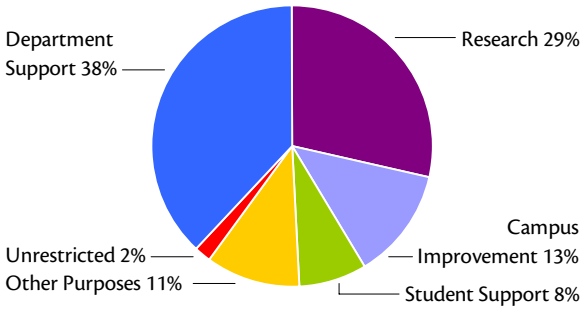
DISPLAY II-9: 2007-08 PRIVATE GIFT AND GRANT SUPPORT BY SOURCE

More than half of gift and grant support to the University is provided by foundations and corporations.



DISPLAY II-10: 2007-08 PRIVATE GIFT AND GRANT SUPPORT BY PURPOSE

Academic departments and research receive two-thirds of private gift and grant support, and health science disciplines receive nearly half of all private support.



In 1998-99, The Regents approved a payout rate based on the total return of the General Endowment Pool (GEP) over the previous 60 months, with a long-term target rate set at 4.75%. This policy is intended to smooth annual payouts and avoid significant fluctuations due to the stock market. In 2007-08, the expenditure of the payout distributed on endowments and similar funds totaled $199.2 million from the Regents' Endowments (excludes payout from campus foundations). For 2008-09, projected expenditures total $216 million.

Other Fund Sources

DOE Management Fee Revenue

As compensation for its oversight of the DOE National Laboratories at Berkeley, Livermore, and Los Alamos, the University earns management fees which can be used to support other activities. Performance management fees from Lawrence Berkeley National Laboratory (LBNL) are gross earned amounts before the University's payments of unreimbursed costs. In contrast, net income to UC from the Los Alamos National Security LLC (LANS) and Lawrence Livermore National Security LLC (LLNS) reflects fee income remaining after payment of unreimbursed costs at the two laboratories. In total, $33.5 million, which represents the University's performance management fees from LBNL ($4.5 million) as well as an estimated share of the LANS and LLNS net income ($29 million) is budgeted as estimated restricted fund income for 2008-09.

Management fee revenue related to LBNL is used for costs of University oversight, research programs, reserves for future claims, and unallowable costs associated with LBNL. Per Regental approval, revenue from LANS and LLNS will be used to provide supplemental income to select LANS employees, to cover unreimbursed oversight and post-contract costs, and to support a variety of University research programs. Further information about DOE Laboratory Management activity and revenue can be found in the *Laboratory Management* chapter of this document.

Contract and Grant Administration

Contract and Grant Administration funds, also referred to as "Off-the-Top" funds currently make up about 19.9% of the total indirect costs recovered under federal awards after the set-aside for Garamendi projects funding. The fund is allocated by the President to the campuses based on the net indirect cost recovery of the individual campus. Pursuant to agreement with the State, federal indirect cost recovery must be used for costs related to federal contract and grant administration, which can include federal governmental relations, cost and financial analysis, campus and sponsored projects offices, costs resulting from federal cost disallowances, and "any additional costs directly related to federal contract and grant activity as mutually agreed to by the University and the State."[1]

University Opportunity Fund

The University Opportunity Fund consists of a share of federal indirect cost recovery funds used to fund programs and services that are not adequately supported from State funds. Allocations to campuses from the University Opportunity Fund are based on the amount of indirect cost reimbursement generated by the campus. This approach represents a reinvestment in research and an incentive to further develop the University's research capacity. Each campus has discretion as to the use of University Opportunity Funds. The following is a programmatic description of functional areas in which campuses spend these funds.

[1] *Memorandum of Understanding between the University and the State Department of Finance for Disposition of Receipts from Overhead on Federal Government Contracts and Grants.*

Research. Campuses often use their University Opportunity Fund allocations to enhance faculty recruitment by providing support for laboratory alterations, equipment, research assistants, fieldwork, and debt service for new buildings. The level of research support that can be offered is often a pivotal factor in the recruitment of promising junior faculty members and in the retention of the University's distinguished scholars. Since 1970, The Regents have used Opportunity Funds to provide core support for high priority systemwide research programs not adequately funded from other sources, such as the California Institutes for Science and Innovation.

Instruction. Allocations for instruction are designed to provide continuing incentives to explore new instructional approaches and programs. Innovative instructional programs like the Education Abroad and Washington Academic Center programs are essential for maintaining dynamic, high quality academic programs.

Capital Outlay. The State funds only a portion of the University's capital outlay needs (about half of the University's need for State-supportable space); the University must use other sources to help address unmet needs. The University's non-State capital outlay program is heavily reliant on Opportunity Funds, although given limited growth in federal funds expected for the next several years, it is unlikely that additional projects will be undertaken using this fund source.

Institutional Support. A portion of the University Opportunity Fund is used to support administrative activities for which adequate State support has not been provided, such as staff and management development programs, and administrative computing. Funds are also provided under Institutional Support to maintain and improve the University's capability to attract external funding, primarily from private sources.

Other Sources

Other University funds include restricted sources such as intellectual property royalty revenue distributed to campuses and inventors, as well as other revenues that are not categorized elsewhere.

Intellectual Property Royalty Income. Income derived from royalties and fees, less the sum of payments to joint holders and less net legal and direct expenses, is distributed in various shares as required under University and campus policies. Patent fund royalties fluctuate from year to year; budget estimates are based upon prior year experience. This revenue appears in the University budget in two categories: as a component of UC General Funds and under Special Funds Income-Other. Income distributions totaled $77.0 million in 2006-07, the most recent year for which data are available.

- **Inventor Shares:** The University Patent Policy grants inventors the right to receive 35% of net income accruing to individual inventions. In 2006-07, 1,638 inventors received $35.6 million.
- **General Fund Share:** In 2006-07, the portion of net income allocated to the UC General Fund was $10 million, equal to 25% of the amount remaining after deducting payments to joint holders, net expenses, and inventor share payments.
- **Research Allocation Share:** The current policy requires that 15% of net income from each invention be designated for research-related purposes at the inventor's campus or Laboratory. This allocation totaled $1.4 million in 2006-07.
- **Income after Mandatory Distributions:** All income remaining after deductions and other distributions is allocated to the campuses. These funds, totaling $30 million in 2006-07, are used by the Chancellors to support education and research priorities.

GENERAL CAMPUS INSTRUCTION

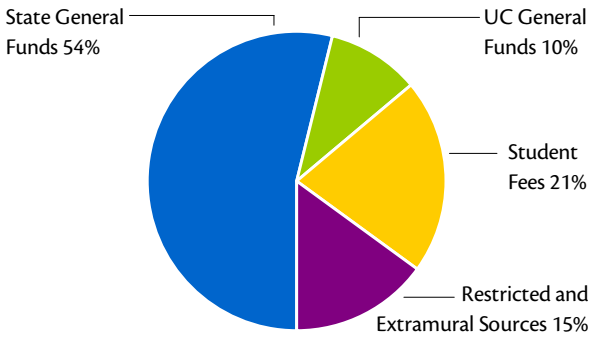
Consistent with the California Master Plan for Higher Education, the University provides undergraduate, professional, and graduate academic education through the doctoral degree level and serves as the primary State-supported academic agency for research. A fundamental mission of the University is to educate students at all levels, from undergraduate to the most advanced graduate level, and to offer motivated students the opportunity to realize their full potential. The University accommodates all qualified undergraduates and must provide graduate academic and professional instruction in accordance with standards of excellence and the growing needs of California, one of the ten largest economies in the world. To do this, the University must maintain a core of well-balanced, quality programs and provide support for newly emerging and rapidly developing fields of knowledge.

The University's 2009-10 budget plan is based on the Higher Education Compact with Governor Schwarzenegger. The key funding provision of the Compact related to general campus instruction is support for enrollment growth of 2.5% per year through the end of the decade. This growth rate represents an increase of more than 5,000 full-time equivalent (FTE) students annually at UC and will allow UC to achieve enrollment levels consistent with earlier projections. Under the Compact, the State is expected to provide funding for this enrollment growth at the agreed-upon marginal cost of instruction as adjusted annually. As explained later, due to the current fiscal crisis, the 2008-09 State budget provided no new resources, including no funding for enrollment growth. As a result, the University is significantly over-enrolled in the current year. For 2009-10, the University's budget plan includes $122.3 million in State funding to support a budgeted enrollment increase of 10,814 FTE students, including health sciences enrollment growth.

Included in the University's enrollment plan for 2009-10 is the continued expansion of the

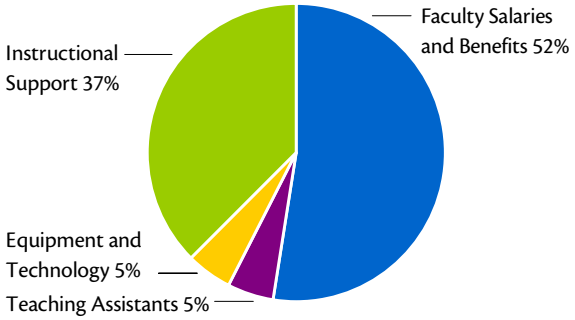
DISPLAY III-1: 2007-08 GENERAL CAMPUS INSTRUCTION EXPENDITURES BY FUND SOURCE

Core funds – State General Funds, UC General Funds, and mandatory and professional school student fees – provide 85% of funding for general campus instruction. Other significant sources include endowment earnings and self-supporting program fees.



DISPLAY III-2: 2007-08 GENERAL CAMPUS INSTRUCTION EXPENDITURES BY CATEGORY

More than half of expenditures in general campus instruction are for faculty salaries and benefits.



University of California at Merced. The campus officially opened in 2005-06 and is enrolling more than 2,800 students during 2008-09. Development of UC Merced is part of the University's strategy to increase statewide enrollment capacity, enhance access to students in the San Joaquin Valley, and provide the benefits of an additional research university to all Californians.

Instructional Program Overview

The general campus Instruction and Research (I&R) budget includes direct instructional resources associated with schools and colleges located on the nine UC general campuses.[1] The I&R base budget totals $2.47 billion in 2008-09, more than 85% of which comes from core fund sources (State General Funds, UC General Funds, and student fees). Additional resources for instruction are derived from self-supporting program fees, course materials fees, and other restricted sources. Major budget elements and their proportions of the general campus I&R base budget are: faculty and teaching assistant salaries and benefits, 58%; instructional support, 37%, which includes salaries and benefits of instructional support staff such as laboratory assistants, supervisory, clerical, and technical personnel, some academic administrators, and some costs of instructional department supplies; and funds for instructional equipment replacement and technology, 5%.

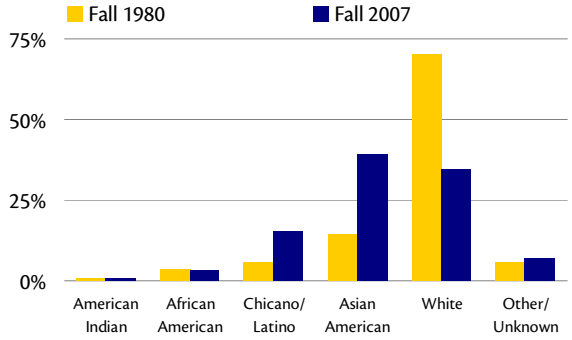
The University offers bachelor's, master's, and doctoral degrees in over 800 instructional programs spanning more than 150 disciplines from agriculture to zoology, as well as many emerging interdisciplinary fields, and professional degrees in 12 disciplines. The Academic Senate of the University authorizes and supervises courses

DISPLAY III-3: CHARACTERISTICS OF FALL 2007 UNDERGRADUATE STUDENTS

Headcount Enrollment	167,693
▪ Female	54%
▪ Underrepresented minority	19%
▪ First-generation college students	20%
▪ Full-time students	96%
▪ California residents	94%
▪ Domestic nonresidents	4%
▪ International students	2%

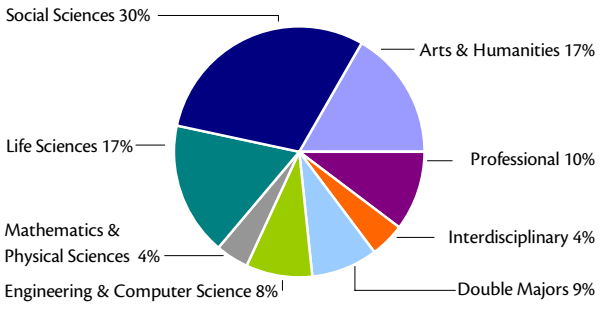
DISPLAY III-4: DISTRIBUTION OF DOMESTIC UNDERGRADUATE STUDENTS BY RACE/ETHNICITY

Since 1980, the proportions of Chicano/Latino and Asian American students among UC undergraduates have nearly tripled.



DISPLAY III-5: 2007-08 BACHELOR'S DEGREES CONFERRED BY BROAD DISCIPLINE

In 2007-08, UC undergraduates earned 42,400 bachelor's degrees. Nearly one-third were earned in sciences, mathematics, technology, and engineering.



[1] The San Francisco campus offers health sciences programs exclusively. Health science programs are discussed in the *Health Science Instruction* chapter of this document.

offered within instructional programs, and also determines the conditions for admission and the qualifications for degrees and credentials. The University began awarding degrees in 1870 and annually confers nearly 57,000 degrees.

Enrollment Growth ($104 Million Increase)

The Higher Education Compact with Governor Schwarzenegger includes the commitment to provide UC with funding for enrollment growth consistent with access under the Master Plan for Higher Education. Funding for enrollment growth provides the base resources necessary to recruit excellent faculty and maintain top quality instructional programs, and thus remains among the University's highest priorities.

State Support for Enrollment Growth

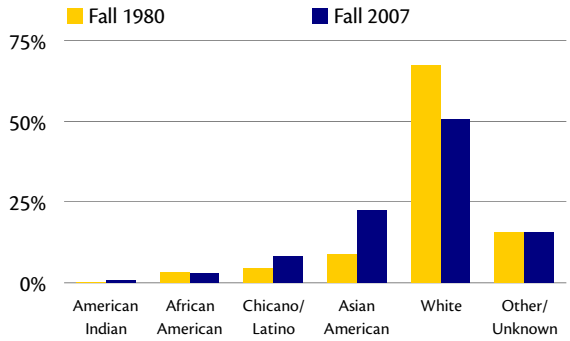
The State provides funding for each additional FTE student added to the University's current budgeted enrollment level based on an amount known as the "marginal cost of instruction." The marginal cost of instruction provides salary and benefits for additional faculty positions (based on the current budgeted student-faculty ratio of 18.7:1); related instructional support such as clerical and technical personnel, supplies, and equipment; support for teaching assistant positions; institutional support; and support for operation and maintenance of plant, libraries and student services. The calculation does not provide support for activities within these categories that the State has chosen not to support. Specifically excluded from the marginal cost calculation is support for student health services, plant administration, executive management, and logistical services. The calculation reflects the State subsidy provided toward the cost of education as well as the portion of this cost that is paid from student fees. The University developed its 2009-10 budget plan using a marginal cost

DISPLAY III-6: CHARACTERISTICS OF FALL 2007 GRADUATE STUDENTS

Headcount Enrollment	47,314
▪ Female	48%
▪ Underrepresented minority	12%
▪ California residents	74%
▪ Domestic nonresidents	10%
▪ International students	16%

DISPLAY III-7: DISTRIBUTION OF DOMESTIC GRADUATE STUDENTS BY RACE/ETHNICITY

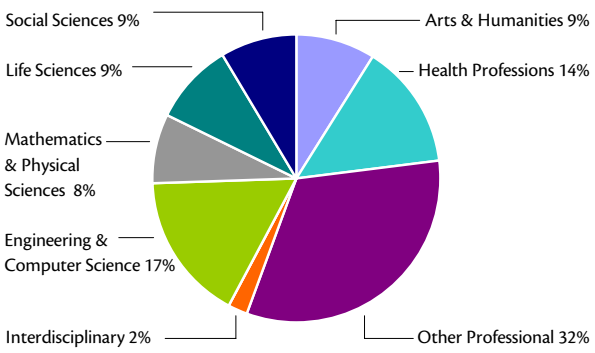
Since 1980, the proportion of Chicano/Latino students among UC graduate students has grown 70%, while the proportion of Asian students has grown 150%.



DISPLAY III-8: 2007-08 GRADUATE DEGREES CONFERRED BY BROAD DISCIPLINE

In 2007-08, the University awarded 14,645 master's, doctoral, and professional degrees. Nearly half were in sciences, mathematics, engineering, and health professions.

▪ Master's degrees	8,818
▪ Doctoral degrees	3,825
▪ Professional degrees	2,002



estimate of $11,076 per FTE student and the University's budget plan includes a request for $122.3 million to support budgeted enrollment growth of 10,814 FTE students in 2009-10, including growth in the health sciences. Of this amount, $104 million will support general campus enrollment growth. Supplemental funding requested for health sciences enrollment growth is discussed in the *Health Sciences Instruction* chapter. The portion of growth funding dedicated to maintenance of new space is discussed in the *Operation and Maintenance of Plant* chapter of this document.

Accommodating Enrollment Growth

The California Master Plan for Higher Education calls for UC to offer access to all eligible applicants in the top 12.5% of the state's high school graduating class who choose to attend. University policy has been to establish eligibility criteria designed to identify the top 12.5% of the high school class and to guarantee admission to all applicants who meet the eligibility requirements and apply on time, though not necessarily at the campus or in the major of first choice. In addition, the Master Plan calls for UC to guarantee a place for all California Community College transfer applicants who meet eligibility requirements. To enable the University to fulfill these access provisions, the Master Plan calls for the State to provide adequate resources to accommodate this enrollment. The University remains committed to the Master Plan as the foundation for one of the finest higher education systems in the world. The interests of the state, its citizens, and the higher education segments in California have been well-served by the Master Plan for nearly 50 years. Legislative reviews of the Master Plan in 1989 and 2002 have maintained its basic tenets, explicitly reaffirming the access guarantee for all eligible students.

Framers of the Master Plan also envisioned maintaining or enhancing the proportion of graduate student enrollment at UC. As discussed in more detail in the *Cross-Cutting Issues* chapter of this document, the University has embarked on a multi-year initiative to re-balance the proportion of graduate and undergraduate students enrolled to better meet state workforce needs. For several decades, a compelling State priority has been placed on providing undergraduate access for the rapidly growing high school graduate population. However, adherence to this priority has not been without some consequences for the overall academic balance of the University and its impact on the state's supply of highly-skilled workers needed in California's knowledge-based economy. While the University has expanded access for undergraduates, graduate and professional enrollments have not always kept pace, as was intended in the Master Plan. The University is planning for continued growth in graduate and professional as well as undergraduate enrollments through 2010-11. Undergraduate enrollment growth is projected to slow after 2010-11, but significant growth in graduate and professional enrollments will continue. In the next decade, the state's need for highly-skilled and specialized workers produced by UC graduate and professional programs will require continued enrollment growth at the graduate level. The University's long-range enrollment projections are discussed more fully in the *Perspective on the 2009-10 Budget* chapter of this document.

UC's long-term enrollment projections are based on consideration of four primary factors:

- projections of high school graduates from the Department of Finance;
- assumptions about the proportion of high school graduates who actually enroll in the University (Consistent with the Master Plan, the University establishes eligibility criteria designed to identify the top 12.5% of the high school class, but in recent years about 8% actually enrolls);

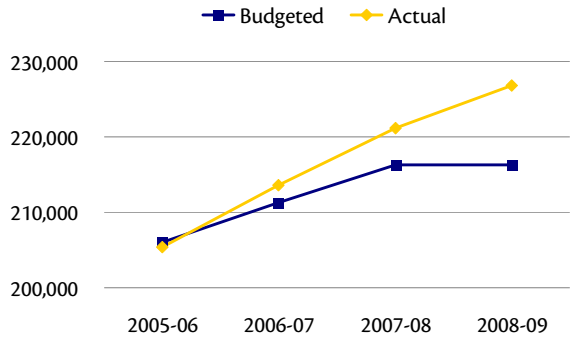
- assumptions about community college transfer rates, consistent with the University's goal to continue to improve these rates; and
- increases in graduate and professional enrollment needed to meet workforce needs in academia, industry, and other areas.

The University's 1999 long-term enrollment plan called for annual enrollment growth of about 5,000 FTE over this decade; by 2010-11, the University would reach its planned target of 216,500 FTE. At the beginning of this decade, the University experienced far more rapid enrollment growth than projected in the 1999 plan, averaging closer to 8,000 FTE per year rather than the 5,000 FTE enrollment growth projected earlier. The Compact negotiated in 2004 called for UC to return to its earlier estimates of 2.5% enrollment growth per year, which has allowed the University to resume enrolling students at levels near those envisioned in the 1999 plan. Funding for this growth was included in the 2005-06, 2006-07, and 2007-08 budgets. However, due to substantial demand for enrollment from growing numbers of high school graduates and community college transfers, the University was significantly over-enrolled in both 2006-07 and 2007-08.

In developing the 2008-09 Governor's Budget, the Department of Finance first "funded" a normal workload budget consistent with the Compact with the Governor, including funding for 5,000 FTE enrollment growth, and then proposed a 10% reduction to that workload budget to address the State's fiscal situation. Funding was partly restored in the Governor's May revision, but the University was left with a $48 million reduction year-over-year and no net new funding to support program growth and mandatory cost increases in 2008-09. Without new State funding to support enrollment growth, but in keeping with its commitment to the California Master Plan and undergraduate applicants who had worked hard to become eligible for admission, the University made a decision to ask campuses, to the best of their ability, to implement those enrollment growth increases that had been included in the Governor's Budget before the 10% cut was taken. This enrollment growth, including growth planned in MD students in the PRIME programs, has been funded through an internal redirection of existing resources. As a result, the University is significantly over-enrolled, by more than 10,000 students, in the current year.

DISPLAY III-9: BUDGETED AND ACTUAL FTE STUDENT ENROLLMENT

The Compact called for enrollment growth of 2.5% annually through the end of the decade to accommodate Tidal Wave II and expansion of graduate enrollments. Enrollments have grown more rapidly than expected, leading to over-enrollment. In 2008-09, with no new funding from the State to support growth, the University is more than 10,000 students over-enrolled.



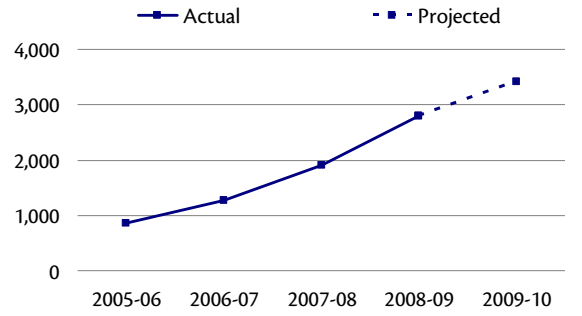
For 2009-10, the University will ask the State to return to the enrollment plan envisioned in the Compact and provide funding both for the enrollment growth occurring in 2008-09 as well as growth planned for 2009-10, for a total of 10,814 FTE students. This funding will help close the gap between enrollment demand and existing resources to support instruction – a gap that is not sustainable beyond the short-term. If the State is unable to provide resources to meet demand for the University, UC campuses will consider steps to slow growth and reduce over-enrollment. At some point, UC's commitment to achieving the vision of the Master Plan may need to be reevaluated.

The University of California, Merced

UC Merced was established as the 10th campus of the University of California to meet the needs of a significant and rapidly growing area of California — the San Joaquin Valley. It was determined that the campus would be sited in the San Joaquin Valley for several purposes: to increase the Valley's educational levels and the college-going rate of high school graduates; to enhance access to a research university education for students in the Valley; to provide additional opportunity for the diverse California population; and to increase the economic viability of the San Joaquin Valley.

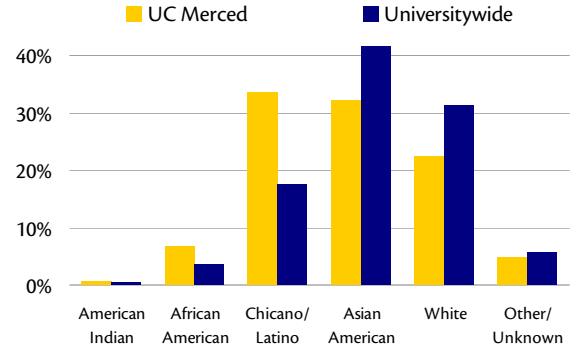
DISPLAY III-10: UC MERCED FTE STUDENT ENROLLMENT

Enrollment at UC Merced has grown to more than 2,800 FTE students in 2008-09. Interest in UC Merced continues to grow. Enrollment is expected to reach 5,000 FTE students by 2012-13.



DISPLAY III-11: FALL 2007 CALIFORNIA FRESHMEN BY RACE/ETHNICITY

Among UC Merced freshmen, more than 40% are students from underrepresented groups.



Educational Access

UC Merced officially opened its doors to freshmen, community college transfer students, and graduate students in 2005-06, and in 2008-09 is enrolling more than 2,800 students. Interest in UC Merced continues to grow as more than 11,500 students applied for admission for Fall 2008. In 2009-10, UC Merced expects to expand by another 700 FTE students, and it is estimated that the campus will reach a population of over 5,000 FTE students by the 2012-13 academic year.

The UC system has experienced unprecedented enrollment growth throughout this decade. UC Merced plays a major role in fulfilling the goals of The Regents and the State to ensure that every eligible student in California is offered a place at UC and to raise the college-going rate in the San Joaquin Valley and beyond. Over one-third of the incoming undergraduate class in the fourth year of operation at UC Merced has come from the Central Valley region. Moreover, among UC Merced freshmen, over one-third are first-generation college students and 40% are members of underrepresented minority groups. These students will serve as role models for others and help establish a college-going tradition in their families and communities.

As a research university, UC Merced is particularly focused on increasing the number of students in California who complete advanced degrees. In Fall 2008, the graduate student population on the campus has grown to 180 students.

Academic Innovation and Excellence

As the first new research university in the United States in the 21st century, UC Merced is in many ways an educational laboratory, its faculty and students deeply engaged in innovative programs in both education and research. UC Merced's 114 ladder-rank faculty members, drawn from all over the world, are leading the way in developing cutting-edge curriculum and charting the way to the introduction of new majors that will support a

vibrant range of academic offerings. During 2008-09, students are able to choose from 20 majors and 16 minors. In addition, 10 minors that were offered in 2006-07 will become majors as more faculty members are hired. Entering freshmen can look forward to greatly expanded curricula as they move toward graduation.

A distinctive mark on research at UC Merced is being made in its signature organizations: the Sierra Nevada Research Institute, the Merced Energy Research Institute, and the Biomedical Sciences Research Institute. As with the instructional programs, UC Merced's research institutes foster collaboration across disciplinary areas — the relationships among environmental science, human health, and environmental and health policy are obvious examples of issues that are particularly important for the San Joaquin Valley. Partnerships with other UC campuses and with entities such as Lawrence Livermore National Laboratory, Sequoia and Kings Canyon National Parks, and Yosemite National Park enhance education and research at UC Merced.

Economic Development

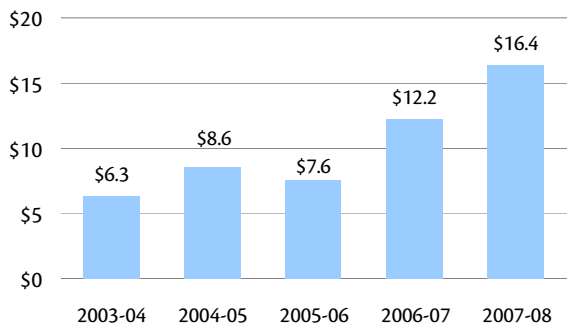
UC Merced serves the San Joaquin Valley as an economic engine. As the employer of more than 1,000 staff and faculty FTE and a major user of services, the campus continues to be a significant and growing contributor to the regional economy. In addition to State and student fee funding for instruction, research dollars awarded to UC Merced, which would otherwise not come to the San Joaquin Valley, reached $16 million in 2007-08 with growth expected to continue. Most importantly, the campus will produce an educated workforce that will benefit the region and the State of California for years to come.

Supplemental One-Time Funding

While the Merced campus has developed and through initial years of enrollment, supplemental funds have been required for faculty salaries and recruitment costs, as well as instructional technology, library materials, and expanded general support needed to fully operate the campus. In recent years, the State has provided one-time allocations to help support start-up costs. This funding grew to $14 million in 2006-07 and 2007-08. Per agreement with the State, funding declined to $10 million in 2008-09, and will further decline to $5 million in 2009-10, the final year of supplemental State support.

DISPLAY III-12: FEDERAL AND PRIVATE RESEARCH AWARDS TO UC MERCED
(DOLLARS IN MILLIONS)

UC Merced and its faculty are attracting significant research dollars to the San Joaquin Valley.



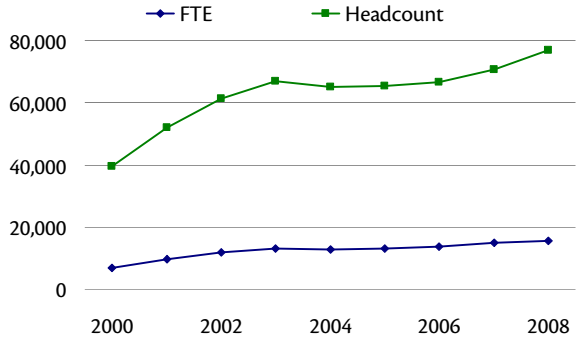
Summer Instruction

Facing extraordinary growth in high school graduating classes over this decade and the subsequent need to accommodate significant increases in enrollment, the University, with funding from the State, began expanding summer instruction programs in Summer 2001. In the eight years from 2000 to 2008, the University more than doubled its summer enrollments. Enrollment grew by 8,800 FTE students over this period. In 2008, nearly 77,000 students participated in summer instruction.

The key to achieving significant enrollment growth in the summer has been to offer students summer instruction that is critical to student progress, along with essential student support services, access to libraries, and student financial aid. State funding for summer instruction has

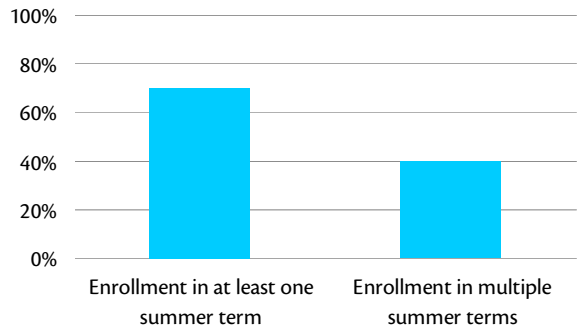
DISPLAY III-13: HEADCOUNT AND FTE ENROLLMENT IN SUMMER INSTRUCTION

FTE Enrollment in summer instruction has grown nearly 130% since 2000 and more than 40% of undergraduates enroll in summer session annually.



DISPLAY III-14: SUMMER ENROLLMENT PATTERNS OF UC UNDERGRADUATES

Among undergraduates who entered UC in 2001 and 2002, fully 70% enrolled during at least one summer term during their undergraduate careers and 40% enrolled in summer courses during more than one year.



allowed campuses to provide financial aid equivalent to the support available during the regular academic year, fund adequate student services, and hire more regular-rank faculty to teach summer courses. In addition, with State funding, campuses can afford to offer a greater breadth of courses during the summer to maximize efficiency and student progress toward the degree: campuses have nearly doubled the number of primary classes offered in the summer since 2000, offering over 5,200 in 2007. Expansion of summer enrollments has resulted in more efficient use of facilities and accelerated time to degree for undergraduates, thereby making room for more students during the regular year. Students report using summer as a means to graduate on time or even early, and enjoy the smaller class sizes and faculty contact summer courses provide.

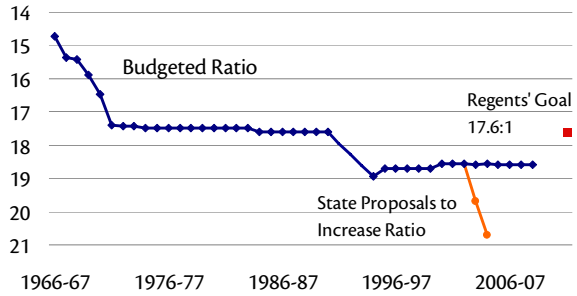
Summer enrollment at UC may be reaching its point of maximum efficiency. Further growth in the summer may be difficult to achieve for several reasons. In recent years, over 70% of undergraduate students have enrolled in at least one summer session, and 40% enroll more than once even though students can also use summer for other opportunities, such as work, travel, or internships. Students are not replacing a regular academic year term with summer, but rather are going year-round for two or more years. On average, students take 9.4 units per summer. Additionally, many courses are designed in two-semester or three-quarter sequences; the cost and difficulty to re-engineer courses to allow for year-round availability is prohibitive.

Improving Instruction

Since 1994, the University has maintained a budgeted student-faculty ratio of 18.6:1. Before the cuts of the early 1990s, the University's student-faculty ratio was 17.6:1; the deterioration in the ratio represented about 500 faculty members. Preserving and ultimately improving the student-faculty ratio at the University is among the highest priorities of The Regents. Improved student-faculty ratios would permit the University to offer both smaller class sizes in some subjects, thereby improving the quality of the educational experience, and a wider range of courses, which will help students complete requirements and graduate more quickly. A sufficient student-faculty ratio also increases opportunities for contact outside the classroom, guidance in internships and placements, and undergraduate participation in research and public service.

DISPLAY III-15: BUDGETED GENERAL CAMPUS STUDENT-FACULTY RATIO

State cuts have deteriorated the University's student-faculty ratio. The University's long-term goal is to improve the ratio to 17.6:1, from the current level of 18.6.



During the State's last fiscal crisis, the University took a series of budget cuts in academic programs, including a total of $70 million in reductions targeted to increase the student-faculty ratio. While UC instead has taken these cuts as unallocated reductions, cuts in core support have meant that campuses did not have funds to hire sufficient numbers of faculty or to address critical areas of instructional and other core support needs. Such reductions have made it difficult for campuses to maintain the instructional support necessary to provide a high quality education.

With funding provided as part of the Compact in 2005-06, 2006-07, and 2007-08, the University committed $10 million annually toward restoring the $70 million that had been eliminated from the University's instruction budget in 2003-04 and 2004-05. Due to the inability of the State to provide Compact funding in 2008-09, no additional funds were committed to this purpose during the current year. For 2009-10, a fourth increment of $10 million toward restoring instructional funds is included in the budget plan.

Science and Math Initiative

Recent analyses of California's teacher workforce needs show that more than 10% of California's science and math teachers are underprepared. In order to combat this problem, UC has launched the Science and Math Initiative (SMI), with annual State support first provided in 2005-06 and now totaling $1.1 million. The program aims to increase the number of science and math majors interested in credential programs to 1,000 each year. SMI attracts science and math majors to teaching by providing them with practical experience in classrooms. Science and math majors work with mentor teachers in hands-on teaching starting during the freshman year at UC and continuing through graduation, with pedagogical instruction specifically tailored to science and math. The program is now in its fourth year of operation, with over 1,250 participating students working in over 200 schools, and expects to graduate 1,000 science and math majors with classroom experience and prepared to enter credential programs in its first class. The graduates could begin teaching in the 2011-12 school year. State General Fund support is annually matched by the University with $1.1 million in lottery funds.

Maintaining Freshman Student Access

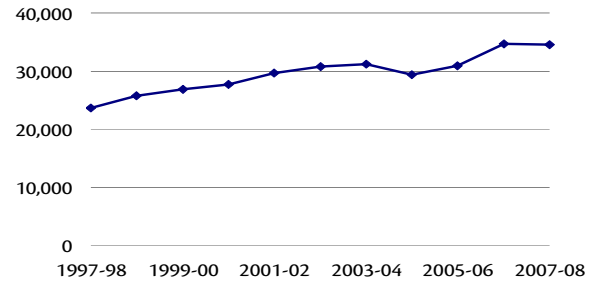
The University has maintained its commitment to the Master Plan for Higher Education to provide a place on at least one of the UC campuses for all eligible California applicants who wish to attend. In recent years, applications for freshman admission from California high school seniors have grown significantly and UC has grown to accommodate all eligible students. Campuses received applications for Fall 2008 admission from more than 79,000 California high school seniors, a one-year increase of 7.7%. Admissions of California high school seniors grew 4.7%, and the University expects more than 34,000 new California freshmen to enroll during 2008-09, including nonresident students.

Eligibility Policies

Consistent with the Master Plan for Higher Education, UC's policy is to provide access for

DISPLAY III-16: CALIFORNIA FRESHMEN ENTRANTS

UC has met demand from Tidal Wave II over the last decade, with growth in the entering freshman class of nearly 50%.



all students who meet the University's eligibility criteria, designed to capture the top 12.5% of public high school graduates, and who wish to attend, although a student may not be offered a place at the campus or within the major of choice. Eligibility for UC as a freshman entrant is based on three factors: subject competency demonstrated by completion of 15 year-long courses in the "a-g" academic disciplines; scholarship as measured by grade point average in "a-g" courses during the sophomore and junior years; and performance on the SAT Reasoning Test or the ACT plus Writing and two SAT Subject Tests. Currently, the University offers three paths to eligibility as a freshman.

- **Eligibility in the statewide context** is achieved based on completion of subject, scholarship, and examination requirements and achievement of a minimum score on the eligibility index, which is based on GPA and test scores.
- **Eligibility in the Local Context** (ELC, or the 4% path), based on high school class rank, was implemented for the first time for students entering in Fall 2001.
- Alternatively, students may achieve **eligibility based on test scores alone**, although fewer than 1% of UC students become eligible solely through this path.

In 2008, the Academic Senate proposed three changes to the current freshman eligibility policy to be effective Fall 2012. First, students would no longer be required to take two SAT Subject exams, though individual majors and colleges could recommend submission of specific SAT subject test scores. Second, an additional pathway to eligibility, "Entitled to Review" (ETR) would be created, under which students would complete at least 11 of 15 "a-g" courses by the end of their 11th grade year (all 15 by graduation), take the SAT or ACT with writing, and earn at least a 2.8 *unweighted* GPA. These students would be entitled to a comprehensive review but would not be guaranteed a space at the University. Finally, admission would be guaranteed for students who rank in the top 9% of their class or the top 9% by statewide eligibility, as described above. This proposal is currently under consideration by the President and Board of Regents.

On an annual basis, the University monitors key demographic and financial indicators, as well as policy changes that affect enrollment. High school eligibility studies, commissioned by the California Postsecondary Education Commission (CPEC) in 2001 and 2003, have indicated that more than 14%

PATHS TO FRESHMAN ELIGIBILITY

Eligibility in the statewide context:

- Completion of at least 15 year-long "a-g" courses and standardized tests,
- a minimum GPA of 3.0 in "a-g" courses, and
- a minimum score on the eligibility index based on GPA and test scores.

Eligibility in the Local Context (ELC):

- Completion of 11 required "a-g" courses and standardized tests by the end of the junior year,
- a minimum GPA of 3.0 in "a-g" courses, and
- rank within the top 4% of the high school class based on GPA in "a-g" courses.

Eligibility based on test scores alone:

- a total score of at least 3450 on the SAT Reasoning Test and two SAT Subject Tests, with no score below 580, or
- a minimum of 25 on each for the four ACT subparts as well as a minimum of 580 on each SAT Subject Test.

of California public high school graduates were eligible for UC admission. In order to keep the pool of UC-eligible students consistent with the 12.5% target set in the Master Plan, effective for applicants for Fall 2005, the University tightened rules for determining whether students are eligible for freshman admission. An eligibility study on the class of 2007 is currently underway. Results are expected to once again indicate that the proportion of California high school graduates who meet UC eligibility requirements exceeds 12.5%. This finding is testament to rising levels of achievement among California high school students and strong interest in securing a place at UC. The University will review its eligibility policies, including the new faculty proposal, in light of the outcomes of the 2007 study. The University remains committed to the Master Plan, which, following extensive reviews by the Legislature, continues to state the principle that UC should admit all eligible students who apply.

Admission Policies

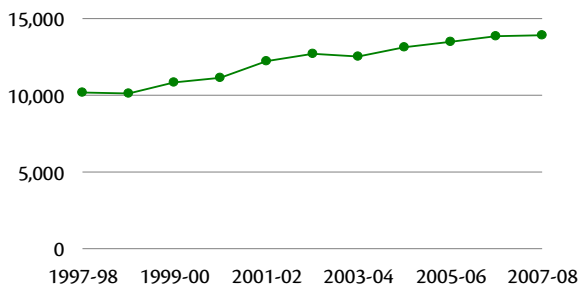
The University's commitment to offering a place to all eligible undergraduate applicants does not extend necessarily to the student's choice of campus or major. At campuses where the number of UC-eligible applicants exceeds the number of spaces available, admission selection guidelines are employed to determine the entering class. Effective for the Fall 2002 entering class, "comprehensive review" ensures the admission of highly-qualified students by allowing UC campuses to consider the broad variety of academic and supplemental qualifications that all students present on the application. Applicants admitted under comprehensive review continue to be high-achieving students. All freshman applicant records are analyzed not only for their grades, test scores, and other academic criteria — important baseline indicators of academic potential — but also for additional evidence of such qualities as motivation, leadership, intellectual curiosity, and initiative. This policy sends a strong signal that UC is looking for students who have achieved at high levels and, in doing so, have challenged themselves to the greatest extent possible.

Transfer from California Community Colleges to UC

For those students not eligible, unable, or who choose not to attend a four-year university directly out of high school, the ability to transfer from a California Community College (CCC) to a four-year institution for upper division coursework maintains the State's commitment to educational opportunity for all. Therefore, the Master Plan calls for UC to accommodate all eligible CCC transfer students, and specifies that the University maintain a ratio of at least 60% upper division to 40% lower division within its undergraduate class in order to ensure spaces for CCC transfer students. The University has exceeded the upper division enrollment goal in recent years because of its strong commitment to improve and enhance the transfer function and maintain its commitment to the Master Plan. Since 1997-98, full-year CCC transfer enrollment has grown 36%. In 2007-08, UC enrolled 13,909 new CCC transfer students, and the upper division-lower division ratio stood at 63:37. Key elements for a successful transfer function include clearly-defined eligibility and selection

DISPLAY III-17: CALIFORNIA COMMUNITY COLLEGE TRANSFER ENTRANTS

Similar to growth in freshman entrants, numbers of CCC transfer students entering UC have also grown 36% over the last ten years.



criteria; availability of academic and financial aid counseling from both CCC counselors and UC transfer advisors; and complete, accurate, timely, and available course articulation information identifying which California Community College courses are transferable to UC and how individual courses will advance students to a baccalaureate degree. The University continues to make efforts in all three of these areas to help promote transfer student access to UC.

Transfer Eligibility

Applicants seeking admission to UC as transfers may meet eligibility requirements in one of three ways, depending on their eligibility status at the time they graduated from high school. Students who were fully eligible for freshman admission at high school graduation must maintain a minimum GPA of 2.0 in transferable coursework. Students who were not fully eligible must meet additional coursework and scholarship requirements.

PATHS TO TRANSFER ELIGIBILITY

Eligible as high school graduate:
- 2.0 GPA in transferable coursework

Not eligible because of missing "a-g" subject requirements at high school graduation:
- Complete transferable courses in the required subjects with a C grade or better
- 2.0 GPA in transferable coursework

Not eligible due to scholarship requirement at high school graduation:
- Complete 60 semester/90 quarter units of transferable coursework with a 2.4 GPA
- Complete 7 specific transferable courses with a C grade or better in each

Admission as a Transfer

All UC campuses are open to new transfer students for each fall term and several will also accept students in winter and spring terms. CCC transfer applicants who are California residents and who have met UC's eligibility requirements and lower division major requirements are given top priority in transfer admission at all campuses. As with freshman applicants, campuses use comprehensive review criteria for transfer applicants to select students for admission to majors and campuses. Selection criteria at campuses with more eligible applicants than spaces available include academic factors such as major preparation, as well as additional evidence of such qualities as motivation, leadership, intellectual curiosity and initiative.

Transfer Advising

In order to promote the transfer process, the University provides admission advisors who regularly travel to community colleges to meet with students and staff regarding transfer admission and lower division preparation requirements. The focus of the effort is on community colleges with high numbers of educationally disadvantaged students, but historically low transfer rates to UC. In 2006-07, State funds totaling $2 million were added to the funds already provided for community college transfer programs, providing more advisors and funding the uctransfer.org website, as discussed in the *Public Service* chapter. Additionally, UC campuses have transfer centers and advisors available to assist prospective and new transfer students who enroll at UC.

Articulation

In order to plan for transfer, students must know how the courses they take at a community college will apply toward a degree at a particular UC campus. "Course articulation" refers to agreements between educational institutions that specify how a course a student completes at one institution (e.g., a community college) can be used to satisfy general education, major preparation, and graduation requirements at a second institution (e.g., a UC campus). Course articulation at UC falls into two categories:

- **Universitywide Articulation.** Transfer Course Agreements, reviewed by the UC Office of the President, designate which courses can be transferred for unit credit to meet University

admissions, general education, and graduation requirements.

- **Major Preparation Articulation.** Each UC campus designates which courses at the community college are comparable to courses taught at the UC campus and, hence, will be accepted as transfer credit toward the requirements of a particular major.

Students can satisfy general education courses by completing the Intersegmental General Education Transfer Curriculum (IGETC), or, if they are interested in high-unit science majors, the Science Intersegmental General Education Transfer Curriculum (SciGETC). In addition to completing general education requirements, students must complete specified coursework to prepare for their intended major.

CCC students have two primary tools to navigate the transfer path. Students can locate course articulation agreements at www.assist.org. As the official repository of articulation for California's colleges and universities, ASSIST, the Articulation System Stimulating Interinstitutional Student Transfer, includes all official course articulation established among California Community College, CSU, and UC campuses. Each UC campus has articulated high demand majors with all 110 CCCs, and all campuses (except Merced) have more than 60 majors articulated on average with all of the community colleges. During 2007-08, more than one million different individuals used ASSIST to view more than 8 million course articulation reports.

UC majors tend to be highly specialized, positioned at the cutting edge of advancing knowledge in disciplines across the curriculum. Despite this complexity, it is the University's challenge and responsibility to establish clear paths for students, leading from the more generalized, lower-division courses offered at the CCC system to more specialized courses defining UC majors. As such, University faculty are working to develop a second tool students and advisors can use to identify coursework to prepare students for top University majors. UC Transfer Preparation Paths establishes a new framework to identify specific courses at every CCC that students can use to meet the lower division requirements in any of the top 20 transfer majors. This information is available at uctransfer.org and supplements the current, traditional major preparation articulation information in ASSIST that the UC campuses maintain, covering all possible transfer options. Another benefit for students will be the ability to identify which University majors and campuses are available to them based on coursework they have already completed.

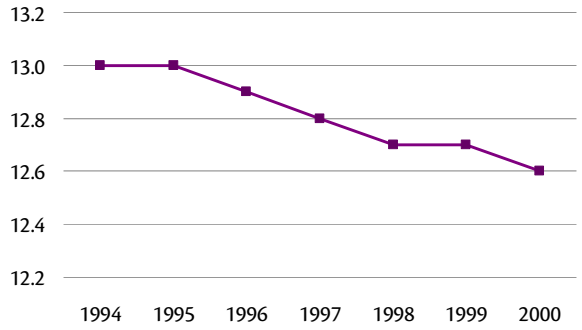
These transfer preparation tools will greatly improve student advising, guidance, and course choice, allowing counselors and students to understand which courses are broadly applicable to various majors and which apply only for certain majors at certain campuses. The transfer paths also allow students and advisers to determine quickly and accurately the best options for rapid progress to degree completion.

Timely Graduation

The University remains committed to ensuring that undergraduate students are able to complete their degrees on time and maintaining its excellent record of improving persistence and graduation rates and reducing time to degree among all students. Accordingly, campuses have developed advising and administrative initiatives to facilitate persistence and timely degree completion. Campuses continue to ensure course availability by sustaining increases in faculty teaching effort, creatively managing the curriculum and its delivery (for example, through targeted and broader summer offerings), and expanding use of instructional technology.

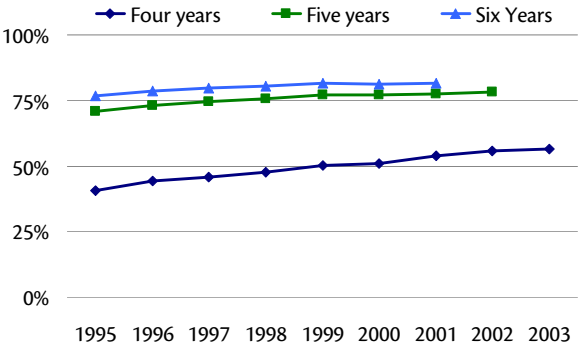
DISPLAY III-18: TIME TO DEGREE AMONG FRESHMEN BY COHORT

Time-to-degree, measured in quarters enrolled, has declined from 13 to 12.6 among recent freshman cohorts.



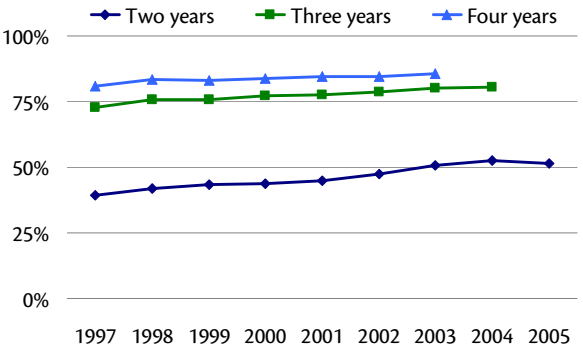
DISPLAY III-19: GRADUATION RATES AMONG FRESHMEN BY COHORT

More than 55% of freshman entrants complete their degree program within four years and more than 80% finish within 6 years. UC graduation rates far exceed the national average.



DISPLAY III-20: GRADUATION RATES AMONG UPPER DIVISION CCC TRANSFER STUDENTS BY COHORT

CCC transfers to UC also exhibit strong graduation rates, with more than half finishing in two years and 85% graduating within four years of transfer.



For UC undergraduates, the number of terms enrolled has dropped from 13.4 enrolled quarters (where a four-year degree equals 12 quarters) for the 1984 freshman class to 12.6 for the 2000 cohort. About half of UC freshmen graduate in 12 or fewer registered quarters; they are able to do this by taking full academic loads each year and by not exceeding the 180 units required for graduation. Students may take more total units or take longer to graduate if they change majors, undertake a double major, major in a field with a higher unit requirement, or take a lighter load some terms, often to accommodate working part-time. In recent years, campuses have worked to increase the average number of units taken during a term and reduce excess units taken over a student's career, enabling more students to graduate in four years and making room for others.

Freshman and transfer persistence and graduation rates have steadily risen over time. Among recent freshman cohorts, 92% of students persist into the second year and nearly 57% graduate within four years. Those who do not graduate in four years typically require only one more academic quarter to earn their degree; 77% of the 2001 entering freshmen earned a baccalaureate degree within five years and 81% within six years. UC graduation rates far exceed the national average: among first-time students entering four-year institutions nationwide, only 56% earn bachelor's degrees within six years.

Students beginning their higher education at a community college have historically done very well after transferring to UC. Among CCC transfer students, 92% persist to a second year and nearly 86% earn a UC degree within four years, taking on average 7.3 quarters at UC to complete their degrees. Transfer students' UC grade point averages upon graduation are about the same as those of students who entered as freshmen.

Instructional Equipment Replacement

Obsolete equipment ranges from equipment that is functional but lacks the required capability and efficiency of current technology, to devices that are of limited use because replacement parts are not readily available or the equipment is costly to operate and maintain. Using an agreed-upon methodology for calculating need, the State began partially funding the instructional equipment replacement (IER) program in 1976-77 and provided full funding from 1984-85 through 1989-90. Since 1990-91, funding for IER has been inconsistent, with annual permanent funding often falling short of each year's IER need, but some one-time funding helped address the growing shortfall. As of 2007-08, the annual shortfall is estimated to be $41.5 million.

Instructional equipment is essential to maintain the high quality of UC's instructional programs, and the continuing funding shortfall prevents the University from offering the ideal learning environment for its students. The need for adequate funding for equipment in engineering, the sciences, and digital media disciplines that are expected to grow significantly this decade is especially crucial because these disciplines require more instructional equipment, the equipment is more expensive, and technological advances occur more rapidly, which results in a need to upgrade as well as replace existing equipment.

Campuses must have current instructional equipment in order for students to receive a cutting-edge educational experience that will prepare them for the best jobs in today's high-technology marketplace. With technology changing every 16 months to 3 years, it is imperative that the University replace obsolete equipment and offer students the most technologically-advanced education available. A persistent inability to keep up with equipment needs weakens the University's instructional programs and reduces the University's ability to provide the highly-skilled personnel needed for California's high technology industries.

The Higher Education Compact with Governor Schwarzenegger includes provisions for 1% budget increases in 2008-09, 2009-10, and 2010-11 to address budgetary shortfalls in State funding for core areas of the budget critical to maintaining the quality of academic programs, including information technology. Additional funding for core academic support (informational technology, instructional equipment replacement, building maintenance, and library resources) is one of the priorities for restoring UC academic quality. As discussed in the *Cross-Cutting Issues* chapter of this document, funds are included in the 2009-10 budget plan for this purpose.

HEALTH SCIENCE INSTRUCTION

The University of California plays a critically important role in training health professionals, delivering essential healthcare services, and undertaking scientific research. UC's research discoveries help prevent and cure diseases, and create new technologies for diagnosing and treating illness as well as new strategies for staying healthy. Beyond the millions of federal and philanthropic dollars invested in the state through UC's research grants, UC's advances in the prevention and treatment of chronic medical conditions such as cardiovascular disease, asthma, and diabetes help improve health outcomes, achieving savings in treatment and lost productivity costs. Importantly, however, UC provides an unparalleled integration of research and education with patient care, preparing clinical leaders as well as leaders in research and academia — the foundation of the University's health sciences programs. In addition, UC makes significant contributions to many community outreach programs, providing education, prevention, and early intervention services to thousands of Californians. The ultimate goal of all UC health sciences programs is to train knowledgeable, skilled, and compassionate health care professionals who deliver outstanding services to California and the world.

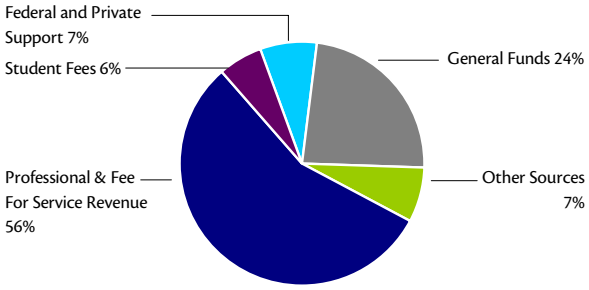
DISPLAY IV-1: UC HEALTH SCIENCES AT A GLANCE

UC has schools of Dentistry, Medicine, Nursing, Optometry, Pharmacy, Public Health, and Veterinary Medicine over seven campuses. It is the largest health sciences education and training program in the nation.

	2007-08
▪ Students trained	13,958
▪ Inpatient admissions	>140,000
▪ Outpatient visits	3.5 million
▪ NIH research awards	$1.7 billion

DISPLAY IV-2: 2007-08 HEALTH SCIENCES INSTRUCTION EXPENDITURES BY FUND SOURCE

Physician and other professional fee revenue as well as support from the medical centers supplement the cost of clinical training in the health sciences.



Funding for Health Sciences

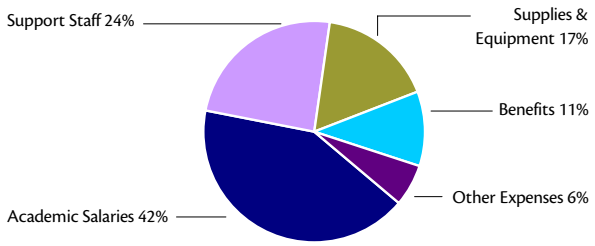
The 2009-10 instructional budget for Health Sciences is $1.1 billion, of which $378 million is UC and State General Funds.

To operate the instructional program, the health science schools require faculty, administrative and staff personnel, supplies, and equipment. Faculty requirements are determined in accord with student-faculty ratios that have been established for each profession and for each of the categories of students enrolled.

Health Science programs are high cost programs and while the State subsidy for these programs is significant, revenues from other sources are essential. Physician and other professional service fees, as well as professional school fees charged to medicine, dentistry, veterinary medicine, nursing, optometry, public health, and pharmacy students

DISPLAY IV-3: 2007-08 HEALTH SCIENCES INSTRUCTION EXPENDITURES BY CATEGORY

Academic and staff salaries and benefits constitute over three-quarters of all health sciences expenditures.



contribute to the funding for health sciences instructional programs. During the State's fiscal crisis in the early part of this decade, State support for UC's professional schools declined significantly and professional fees increased dramatically to offset lost State revenue.

Health Sciences Initiatives for 2009-10

For 2009-10, the University is requesting State support for expansion of the following programs:

- PRogram In Medical Education (PRIME) at the Irvine, Davis, San Diego, San Francisco, Berkeley, Los Angeles and Riverside campuses;
- nursing at the Davis, Los Angeles, and San Francisco campuses;
- pharmacy at San Diego; and
- public health at the Berkeley, Davis, Irvine, and Los Angeles campuses.

Due to the current fiscal crisis, the 2008-09 State budget for the University provided no new resources for planned health sciences enrollment increases to meet the State's workforce needs. The University provided one-time funding to keep the multi-year expansion of the PRIME program on track. Accommodating enrollment growth with few additional resources other than the student fee income associated with growth, however, means that new and existing students alike are impacted by the lack of resources to support a high quality academic experience. This is especially true in the high cost disciplines that characterize the health sciences. The University cannot continue to accommodate these increased enrollments without workload support. The proposed enrollments and associated State General Fund support summarized in Display IV-4 reflect the proposed growth for 2008-09 and 2009-10. The increase of 552 students will allow UC to achieve enrollment levels consistent with planned health sciences enrollment expansions to meet the state's workforce need.

DISPLAY IV-4: 2009-10 HEALTH SCIENCES ENROLLMENT INCREASE AND STATE SUPPORT
(DOLLARS IN MILLIONS)

Program	Enrollment 2009-10	Enrollment 2009-10	Two-year Total	State Support
Program in Medical Education (PRIME)	69	61	130	$3.3
Nursing: Graduate	32	10	42	$0.6
Undergraduate	100	50	150	$1.7
Pharmacy	40	5	45	$0.5
Public Health	136	49	185	$2.5
Total			**552**	**$8.5**

The University also is requesting a $10 million permanent augmentation to begin development of a new medical school at Riverside. In the first several years, funding will be used for planning and start-up costs. Ultimately, this funding will serve as an initial investment in the core operating infrastructure that will later be supplemented by marginal cost funding for enrollment growth and professional school fees. Each initiative is discussed in more detail later in this chapter.

State Needs for Health Sciences Expansion

Already the most populous state in the nation, California is projected to grow 37% through 2030, faster than the nation as a whole. California's elderly population will grow even faster, with the population age 85+ growing more than 150% by 2030, as shown in Display IV-5. California's

population is racially and culturally more diverse than any other state in the nation, with more than 1 in 4 Californians born outside the U.S., more than twice the national average of 1 in 10. Despite these trends, for nearly three decades, UC added virtually no new capacity in its health sciences programs; only recently has the University begun to expand medicine and nursing programs.

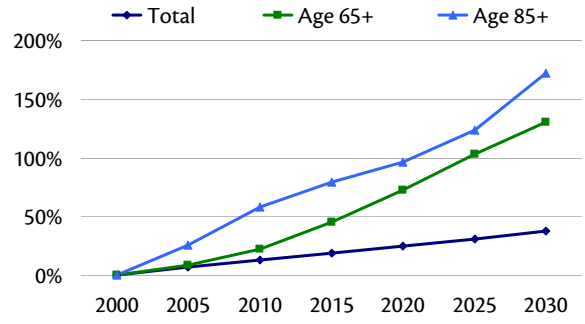
In June 2005, the Universitywide Health Sciences Committee (HCS) submitted the most comprehensive assessment of health workforce needs undertaken by UC in more than two decades. The report found shortages of health care professionals in most areas of the state and noted that gaps in access to care are widening. In response to these findings, President Dynes appointed the Advisory Council on Future Growth in the Health Professions to review the findings and develop profession-specific enrollment plans with annual targets for growth through 2020.

The Council found compelling needs for enrollment growth in medicine, nursing, public health, pharmacy, and veterinary medicine, as well a need to maintain existing enrollment levels in dentistry and optometry. The Council recommended that growth in the health professions occur in a phased, stepwise manner, contingent upon adequate resource support, beginning with increases that can be accommodated within existing campus infrastructures. In addition, because the magnitude of growth that will be needed in some professions exceeds what can be accommodated by existing programs, even with new infrastructure, the Council recommended planning for new programs at new locations be developed and phased in over time.

In recommending substantial enrollment increases in five professions, the Council stressed that future growth provide opportunities for:

DISPLAY IV-5: PROJECTED CALIFORNIA POPULATION GROWTH BY AGE GROUP

Between 2000 and 2030, the Census Bureau projects that California's population will grow by 37%. During that time, the population age 65 and older will grow 130% and the population age 85 and older will grow 170%.



- new educational models involving interdisciplinary training and team-based approaches to patient care;
- increased diversity of all UC health professions faculty and students;
- innovative approaches to teaching, including telemedicine, distance learning, and use of new technologies;
- added new value for students, the people of California, and the health professions themselves.

PRograms In Medical Education (PRIME) ($3.3 Million Increase)

California's physician workforce is vital to the health and well-being of the state's 35 million residents. As the most populous, and most ethnically and culturally diverse state in the nation, California faces unique challenges in improving access to care and health outcomes for its citizens. In both urban and rural communities, challenges associated with inadequate access to care and resulting health disparities stem from multiple factors, including uneven geographic distribution of clinicians, lack of insurance, low socioeconomic status, limited English proficiency, and low health literacy. Health sciences graduates must be prepared and better trained to consider the

cultural and socioeconomic factors, health practices, and potential environmental hazards that affect health outcomes. Without comprehensive strategies and focused teaching programs, current health disparities will persist and likely intensify in the years ahead as the state is facing a projected 15.9% shortfall of physicians (i.e., almost 17,000) by 2015.

PRograms In Medical Education (PRIME) incorporate specific training and curriculum designed to prepare future practitioners to address disparities that exist in the provision of health care throughout the state, improving the quality of healthcare available for all Californians. The special training ranges from enhancing cultural sensitivities to the use of technology to overcome geographic barriers to quality care. Since students who enter medical school with an interest in caring for underserved communities as part of their future career are more likely than other students to practice in such communities, the PRIME programs will also help address regional health disparities.

Over an eight-year period, the PRIME programs will expand MD enrollments by about 10%, or by 276 students, and add 69 master's degree students. This increase in enrollment will be accommodated within the 2.5% annual enrollment increase provided under the Compact with the Governor. Support is provided at the MD marginal cost of instruction for four years of medical school training and at the general campus graduate academic marginal cost of instruction for a fifth master's year. For 2009-10, the University is requesting an enrollment increase of 122 MD students and eight master's students to support the unfunded expansion in 2008-09 as well as the next phase of a planned multi-year expansion in the University's PRIME program. The MD marginal cost of instruction is $26,676 per student, which generates $3,254,000. Support for the eight master's students will be provided at the general campus marginal cost of instruction rate of $11,076 for a total of $89,000. Additional supplemental support for the medical program comes from fee revenue from mandatory systemwide student fees paid by all students and from the professional fee charged to MD students.

DISPLAY IV-6: PROGRAMS IN MEDICAL EDUCATION (PRIME)

PRIME-RC (Rural California) at Davis
Award-winning model program in telemedicine and a commitment to outreach and rural health care.

PRIME-LC (Latino Community) at Irvine
Emphasizes Latino health issues with training in Spanish language and Latino culture.

PRIME at Los Angeles
Committed to serve, and experience working with, diverse medically disadvantaged populations.

PRIME-HEq (Health Equity) at San Diego
Builds upon knowledge of health disparities and minority health problems to help students work toward and contribute to achieving equity in health care delivery.

PRIME-US (Urban Underserved) at San Francisco
Offers students the opportunity to pursue their interests in caring for underserved populations in urban communities.

Telemedicine. A key component to the University's PRIME programs is expansion of telemedicine capability. Telemedicine is interactive health care over distance, using telecommunications and other information technology to connect healthcare providers and patients electronically so that they can share information and receive or provide consultations with medical specialists. California has been a national leader in telemedicine, and UC in particular has been pioneering in the field. UC Davis has provided telemedicine services for 26 years and in 2006 won the American Telemedicine Association's President's Award.

The Education General Obligation Bond approved in the November 2006 election included $200 million for UC to undertake "capital improvements that expand and enhance medical education programs with an emphasis on

telemedicine aimed at developing high-tech approaches to healthcare." To date, $170.4 million of this bond funding has been appropriated to accommodate enrollment growth within UC PRIME programs and capital investments to support new UC telemedicine programs. The University's capital outlay plan for 2009-10 includes a request for the remaining $28.6 million.

Under the Federal Communications Commission's Rural Health Care Pilot Program, the new UC-managed California Telehealth Network (CTN) has over $30 million over three years in FCC and other funding to connect more than 300 primarily rural California healthcare facilities to a statewide and nationwide broadband telehealth network and to provide distance learning and emergency preparedness/disaster response.

New funding for telemedicine and expansion of medical education programs marks an exceptional and unique opportunity to address statewide objectives for increasing medical student enrollments, expanding access to clinical services and creating a new systemwide network that will enable UC medical school campuses to link together for educational and other purposes.

Nursing Expansion to Meet Statewide Shortages ($2.3 Million Increase)

Virtually all Americans will require nursing care at some time in their lives. Therefore, continuing reports of a deepening nursing shortage raise serious concerns that must be addressed in California and nationwide.

California ranks 50th in the nation in the number of nurses per capita (589 vs. the U.S. average of 825 per 100,000). Causes of the nursing shortage include rapid population growth (especially of those over age 65); an aging nursing workforce (California nurses are 5 years older than the national average and half are over age 50); and increasing mean age of nursing faculty nearing retirement. Current nurse staffing ratios for California hospitals and national accreditation standards limiting the number of hours medical residents can work have created further demand. Recent studies have shown that without intervention, California's nursing shortage will worsen significantly through 2030.

DISPLAY IV-7: NURSING PROGRAMS AT THE UNIVERSITY OF CALIFORNIA

Schools of Nursing

UC San Francisco
- Established 1907
- Offers MS and PhD

UC Los Angeles
- Established 1949
- Offers RN/BS/MSN, BS, MSN, and PhD

Nursing Science Programs

UC Irvine
- Established 2005
- Offers BS, MS, DNP, and PhD

UC Davis
- Proposed opening fall 2010
- Offers BSN, MSN, and PhD

In their 2007 report, UC's President's Advisory Council on Future Growth in the Health Professions recommended significant increases in nursing education. The Council also stated its belief that even with significant infrastructure support, unmet demand will warrant planning toward the future establishment of additional nursing programs.

To help meet the state's future nursing needs, the University has been expanding its traditional graduate role in nursing education, including preparation of new faculty for nursing programs and the education and training of advanced practice nurses, but it also has re-established and added new undergraduate nursing programs as shown in Display IV-7.

- **Baccalaureate Nursing.** In Fall 2006, UC re-established the UCLA undergraduate bachelor's

degree program and added a new undergraduate program at UC Irvine.

- **Graduate Nursing.** The University also is expanding its graduate nursing programs and adding new ones. UCLA and UCSF have recently expanded professional and doctoral enrollments, training both professional nurses and nursing faculty. Irvine plans to add graduate nursing programs to the nursing education programs beginning in 2009-10.
- **New Initiatives.** In July 2007, the Gordon and Betty Moore Foundation announced $100 million in founding support, the largest donation ever made to a nursing school, to launch the Betty Irene Moore School of Nursing at UC Davis. Pending necessary approvals, UCD anticipates admitting its first students in the master's and doctorate programs in the fall of 2010. A bachelor's of science in nursing program is also planned for the future. When full enrollment is reached in all degree programs (both graduate and baccalaureate), the school is projected to serve 456 students. Other UC campuses are considering initiatives in nursing education in the future.

For 2009-10, the University is proposing to add funding for the 32 graduate professional master's students and 100 undergraduate nursing students requested but not funded in 2008-09, and an additional 10 Doctor of Nursing Practice (DNP) and 50 undergraduate nursing students to support the 2009-10 phase of a planned multi-year expansion of undergraduate nursing. This increase in enrollment will be accommodated within the 2.5% annual enrollment increase provided under the Compact, but the University is requesting an additional $3,251 per graduate professional master's and DNP student for a total of $602,000 to fully fund the graduate professional nursing marginal cost of instruction, consistent with past practice. Support for the undergraduate nursing students will be provided at the general campus marginal cost of instruction rate of $11,076 for a total of $1,661,000. Additional supplemental support for the nursing program comes from fee revenue from mandatory systemwide student fees paid by all students and from the professional fee charged to MSN and DNP students.

Pharmacy Enrollment Growth ($500,000 Increase)

Across the nation, larger patient populations in general, and increasing numbers with chronic diseases in particular, contribute to rapidly rising demands for health providers. Within the pharmacy workforce, evidence of this demand is seen in the dramatic increase in prescriptions written and dispensed in the United States. During the 1990s alone, the number of retail prescriptions dispensed increased by 44%, from 1.9 billion in 1992 to almost 2.8 billion in 1999. By 2005, this number increased to 3.7 billion. Among the factors fueling this growth are development of new medications and drug therapies, identification of new uses for existing medications, increased numbers of authorized prescribers, broader insurance coverage for some medications, and direct marketing to the public by pharmaceutical companies.

Not surprisingly, this growth has generated a corresponding demand for pharmacists in hospitals and clinics, as well as in retail, government, and academic settings. Because growth of the workforce has not kept pace with the demand for services due in part to the lack of growth in educational opportunities, a nationwide pharmacist shortage has developed. In California, this shortage is significant. California ranks 48th and 41st, respectively, among all states in the nation for ratio of pharmacists and pharmacy technicians per 100,000 Californians.

For 2009-10, the University is proposing to add funding for 30 Doctor of Pharmacy (Pharm. D)

students and 10 graduate academic students to support the unfunded 2008-09 growth, and an additional 5 graduate academic students to support the 2009-10 phase of a planned multi-year expansion of the San Diego Pharmacy School. This increase in enrollment will be accommodated within the 2.5% annual enrollment increase provided under the Compact, and support is provided at the general campus marginal cost of instruction rate of $11,076 for a total of $498,000. Additional supplemental support for the pharmacy program comes from fee revenue from mandatory systemwide student fees paid by all students and from the pharmacy professional degree fee.

Public Health Enrollment ($2.5 Million Increase)

The profession of public health is dedicated to promoting health, preventing disease, prolonging life, and improving quality of life for the general population. The principal areas of focus of the public health system are health surveillance, protection, and promotion; policy development, and regulation; and the organization, delivery, and evaluation of health services delivered to individuals and populations.

Public health professionals are educated in public health or a related discipline and are employed to improve health through an emphasis on prevention of disease. The workforce includes clinicians (physicians, nurses, dentists); occupational and environmental health specialists; epidemiologists and biostatisticians; health program administrators and health educators; and health economists, planners, and policy analysts.

Recent studies have found that the public health workforce is seriously deficient in training, preparation, and size. California significantly lags other states in public health educational capacity. The state's public health agencies cite particular shortages of epidemiologists, environmental health scientists, and health educators while the private sector is in need of professionals trained in health services administration and management. It is estimated that only 20% of California's public health workforce has received formal training in public health. Per capita, California has only 25% the number of public health faculty and 25-50% of the number of public health students as comparable key states.

In its 2007 report, the President's Advisory Council on Future Growth in the Health Professions recommended significant increases in public health master's and doctoral student enrollments. The Council also stated that even with significant infrastructure support, unmet demand will warrant planning toward the future establishment of at least one new School of Public Health.

For 2009-10, the University is proposing to add the 126 master's of public health (MPH) and 10 professional doctorate (DPH) students requested but not funded in 2008-09, as well as funding planned for 2009-10 for 49 graduate academic students in public health programs. This increase in enrollment will be accommodated within the 2.5% annual enrollment increase provided under the Compact, but the University is requesting an additional $3,251 per MPH and professional doctorate student to fully fund the graduate professional marginal cost of instruction. The total requested for the 136 MPH and DPH students is $1,948,000. Support for 49 graduate academic and non-MPH graduate professional students is at the general campus marginal cost of instruction and equals a total of $543,000. Additional supplemental support for the public health program comes from fee revenue from mandatory systemwide student fees paid by all students and from the professional fee charged to MPH and DPH students.

Riverside Medical School ($10 Million Increase)

The University of California, Riverside (UCR) plans to establish a four-year School of Medicine that would be the first new allopathic medical school to open in California in more than 40 years. The mission of UCR's School of Medicine will be to improve the health of the people of California and to serve Inland Southern California by training a diverse physician workforce and developing innovative research and health care delivery programs that will both improve the health of the medically underserved throughout the region and serve as models for improving health care access in California and nationally.

For 2009-10, the University requests a $10 million permanent augmentation to begin development of a new medical school at Riverside. In the first several years, funding will be used for planning and start-up costs.

The proposed $10 million will be used to develop academic programs and support the salaries of initial medical school staff and faculty. Specific and critical start-up activities that will occur during this budget year will include pursuing accreditation for the medical school curriculum and graduate medical education (residency) programs, establishing affiliations with community-based hospitals and clinics to support the distributed clinical model, and pursuing private philanthropy to leverage the State's investment in the medical school. Ultimately, this funding will serve as an initial investment in the core operating infrastructure that will later be supplemented by marginal cost funding for enrollment growth.

California's Need for a New Medical School

The need for a new medical school is driven by national, state, and local trends in population growth, the aging of the population and physician workforce, and disparities in health care access and outcomes across communities. A January 2006 report of the Association of American Medical Colleges (AAMC) called for a 30% expansion of enrollment in medical schools by 2015, through expansion of existing schools as well as development of new schools of medicine. This projected need is based on population growth, the aging of the population, and the concomitant aging of the physician workforce.

For California, the Center for Health Workforce Studies estimates that by 2015, physician demand will outpace physician supply by 4.7 to 15.9%. Further, California significantly lags the nation as a whole for medical school enrollment per capita, ranking 39th in the nation, according to the AAMC.

Specific regions within California – including rapidly growing Inland Southern California – are already experiencing a healthcare crisis due to a shortage of physicians, nurses and allied health professionals, a crisis that will worsen without expanding medical education:

- Riverside and San Bernardino counties have among the lowest ratio of active patient care physicians, including both generalists and specialists, in the state.
- Inland Southern California has only 54% of the state average direct patient care physicians per 100,000 population. To achieve parity with the rest of the state by 2030, the physician workforce would have to expand by over 9,300.
- Inland Southern California's population will reach 6.7 million by 2030, with the largest proportional increase in people age 65 years and older.
- The social and economic consequences of this healthcare crisis are grim. According to the California Department of Public Health and California Conference of Local Health Officers, the Inland Southern California region among the poorest outcomes of California counties for

a number of significant diseases, such as coronary heart disease, diabetes, tuberculosis, and infant mortality rate.

The UCR School of Medicine will help meet health care needs in the state and region by serving as a locus for expanded medical care; by educating physicians who are likely to enter residencies, and later practices, in the region and state; by training a culturally competent and diverse physician workforce; and by undertaking research to develop and implement projects that improve the health of people living in the region.

The addition of a medical school will also stimulate significant additional benefits through the creation of jobs, direct spending for goods and services, and the generation of additional tax revenue. In addition, the research enterprise of the medical school will bring new opportunities for translational biomedical investigations and clinical trials to complete the innovation pipeline from discovery to new business development, further strengthening not only the health and wellbeing, but also the economic vitality of the region and the state.

A New School at Riverside

The UC Advisory Council on Future Growth in the Health Professions recommended to the UC Board of Regents in November 2006 that there be an approximately one-third increase in UC medical student and resident enrollment by 2020, accomplishing this growth by increasing enrollments at existing schools as well as creating at least one new UC School of Medicine that would graduate its first class by no later than 2020. The Council considered UC Riverside a good candidate for a new medical school because its thirty-year history with the joint UCR-UCLA medical program – in which UCR provides the first two years of medical education to 24 students a year who then go on to UCLA to complete their MD degrees – forms a strong foundation for development of an independent medical school.

Campus officials plan to enroll the first students in the full, four-year medical school in fall of 2012, initially admitting 50 new students, and expanding rapidly to enroll 100 new students each year for a total medical student body of 400 by 2017. Residency programs will also be launched in 2012, starting with approximately 26 residents and growing to 160 in 2017. Additionally, the medical school will build on UCR's current graduate program in biomedical sciences to a total of 160 Ph.D. students by 2021 to help meet state needs for technically trained scientists.

Rather than construct its own hospital, UCR will partner with regional hospitals, clinics and providers for its clinical education programs. This distributed model will allow the UCR medical school to train students and residents in a variety of healthcare settings in the region, to expose students to diverse patient populations and to leverage existing healthcare infrastructure.

Two factors that strongly influence where trained doctors ultimately practice are the region in which they grew up and the location of their residencies. Through its K-12 and undergraduate outreach and student support programs, the UCR School of Medicine will attract local Inland Southern Californians to UCR's School of Medicine. As physicians tend to practice where they do their residencies, over time this approach will result in greater access to health care for the region's diverse and currently underserved population.

After receiving approval from the Academic Council and concurrence from the California Postsecondary Education Commission, in July 2008, the Regents authorized establishment of a School of Medicine at the University of California, Riverside with the understanding that School shall not admit or enroll students until the President is satisfied that the resources estimated to be necessary for start-up and to sustain operations are obtained. The campus has launched a fundraising initiative, which generated

approximately $30 million in gifts and pledges, even before Regental approval.

The State funds requested for 2009-10 are the first increment in funding needed for support of the new school. Initial investments provided on a permanent basis, along with enrollment growth funding provided through 2019-20 as the school enrolls MD, graduate academic, and medical residents, will ultimately provide $25.3 million in 2006-07 dollars to support the school. The medical school is projected to become self-sustaining in 2021, with an annual operating budget of $87 million derived from student fees, contract and grant revenue, and graduate medical education as well as the State support mentioned above (not including clinical revenue and expense). In addition, UCR will seek state assistance in capital funding for a significant portion of the $500 million in instructional and research facilities that will be required to support the school.

CROSS-CUTTING ISSUES

Several of the University's significant budget issues do not fall into a single functional area and instead cut across multiple areas. This chapter provides detailed information about several of these cross-cutting issues for 2008-09: graduate student enrollment and financial support, information technology, and core academic support.

Graduate Student Enrollment and Financial Support

Graduate education and research at the University of California have long fueled California's innovation and development, helping establish California as one of the ten largest economies in the world. Indeed, UC is charged by the California Master Plan for Higher Education with the responsibility to prepare professional and doctoral students to help meet California's and the nation's workforce needs. However, over the last forty years, while well-justified attention has been paid to accommodating undergraduate enrollment growth as a result of Tidal Waves I and II, little attention has been paid to graduate growth.

Despite high-quality programs and many applicants, growth in graduate programs has been limited, creating an imbalance in University programs and failing to meet the state's workforce needs. As a result, the University has reached a critical point in graduate and professional education. Unless action is taken to build and expand graduate and professional programs, California's educational, economic, technological, and public welfare needs will not be met.

Since 1965-66, UC undergraduate enrollments have grown fairly steadily, from 49,000 FTE to 164,000 FTE, nearly 250% over forty years, to ensure undergraduate access for UC-eligible students. General campus graduate enrollment has grown at a much slower rate, from 20,000 to 34,000 FTE, only 70%, during the same period. In fact, during the 1980s and early 1990s, graduate enrollment did not increase at all; much of this growth occurred since 2000-01.

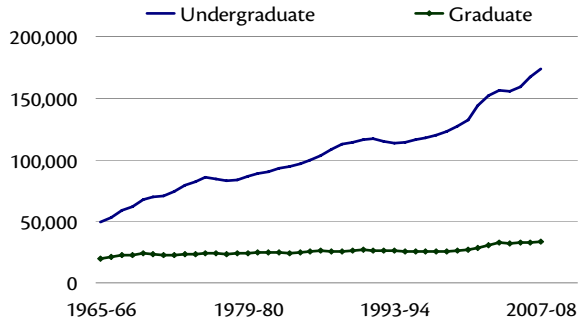
As a consequence of this imbalance, the proportion of graduate students decreased from 28.8% of general campus enrollment in 1965-66 to 16.6% in 2001-02. Although UC's graduate enrollments began to grow again in 1999-2000, by an average of 1,000 FTE students per year, they have only kept pace with undergraduate growth, thereby halting the decline in the graduate proportion. The proportion of general campus graduate students is 16.4%. Graduate enrollments will continue to grow along with undergraduate enrollments over the next several years. Because numbers of high school graduates will level off, the University is expecting increases in the proportion of graduate students during the next decade, as indicated in the University's recent long-range enrollment projections.

In Fall 2006, 22% of total UC enrollment was graduate students (including health sciences and self-supporting enrollments), compared to 33% at public comparison universities and 60% at private comparison universities. In fact, UC's total graduate percentage is lower than the percentages at all of the eight comparison institutions.

California's under-investment in graduate education can also be seen in degree production

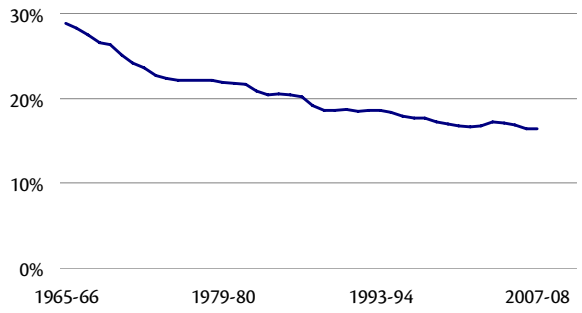
DISPLAY V-1: UNDERGRADUATE AND GRADUATE GENERAL CAMPUS FTE ENROLLMENT

Since the 1960s, UC's undergraduate enrollment has grown rapidly, but graduate enrollments have not kept pace. While undergraduate enrollment has grown 250%, graduate enrollment has grown only 70%.



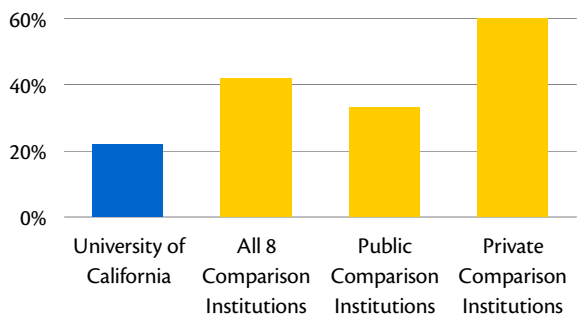
DISPLAY V-2: GRADUATE STUDENTS AS A PERCENTAGE OF GENERAL CAMPUS ENROLLMENT

The proportion of graduate enrollments on the general campuses has fallen from nearly 30% in the 1960s to less than 17% in recent years.



DISPLAY V-3: GRADUATE ENROLLMENT AT UC AND COMPARISON INSTITUTIONS

In Fall 2006, 22% of total UC enrollment was graduate students (including health sciences and self-supporting enrollments), compared to 33% at public comparison universities and 60% at private comparison universities.



by state, especially compared to other populous, industrialized, and high tech states. Among the 15 largest U.S. states — those most like California and with which California competes for educated workers and industry — California ranks only eighth in 2006, and it ranks only slightly above the national average of all 50 states.

UC has fallen behind in graduate enrollments for several reasons. Because of State budget constraints in the 1980s and 1990s, graduate growth was held down to ensure access to all eligible undergraduates who chose to attend UC. But graduate enrollment growth has also been slowed, in many cases, by the inability of graduate students or departments to secure adequate and competitive student financial support. Dramatic increases in graduate student fees in recent years have exacerbated these problems.

Graduate enrollments in high quality programs are critical to the state's continuing economic vitality, as well as its social and cultural development. In addition, UC graduate students play a vital role as future faculty in higher education in California, and serve a key function in enhancing the quality of the instructional and research enterprise while enrolled at UC.

Graduate Education and the State's Economy

UC graduate education and research have a long history of fueling economic development in California. For example, UC graduate education and research spawned the biotechnology industry, and UC graduates have been drivers in the development of the electronics industry, particularly in communications technologies and semiconductors.

UC graduate programs directly contribute to California's R&D-intensive industry sectors by supplying highly trained alumni and attracting industry to California. Companies in knowledge-based industries tend to form clusters around major universities to take advantage of access to the pool of specialized workers and to

benefit from knowledge transfers from the concentration of research, innovation, and specialization.

California's future economy will depend even more on high-tech industries. Stem cell research, environmental research and innovation, global health care development and delivery, and energy research will have significant impacts on the health and economy of California and the world. These science- and technology-based industries will require even more highly trained workers.

In the coming years, all sectors of California's economy will need many more highly-educated workers — engineers, scientists, business entrepreneurs, and others whose innovations will drive California's prosperity. In keeping with its charge under the Master Plan, the University will play a key role in helping to meet the need for these technically and analytically sophisticated workers. As the state's economy continues to shift toward jobs requiring advanced education, California will need to fill more than a million new positions requiring graduate degrees by 2025, a 68% increase from 2005. In addition, the retirement of the large baby-boom generation of highly educated workers and the declining in-migration of educated workers from other states and nations create significant challenges to our economy. Growth in UC graduate programs will help meet the need for more science and technology professionals. The University projects that more than a third of graduate enrollment growth through 2020-21 will be in science, math, engineering, and computer science fields. As discussed in the *Health Sciences Instruction* chapter of this document, health care is another area in which UC's graduate programs contribute to state workforce needs. Over the next decade, the University projects that more than a quarter of graduate enrollment growth will occur in the health professions.

UC's contribution toward fulfilling the state's need for intellectual resources is not limited to science, engineering, and health care. In addition to the needs of a technologically-based economy, California and the U.S. face many social challenges that require highly-educated individuals to analyze and solve problems as they shape California's future. UC graduate programs in the arts, humanities, social sciences, and professional fields continue to serve these needs.

- Professional and managerial jobs are California's fastest growth occupations, creating thousands of jobs for financial managers, marketing executives, computer scientists, engineers, consultants, and many other professionals. These professional and managerial jobs typically require at least a bachelor's degree and often a master's or doctorate.
- UC prepares highly-skilled and creative school administrators, architects, lawyers, public health and public policy analysts, social workers, urban planners, and other professionals who add to the state's economic and social well-being.
- Recent reports show that the arts contribute $5.4 billion to California's economy. Alumni of UC's graduate programs are represented in every sector of the arts world, leading and building programs and creating new ideas. California's entertainment and digital media industries are thriving precisely because of the many writers, musicians, visual artists, and actors the University trains.

Graduate Students and Higher Education

No less important is the crucial role UC graduate students play in higher education in California, both as future faculty at UC, CSU, and other California colleges and universities, and as teaching and research assistants while in graduate school. Both UC and CSU depend heavily on the graduates of UC's Ph.D. programs: nearly a quarter of UC and CSU tenure-track faculty members have a doctoral degree from UC.

California's four-year colleges and universities will need to hire more than 25,000 new faculty between 2007 and 2020, including over 8,000 for UC alone and close to 12,000 for CSU, to teach the growing numbers of undergraduates and to replace retiring faculty. Because many doctoral institutions in other states are not planning graduate enrollment increases, even more of these new college faculty than in the past may need to come from UC's graduate programs.

Growth in graduate enrollments is necessary to maintain excellence in instruction and research, distinctly part of UC's mission. New faculty members are attracted to UC in part because of the high caliber of graduate students with whom they can work. While teaching assistants help meet UC's overall instructional needs, their primary importance lies in the ways they complement faculty roles: leading small discussion groups and laboratory sections, offering a wider range of perspectives and delivery modes, and serving as mentors for undergraduates.

Graduate students are also vital to UC's discovery and innovation enterprise. Especially in the sciences and engineering, the research process entails research teams, and graduate student researchers, as key members of these teams, have been central to the creative breakthroughs that have made UC one of the world's greatest universities. Graduate students further amplify UC's research contributions by supervising and mentoring undergraduates engaged in research projects, thus enabling greater involvement of undergraduates in primary research activities.

In the 21st century, access to an undergraduate education is no longer sufficient. While recent increases in undergraduate enrollments have served to provide access for Tidal Wave II, members of this second wave will seek to further their education beyond the baccalaureate level in the coming years. Following the extraordinary growth in high school graduates during the current decade, the population aged 25-34 in California will grow 17% between 2010 and 2020. As a result, demand for graduate education will increase substantially, particularly from the University's own baccalaureate graduates — 75% of UC undergraduates state a desire to earn a graduate or professional degree. The University has an obligation to provide Californians with the opportunity to achieve at the highest levels. This is particularly important because the state's underrepresented ethnic minority students, who have historically had much lower rates of graduate education, are projected to become the majority of California's population within the next 15 years. Unless more pursue graduate study, not only will their horizons be more limited, but the state will have even greater difficulty meeting its future workforce needs.

Graduate Academic Student Aid

The competitiveness of graduate student support for UC graduate academic students and its impact on the ability of the University to enroll top students from across the world has been a longstanding concern at the University. Several administrative and faculty groups and committees, including the 2001 Commission on the Growth and Support of Graduate Education, have taken up the issue and concluded that both the size and composition of UC's awards for graduate academic degree students are not fully comparable to the best offers UC students receive from competitor institutions. Recently, the longstanding concern about the competitiveness of UC's awards has been joined by concerns about the impact of cost increases — especially increases in nonresident tuition and systemwide fees — that were instituted in response to declining State support for the University's budget.

Concerns about the competitiveness of the University's awards were substantiated by surveys conducted in 2001, 2004, and 2007 of students admitted to UC's academic doctoral programs.

These surveys showed that the competitiveness of UC's offers varied across academic disciplines and campuses, but also indicated that the average amount of student financial support offered by the student's top choice UC doctoral program was substantially less than that offered by the student's top choice non-UC institution. This shortfall has been exacerbated by differences between the cost of living in the communities surrounding UC campuses compared to those of other institutions. On a more positive note, the surveys also indicated that the competitive gap between UC's offers and those of students' top-choice non-UC institutions (excluding cost-of-living differences) did not increase in real terms between 2001 and 2004, and declined between 2004 and 2007.

In 2006-07, the University also created an ad hoc Graduate Student Support Advisory Committee (GSSAC) to establish specific graduate support benchmarks, develop a short- and long-term strategy for enhancing graduate student support, and review the methodology for allocating UC systemwide funding for graduate student support. The final report of the Committee included three principal findings:

- Anticipated increases in traditional funding levels for graduate student support will be inadequate to allow the University to achieve its twin goals of closing the competitive gap and meeting its enrollment growth targets. The Committee estimated that an additional $122 million of support would be necessary for the University to improve the competitiveness of its awards and to achieve its graduate academic enrollment goals by 2010-11.
- The cost of covering tuition for first-year nonresident students and for international students who have not yet advanced to candidacy limits the extent to which UC graduate programs can compete for and enroll the highest quality students.
- Research and training grants cannot be relied upon both to fully cover all future tuition and fee increases and to help increase the University's competitiveness.

In recent years, the University has taken steps to improve graduate student support. First, fee increases during recent years have been offset in part by new UC graduate student support funding generated by the fee increases themselves. The percentage of new fee revenue returned to students in financial aid was increased from 20% in 2004-05 to 50% in 2005-06. Over the last three years, this increase has provided funds to cover the fee increases for students receiving University fellowships and teaching assistantships.

Second, over the last three years, the University has sought to further augment its graduate student support programs by an additional $40 million from a combination of campus and systemwide fund sources. This approach reflects a shared responsibility at the systemwide and campus level to address the widespread concern about the University's ability to provide competitive award packages for academic graduate students, especially international students faced with the added expense of nonresident tuition.

Finally, the University has not increased graduate nonresident tuition levels since 2005-06. The foregone revenue has been judged to be a worthwhile trade-off in order to avoid further demands on limited fellowship and research assistantship funding caused by a tuition increase. By continuing to hold nonresident tuition for graduate academic students at the 2004-05 level, the University also continued to reduce, in real terms, the costs associated with covering nonresident tuition for out-of-state and international students.

In the event of a fee increase in 2009-10, the University's proposed expenditure plan includes setting aside 50% of any new revenue so that campuses may cover the associated cost increases

for University-funded teaching assistants, fellowships, and research assistantships. The University will also freeze nonresident tuition for graduate academic students for the fifth consecutive year, further reducing the real cost of nonresident tuition in each of the past few years. Lastly, in response to continued concern about the University's ability to provide competitive award packages for academic graduate students, the expenditure plan includes an additional $10 million in funds for graduate student support.

Information Technology

As in all modern universities, information technology (IT) pervades the University of California. IT has become an overarching issue for the University, as every academic and administrative area and function of the University depends critically on information technology systems and services for communication, operations, analysis, and information storage and retrieval.

Instruction increasingly relies on technology within classrooms and laboratories, but also to connect students, faculty, and instructional materials outside of these physical spaces. The research enterprise, having always relied on the most advanced technologies of the time, expands and innovates with the introduction of new technology. The University's public service mission has also been fundamentally reshaped by technology, as UC's libraries and student academic preparation programs now reach throughout the state electronically. Finally, UC's business operations increasingly rely on advanced systems to support the institution's administrative responsibilities.

As the University pursues its mission in a world that increasingly depends on digital information and the systems supporting it, the University is working to identify strategic directions for IT investments that will enable UC campuses to meet their distinctive needs more effectively, leveraging IT investments for operational efficiencies and cost savings. In 2006, UC launched a widely consultative, two-year systemwide planning process under an IT Guidance Committee (ITGC) in order to identify efficient and cost-effective investment strategies that promise to:

- ensure a robust technology infrastructure and the tools for access to and protection of UC's vast repositories of information assets,
- enable researchers to compete and lead on an international scale with the computing and network capabilities required for success,
- advance learning and instruction via tools for the 21st century,
- enable students to work and live in a "wired" environment adapted to their lives and learning styles,
- support academic and administrative operations to ensure effective stewardship, accountability, and transparency, and
- expand the virtual presence of the University in California in the national and international communities.

The purview of the IT Guidance Committee was wide ranging. It looked at administrative and business as well as academic applications of information technology. The ITGC's goals were straightforward: to rationalize wherever possible development and maintenance of those essential IT services that are commonly required but not economically supported by campuses, medical centers, or organized research units acting independently or in small groups. By realizing efficiencies in the supply of IT services, more support may be made available for local IT investments to support the distinctive and innovative work of campuses, departments, and individual scholars.

IT Infrastructure

While the University's missions and functions each involve specific IT needs, the need for infrastructure upgrades is cross-cutting. Among the critical components of an information technology infrastructure are the network services to accommodate the growing complexity and demands of the University's teaching, research, public service, and patient care missions. All UC campuses and facilities require access to a secure, highly configurable, high-speed network in support of evolving needs for expanded services and connectivity for teaching faculty, greater bandwidth for researchers, and network-based services such as video-conferencing for the administrative community.

IT and the Student Experience

Strategic investments in technology promise to enhance opportunities for instruction and enrich students' learning experience. Such investments are essential if the University is to compete successfully for the best undergraduate and graduate students, and to prepare those students appropriately for employment in a global knowledge economy where facility with leading-edge analysis, communication and collaboration tools is required. Investments will also support innovation in instruction, in academic preparation of California's K-14 students, and in the University's service to its graduates and more generally to the people of California. With such investments, strategically and judiciously made:

- faculty will be able to integrate into their courses perspective and expertise drawn in real time from across the system and from universities around the world;
- classroom-based instruction will be augmented in ways that allow students to learn anywhere at anytime, and in ways that meet their individual lifetime learning needs;
- new networked technologies will enable students and faculty to build communities of interest around themes or assignments associated with a particular course, or subjects taught in a particular department, program or discipline. Learning communities in UC need know no geographic boundaries;
- instructional materials developed for UC students, publications by UC faculty, and other information resources available from UC's libraries, museums, and archives will, where appropriate, be made available for use within California's schools and community colleges to help to prepare more students for entry into California higher education; and
- such materials will also be available to the University's graduates and to the citizens and enterprises of the State of California, encouraging continuing engagement with the University's rich cultural, civic, economic, and educational resources.

IT and the Research Enterprise

UC researchers increasingly rely on information technology as new frontiers in scientific and engineering research require computer simulation and modeling to bridge from theory to experimentation. As UC scientists focus on research involving critical problems in the biological and health sciences and issues of major international concern such as earthquake analysis, climate change, population growth and change, natural resources planning, and energy production and conservation, they are increasingly called upon to collaborate in multi-disciplinary, cross-institutional and often international teams. In order to succeed, even to participate in these efforts, University researchers require advanced computational and network services, and a range of data sharing and scholarly collaboration tools that reduce the barriers associated with distance, language, and time.

Strategic investments in information technology are also essential for UC to support researchers with innovative technologies and to bolster their

ability to attract large-scale research funding from state, federal, philanthropic, and corporate entities. The ITGC consulted broadly with the research community to advance strategic planning that promises efficient development of a research cyberinfrastruture that will keep the University, its campuses, and its researchers competitive.

Stewardship of Digital Information Resources
The vast collections maintained by the UC libraries provide an unequalled information resource that enables research and instruction at this University to achieve and maintain its world-class stature. UC scholars and students will continue to rely upon this ever-expanding resource, some of which exists exclusively in digital form, but is not formally published and is not yet systematically collected or maintained by campus libraries or any other organization. This material includes, for example, scientific data, information culled from millions of websites, and digital entertainment products. Soon, the great universities will be those that are able to capture, organize, and support re-use of this vast and rapidly growing digital record of society's science, culture, economy, and governance.

The challenge of digital stewardship is considerable: digital information is voluminous, heterogeneous, complex, and notoriously volatile. The University will continue to explore how different digital asset management needs can be met by a common infrastructure and services.

Institutional Support and Business Operations
The ITGC has paid particular attention to basic IT services that enable the University to operate as both a business and an academic entity. Investments in information technology continue to produce significant efficiencies and to deliver critical new services in University business administration and operations. However, in recent years of budget cuts and fiscal constraints, the University has significantly under-invested in some key areas of administrative computing and related infrastructure. This has had a negative impact on the University's ability to improve productivity and labor cost savings and has hampered efforts to address critical issues and opportunities in such areas as medical record systems, research administration, student systems, e-procurement, and employee self-service applications. Recent refinements to the University's corporate financial systems, on the other hand, have produced more accurate and comprehensive financial reporting and analysis capabilities in an environment of tighter regulation and compliance.

Inadequate systems to collect and manage information about UC employees, both at the campus and systemwide levels, continue to be a significant liability to UC in light of growing demands for greater transparency and accountability. To address the University's human resources information systems needs, a thorough examination of HR-related business processes and practices must result in greater standardization as a critical first step.

The ITGC has acknowledged the imperative to invest in effective administrative business processes and systems. As committed by the President's Implementation Team of the Task Force on UC Compensation, Accountability and Transparency, the University requires a new HR Information System environment that will build upon current systems investments, exploit new technologies, support more standardized business processes and improve the breadth and depth of employee-related data for reporting and analysis. A phased, multi-year project approach to these enhancements will ensure minimal disruption to the business environment, and a gradual deployment of new capabilities.

Funding Information Technology Advances
The Higher Education Compact with Governor Schwarzenegger includes provisions for 1% budget increases in 2008-09, 2009-10, and 2010-11 to

address budgetary shortfalls in State funding for core areas of the budget critical to maintaining the quality of academic programs, including information technology. Additional funding for core academic support (informational technology, instructional equipment replacement, building maintenance, and library resources) is one of the priorities for restoring UC academic quality. As discussed below, funds are included in the 2009-10 budget plan for this purpose.

Core Academic Support

Several areas of the budget are critical to academic quality, but have been historically underfunded. Collectively referred to as core academic support, these areas require ongoing support and new investments to ensure that the University is able to recruit and retain the best faculty and students. Core academic support includes:

- **instructional technology** to enhance and enrich students' learning experiences and prepare them for employment in a global knowledge economy (discussed at length above);
- **instructional equipment** replacement, providing up-to-date computing, laboratory, and classroom tools for teaching and research;
- **library resources** to build print and digital collections and to continue strategic investments in advanced cost-effective reference and circulation services; and
- **ongoing building maintenance** to support the janitorial, groundskeeping, and utility costs associated with maintaining facilities.

The Partnership Agreement with former Governor Davis recognized this shortfall and planned a 1% adjustment to the base each year to help address the gap. Funds were provided for this purpose for two years. Once the State's fiscal crisis began in the early part of this decade, however, not only were increases discontinued, but program cuts erased any of the progress that had been made from earlier funding increases. The shortage in these areas is estimated to be over $100 million.

The Compact Agreement with Governor Schwarzenegger again recognizes the critical nature of the shortfall in these budget areas and proposes a 1% annual adjustment in the base budget beginning in 2008-09 to help address the shortfall. The additional 1% base budget adjustment was first funded in the Governor's 2008-09 budget proposal before applying a 10% budget-balancing reduction. Thus, no new funding was provided for these purposes and no progress has been made during this decade toward closing these shortfalls.

For 2009-10, an additional 1% base budget adjustment from the State would provide $30.8 million in new funds. Campuses propose to dedicate these funds as follows:

- $6.0 million for instructional technology;
- $3.0 million for replacement of obsolete instructional equipment;
- $5.3 million for library acquisitions and shared resources, to help address rising costs of library materials and create new efficiencies in the library system;
- $15.8 million for operation and maintenance of plant, specifically to cover purchased utilities deficits caused in part by the State's energy crisis earlier in the decade and a large, growing deferred maintenance backlog; and
- $0.7 million for other academic support programs.

UNIVERSITY EXTENSION, SUMMER SESSIONS, AND OTHER SELF-SUPPORTING INSTRUCTIONAL PROGRAMS

University Extension

University Extension is the largest continuing education program in the nation, providing courses to nearly 300,000 registrants who are typically employed adult learners with a bachelor's degree. UC Extension is a self-supporting operation and its offerings are dependent upon user demand. In 2008-09, University Extension operations, derived from fee revenue, are estimated to total $203 million.

The University offered its first Extension courses to students beyond the immediate campus community more than 100 years ago. Today, Extension divisions at each of UC's nine general campuses offer more than 18,000 different courses, programs, seminars, conferences, and field studies throughout California and in a number of foreign countries. Almost 60% of Extension's offerings are designed to serve the continuing educational needs of professionals. More than 1,300 certificate programs are offered in such areas as computing and information technology, environmental management, graphics and digital arts, and health and behavioral sciences.

UC Extension offers a wide variety of online courses to students in California, the nation, and around the world ranging from undergraduate courses carrying UC academic credit to professional-level courses in subjects such as project management, computer programming, and technical writing. These courses extend the instructional resources of the University to the world community.

Extension also offers degree-equivalent study in undergraduate education programs, and cultural enrichment and public service programs. Various undergraduate degree credit courses are available, either as replications of existing UC campus courses or structured as undergraduate classes but with content not found in an existing campus offering. Extension explores history, literature, and the arts in traditional and innovative ways, providing cultural enrichment to Californians. Extension also organizes lecture series, summer institutes, public affairs forums, and other events for the general public.

Summer Sessions

In addition to the University's course offerings during the regular academic year, both UC and non-UC students may enroll in courses during summer session on all nine general campuses. Historically, the State provided funding for UC students enrolling in the fall, winter, and spring terms, but not summer; through Summer 2000, summer sessions were supported from student course and registration fees set by each UC campus. The University began converting summer instruction for UC students from a self-supporting to a State-supported program in Summer 2001 and completed the conversion of all general campuses in 2006-07. For UC students, funding for summer has been shifted to the general campus instructional budget. Further discussion of State-supported summer instruction may be found in the *General Campus Instruction* chapter of this document.

Funding for non-UC students remains in the Summer Sessions budget. In 2007-08, the base budget for Summer Sessions is $11.1 million, all of which is non-State Funds. In Summer 2007, 9,340 non-UC students registered for UC summer sessions. Many of these students are regularly enrolled at the California State University, California Community Colleges, and other institutions. Non-UC students pay fees that support the full cost of their education.

Self-Supporting Programs

The University operates a number of self-supporting graduate degree programs. These programs, developed in accordance with The Regents' *Policy on Self-Supporting Part-Time Graduate Professional Degree Programs*, are intended to provide flexible part-time pathways to graduate professional degrees for academically qualified working adults who cannot be full-time students. Extending the opportunity to enroll part-time in professional master's graduate degree programs to those who need to continue their employment while studying is consistent with the University's mission in graduate professional education.

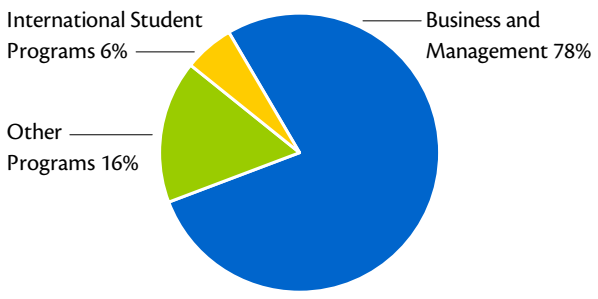
Self-supporting part-time graduate professional degree programs adhere to the same UC academic standards as do other graduate degree programs, but are not supported with State funds. Full program costs, including but not limited to faculty instructional costs, program support costs, student services costs, and overhead, are covered by student fees or other non-State funds.

The University currently operates more than 30 self-supporting graduate degree programs. The University's oldest and largest self-supporting programs are evening/weekend and executive MBA programs for employed professionals. More recently, programs have been established in a range of disciplines, and include on-line programs, off-site programs, joint programs with other institutions, and programs for foreign-trained students.

During 2007-08, enrollment in the University's self-supporting programs totaled 3,700 year-average headcount and nearly 3,000 FTE students. These programs generated more than $93 million in fee revenue during 2007-08.

DISPLAY VI-1: 2007-08 SELF-SUPPORTING PROGRAM HEADCOUNT ENROLLMENT BY DISCIPLINE

More than three-fourths of self-supporting program enrollment is in MBA and other management programs for working professionals.



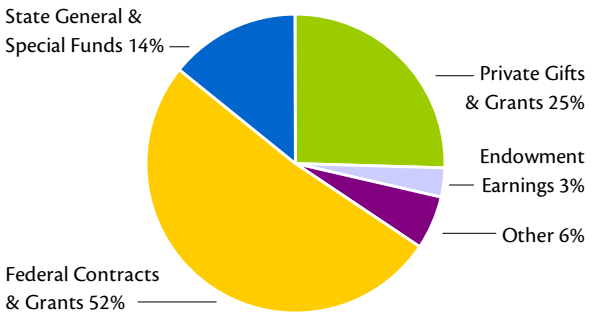
RESEARCH

The California Master Plan for Higher Education designates the University as the primary State-supported academic agency for research. As one of the nation's preeminent research institutions, the University provides a unique environment in which leading scholars and promising students seek to expand fundamental knowledge of the physical world, human nature, and society. The University's research forms the basis for new knowledge and innovation that creates new products, new companies, new jobs, and entire new industries. University researchers are at the forefront of discoveries that lead to cures for diseases, improve the food we eat, help buildings withstand earthquakes, improve transportation systems, develop techniques for addressing global climate change, identify best practices for K-12 educational improvement, and strengthen ties to Mexico, along with a wide variety of other benefits to the state.

The University is one of the primary engines that power the state's economy and is critical to keeping California competitive in the global market. The quality of the University's research and the skilled, entrepreneurial workforce produced by its educational programs, along with an ability to transfer new knowledge from the laboratory to the marketplace, helped lead to California's dominance in knowledge-intensive industries. It is no coincidence that the excellence of UC's research and academic programs occurs in the same places where private-sector growth and innovation appear strongest. Through its education, research and public service programs, the University of California has always played a key role as a center of innovation and technology development. By attracting research funds, enhancing employment and productivity, and producing business spin-offs, UC has been instrumental in the success of some of the most dynamic regional economies in the world, from Silicon Valley and Bay Area biotechnology to telecommunications in Southern California. University research is supported from a variety of fund sources. Display VII-1 shows actual research expenditures by fund source for 2007-08. Research expenditures totaled $3.5 billion, an increase of 5.8% over the prior year.

DISPLAY VII-1: 2007-08 RESEARCH EXPENDITURES BY FUND SOURCE

Every dollar of State expenditures for research leverages $5 more from non-State sources. More than half of research funding is derived from federal funds.

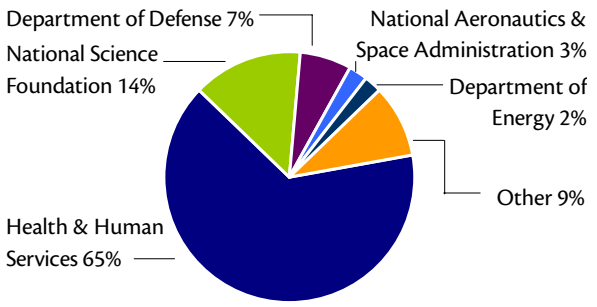


Federal Funds. Federal funds are the University's single largest source of support for research, accounting for approximately 52% of all University research expenditures in 2007-08.

In the late 1990s, federal research and development funding experienced rapid increases, due largely to a bipartisan commitment to double the National Institutes of Health (NIH) budget over a five-year period beginning in 1998-99.

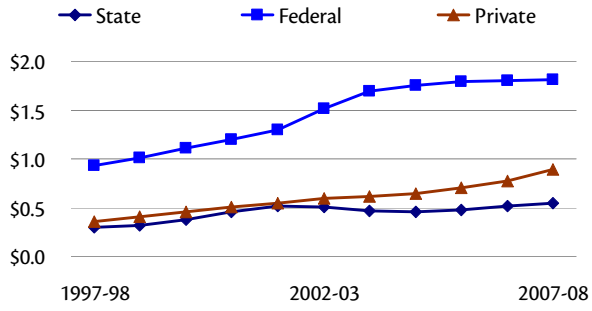
DISPLAY VII-2: 2006-07 FEDERAL RESEARCH AWARDS BY SPONSOR

In 2006-07, UC attracted $2.7 billion in federal research awards. The NIH provides nearly two-thirds of federal research awards.



DISPLAY VII-3: RESEARCH AWARDS BY SOURCE
(DOLLARS IN BILLIONS)

UC federal direct research expenditures increased rapidly with the doubling of the NIH research budget over a five-year period between 1998-99 and 2002-03 but slowed recently. Private support for research has doubled over the last 10 years.



About 65% of the University's federal research awards in FY2007 came from Health and Human Services primarily through the National Institutes of Health. Other agencies that figure prominently in the University's awards are the National Science Foundation, the Department of Defense, the National Aeronautics and Space Administration, and the Department of Energy.

The University remains highly competitive in terms of attracting federal research dollars, with fluctuations in the University's funding closely paralleling trends in the budgets of federal research granting agencies. The outcomes of the annual federal budget process and the changes in the federal research budget have important ramifications for the University's research budget.

Private Funds. Display VII-3 also illustrates the growing importance of private gifts and contracts and grants. Private support for research doubled over the last 10 years.

State Funds. State funds for research constitute about 14% of the total and include State General and Special State funds to support coordinated statewide programs. For many University research programs, State funds are the core that attracts extramural funds. It provides seed money for research projects vital to California, whether the subject is earthquake engineering or improved crop varieties. Once a research program is up and running, UC leverages the initial investment of State funds by attracting grants from federal and private sources. The quality of UC's research attracts billions of dollars annually in funding from federal and private sources.

For 2007-08, the rate of growth in expenditures:

- from State funds increased by 5.8%;
- from private gifts and grants increased dramatically by 16%; but
- from federal funds slowed by 0.4%.

In 2008-09, funds for research will increase to $3.7 billion, including:

- $2.9 billion from extramural sources (i.e., federal government, private individuals, foundations, industry),
- $160 million from Regents' funds,
- $315 million from State and UC General Funds, and
- $328 million from restricted funds (State and non-State funds).

The $328 million in restricted funds includes special State funds to support a coordinated statewide program of tobacco-related disease research administered by the University ($14.6 million for 2008-09). Another tobacco

tax provides support for the Breast Cancer Research Program ($12.8 million). The Breast Cancer Research Program also receives special State funds from the California Breast Cancer Research Fund ($778,000), which derives from the State personal income tax check-off.

Restricted funds include performance fee revenue from the management of the Department of Energy (DOE) laboratories. The Labs conduct research important to the State and the nation, including research on bioterrorism, nuclear nonproliferation, and energy efficiency and new energy resources. While the Laboratories are separate entities, research at the Labs has direct and indirect benefits for University faculty and students. The Laboratories are discussed in more detail in the *Department of Energy Laboratory Management* chapter of this document.

The $315 million in State and UC General Funds support:

- agricultural research;
- systemwide programs to support research on AIDS, the Industry-University Cooperative Research Program, biotechnology, and toxic substances research;
- California Institutes of Science and Innovation;
- organized research units (ORUs) on the campuses; and
- multi-campus research programs (MRUs).

The funds also support permanent and one-time funding for other research activities not formally constituted as MRUs, including, among others, Internet2, universitywide programs in substance and alcohol abuse prevention, neuro-developmental disorders, spinal injury research, and individual faculty research.

While they have relatively modest budgets, typically in the range of $30,000 to $1.5 million, the University's MRUs dynamically link the work of the ten campuses and three national labs into a network of shared information, resources, dissemination, and public engagement. MRUs provide seed-funding on a peer-reviewed basis for innovative new research, provide support for graduate student traineeships, and work directly with state agencies to disseminate the expertise of the UC faculty and their research. The Institute for Transportation Studies, the UC Marine Council, the UC Energy Institute, and the Toxic Substances Research and Teaching Program work respectively with CalTrans, the California Resources Agency, the California Energy Commission, and the California Environmental Protection Agency to bring research to bear on the needs of California and to train students to move into leadership roles in public policy and resource management.

Unfortunately, State and federal support for the University and its research programs is declining at a time when global competition is increasing, raising concerns about the nation's ability to maintain its competitive edge. The cost of doing cutting-edge research in science and engineering is increasing, and more research connected to economic competitiveness requires large interdisciplinary research teams. Research is increasingly more infrastructure dependent and the costs of compliance with extramural contract and grant requirements have risen rapidly, yet core support for the University's administrative research staff and infrastructure has not kept pace with the amount of funded research. The key to the University's research success is its faculty and students, but reduced resources and increasing costs to recruit and establish new faculty in all disciplines, as well as increases in graduate student fees and nonresident tuition and inadequate graduate student support packages, may undermine the University's success in attracting the best faculty and graduate students.

In its 2005 report, "The Knowledge Economy: Is the United States Losing its Competitive Edge?,"

the Task Force on the Future of American Innovation notes that:

"For more than half a century, the United States has led the world in scientific discovery and innovation. It has been a beacon drawing the best scientists to its educational institutions, industries and laboratories from around the globe. However, in today's rapidly evolving competitive world, the United States can no longer take its supremacy for granted. Nations from Europe to Eastern Asia are on a fast track to pass the United States in scientific excellence and technological innovation. Research, education, the technical workforces, scientific discovery, innovation and economic growth are intertwined. To remain competitive on the global stage, we must ensure that each remains vigorous and healthy. That requires sustained investments and informed policy."

Yet, U.S. funding for universities and research has not kept pace and is projected to decrease in the future at a time when other countries are increasing their investment.

In the 2009-10 Budget, the University is requesting restoration of State funds supporting a universitywide program of labor research, and funding from the State Transportation Fund for the universitywide Institute of Transportation Studies Multi-campus Research Unit.

Labor Research ($5.4 Million Increase)

The University is requesting $5.4 million in State General Funds to restore funding to the Miguel Contreras Labor Program, which supports research on labor and employment and labor education throughout the University of California system. The Governor vetoed the funds from the final 2008 budget because of the State's fiscal situation. Given the importance of continued research in this area, the University is asking for the funds to be restored.

The $5.4 million in the 2008 Budget Act is what remained after the Legislature imposed a 10% reduction to all line item research programs in the University's budget. Consistent with previous budget act language specifying that 60% of the funding would be for labor research and 40% for labor education, the restored $5.4 million will be distributed as follows:

- $3.24 million for research: $1.44 million will support a Universitywide competitive grants research program on labor and employment research coordinated by the Office of the President; the Berkeley and Los Angeles campuses will receive $800,000 for labor research operated through the Institutes for Research on Labor and Employment (IRLE).
- $2.16 million to support labor education: Berkeley and UCLA each will receive $1.08 million to support labor education also operated through the Institutes for Research on Labor and Education (IRLE).

Focus of the Program

Growing international economic integration, policy changes, transformations in business organization, new technology, and other changes have brought many positive developments, but have also resulted in emerging issues and concerns for communities, researchers, and policy makers. The labor program funding is used to support research and education that advances knowledge and understanding of these new challenges and opportunities from a variety of perspectives and disciplines, including historical, comparative, and institutional approaches.

Restored funds would be used to conduct research related to the labor and employment concerns of California's changing workforce. Recent examples include research on the causes and consequences of low-wage jobs, and trends in employer sponsored health care. If restored, the proposed funding will support research on issues of importance to employers, working people, and

the California economy. The funds will not only support faculty research, but will provide much-needed support for graduate students.

Funding History
Funding for a new Institute for Labor and Employment (ILE) was first provided in 2000-01, when the Legislature proposed and the Governor sustained an additional $6 million in the University's budget to establish a multi-campus research program focused on research issues related to labor and employment.

However, since that time, funding for the program has been unsteady. The State's fiscal crisis necessitated cuts to the University's State-funded research budget, including the funding provided for ILE. By 2004-05, funding for the Institute had been reduced to $3.8 million and concerns about the research and activities of the ILE had also led to a restructuring of the program. The multi-campus research program was disbanded and instead, while still targeted at research on labor and employment issues, funding was divided as follows: one-third each to the Berkeley and Los Angeles and the remaining one-third committed to a universitywide competitive grants program for which faculty from any campus could compete under a normal peer review process.

Unfortunately, concerns in the Governor's Office and among various legislators about the use of the funds continued. As a result, the total $3.8 million committed for labor and employment research was eliminated in the final 2005-06 Budget Act. The University continued support for labor research on a one-time basis by redirecting funds totaling $1.25 million to Berkeley ($800,000) and to UCLA ($450,000). The temporary funding allowed the program to continue until the new labor research and education program, now known as the Miguel Contreras Program, was funded in the 2006 Budget Act. The new program has received recognition both in Sacramento and on the campuses.

Institute of Transportation Studies ($5 Million Increase)

The University of California is requesting $5 million in permanent funding from the Public Transportation Account (PTA), State Transportation Fund, for its universitywide Institute of Transportation Studies Multi-campus Research Unit (ITS MRU) to undertake research, policy analysis, education, and technology transfer initiatives to increase the sustainability of the State's transportation systems. The focus of these initiatives will be the transportation sector's contributions to greenhouse gas (GHG) emissions. These funds will augment the 2008-09 funding level of $980,000 from the PTA fund and $250,000 from the General Fund. The ITS MRU is hosted by the Berkeley, Davis, and Irvine campuses, with affiliates at the Los Angeles, Riverside, and Santa Barbara campuses. Over 200 Master's and PhD students study at the ITS MRU, many of whom will be California's future transportation leaders and decision-makers. In addition, this unit conducts extensive outreach to external constituencies to improve the State's transportation system.

With worsening traffic congestion threatening economic growth and quality of life, as well as daunting energy and climate change challenges, California and the nation need new forms of transportation and new ways of thinking about transportation. University-based research, development, education and outreach are all needed to design and evaluate new and more sustainable responses to increasing travel demand, inadequate infrastructure, and increasing oil use and greenhouse gas emissions.

The ITS MRU is recognized as the premier center of university transportation research in the world. It has been funded with a small portion of the fuel taxes that support the PTA since 1947. The initial State PTA funding of $920,000 has only risen to $980,000 over the past 60 years, supplemented by

$250,000 of State General Funds cost increase funding over time. Thus, its purchasing power has shrunk to about 1/8 of its initial value.

Despite this, ITS has been extraordinarily successful, with faculty researchers attracting $30 million per year in extramural funding, leveraging the core funding from the State's PTA account at a ratio of at least 30:1. Using this leveraging, the ITS MRU:

- conducts research,
- disseminates results of ongoing research through publications, programs, conferences, and seminars;
- conducts educational programs for California's transportation and public works communities; and
- offers a variety of public service activities, including various information services and a major transportation reference library at UC Berkeley.

The minimal core funding has a large downside, though: it forces the ITS MRU to be almost entirely reactive to external funding opportunities defined by outside agencies and companies.

The current lack of sufficient core funding has clear negative consequences for California: 1) research is much less forward looking and is typically focused on near-term project needs of agencies and companies; 2) stable funding is not available to maintain strong technical staffs to respond quickly to requests from State agencies for near-term analysis; 3) University researchers do not have access to funding to address highly innovative changes to California's transportation sector; 4) it is increasingly difficult to attract new graduate students to the transportation field when their funding is almost entirely dependent on short-term, externally funded projects; and 5) it is difficult to respond to major federal and private funding opportunities.

Proposed Use of New Funds

Consistent with the overall objective of reducing GHGs and oil use, enhancing the efficiency of the transportation system, and being responsive to the purposes of the PTA, the ITS will use the expanded funding for the following research areas:

- **Expand the benefits of public mass transit.** The State has significantly increased investments in public transit systems. While ridership is up in many places due to rising fuel prices, transit's share of overall travel in the state remains relatively low. Working closely with stakeholders, UC researchers will pursue a wide array of initiatives to expand and enhance transit services, including technological, institutional and financing innovations.
- **Reduce the need for vehicle travel via more rational land-use and infrastructure-investment policies.** Local, regional, and state agencies in California have for many years sought to better integrate land use and transportation planning in order to increase the efficiency of urban systems and reduce reliance on solo driving. Through research, education, technology transfer, and outreach programs, UC researchers will evaluate environmental and social costs of alternative development patterns, develop better planning support systems and tools, disseminate best practices for reducing vehicle miles traveled, and identify the most effective ways to encourage public transit alternatives to private vehicle travel.
- **Improve transportation efficiency.** Today's transport system is extraordinarily expensive and energy intensive. New strategies and technologies are needed to combat road congestion and achieve more efficient movement of people and goods. Increased efficiency will lower overall emissions for passenger, commercial, and transit vehicles. Through research, education, technology

transfer, and outreach programs, UC researchers will develop a wide array of strategies, test them, evaluate their effectiveness, and disseminate their findings.

- **Advance low-carbon fuels and vehicles.** Today's transport fuels are carbon-intensive and almost totally based on petroleum. ITS will expand analytical support for California's Low Carbon Fuel Standard; investigate the broader environmental impacts of transport fuels; and investigate the various issues and opportunities associated with introducing biofuels, battery electric vehicles, plug-in hybrids, and hydrogen fuel cell vehicles.

Additional initiatives may be added as public needs develop. ITS will bring to bear the collective expertise from the three main campuses of UC ITS (Berkeley, Davis, Irvine), and from the affiliated campuses at Los Angeles, Riverside, and Santa Barbara.

Management, Oversight, and Reporting
To effectively utilize the new funds, ITS would employ the following mechanisms for directing research, and reporting outcomes:

- **Management** — The ITS Directors' Council, consisting of the directors of the three main campuses of UC ITS (Berkeley, Davis and Irvine), along with representation from affiliated campuses at Los Angeles, Riverside and Santa Barbara, will provide overall management of these new initiatives based on a strategic plan developed by the directors.
- **Oversight** — An Advisory Committee will be created to provide oversight and guidance for these initiatives. Membership will be composed of experts inside and outside of UC ITS, including representatives from the executive and legislative branches of the State, the local and regional transportation community, and the transportation industries.
- **Reporting** — A reporting plan will be developed to regularly update all relevant stakeholders on research progress and findings.

California Institutes of Science and Innovation

At the start of this decade, the State of California, UC, and hundreds of the state's leading-edge businesses joined together in an unprecedented partnership to create the four California Institutes for Science and Innovation. In partnership with the State and California industry, the four Institutes engage UC's world-class research faculty directly with California, national, and international companies in attacking large-scale issues critical to the State's economy and its citizens' quality of life — information technology, telecommunications, nanotechnology, biology, health care, traffic congestion, environmental management, homeland security, and novel energy systems are among the areas of focus for new research within these Institutes.

While the facilities needs of the Institutes have been largely met, the core support for operation of the Institutes is inadequately funded. The 2009-10 budget plan proposes an additional $10 million of support (from University funds, contingent on other portions of the plan being adequately funded) to ensure that each Institute has a minimum level of support with which to operate, which in turn will act as seed money to continue to attract funds from industry and governmental sources. The funds will support advanced technology infrastructure, personnel, and other academic support and provide seed money for building new research teams across disciplines and campuses, new educational programs, and mounting large scale extramural contracts and grants.

The $100 million in capital invested by the State for each Institute not only returned the required two-to-one match from federal and private sources

within the required four years, but is continuing to yield additional returns on the State's investment. The 275 partner companies that have invested over $200 million in these Institutes come from all parts of the economy — entertainment, transportation, biotechnology, nanotechnology, aerospace, information technology, and more. Each Institute is briefly described below.

- **California Institute for Quantitative Biosciences (QB3)** — UC San Francisco leads a partnership with UC Berkeley and UC Santa Cruz. QB3 is developing new technologies and new areas of research for drug discovery and for the diagnosis and treatment of cancer, arthritis, and other diseases through the convergence of mathematics, engineering, and physical sciences with biomedical and genome research.
- **California NanoSystems Institute (CNSI)** — UCLA leads a partnership with UC Santa Barbara. CNSI is creating laboratories for research, education and technology development in the emerging field of nanoscience — the study and design of materials and functional machines at the level of individual molecules and atoms.
- **California Institute for Telecommunications and Information Technology Calit2** — UC San Diego leads a partnership with UC Irvine that has built effective intercampus collaborations and new paradigms for performing multi-disciplinary research and education. Calit2 is defining worldwide and community-based networking scenarios to serve a broad spectrum of research, R&D, and social needs.
- **Center for Information Technology Research in the Interest of Society (CITRIS)** — UC Berkeley leads collaboration with UC Davis, UC Santa Cruz, and UC Merced. CITRIS research and education programs are changing the way researchers collect, share, and utilize data, and will transform decision-making in government and commerce by delivering new kinds of vital data for rapid analyses that are essential for saving lives and dollars. The original focus of this research center is on six societal-scale applications of information technology — energy efficiency, transportation, earthquake preparedness, environmental monitoring, health care and education – but was recently expanded to include special initiatives in Homeland Defense and Cultural Research.

The Institutes are expected to increase the state's capacity for creating the new knowledge and the highly skilled workforce that will drive entrepreneurial business growth and expand the California economy into new industries and markets. The potential of these Institutes is immeasurable, but adequate support is critical if they are to succeed in generating the economic benefits to the state they are well poised to create.

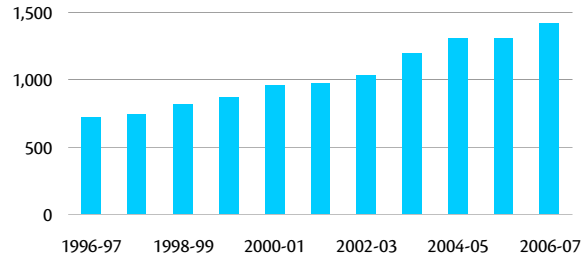
Importance of University Research

Economists attribute at least 50% of this nation's economic growth since World War II to innovation resulting from research and development, with university research playing a key role. Many similarly believe that California's recovery from the recession of the early 1990s was due, in large part, to the commercial impacts of research and training conducted by major institutions like the University of California.

UC is an important generator of ideas and technologies, which can be measured in part by the number of inventions created by UC researchers with university resources. During the 12-month period ending June 30, 2007, faculty and researchers at the nine UC campuses disclosed a total of 1,411 inventions. This represents a one-year increase of 8% increase when compared with the 1,308 new inventions reported the prior year. The University of California has received more patents than any other university in the world. As the foundation for start-up firms, many technologies developed in the UC system also

DISPLAY VII-4: UC INVENTION DISCLOSURES

During the 12-month period ending June 30, 2007, faculty and researchers at the nine UC campuses disclosed a total of 1,411 inventions — an 8% increase over the prior year.



serve as an important engine for economic growth. More than 160 companies have been founded on the basis of UC technology licensing agreements. An estimated 65% of these firms are in fields directly related to biotechnology, genomics, and pharmaceutical drug development.

The University is working to increase the effectiveness of its technology transfer operations by streamlining and making more effective the transfer of new knowledge through licensing, with the goal of increasing the public benefits of research through engagement with companies that can commercialize new products and technologies and create jobs. The University is giving local campus licensing offices more autonomy for managing industry relations and intellectual property portfolios while sustaining core University policy.

An example of streamlining is the negotiation process for creating clinical trials master agreements between the five University medical centers and private industry. Over the past five years, a concerted effort has been made to negotiate master agreements aligned with University of California policy and tailored to the requirements of individual pharmaceutical companies. Because a company's master agreement is developed cooperatively with all five medical centers rather than individually, the administration and negotiation processes are significantly streamlined, reducing the preparation of new clinical trial agreements to a matter of hours instead of the typical three to six months.

Historical Trends in Federal Funding

As previously noted, Federal funds are the University's single largest source of support for research, accounting for approximately 52% of all University research expenditures in 2007-08.

In the decade between 1982-83 and 1992-93 and again from 1997-98 through 2003-04, federal support for research at UC grew dramatically, with annual increases averaging almost 10%. Between 1992-93 and 1995-96, in a pattern that may be repeating itself beginning in 2004-05, the focus of the federal government was on reducing the deficit, which led to constraints on discretionary spending. Most of UC's federal research funds come from the domestic discretionary portion of the federal budget.

As a result, while total University federal research expenditures continued to increase, the rate of growth slowed. Between 1992-93 and 1995-96, federal research expenditures at the University increased by an average of about 4% per year, and in 1996-97, there was no increase over the previous year.

But progress toward a balanced budget and continued administrative and congressional support for investments in research again resulted in new growth for funding. In 1997, after twenty years of deficits in federal government spending, the President and Congress reached an agreement to balance the federal budget over the five-year period from 1998 through 2002. Of specific concern to the University was a part of the budget plan that envisioned no increases in overall domestic discretionary spending during this period. This, in combination with tight spending caps, led to predictions of dramatically reduced funding for University research.

After the 1997 agreement, however, there was a dramatic turn-around in the federal budget due in large part to the sustained strength of the national economy. Revenues increased more rapidly than had been projected, and the budget was balanced three years ahead of schedule. As the federal budget went into its first surplus in more than 30 years in 1998, federal research and development (R&D) funding experienced rapid increases, due largely to a bipartisan commitment in 1999 to double the NIH budget over five years.

Federal support for research and development (R&D) continued to grow following the terrorist attacks of September 11, 2001, and the subsequent wars in Afghanistan and Iraq. The federal budgets for FY2002, FY2003, and FY2004 contained record increases for federal R&D due mainly to new R&D spending on homeland security and defense.

After 1997-98, the University's federal research expenditures increased significantly as follows: 7% in 1997-98, nearly 9% in 1998-99, 9.5% in 1999-00, 8% in 2000-01, 8.5% in 2001-02, 16.3% in 2002-03, and 11.8% in 2003-04. Beginning in 2004-05, however, the renewed concern over an escalating national deficit and the resulting political pressures to constrain federal domestic spending began to have an effect on the University's federal research expenditures. Thus, these dollars increased by only 3.5% in 2004-05, 2.3% in 2005-06, 0.5% in 2006-07, and 0.4% during the past year.

Over the next few years, it is likely that overall federal research funding will continue to be subject to spending cuts and constraints. Looking ahead, the federal budget situation will continue to be greatly influenced by military commitment to Iraq and Afghanistan, and the growth of entitlement programs such as Medicare. These put enormous pressure on overall domestic discretionary spending, which as previously noted, is the source of most of UC's federal research funding.

Outlook for FY2008 and Beyond

A mid-year supplemental action provided additional federal FY2008 research funding for NIH, DOE, NSF and NASA, and the Congress has endorsed increases in the FY2009 budget for the physical sciences and for biomedical research as well as in other parts of the federal research and development portfolio. The Congress, however, was unable to act by the start of the federal fiscal year (October 1). Thus, most federal programs will operate at 2008 funding levels until a final FY2009 budget act is passed. If the proposed increases are ultimately included, this would provide potential increases for UC research funding in the future. As noted early in this chapter, the outcomes of the annual federal budget process and the changes in the federal research budget have important ramifications for the University's research budget, and the University is closely following developments at the federal level.

Benefits of Research

Recent national studies of research universities confirm the research excellence of the University of California.

In their 1997 book, *The Rise of American Research Universities*, Hugh D. Graham and Nancy Diamond quantitatively measured and compared institutional research performance at 203 public and private universities in the U.S. Based on faculty members' grant, publication, and fellowship award records across different fields, the authors concluded that the University of California as a system led the nation in research excellence and productivity among public universities. They cite the remarkable rise of the University's smaller, younger campuses as well as the success of its large, established institutions.

Another indicator of how well UC does relative to other research universities is the National Science Foundation study on American patents. UC produced more research leading to patented

inventions than any other public or private research university or laboratory during the periods studied.

The University's research activities yield a multitude of benefits, ranging from increases in industrial and agricultural productivity to advances in health care and improvements in the quality of life. The following discussion presents examples of UC's contributions to the economic and social well-being of the state and nation.

Economic Impact

In terms of a direct impact on the California economy, University research programs attract large amounts of extramural funds for expenditure within the state. In 2007-08, for every State dollar UC spent nearly $5 more dollars from the federal government and other non-State sources, although this is in large part made possible by the State funds also provided for faculty salaries.

High-technology industries such as biotechnology, microelectronics, and information technology stimulate and support the state's economy. Some of these industries have grown directly from UC research. For example, the biotechnology industry was launched as a result of the discovery of recombinant DNA, or "gene splicing," by scientists at UC San Francisco and Stanford. Today, California is the world leader in biotechnology and home to 376 companies, approximately one-third of all biotechnology firms in the U.S. Many commercial enterprises in California are either based on UC-developed technology or were founded by faculty or students trained at UC.

Recently, UC San Diego identified 119 such companies nurtured by research from that campus, which together employ more than 15,000 people and generate annual revenues in excess of $1.8 billion. UC scientists founded one in five biotechnology companies in California, including three of the world's top companies, Genentech Inc. of South San Francisco, Chiron Corporation of Emeryville, and Amgen, Inc. of Thousand Oaks. California biotechnology companies collectively account for nearly half of the biotech industry's annual sales in the U.S. and employ more than 40,000 people in California. Two key programs fostering University cooperative efforts with the private sector are the California Institutes for Science and Innovation, discussed at the beginning of this chapter, and the Industry-University Cooperative Research Program.

UC's museums, performing arts venues, and nationally ranked arts and humanities instruction programs and organized research programs are key components in making California a leader in the arts and culture industries. A 2004 report by the California Arts Council concluded that the total annual impact of the California arts and culture sector totaled $5.4 billion, up 152% from $2.15 billion in 1994. The study demonstrated that arts and culture generate billions annually, support a workforce of more than 160,000, and produce nearly $300 million in state and local taxes. Education, cultural tourism, and California's creative industries contribute significantly to the state's economic well-being and status as one of the world's largest economies, and the University is an important contributor to these efforts.

Agriculture

California farmers and ranchers produce nearly 350 commodities, and the state's agricultural industry accounts for more than 1 million jobs. California is the nation's leading agricultural state, grossing nearly $32 billion in farm receipts and generating more than $8 billion in export revenues in 2005. Over 50% of the nation's fruits, nuts and vegetables are grown on California farms, and during certain times of the year almost all of the fresh produce consumed in the United States is California grown. Eight commodities — milk and cream, grapes, nursery and greenhouse products, almonds, cattle and calves, lettuce, hay and strawberries — generated more than $1 billion in farm income in 2005.

For over a century, UC, as the state's land grant institution, has brought California agriculture the best that science has to offer. Along the way, California farmers and ranchers have consistently increased yields, improved water efficiency, reduced pesticide loads, introduced new crops and varieties, and adopted new food safety practices — all with the help of UC. As a result, California has the most environmentally compatible, natural resources conscious and sustainable agricultural sector in the world from which all Californians benefit.

The UC Division of Agriculture and Natural Resources (ANR), with 650 scientists affiliated with the Agricultural Experiment Station (AES) on the Berkeley, Davis, and Riverside campuses, and more than 340 campus specialists and county-based advisors with Cooperative Extension (CE), its public service arm, has been at the forefront of developing and delivering cutting-edge research, new technologies and innovative farming practices to California growers. These UC breakthroughs have helped farmers and ranchers maintain a competitive edge in domestic and export markets, while improving the quality of the environment and ensuring that consumers have a safe and secure food supply. A few examples include:

- Development of new varieties of strawberries, walnuts, citrus, and other fruit, nut, field and vegetable crops have contributed to California's dominance as the leading agricultural producer in the nation (80% of the strawberries consumed in the U.S. are UC-patented varieties).
- Discovery of the basic principles of biological control and integrated pest management (IPM) have led to the control of a myriad of insect pests found in agricultural, urban and natural systems, reduced pesticide use, and improved environmental quality.
- Improved land reclamation practices, more efficient irrigation methods, and enhanced drainage techniques have made California agriculture more productive while conserving natural resources (UC scientists brought drip irrigation to California, significantly reducing agriculture's water use).

In the natural resources area, ANR academics are addressing challenges and opportunities associated with land, air, and water resources. Some recent successes include:

- Effective ways to reduce the adverse impacts of agricultural and other wastes on land, water, and air resources. UC is providing dairies in the Central Valley with science-based tools to meet new waste discharge regulations and implement effective nutrient management and monitoring practices.
- Cutting-edge strategies for the protection of rangelands, watersheds, and water quality by helping ranchers reduce the impacts of livestock production.
- Innovative agricultural and forestry practices to improve wildlife habitat. UC scientists helped growers solve a rice straw disposal problem and create more than 100,000 acres of seasonal habitat for migratory waterfowl through research showing benefits of winter flooding of harvested fields.

However, California is changing rapidly, and the state's agricultural and natural resources sectors are at a crossroads. Growers are facing increased land use pressures, rising land costs, and new air and water quality regulations as the state's rapidly urbanizing population spills onto the state's most productive farm and forest lands. There is increased competition for water among urban residents, fish and wildlife, and California's irrigation-dependent agriculture with the Sacramento-San Joaquin Delta in crisis. Food safety is on the minds of consumers, with the *E. coli* contamination of fresh spinach in the Salinas Valley in 2006 as a recent example. Energy costs and supplies are in flux, driving interest in producing renewable energy on agriculture and

forested lands. Agriculture is affected by invasive pests and diseases, many of which also threaten urban residents (West Nile virus, Pierce's disease/Glassy-winged sharpshooter, Sudden Oak Death). Overlaying these competing factors is a push for more sustainable agriculture and natural resources systems.

The ability of California agriculture to meet the food needs of a growing population, build sustainable farming and natural resources systems for future generations, and compete in an increasingly global economy will, more than ever, require early adoption of cutting-edge research, the availability of new technologies, and rapid access to innovative farm management practices. Successfully addressing the emerging issues and opportunities facing agriculture and the environment will require a new way of doing business in UC.

The future problem-solving model will require a comprehensive, multi-disciplinary focus, bringing together teams of experts from the UC and CSU systems, along with public and private sector partners, to identify critical issues, set research priorities and directions, generate new funding for research, development and delivery, and create new ways to get the results quickly and more efficiently into the hands of farmers, ranchers, environmentalists, land managers and policy makers. The Division of Agriculture and Natural Resources, with its land grant mission, proven record of employing multi-disciplinary teams and systems approaches to address and solve problems, and direct links to clientele through county- and campus-based programs, is uniquely positioned within UC to provide leadership in this area.

Medicine

UC medical research has led to dramatic improvements in the diagnosis and treatment of disease. The University assumed a major leadership role in the battle against AIDS, and its researchers were among the first to describe the AIDS syndrome and the malignancies associated with it, and to isolate the causative agent for AIDS in humans. Molecular biology research has given us relatively inexpensive, safe, and effective vaccines and hormones, as well as a variety of other therapeutic agents. Genetic engineering technologies being developed at UC promise to help find cures for some of the most serious health problems, such as cancer, Alzheimer's disease and other illnesses of aging, cardiovascular disease, and arthritis. Other medical advances growing out of UC research include a laser treatment for previously untreatable eye conditions; high energy shock waves to disintegrate urinary stones without surgery; a nicotine skin patch worn on the upper arm to wean smokers off cigarettes; corrective surgery before birth for formerly fatal fetus abnormalities; an inner-ear implant that enables the deaf to recognize tones and thus understand language; and a simple, inexpensive blood test to determine the risk for having a Down's syndrome baby among other important advances.

In the late 1990s, the State funded several new initiatives in medical research, including funds for research on substance and alcohol abuse, operating and annual debt service support for a facility to house basic science research on various neurodevelopmental disorders, and funding for geriatric research, among other augmentations.

Coordinated by the UCSF campus, the substance and alcohol abuse funds are being used to study the effects of alcohol on the brain, to develop ways to identify alcoholics and individuals at risk for developing alcoholism because of genetic vulnerability, and to develop new therapies for the prevention and management of alcoholism and alcoholic neurologic disorders.

The funds provided for the Medical Investigation of Neurodevelopmental Disorders (M.I.N.D.) Institute at UC Davis support research, education, and the assessment and clinical care of children and adult patients with such neurodevelopmental

disorders as autism and autism spectrum disorders, pervasive developmental disorders, cerebral palsy, developmental delays, and communication disorders. The Institute enables leading scientists, physicians, and educators in diverse fields to conduct research projects directed toward better understanding of development and brain function. The educational component includes programs for health sciences students, patients, and parents. The Institute includes an interdisciplinary, neurodevelopmental clinic created to translate laboratory research into practice and provide the newest medical diagnostic and treatment methods for patients. Staff also collaborate with state and local agencies in improving the state of knowledge and the standard of care for neurodevelopmental disabilities.

In the 2000-01 budget, the University of California also received $2 million in one-time funds for its long-standing Academic Geriatric Resource Program (AGRP) and $4 million in one-time funds to create new endowed chairs in geriatrics at UC medical school campuses. The $2 million of funding was used to fund a wide range of AGRP activities, including medical education curriculum development, focusing on the health needs of the state's aging population. Other programs funded in the late 1990s and early 2000s by the State support research on the diagnosis, treatment, and prevention of lupus and brain and spinal cord injury treatment and cure.

Other Research Areas

In other areas, University researchers are exploring methods for predicting the time and location of earthquakes and ways to design new buildings and modify existing buildings so they better withstand earthquake effects. Research on global climate and earth systems is benefiting California fisheries and agriculture by leading to better predictions of hazards such as drought, flooding, and other natural disasters, and to more effective means of mitigating their effects. New materials are being developed that could lead to better synthetic products, such as prosthetic devices more acceptable to the body and longer-lasting, easy-care contact lenses.

UC researchers forging ahead in new areas such as roadway technologies, alternative fuels, and truck safety are addressing California's changing transportation needs.

Social science research is furthering our understanding of issues critical to California's social and political well-being. Examples include collaborative research between California and Mexico focusing on issues of critical interest such as trade and economic development, immigration, language acquisition and development, educational access, international relations, public policy issues around homeland security, population growth, the Pacific Rim, and a wide range of other policy-relevant research areas.

In the humanities, research at the University of California has flourished across the system, placing many programs at the top of the National Research Council rankings. The systemwide Humanities Research Institute is spearheading a transformative effort to bring technology to bear on cultural issues and has worked closely with scientists and engineers to develop new approaches to interdisciplinary scholarship and collaborative research. The UC Humanities Technology Council brings together the top thinkers within UC from the California Digital Library, UCTV, the California Institutes for Science and Innovation, the San Diego Supercomputer Lab, the UC Digital Arts Research Network, the Museum Online Archive of California, and other major projects to promote collaboration and develop new ways of linking humanities resources around the state, across the country, and internationally.

PUBLIC SERVICE

Public service includes a broad range of activities organized by the University to serve state and local communities; students, teachers and staff in K-12 schools and community colleges; and the public in general. Consistent with its mission as a land grant institution, the University's public service programs help improve the quality of life in California by focusing on major challenges, whether in business, education, health care, community development, or civic engagement, that impact the economic and social well-being of its citizens.

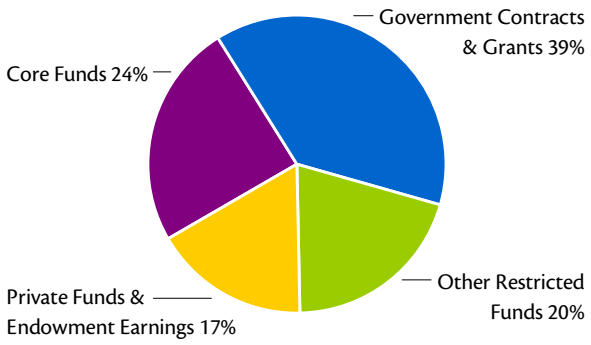
State funds support a variety of public service programs at UC. This chapter describes four major State-supported public service efforts:

- Student Academic Preparation and Educational Partnerships,
- the California Subject Matter Project,
- Cooperative Extension, and
- the Charles R. Drew University of Medicine and Science.

Campuses also conduct other public service programs supported by State funds, as well as by student fees, user fees, and other non-State fund sources; these programs include arts and lecture programs and student-or faculty-initiated community service projects.

DISPLAY VIII-1: 2007-08 PUBLIC SERVICE EXPENDITURES BY FUND SOURCE

While State funds play an important part in the UC's public service programs, significant funding for Cooperative Extension and other major programs is generated from government contracts and grants and private sources.



Student Academic Preparation and Educational Partnerships

Student Academic Preparation and Educational Partnerships (SAPEP) programs seek to raise student achievement levels and to close achievement gaps between groups of students throughout the K-20 pipeline, tasks critical to keeping California's economy competitive in the long run. In national comparisons of 8th graders, California scored last in the country in science and 8th from the bottom in mathematics (National Science and Engineering Indicators, 2006). In addition, 2007 data shows that 58% of public high school students enrolled at UC come from just 20% of the state's high schools. In recognition of these achievement levels and gaps, The Regents adopted a policy in 2005 that calls for the University to work with key constituencies to enhance the educational capacity of California's schools; to help close opportunity gaps that separate groups of students; and to enhance access to those who have been underserved by the University.

Programs in the SAPEP portfolio strive to decrease the impacts of disparity in educational opportunity in California schools through:

- Direct Academic Services and Advising: Providing academic services to individual disadvantaged students so that they may complete a rigorous college preparatory curriculum in high school and enroll in college;
- Skills Building: Enhancing the academic preparation of undergraduates from educationally disadvantaged communities to promote their readiness for graduate and professional level training;
- Professional Development: Improving school conditions through effective professional development, helping to build college-going cultures, and providing access to technology-based learning resources; and
- Research: Identifying through research what works — and what does not work — in individual schools and throughout the state's educational system.

The impact of the University's student academic preparation programs on educationally disadvantaged and underrepresented minority students is significant. While enrollment at UC is not the specific goal of UC's academic preparation programs, the ability of students to compete successfully for UC admission is an indicator of increasing preparation levels. In Fall 2007, 16.1% of African Americans and 21.6% of Chicano and Latino students in the incoming freshman class at UC campuses had been participants in UC's student academic preparation programs. Furthermore, CPEC eligibility data shows that in 2003, 6.2% of African-American students were eligible for UC, compared to just 2.8% in 1996. For Chicano and Latino students, eligibility gains were equally strong, with 6.5% eligible in 2003 compared with only 3.8% in 1996.[1] Significant budget cuts after 2000-01, however, reduced opportunities for more than 50,000 students to participate in the University's student academic preparation programs, and fewer schools and teachers are served. Reduced funding has required new modes of engagement and utilization of resources with K-12 schools, businesses, and community-based organizations.

At the July 2006 meeting, The Regents agreed on the need for a study of actions the University can take to increase diversity in undergraduate and graduate enrollments and faculty hiring, and to foster a climate that is welcoming and inclusive. A study group reviewed these issues and submitted their report in Fall 2007.[2] The Regents have continued to identify diversity at UC as one of the University's highest priorities.

Program Descriptions

The University has positioned the SAPEP programs at all major levels of the educational continuum, from kindergarten to graduate and professional programs.[3]

Direct Student Services Programs. Most SAPEP programs provide academic assistance directly to students.

- **Community College Transfer Programs** increase opportunities for community college students to transfer to baccalaureate degree-granting institutions by providing comprehensive academic guidance and

[1] A new CPEC study of 2007 graduates will be available in early 2009.

[2] The study group's overview report, as well as reports on undergraduate, graduate and faculty diversity, are available at http://www.universityofcalifornia.edu/diversity/.

[3] Detailed descriptions for each of the SAPEP programs can be found in the most recent SAPEP legislative report, accessible through the homepage of the UC Office of the President, Student Affairs Division, at http://www.ucop.edu/sas/index.html.

support to prospective transfers to UC and other four-year colleges. Services include individual academic advising and educational planning, including assistance with course selection and monitoring of student programs; informational workshops on academic requirements for transfer admissions; and professional development and training for community college counselors and faculty.

- **The Early Academic Outreach Program (EAOP),** UC's largest academic preparation program, helps disadvantaged students complete a rigorous college preparatory curriculum in high school, meet UC and CSU eligibility requirements, and enroll in college. EAOP accomplishes this through activities such as academic advising on college eligibility requirements, academic enrichment to build a college-going culture, and providing information about entrance exams.
- **Graduate and Professional School Programs** enhance the academic preparation of undergraduates from educationally disadvantaged communities, thereby encouraging them to pursue graduate and professional level training. UC LEADS (Leadership Excellence through Advanced Degrees Program) places educationally disadvantaged juniors and seniors in two-year intensive research experiences with faculty mentors. Summer research internship programs, UC Law Fellows, and medical school programs provide similar preparation for graduate study through academic skills building, test preparation, and mentoring.
- **The Mathematics, Engineering, Science Achievement (MESA) Program** provides academic support for middle school, high school, and community college students so they can excel in math and science and graduate with baccalaureate degrees in science, engineering, computer science and other math-based fields.
- **The Puente Program** prepares high school and community college students to attend four-year colleges and universities through rigorous academic instruction in writing and literature, intensive college-preparatory counseling, and mentoring from successful members of the community.
- **Student-Initiated Programs (SIP)** is a UC student-led initiative that seeks to ensure access to higher education for those students labeled "at risk." SIP's mission revolves around student empowerment and academic development; the programs' mentoring of high school juniors and seniors includes college information days, campus tours, conferences, workshops, and cultural activities for students and their parents.
- **UC Links** is a multi-campus, intersegmental, faculty-based initiative that links community and university partners in a network of after-school programs providing K-8 students with early academic support, so they can enter and complete the 'a-g' high school course pattern and enroll in college.

Statewide Infrastructure Programs. The SAPEP portfolio also includes two programs that provide infrastructure needed to facilitate transfer from the community colleges to four-year institutions.

- **The Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST)** is California's official statewide repository for course articulation and transfer information; ASSIST provides counselors and students with detailed course transfer and articulation information to help facilitate a seamless transfer process.
- **Community College Articulation Agreements** are formal understandings between individual community colleges and individual UC campuses that define how specific college courses can be used to satisfy subject matter requirements at a UC campus. In addition, in 2007-08 UC created transfer preparation paths

to facilitate the smooth transfer of California community college students into one of UC's top 20 transfer majors.

Longer-Term Strategies. As the quality and content of instruction, school environments, and the level of support from families and local communities play instrumental roles in student success, UC helps build long-term ties between campuses, schools, and local community and business organizations.

- **K-20 (Kindergarten – University) Intersegmental Alliances** create systemic change in educational institutions that will help raise student achievement levels generally and better prepare students for postsecondary education and the workplace particularly.

Direct Instructional Programs. The University offers direct instruction to students in K-12 schools through two programs.

- **The Preuss Charter School** on the UC San Diego campus prepares students from low-income and educationally disadvantaged backgrounds to be competitively eligible for UC and other selective four-year institutions.
- **UC College Preparation (UCCP)** publishes free online courses and content to benefit California students, with a special emphasis on helping underserved students gain college eligibility. UCCP's Advanced Placement and college preparatory courses are freely available to California students, teachers and schools.

Funding for Student Academic Preparation and Educational Partnerships

The State's fiscal crisis in the early part of this decade resulted in a dramatic reduction in State funds designated for SAPEP programs. In 1997-98, after the adoption of SP-1 and Proposition 209 (see "History" section later in this chapter), the University's budget for student academic preparation programs was $18.1 million from State and University funds. The total grew to a high of $85 million in 2000-01, but was reduced by $55.7 million over the next several years, bringing the total budget to $29.3 million in 2005-06. In 2006-07, an augmentation of $2 million was provided to expand community college transfer programs; this brought SAPEP's budget to $31.3 million, which consisted of $19.3 million in State General Funds and $12 million in University funds. The total budget for 2008-09 remains at $31.3 million. It should be noted that while the underfunding of the University's 2008-09 budget has required campuses to redirect over $148 million from existing programs in order to fund mandatory cost increases, the University has protected SAPEP programs from any reductions in the current year.

From 2004-05 to 2007-08, State funding for these programs was the subject of debate and negotiations during each budget cycle, contributing to uncertainty as to whether or not programs would be able to continue from year to year. The University continually seeks stability in the funding of these programs and to that end annually prepares a detailed legislative report describing student outcomes and program accomplishments.

Program Accountability

SAPEP programs are committed to rigorous standards of assessment and to an accountability system that reports progress on a regular basis. The University reports to the Legislature each year on details for individual programs, including goals and accountability data demonstrating program scope and effectiveness in accordance with the SAPEP Accountability Framework developed in April 2005.[4]

[4] The SAPEP Accountability Framework is included as an appendix to the most recent SAPEP legislative report, which is accessible through the homepage of the UC Office of the President, Student Affairs Division, at http://www.ucop.edu/sas/index.html.

The SAPEP Accountability Framework was developed with the participation of representatives from the Legislature and the Schwarzenegger administration to help forge a common approach to understanding and assessing the performance and accountability of the SAPEP programs. The framework defines the way that SAPEP assesses, evaluates and reports the effectiveness and efficiency of its programs, as well as identifies SAPEP goals and aligns them with accountability mechanisms. Over time, use of the framework will ensure that programs are managed efficiently, effectively and in accordance with a common set of principles, policies, and stakeholder expectations. By placing emphasis on specific program goals, the framework also ensures that program planning across the SAPEP portfolio is data-driven and results-oriented. As stated in the framework, "[a]s SAPEP develops and works towards specific program goals outlined in the Framework document, and as information sources are identified, the accountability framework will be reviewed and refined." Examples of goals and indicators used to measure outcomes under the Framework include:

- completion of college preparatory "a-g" courses;
- readiness for four-year colleges other than UC;
- high school graduation and high school exit exam completion;
- community college transfer readiness;
- matriculation into graduate and professional schools; and
- establishment and maintenance of K-20 partnerships.

The University's third annual report under the new framework, completed in April 2008 and evaluating program results in the 2006-07 academic year, includes benchmarks and outcomes for all programs, including infrastructure programs for which the University serves as steward. Outcome findings for 2006-07 include the following:

- Collectively, the SAPEP programs reached more than 131,000 students at 687 K-12 public schools and 110 community colleges. Most high schools served by SAPEP programs need assistance; the majority are among the lowest-performing in the state, with 73% in the lowest half of Academic Performance Index rankings (API deciles 1-5).
- Program participants graduated from high school better prepared for college. In 2006-07, a higher proportion of Early Academic Outreach Program (EAOP), Mathematics, Engineering, Science Achievement (MESA), and Puente students took the SAT or ACT than did non-participants in the same schools. For example, 66% of EAOP-MESA-Puente students at API 1 and 2 schools took the SAT or ACT compared to 32% of non-participants at those same schools.
- SAPEP programs prepared undergraduates for graduate and professional school work. Approximately 79% of graduate and professional school academic preparation program participants have enrolled in a graduate/professional school. Independent research confirms that UC's postbaccalaureate premedical programs improve applicants' chances of getting into medical school.
- SAPEP programs used state resources efficiently. The cost per student of most of the SAPEP programs is substantially less than the cost per student of comparable federally funded programs. In the aggregate, SAPEP programs leveraged the State and University investment of $31.3 million in SAPEP by raising an additional $54 million in support of K-14 efforts to be expended during the next 3-5 years.

History of the Student Academic Preparation and Educational Partnerships

As early as 1872, then-President Daniel Coit Gilman called on the University to collaborate with schools in enhancing student preparation for a college education so that the "work of the

university shall clearly forward the welfare of the state, of the whole body politic."

The current generation of student academic preparation programs took shape in the 1960s, when the civil rights movement drew attention to issues of access to the University. During this period when there were no fiscal constraints on enrollments, The Regents addressed access issues primarily through aggressive and innovative admissions policies.

In the 1970s, the University began providing underrepresented students academic assistance and information to help them meet university admission standards. The Legislature passed the Meade Bill in 1975, marking the first time that State resources were devoted to increasing the number and persistence of eligible minority students. With it was born the concept of developing a pipeline of academic preparation programs beginning with students in the 7th grade and continuing through their college careers. Academic preparation programs expanded gradually during the 1980s and early 1990s.

In July 1995, The Regents adopted Resolution SP-1, which eliminated consideration of race, ethnicity, and gender in UC admissions. At the same time, the Board called on the President to appoint the Outreach Task Force (OTF) to identify ways in which outreach programs could help to ensure that the University remain accessible to students from educationally disadvantaged backgrounds. Coupled with the passage by California voters of Proposition 209 in Fall 1996, which essentially placed the tenets of SP-1 in the State's Constitution, these events elevated academic preparation programs to become the University's most critical tool for promoting access to the University for educationally disadvantaged students in California.

In 1998-99, in accordance with the recommendations and goals established by the OTF, the State provided $33.5 million and the University $5 million for a total increase of $38.5 million in new funds for Student Academic Preparation and Educational Partnerships (most of which was to be matched on a dollar per dollar basis by K-12 partners). A total of $62.2 million was available in 1998-99 for SAPEP programs. By the end of the decade, nearly 100,000 students were being served and the University had developed robust partnerships with more than 250 low-performing schools.

The five-year outcomes timeframe established by the OTF concluded in 2003-04 and the University transitioned to a new paradigm for effectively supporting educationally disadvantaged students and low-performing schools, one that emphasizes partnership and collaboration as the key ingredients to addressing the crisis of persistent disparities in students' opportunities to learn in California's schools. This paradigm was in large part guided by a Strategic Review Panel (SRP), convened by then-President Atkinson in Fall 2002. The SRP recommended that the University establish closer alliances with other educational segments – especially K-12 – and with business, industry, and philanthropic partners in order to leverage the capacity of all stakeholders in addressing educational disparities in California's schools.

The SAPEP programs are currently in a new five-year cycle (2004-05 to 2008-09) during which changes in program objectives are required, as described in the April 2005 SAPEP Accountability Framework.

California Subject Matter Project

The California Subject Matter Project (CSMP) provides content-focused, standards-aligned professional development for K-12 teachers based on student, teacher, and school identified needs. The CSMP engages K-12 leaders and faculty in the various disciplines from the University of California, California State University (CSU), and

private higher education institutions to develop and deliver intensive institutes for education professionals. The institutes and workshops advance teachers' understanding of subject matter knowledge and support their implementation of research-based instructional strategies to improve student achievement, including approaches to support English learners. During 2007-08, CSMP served over 40,000 teachers and school administrators at 6,000 schools, a third of which were low-performing schools. Statewide, there are 97 discipline-specific sites in 15 regions and 9 statewide offices. In 2007-08, 55 of these sites were hosted by CSU, 33 by UC, and 8 by private higher education institutions.

The CSMP was reauthorized in 2002. In 2003, legislation recognized that seven of the nine projects were operating with content and skill standards approved by the State Board of Education and authorized the continuation of State funding support for those projects, including: reading and literature, writing, mathematics, science, history/social science, world history/international studies, and the arts. The 2003 legislation recognized that the foreign languages and physical education/health projects were waiting for content and skill standards approval from the State Board of Education and authorized maintenance level funding for those programs. (K-12 Physical Education standards were adopted by the State Board of Education in Spring 2005.) The 2003 legislation also authorized the CSMP to integrate instructional strategies for working with English learners into their professional development training. The CSMP was reauthorized again in October 2007 and includes a requirement for a report to the Legislature due on January 1, 2011. The bill extends authorization to January 1, 2013.

An in-depth evaluation of CSMP released by SRI International in December 2005 concludes that teachers consistently rated CSMP professional development more highly than other professional development programs, and that CSMP has been successful in its efforts to serve teachers from low-performing schools and teachers of English learners. Also, the report indicates that there is a positive correlation between student achievement and the number of years students had teachers who participated in CSMP in science, reading, writing, and mathematics.

State funding for the CSMP was reduced from a high of $35.5 million in 2000-01, to $20 million in 2002-03, and to $5 million in 2003-04 where it remained in 2007-08; an additional $4.35 million from the federal No Child Left Behind Act, Title II, Part A program (NCLB) brought total CSMP funding to $9.35 million in 2007-08. In 2007-08 CSMP leveraged approximately an additional $14 million in cash from foundation grants and $1 million in in-kind contributions from district contracts, for a total of $15 million to augment state and federal support.

In 2008-09, California's Department of Education will provide $9.85 million to the CSMP, which will be payable from the Federal Trust Fund and transferred to UC. Of that money, $5.5 million will be provided in one-time carryover funds and will replace the $5 million the State has been providing for CSMP over the past few years. This funding of the CSMP through federal instead of State funds will result in heightened program requirements and delayed availability of funds for some sites. The Legislature directed that this provision of federal funds for the CSMP be a one-time action and that in 2009-10, the State will return to its practice of providing $5 million to the CSMP in State General Funds. As the CSMP remains a vital part of the state's capacity to develop California's teacher workforce, UC will also continue to seek additional funding to provide quality professional development programs for K-12 teachers.

Cooperative Extension

Cooperative Extension, the largest State-funded public service program at UC, provides applied research and educational programs in agriculture, natural resources, and family and consumer sciences; community resource development; and 4-H youth development for Californians. About 225 county-based Cooperative Extension advisors team with over 115 campus-based Cooperative Extension specialists and nearly 650 Agricultural Experiment Station scientists on the UC Berkeley, Davis and Riverside campuses to deliver the latest research-based information, management practices, and technological advances to users across the state. Cooperative Extension advisors, who live and work in local communities, also conduct applied research in the field and adapt new technologies from campus labs to meet local and regional needs. UC Cooperative Extension represents a unique funding and educational partnership involving federal, state, and local entities, and is a key component in the fulfillment of the University's commitment as California's land grant university.

While new technologies and research innovations developed on UC campuses, and delivered to local constituencies via the Cooperative Extension network, make a real difference in addressing and solving some of the most pressing economic, environmental, social and community development challenges facing California, this is not a one-way process. The network of county-based CE advisors is also the locus for identifying new and emerging problems as they occur — locally and regionally. Working with farmers and ranchers, government agencies and regulators, elected officials, environmentalists, consumers and other stakeholders, CE advisors are uniquely situated to anticipate and observe emerging issues and then to share this information with CE campus-based specialists, AES-affiliated scientists, and other experts through UC and CSU.

This continuous interaction involving campus-based scientists and CE specialists, county-based CE advisors, and local constituencies helps to drive research priorities in the UC Division of Agriculture and Natural Resources, and to focus increasingly limited fiscal and human resources on addressing the most critical challenges (and opportunities) facing California. Cooperative Extension reaches many people, effectively and at a personal level, making it one of the University's most successful public service programs.

Providing California agriculture with cutting-edge research and the technology innovations needed to compete successfully in domestic and international markets, while implementing the environmentally-friendly and sustainable agricultural practices that make its growers the envy of the world, remains a high priority for CE and other parts of the Division of Agriculture and Natural Resources. CE advisors and specialists work with farmers and ranchers to solve pest problems, improve irrigation efficiency, reduce chemical use, increase productivity, and introduce new crops and varieties.

Recent examples of this relationship include:

- Detection, control and eradication of invasive and exotic insect and plant pests that damage crops and nursery and ornamental plants (ANR scientists and CE specialists and advisors have helped limit the spread of the glassy-winged sharpshooter, an invasive insect that kills grapevines and threatens California's $2 billion plus grape industry; work is now beginning on identifying and controlling the recently introduced light brown apple moth that is responsible for quarantines on food and nursery crops grown on the Central Coast).
- Introduction of new field, vine and tree crop varieties that give growers a competitive advantage and benefit consumers (80% of strawberries consumed in the U.S. are from UC patented varieties developed by ANR scientists

and CE specialists; CE advisors tested and released new blueberry varieties that helped create a $40 million industry in less than five years, benefiting small and entry-level farms).

- Precision application of water and chemical inputs in crop production, with reduced inputs and positive environmental consequences (CE specialists and advisors have upgraded drip irrigation and fine mist irrigation systems to reduce frequency and amount of water used on many commodities, along with developing methods to apply chemicals, fertilizers and other nutrients with precision via drip systems).
- Improved monitoring and detection methods to improve food safety and security, and consumer confidence from "farm-to-fork" (CE specialists and advisors helped identify a strain of bacteria that caused the *E. coli* contamination in spinach grown in the Salinas Valley, and are conducting research trials to prevent future occurrences).

The Division of Agriculture and Natural Resources and its public service and research programs, however, serve more than agriculture. CE specialists and advisors are working with land managers, environmentalists, and regulators to protect air and water quality, manage forestland and watersheds, and reduce wildfire danger; with youth to build the life skills needed to help them become tomorrow's leaders; with at-risk and low-income families to teach better nutrition and food management skills; with landscape professionals and homeowners to reduce pesticide and water use; and with consumers to help ensure a healthful, nutritious, and affordable food supply.

Here are examples of how Cooperative Extension is making a difference for these stakeholders:

- Research and field testing of new methods to reduce brush build-up, thin trees, and strategically manage public and private forest and wildland holdings to reduce wildfires and wildfire damage to natural resources and homes (CE specialists and advisors have helped implement forest management plans in the Sierra resulting in reduced damage to timber, wildlife and residences; more recently, many homes in southern California survived the devastating October 2007 wildfires thanks to an interactive educational program from the CE San Diego County office showing residents how to manage vegetation around their homes and retrofit non-flammable building materials).
- Nutrition education programs, primarily in urban areas and delivered by CE advisors, teach at-risk and low-income families the nutritional value of fresh fruits and vegetables, money management, food preparation, and basic shopping skills, with the goal of increasing nutritional awareness and promoting healthier lifestyles (Expanded and Nutrition Education Program — EFNEP serves families in 17 counties, including Alameda, Los Angeles, Orange and Sacramento).
- 4-H Youth programs provide core curricula and hands-on educational opportunities for young people (ages 5-19) to build confidence, learn responsibility and develop life skills through traditional 4-H clubs, and through after school programs that focus on building science literacy and other educational and life skills. Over 100,000 youth and 20,000 adult volunteers participate in 4-H programs serving every county.
- Landscape professionals, homeowners, and backyard gardeners receive research-based information and advice on plant selection, reduced pesticide use, water conservation, and implementing "green" practices from UC trained CE Master Gardener volunteers who undergo an intensive educational program and then serve their local communities in return. The UC Master Gardener program is active in 42 counties, including Fresno, Monterey, San Diego and Santa Cruz.

What does the future hold? Cooperative Extension and AES took deep budget cuts earlier this decade that will compromise the ability of the University to continue to address the high priority, most pressing economic, environmental, social and community-related challenges facing California. The budget cuts resulted in the loss of nearly 25% of State funds, a hiring freeze on CE specialist and advisor positions, and extensive lay-offs in administration and support programs. The situation has stabilized and ANR has made a priority of using limited State funds freed up by retirements and attrition to begin hiring CE advisors to fill high priority statewide, regional and local needs. However, at this point in time, there has been no appreciable increase in the CE county advisor ranks, and hiring of new campus-based CE specialists continues to be on hold.

In order for the Division of Agriculture and Natural Resources to build the research and public service capacity to meet emerging and future needs of California agriculture and other key stakeholders, and for the University of California to fully realize the "power and promise of 10," an increased investment of State funds will be required to augment support from federal, county, and private sources.

Charles R. Drew University of Medicine and Science

The Charles Drew University of Medicine and Science (CDU) is a private, nonprofit corporation with its own Board of Trustees. CDU conducts educational and research programs in south central Los Angeles. Since 1973, the State has appropriated funds to the University to support a program of clinical health science education, research, and public service operated by the Los Angeles campus in conjunction with CDU. State General Funds are provided to CDU under two separate contracts, both administered by the University of California. One contract relates to State support for medical instruction, including the Postgraduate Medical Education Program and the joint Drew/UCLA Undergraduate Medical Education Program. The second contract covers a separate public service program operated to provide funding for a prescribed list of health science educational, research, and clinical public service programs in the Watts-Willowbrook community. CDU receives State funds for the training of 24 third-year and 24 fourth-year medical students, and, until recently, for 170 medical residents. State support for the resident training program is provided through the University of California's budget for Medical Education.

In the early part of the decade, CDU experienced difficulties involving the accreditation of its graduate medical education (or residency) programs. In response to these problems, the California Legislature passed Assembly Concurrent Resolution 139 (Dymally, 2003), which requested that the University join with leadership at CDU and Los Angeles County to address accreditation concerns regarding Drew residency training program; the University actively worked with Drew to achieve accreditation of its residency training programs. As a result of these efforts, significant progress was made in addressing and successfully responding to issues involving accreditation.

Undermining this progress, however, were serious concerns involving patient care activities at Los Angeles County's King Drew Medical Center (KDMC), which had served as a primary teaching site for UCLA-Drew medical students and Drew medical residents. Based upon these and related actions, the Los Angeles County Board of Supervisors, which has administrative and fiscal responsibility for the hospital, closed KDMC in 2007. As a result of the closure of the hospital, CDU voluntarily closed its residency programs. Although no residents are currently in training,

CDU is working with the national accreditation council to pursue re-establishment of training programs that meet existing standards and requirements. It is important to note, however, that medical student education through the joint UCLA-Drew program continues at full enrollment. The University of California is committed to working with CDU and to assist in efforts to address current challenges and to support development of proposed new programs in nursing education when programmatically and financially feasible.

With respect to Drew's finances, State budget augmentations and administrative assistance from the UCLA administration have enabled Drew's financial situation to improve. The University has provided strong support to Drew despite the significant reductions to the University's State funded budget during the State's recent budget crisis. While other UC programs have been cut 10%-50% (and in some instances, whole programs have been eliminated), the total cuts to Drew throughout the fiscal crisis were minimal — about $200,000. UCLA-Drew medical students, however, along with every other student in the University, shared in the student fee increases necessary to offset reductions in the State support for all instructional programs.

The State support provided to Drew in the 2008 Budget Act for both the instructional and public service programs is $8.7 million. Of this amount, $500,000 is contingent upon the University continuing to provide $500,000 in matching funds from funds previously available to UC through the State's Medi-Cal Medical Education program, which provided funding from the federal government to help support the cost of providing a medical education. The University also provides cost-of-living adjustments from the General Fund, support from University funds, and medical student professional fee revenue to support the program. The total from all University sources available to Drew for 2008-09 is $11.5 million. CDU is developing a proposal for the State requesting continuation of state support for this transitional period as ongoing efforts are made to re-build and re-establish resident training programs in the community. CDU also is preparing to open a new school of nursing, the Mervyn M. Dymally School of Nursing, in a continuing effort to address the shortage of both nurses and nursing faculty in California.

DISPLAY VIII-2: SAPEP STATE GENERAL FUNDS AND UNIVERSITY FUNDS BUDGETS
(DOLLARS IN MILLIONS)

During the late 1990s, SAPEP budgets received significant augmentations and funding reached its peak in 2000-01. In 2008-09, SAPEP budgets consist of $19.3 million in State funds and $12 million in University funds.

	1997-98	2000-01	2008-09
Direct Student Services Programs			
Community College Transfer Programs	$1,718	$5,295	$3,279
EAOP	4,794	16,094	8,914
Graduate and Professional School Programs	1,893	8,575	2,661
MESA K-12 Programs	4,169	9,355	4,861
MESA Community College Programs	22	1,309	327
Puente High School Programs	-	1,800	1,051
Puente Community College Programs	162	757	450
Student-Initiated Programs	-	-	440
UC Links	-	1,656	694
Statewide Infrastructure Programs			
ASSIST	360	360	429
Community College Articulation	-	-	600
Longer-Term Strategies			
K-20 Regional Intersegmental Alliances (formerly School-University Partnerships)	-	15,591	1,395
Direct Instructional Programs			
Preuss Charter School	-	1,000	1,000
UC College Preparation (online courses)	-	8,400	3,106
Other Programs			
Evaluation	-	1,386	1,180
Other Programs (currently includes Community Partnerships, ArtsBridge, Other)	203	3,887	936
Programs that have been eliminated or consolidated into others, including Test Preparation, Dual Admissions, Gateways, Informational Outreach and Recruitment, Central Valley Programs, UC ACCORD	4,750	9,717	-
Total	**$18,071**	**$85,182**	**$1,323**
General Funds	[$16,996]	[$82,243]	[$19,323]
University Funds	[$1,075]	[$2,939]	[$12,000]

ACADEMIC SUPPORT — LIBRARIES

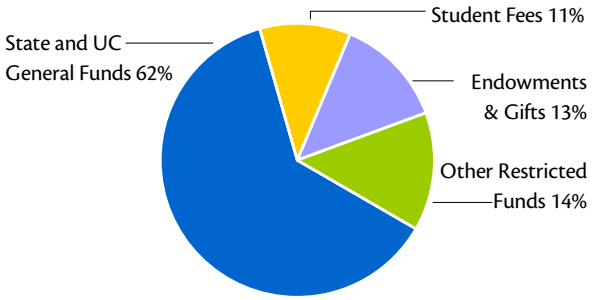
Great universities have great libraries for four reasons. First, information resources are at the foundation of academic excellence, which requires effective and convenient access to the information resources that libraries provide. Second, universities provide significant services to their communities, both to the University itself and to the public. Third, the quality of the library is often seen as a tangible symbol of an institution's commitment to support academic excellence in all its forms. Finally, in an increasingly knowledge-based society, facilitating access to knowledge in all its many forms takes on broader significance and value.

Over the last decade, rapid advances in the development and use of new technologies to create, publish, store, search for, and deliver information have begun to transform libraries, allowing campuses to provide information without having to physically possess and store it, increasing efficiencies in print collections management, cost savings and access to scholarly materials. At the same time, UC's growing digital information repositories are becoming more readily accessible to not only other campuses, but all California residents at the click of a mouse. Finally, the Libraries, as centers of information and knowledge, are both essential components of and significant contributors to the rapidly-changing digital information environment that is indispensable for the University's world-class research, teaching, learning, and service enterprise.

The University of California library system includes over 100 libraries at the ten campuses and two Regional Library Facilities. Systemwide, the library system has the second largest number of volumes held in the United States, over 35 million, surpassed only by the Library of Congress. In 2006, the economic value of the physical collection was valued at $833 million, or 5.4% of UC net capital assets. Well over 3.5 million items were loaned by UC libraries in 2006-07, including 125,000 intercampus library loans and copies.

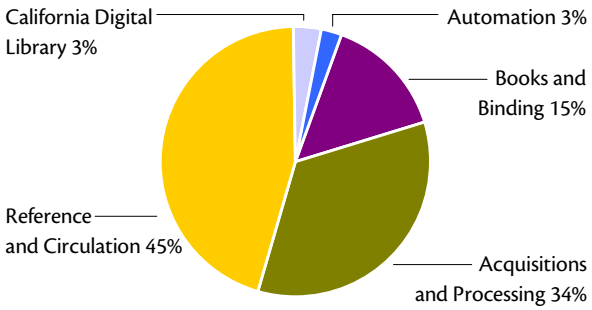
DISPLAY IX-1: 2007-08 LIBRARY EXPENDITURES BY FUND SOURCE

More than three-fourths of the library budget is derived from core funds. Endowment earnings, private gifts, and other sources provide additional support.



DISPLAY IX-2: 2007-08 LIBRARY EXPENDITURES BY PROGRAM AREA

Nearly half of the library budget provides for the purchase and preparation for use of library materials. Other functions include reference and circulation services, library automation, and the California Digital Library.



DISPLAY IX-3: UC LIBRARIES AT A GLANCE

Number of Libraries	100+
Library Holdings	
Total volumes	35,657,796
CDL/Shared print collection	41,432
Received serials	184,517
Manuscript units	211,179
Maps	2,230,770
Microcopy and microfilm	29,918,250
Audio, video, and visual materials	19,191,005
Computer files	100,907
Pamphlets & government documents	3,034,626
Library Loans	
Total library loans	3,624,662
Intercampus loans	125,012
Regional facility loans	134,464

The Library Budget

The total budget of the University of California's over 100 libraries is $281.7 million in 2008-09. More than three-fourths of the library budget is derived from core funds (State support, UC General Funds, and student fee revenue). Significant restricted funding is provided from endowment earnings and private gifts and grants.

Approximately 20% of the library budget supports purchase of print volumes, periodical subscriptions and other material holdings. Another 6% of the budget supports technology and equipment for remote information access and the remaining 74% provides compensation and benefits for more than 2,400 University librarians and support staff.

Library expenditures are divided into five functional categories:

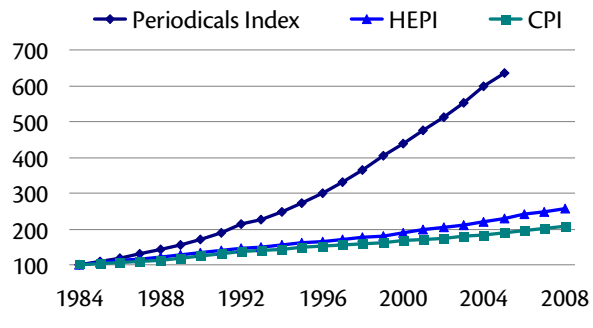
- Purchases of **books and binding** services includes campus expenditures for library materials in all forms.
- **Acquisitions processing** includes all operational activities related to acquiring library materials and preparing them for use.
- **Reference and circulation** includes providing users with information and materials, managing and maintaining materials, and creating and operating digital services that provide library effective access to information in all formats.
- The **California Digital Library** (CDL) supports the development of systemwide digital collections and maintains Calisphere, a compendium of freely accessible online collections for California K-20 education.
- The systemwide **Library Automation** unit provides universitywide bibliographic access to the resources of the University's libraries through the MELVYL online union catalog.

Over the last 25 years, the State has provided substantial support for the University's strategy to leverage library development on a systemwide basis. Over the last decade, however, the State has been unable to provide full funding to meet the impact of persistent price increases for library materials, which consistently outpace the rate of inflation.

The Partnership agreement with former Governor Davis included a commitment to support a 1% annual increase to UC's General Fund base to address shortfalls in four core areas of the budget, including library materials. This provision would have provided about two-thirds of the funding needed to address the historic $33 million library budget shortfall over a four-year period, while the remainder was to be funded through a redirection

DISPLAY IX-4: CONSUMER, HIGHER EDUCATION, AND PERIODICAL PRICE INCREASES

Over the last twenty years, the cost of periodicals has risen more than 300%, while the consumer price index has risen only 100% during the same period.



of resources at the campus level. Between 1998-99 and 2000-01, consistent with provisions of the Partnership, the State provided $8.7 million for library materials and expanded sharing of library collections that began to address the permanent budget shortfall, supplemented by $14 million in one-time funds. In addition, the State provided $7 million to support the development and expansion of the California Digital Library.

However, as a result of the State's ongoing fiscal crisis, the provision for a 1% increase to address core needs, including libraries, was funded only twice, in 1999-2000 and 2000-01. From 2002-03 through 2004-05, permanent funds for core academic support were cut by a total of $81.9 million. As a result, the budgetary gains made between 1998-99 and 2000-01 were largely erased. Under the provisions of the Compact with Governor Schwarzenegger, funds to address the permanent shortfall in the library collections budget and other core needs were scheduled to once again become available beginning in 2008-09; however, the State's fiscal crisis prevented implementation of this provision. The University's 2009-10 budget request includes a return to this provision of the Compact, as discussed in the *Cross-Cutting Issues* chapter.

In order to address the funding shortfalls in the library budget, the University has identified and developed several strategies to reduce costs and promote broader and more efficient use of library resources. As shown in Display IX-5, these include reduced purchasing costs through interlibrary lending, lower capital costs resulting from use of shared off-site facilities, savings from systemwide digital collections development, and shared journal subscriptions.

In spite of the significant efficiencies UC has introduced into its library system, growing evidence suggests that the strength of the University's library collections and services is declining in comparison with peer institutions, with a potential negative impact on the University's ability to recruit and retain faculty and support cutting-edge research programs.

DISPLAY IX-5: ESTIMATED ANNUAL SAVINGS FROM LIBRARY INNOVATIONS AND EFFICIENCIES
(DOLLARS IN MILLIONS)

Resource Sharing	$37.0
Regional Libraries Facilities	$16.0
California Digital Library	$42.0
Shared Print Journal Collection	$3.5
Total	$98.5

The Library Program

Over the last 25 years, the University has employed a systemwide strategy that emphasizes not only campus collaboration and application of new technology to create a multi-campus library system with capabilities for coordination and sharing of resources that are unequalled by the research libraries of comparable university systems, but also innovations in organization and technology resulting in millions in avoided costs. Through their campus libraries, UC faculty and students have enjoyed increasingly faster and more convenient access to a larger universe of information in a wider variety of formats, even in the face of rising costs and constrained budgets. The UC Libraries have developed several programs which both increase access for and decrease cost to the University and Californians:

Bibliographic Services, MELVYL, and a range of journal abstracting and indexing services allow library users at any campus to easily locate and request items held anywhere in the UC system or in rapidly-expanding digital library collections.

Resource Sharing, including overnight courier services, facilities for immediate scanning and electronic delivery of journal articles and other brief items, and interlibrary loan, expedite the borrowing of materials across the system.

Regional Library Facilities in Richmond and Los Angeles, house 11.5 million volumes of

infrequently-used materials of enduring research value deposited by campus libraries.

California Digital Library makes available to faculty, students, and staff from all UC campuses about 24,000 journal titles, 250 reference databases, and over 8,000 finding aids that provide access to unique special collections resources. In addition, the libraries are creating collections of high-quality material that are solely available in digital form accessible not only to UC faculty and students, but also to the general public. These services, by making accessible to the general public the University's information resources, demonstrate that the libraries' investments in digital technologies to improve service for students and staff also have enormous potential to benefit all Californians.

Shared Print Collection allows campuses to purchase single copies of printed material for systemwide use or assemble high-quality collections from existing campus holdings, avoiding unnecessary and unplanned duplication of collections and expenditures.

Mass Digitization. With industry partners including Yahoo, Microsoft, and Google, the University of California began digitally reformatting large numbers materials from the Libraries' print collections, promising to stimulate greater innovation in UC research, expand access for the people of California to the University's rich scholarly information resources, help ensure the preservation of holdings, and enable significant efficiencies in collection management.

ACADEMIC SUPPORT — OTHER

Included in the category Academic Support — Other are various clinical or other support activities that are operated and administered in conjunction with schools and departments. Among the clinical facilities that support health sciences programs are:

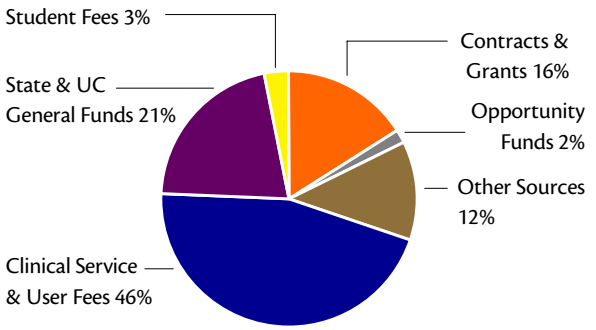
- outpatient clinics operated by the five academic medical centers at Davis, Irvine, Los Angeles, San Diego, and San Francisco;
- two dental clinics (Los Angeles and San Francisco) with off-campus community dental clinics;
- occupational health centers in the north and in the south;
- the veterinary medicine clinical teaching facilities at Davis and in the San Joaquin Valley with a satellite site in San Diego;
- an optometry clinic at Berkeley; and
- two neuropsychiatric institutes (Los Angeles and San Francisco).

In addition, a demonstration school, vivaria, and other activities provide academic support to health sciences and general campus programs. Most of these facilities provide experience for students as well as valuable community services. Their financial support is derived from a combination of State funds, patient income, and other revenue.

The University's clinics are largely self-supporting through patient fees. State funds for Clinical Teaching Support (CTS) are appropriated to the University for the hospitals, neuropsychiatric institutes, and the dental clinics, in recognition of the need to maintain a sufficiently large and diverse patient population for teaching purposes.

DISPLAY X-1: 2007-08 OTHER ACADEMIC SUPPORT EXPENDITURES BY FUND SOURCE

Expenditures totaled $983 million in 2007-08. Clinics and other services are largely self-supporting through patient and other user fees



The funds are generally used to provide financial support for patients who are essential for the teaching program, but who are unable to pay the full cost of their care.

The State's ongoing fiscal crises have resulted in significant budget reductions throughout the University's budget. Academic and Institutional Support budgets were cut by $36.5 million in 2003-04 and another $45.4 million in 2004-05.

Description of Programs

Community Dental Clinics

The on-campus and community dental clinics at Los Angeles and San Francisco serve primarily as teaching laboratories in which dental students and graduate professional students enrolled in the schools of dentistry pursue organized clinical curricula under the supervision of dental school faculty. The community dental clinics provide a spectrum of teaching cases that are generally not

available in the on-campus clinics. The dental clinics give students actual clinical experience and a broader perspective in determining treatment plans, thereby enhancing the required training in general and pediatric dentistry. While providing valuable clinical experience for students, the clinics also serve to meet the dental health needs of thousands of low-income patients, many of whom would not otherwise receive dental care.

Occupational Health Centers

The occupational health centers were created as a joint project of the California Department of Industrial Relations and the University of California to help serve the occupational health needs of California. The major functions of the centers are teaching (the training of occupational physicians and nurses, toxicologists, epidemiologists, and industrial hygienists); public service (providing a referral service for occupational illnesses, promoting health in the workplace, and providing clinical care); and research (stimulating research on the causes, diagnosis, and prevention of occupational illnesses). Each center serves as the focal point for occupational health-related activities on the campuses in its geographical area, thereby strengthening the University's programs of teaching and research in these fields.

Veterinary Clinics

The two veterinary medicine clinical teaching facilities, one at Davis and the other in the San Joaquin Valley, are specialized teaching hospitals and clinics that support the School of Veterinary Medicine. Students enrolled in veterinary medicine are trained at these facilities by faculty of the School of Veterinary Medicine in the clinical aspects of diagnosis, treatment, prevention, and control of diseases in animals.

Optometry Clinic

The optometry clinic at Berkeley serves primarily as a clinical teaching laboratory for the School of Optometry, while providing a complete array of visual health care services for patients. At the clinic, optometry faculty supervise students in the clinical aspects of the prevention, diagnosis, and remediation of visual problems.

In addition, students receive clinical experience at various Bay Area community health centers, which exposes them to a broad range of cases and provides a much-needed public service to the community.

Neuropsychiatric Institutes

The two neuropsychiatric institutes are among the State's principal resources for the education and training of psychiatric residents and other mental health professionals, and for the provision of mental health services. The primary missions of the institutes are to treat patients with diseases of the nervous system and to strive for excellence in the development of approaches to problems associated with mental retardation, psychological disorders, and neurological disorders.

Other Academic Support Programs

The demonstration school at UCLA serves as a teaching laboratory for experimentation, research, and teacher training in the field of education. The schools educate children and contribute to the advancement of education through research efforts and application of results. Vivaria are centralized facilities for the ordering, receiving, and care of all animals essential to instruction and research.

Other activities under Academic Support — Other include support for the arts and specialized physical sciences and engineering projects.

TEACHING HOSPITALS

The Role of the University Teaching Hospitals

The University operates academic medical centers at five campuses. Their primary mission is to support the clinical teaching programs of the five schools of medicine located on the Davis, Irvine, Los Angeles, San Diego, and San Francisco campuses, as well as programs in the University's other health sciences schools.

To a large extent, the core clinical learning experiences in the health sciences take place in the UC medical centers, although changing needs in medical education require the development of more out-of-hospital educational sites and primary care networks. In conjunction with their teaching mission, the medical centers provide a full range of health care services and are sites for testing the application of new information and the development of new diagnostic and therapeutic techniques. With their tripartite mission of teaching, public service, and research, the University of California academic medical centers are a major resource for California and the nation. They provide excellent training for tomorrow's health professionals, educational opportunities for community health professionals who participate in the University's clinical teaching and continuing education programs, and health care services to thousands of patients each day. The patients served generally have more complex medical conditions than patients at many other institutions, which often can only be managed in tertiary referral hospitals such as the University's academic medical center. The complexity of the patient population is reflected in the specialty and regional nature of the care provided. The University's academic medical centers operate in urban areas, and three of the five centers are located in counties that have no county hospital.

DISPLAY XI-1: UC MEDICAL CENTERS AT A GLANCE

The University's five academic medical centers constitute the fifth largest health care system in California.

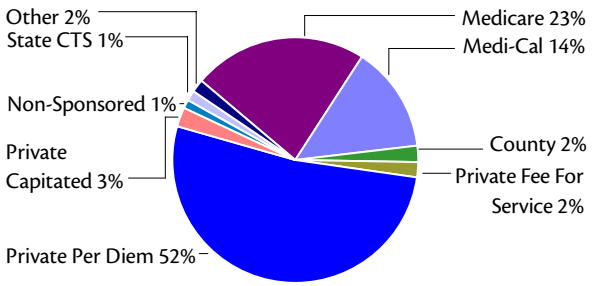
▪ Licensed acute care inpatient bed capacity	3,100
▪ Patient days	868,000
▪ Outpatient Clinic Visits	3,542,000
▪ Emergency Room Visits	262,000

Four of the five Medical Centers currently operate as Level 1 Trauma Centers, capable of providing the highest level of specialty expertise and surgical care to trauma patients twenty-four hours a day, 365 days a year.

In alignment with the mission of advancing medical science and educating health professionals, the UC academic medical centers also play a critical role in maintaining healthcare access to medically vulnerable populations. This includes being major providers of care to Medi-Cal and Medicare eligible patients. At the request of the State, the University assumed operation of three former county hospitals for the Davis, Irvine, and San Diego campuses rather than constructing new teaching hospitals of its own. Three of the medical centers have historically served a disproportionately high percentage of Medi-Cal patients, as well as uninsured patients, whose care may be covered only partially by county indigent care programs. Given these services, changes in Medicaid and Medicare funding are extremely important to the academic medical centers.

DISPLAY XI-2: 2007-08 MEDICAL CENTER REVENUE BY SOURCE

Nearly 40% of medical center revenue comes from federal Medicare and Medi-Cal.



Over the last few decades, the medical centers have faced financial crises brought on by varying fiscal issues requiring different operational and policy solutions. For example, special capital and operating subsidies were provided to the three former county hospitals (UCD, UCI, and UCSD) in the mid-1980s and the State is currently providing lease revenue bonds to help with seismic corrections at the medical centers. The federal and state governments provide support through various programs, including Medicare, which helps pay for medical education, and Medi-Cal, which provides various supplemental payments to help fund care to low-income patients. As with the funding for the medically indigent, these funding sources are vulnerable to changing public policies.

Each of the Medical Centers has agreements with third-party payors that provide for payments at differing amounts. The following is a brief discussion of several types of third-party payors who have such agreements with the Medical Centers.

Medicare

Medicare is a federal governmental health insurance system for eligible elderly and disabled persons. In order to provide Medicare services, health care providers must meet certain "Conditions of Participation" on an on-going basis, as determined by inspections conducted by either the applicable state health department and/or the Joint Commission on the Accreditation of Healthcare Organizations. Each of the Medical Centers is currently certified as a provider for Medicare services and each intends to continue to participate in the Medicare program. The requirements for Medicare certification are subject to change, and, in order to remain qualified for the program, it may be necessary for one or more of the Medical Centers to effect changes from time to time in its facilities, equipment, personnel, billing processes, policies and service.

The University is closely following the changes that the federal Center for Medicare and Medicaid Services (CMS), which oversees Medicare, has proposed for the acute inpatient prospective payment system.

Recently enacted changes include: 1) the shift of the Diagnostic Related Group (DRG) weighted inpatient payment system from a charge-based to a cost-based system; and 2) expanded number of DRGs to better reflect the severity of patients. These changes are designed to ensure that Medicare payments more closely reflect acuity. While these changes may prove beneficial for UC over the long term, they represent significant changes that may reduce payments in the short-term as the system transitions to the new payment arrangement.

In addition, the Medicare physician fee schedule includes reductions imposed by Congress. These changes impact Medicare physician reimbursement and have a downstream impact on commercial physician reimbursement rate structures tied to Medicare rates.

Medicare Graduate Medical Education Payments. Medicare provides teaching hospitals with Graduate Medical Education payments to help pay for the direct medical costs of providing a medical education and for the direct programmatic costs allowable under Medicare,

such as salary and benefits for full-time-equivalent residents.

Medicare indirect medical education payments are provided to teaching hospitals for some of the indirect costs associated with medical education, such as the extra demands placed on the medical center staff as a result of the teaching activity or additional tests and procedures that may be ordered by residents. The combined direct and indirect medical education payments in 2007-08 were $139.2 million, approximately 13% of Medicare reimbursement to the five medical centers.

The Balanced Budget Act. The federal 1997 Balanced Budget Act (BBA) contained significant changes to Medicare. It included a schedule for reducing indirect medical education (IME) payments by approximately 29% over a four-year period. These changes were expected to reduce Medicare spending by $116 billion by 2002. The BBA proposed to reduce the indirect medical education factors from 7.7% in 1997 to 5.5% in 2002. This reduction was predicted to achieve $4.2 billion in savings over five years. Another $3.4 billion in savings over the same period would have been achieved through changes in direct medical education payments. On average, the impact to the UC Medical Centers was estimated to range from $6 million in 1997 to over $20 million in 2002, for a total of $70 million over five years.

The Balanced Budget Refinement Act of 1999 (BBRA) and the Medicare, Medicaid, and State Children's Health Insurance Program Benefits Improvement and Protection Act of 2000 (BIPA) altered the schedule. The BBA of 1997 reduced the IME percentage add-on from 7.7% in FY1997 to 7.0% in FY1998, 6.5% in FY1999, 6.05% in FY2000, and 5.5% in FY2001 and subsequent years. The BBRA of 1999 modified BBA reductions by holding the IME adjustment to 6.5% through FY2000, then lowering the adjustment to 6.25% in FY2001, and finally reducing it to 5.5% in FY2002 and subsequent years. BIPA 2000 further delayed the reduction by holding it to an average of 6.5% in FY2001 and FY2002, before allowing it to fall to 5.5% in FY2003 and thereafter.

The "Medicare Prescription Drug, Improvement and Modernization Act of 2003," signed into law on December 9, 2003, increased the Medicare Indirect Medical Education (IME) adjustment from 5.5 to 6.0% on April 1, 2004; 5.8% in FY2005; and 5.55% in FY2006. In FY2007, IME payments were reduced to 5.35% before being set at 5.5% in FY2008 and beyond.

Medi-Cal

Medicaid is a program of medical assistance, funded jointly by the federal government and the states, for certain needy individuals and their dependents. Under Medicaid, the federal government provides grants to states that have medical assistance programs that are consistent with federal standards.

Medi-Cal is the Medicaid program in California. The State of California selectively contracts with general acute care hospitals to provide inpatient services to Medi-Cal patients. Each of the Medical Centers currently has a Medi-Cal contract. Typically, either party may terminate such contracts on 120 days' notice. The State may also terminate these contracts without notice under certain circumstances (e.g., breach by the provider or failure to remain qualified under the Medi-Cal Program) and is obligated to make contractual payments only to the extent the State legislature appropriates adequate funding.

Medi-Cal payments received by each of the Medical Centers include (i) fee-for-service payments, (ii) disproportionate share payments, which are supplemental payments to hospitals, such as the Medical Centers, that serve a disproportionately large share of Medi-Cal beneficiaries and other low income patients, and (iii) Safety Net Care Pool payments, which are

payments for otherwise uncompensated care provided to certain uninsured patients.

Private Health Plans and Managed Care
Health care, including hospital services, is increasingly paid for by various "managed care" plans that generally use discounts and other economic incentives to reduce or limit the cost and utilization of health care services such as inpatient hospital care. Payments to the Medical Centers from managed care plans typically are lower than those received from traditional indemnity/commercial insurers. (Managed care plans have replaced indemnity insurance as the prime source of nongovernmental payment for hospital services provided at the Medical Centers.) Many managed care plans currently pay providers on a negotiated fee-for-service basis or, for institutional care, on a fixed rate per day basis, which, in each case, is discounted from the typical charges for the care provided and, in some cases, is less than the actual cost of such care. Other managed care plans employ a "capitation" payment method under which hospitals are paid a predetermined periodic rate for each enrollee in the plan who is "assigned" or otherwise directed to receive care at a particular hospital. In a capitation payment system, the hospital assumes a financial risk for the cost and scope of institutional care provided to a plan's enrollees. Participation in managed care plans may maintain or increase the patient base of a Medical Center but could result in lower net income to such Medical Center if the Medical Center is unable to adequately contain its associated costs. Thus, the effect of managed care on each Medical Center's financial condition and on the amount of revenues pledged under the Indenture is difficult to predict and such effect may differ over time.

Medically Uninsured Patients
The Medical Centers all treat a large number of indigent patients who are unable to pay for their medical care. Future economic, demographic or political changes could result in additional increases in the number of such patients cared for by the Medical Centers and increased amounts of unreimbursed costs related to the care of such patients. For example, changes in governmental policy that result in coverage exclusions under local, state and federal health care programs (including Medicare and Medi-Cal) may increase the demand for care by the uninsured at the Medical Centers.

Funding from Counties
Counties in the State of California reimburse hospitals for certain indigent patients covered under the county contract. The Davis, Irvine, and San Diego Medical Centers, former county hospitals, currently have contracts with their respective counties to provide care to the uninsured.

Counties use local tax dollars from their general fund to subsidize health care for the indigent. Some spending is required in order to receive the state matching funds, but many counties appropriate additional discretionary funds to cover the costs of serving the uninsured. However, the downturn in the State's economy also affected local county revenues, creating increased competition among local services for reduced funds, severely constraining the ability of local governments to adequately fund health care services to the uninsured. Although there have been measures enacted to mitigate the impacts, e.g., Tobacco Tax (Proposition 99), these efforts have not provided full relief.

Tobacco Tax Funds
In November 1988, voters approved Proposition 99, the Tobacco Tax and Health Protection Act, which imposed an additional tax on cigarettes and other tobacco products. The proceeds are allocated to six separate accounts for activities designed to meet the stated goals of the proposition, including indigent care, the prevention and cessation of tobacco use, and the

prevention and treatment of tobacco-related diseases. In 1989, the State approved a plan (AB 75) specifying how Proposition 99 funds were to be distributed. Funds from the "Hospital Services and Unallocated Accounts," which are distributed to the counties, are available for payment to public and private hospitals for treatment of patients who cannot afford to pay and for whom payment will not be made through private coverage or by any program funded in whole or in part by the federal government. In 2007-08, the University medical centers received a total of $510,000 in Proposition 99 funds as compared to $14.6 million in 1989-90.

Clinical Teaching Support

State General Funds, called Clinical Teaching Support (CTS), are appropriated to the University in recognition of the need to maintain a sufficiently large and diverse patient population at the medical centers for teaching purposes. These funds are generally used to provide financial support for patients who are essential for the teaching program, but who are unable to pay the full cost of their care.

The 2007-08 budget included nearly $54 million in CTS funds for the five UC medical centers. While CTS funds represent about 1.2% of the total operating revenue for the medical centers, they continue to be important to the quality of the clinical teaching programs and to the financial stability of the medical centers. CTS funds allow the medical centers to serve a diverse pool of patients in order to achieve their teaching mission.

Current Challenges and Issues

The medical centers have taken steps to remain competitive in their respective markets by improving efficiencies, and by expanding their presence in the market through affiliations or the addition of clinical sites. As part of their strategy to capture greater market share and to improve their patient mix, three UC medical centers expanded their patient care by adding different locations. In 1990, Mount Zion Health Systems integrated with UCSF Medical Center; in 1993, UCSD built the Thornton Hospital on the La Jolla campus; and the UCLA Medical Center acquired the Santa Monica Hospital in 1995.

UC medical centers are subject to the same pressures currently confronting most hospitals, including:

- increasing demand for services and capacity constraints;
- a shortage of key personnel, including nurses, lab techs, and radiology techs, resulting in increased use of temporary labor;
- rising costs of pharmaceuticals and medical supplies;
- increasing salary and benefit costs, including re-instatement of employer contributions to UC's retirement system;
- changes to the federal Medicare payments program that affect direct and indirect support for medical education as well as reimbursement for patient care;
- changes to federal Medi-Cal payments for patient care, including aggregate caps on supplemental payments;
- financing seismic retrofit other significant capital needs, such as upgrades necessary for programmatic changes (discussed in the *Seismic Safety and Other Capital Outlay Issues* section of this chapter);
- community preparedness activities, such as establishing procedures for responding to epidemics; and
- compliance with government regulations, such as AB 394, which established licensed nurse-to-patient ratio requirements, effective January 1, 2004.

In spite of these economic issues, the UC medical centers must generate sufficient funds to meet their teaching mission and support their Schools

of Medicine. The financial viability of UC medical centers depends upon payment strategies that recognize the need to maintain an operating margin sufficient to cover debt, provide working capital, purchase state-of-the-art equipment, invest in infrastructure and program expansion, and support medical education and care for the poor.

Additionally, the increased public policy discussions regarding health care reform suggest the potential for change that could significantly impact the academic medical centers. To the extent that healthcare reform results in expanded health care for coverage for uninsured patients currently served by the medical centers, the result could be extremely positive. Conversely, to the extent healthcare reform limits reimbursement payments from public programs, or imposes markets reforms that reduce commercial insurance payments to the medical centers, the result could negatively impact the medical centers.

Health Care Reform

Recent legislative and political activities suggest that health care reform will continue to be a public policy focus in 2008. It is difficult to assess the outcome of these activities. In California, the Governor and certain legislators introduced a comprehensive health care reform proposal, which purportedly would have provided public and private insurance coverage to nearly 4.5 million currently uninsured Californians. In January 2008, the reform proposal failed to pass the California Legislature. Key components of the comprehensive proposal, such as an expansion of health insurance coverage paid for through the levy of various fees, including a tax on hospital revenues, and the emphasis on the role of primary care to lower overall health care expenditures, may be forthcoming from both State and national initiatives. Such initiatives could adversely affect the financial condition of all healthcare providers by reducing government reimbursement or other income, imposing additional uncompensated operating costs, or restricting the provision of new or expanded healthcare services

Other Issues Affecting Teaching Hospitals

Health Insurance and Portability and Accountability Act of 1996

The Health Insurance and Portability and Accountability Act of 1996 (HIPAA) privacy standards empower the patient to request, amend, and obtain certain information. This is of concern to the University because academic medical centers, given the many arenas in which they interact with protected health information, are more likely than their community hospital counterparts to be the subject of an extensive number of patient requests. The cost to comply with a potentially extraordinary number of requests is an unfunded mandate with significant financial consequences. Health care providers, including the UC medical centers, were required to comply with the "Privacy Rule" under HIPAA by April 2003.

Seismic Safety and Other Capital Outlay Issues

SB 1953, the Hospital Seismic Safety Act was enacted in late 1994. This legislation requires general acute-care inpatient hospitals to meet standards designed to prevent collapse in a major earthquake by 2008, even though the hospital may not remain operational after the earthquake. By 2030, hospitals are required to meet higher building standards that would increase the probability of remaining operational following a major earthquake. No provisions for funding were included in the legislation.

UC estimated that compliance with the SB 1953 2008 requirements would cost at least $600 million. A trailer bill to the 2000 State Budget Act authorized the State Public Works Board (SPWB) to issue up to $600 million in State lease revenue bonds for seismic correction of the

University's acute care hospital facilities required by SB 1953. In anticipation of the sale of the $600 million of state lease revenue bonds, The Regents approved the following allocations at their meeting in November 2000: Davis — $120 million, Irvine — $235 million, Los Angeles — $180 million, San Diego — $40 million, and San Francisco — $25 million. Construction for the Tower II, Phases 2 and 3 renovations at the Davis campus and the Westwood/Santa Monica Replacement Hospital facilities at UCLA are complete. Construction is underway for the Irvine Replacement Hospital, the Surgery and Emergency Services Pavilion at the Davis campus, and renovations of Moffitt/Long Hospital facilities at UCSF and the UCSD Hillcrest facility.

In addition, the medical centers have other significant capital needs, such as upgrades necessary for programmatic changes, which cannot be addressed with the State's lease revenue bonds. Therefore, the UC medical centers will be required to use hospital reserves and conduct significant funding campaigns to supplement available funds. The Los Angeles Medical Center received significant funding provided from insurance and from the Federal Emergency Management Agency (FEMA) as a result of damage done by the Northridge earthquake in January 1994. FEMA funds were used to build the new hospital in the Westwood campus and the Santa Monica Medical and Orthopedic Hospital in Santa Monica.

At the September 2008 UC Regents meeting, UCSF Medical Center received approval for project design, budget, and environmental certification for a new hospital complex on the UCSF Mission Bay campus.

STUDENT SERVICES

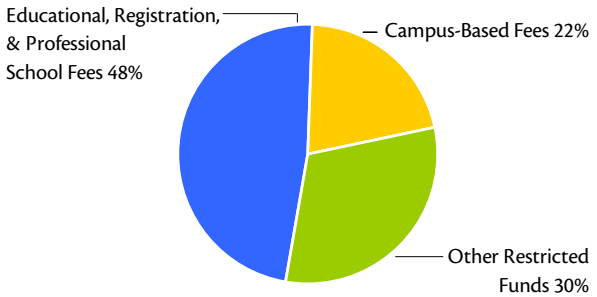
Student services programs and activities contribute to students' intellectual, cultural, and social development outside of the formal instructional process. These services can have a significant influence on a student's academic outcomes and personal development, and can also help create bridges between what students learn in the classroom and how they apply their knowledge and skills on campus and in the broader community. Student services are supported entirely from non-State funds. In 2008-09, the student services budget is $582.1 million, 70% of which is generated from student fee income.

Student services include a variety of programs:

- **Counseling** assists students with scholastic performance, choice of major, personal concerns, assessing interests and aptitudes, or exploring career opportunities.
- **Academic support services** offer individual and group tutorial services in writing, mathematics, study skills, and preparation for graduate and professional school exams.
- A wide range of **cultural and social activities** enhances the quality of life for students and the campus community. Such activities include music, dance and drama events, speakers, and sports activities.
- **Student health services** provide primary care and other services to keep students healthy, including general outpatient medical care, specialty medical care, and health education.
- **Campus admissions and registrar operations** include the processing of applications for admission, enrollment and registration of students, scheduling of courses, maintaining and updating of student academic records, preparing of diplomas, and reporting of statistics.
- **Campus financial aid offices** counsel students about their financing options; determine and monitor the eligibility of students for financial assistance; and develop financial aid packages for students, which include scholarships, fellowships, grants, loans, and work-study jobs from federal, State, UC, and private sources.
- **Services to students with disabilities** include readers for the blind, interpreters for the deaf, note-taker services, mobility assistance, provision of adaptive educational equipment, disability-related counseling, and other services.

DISPLAY XII-1: 2007-08 STUDENT SERVICES EXPENDITURES BY FUND SOURCE

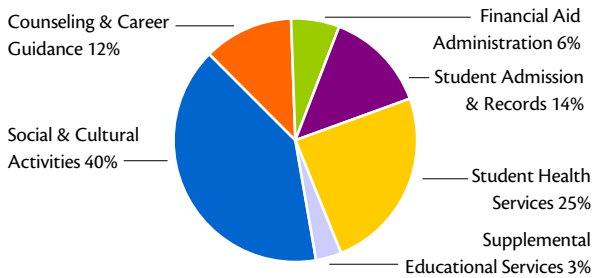
Student fee revenue, including campus-based fees, provides 70% of the funding for student services.



Student services programs, as with most University programs, suffer from underfunding due to lost State support. Student services were adversely affected by severe budget cuts during the early 1990s, when the University was forced to make reductions due to the State's fiscal crisis; those cuts have not been restored. In 2002-03, student services programs were again reduced by a mid-year cut of $6.3 million, which grew to

DISPLAY XII-2: 2007-08 STUDENT SERVICES EXPENDITURES BY PROGRAM CATEGORY

More than 75% of student services expenditures are non-administrative activities in counseling, cultural and social activities, and student health services.



$25.3 million in 2003-04 — equivalent to a 20% reduction in Registration Fee-funded programs. These reductions occurred when student enrollment increased with corresponding growth in demand for student services, including services during summer sessions. As students change and as greater numbers of students enroll at UC campuses, it is becoming increasingly difficult to provide adequate services for students in the face of severely reduced budgets. Achieving adequate support for student services remains a high priority for the University.

Student Mental Health Services

In recent years, student mental health issues have become a growing concern at UC as well as other higher education institutions across the nation. Psychological counseling has become an area of major importance, given the increasing numbers of students arriving annually who are on medications or who otherwise manifest behavioral or other psychological issues that negatively impact their wellness and academic performance or that of their immediate peers.

A comprehensive systemwide review of student mental health issues and the challenges associated with providing these services, which was presented at the September 2006 Regents' meeting, found the following:

- consistent with national trends, UC students are presenting mental health issues with greater frequency and complexity;
- budget constraints limit the capacity of campuses to respond to mental health issues and result in longer student wait times, difficulty retaining staff, and decreased services and programs; and
- increasing demand and declining capacity pose a threat to the learning environment because of the significant adverse impacts on faculty, staff, and fellow students when students are inadequately cared for through the existing mental health system.

Recommendations in the final report include:

- restoring critical mental health services to fully respond to students in distress or at risk;
- implementing and augmenting targeted interventions through education, support, and prevention programs, and restoring staffing levels in those units best poised to assist high-risk students; and
- taking a comprehensive institutional approach to creating healthier learning environments by enhancing the full spectrum of student life services, and by revising administrative policies and academic practices that influence communication and collaboration around these issues.

In response to the urgent priority to enhance mental health services, the University has added $12 million in the last two years by dedicating funding from Registration Fee increases for this purpose. The University will continue to monitor student mental health and the effectiveness and adequacy of new initiatives and programs supported by this new funding.

Other Future Needs

Campuses have identified the following critical needs for additional funds, should the State's fiscal situation permit restoration of recent budget cuts:

- Campuses need more funding in academic support programs, including tutoring in writing, mathematics, and study skills; and preparation for graduate and professional school exams. Additional funds are also needed to help bridge the digital divide between those students who enter the University with high levels of experience in using technology and other students, particularly those from lower income or disadvantaged backgrounds who do not have the skills necessary to take full advantage of the available technology-based resources on campuses.
- The strain on student services budgets has been exacerbated over time by the increasing demand for services to students with disabilities, many of which are very expensive and cause limited student services funds to be spread even more thinly. There has been an increase in the number of students needing interpreting and/or real-time captioning services (costs have increased for interpreters), suffering repetitive stress injuries, and requiring multiple forms of auxiliary services and assistive technology.
- Campuses have not had the resources to invest sufficiently in major student information systems (e.g., student information services; web-based services; and registration, admission, financial aid billing and accounting services) to meet the current and future needs of students and student service organizations. In many cases, core information technology systems are completely outdated.

INSTITUTIONAL SUPPORT

Institutional Support services provide the administrative infrastructure for the University's operations. Grouped into five broad categories, institutional support activities include:

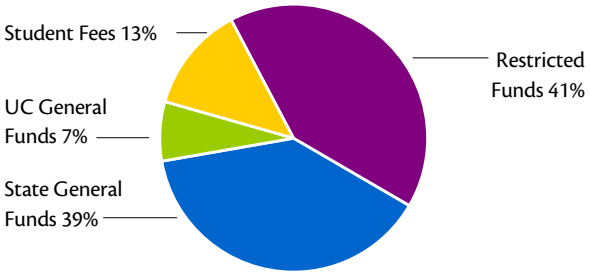
- **Executive Management** — offices of the President, Vice Presidents, Chancellors, and Vice Chancellors; planning and budget offices;
- **Fiscal Operations** — accounting, audit, and contract and grant administration;
- **General Administrative Services** — computer centers, information systems, and personnel;
- **Logistical Services** — purchasing, mail distribution, and police;
- **Community Relations** — development and publications.

State funding for Institutional Support has failed to keep pace with enrollment and other program growth, and general inflation. Moreover, the University faces a growing body of unfunded mandates affecting Institutional Support, including new accounting standards, increased accountability requirements and compliance reporting in areas ranging from environmental health and safety to fair employment practices and compensation issues. To comply with these unfunded mandates, the University has absorbed increased costs necessitated by new data collection processes and costly changes to existing information and reporting systems.

Despite these added expenses, Institutional Support expenditures as a proportion of total University expenditures have actually decreased over the last 30 years. Institutional Support budgets are often one of the first areas of the budget to be reduced in difficult economic times. In response, UC administrative units have implemented new processes and better utilized technology to increase productivity in order to meet increasing workload demands under constrained budget situations.

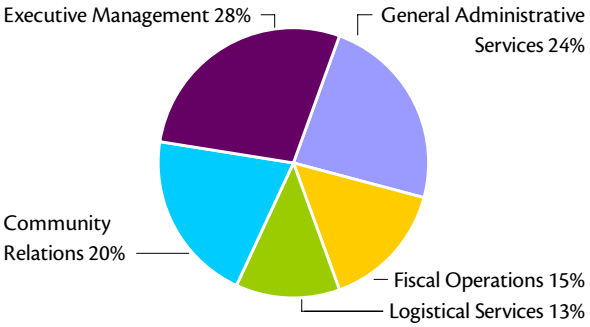
DISPLAY XIII-1: 2007-08 INSTITUTIONAL SUPPORT EXPENDITURES BY FUND SOURCE

Core funds provide about 60% of Institutional Support funding. Significant other sources include private funds, endowment earnings, and indirect cost recovery for contract and grant administration.



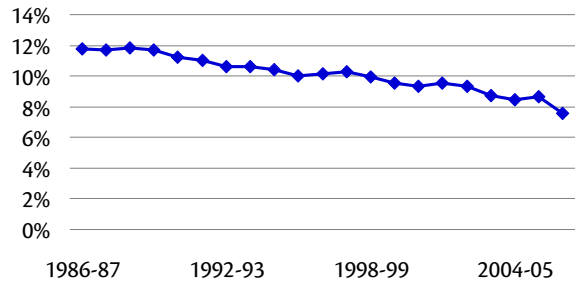
DISPLAY XIII-2: 2007-08 INSTITUTIONAL SUPPORT EXPENDITURES BY CATEGORY

Fiscal operations, administrative and logistical services, and community relations comprise nearly 72% of institutional support expenditures.



DISPLAY XIII-3: INSTITUTIONAL SUPPORT AS A PERCENTAGE OF UNIVERSITY SPENDING

Since 1986 spending on Institutional Support as a percentage of total UC expenditures has dropped steadily, from 11.8% in 1986-87 to 7.6% in 2006-07.



Since the early 1990's, Institutional Support budgets have been deeply impacted as a result of the State's fiscal problems. Due to legislative intent language and the shared desire of the University and the State to protect core academic programs, Institutional Support has often been targeted for additional cuts over the years.

- Between 1995-96 and 1998-99, budget reductions totaled $40 million, consistent with productivity improvements mandated under a four-year Compact between then-Governor Wilson and higher education.
- In 2003-04 and 2004-05, Institutional Support and Academic Support budgets were reduced by a total of $81.9 million.
- For 2008-09, the Legislature directed that $32.3 million be reduced from Institutional Support.

In addition to these base budget cuts, unavoidable costs related to faculty merits, employee health benefits, energy cost increases and maintenance of new space, have often been funded by redirecting resources from Institutional Support. Reduced funding of Institutional Support presents challenges that affect critical University functions.

To address the $32.3 million reduction required in 2008-09, as well as the University's own desire and efforts to streamline and improve the effectiveness of administrative services savings have been generated through the restructuring of UCOP (discussed more fully below), which will transform the office into a smaller, more dynamic and responsive organization. Expenditure reductions from this restructure are estimated to total $30.4 million, as shown in Display XV-4. Another $26.3 million in program budgets will be transferred to campuses to help make UCOP smaller and more focused. Additional savings will be realized through campus administrative efficiencies.

UCOP Restructuring

In April 2007, the University, in consultation from the Monitor Group, began an initiative to improve the administrative efficiency and effectiveness of UCOP and across the UC system. The assessment recommended rebuilding UCOP as an efficient and high performing organization that is both smaller and more focused in mission.

For the 2008-09 fiscal year, the University implemented plans that would reduce spending at UCOP by 20% ($56.7 million) and reduce staff by 23% (404 FTE positions). These actions for 2008-09 provide the foundation for an aggressive restructuring of UCOP. The final size and shape of the new office is still being developed and will be reflected in the proposed 2009-10 UCOP budget, which will be submitted to the Board of Regents in March 2009.

Restructuring of UCOP has included thorough department-by-department functional analyses, providing the basis for a dramatic consolidation of UCOP functions. Consolidations and reorganizations will dramatically reduce the administrative budget and staff FTE and improve effectiveness. These measures include:

- consolidation of fragmented functions within UCOP to reduce redundancy;
- creation of new business models, moving certain functions to third parties;

DISPLAY XIII-4: ESTIMATED REDUCTIONS IN UCOP BUDGET THROUGH RESTRUCTURING

Program reductions	$25.4 million
Relocation of functions to campuses	$26.3 million
Recaptured unexpended funds	$3.5 million
Voluntary employee separation	$1.5 million
Total	$56.7 million

- establishment of new "service centers" for important systemwide functions; and
- elimination or reduction of low priority activities.

UCOP remains critical to the success of the UC system. A well-operated central administration can reduce redundancy across the system and help strategically position the campuses to perform the University's core mission.

Campus Administrative Savings

In January 2008, the University convened the UC Work Group on Administrative Efficiencies, composed of leaders from campuses and UCOP, to explore opportunities for campus and systemwide initiatives that would improve quality and lower the cost of administrative processes, systems and services.

The work group considered in excess of fifty proposals for improving administrative services and increasing efficiency and in July 2008 issued a report on recommendations the University could implement to realize savings. Proposals include:

- **an integrated human resources (HR) strategy** — take action to address succession planning as the "baby boomers" approach retirement and implement incentives to attract and retain the future workforce.
- **improvements in HR processes** — streamline HR functions by implementing an HR Information System (HRIS) for the University and revise processes related to collective bargaining and UC personnel policies.
- **information technology (IT) initiatives** — achieve efficiencies by creating regional data centers that serve multiple campuses, consolidating campus IT services and support, implementing a systemwide data warehouse and fostering campus collaborations on shared IT systems.
- **improvements in financial processes** — streamline functions by adding additional automation to the consolidated billing process and direct deposit, implementing collaborative Requests for Proposals (RFPs) for similar services and developing a contracts and grants billing module.
- **improvements in administrative processes** — increase efficiency by streamlining certain processes, such as the approval process for capital projects, establishing Business Service Centers to consolidate processing and reducing travel costs by utilizing teleconferencing and videoconferencing.
- **opportunities for Legislative relief** — reduce administrative workload by seeking relief from certain legislation that has added workload without adding additional resources (which may require the active support of the Regents).
- **an investment fund strategy** — explore new opportunities for managing assets in ways that generate additional discretionary revenues without generating unacceptable risk and explore new opportunities for leveraging available resources to accelerate investments that result in administrative cost efficiencies.

It should be remembered that since the fiscal crises in the early 1990s and early 2000s, campuses had already moved to streamline processes that have produced significant savings and improvements in efficiency. These efforts have included consolidating campus Web sites into unified campus portals, transforming previously manual processes at central offices to self-service sites on the Web, and collaborations across campuses in implementing a new reporting system. The efforts of this work group aim to expand the achievements in administrative efficiency thus far.

OPERATION AND MAINTENANCE OF PLANT

An essential activity of the University in support of the core mission of instruction, research, and public service is the operation and maintenance of plant (OMP), including facilities, grounds, and infrastructure. The University maintains 120 million gross square feet of space in 5,600 buildings at the ten campuses, five medical centers, and the agricultural field stations. Of this total, over 58 million square feet, or about 50%, is eligible to be maintained with State funds. The OMP budget, totaling $592.2 million in 2008-09, is funded largely from core funds.

The proposed 2009-10 budget plan includes a $9.7 million increase for operation and maintenance of new space and $24.1 million to offset increased purchased utilities costs.

Three basic types of funding are required to operate, maintain, and preserve these buildings and supporting campus infrastructure:

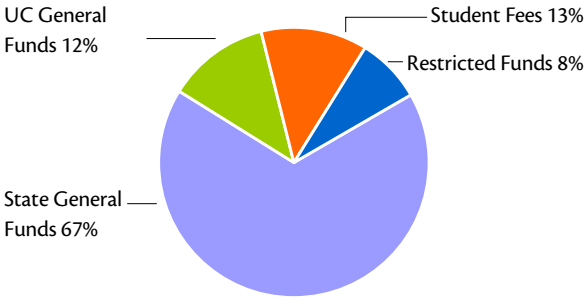
- **annual support for operation and maintenance of plant (OMP)** – includes building maintenance and purchased utilities;
- **capital renewal** – the systematic replacement of building systems and campus infrastructure to extend useful life; and
- **deferred maintenance** – the backlog of unaddressed renewal resulting from chronic underfunding of OMP and the lack of regular and predictable investment in capital renewal.

Years of underfunding of OMP, particularly of basic building maintenance, and the absence of systematic funding of capital renewal have challenged the University's ability to operate and maintain facilities that can effectively support the University's vast array of instructional, research and public service programs.

Compounding this challenge are the higher costs associated with operating and maintaining a vast inventory of aging facilities and an increasing number of energy-intensive laboratories and specialized research facilities. About 60% of the University's state-eligible space is more than 30 years old, with the significant majority of that

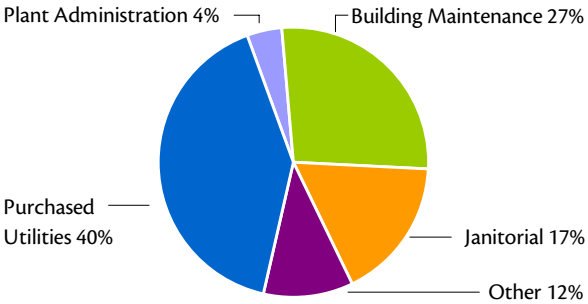
DISPLAY XIV-1: 2007-08 OMP EXPENDITURES BY FUND SOURCE

Two-thirds of OMP expenditures are supported from State General Funds.



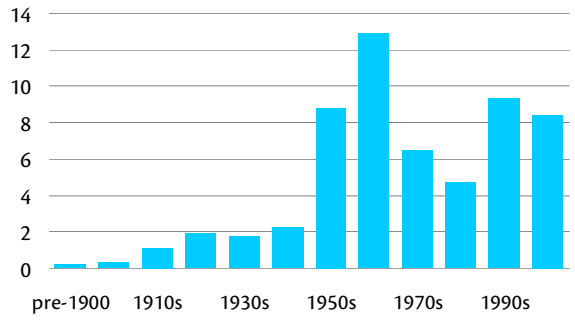
DISPLAY XIV-2: 2007-08 OMP EXPENDITURES BY PROGRAM CATEGORY

Purchased utilities account for 40% of OMP expenditures. Another 27% funds building maintenance.



DISPLAY XIV-3: STATE-MAINTAINED PROGRAM SPACE BY DECADE OF CONSTRUCTION
(GROSS SQUARE FEET IN MILLIONS)

Due to the rapid expansion of the University during the 1950s and 1960s, about 60% of State-eligible space is more than 30 years old.



space built between 1955 and 1975. These aging facilities are more expensive to maintain and, with building systems at or beyond their useful life, a principal driver of the University's escalating capital renewal needs. Moreover, laboratories and specialized research facilities comprise a growing percentage of the University's inventory of state-eligible space, adding further strain on limited OMP funds with higher utility and maintenance costs. Dramatically rising purchased utilities costs and a growing inventory of eligible but unfunded State space in recent years also contribute to the OMP funding shortfall.

Operation and Maintenance of Plant (OMP)

OMP funding supports several facilities service functions, including regular building and grounds maintenance, janitorial services, utilities operations, and purchased utilities. Overall OMP funding of building maintenance and other facilities service functions (excluding purchased utilities) is estimated to fall between 60% and 70% of standard, based on workload standards developed in the early 1980s by the University and the CSU in conjunction with the Department of Finance and the Legislative Analyst's Office.[1]

In recognition of more than two decades of chronic underfunding of the University's OMP needs, the Legislature proposed a funding plan in 1996-97 to begin to eliminate over four years an estimated $60 million funding shortfall for ongoing maintenance services by providing $7.5 million in State funds each year to be matched by an equal amount of University funds. The University provided its share of the funding during the first two years of the plan, for a total of $13.5 million; however, due to the State's fiscal constraints, the State was unable to provide its share. Beginning in 1999-00, the Partnership Agreement with Governor Davis called for annual improvements in OMP funding to be provided as part of a 1% increase to UC's General Fund base, with a goal of funding two-thirds of the OMP funding shortfall over a four-year period. Increases for OMP of $4 million in 1999-2000 and $4.5 million in 2000-01 were provided. However, due to the State's deteriorating fiscal situation, no additional funding to rebuild the OMP base has been provided since 2001-02.

Beginning in 2008-09 and continuing through 2010-11, the Compact with Governor Schwarzenegger calls for an additional 1% adjustment to the base to be used to address critical budgetary shortfalls in State funding for core academic support: instructional equipment,

[1] The OMP workload standards developed 25 years ago established minimum baseline costs for operating and maintaining average buildings at the University of California and the California State University. Since those standards were developed, however, programmatic requirements, particularly in the sciences and engineering, have required that the University construct more facilities to support a complex array of advanced research and technology-oriented programs to meet its evolving teaching and research missions. These facilities, in general, are more energy intensive and contain technology and complex mechanical systems that are more costly to operate and maintain and have higher capital renewal requirements than other University facilities. As the University's building mix shifts, the OMP workload standards developed in the early 1980s grow increasingly obsolete and fail to reflect the University's full OMP requirements.

instructional technology, libraries, and ongoing building maintenance. Due to the budget cuts in 2008-09, this provision of the Compact was not funded. As discussed in the *Cross-Cutting Issues* chapter of this document, this funding is again requested for 2009-10, although the State's continuing fiscal crisis may make it difficult to realize this funding.

OMP Support for New Space ($9.7 Million Increase)

Funding of new space is an essential annual budget need. Unfortunately, as a result of the State's ongoing fiscal crisis, the State has not provided operating and maintenance funding for much of the new space that has come on line over the last seven years. The cumulative shortfall in funding of new space has exacerbated the effects of the long term underfunding of OMP.

In 2002-03, the State provided OMP support for utilities and maintenance costs for only about two-thirds of the core instructional and research space that the University brought on line. For the next two years (2003-04 and 2004-05) the State provided no funding for new space. In the absence of State funding, the University redirected $7 million from existing University resources to address the most critical operation and maintenance needs for the new space coming on line during that period. In 2005-06, $16 million of funding was provided within the approved budget plan to support new space added that year and to partially backfill the unfunded space that had come on line during the preceding two years. Nevertheless, more than $40 million in costs related to new space coming on line over the last seven years remains unfunded in the budget.

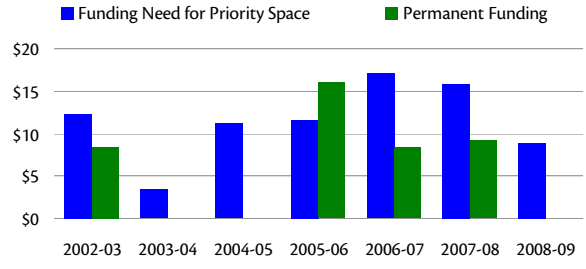
In response to legislative supplemental language requesting the Department of Finance, the Legislative Analyst's Office, UC, and CSU to review the marginal cost of instruction calculation, the marginal cost for 2006-07 was revised to $9,900 per student, reflecting more accurately the cost of hiring new faculty, as well as the need to include a component in the calculation for maintenance of new space. As a result, $8.3 million was provided in 2006-07 for new space coming on line that year. In 2007-08, $9.2 million was provided for new space, based on a marginal cost of $10,500 per student.

With no State funding for OMP again in 2008-09, the University redirected $9.7 million from its own resources to ensure that campuses had basic operating and maintenance funds to open 983,000 gross square feet of new space.

The proposed budget plan for 2009-10 includes $9.7 million in new OMP funding as provided within the Compact. This funding will support operation and maintenance of approximately 961,000 gross square feet of new space coming on line in 2009-10, based on an estimated marginal cost of $11,076. In addition, the University is requesting marginal cost funding for enrollment growth that occurred in 2008-09 but was not funded; if provided, that funding would include $9.7 million for space that came on line in 2008-09. As in recent years, the proposed plan funds facilities housing high priority core instructional and research programs.

DISPLAY XIV-4: ANNUAL NEED AND ACTUAL STATE FUNDING FOR MAINTENANCE OF NEW SPACE
(DOLLARS IN MILLIONS)

During six of the last seven years, the need for funding to maintain new space coming on line has exceeded State funding appropriations.



Purchased Utilities
($24.1 Million Increase)

Rising purchased utilities costs have had a severe impact on the ability of campuses to manage OMP costs. Since 1999-2000, the University's overall expenditures for purchased utilities have increased nearly two thirds, while electricity and natural gas expenditures have jumped 125%.

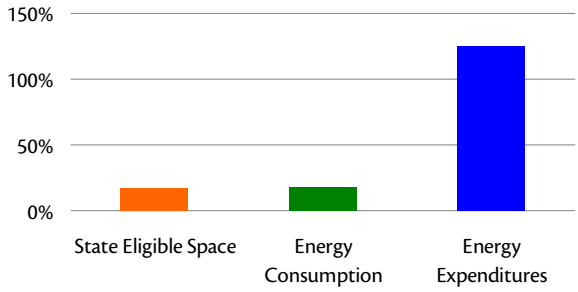
The 2009-10 budget plan includes $24.1 million to cover anticipated increases in electricity and natural gas costs.

The University first experienced steep increases in purchased utility costs in 2000-01 and 2001-02 as a result of the statewide energy crisis. While the UC/Enron "direct access" contract protected several UC campuses from the volatility of statewide electricity rates until March 2002, the University paid increasingly higher rates for natural gas throughout 2000-01 and 2001-02. Recognizing these increased costs, the State provided the University with $75 million in 2000-01 and 2001-02 to help offset the increases in purchased utility costs, with $20 million intended to be a permanent allocation. However, the mid-year budget cuts in 2001-02 eliminated $25 million of the total, including all of the permanent allocation, leaving only $50 million of one-time funds to address the substantial ongoing shortfall in the purchased utility budget.

Since 2001-02, no additional State funding to offset increasing utility costs has been appropriated, even though the University's purchased utilities costs have continued to escalate at an average rate of 8% a year. Purchased utilities costs are affected by both commodity rates and consumption levels. Commodity rates for electricity and natural gas have accounted for most of the steep rise in purchased utilities costs since 1999-00, though consumption has also increased as well, reflecting enrollment-driven growth in new space.

DISPLAY XIV-5: GROWTH IN STATE SPACE, ENERGY CONSUMPTION, AND ENERGY COSTS BETWEEN 1999-2000 AND 2007-08

Between 1999-00 and 2007-08, the University's total maintained space has risen by 17% and energy consumption has risen by 18%. Due to significant increases in prices, total expenditures for electricity and natural gas have risen 125%.

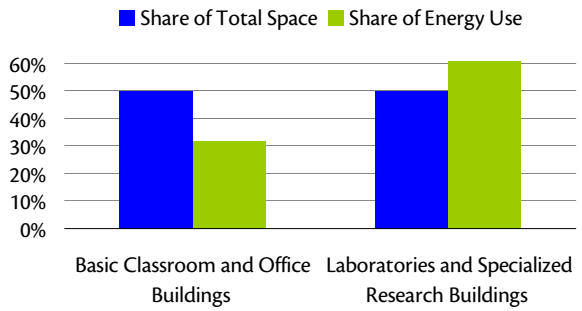


Between 1999-00 and 2007-08, the University's state-eligible space increased by 17%. A disproportionate amount of this new space has been laboratory and other specialized research facilities, which consume on average more than twice as much energy as basic classroom and office buildings. Consequently, these "complex" buildings, which now comprise slightly less than half of the State-eligible space, account for nearly two-thirds of the energy use in the University's state-eligible space, as shown in Display XIV-6. This ratio is likely to increase as the University continues to construct more "complex" laboratories and other facilities supporting programs in engineering and the physical and biological sciences.

Without additional State funding, the University has sought to mitigate the relentless rise of purchased utilities costs by moving aggressively to reduce overall energy consumption. It has continued to implement stringent energy conservation measures, undertaken capital improvements to maximize the efficiency of new buildings, taken measures to purchase energy at the lowest rates possible, and continued to invest in energy efficiency projects, such as installing energy monitoring and metering systems, and

DISPLAY XIV-6: ENERGY USE BY BUILDING TYPE

Laboratories and specialized research facilities consume on average more than 2 times more energy than campus classroom and office buildings.



retrofitting existing facilities to install and upgrade temperature controls, efficient lighting systems, motors, and pumps.

Other large scale conservation projects have included the development of new energy efficient co-generation facilities at the San Francisco, Los Angeles, and San Diego campuses and thermal storage facilities at the Davis, Irvine, Merced, and Riverside campuses. The University's Policy on Sustainable Practices requires that new facilities be designed so that energy use is 20% below existing Title 24 State standards. In addition, the policy sets a systemwide goal of providing 10 megawatts of local renewable power by 2014 and reducing growth-adjusted, nonrenewable energy consumption by 10% or more below 2000 levels by 2014.

Many of the University's energy efficiency projects have been subsidized through partnership programs with the State's investor-owned utilities. Since 2004, the University has implemented $46 million of energy projects, garnering $23.5 million in incentive grants and $5 million in annual energy savings.

The University recently negotiated a much larger, more ambitious partnership program for the next three years to help meets its 2014 energy reduction goals. To support this larger incentive program, the University has developed a Strategic Energy Plan that identifies opportunities for reducing energy use at each of the campuses and medical centers. Based on findings of the Strategic Energy Plan, the University has made a commitment to the State's investor-owned utilities to deliver a specified level of energy savings over the next three years. The University will be seeking Regental approval of $220 million in external financing to ensure that campuses are able to fund project costs not covered by utility incentive awards. UC has also negotiated provisional budget language with the Department of Finance to allow campuses to pledge operating funds for debt service on financed projects in State-supported facilities.

The partnership program is expected to generate over $75 million in incentive payments from the utilities to offset project costs and provide $38 million a year in energy savings. Debt service for both State- and non-State-supported projects completed over the three-year program is expected to be about $22 million a year for the 15-year term of the financing. The program is expected to reduce systemwide electricity consumption by 12%, natural gas consumption by 10%, and greenhouse gas emissions by 14%.

In addition to pursuing energy conservation opportunities, the University has continued efforts to obtain favorable contracts for electricity and natural gas. The University recently executed a one-year "direct-access" electricity supply contract with RBS Sempra Commodities that will extend through August 2009. While Sempra rates are competitive, utility rate structure changes have made direct access contracts less attractive for several campuses; in an effort to manage the increases in purchased utilities costs, some have returned to service from local utilities, such as Pacific, Gas & Electric and Southern California Edison. Based on current projections, electricity prices are expected to increase by 7% to 12% in 2008-09. Increases in the cost of natural gas, now indexed to the escalated price in crude oil, also

affects the cost of electricity as natural gas is the preferred fossil fuel to generate electricity in California and other western states. Most campuses have been managing natural gas costs by developing a portfolio of longer-term natural gas contracts, many with the State pool through the Department of General Services (DGS). DGS has recently revised its forecast, projecting increases of 4% to 8% in natural gas costs in 2008-09.

In the absence of additional State funding, University campuses have been forced to absorb rising purchased utilities costs by cutting other elements of their maintenance budgets — a difficult tradeoff during a time of declining State funding and against the backdrop of historical underfunding of OMP — and by redirecting other program funds. The University will need to continue to reallocate resources to cover shortfalls in purchased utilities funding in 2009-10.

Capital Renewal and Deferred Maintenance

Nearly 40% of the University's state-eligible space was constructed between 1955 and 1975, as shown in Display XIV-3 (page 110). Over the next decade, many of the electrical, HVAC, elevator and conveying, plumbing and other systems in these buildings will reach the end of their useful life. As a result, the University's annual capital renewal needs are expected to increase dramatically over the next decade.

In each of the next five years, the University estimates that its capital renewal needs will be at least $275 million, including approximately $230 million for building systems and $45 million for campus infrastructure. This annual investment is for the normal replacement and renewal of building systems and components. Replacement and renewal cycles may occur several times during the life of a building. It should be emphasized that funding for the systematic replacement of building systems and infrastructure is currently not included in either the operating or capital budgets (though such funding is provided for in the University's five-year plan). Moreover, projected capital renewal costs do not include the backlog of deferred maintenance. Previous estimates put the backlog of high priority deferred maintenance at $800 million. It is believed that the cost to address all high priority projects is significantly higher. Analysis will be conducted in the coming year to refine this estimate. The backlog will continue to grow as long as basic OMP is underfunded, thus shortening the useful life of building systems, and no provision is made for systematic investment in capital renewal.

The estimates of funding needs for capital renewal and deferred maintenance are based on a budget model developed by the University in 1998. The model includes a detailed inventory of all State-maintained facilities at each campus and breaks down infrastructure and buildings into systems that need to be renewed on a predictable basis and have life cycles between 15 and 50 years. These systems include components such as roofs, fire alarm systems, heating and ventilation systems, central plant chillers and underground utility cabling. The model assumes standard life cycles and costs for renewing each system, and from these elements develops a profile for each building and infrastructure system, projecting the renewal date and cost for a 50-year period. The model also estimates the deferred maintenance backlog by tracking those systems that have deteriorated to the point that they currently need major repair, replacement, or renewal to stop accelerating deterioration and reverse increasing maintenance costs to keep the systems operating.

Funding for capital renewal and deferred maintenance has not been stable or predictable since the mid-1990s. Before 1994-95, the State provided the University with nearly $20 million a year in permanent deferred maintenance funding. While not sufficient to meet the University's deferred maintenance needs, it was a reliable and

predictable source of funding. From 1994-95 through 1997-98, annual funding for deferred maintenance ranged from $8 million to $25 million per year, provided through a variety of one-time, bond, and permanent funds.

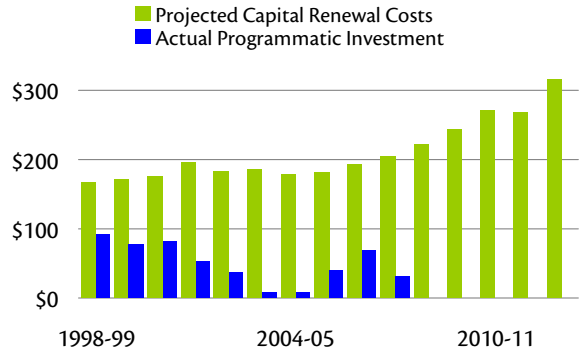
Recognizing the University's growing deferred maintenance backlog and the lack of regular and adequate capital renewal funding, The Regents approved a new funding approach in 1998 for capital renewal and deferred maintenance that provided significant levels of funding for the next several years. Funding was provided by issuing 15-year bonds, to be repaid by using a portion of the increase each year in UC General Funds. Bond funding was provided for four years, supplemented by permanent and one-time General Fund allocations. Between 1998-99 and 2001-02, $289 million was provided on a systemwide basis to address the most urgent deferred maintenance and capital renewal problems.

In 2002-03, the systemwide long-term debt financing program for deferred maintenance and capital renewal was suspended because University funds used to support debt financing had to be redirected to offset State funding cuts. In addition, the final Budget Act for 2002-03 included a one-time cut of $29 million related to core needs, including a cut of the remaining $7.1 million for deferred maintenance that had been available on a permanent basis since 1999-2000. Display XIV-7 provides a summary of annual programmatic funding, including University financing and permanent and one-time State funding, and tracks that funding against projected annual capital renewal needs. This graph does not include the University's deferred maintenance backlog.

In the absence of State and other funding, the University has continued to use its capital outlay program to address some of the highest capital renewal, deferred maintenance, and seismic priorities while still meeting new growth.

DISPLAY XIV-7: PROJECTED NEED AND ACTUAL INVESTMENT IN CAPITAL RENEWAL
(DOLLARS IN MILLIONS)

Programmatic investment in capital renewal and deferred maintenance has declined as the need to invest in renewal of the University's growing inventory of aging facilities increases.



During the six-year period 2002-03 to 2007-08, a number of campuses have pledged a portion of their UC General Fund income to finance long-term debt to fund urgent capital renewal and deferred maintenance work, generating $187 million in bond funding for this purpose over the six-year period. This program is continuing in 2007-08, with additional campuses participating to the extent that it is financially feasible for them to do so. The program is expected to generate another $27 million or more in bond funding for deferred maintenance and capital renewal projects.

The University's deferred maintenance problem cannot be eliminated until ongoing building maintenance is adequately supported and the University secures predictable ongoing funding to invest in capital renewal.

As permitted by the State's fiscal situation, the Compact between the Governor and UC and CSU provides for State one-time funds to address high priority infrastructure needs, such as capital renewal of facilities and deferred maintenance needed to maintain capital assets. As the State's fiscal condition improves, the University intends to seek funding to help meet its substantial ongoing capital renewal needs and manage its large deferred maintenance backlog.

STUDENT FEES

Revenue from student fees is a major source of funding for the University's core educational program, providing approximately $1.84 billion[1] in 2007-08 to supplement State funding and other sources and help support basic operations.

Fees have increased significantly in recent years due to reductions in State funding, the need to fund mandatory cost increases, and initiatives to maintain program quality. As discussed in the *Summary of University Funds* chapter, students now pay approximately 30% of the cost of education. Even with recent fee increases, however, UC fees remain very competitive with those of the University's four public comparison institutions for resident undergraduates and resident graduate academic students. In 2008-09, the University's average fees for California resident undergraduate and graduate students remain well below the average of tuition and fees at the University's comparison institutions.

The University of California Student Fee Policy, established by The Regents in 1994, recognizes that the University's commitment to low fees has been eroded by dramatic declines in State support. The policy also specifically authorizes the use of Educational Fee revenue for general support of the University, including costs related to instruction. In addition, a goal of the policy is to maintain the affordability of a high-quality educational experience at the University for low- and middle-income students without unnecessarily subsidizing high-income students.

DISPLAY XV-1: 2008-09 STUDENT FEE LEVELS

Registration Fee		$864
Educational Fee		
Undergraduate	Residents	$6,262
	Nonresidents	$6,849
Graduate Academic	Residents	$7,122
	Nonresidents	$7,434
Graduate Professional		$6,204 – $7,434
Professional Fees (vary by program)		$3,685 – $22,049
Nonresident Tuition		
Undergraduate		$20,021
Graduate Academic		$14,694
Professional		$12,245
Campus-based Fees		
Undergraduate		$428 - $1,513
Graduate[2]		$1,683 - $3,374

The Higher Education Compact includes Governor Schwarzenegger's proposed long-term student fee policy that calls for increases in student fees to be based on the annual increase in California per capita personal income. However, the Compact provides that fiscal circumstances in some years will require greater increases to provide sufficient funding for programs and to preserve quality. In those years, UC may decide, after consultation with the Governor, to increase fees up to 10%. This fee policy is contingent on State resources being provided for the basic budget at the level called for in the Compact and on no further erosion of the University's base budget. It assumes that revenue from student fees will remain with UC, rather than being used as an offset to reductions in State support.

[1] In addition to mandatory fees and professional school fees, this figure includes $250 million in nonresident tuition, but excludes $282 million in campus-based fees.

[2] Campus-based fee levels for graduate students include a waivable health insurance fee.

Students at the University of California pay five different types of fees[3]:

- The **Educational Fee,** a mandatory systemwide fee assessed to all registered students providing general support for the University's budget;
- The **Registration Fee**, another mandatory systemwide fee assessed to all registered students that supports services which benefit students;
- **Professional School Fees**, paid by students enrolled in a number of professional degree programs to support instruction and specifically to sustain and enhance program quality;
- **Nonresident Tuition,** charged to nonresident students in addition to mandatory fees and any applicable professional school fees, in lieu of State support for the cost of education; and
- **Campus-Based Fees**, also called Miscellaneous Fees, which vary across campuses and by student level and fund a variety of student-related expenses not supported by other fees.

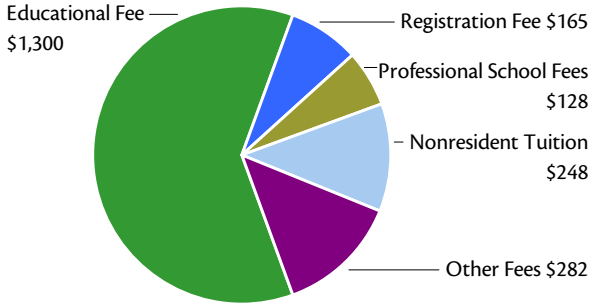
Amidst years of fee increases, the University's ongoing commitment of a portion of student fee revenue to financial aid, discussed in the *Student Financial Aid* chapter of this document, has helped maintain the affordability of a UC education to date. At the undergraduate level, 28% of all fee revenue is used for student financial aid to ensure that the University remains financially accessible so that costs are not a barrier for academically eligible students in seeking and obtaining a UC degree.

For 2008-09, The Regents implemented a 7% increase in the Educational Fee and a 10% increase in the Registration Fee. A portion of the revenue is being used to augment the University's student aid programs: 33% of new fee revenue from undergraduate and professional degree students and 50% of new fee revenue from graduate academic students is being set aside for financial aid purposes. Revenue from the increase in the Educational Fee is being used to help fund the University's budget. One-half of the revenue from the increase in the Registration Fee is being used to continue a program to enhance campus mental health services, and the remainder is being used to cover cost increases to Registration Fee-funded programs. In 2008-09, increases in professional school fees varied by program and campus from 5% to 20%. Nonresident tuition for undergraduates increased by 5% in 2008-09, while nonresident tuition for graduate academic and professional students did not increase.

Aside from a proposed increase in undergraduate nonresident tuition, for 2009-10 the University is making no proposal to increase mandatory systemwide student fees (Educational and Registration Fees) or professional school fees at this time. Instead, similar to last year, the University proposes to delay action on student fees until more is known in January 2009, after the Governor's proposed budget for 2009-10 is released. The University's budget plan proposed for 2009-10 includes a request for additional General Funds to avoid increases in student fees (equivalent to 9.4% for mandatory student fees and 5-24% for professional school fees). The State is advised that absent these additional funds, student fee increases will be required.

DISPLAY XV-2: 2007-08 STUDENT FEE REVENUE
(DOLLARS IN MILLIONS)

In 2007-08, student fees generated $1.84 billion to support the University's operating budget as well as student financial aid. Other fees totaling $282 million support certain specific programs outside the core budget.



[3] Although counted as students, medical and other health sciences residents are not charged student fees.

Types of Fees

Educational Fee

The Educational Fee, first established in 1970 and charged to all registered students, provides general support for the University's operating budget, including costs related to general campus and health sciences faculty and instructional support; libraries and other academic support; student services; institutional support; and operation and maintenance of plant. Educational Fee revenue is also used to provide student financial support. In 2007-08, the Educational Fee generated $1.3 billion for University operations.

The Regents set Educational Fee levels annually as described in the 1994 Student Fee Policy.[4] The policy directs the President of the University to recommend the annual Education Fee levels to The Regents after taking the following factors into consideration: 1) the resources necessary to maintain access under the Master Plan, to sustain academic quality, and to achieve the University's overall mission; 2) the full cost of attending the University; 3) the amount of support available from different sources to assist needy students; 4) overall State General Fund support for the University; and 5) the full cost of attendance at comparable public institutions.

Educational Fee levels vary by student level, residency, and program. In 2008-09, these fee levels range from $6,204 to $7,434. In 2007-08, The Regents implemented a $60 surcharge on the Educational Fee to pay costs associated with the injunction and judgment of the *Kashmiri v. Regents* lawsuit (discussed later in this chapter).

Registration Fee

Also charged to all registered students, revenue from the Registration Fee funds services that are necessary to students, but not part of the University's programs of instruction, research, or public service. In 2007-08, the Registration Fee generated $165 million. The majority of these funds are spent on student services, including counseling and career guidance, cultural and social activities, and student health services. In addition, some Registration Fee revenue is used for capital improvements that provide extracurricular benefits for students. As with the Educational Fee, The Regents set Registration Fee levels annually in accordance with the 1994 policy. In 2008-09, the Registration Fee is $864 for all students.

Chancellors are authorized to determine specific allocations of Registration Fee income on their campuses, within applicable University policies and guidelines. Each campus has a Registration Fee Committee, which includes a majority of student members, to advise the Chancellor on pertinent issues. As described in the *Student Services* chapter of this document, for the last two years, the University has increased the Registration Fee level in part to provide additional funds for expansion of student mental health services.

Professional School Fees

Professional school fees were established in 1994-95[5] to allow UC's professional schools to offset reductions in State support and maintain program quality. More recently, the Compact calls for the University to develop a long-term plan for increasing professional school fees, and states that revenue from these fees will remain with the University and not be used to offset reductions in State support. At present, these fees are charged to students enrolled in graduate professional degree programs in business; dentistry; law; international relations and Pacific studies; medicine; nursing; optometry; pharmacy; public health; public policy;

[4] The University of California Student Fee Policy is available at http://www.universityofcalifornia.edu/regents/policies/6069.html.

[5] The Regents' Policy on Fees for Selected Professional School Students is available at http://www.universityofcalifornia.edu/regents/policies/6088.html.

theater, film and television; and veterinary medicine. Charged in addition to mandatory student fees and, if applicable, nonresident tuition, professional school fees range from $3,685 to $22,049 depending on the program, campus, and student residency. In 2007-08, these fees generated $128 million.

Historically many of UC's professional schools have held a place of prominence in the nation, promising a top-quality education for a reasonable price. Budget cuts have devastated the resources available to the professional schools to such a degree that the schools are extremely concerned about their ability to recruit and retain excellent faculty, provide an outstanding curriculum, and attract high-caliber students. New revenue generated from professional school fee increases is one of the ways to regain the excellence threatened by budget cuts. Fee increases since 2005-06 have provided new revenue for the schools to cover salaries and other necessary costs. However, the new revenue has not been sufficient to restore lost State support. As a result, professional school budgets remain severely strained and the University's professional schools are in danger of losing prominence among their peers.

The Regents' Policy on Fees for Selected Professional School Students specifies that professional school fees will be approved by The Regents in the context of multi-year plans that advance the mission and academic plans of each professional school program. Multi-year planning with regard to fees for professional degree students is a vital and fiscally prudent strategy that:

- provides a more stable planning environment for the professional schools;
- allows the schools to consider and act on long-term investment needs such as new faculty positions, facility needs, and financial aid program development;
- provides each program with the opportunity to comprehensively analyze their program needs, the costs to address those needs, and the revenue available to support those needs;
- allows each program to examine its competitiveness with other institutions on a number of measures, including the "sticker price" of attendance, its financial aid programs and its impact on the net cost to students, and other indicators of national competitiveness of the program; and
- helps inform decision making by clearly identifying each degree program's goals and objectives and the steps that are needed to achieve them.

The Regents' policy also includes specific conditions for ensuring that the University's commitment to access, affordability, diversity, and students' public service career decisions are not adversely affected by increases in fees for professional degree students.

Professional school fee increases for 2008-09 varied by program but ranged between 5% and 20%. The majority of degree programs determined that within their current marketplace, annual increases in the professional degree fees of 7% were sufficient to meet their program goals and objectives; selected law and business programs were at the higher end of the range. These fee increases were approved in the context of the programs' multi-year plans and will enable programs to act on investment needs such as new faculty positions, facility needs, and financial aid program development.

Nonresident Tuition

In addition to all other applicable fees, University of California students who do not qualify as California residents are required to pay nonresident tuition, consistent with the State's policy not to provide support for nonresident students. Enrollment of more than 17,000 nonresident students, including both international students and domestic students from other states,

STATE LAW REGARDING NONRESIDENT TUITION

Section 68052 of the California Education Code directs California's public institutions of higher education to address the following when establishing nonresident student tuition levels:

- Nonresident tuition methodologies used by California's public postsecondary education segments should consider 1) the total nonresident charges imposed by each of their public comparison institutions, and 2) the full average cost of instruction;
- Nonresident tuition plus required fees should not fall below the marginal cost of instruction;
- Increases in the level of nonresident tuition should be gradual, moderate, and predictable; and
- In the event that State revenues and expenditures are substantially imbalanced due to factors unforeseen by the Governor and the Legislature, nonresident tuition will not be subject to the law's provisions.

generated nearly $250 million in 2007-08. Nonresident tuition levels in 2008-09 vary by student level and program: $20,021 for undergraduate students, $14,694 for graduate students, and $12,245 for professional students. Doctoral students advanced to candidacy are not charged nonresident tuition while enrolled within normative time. The California Education Code provides direction to the University about increasing nonresident tuition levels.

Prior to 2007-08, nonresident tuition revenue was collected centrally and distributed to the campuses along with other General Fund revenue to cover costs associated with faculty and staff salaries, other operating costs, and financial aid. As of 2007-08, each campus retains the nonresident tuition revenue that is generated at that campus. Campuses now have the flexibility to determine how the nonresident tuition revenue will be spent, taking into account their overall expenditure needs. It is anticipated that campuses will use a significant portion of the revenue for graduate student support.

A significant concern associated with nonresident tuition is the University's ability to attract high quality nonresident undergraduate and graduate students. In recent years the University has fallen short of its goals for nonresident enrollment and tuition revenue. Moreover, concern over the inadequacy of graduate student support has been the underlying reason that the University has not increased nonresident tuition levels for graduate academic and professional students since 2004-05. The University annually monitors applications for admission and enrollment of undergraduate and graduate nonresident students. Future increases in nonresident tuition should be carefully considered, given the potential impact on nonresident enrollment.

Regarding nonresident tuition for academic graduate students, the faculty has expressed interest in eliminating this charge. State policy constrains the extent to which the University can reduce nonresident tuition levels, however, and budgetary issues must be considered as well. Nevertheless, the University continues to take steps to help address the impact of nonresident tuition on its ability to remain competitive. By forgoing increases in graduate nonresident tuition over the past few years, the University has effectively reduced the real cost of graduate support for nonresident tuition. Continuing to do so will further ease the pressure on those fund sources that currently cover nonresident tuition and will maximize the impact of new graduate student support funding on improving the competitiveness of the University's graduate student support programs. In addition, funding for graduate student support has increased significantly in recent years and is being used to help address the issues raised by faculty regarding nonresident tuition.

Campus-Based Fees

Campus-based fees, also called Miscellaneous Fees, cover a variety of student-related expenses that are not supported by the Educational Fee or the University Registration Fee. The first campus-based fee was established on the Berkeley campus

in 1900. Campus-based fees help fund such programs as student government and the construction, renovation, and repair of sports and recreational facilities, as well as items such as transit and course materials costs.[6] The number and dollar amounts of campus-based fees vary from campus to campus and between graduate and undergraduate students. Campus-based fees for 2008-09 range from $428 at Los Angeles (undergraduates) to $3,374 at Santa Cruz (graduates). Generally, students must vote to establish or increase campus-based fees, but these fees can also be set by Chancellors (with the concurrence of the Office of the President) if a fee is necessary to help ensure the safety of students, e.g., to pay for the seismic retrofit of a building funded by student fees. In recent years, a return-to-aid component has been built into newly established campus-based fees. Displays XV-7 through XV-10 (on pages 125-28) show average campus-based fee levels over time by type and level of student.

DISPLAY XV-3: 2008-09 UNIVERSITY OF CALIFORNIA AND PUBLIC COMPARISON INSTITUTION FEES

The University's average fees for 2008-09 for California resident undergraduate and graduate academic students remain well below the average of tuition and fees at the University's four public comparison institutions. Even with recent fee increases, UC fees remain very competitive for resident undergraduates and resident graduate academic students.

	Undergraduate		Graduate	
	Resident	Nonresident	Resident	Nonresident
Public Comparison Institutions				
Buffalo	$6,285	$12,545	$8,341	$12,361
Illinois	$12,106	$25,890	$11,988	$24,742
Michigan	$11,738	$34,230	$16,541	$33,255
Virginia	$9,490	$29,790	$12,140	$22,140
Average	$9,905	$25,614	$12,253	$23,125
UC	**$8,027**	**$28,635**	**$10,353**	**$25,359**

Note: Comparison institution figures include tuition and required fees as reported by the Association of American Universities Data Exchange (AAUDE). UC figures include mandatory systemwide fees and campus-based fees, nonresident tuition for nonresident students, and a waivable health insurance fee for UC graduate students.

UC and Comparison Institution Fees

As an overall measure of affordability and the University's place in the market, the University annually monitors fee levels relative to those charged by its four public comparison institutions. As discussed in the *Student Financial Aid* chapter of this document, the University also monitors the net cost of attendance — i.e., total charges for fees and living expenses, net of financial aid — compared to net costs at these public institutions. The net cost of attendance provides a more complete representation of the actual financial impact of student fee levels and other costs. In addition, to facilitate recruitment of high-quality academic doctoral students, the University conducts surveys assessing the competitiveness of its graduate student financial aid offers relative to those of other doctoral institutions.

Despite the significant fee increases implemented in the early part of this decade, in 2008-09, UC's average fees for *resident undergraduate* students (excluding health insurance fees) are $1,878 less than the average fees charged at the University's four public comparison institutions, as shown in Display XV-3. Currently, only one of the four public comparison institutions charges resident undergraduate students lower fees than UC. Similarly, University fees for *resident graduate* academic students continue to be below (by $1,900) the average fees charged at the University's four public comparison institutions; only one of these institutions charges lower fees to graduate academic students than UC.

However, the comparisons for *nonresident* students are a different matter. In the past, the University's fees were among the lowest charges, for both nonresident undergraduate and graduate

[6] The University Policy on Compulsory Campus-Based Student Fees is available at http://www.ucop.edu/ucophome/coordrev/ucpolicies/aos/uc80.html.

academic students, of any of the University's public salary comparison institutions. With the increases in mandatory systemwide fees and nonresident tuition approved by The Regents for 2005-06, for the first time since the mid-1980s the University's fees for nonresident undergraduate and graduate students exceeded the average fees for these comparison institutions. Currently, UC's fees are higher than the average fees for the comparators by $3,021 for nonresident undergraduates and by $2,234 for nonresident graduate academic students. Even so, the University's tuition and fees for nonresident undergraduate students continue to represent the mid-point among UC's public salary comparison institutions. Making the University more affordable for nonresident graduate academic students is a serious concern, as mentioned above and discussed further in the *Student Financial Aid* chapter of this document.

Professional School Fees. For 2008-09, UC fees for most resident professional students fall within the range of the tuition and fees charged by comparable public institutions, as shown in Display XV-12 at the end of this chapter. UC professional degree programs recruit students nationally and internationally as well as from within California, and they compete with private as well as public institutions of comparable quality. These factors are among those taken into consideration by the programs as they develop their three-year plans for professional degree fees.

History of Student Fees

Student fees were first charged by the University in the 1920s with the establishment of an incidental fee. In 1960, the California Master Plan for Higher Education affirmed that UC should remain tuition-free, but allowed that fees could be collected for costs not related to instruction. In the late 1960s, the incidental fee was renamed the Registration Fee, and fee revenue was used to support student services and financial aid. The Educational Fee was established in 1970-71 and was originally intended to fund capital outlay. In 1994, the University of California Student Fee Policy established that the Educational Fee may be used for general support of the University's operating budget.

DISPLAY XV-4: RECENT HISTORY OF UNIVERSITY OF CALIFORNIA STUDENT FEES

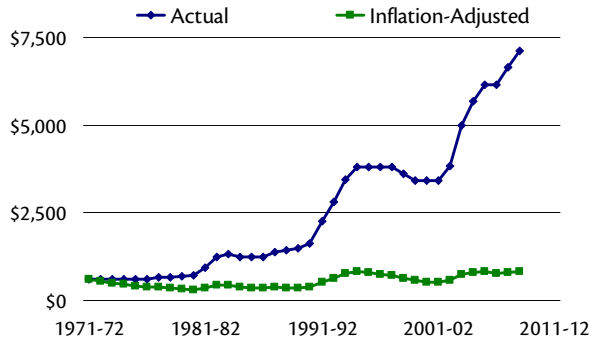
1990-91 – 1994-95	Fees increase by 157% over a five-year period in response to significant State funding reductions.
1994-95	The Regents approve a new Student Fee Policy, the Fee Policy for Selected Professional School Students, and the Financial Aid Policy.
1995-96 – 2001-02	Due to strong support from the State, mandatory systemwide fee levels for resident students do not increase for seven consecutive years.
2002-03 – 2005-06	A series of fee increases over four years results from the State's deteriorating fiscal situation. Fees double for resident undergraduate and graduate academic students. Increases for nonresident and professional students are even higher.
2006-07	The State provides supplementary funding to avoid student fee increases.
2007-08 – 2008-09	Mandatory systemwide fees charged to undergraduate and graduate resident students increase by about 8% in 2007-08 and 7.4% in 2008-09. Professional school fees increase by 7-12% in 2007-08 and 5-20% in 2008-09, depending on the program.

Over time, UC's student fee levels have closely tracked the State's economy. In good years, such as during the mid-1980s and the late 1990s, fees were held steady or were reduced. In years of fiscal crisis — during the early 1990s and again during the early 2000s — student fees increased dramatically in response to significant reductions in State funding, as described in Display XV-4.[7]

[7] A detailed timeline of the evolution of UC student fee policies and practices can be found at http://www.ucop.edu/budget.

DISPLAY XV-5: RESIDENT UNDERGRADUATE STUDENT FEES IN REAL AND CONSTANT DOLLARS

Over time, UC's undergraduate student fee levels have closely tracked the State's economy. In good years, fees were held steady or were reduced. In years of fiscal crisis, student fees increased dramatically. When adjusted to reflect 1971-72 constant dollars, 2008-09 undergraduate fees are slightly less than they were in 1994-95.



As shown in Display XV-5, despite fee increases over the last 35 years, fees have not increased significantly when measured in constant dollars.

Kashmiri and Luquetta Lawsuits

As noted in the Educational Fee section above, a recent lawsuit against the University, *Kashmiri v. Regents*, has impacted Educational Fee levels for all students. The lawsuit was filed against the University in 2003 by students who had been enrolled in UC's professional degree programs prior to December 16, 2002. The class action suit alleged that the increases in the Fee for Selected Professional School Students that were approved by The Regents for Spring 2003 (and for all subsequent years) violated a contract between the University and students that the professional school fee would not be increased while they were enrolled. Subsequently, the trial court entered an order granting a preliminary injunction against the University, prohibiting the University from collecting the professional school fee increases approved by The Regents for 2004-05 and 2005-06 from students affected by the lawsuit. At the end of 2006-07, the University had lost approximately $20 million in uncollected professional school fee revenue. To address this revenue loss, The Regents approved a multi-year plan of increases in the Educational Fee for professional school students. At the end of 2006-07, the temporary Educational Fee increase for professional school students ceased and was replaced by a temporary Educational Fee surcharge of $60 that is being assessed to all students until the shortfall in revenue is fully replaced. At the time this plan was approved, The Regents determined that, should the University be exposed to damages as a result of the litigation, the President would propose a plan to The Regents to address any liability incurred.

In March 2006, the trial court entered judgment in favor of plaintiffs in the amount of $33.8 million, and the judgment was made final in January 2008 after the University unsuccessfully appealed the judgment and filed a Petition for Review. Issues to be resolved in the case include the formula by which refunds will be provided to class members and whether the University will be liable, in addition to the judgment, for the plaintiffs' attorneys' fees. At their July 2008 meeting, The Regents approved an item calling for continuation of the $60 Educational Fee surcharge until the judgment is also fully paid, estimated to occur in five to six years.

A second lawsuit, *Luquetta v. Regents,* was filed in 2005 and seeks to extend the professional fee claim to professional students who enrolled during the 2003-04 academic year. Unlike in *Kashmiri*, the trial court has repeatedly refused the plaintiffs' request that it enjoin increases in the professional fee; however, the plaintiffs' claim that the University must pay damages to compensate them for excess fees they paid remains pending. The University has defenses to the claims in *Luquetta* that were not available in *Kashmiri*. The financial impact of this lawsuit, should the trial court rule in favor of the plaintiffs, is uncertain but would exceed $20 million.

DISPLAY XV-6: UC MANDATORY STUDENT FEE LEVELS

		Educational Fee					
	Registration Fee	Undergraduate Resident	Undergraduate Nonresident	Graduate Academic Resident	Graduate Academic Nonresident	Graduate Professional[1]	Surcharge[2]
1970-71	$300	$150	$150	$180	$180	$180	
1971-72	300	$300	300	360	360	360	
1972-73	300	300	300	360	360	360	
1973-74	300	300	300	360	360	360	
1974-75	300	300	300	360	360	360	
1975-76	300	300	300	360	360	360	
1976-77	300	300	300	360	360	360	
1977-78	357	300	300	360	360	360	
1978-79	371	300	300	360	360	360	
1979-80	385	300	300	360	360	360	
1980-81	419	300	300	360	360	360	
1981-82	463	475	475	535	535	535	
1982-83	510	725	725	785	785	785	
1983-84	523	792	792	852	852	852	
1984-85	523	722	722	782	782	782	
1985-86	523	722	722	782	782	782	
1986-87	523	722	722	782	782	782	
1987-88	570	804	804	804	804	804	
1988-89	594	840	840	840	840	840	
1989-90	612	864	864	864	864	864	
1990-91	673	951	951	951	951	951	
1991-92	693	1,581	1,581	1,581	1,581	1,581	
1992-93	693	2,131	2,131	2,131	2,131	2,131	
1993-94	693	2,761	2,761	2,761	2,761	2,761	
1994-95	713	3,086	3,086	3,086	3,086	3,086	
1995-96	713	3,086	3,086	3,086	3,086	3,086	
1996-97	713	3,086	3,086	3,086	3,086	3,086	
1997-98	713	3,086	3,086	3,086	3,086	3,086	
1998-99	713	2,896	3,086	3,086	3,086	3,086	
1999-00	713	2,716	3,086	2,896	3,086	3,086	
2000-01	713	2,716	3,086	2,896	3,086	3,086	
2001-02	713	2,716	3,086	2,896	3,086	3,086	
2002-03[3]	713	3,121	3,491	3,301	3,491	3,491	
2003-04	713	4,271	4,751	4,506	4,751	4,751	
2004-05	713	4,971	5,451	5,556	5,801	4,751	
2005-06	735	5,406	5,922	6,162	6,429	5,357	700
2006-07	735	5,406	5,922	6,162	6,429	5,357	1,050
2007-08	786	5,790	6,342	6,594	6,888	5,736	60
2008-09	864	6,202	6,789	7,062	7,374	6,144	60

[1] Charged to resident and nonresident professional degree students. Excludes MPH, DrPH, DEnv, MPP, and MPIA in IRPS at UCSD.

[2] In 2005-06 and 2006-07, surcharges were only charged to professional school students. In 2007-08 and 2008-09, surcharges are charged to all students.

[3] Annualized.

DISPLAY XV-7: UC AVERAGE ANNUAL STUDENT FEES FOR RESIDENT UNDERGRADUATE STUDENTS

	Mandatory Fees	Increase	Campus-based Fees[1]	Total Charges	Total Increase
1970-71	$450		$37	$487	
1971-72	600	33.3%	40	640	31.5%
1972-73	600	0.0%	44	644	0.6%
1973-74	600	0.0%	44	644	0.0%
1974-75	600	0.0%	46	646	0.3%
1975-76	600	0.0%	47	647	0.3%
1976-77	600	0.0%	48	648	0.1%
1977-78	657	9.5%	49	706	9.0%
1978-79	671	2.1%	49	720	1.9%
1979-80	685	2.1%	51	736	2.2%
1980-81	719	5.0%	57	776	5.4%
1981-82	938	30.5%	60	998	28.6%
1982-83	1,235	31.7%	65	1,300	30.3%
1983-84	1,315	6.5%	72	1,387	6.7%
1984-85	1,245	-5.3%	79	1,324	-4.5%
1985-86	1,245	0.0%	81	1,326	0.2%
1986-87	1,245	0.0%	100	1,345	1.4%
1987-88	1,374	10.4%	118	1,492	10.9%
1988-89	1,434	4.4%	120	1,554	4.2%
1989-90	1,476	2.9%	158	1,634	5.1%
1990-91	1,624	10.0%	196	1,820	11.4%
1991-92	2,274	40.0%	212	2,486	36.6%
1992-93	2,824	24.2%	220	3,044	22.4%
1993-94	3,454	22.3%	273	3,727	22.4%
1994-95	3,799	10.0%	312	4,111	10.3%
1995-96	3,799	0.0%	340	4,139	0.7%
1996-97	3,799	0.0%	367	4,166	0.7%
1997-98	3,799	0.0%	413	4,212	1.1%
1998-99	3,609	-5.0%	428	4,037	-4.2%
1999-00	3,429	-5.0%	474	3,903	-3.3%
2000-01	3,429	0.0%	535	3,964	1.6%
2001-02	3,429	0.0%	430	3,859	-2.6%
2002-03[2]	3,834	11.8%	453	4,287	11.1%
2003-04	4,984	30.0%	546	5,530	29.0%
2004-05	5,684	14.0%	628	6,312	14.1%
2005-06	6,141	8.0%	661	6,802	7.8%
2006-07	6,141	0.0%	711	6,852	0.7%
2007-08	6,636	8.1%	881	7,517	9.7%
2008-09	7,126	7.4%	901	8,027	6.8%

[1] Beginning in 1998-99, campus-based fees are calculated on a weighted basis using enrollments.
[2] Annualized.

DISPLAY XV-8: UC AVERAGE ANNUAL STUDENT FEES FOR NONRESIDENT UNDERGRADUATE STUDENTS

	Mandatory Fees	Increase	Campus-based Fees[1]	Nonresident Tuition	Increase	Total Charges	Total Increase
1970-71	$450		$37	$1,200		$1,687	
1971-72	600	33.3%	40	1,500	25.0%	2,140	26.9%
1972-73	600	0.0%	44	1,500	0.0%	2,144	0.2%
1973-74	600	0.0%	44	1,500	0.0%	2,144	0.0%
1974-75	600	0.0%	46	1,500	0.0%	2,146	0.1%
1975-76	600	0.0%	47	1,500	0.0%	2,147	0.1%
1976-77	600	0.0%	48	1,905	27.0%	2,553	18.9%
1977-78	657	9.5%	49	1,905	0.0%	2,611	2.3%
1978-79	671	2.1%	49	1,905	0.0%	2,625	0.5%
1979-80	685	2.1%	51	2,400	26.0%	3,136	19.5%
1980-81	719	5.0%	57	2,400	0.0%	3,176	1.3%
1981-82	938	30.5%	60	2,880	20.0%	3,878	22.1%
1982-83	1,235	31.7%	65	3,150	9.4%	4,450	14.7%
1983-84	1,315	6.5%	72	3,360	6.7%	4,747	6.7%
1984-85	1,245	-5.3%	79	3,564	6.1%	4,888	3.0%
1985-86	1,245	0.0%	81	3,816	7.1%	5,142	5.2%
1986-87	1,245	0.0%	100	4,086	7.1%	5,431	5.6%
1987-88	1,374	10.4%	118	4,290	5.0%	5,782	6.5%
1988-89	1,434	4.4%	120	4,956	15.5%	6,510	12.6%
1989-90	1,476	2.9%	158	5,799	17.0%	7,433	14.2%
1990-91	1,624	10.0%	196	6,416	10.6%	8,236	10.8%
1991-92	2,274	40.0%	212	7,699	20.0%	10,185	23.7%
1992-93	2,824	24.2%	220	7,699	0.0%	10,743	5.5%
1993-94	3,454	22.3%	273	7,699	0.0%	11,426	6.4%
1994-95	3,799	10.0%	312	7,699	0.0%	11,810	3.4%
1995-96	3,799	0.0%	340	7,699	0.0%	11,838	0.2%
1996-97	3,799	0.0%	367	8,394	9.0%	12,560	6.1%
1997-98	3,799	0.0%	413	8,984	7.0%	13,196	5.1%
1998-99	3,799	0.0%	428	9,384	4.5%	13,611	3.1%
1999-00	3,799	0.0%	474	9,804	4.5%	14,077	3.4%
2000-01	3,799	0.0%	535	10,244	4.5%	14,578	3.6%
2001-02	3,799	0.0%	430	10,704	4.5%	14,933	2.4%
2002-03[2]	4,204	10.7%	453	12,480	16.6%	17,137	14.8%
2003-04	5,464	30.0%	546	13,730	10.0%	19,740	15.2%
2004-05	6,164	12.8%	628	16,476	20.0%	23,268	17.9%
2005-06	6,657	8.0%	661	17,304	5.0%	24,622	5.8%
2006-07	6,657	0.0%	711	18,168	5.0%	25,536	3.7%
2007-08	7,188	8.0%	881	19,068	5.0%	27,137	6.3%
2008-09	7,713	7.3%	901	20,021	5.0%	28,635	5.5%

[1] In 1998-99, campus-based fees are calculated on a weighted basis using enrollments.

[2] Annualized.

DISPLAY XV-9: UC AVERAGE ANNUAL STUDENT FEES FOR RESIDENT GRADUATE STUDENTS

	Mandatory Fees	Increase	Campus -based Fees[1]	Total Charges	Total Increase
1970-71	$480		$28	$508	
1971-72	660	37.5%	30	690	35.9%
1972-73	660	0.0%	35	695	0.6%
1973-74	660	0.0%	35	695	0.0%
1974-75	660	0.0%	36	696	0.2%
1975-76	660	0.0%	34	694	-0.3%
1976-77	660	0.0%	36	696	0.3%
1977-78	717	8.6%	37	754	8.3%
1978-79	731	2.0%	38	769	2.0%
1979-80	745	1.9%	39	784	2.0%
1980-81	779	4.6%	45	824	5.1%
1981-82	998	28.1%	45	1,043	26.6%
1982-83	1,295	29.8%	51	1,346	29.1%
1983-84	1,375	6.2%	58	1,433	6.5%
1984-85	1,305	-5.1%	63	1,368	-4.5%
1985-86	1,305	0.0%	64	1,369	0.1%
1986-87	1,305	0.0%	82	1,387	1.3%
1987-88	1,374	5.3%	100	1,474	6.3%
1988-89	1,434	4.4%	125	1,559	5.8%
1989-90	1,476	2.9%	222	1,698	8.9%
1990-91	1,624	10.0%	482	2,106	24.0%
1991-92	2,274	40.0%	557	2,831	34.4%
1992-93	2,824	24.2%	608	3,432	21.2%
1993-94	3,454	22.3%	703	4,157	21.1%
1994-95	3,799	10.0%	786	4,585	10.3%
1995-96	3,799	0.0%	836	4,635	1.1%
1996-97	3,799	0.0%	868	4,667	0.7%
1997-98	3,799	0.0%	923	4,722	1.2%
1998-99	3,799	0.0%	839	4,638	-1.8%
1999-00	3,609	-5.0%	969	4,578	-1.3%
2000-01	3,609	0.0%	1,138	4,747	3.7%
2001-02	3,609	0.0%	1,305	4,914	3.5%
2002-03[2]	4,014	11.2%	1,327	5,341	8.7%
2003-04	5,219	30.0%	1,624	6,843	28.1%
2004-05	6,269	20.1%	1,606	7,875	15.1%
2005-06	6,897	10.0%	1,811	8,708	10.6%
2006-07	6,897	0.0%	1,973	8,870	1.9%
2007-08	7,440	7.9%	2,281	9,721	9.6%
2008-09	7,986	7.3%	2,367	10,353	6.5%

[1] Beginning in 1998-99, campus-based fees are calculated on a weighted basis using enrollments.
[2] Annualized.

DISPLAY XV-10: UC AVERAGE ANNUAL STUDENT FEES FOR NONRESIDENT GRADUATE ACADEMIC STUDENTS

	Mandatory Fees	Increase	Campus-based Fees[1]	Nonresident Tuition	Increase	Total Charges	Total Increase
1970-71	$480		$28	$1,200		$1,708	
1971-72	660	37.5%	30	1,500	25.0%	2,190	28.3%
1972-73	660	0.0%	35	1,500	0.0%	2,195	0.2%
1973-74	660	0.0%	35	1,500	0.0%	2,195	0.0%
1974-75	660	0.0%	36	1,500	0.0%	2,196	0.1%
1975-76	660	0.0%	34	1,500	0.0%	2,194	-0.1%
1976-77	660	0.0%	36	1,905	27.0%	2,601	18.5%
1977-78	717	8.6%	37	1,905	0.0%	2,659	2.2%
1978-79	731	2.0%	38	1,905	0.0%	2,674	0.6%
1979-80	745	1.9%	39	2,400	26.0%	3,184	19.1%
1980-81	779	4.6%	45	2,400	0.0%	3,224	1.3%
1981-82	998	28.1%	45	2,880	20.0%	3,923	21.7%
1982-83	1,294	29.8%	51	3,150	9.4%	4,495	14.6%
1983-84	1,375	6.2%	58	3,360	6.7%	4,793	6.6%
1984-85	1,305	-5.1%	63	3,564	6.1%	4,932	2.9%
1985-86	1,305	0.0%	64	3,816	7.1%	5,185	5.1%
1986-87	1,305	0.0%	82	4,086	7.1%	5,473	5.6%
1987-88	1,374	5.3%	100	4,290	5.0%	5,764	5.3%
1988-89	1,434	4.4%	125	4,806	12.0%	6,365	10.4%
1989-90	1,476	2.9%	222	5,799	20.7%	7,497	17.8%
1990-91	1,624	10.0%	482	6,416	10.6%	8,522	13.7%
1991-92	2,274	40.0%	557	7,699	20.0%	10,530	23.6%
1992-93	2,824	24.2%	608	7,699	0.0%	11,131	5.7%
1993-94	3,454	22.3%	703	7,699	0.0%	11,856	6.5%
1994-95	3,799	10.0%	786	7,699	0.0%	12,284	3.6%
1995-96	3,799	0.0%	836	7,699	0.0%	12,334	0.4%
1996-97	3,799	0.0%	868	8,394	9.0%	13,061	5.9%
1997-98	3,799	0.0%	923	8,984	7.0%	13,706	4.9%
1998-99	3,799	0.0%	839	9,384	4.5%	14,022	2.3%
1999-00	3,799	0.0%	969	9,804	4.5%	14,572	3.9%
2000-01	3,799	0.0%	1,138	10,244	4.5%	15,181	4.2%
2001-02	3,799	0.0%	1,305	10,704	4.5%	15,808	4.1%
2002-03[2]	4,204	10.7%	1,327	11,132	4.0%	16,663	5.4%
2003-04	5,464	30.0%	1,624	12,245	10.0%	19,333	16.0%
2004-05	6,514	19.2%	1,606	14,694	20.0%	22,814	18.0%
2005-06	7,164	10.0%	1,811	14,694	0.0%	23,669	3.7%
2006-07	7,164	0.0%	1,973	14,694	0.0%	23,831	0.7%
2007-08	7,734	8.0%	2,281	14,694	0.0%	24,709	3.7%
2008-09	8,298	7.3%	2,367	14,694	0.0%	25,359	2.6%

[1] Beginning in 1998-99, campus-based fees are calculated on a weighted basis using enrollments.
[2] Annualized.

DISPLAY XV-11: PROFESSIONAL SCHOOL FEES BY PROGRAM AND CAMPUS

In addition to the fees displayed below, professional school students also pay mandatory Universitywide fees and campus-based fees. For Medicine and Law students, the fee amounts below do not include the $376 Special Fee for Law and Medical Students approved in 1990.

	2006-07		2007-08		2008-09	
	Residents	Nonresidents	Residents	Nonresidents	Residents	Nonresidents
Business						
Berkeley	$16,346	$15,276	$18,160	$16,984	$21,630	$19,065
Davis	14,276	14,276	15,276	15.276	16,804	16,804
Irvine	15,246	14,276	16,314	15,276	17,456	16,345
Los Angeles	17,371	14,276	19,287	15,882	22,049	16,994
Riverside	14,276	14,276	15,276	15,276	16,345	16,345
San Diego	14,276	14,276	15,276	15,276	16,804	16,040
Dentistry						
Los Angeles	15,798	13,816	16,902	14.784	18,087	15,818
San Francisco	15,796	15,796	16,902	16,902	18,087	18,087
International Relations & Pacific Studies						
San Diego	4,000	4,000	4,284	4,284	4,584	4,498
Law						
Berkeley	15,958	15,958	17,770	17,770	21,242	21,242
Davis	14,637	14,637	16,318	16,318	18,439	18,439
Los Angeles	15,958	14,637	17,770	16,318	21,075	19,351
Medicine						
Berkeley	13,064	13,064	14,004	14,004	14.984	14.984
Davis	13,064	13,064	14,004	14,004	14,984	14,984
Irvine	13,064	13,064	14,004	14,004	14,984	14,984
Los Angeles	13,064	13,064	14,004	14,004	14,984	14,984
Riverside	13,064	13,064	14,004	14,004	14,984	14,984
San Diego	13,064	13,064	14,004	14,004	14,984	14,984
San Francisco	13,064	13,064	14,004	14,004	14,984	14,984
Nursing						
Los Angeles	3,218	3,218	3,444	3,444	3,685	3,685
San Francisco	3,218	3,218	3,444	3,444	3,685	3,685
Optometry						
Berkeley	9,542	9,542	10,210	10,210	10,925	10,925
Pharmacy						
San Diego	11,098	11,098	11,874	11,874	13,634	13,634
San Francisco	11,098	11,098	11,874	11,874	13,634	13,634
Public Health						
Berkeley	4,000	4,000	4,284	4,284	4,541	4,541
Davis	4,000	4,000	4,284	4,284	4,541	4,541
Los Angeles	4,000	4,000	4,284	4,284	4,541	4,541
Public Policy						
Berkeley	4,000	4,000	4,284	4,284	4,541	4,541
Los Angeles	4,000	4,000	4,284	4,284	4,541	4,541
Theater, Film, & Television						
Los Angeles	5,959	5,959	6,375	6,375	6,758	6,758
Veterinary Medicine						
Davis	10,882	10,882	11,646	11,646	12,459	12,459

DISPLAY XV-12: 2008-09 TOTAL FEES FOR RESIDENT PROFESSIONAL DEGREE STUDENTS AT UC AND COMPARISON INSTITUTIONS

For 2008-09, UC total fees for most resident professional students fall within the range of the tuition and fees charged by public institutions with comparable programs.

	Berkeley	Davis	Irvine	Los Angeles	Riverside	San Diego	San Francisco
Business	**30,926**	**26,504**	**27,814**	**31,850**	**25,792**	**25,962**	
Comparison Institutions							
Arizona State University					17,323		
University of Michigan	42,789	42,789	42,789	42,789	42,789	42,789	
University of Minnesota		30,117	30,117				
University of Texas			21,147		21,147		
University of Virginia	42,476	42,476		42,476	42,476	42,476	
University of Washington					23,201		
Average	42,632	38,461	31,351	42,632	29,387	42,632	
Dentistry				**28,092**			**27,925**
Comparison Institutions							
Ohio State University				28,144			28,144
University of Illinois-Chicago				29,166			29,166
University of Michigan				30,223			30,223
Average				29,178			29,178
International Relations & Pacific Studies[1]						**14,660**	
Comparison Institutions							
University of Illinois						19,961	
University of Maryland						19,432	
University of Michigan						21,070	
Average						20,154	
Law	**30,944**	**28,515**		**31,102**			
Comparison Institutions							
University of Michigan	43,849	43,849		43,849			
University of Illinois		31,168					
University of Virginia	38,776	38,776		38,776			
Average	41,312	37,931		41,312			
Medicine	**24,716**	**27,414**	**28,120**[(2)]	**24,172**	**24,865**	**24,578**	**25,202**
Comparison Institutions		28,212					
Oregon Health Sciences U.		26,192				28,212	
University of Colorado	26,192		26,192	26,192	26,192	26,192	26,192
University of Maryland	31,249	28,355	31,249	31,249	31,249		31,249
University of Michigan	28,355		28,355	28,355	28,355		28,355
University of Washington		27,586				20,541	
Average	28,599		28,599	28,599	28,599	24,982	28,599

DISPLAY XV-12: 2008-09 TOTAL FEES FOR RESIDENT PROFESSIONAL DEGREE STUDENTS (continued)

	Berkeley	Davis	Irvine	Los Angeles	Riverside	San Diego	San Francisco
Nursing			**14,028**	**12,436**			**13,448**
Comparison Institutions							
Oregon Health Sciences U.							24,853
University of Maryland							10,503
University of Michigan			19,403	19,403			
University of Pittsburgh				20,622			
University of Washington			15,351	15,351			15,351
Average			17,377	18,459			16,902
Optometry	**20,220**						
Comparison Institutions							
Ferris State University	22,241						
University of Houston	17,845						
Average	20,043						
Pharmacy						**22,792**	**23,421**
Comparison Institutions							
University of Illinois-Chicago						20,168	20,168
University of Michigan						20,951	20,951
Virginia Commonwealth U.						22,529	22,529
Average						21,216	21,216
Public Health	**14,754**	**16,350**	**15,802**	**14,210**			
Comparison Institutions							
University of Iowa		10,951					
University of Massachusetts			15,780				
University of Michigan	23,324		23,324	23,324			
University of Minnesota		16,628					
University of North Carolina	10,367	10,367	10,367	10,367			
University of Washington	11,466			11,466			
Average	15,052	12,649	16,490	15,052			
Public Policy	**14,754**			**14,210**			
Comparison Institutions							
University of Michigan	21,070			21,070			
University of Texas	9,230			9,230			
University of Wisconsin	12,087			12,087			
Average	14,129			14,129			
Theater, Film & Television				**15,510**			
Comparison Institutions							
University of Iowa				7,662			
University of Texas				8,423			
University of Washington				11,466			
Average				9,184			
Veterinary Medicine		**24,263**					
Comparison Institutions							
Cornell University		38,684					
Ohio State University		24,853					
University of Pennsylvania		36,272					
Average		33,270					

[1] Because International Relations and Pacific Studies is unique, the Master of Business Administration program at the University of Illinois and the Master of Public Policy programs at the Universities of Maryland and Michigan are used as comparisons.

[2] Includes required summer fees.

STUDENT FINANCIAL AID

Guided by the policy adopted by The Regents in 1994, the University's financial aid program is closely linked to the University's goals of student accessibility and helping the state meet its professional workforce needs.[1] In 2006-07, UC students received $2.1 billion in financial aid, of which $664 million (31%) was provided by UC. Maintaining a robust financial aid program for UC undergraduate and graduate students remains a top University budget priority.

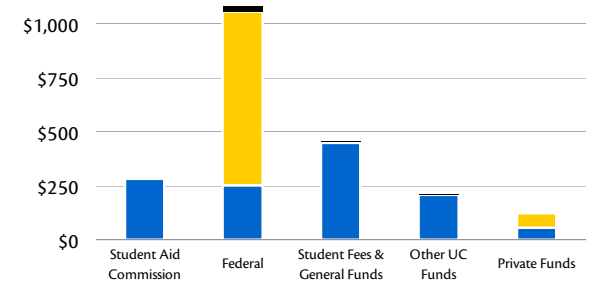
At the undergraduate level, the goal of the University's financial aid program is to maintain the affordability of the University for all students so that financial considerations are not an obstacle to student decisions to seek and complete a University degree. In 2006-07, over half (54%) of UC undergraduates received grant/scholarship aid averaging approximately $9,250 per student. Despite fee increases, the University of California has become nationally recognized as a leading institution in enrolling an economically diverse pool of undergraduate students. In 2006-07, over 30% of UC students were low-income Pell Grant recipients — more than at any comparably selective research institution.

At the graduate level, The Regents' financial aid policy calls upon the University to attract a diverse pool of highly qualified students by providing a competitive level of support relative to other institutions. This competitive context reflects the fact that graduate student enrollment is tied most directly to the University's research mission and helps the state meet its academic and professional workforce needs.

In total, 61% of graduate students received grants or fellowship support averaging about $13,400 per student. The competitiveness of support packages for UC graduate academic students and its impact on the ability of the University to enroll top students from across the world has been a longstanding concern at the University. The University has faced several challenges in recent years related to both the need to remain affordable at the undergraduate level and to be competitive at the graduate level. At the undergraduate level, fee increases implemented in response to declining State support for the University's budget contributed to an increase in the University's cost of attendance. These fee increases occurred while other elements of the cost of attendance — such as living expenses and books and supplies — also increased. For graduate academic students,

DISPLAY XVI-1: 2006-07 FINANCIAL AID BY TYPE AND SOURCE OF FUNDS
(DOLLARS IN MILLIONS)

The amount of financial aid provided in 2006-07 represents an increase of about $119 million, or 5.9%, over the amount received in 2005-06.



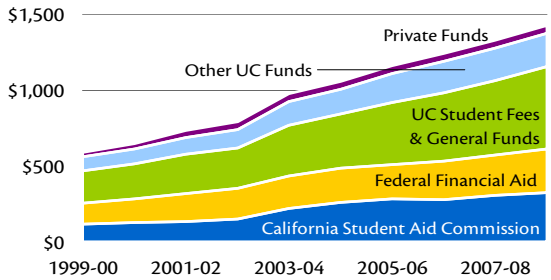
	Student Aid Commission	Federal	Student Fees & General Funds	Other UC Funds	Private Funds
Work-study	$-	$26.60	$2.28	$1.05	$-
Loans	$-	$805.07	$2.64	$1.22	$67.19
Gift Aid	$279.73	$250.62	$449.58	$207.25	$54.13

[1] The University of California Financial Aid Policy is available at http://www.universityofcalifornia.edu/regents/policies/6076.html.

increases in fees and nonresident tuition threatened the University's ability to offer competitive student support packages and placed additional strain on the fund sources that cover those costs. Increases in the Fee for Selected Professional School Students, which were implemented to help professional schools maintain the quality of their programs, have increased the demand for student financial support for these students as well. The University responded to these challenges by adopting measures that both expanded the availability of student support and mitigated student cost increases, such as increased University funding for grants and fellowships, limiting nonresident tuition increases for graduate students, expanding loan repayment assistance programs for professional degree students choosing public interest careers, and improving the availability and terms of private loans for graduate and undergraduate students.

Regarding increased University funding for grants and fellowships, the University has continued to use a portion of the revenue derived from student fee increases to support financial aid for both undergraduate and graduate students. In recent years, UC has set aside 33% of new fee revenue from undergraduate and graduate professional students, and 50% of new fee revenue from graduate academic students, to augment UC's "return-to-aid" funds.

DISPLAY XVI-2: GIFT AID EXPENDITURES BY SOURCE
(DOLLARS IN MILLIONS)
To offset fee increases and maintain the promise of higher education for all Californians, both the University and the State have invested heavily in student financial support. Total gift aid is projected to exceed $1.4 billion in 2008-09, an average of almost $6,300 per student.



In 2009-10, the University will continue to augment its student aid programs with a return-to-aid of 33% for any new undergraduate fee revenue. These funds, together with Cal Grant award increases, would provide additional support to generally cover any systemwide fee increases of UC's grant-eligible undergraduates along with some coverage of other cost increases. The University would also use these funds to mitigate any fee increase impacts on financially needy middle-income students by covering a portion of the increase for these undergraduates who would not otherwise be eligible for grant assistance.

To help mitigate the impact of any fee increases on the competitiveness of UC graduate student support, in 2009-10 the University will continue its current policy of returning 50% of any new systemwide fee revenue from graduate academic students to student support. In addition to funds derived from this policy, $10 million in supplemental graduate student support is proposed for 2009-10.

For graduate professional students, the University's professional degree programs will be expected to supplement its financial aid resources by an amount equivalent to at least 33% of any new professional school fee revenue in 2009-10. The University will also continue to monitor various indicators of program affordability, including demographic enrollment trends and cumulative debt levels, which can be substantial for some disciplines (e.g., medicine). The availability of flexible loan repayment plans is becoming increasingly important to these students. In addition, for 2009-10, the University expects that campuses will continue to provide loan assistance repayment programs (LRAPs) where appropriate to help borrowers with public interest employment meet their student loan repayment obligations.

Finally, as mentioned in the *Student Fees* chapter, the University proposes to freeze nonresident

tuition for graduate academic students for the fifth consecutive year and to freeze tuition for graduate professional students for the sixth year in a row. By forgoing any increase in graduate nonresident tuition, the University has effectively reduced the real cost of nonresident tuition in each of the past few years.

The University will continue to monitor the effectiveness of its financial support both at the undergraduate and graduate level to evaluate its success in adhering to the principles, articulated by The Regents, of affordability at the undergraduate level and competitiveness at the graduate level.

Fund Sources for Financial Aid

UC students may receive scholarships, fellowships, grants, loans, work-study jobs, and fee remissions to assist them in paying the educational costs of attending UC. The cost of attendance includes fees, housing and living expenses, books, and other expenses. UC students receive assistance from four major fund sources: State aid programs, federal aid programs, University funds, and private agency gift funds and loans.

State Aid Programs

Students at all California institutions of higher education receive financial support from a number of State programs. These programs, administered on behalf of the State by the California Student Aid Commission, include the Cal Grant A, B, and C Programs. The Cal Grant A Program is the largest of the State's aid programs and provides fee-coverage grants to needy, meritorious undergraduates; the Cal Grant B Program provides undergraduates from particularly low-income or disadvantaged backgrounds with a fee-coverage grant and a stipend for living expenses; and the Cal Grant C Program helps pay for tuition and training costs at occupational or career colleges. The programs are designed to promote access to postsecondary education and to foster student choice among California institutions of higher education. Cal Grant Awards for recipients attending UC and CSU currently cover systemwide student fees, but provide only minimal assistance to help students cover other costs of attendance. In 2006-07, UC students were awarded $280 million in financial aid from all programs administered by the Student Aid Commission. Cal Grant funding for UC students has increased in recent years as UC's fees have increased. In the event of a fee increase for the 2009-10 year, it is anticipated that the State would continue its longstanding commitment to cover systemwide fees for UC Cal Grant recipients.

Federal Aid Programs

In 2006-07, UC students received $251 million in federal grants and scholarships, an increase of about 11% over 2005-06 levels. Federal grants and scholarships comprised 20% of all grants and scholarships received by UC students in 2006-07, a slight increase from 19% in 2005-06. As in past years, the vast majority of federal aid received in 2006-07 was in the form of loans; UC students and their families received $805 million in federal loans that year. These figures exclude the value of federal tax credits and income tax deductions that benefit many UC families. Nationally, the value of these federal benefits has grown steadily since their introduction in 1997; these benefits are described in greater detail at the end of this chapter.

University Funds

This category has two components, UC core operating funds and other University aid funds. Regarding UC core operating funds, the University designates $454 million in student fee revenue, UC General Funds and State General Funds for student financial support. In addition to these UC core operating funds, other University aid funds are provided through various campus-based programs funded by endowment income, current gifts, and campus discretionary funds. In 2006-07, $210 million from these other University aid funds

UNIVERSITY OF CALIFORNIA RETURN-TO-AID POLICY

Historically, the University has funded UC student financial support needs in part by setting aside a portion of revenue from fee increases for financial aid for needy students, a practice called "return-to-aid." As student financial need increased over time, the percentage of revenue from fee increases dedicated to financial aid also increased.

In 1987-88, the percentage of new fee revenue dedicated to financial aid was 16%; this proportion has increased over time to 33% for undergraduates. A return-to-aid rate of 50% on new fee revenue will augment financial aid funding for graduate academic students in 2009-10, while 33% of all new professional school fee revenue will augment financial aid for professional school students. In addition, campuses are expected to set aside a minimum of 25% of the revenue from newly enacted campus-based fees for return-to-aid.

was awarded to students. Nearly all of the support ($207 million) in this University funds category was awarded in the form of fellowships, scholarships, and grants.

Private Agency Gift Funds and Loans

Private agencies and companies also provide student financial support through scholarships and other forms of aid. Funds in this category range from traineeships and fellowships from private companies (e.g., Hewlett Packard and IBM), to funds from associations and foundations (e.g., the Gates Millennium Scholars program and the American Cancer Society), to small scholarships from a student's local PTA or Rotary Club. Nearly all funds in this category are awarded to students in the form of grant support. In 2006-07, $54 million was awarded to UC students from private agency programs, which represented 4% of the scholarships, grants, and fellowships students received during that year.

Private loans are an important financing option for students with unique circumstances, such as international students with no U.S. co-signers and students who have already borrowed the maximum allowable amount under federal student loan programs. They are particularly important for students in professional degree programs due to the relatively high cost of those programs. UC students borrowed $67 million in private loans in 2006-07. For 2006-07 and 2007-08, the University leveraged its systemwide loan volume to ensure access to private student loans with competitive terms.

Other smaller sources of financial assistance, including exemptions and tax credits, are described in more detail at the end of this chapter.

Undergraduate Student Financial Aid

As noted earlier in this chapter, the University has remained accessible to undergraduate students from all income groups. Over 30% of UC students are low-income Pell Grant recipients, more than at any other comparably selective research institution. Financial aid also contributes greatly to the University's undergraduate diversity. African-American, Chicano/Latino, and Asian-American students are disproportionately low income; 46%, 47%, and 36%, respectively, of these students are either financially independent students (who are generally low-income) or have parent incomes less than $40,000. Collectively, these students receive 70% of all undergraduate gift assistance.

To date, the University has remained successful in enrolling low-income students despite recent fee increases and increases in non-fee costs that also occurred during those years. The percentage of low-income students who enroll at UC has increased slightly in recent years, while the

DISPLAY XVI-3: UNDERGRADUATE STUDENT FINANCIAL AID AT A GLANCE

▪ 2006-07 total aid	$1.4 billion
▪ Aid recipients	63%
▪ Total gift aid	$860 million
▪ Gift aid recipients	54%
▪ Average gift aid award	$9,300
▪ Gift aid awards based on need	>85%

percentage of middle-income students has remained fairly constant.

A general measure of the University's affordability is its average net cost of attendance, which represents the actual cost of attending UC for undergraduates after taking into account their scholarship and grant assistance. In 2007-08, as in previous years, the University's average *total* cost of attendance was higher than the average total cost of its four public comparison institutions. After adjusting for grants, scholarships, and fellowships, however, the *net* cost of attendance for resident need-based aid recipients was lower than the estimated net cost at three of the University's four public comparison institutions.

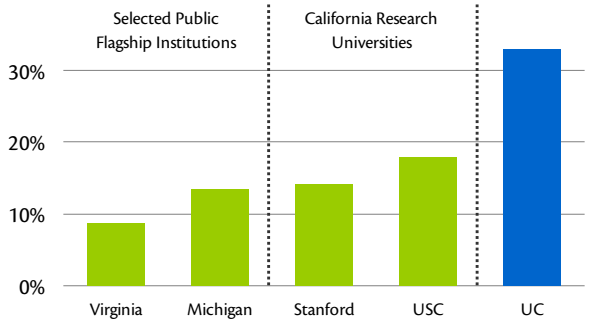
The Education Financing Model

Consistent with the financial aid policy adopted by the Regents in January 1994, the University uses an integrated framework — the "Education Financing Model" — to assess UC's role in funding its financial support programs, to allocate financial aid across campuses, and to guide the awarding of aid to individual students. The framework is based on four principles:

1. The University must acknowledge the total cost of attendance: resident student fees, living and personal expenses, and costs related to books and supplies, transportation, and health care;

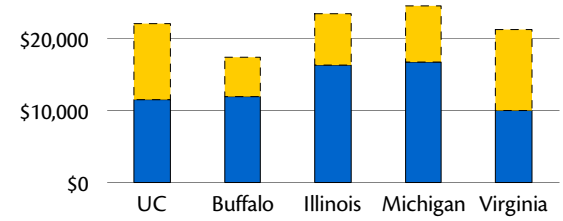
DISPLAY XVI-4: 2006-07 UNDERGRADUATE PELL GRANT RECIPIENTS

UC remains accessible for students from low-income families. UC has a very high proportion of federal Pell Grant recipients – around 30%, which is more than at any comparable public or private institution.



DISPLAY XVI-5: 2007-08 NET COST OF ATTENDANCE FOR UNDERGRADUATE AID RECIPIENTS

Undergraduate need-based aid recipients at UC receive an average of $10,500 in gift aid, resulting in a net cost of $11,600. UC's net cost is lower than the net cost at three of its four public comparison institutions.



	UC	Buffalo	Illinois	Michigan	Virginia
Total Cost	$22,150	$17,500	$23,510	$24,570	$21,300
Gift Aid	$10,550	$5,510	$7,120	$7,770	$11,270
Net Cost	$11,600	$11,980	$16,390	$16,790	$10,030

2. Financing a UC education requires a partnership between students, their parents, federal and state governments, and the University;
3. To maintain equity among undergraduate students, all students, no matter which campus they attend, are expected to make a similar contribution from student loans and employment to help finance their education; and
4. Flexibility is needed for students in deciding how to meet their expected contribution, and for campuses in implementing the Model to serve their particular student bodies.

These principles are reflected in a relatively simple framework for determining the components of a student's financial aid package, illustrated in Display XVI-6.

DISPLAY XVI-6: UC GRANT ASSISTANCE UNDER THE EDUCATION FINANCING MODEL

The Total Cost of Attendance	
Less	A reasonable contribution from parents
Less	Grants from federal and state programs
Less	A manageable student contribution from work and borrowing
Equals	University grant aid needed

Parent Contribution. Parents are expected to help pay for the costs of attending the University if their children are considered financially dependent. The amount of the parental contribution is determined by the same formula used to determine need for federal and state aid programs, which takes into account parental income and assets (other than home equity), the size of the family, the number of family members in college, and non-discretionary expenses. Particularly low-income parents have an expected contribution of zero.

Student Contribution. Undergraduates are expected to make a contribution to their educational expenses from earnings and borrowing. The expected contribution should be manageable so students are able to make steady progress toward completion of the baccalaureate degree and to meet loan repayment obligations after graduation. The Education Financing Model includes ranges for loan and work expectations based on the University's estimate of the minimum and maximum manageable loan/work levels, adjusted annually for inflation and periodically for market changes in student wages and expected post-graduation earnings.

The University's goal is to provide sufficient systemwide funding to keep students' loan/work expectations within the range established by the Education Financing Model. The University's activities in determining funding levels for its need-based grant program, determining how these funds are allocated across the campuses, and setting guidelines for awarding those funds to students are carried out in accordance with the principles of the Education Financing Model.

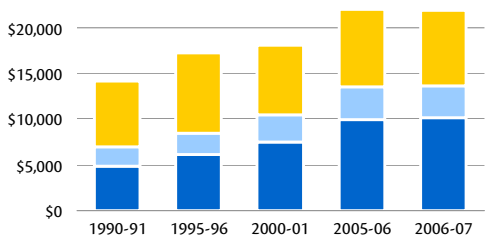
Display XVI-7 illustrates how undergraduate need-based aid recipients at UC have financed their cost of attendance from 1990-91 through 2006-07, and also illustrates several noteworthy trends:

- The total cost of attendance for need-based aid recipients has generally increased over time, due to increases in both fee and non-fee expenses. Since 2000, the total cost of attendance has increased by $3,836 (21%) in inflation-adjusted dollars. Of this amount, $1,994 came from fee increases and $1,842 came from increases in non-fee costs;
- Since 1990-91, the average parental contribution of need-based aid recipients has increased by 65%, due largely to higher-income families becoming eligible for need-based aid; and
- Also since 1990-91, the average amount of grant, scholarship, and fellowship assistance received by need-based aid recipients increased by 107% in inflation-adjusted dollars. The amount to be covered by student work and borrowing increased by 16% during this period and will likely continue to increase in the future.

For 2008-09, it is estimated that UC grant recipients will be expected to work or borrow, on average, approximately $9,400 to finance their education, although students can compete for UC scholarships and outside awards that effectively reduce their expected contribution. In 2006-07, one in four In 2006-07, one in four undergraduate

DISPLAY XVI-7: COST OF ATTENDANCE BY EXPECTED SOURCE OF FUNDING AMONG UNDERGRADUATE NEED-BASED AID RECIPIENTS
(2006-07 DOLLARS)

The total cost of attendance, average parental contribution, and average amount of grant, scholarship and fellowship assistance have increased over time for undergraduate need-based aid recipients.



	1990-91	1995-96	2000-01	2005-06	2006-07
Loan/Work	$7,210	$8,770	$7,580	$8,500	$8,330
Parent Contribution	$2,110	$2,310	$2,950	$3,590	$3,490
Gift Aid	$4,880	$6,160	$7,540	$9,880	$10,090

students received scholarships worth, on average, nearly $3,600 each.

In recognition of the University's commitment to providing financial access for students at every income level, in October 2007 the Provost established a Workgroup on Undergraduate Affordability to identify and prioritize the University's most important undergraduate student support needs, and to recommend specific goals and strategies to address them. The Workgroup's findings, goals and recommendations were finalized in March 2008.[2] The Workgroup's findings included the prediction of a widening gap, developing over the next five to ten years, between students' total cost of attendance and the resources that will be available to cover them. The Workgroup recommended enhancements to the University's need-based grant program to address these concerns before they become an obstacle to maintaining a talented and socioeconomically diverse student body. The recommendations included additional fundraising, aided by a State matching grant program; expansion of the Cal Grant program; and increasing the priority of undergraduate financial aid in the use of fee revenue and any new revenue resulting from an improved investment strategy for campus cash balances.

Outcomes of the Undergraduate Aid Program
The University monitors a variety of outcome measures related to student support to evaluate the effectiveness of its undergraduate financial aid programs. These outcome measures are designed to answer the following questions:

- **Does the University enroll students from all income levels?** As noted earlier, the University has achieved remarkable success at enrolling a high percentage of low-income undergraduate students. In addition, the enrollment patterns of first-year students do not appear to be driven by fee levels or changes in the University's net cost; rather, trends in the income of UC freshmen generally reflect similar trends among California's population as a whole.
- **Do UC students work manageable hours?** The University funds and administers its financial aid programs such that no student is expected to work more than 20 hours per week in order to finance their education. Multiple surveys conducted between 2003 and 2007 depict similar patterns of work, indicating that the increase in UC's cost of attendance that occurred during this time period has not significantly impacted this outcome measure.
- **Do students' financial circumstances affect their academic success?** Despite recent increases in fees and non-fee expenses, trends in student persistence remain stable for students at every income level. In addition, financial considerations do not seem to influence students' abilities to make progress towards meeting their baccalaureate degree requirements.
- **Are students graduating with greater debt?** The percentage of students who graduate with student loan debt has declined among every income group in most years during the period from 1999-2005, which is consistent with a declining trend in the number of students who borrow each year. Among those who do borrow, average cumulative debt has also generally declined in constant dollars during the past few years.

Graduate Student Financial Aid

At the undergraduate level, the Cal Grant program insulates many needy low- and middle-income families from the effects of systemwide fee increases and plays an important role in maintaining the affordability of the University. No comparable State program exists at the

[2] The Report of the Workgroup on Undergraduate Affordability is available at http://www.ucop.edu/sas/sfs/docs/affordabilityrpt2008.pdf.

graduate level. For graduate students, the burden of covering increases in fees and nonresident tuition falls upon the University, research grants funded by federal and other extramural agencies, private foundations, and students.

Because the competitive markets for graduate academic and graduate professional students differ substantially, so do the types of financial support provided to these two types of graduate students. As shown in Display XVI-9, 33% of support for graduate academic students was in the form of fellowships and grants. Graduate academic students also serve as teaching and research assistants and, hence, receive support from the instructional and research components of the University's budget. Combined, fellowships, grants, and assistantships represent over 90% of all support received by graduate academic students. In contrast, 69% of the support for graduate professional students was in the form of student loans and work-study and only 31% was in the form of fellowships, grants, and assistantships.

Graduate Academic Student Aid

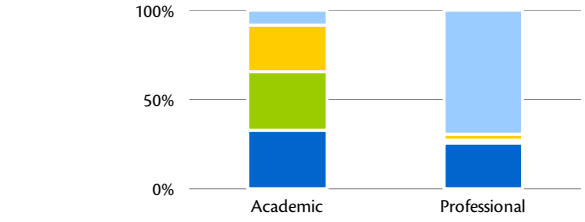
As noted above, the competitiveness of graduate student support for UC graduate academic students and its impact on the ability of the University to enroll top students from across the world has been a longstanding concern at the University. This concern has been joined by concerns about the impact of cost increases — especially increases in nonresident tuition and systemwide fees — that were instituted in response to declining State support for UC's budget.

DISPLAY XVI-8: GRADUATE STUDENT FINANCIAL AID AT A GLANCE

▪ 2006-07 total aid	$723 million
▪ Aid recipients	73%
▪ Gift aid recipients	61%
▪ Average gift aid award	$13,400

DISPLAY XVI-9: 2006-07 GRADUATE FINANCIAL SUPPORT BY PROGRAM TYPE AND AID TYPE

More than 90% of graduate academic financial aid is in the form of fellowships and grants, teaching assistantships and research assistantships. Most aid for professional school students is in the form of loans.



	Academic	Professional
Loan/Work-Study	8%	69%
Teaching Assistantship	26%	3%
Research Assistantship	32%	2%
Fellowship/Grant	33%	26%

In 2006, the University established an ad hoc Graduate Student Support Advisory Committee (GSSAC) to advise the Provost and other senior University officials on matters related to graduate student support. The final report of the Committee included three principal findings:

- Anticipated increases in traditional funding levels for graduate student support will be inadequate to allow the University to achieve its twin goals of closing the competitive gap and meeting its enrollment growth targets. The Committee estimated that an additional $122 million of support would be necessary for the University to improve the competitiveness of its awards and to achieve its graduate academic enrollment goals by 2010-11.
- The cost of covering tuition for first-year nonresident students and for international students who have not yet advanced to candidacy limits the extent to which UC graduate programs can compete for and enroll these students.
- Research and training grants cannot be relied upon both to fully cover all future tuition and fee increases and help increase the University's competitiveness.

Over the past few years the University has taken several steps to address the gap between graduate student support demand and supply. First, the University increased the percentage of new fee revenue from graduate academic students to be set aside for graduate student support. The percentage was 20% in 2004-05 and is currently 50% (less an amount used to partially restore $5.4 million in undergraduate fee revenue temporarily budgeted for graduate student support in 2003-04). In 2007-08, these funds allowed campuses to cover cost increases associated with University-funded teaching assistantships, research assistantships, and fellowships that currently cover students' fees.

Second, over the last three years, the University has further augmented its graduate student support programs by an additional $40 million from a combination of campus and systemwide fund sources. This approach reflects a shared responsibility at the systemwide and campus level to address the widespread concern about the University's ability to provide competitive award packages for academic graduate students, especially international students faced with the added expense of nonresident tuition. As noted earlier in this chapter, an additional $10 million in graduate student support is proposed for 2009-10.

Third, the University has not increased graduate nonresident tuition levels for several years. The foregone revenue is seen as a worthwhile trade-off in order to avoid further demands on limited fellowship and research assistantship funding caused by a tuition increase. By continuing to hold nonresident tuition for graduate academic students at the 2004-05 level, the University also continued to reduce, in real terms, the costs associated with covering nonresident tuition for out-of-state and international students.

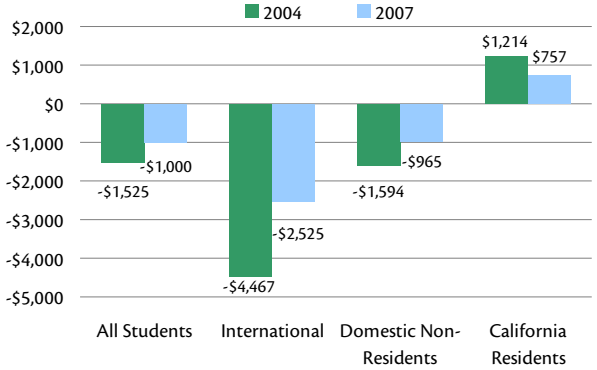
Fourth, the University has worked to reduce costs for academic doctoral candidates. Since Fall 1997, academic doctoral students who have advanced to candidacy have been assessed 25% of nonresident tuition for up to three years. This policy provides an incentive for these students to complete their dissertation work promptly and reduces the burden on research grants and other fund sources that are often used to fund this cost as part of a student's financial support package. In 2006-07, The Regents approved a proposal to make these students exempt from paying any nonresident tuition, subject to the same three-year limit.

As a result of these steps taken by the University, for academic graduate students UC has narrowed the gap between its offers for academic doctoral students and those of competing institutions by more than $500, as shown in Display XVI-10. UC's competitiveness has improved the most for international students, where the gap has been reduced by almost $2,000. UC has made progress for domestic nonresident students as well and maintained a sizable advantage over competing institutions for California resident students. Nevertheless, large gaps remain, and they are exacerbated by the high cost of living at UC campus locations.

The University's proposals for 2009-10 continue to address the most pressing concerns regarding

DISPLAY XVI-10: COMPETITIVENESS OF UC FINANCIAL SUPPORT OFFERS TO ACADEMIC GRADUATE STUDENTS

For academic doctoral students, UC has narrowed the gap between its offers and those of competing institutions by more than $500.



graduate student support, namely mitigating the impact of any further fee increases on graduate student support; ensuring that the University can compete successfully for the top students, including out-of-state and international students; and providing additional funding so that the University can achieve its goals for graduate enrollment growth.

Professional School Student Aid
The Regents' Fee Policy for Selected Professional School Students, approved in 1994, stipulates that an amount of funding equivalent to at least one-third of the total revenue from Professional School Fees be used for financial aid.[3] The policy was amended in July 2007, at which time The Regents adopted specific conditions for ensuring that the University's commitment to access, affordability, diversity, and students' public service career decisions are not adversely affected by fee increases for professional degree students.

About two-thirds of aid awarded to graduate professional students is in the form of loans, primarily from federal loan programs, rather than fellowships or grants. The differences in support patterns for graduate academic and graduate professional students reflect the contrasting approaches to graduate student support in higher education. Fellowship, grant, and assistantship support are viewed as more successful and loans less successful for recruiting and retaining doctoral students whose academic programs are lengthy and whose future income prospects are relatively low. The University also sets aside less return-to-aid funding for professional school students (33%) than for graduate academic students (50%). A greater reliance on loans and a smaller return-to-aid percentage are appropriate for professional school students because their programs are shorter, and their incomes after graduation tend to be higher, than those of other graduate students.

University funds are also used for loan repayment assistance programs (LRAPs) in certain disciplines. These programs acknowledge the fact that students who choose careers in the public interest often forego higher incomes; thus, these students may be less able to meet their debt repayment obligations. Other LRAPs are funded at the federal, state, or regional level to encourage students to serve specific populations (e.g., to work as a physician in a medically underserved area). In recent years, every UC law school has significantly expanded its LRAP to provide a higher level of debt repayment relief to a broader population of graduates. Other professional schools are continuing to evaluate the appropriate mix of loan assistance and increased fellowship support to ensure that public interest careers remain a viable choice for their graduates, given the different labor markets and students that each program serves. As noted earlier in this chapter, the University will continue to monitor enrollment trends and debt levels for these students.

Other Sources of Financial Assistance

The federal government and the State provide a number of vehicles to help students and their families finance their education.

Cal Vet Fee Exemptions
Under the California Education Code, dependents of veterans whose death or disability was service-connected are generally eligible for exemption from mandatory systemwide fees. In 2006-07, nearly 2,700 UC students took advantage of such exemptions, worth a total of $16.5 million.

Tuition Exemption Under AB 540
Certain nonresident students who attended a California high school for at least three years and who graduated from a California high school may be eligible for exemption from nonresident tuition at UC. Potentially eligible students include

[3] The University of California Policy on Fees for Selected Professional School Students is available at http://www.universityofcalifornia.edu/regents/policies/6088.html.

undocumented students and domestic students who fail to meet the University's requirements for residency. In 2006-07, over 1,600 UC students qualified for exemptions worth $26.5 million.

Hope and Lifetime Learning Tax Credits
The Taxpayer Relief Act of 1997 established two tax credit programs, which provide tax credits to qualified taxpayers for tuition and fees paid for postsecondary education. The Hope Tax Credit provides tax credits for payments made for students who are in their first two years of college; the Lifetime Learning Tax Credit provides smaller tax credits, but taxpayers are not limited to payments made during the first two years. In general, middle- and lower-middle-income students and their families benefit from these programs. The estimated value of these tax credits for UC students exceeded $80 million in 2006-07.

Above-the-Line Tax Deduction for Higher Education Expenses
In 2001, a new higher education expense deduction was established to provide relief to families whose incomes disqualify them from participation in the Hope and Lifetime Learning Tax Credits. Eligible families can qualify for a deduction of up to $4,000.

Scholarshare Trust College Savings Program
This program is a tax-exempt college savings fund administered by the California State Treasurer to encourage families to save for college expenses.

Penalty-Free IRA Withdrawals
Taxpayers may withdraw funds penalty-free from either a traditional Individual Retirement Account (IRA) or a Roth IRA for postsecondary education expenses. This provision is intended to assist middle-income students and their families.

Coverdell Education Savings Account
The Economic Growth and Tax Relief Reconciliation Act of 2001 established the Coverdell Education Savings Account (ESA) to replace the Education IRA. Although contributions are not tax-deductible, earnings on the ESA are tax-free and no taxes will be due upon withdrawal if used for qualified higher education expenses. This program is intended to assist middle-income students and their families.

U.S. Savings Bonds
The interest on U.S. savings bonds is, in certain circumstances, tax-free when bond proceeds are used to cover education expenses. Eligibility for tax-free withdrawals is a function of income level when the bond is redeemed and is intended to assist middle-income students and their families.

Student Loan Interest Deduction
Taxpaying borrowers may take a tax deduction for interest paid on student loans. Middle- and lower-middle-income borrowers with high debt are the primary beneficiaries of this deduction.

Loan Repayment Assistance Programs
Loan repayment assistance programs (LRAPs), loan assumption programs, and loan forgiveness programs are available to graduates who enter certain professions (especially teachers) or who serve specific populations after graduation.

Veterans Education Benefits
Several federal programs provide financial assistance to help veterans and their dependents finance a college education. In particular, the newly enacted GI Bill will provide eligible veterans attending UC with up to $22,000 per year beginning in 2009-10.

AUXILIARY ENTERPRISES

Auxiliary enterprises are self-supporting services that are primarily provided to students, faculty, and staff. Student and faculty housing and campus bookstores are the largest auxiliaries. No State funds are provided for auxiliary enterprises; therefore, revenues are derived from fees directly related to the costs of goods and services provided to cover all of their direct and indirect operating costs. The annual budget is based upon income projections; all budget increases are funded by corresponding increases in revenue. Total operating expenditures for auxiliary enterprises are estimated to total $945.4 million in 2008-09.

Student, Faculty, and Staff Housing

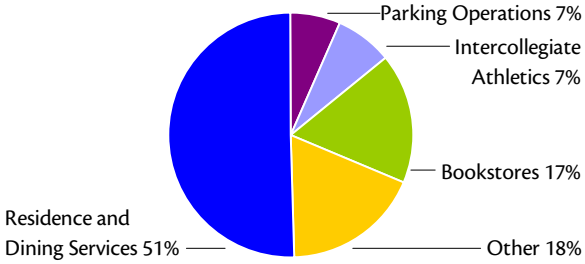
The largest program in Auxiliary Enterprises is student housing, comprising 58,050 University-owned residence hall and single student apartment bed-spaces and 4,924 student family apartments, for a total of 62,974 spaces in Fall 2007.

Affordable student housing is an important component of the University's ability to offer a high-quality education and residence life experience. Rapid enrollment growth has presented the University with many challenges; creating affordable, accessible student housing to accommodate this growth is high among those challenges. In accommodating demand, campuses identified guaranteed housing for freshmen as one of their highest priorities. Providing additional housing opportunities for transfer and graduate students is also a top priority for all campuses.

While the University was better prepared in Fall 2007 to meet the housing demand of students than in previous years, most campus residence halls continued to be occupied at over 100% design capacity (systemwide occupancy of residence halls was 107.5%). Occupancy will likely increase as a result of enrollment growth in 2008-09. Campuses accommodate high excess occupancy by converting doubles to triples as well as modifying study areas into temporary quarters. All campuses housed freshmen that met enrollment and housing deadlines. By the Fall 2016 term, if construction proceeds as planned, the University will add 9,000 new student bed-spaces.

DISPLAY XVII-1: 2007-08 AUXILIARY ENTERPRISES EXPENDITURES BY SERVICE TYPE

Student and faculty housing and campus bookstores are the largest auxiliary enterprises.



DISPLAY XVII-2: AUXILIARY ENTERPRISES AT A GLANCE

Student Housing:	
Single student residence bed spaces	58,052
Student family apartments	4,924
Student housing occupancy rate	107.5%
Planned growth by 2012	9,000
Faculty Housing:	
Faculty rental housing units	900
Planned growth	1,156
Mortgage loans provided	5,397
Faculty provided housing assistance	3,367
Parking:	
Parking spaces	111,617

The California housing market is a continuing deterrent to UC's faculty recruitment efforts, particularly for junior faculty. Various programs to alleviate this problem have been implemented since 1978:

- Rental housing units are made available to newly appointed faculty according to criteria established by each campus. These units are
- self-supporting without subsidy from student rental income.
- Home loan programs provide mortgage loans with favorable interest rates and/or down payment requirements to faculty members and other designated employees.
- The Faculty Recruitment Allowance Program provides faculty members with housing assistance during their first years of employment with the University.
- Six campuses have developed for-sale housing on land owned by the University. The land is leased to the purchaser of a unit built by a private developer. Resale restrictions control prices and determine eligibility for new buyers.

Parking

The parking program is another major auxiliary, with more than 110,000 spaces for students, faculty, staff, and visitors. Recognizing the serious need for parking on each of the campuses, in recent years the University has approved parking projects that will yield more than 2,000 new spaces.

PROVISIONS FOR ALLOCATION

Provisions for allocation serve as a temporary repository for certain funds until final allocation decisions are made. For instance, funds allocated for fixed cost increases, such as salary adjustments, employee benefit increases, and price increases, are held in provision accounts pending final allocation. Fixed cost increases are discussed in the *Compensation, Employee Benefits, and Non-Salary Cost Increases* chapter of this document. Provisions for allocation also include negative appropriations, specifically State General Fund unallocated budget reductions awaiting allocation decisions and budgetary savings targets.

Rental Payments for Facilities Funded from Lease Revenue Bonds

Funds to pay for rental payments for University facilities constructed from lease revenue bonds were initially appropriated to the University in 1987-88. Under the conditions of this funding mechanism, the University contracts with the State to design and construct facilities, provides the State Public Works Board (SPWB) with a land lease for the site on which buildings will be constructed, and enters into a lease purchase agreement for the facilities with the SPWB. Annual lease payments are appropriated from State funds and used to retire the debt. At the end of the lease term, ownership of the facilities automatically passes to the University. In 2008-09, $175 million was appropriated to the University for revenue bond lease payments. Consistent with past practice, the funding level needed for revenue bond lease payments for 2009-10 will be determined by the Department of Finance and included in the final budget.

Debt Service Payments for Deferred Maintenance Projects

In 1994-95 and again in 1995-96, the State authorized $25 million in long-term debt financing to pay for high priority deferred maintenance projects involving the renewal or replacement of capital assets. All projects funded by this mechanism are required to have a useful life of at least 15 years. It was determined that the University should provide the financing and that funds to repay the principal and interest would be appropriated in the annual State budget.

The 1999 State Budget Act appropriated a total of $5.1 million to pay for the principal and interest related to the 1994-95 and the 1995-96 deferred maintenance projects. The 2009-10 budget continues this level of funding.

COMPENSATION, EMPLOYEE AND RETIREMENT BENEFITS, AND NON-SALARY COST INCREASES

This chapter discusses funding increases for employee salaries and benefits, and for price increases required to maintain the University's purchasing power at present program levels.

An area of continuing concern, as a result of years of underfunding of the University's budget, is the growing lag in faculty and staff salaries compared to market. Among the University's highest priorities is to achieve and maintain market-competitive total compensation for its employees. This means providing sufficient funds, through a combination of merits, general range, market, and equity adjustments to keep UC faculty salaries at the average of the salaries provided at its eight comparison institutions, and to provide salary increases for other employees that, on average, remain competitive with the market.

The University's budget plan for 2009-10 includes a compensation package of 5% for faculty and staff funded from State and UC General Funds and student fee income. This package includes funding for the following elements:

- continuation costs for salaries and health and welfare benefits provided in the previous year;
- funding for merit salary increases for eligible employees;
- general range adjustments effective October 1 (for eligible employees);
- market based and equity salary increases; and
- health and welfare benefit cost increases.

Consistent with past practice, compensation for employees funded from other fund sources — including teaching hospital income, auxiliary enterprises, federal funds and other sources — must be accommodated from within those fund sources and must conform to the University's established systemwide salary programs for State-funded employees. The faculty salary plan implemented in 2007-08, which aimed to increase faculty salaries to market over a four-year period, was suspended in the second year due to the State's fiscal crisis. If new funding is provided, the University proposes to return to the faculty salary plan in 2009-10, although specifics of market adjustments are yet to be developed. For other academic and staff employees, the 5% package will narrow the competitive salary gap for staff by approximately 1%. An amount equal to 3% of the

DISPLAY XIX-1: COMPONENTS OF THE COMPENSATION PACKAGE

- **Continuation costs** are costs incurred in the budget year from salary and benefits increases occurring during the previous year, but not fully funded because salary increases were implemented on October 1 and benefit costs increase on January 1. In order to annualize the total cost, the unfunded portion must be recognized in the budget year.
- **Merit increases** recognize and reward excellence, and are critical to the preservation of the quality of the University. Academic merit salary increases in particular provide an incentive to maintain and expand teaching and research skills, and enable the University to be competitive with other major research universities in offering long-term career opportunities. Merit increases are never automatic.
- **General range adjustments** for eligible employees are pay increases that reflect changes in the cost of living.
- **Market and equity adjustments** help bring an individual's salary to market level for employees in jobs with the biggest market gaps, or to address recruitment and retention issues.

non-salary base will be provided for price increases.

Compensation for Academic and Staff Employees: Salary Increases

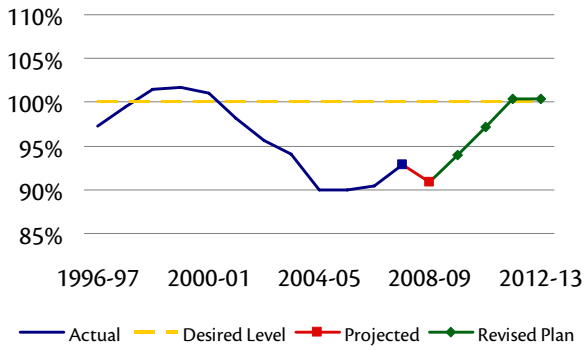
In 2005, The Regents commissioned a study to review UC's total compensation program. The results of the study indicated that in general, salaries were substantially below that of the market median. However, the total compensation package, including salary, health and welfare benefits for active employees and annuitants, and retirement system benefits, was close to the market. It is anticipated that the employer-provided value of the benefit package will decrease in the next few years as employer and employee contributions to the retirement system, not required since the early 1990s, are phased in to ensure the solvency of the retirement program. In addition, funding over the next several years likely will not be adequate to match the inflationary increases of health benefit costs, requiring that employees contribute a larger share of their medical premiums. The University's long-range plan is to rebalance the components of the total compensation package and bring salaries closer to market-competitive levels so that the total compensation package remains competitive. In order to maintain the quality of its programs, the University is determined to remain competitive in the market.

Funding Shortfalls and the Salary Gap

The fiscal crisis faced by the State during the early part of this decade has contributed to the gap between UC salaries for UC faculty and other employees and the market. As part of the State's actions to reduce the University's budget in 2001-02 and 2002-03, the University lost funding that had been targeted for general range, market, and equity increases for faculty and staff. The University instituted additional internal budget cuts in order to fund academic merit increases

DISPLAY XIX-2: LADDER RANK FACULTY SALARIES AS A PERCENTAGE OF MARKET

After one year of the faculty salary plan, the market lag of UC's faculty salaries lag improved from 9.6% in 2006-07 to 7.1% in 2007-08. However, with no general range adjustments in 2008-09, it is expected that the gap will widen again. Returning faculty salaries to market will require salary increases of 7.5% annually over three years.



for 2003-04 and 2004-05, but no employees received a general range adjustment and staff employees received no merit increases. While the Compact provided funding for academic and staff salary increases in 2005-06, this was not enough to reverse the effects of years without adequate salary increases. By 2004-05, faculty salaries had fallen 10% behind the University's comparison institutions. A similar problem exists for other academic and staff employees.

Closing the Faculty Salary Gap

In 2007-08, the University began an accelerated plan to eliminate the 9.6% faculty salary lag and return faculty salaries to market over a four-year period. Using funding provided by the Compact as well as internal redirection of funds, the plan called for funding merit increases to reward excellence, general range adjustments to provide increases to all faculty, and market adjustments to raise salaries of faculty who were on-scale, but no longer market competitive. UC's faculty salary scales are significantly below market. Newly recruited faculty are often paid off-scale in order to attract them to UC. In addition, faculty may be paid off-scale in order to ward off recruitment efforts by other institutions. Currently, about 60%

of all UC faculty are paid off-scale. These salary adjustments were expected to close the faculty salary gap by 2010-11; the four-year cost of implementing this plan was estimated to be in excess of $260 million. The first year of the plan was implemented in 2007-08, and the faculty salary gap relative to the University's comparison institution was reduced to 7.1%. The second year of the plan, however, has been postponed due to the State's fiscal crisis. The University proposes to return to the faculty salary plan if new funding is available, although levels of general range and market adjustments must still be determined.

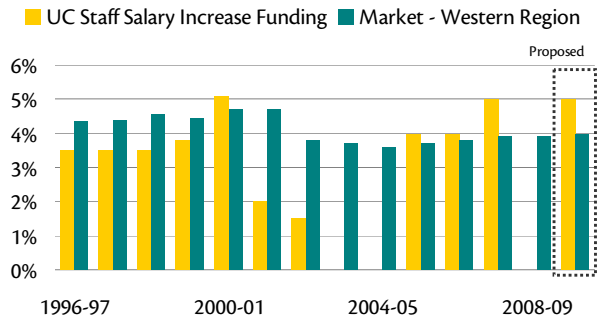
Staff Salary Plan

The funding gap with respect to staff salaries presents a similar problem for the University as faculty salaries. Compared to market data from over 800 employers of all sizes and industries, including the public sector, in the western United States, annual salary increase funding for UC staff employees lagged every year but one from 1999-00 to 2004-05. Market salaries over the period have been increasing at nearly 4% per year, but funding for UC staff salary increases has not kept pace. In fact, during 2003-04 and 2004-05, UC was unable to provide any increases. From 2005-06 to 2007-08, with funding from the Compact, UC exceeded market increases, but again in 2008-09, no funding was provided for staff salary increases.

In Fall 2005, The Regents adopted a plan calling for annual increases of 5% - 5.5% in staff salaries over a period of 10 years to close the gap. The University recognizes that while this amount will keep pace with market increases, it is not sufficient to address all salary inequities. For now, market and equity funding will only address the most serious market and retention situations. As noted above, no salary increases were provided in 2008-09, thereby exacerbating the problem with respect to achieving competitive salaries for staff.

DISPLAY XIX-3: INCREASES IN FUNDING FOR STAFF SALARIES COMPARED TO MARKET

This display shows annual percentage increases in funding for UC staff salaries compared to increases in funding for salaries in the Western Region market. In six out of the last ten years, UC salary increases lagged market increases. In three of those years, UC was unable to provide any increases, resulting in significant market disparities. (Source: World at Work Annual Salary Budget Survey)



For employees represented by unions, the University has collective bargaining agreements that specify compensation increases for their members. Non-represented employees are eligible for salary increases through performance-based merit salary programs. These are funded from a pool created by combining budgeted funds for general range adjustments with those provided for merit increases.

Actual merit or other salary and benefit actions for University employees may be subject to notice, meeting-and-conferring, and/or consulting requirements under the Higher Education Employer-Employee Relations Act (HEERA).

Employee and Retirement Benefits

Employee Benefits

As part of the total compensation package for faculty and staff, the University offers competitive health and welfare benefits. On average, and depending upon appointment type, the University may pay as much as 40% of an employee's annual base salary in employer benefit costs over and above salary. Therefore, while salary packages lag the market for both faculty and staff, the total

compensation package at the University remains competitive when benefits are included.

Chief among these benefits are medical and dental plans for active employees. The University has a continuing commitment to controlling employee health benefit costs; however, these efforts have been impacted by state and national trends of dramatically increasing health insurance costs. Increases in health premiums have outpaced core funding available in each of the last four years.

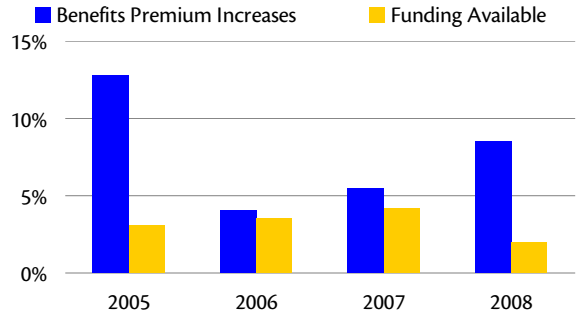
It is unlikely that there will be sufficient funding within the Compact to cover the entire cost increase expected in employee health benefits for 2009-10 estimated at 11%, and historically, funding available for medical and dental premiums paid by the University have not been enough to cover actual cost increases.

The University will use available funding not used for salary increases to help defray the cost of increases in health benefits for employees; however, it is likely that some of the increases in health benefit costs will again be borne by employees themselves.

The University's progressive medical premium rate structure is designed to help offset the impact of the employee's share of the medical plan premiums on lower paid employees. While UC continues to pay approximately 87% of monthly medical premiums for employees on an aggregate basis, UC has made a strategic decision to cover an even larger portion of the premium for those in lower salary brackets.

DISPLAY XIX-4: HEALTH BENEFIT COST INCREASES AND CORE FUNDING AVAILABLE

UC's share of annual increases in medical and dental benefit premiums have outpaced the core funding available to cover costs.



While the University has historically had a very competitive benefit package compared to those of other institutions, it is anticipated that within the next few years there will be an unavoidable decrease in the employer-provided value of the overall benefit package due in part to increases in employee paid health premiums.

Annuitant Health Benefits

As part of the benefit package, the University provides medical and dental benefits for over 33,000 eligible retirees. Consistent with the principles of the Compact, the University is requesting funding that is equivalent to the funding provided for the State's annuitants. The Department of Finance traditionally calculates these costs based on the most recent available data.

Currently, the University pays its share of annuitant health benefits on a "pay-as-you-go" system, whereby actual plan premiums and costs are paid from an assessment on payroll. In 2007-08, the University's expenses related to annuitant health totaled $225 million.

New federal accounting rules require the University to report in its financial statements all post-employment benefits (OPEB) expense, such as retiree medical and dental costs, on an accrual basis over the employees' years of service, along with the related liability, net of any plan assets. Beginning with the 2007-08 financial statements, the University will record the annual OPEB expense, including normal cost, interest, and amortization of unfunded liability. The total accrued OPEB expense for 2007-08 was approximately $1.1 billion.

Reinstatement of Retirement Contributions

Prior to November 1990, contributions to the University of California Retirement Plan (UCRP)

were required from both the University as employer and from employees as members. In the early1990s, the Regents suspended University contributions to UCRP after the actuaries confirmed that UCRP was adequately funded to provide plan benefits for many years into the future. At the same time, the Regents directed that employee contributions be redirected to individual accounts in the Defined Contribution (DC) Plan. As part of this decision, The Regents reserved the right to reinstate contributions to UCRP to maintain the Plan's funded status.

Under the DC Plan, contributions from employees have been held in accounts and invested at an employee's direction. DC Plan accumulations are available for distribution starting at retirement or termination of employment.

At the March 2006 meeting, the Regents approved a targeted funding level of 100% over the long term along with employer and employee contributions at rates sufficient to maintain that level within a range of 95% — 110%. Over the 18 years when neither employees nor the University has contributed to UCRP, the funded status of the retirement program has declined and is projected to dip below 100% in 2009.

The Regents approved a resumption of UCRP contributions effective July 2007, subject to the availability of funding, the budget process, and for represented employees, the collective bargaining process. However, no State funding was provided in the 2007-08 budget and the restart of contributions was delayed.

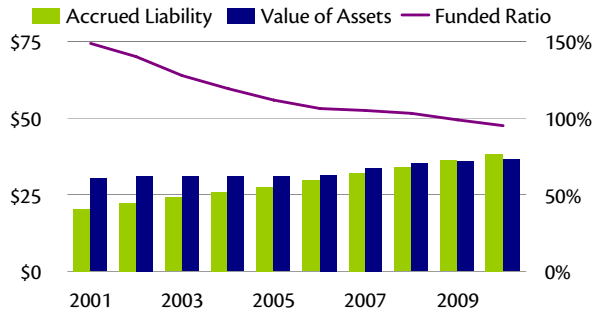
In September 2008, the Regents approved a new funding policy needed to keep UCRP fully funded, and established a date of July 1, 2009, subject to collective bargaining where applicable, for the resumption of employer and employee contributions to the UCRP. While the actual level of employer and employee contributions will be determined at a future Regents meeting, the funding policy includes a commitment that the employer contribution percentage will be equal to or greater than the employee contribution. The University's expectation is that in the first year of contributions, there would be no impact on employee take-home pay because employee contributions could begin in the form of a redirection of mandatory employee contributions currently going into the UC Defined Contribution Plan. Additionally, the University expects that its long-term approach to how employer and employees will share the cost of UCRP benefits will be consistent with the State's approach to contributions to CalPERS.

At the November 2008 meeting, UC's actuary will present the Regents with the annual valuation for UCRP and information regarding the total recommended level of contributions required from both UC and employees to keep UCRP fully funded. Then, at a later meeting, the Regents are expected to determine the amount of resources available, and how contributions should be divided between the University and employees (i.e., the amounts UC will contribute and the amounts employees will contribute).

The University estimates that over the 18 years during which employer and employee contributions were not required, the State has

DISPLAY XIX-5: UCRP HISTORICAL AND PROJECTED FUNDED STATUS
(DOLLARS IN BILLIONS)

The surplus in the UC Retirement Plan has diminished over time and is expected to dip below the 100% funded level by 2009. Employer and employee contributions to the UCRP will need to be restarted to keep the retirement program fiscally viable.



saved nearly $2.3 billion. In the budget year, the State and student fee-supported compensation base is approximately $2.4 billion. If contributions were restarted at a level of 11.54%, with employees contributing 2% and UC contributing 9.54%, the State share would be $228 million. UC would need to identify an additional $42.8 million from UC General Funds and $450 million from other fund sources. The budget plan for 2009-10 reflects the $228 million needed from the State plus the $42.8 million needed from UC General Fund sources, for a total of $270.8 million.

Non-Salary Price Increases

Prices of equipment, supplies, utilities, and other non-salary items purchased by the University are also rising. Non-salary items include instructional equipment and supplies such as chemicals, computers, or machinery; library materials, and purchased utilities. Increases in non-salary costs without corresponding increases in budgeted funds oblige campuses to find alternative fund sources or efficiencies to cover these costs.

To offset the impact of inflation on non-salary items, such as instructional equipment and library materials, and maintain the University's purchasing power, $21.6 million in funding within the Compact is proposed to cover non-salary price increases averaging 3%, based on the Consumer Price Index (CPI). Costs of goods and services employed for education, as measured by the Higher Education Price Index (HEPI), typically rise faster than the CPI, and as a result, the 3% adjustment in the budget plan implicitly requires the University to create new efficiencies to cover actual cost increases above the CPI. In addition, the budget plan includes $24.1 million to address an anticipated 10% increase in the price of purchased utilities. Since 1999-00, prices of electricity and natural gas have risen 140%, resulting in large cost increases for UC campuses despite only modest increases in consumption.

DEPARTMENT OF ENERGY LABORATORY MANAGEMENT

Contracts for University management and oversight of the Department of Energy (DOE) Lawrence Berkeley National Laboratory (LBNL) and the University's ownership interest in Los Alamos National Security Limited Liability Company (LANS-LLC) and Lawrence Livermore National Security Limited Liability Company (LLNS-LLC), which are the contractors at Los Alamos (LANL) and at Lawrence Livermore (LLNL), provide compensation to the University for its management of the Laboratories.

The University was awarded a new management and operating contract for LBNL on April 19, 2005. This contract runs for five years and may be extended through an "award term" provision for additional years not to exceed 20 in all.

The University's original LANL contract expired on May 31, 2006, and its LLNL contract expired on September 30, 2007. These two Laboratories are now managed by limited liability companies partially owned by the University.

- The LANS-LLC was awarded a new management and operating contract for LANL on December 21, 2005 and commenced full operations on June 1, 2006. This contract runs for seven years and may be extended through an "award term" provision for additional years not to exceed 20 in all.
- The LLNS-LLC was awarded a new management and operating contract for LLNL on October 1, 2007. This contract also runs for seven years and may be extended through an "award term" provision for additional years not to exceed 20 in all.

Indirect Cost Reimbursement
The University receives indirect cost reimbursement for LBNL. In accordance with a *Memorandum of Understanding between the University and the State Department of Finance*, this indirect cost reimbursement contributes to the UC General Fund income and helps to support the University's operating budget, in particular its research programs. In 2008-09, management fees from the LBNL contract will provide $1.1 million to fund the UC General Fund budget. Since the University no longer directly manages LANL and LLNL, the University no longer receives an indirect cost reimbursement contribution related to LANL and LLNL.

DOE Management Fee
Performance management fees from LBNL are gross earned amounts before the University's payments of unreimbursed costs. In contrast, net income to UC from LANS and LLNS reflects fee income remaining after payment of unreimbursed costs incurred by the LLCs at the two laboratories. In total, $33.5 million, which represents the University's performance management fees from LBNL ($4.5 million) as well as an estimated share of the LANS and LLNS net income ($29 million), is budgeted as restricted fund income for 2008-09.

- **LBNL Management Fee Revenue.** The $4.5 million in management fee revenue related to LBNL will be used for costs of University oversight, research programs, reserves for future claims, and unallowable costs associated with LBNL.

- **LLC Income.** LLC income is estimated at $29 million for 2008-09. The planned expenditure of the $29 million is proposed to and approved by The Regents before implementation.

Expenditure Plan for 2008-09 LLC Income
Of the estimated $29 million of LLC income available this year, The Regents approved various expenditures at the May 2008 meeting and will approve proposed research expenditures at a later meeting. At the May 2008 meeting, The Regents approved $2.2 million to provide supplemental income to select LANS and LLNS employees for whom it was the University's responsibility to recruit to employment, and $3.6 million to cover unreimbursed oversight costs.

The remaining $23.2 million is designated for reserves for future claims ($1.3 million), and for research programs ($21.9 million). A proposal will be presented to The Regents at the November 2008 meeting.

LLC Income for 2009-10. The expenditure plan for the DOE lab management fees remain unchanged for 2009-10 because of the uncertainties and inexperience with the new contractual arrangements with the LLCs. The budget will be adjusted as information becomes available.

HISTORICAL PERSPECTIVE

Historically, the University's State-funded budget has reflected the cyclical nature of the State's economy. During times of recession, the State's revenues have declined and appropriations to the University either held constant or were reduced. When the State's economy has been strong, there have been efforts to "catch up." The last four decades have all begun with significant economic downturns followed by sustained periods of moderate, and sometimes extraordinary, economic growth.

The University has met this challenge several times in the last four decades. The University experienced budget reductions of about 20% in real dollars during the late 1960s and early 1970s. Faculty positions and research funding were cut, and the student-faculty ratio deteriorated by about 20%.

In the late 1970s and early 1980s, the University again experienced a number of budget cuts. By the early 1980s, faculty salaries lagged far behind those at the University's comparison institutions and top faculty were being lost to other institutions; buildings needed repair; classrooms, laboratories, and clinics were poorly equipped; libraries suffered; and the building program virtually came to a halt.

The situation improved significantly in the mid-1980s when a period of rebuilding was initiated. Faculty and staff salaries were returned to competitive levels; funds became available for basic needs such as instructional equipment replacement and building maintenance; and research efforts were expanded. The capital budget also improved dramatically. There was significant growth in private giving, and the University once again became highly competitive for federal research funds. By the late 1980s, however, the situation began to change. Fiscal problems at the State level led to a growing erosion of gains made during the mid-1980s. By 1989-90, UC was struggling with the early stages of a fiscal problem that subsequently turned into a major crisis.

The Budget Crisis in the Early 1990s

The University experienced dramatic shortfalls in State funding during the first four years of the 1990s. Although State funding increased in 1990-91, it was below the level needed to maintain the base budget and fund a normal workload budget. Over the next three years, State funding for the University dropped by $341 million. At the same time, the University had to cope with inflation, fixed cost increases, and workload growth. Consequently, the University made budget cuts totaling $433 million, equivalent to roughly 20% of its State General Fund budget in 1989-90, as depicted in Display XXI-1.

DISPLAY XXI-1: PERMANENT CUTS TO CAMPUS AND OFFICE OF THE PRESIDENT BUDGETS 1990-91 THROUGH 1994-95
(DOLLARS IN MILLIONS)

1990-91	5% cut in research, public service, and administration.	$ 25
1991-92	Workforce reduction in both instructional and non-instructional programs; cut in non-salary budgets; undesignated cut.	120
1992-93	Permanent cut of $200 million phased in over two years.	200
1993-94	Reduction in campus and Office of the President budgets, resulting in further workforce reductions.	35
1994-95	Reductions in campus and Office of the President budgets in order to fund restoration of salary funds cut temporarily in 1993-94.	53
	TOTAL	**$ 433**

In addition, employees received no general cost-of-living increases for three years and salaries were reduced on a one-year basis. Student fees were raised, though significant increases in financial aid helped to mitigate the impact on financially needy low- and middle-income students.

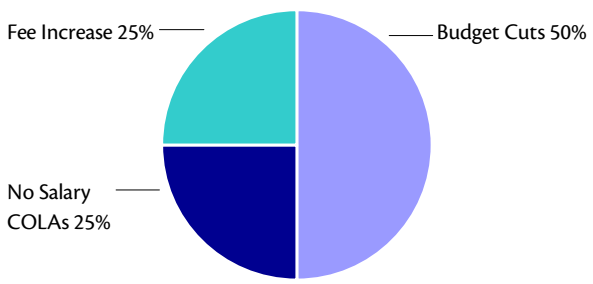
The enormity of the budgetary losses during the early 1990s is difficult to grasp. One way to convey the magnitude of the problem is to consider that the University's 1993-94 State General Fund budget was less than it was in 1987-88, even though in the interim there had been inflation, other cost increases, and enrollment growth of 6,200 students (4.3% increase) between the years 1987-88 and 1993-94. Another way is to consider that the University's budget would have been about $900 million greater if the State had maintained the base and funded normal cost increases and workload growth over the four years from 1990-91 through 1993-94. The University coped with this shortfall in ways that reflected the limited nature of its options in the short term.

As illustrated in Display XXI-2, about half of the loss was taken through budget cuts, approximately another quarter by providing no cost-of-living increases for employees, and the remaining quarter was made up through student fee increases accompanied by increases in student financial aid.

While regrettable, the fee increases were necessary to address budget cuts of such significant magnitude. At the same time, the University mitigated the impact of these fee increases on financially needy low- and middle-income students through a significant increase in financial aid grants (as opposed to loans). Over five years, through 1994-95, financial aid grants and other gift aid funded from University sources increased by approximately $118 million, or nearly 170%, to help mitigate the impact of increased fees.

During the early 1990s, the University's General Fund workforce declined by a net total of approximately 5,000 full-time equivalent (FTE) employees. While much of this decline occurred through early retirements — an approach preferred to layoffs — the result was that the University had many fewer staff available to handle the same workload. The instructional program was protected to the extent possible by making deeper cuts in other areas such as administration, research, public service, student services, and facilities maintenance. In particular, administration was assigned deep cuts both on the campuses and in the Office of the President. In addition, the purchase of scholarly journals for the libraries was severely curtailed, the backlog of deferred maintenance projects continued to grow, and the budget for instructional equipment replacement declined to only about half of the amount needed. Although instructional resources were eroded by the budget cuts, the University honored the Master Plan by continuing to offer a place to all eligible California resident students who sought admission at the undergraduate level and providing students with the classes they needed to graduate in a timely manner.

DISPLAY XXI-2: $900 MILLION SHORTFALL FROM WORKLOAD BUDGET



In 1994-95, after years of steady erosion, the University's budget finally stopped losing ground. For the first time in four years, the State provided the University with a budget increase over the prior year totaling about 3% (excluding revenue bond payments). Base salary levels were restored following a temporary salary cut in 1993-94, and funding for faculty and staff cost-of-living salary

increases of about 3% was provided for the first time since 1990-91. The student fee increase was held to 10% through a compromise agreement to fund deferred maintenance with debt financing. Once again, increases in financial aid accompanied the fee increase, helping to offset the impact on needy students.

While the 1994-95 budget represented a substantial improvement over previous years, the University nonetheless remained in precarious financial condition. The University's share of the State General Fund budget had declined to 4.3% (before the 1990s fiscal crisis began, the University's share was 5.3%). Faculty salaries lagged the average of the University's comparison institutions by 7%, the workforce had been reduced by 5,000 FTE without a corresponding decline in workload, and the budget was severely underfunded in several core areas that have a direct relationship to the quality of instructional programs — building maintenance, instructional equipment, instructional technology, and libraries, for example.

Compact with Governor Wilson: 1995-96 through 1999-2000

A major turning point came with the introduction of Governor Wilson's 1995-96 budget, which included the following statement:

> *"Unfortunately, the fiscal difficulties of the early 1990s prevented the State from fully meeting the needs of higher education, and California's competitiveness has been jeopardized. Now that the State's resources have begun to improve, the investment in higher education must be renewed. . . . . A strong system of higher education is critical to our social fabric and our ability to compete in the global markets of the 21st Century."*

Translating this perspective into action and signaling a very welcome message about the priority of higher education, the Governor's Budget for 1995-96 included a Compact with Higher Education that ultimately was operational through 1999-2000. Its goal was to provide fiscal stability after years of budget cuts and allow for enrollment growth through a combination of State General Funds and student fee revenue.

The Compact included provision of State General Fund budget increases averaging 4% per year over the four-year period. The Compact also anticipated general student fee increases averaging about 10% a year as well as additional fee increases for students in selected professional schools. At least one-third of new student fee revenue was to be earmarked for financial aid, with the remainder used to help fund the University's budget. Additional financial aid was to be provided through the State's Cal Grant Program. The Compact also provided additional funds to cover debt service related to capital outlay projects and deferred maintenance. Based on the premise that there was a continuing need for efficiencies in order to maintain student access and program quality within available resources, the Compact included a $10 million budget reduction each year for four years, reflecting $40 million in savings to be achieved through productivity improvements. For the capital budget, the Compact provided $150 million a year, with priority given to seismic and life-safety projects, infrastructure, and educational technology.

The funding provided under the Compact was to be sufficient to prevent a loss of further financial ground as the University entered into a time of moderate enrollment growth (1% per year). It did not provide restoration of funding that had been cut during the early 1990s, but it did provide the institution with much-needed fiscal stability after years of budget cuts as well as a framework to begin planning for the future.

The Compact was remarkably successful. During the four years beginning in 1995-96 and ending in 1999-2000, the State funding under the Compact

allowed the University to maintain the quality, accessibility, and affordability that are the hallmarks of California's system of public higher education. The University enrolled more students than the Compact anticipated, and the State provided funding to support them, although a priority was placed on providing access for undergraduate students. Graduate enrollments grew only modestly, exacerbating the imbalance between graduate and undergraduate enrollments that has occurred over the last two decades. Faculty salaries were restored to competitive levels, allowing the University to once again recruit the nation's best faculty. Declining budgets were stabilized and further deterioration of the University's budget was halted.

In fact, the Legislature and the Governor not only honored the funding principles of the Compact, but also provided funding above the levels envisioned in the Compact. This additional funding eliminated the necessity for increases in student fees, allowed for reductions in student fees for California resident students, helped restore UC faculty salaries to competitive levels more quickly, provided $35 million for a number of high priority research efforts (including the Industry-University Cooperative Research Program, the UC San Diego Supercomputer Center, and a variety of other legislative research initiatives), and increased funding for K-14 and graduate outreach by $38.5 million to expand existing programs and develop new ones.

In all, the State provided nearly $170 million in funding above the level envisioned in the Compact for high priority programs. In addition, general obligation bonds and/or lease revenue bonds were provided each year for high priority capital projects.

A New Partnership Agreement with Governor Davis

Governor Davis entered office in January 1999 with a commitment to improve California public education at all levels. For UC, his commitment manifested itself in a new Partnership Agreement, the funding principles of which were developed in time to guide development of the 2000-01 budget. The Partnership Agreement was a comprehensive statement of the minimum resources needed for the University to maintain quality and accommodate enrollment growth projected throughout the decade, accompanied by the expectation that the University would manage these resources in such a way as to achieve certain outcomes outlined in very specific accountability principles.

Specifically, the Partnership Agreement expressed a commitment on the part of the Governor to support a 4% increase to the base budget each year to provide adequate funding for salaries and other cost increases; funding for enrollment growth at the agreed-upon marginal cost consistent with the Master Plan; and a further 1% annual increase to the base budget to address chronic underfunding of State support for core areas of the budget (building maintenance, instructional technology, instructional equipment, and library materials). It also included an acknowledgement of the need to either increase fees or provide revenue equivalent to that which would be generated from a student fee increase to provide adequate support for student fee funded programs, as well as a commitment to provide State support for summer instruction at each of the University's general campuses.

The accountability measures included in the Partnership Agreement covered a wide range of issues, including goals related to maintaining quality (such as preventing further deterioration in the student faculty ratio); improving relationships with K-12 schools (including major initiatives in outreach and K-12 teacher professional development); increasing community college transfer; and phasing in State-supported summer instruction at each of the campuses, as well as a

variety of other issues. The Partnership specified performance data and reporting requirements for each goal, to be reviewed by the Administration on an annual basis.

First Year of the Partnership Agreement — 2000-01

For the first year of the Partnership, the University's basic budget request was fully funded, consistent with the funding principles of the Partnership. Funding was also provided within the Partnership to support the first year of the University's initiative to improve undergraduate education.

In addition to this basic funding, support above the Partnership level was provided for other high priority needs, including funding to do the following: replace foregone revenue related to a second fee reduction of 5% for resident undergraduate students and a 5% fee reduction for resident graduate academic students; provide salary increases beyond normal cost-of-living and merit increases, primarily for lower paid staff; augment several outreach programs and significantly expand K-12 teacher professional development programs; support research initiatives (in the areas of Industry-University Cooperative Research, AIDS, alcohol and substance abuse, brain injury, neurological disorders, engineering and computer science, UC-Mexico collaboration, Internet2, Lupus, spinal cord injury, and labor policy); expand the California Digital Library; augment Cooperative Extension; initiate the Teacher Scholars and Principal Leaders programs; expand the California State Summer School for Mathematics and Science; begin planning for a regional center in the Santa Clara Valley; development of K-12 high-speed Internet connections; and reduce summer term fees to a level equivalent to what students pay during the regular academic year.

The State also provided $108 million in one-time funding for deferred maintenance, instructional equipment and libraries; endowed chairs and new initiatives in aging and geriatrics; teaching hospital equipment; and several research initiatives.

Augmentations over this period totaled $476 million in permanent and $108 million in one-time funds. The total State General Fund Budget for UC in 2000-01, before the State's fiscal crisis began, was $3.2 billion. The significant infusion of State funding over this two-year period was welcome support for the University. Faculty salaries had once again reached competitive levels, the University was beginning to address salary lags for staff employees, enrollment growth was fully funded, progress was being made to reduce shortfalls in funding for core areas of the budget, student fees were kept low, and support was provided for a variety of research and public service initiatives of importance to the State and the University.

A State Fiscal Crisis —2001-02 through 2004-05

Unfortunately, by 2001-02, the State's fiscal situation was beginning to deteriorate. The University based its budget request on the Partnership Agreement and included information on other high priorities for the University and the State to be funded when the State's economic situation improved. The Governor's Budget, released in January 2001, proposed full funding for the University's budget request as well as additional funds for initiatives beyond the Partnership Agreement. However, by the time the May Revise was issued, the State's financial situation had weakened to the point of requiring reductions to funding levels the Governor had originally proposed and the State was fully engaged in a major fiscal crisis that was to last four years.

The final 2001-02 budget was the first budget in seven years that did not provide full funding of the Partnership Agreement (or the preceding Compact). Partnership funds totaling $90 million

were eliminated from the University's proposed budget, thereby significantly reducing the funding available for compensation and other fixed costs and eliminating the additional 1% ($30 million) originally proposed for core needs. However, the budget did provide an increase of $131 million, including partial funding of the Partnership as well as funding above the Partnership for initiatives representing high priorities for the Governor and the Legislature.

This funding allowed the University to fund merit and COLA salary increases for faculty and staff, employee health and welfare benefit costs, and funding for maintenance of new space that came on line during the budget year. Funds for strengthening the quality of undergraduate education were not provided and UC funding available for debt financing for deferred maintenance projects was reduced from $6 million to $4 million to help fund compensation increases. Enrollment growth of 7,100 FTE was also funded (including an additional 1,400 FTE proposed in the May Revise). Cost adjustments to student-fee-funded programs were provided, avoiding student fee increases for the seventh consecutive year, and funding was provided to convert summer instruction at the Berkeley, Los Angeles, and Santa Barbara campuses to State-support.

Several initiatives also were funded above the level called for under the Partnership, totaling $75 million in one-time and $3 million in permanent funds. These included energy costs, Internet2 access for faculty and students, faculty start-up costs associated with accelerated hiring at the Merced campus, increases in research requested by the Governor and/or the Legislature, and one-time clinical teaching support funds for teaching hospitals, neuropsychiatric institutes, and dental clinics.

The final budget also reduced funding for the California Professional Development Institutes and redirected $5 million from K-12 School-University Partnership Programs to increase funds for the Mathematics, Engineering, and Science Achievement Program (MESA), Puente, and Early Academic Outreach programs; provide funds for student-initiated outreach; and help fund campus costs associated with the implementation of comprehensive review of admissions applications. The University's State General Fund budget for 2001-02 totaled $3.3 billion.

By the time development of the 2002-03 budget began, the State's fiscal situation had deteriorated markedly, necessitating the unusual action on the part of the Governor and the Legislature to adopt mid-year budget reductions for UC of $40.8 million for the 2001-02 budget. One-time funds provided for energy costs were reduced, and support for the California Professional Development Institutes for K-12 teachers and the Digital California Project (K-12 Internet) was reduced. An unallocated reduction of $5 million was also included in the mid-year reductions. The State's budget deficit for 2002-03 eventually grew to $23.5 billion.

The final budget act for 2002-03 budget provided funding to the University for a 1.5% increase to the basic budget — instead of the 4% called for in the Partnership Agreement — to fund compensation, health and welfare benefits, and other increases. It also included funding for enrollment growth of 7,700 new FTE students and State support for summer instruction at the Davis campus. Increases to UC's State General Fund budget totaled $149 million.

While the increases to the budget were welcome, the budget also included base budget reductions totaling $322 million, including a 10% across-the-board cut to research programs; elimination of the "bonus" that was provided to financial aid in 1998-99 and 1999-2000, when student fees were reduced without a corresponding reduction in financial aid; reductions to the California Subject

Matter Projects, K-12 Internet connectivity, and outreach programs; elimination of all State General Funds for the California Professional Development Institutes; and a one-time reduction of $29 million for core needs, including deferred maintenance, libraries, instructional equipment, and instructional technology. State General Funds provided to the University in the 2002-03 Budget Act totaled $3.2 billion.

Under the authority granted to the Department of Finance in Control Section 3.90 and with the ultimate approval of the Legislature in March 2003, mid-year cuts were instituted in December, 2002, that included $70.9 million in further base budget cuts for the University. These cuts were targeted at the UC College Preparatory Initiative (which provides online courses for K-12 students), savings from prior years related to several research programs that had received large augmentations in the late 1990s, public service programs, the K-12 Internet program, academic and institutional support, and student services. In addition to cuts targeted at specific programs, $19 million was designated as an unallocated reduction, which the University offset by instituting an increase in mandatory systemwide student fees of $135 approved by the Board of Regents in December effective with the Spring 2003 term. When annualized, this fee increase totaled $405.

By the time the mid-year budget cuts were being approved for 2002-03, the State was facing a deficit for 2003-04 that was unprecedented in magnitude. With the release of the May Revision, the Governor estimated the deficit to total $38.2 billion. The final budget for 2003-04 addressed the State's shortfall through a combination of actions, including borrowing, assumptions about increased federal funding, an increase in the vehicle license fee, fund shifts, and spending reductions and savings.

For the University, cuts proposed by the Governor in January totaling $373.3 million were all approved in the final budget act. These reductions affected nearly every area of the budget and included another 10% cut to research as well as targeted reductions to the University of California College Preparatory program (on-line courses to K-12 students), outreach, the California Subject Matter Projects, K-12 Internet, other public service programs, academic and institutional support, and student services. Also included in the total reduction to the University's budget was $179 million in cuts offset by increases in student fees that otherwise would have been targeted at instructional programs. The Regents adopted an increase in mandatory systemwide student fees of $1,150, or 30%, to offset this reduction in 2003-04.

Also, $34.8 million of the total cut proposed to be targeted at increasing the University's student-faculty ratio was instead taken by the University as an unallocated reduction. In addition to cuts proposed by the Governor, the Legislature proposed $98.5 million in unallocated cuts that ultimately were included in the final budget. Of the total, $80.5 million was designated as one-time and $18 million was designated as permanent.

The final budget did include some funding increases as well, including one-time start-up funds for the Merced campus, funding for 13,000 additional FTE students at the agreed-upon marginal cost of instruction, funding for health and welfare benefits for annuitants and debt service, and other routine one-time budget adjustments. However, most of the Partnership was not funded, including funding for the 4% annual adjustment to the base budget, funding for core needs (including instructional equipment, instructional technology, maintenance, and libraries), and restoration of the $29 million reduction in 2002-03 to core areas of the budget that had previously been specified as a one-time cut. The 2003-04 State General Fund budget approved in the budget act for the University

was $2.87 billion, $282 million less than the State General Fund budget for 2002-03 adopted in September, 2002.

Another round of mid-year reductions occurred in December 2003, totaling $29.7 million. Originally, mid-year cuts were targeted at outreach ($12.2 million) and the Institute for Labor and Employment ($2 million), with another $15 million designated as an unallocated reduction. While these mid-year reductions originally were intended by the Governor to be permanent reductions, the budget agreement for 2004-05 restored funding for outreach and for the Institute for Labor and Employment. Consequently, the mid-year reductions were taken on a temporary basis in 2003-04 and only the $15 million associated with the unallocated reduction was ultimately approved as a permanent reduction. That reduction was taken as a temporary unallocated reduction for 2003-04 and offset on a permanent basis as part of the student fee increases approved for 2004-05.

The State remained in fiscal crisis for 2004-05 and the reductions to the University's budget were once again significant. State General Funds for 2004-05 totaled $2.721 billion, $147 million less than the funding level provided in the previous year. Base budget reductions included another 5% cut to research ($11.6 million) and a 7.5% reduction to academic and institutional support ($45.4 million). Another $34.8 million cut had originally been targeted at increasing the University's student-faculty ratio, but was instead taken by the University as an unallocated reduction.

Also included in the total reduction to the University's budget was $183.5 million in cuts offset by increases in student fees that otherwise would have been targeted at instructional programs. While the Governor had originally proposed a 10% increase in undergraduate student fees and a 40% increase in graduate academic student fees to help offset these cuts, as part of the negotiation of the Compact the Governor agreed to a three-year plan for student fee increases requiring undergraduate students to pay a slightly higher fee increase in 2004-05 in order to help moderate the fee increase for graduate students.

Thus, in 2004-05, undergraduate fees increased by $700, a 14% increase over 2003-04 rather than the 10% proposed in January, and graduate fees increased by $1,050, an increase of 20% rather than the 40% proposed in January. As specified in the Compact, in the second and third year of this plan, undergraduate students will pay increases of 8% per year in order to achieve an average increase over the three-year period of 10% per year, and graduate fees will rise by 10% per year.

The 2004-05 budget also included an average increase of 30% for most professional school students (at the request of the Governor, nursing professional school fees did not increase in 2004-05), which generated $5 million less in revenue than the Governor had originally assumed in his budget. The University believed that the increases needed to achieve the level of revenue proposed by the Governor would have been too steep to accomplish all in one year. As a result of the shortfall, campuses were asked to absorb an unallocated reduction of $5 million on a temporary basis until fees could be raised in 2005-06 to cover the shortfall. Nonresident tuition was also increased by 20% in 2004-05 for undergraduate and graduate academic students. It should be noted that nonresident students pay mandatory systemwide student fees and campus-based fees in addition to nonresident tuition.

One of the most difficult issues facing the University in the 2004-05 budget related to funding for enrollment. For the first time in recent history, the University was asked to reduce enrollment to help meet budget reductions. The Governor's January budget had proposed a 10%,

or 3,200 FTE, reduction in University freshman enrollments and called for the University to redirect these students to the California Community Colleges for their first two years of study. Upon successful completion of their lower division work, as specified by the UC campus that originally accepted and redirected them, these students would enroll for their upper division work at that UC campus. The University implemented the Governor's proposal in the spring and called the redirection program the Guaranteed Transfer Option, or GTO. The University initially offered GTO to 7,600 eligible freshman applicants.

As part of the actions taken on the final budget for 2004-05, the Governor and the Legislature reached a compromise that lowered the reduction in enrollment from 3,200 FTE to 1,650 FTE. This compromise allowed the University to offer freshman admission to all students who originally received the GTO offer. Because the offers were made very late in the admissions process, many students had already made other plans. Nevertheless, the actions taken by the Governor and the Legislature on enrollments were important for preserving the Master Plan guarantee of access for eligible students.

Following the compromise, the University immediately sent offers for freshman admission to all eligible students who had not yet received a UC freshman offer. Among the roughly 7,600 applicants initially offered GTO and later offered freshman admission, approximately 1,854 enrolled at UC during 2004-05. Another 500 remained as GTO students with plans to later transfer to the University as upper division students. Funding for student academic preparation programs was also a challenging issue in the 2004-05 budget. In his January budget, the Governor proposed eliminating funding for these programs. Ultimately, after significant negotiation, all but $4 million of the funds for these programs was restored on a one-time basis, leaving the program with a total of $29.3 million for 2004-05.

The Governor's January budget had also proposed elimination of all State funds ($4 million) for the Institute for Labor and Employment, a multi-campus research unit housed on the Berkeley and Los Angeles campuses. As part of the final budget package, the Governor and the Legislature agreed to restore $3.8 million of these funds, leaving the program with a $200,000 reduction, equivalent to the 5% reduction to the overall research budget that year.

The final budget eliminated all remaining funding for the Digital California Project (K-12 Internet) from the University's budget. Instead, the State budget included a total of $21 million in Proposition 98 funding specifically designated for schools to contract with providers for access to the high-speed Internet.

Consistent with the last several years, the 2004-05 budget again provided one-time funding to allow the Merced campus to continue its preparations to open the campus by Fall 2005. The budget increased one-time funding by $2.7 million to $10 million. This funding was provided for faculty start-up costs and to help establish the systems and core infrastructure needed to ready the campus for its opening in September, 2005.

Also, the one-time reduction of $80.5 million from 2003-04 was also restored, consistent with the prior year budget act and, consistent with past practice, funding for annuitant health benefits and lease revenue bond payments was provided.

The University did not receive funding for increases to salaries, employee health and welfare benefits, maintenance, energy, inflation, core needs, and other cost increases. Faculty salaries were about 8-10% behind the average of other comparison institutions — a similar problem existed with respect to staff salaries. Employee benefit costs were skyrocketing, energy costs were

increasing significantly, new space was coming on line with no funds to support maintenance, and funding for core needs that provide the infrastructure to support the academic program, such as libraries, instructional equipment, and instructional technology, was falling further behind.

With the 2004-05 budget, as a result of the State's fiscal crisis, the University's State General Fund budget was nearly $1.5 billion below what it would have been if a normal workload budget had been funded for the previous four years. A little more than 1/3 of this shortfall was accommodated through base budget cuts to existing programs; a little more than 1/4 was addressed through student fee increases; and the remainder represented foregone salary and other unfunded cost increases.

A New Compact with Governor Schwarzenegger
For 2004-05, the State was facing its fourth year of the budget crisis, with estimates of the deficit reaching $15 billion in December, 2003. In his January budget, Governor Schwarzenegger proposed further significant reductions to the University's budget, including over $140 million in additional base budget reductions, another $200 million in reductions to be offset by student fee increases, and an unprecedented enrollment reduction of 3,200 FTE, as discussed above. For the first time since the adoption of the California Master Plan for Higher Education more than 40 years ago, the University was being asked to turn away eligible students from freshman enrollment.

As the State's economic recovery remained slow, prospects for further cuts in the May Revise grew. Moreover, while the Governor's proposed solution to the overall deficit included major budget reductions in most areas of the budget, it also included heavy borrowing and several one-time actions that would only delay further cuts into future years. The University was gravely concerned about the future of the institution and the potential long-term effect on quality of the academic enterprise as the State fought its way out of its economic crisis over the next several years.

Governor Schwarzenegger was equally concerned about the University's future and asked his administration to work with the University and with the California State University on a new long-term funding agreement for the four-year institutions, similar to those developed with Governors Deukmejian, Wilson, and Davis in the past. The new higher education Compact was announced by Governor Schwarzenegger in May, 2004.

The fiscal provisions of the Compact are designed to provide sufficient resources for the following:

- **Block Allocation for Salaries, Employee Benefits, and Other Basic Support** — adjustments of 3% in 2005-06 and 2006-07, and adjustments of 4% for 2007-08 through 2010-11. The importance of this element of the Compact cannot be overstated. Faculty salaries lag behind the average of comparison institutions; there is a similar problem related to staff salaries. The Compact has allowed the University to stop the erosion in salaries in the first two years, and, in subsequent years as the State's fiscal situation improves, begin to close the gap and address salary inequities that exist between newly-hired faculty and staff and longer-term employees. Returning to paying competitive salaries is one of the University's highest priorities and is critical to our ability to maintain academic quality and restore the University's — and California's — competitive edge.
- **Core Academic Support Needs** — beginning in 2008-09 and continuing through 2010-11, an additional 1% adjustment to the base to be used to address annual budgetary shortfalls in State funding for core areas of the budget, including instructional equipment, instructional technology, libraries, and ongoing building maintenance.

- **Enrollment** — funding for enrollment growth consistent with the Master Plan at the agreed-upon marginal cost of instruction. UC estimates enrollment will grow by about 2.5% a year through this decade.
- **Student Fees** — undergraduate fee increases of 14% in 2004-05 and 8% in both 2005-06 and 2006-07; graduate fee increases of 20% in 2004-05 and 10% in both 2005-06 and 2006-07. Beginning in 2007-08, the University is to develop its budget plan each year based on the assumption that fees will be increased consistent with the Governor's proposed long-term student fee policy. That policy states that increases in student fees should be equivalent to the rise in California per capita personal income. However, in years in which the University determines that fiscal circumstances require increases that exceed the rate of growth in per capita personal income, UC may decide that fee increases of up to 10% are necessary to provide sufficient funding for programs and preserve academic quality. Revenue from student fees will remain with the University and will not be used to offset reductions in State support. The Compact also calls for the University to develop a long-term plan for increasing professional school fees that considers the following factors: average fees at other public comparison institutions, average cost of instruction, total cost of attendance, market factors, the need to preserve and enhance the quality of the professional programs, the State's need for more graduates in a particular discipline, and financial aid requirements of professional school students. Revenue from professional school fees will remain with the University and will not be used to offset reductions in State support.
- **Other Budget Adjustments** — annual adjustments for debt service, employer retirement contributions, and annuitant health benefits.
- **One-time Funds and New Initiatives** — consideration of additional resources for one-time purposes and new initiatives when the State's fiscal situation improves.
- **Capital Outlay** — continued support for bond financing of at least $345 million annually to meet capital outlay needs.

The Compact also includes accountability measures relating to issues that traditionally have been high priorities for the State. Thus, the University has agreed to maintain and improve where possible performance outcomes in a variety of areas, including maintaining access and quality; implementing predictable and moderate fee increases; enhancing community college transfer and articulation; maintaining persistence, graduation rates, and time-to-degree; assisting the State in addressing the shortage in science and math K-12 teachers; returning to paying competitive salaries and closing long-term funding gaps in core areas of the budget; and maximizing funds from the federal government and other non-State sources. The University will report to the Administration and the Legislature on its progress in these areas by October of each year.

A Turning Point — 2005-06 through 2007-08

As mentioned earlier, negotiation of the Compact with Governor Schwarzenegger late in the budget process for the 2004-05 budget helped stem the tide of budget cuts that had prevailed for four years. Further cuts that were likely to be targeted at UC in the May Revision were avoided. With the 2005-06 budget, the Compact represented a true turning point. For the first time since the State's recent fiscal crisis began, the State provided the University with a normal workload budget. Again, in 2006-07 and 2007-08, the State provided a normal workload budget and the University was beginning to address major shortfalls that had occurred in the recent fiscal crisis.

Over that three-year period, base budget adjustments of 3% in 2005-06 and 4% in 2006-07 and 2007-08 were funded to help support salary continuation costs, cost-of-living adjustments, market-based and equity salary adjustments, merit salary increases, health and welfare benefit cost increases, and non-salary price increases. Enrollment workload funding was provided to support 5,000 new student FTE in 2005-06, 5,299 new student FTE in 2006-07, and 5,000 new student FTE in 2007-08. In addition, the marginal cost of instruction methodology was revised in 2006-07 to more appropriately recognize the actual cost of hiring faculty and include a component for maintenance of new space, which had not been adequately funded by the State in recent years. By 2007-08, the marginal cost rate totaled $10,586 per student. Other normal workload increases included provision of a 2.25% non-salary price increase each year and funding for maintenance of new space ($16 million in 2005-06, $8.3 million in 2006-07, and $9.2 million in 2007-08).

In each of the three years, the University also directed an additional $10 million for a multi-year plan to restore $70 million of unallocated reductions that had originally been targeted at instructional programs. Thus, $30 million was been put toward this goal.

The State also funded several initiatives during this period. A total of $1.25 million was phased in over two years for the University's science and math initiative, *California Teach: One Thousand Students — One Million Minds.* State funds were matched 1:1 by the University for a total of $2.5 million for this program. An additional 400 APLE warrants were also authorized over that period as a loan forgiveness initiative to help participants in the program pay down their student loans. In 2005-06, all State funding for the University's program in labor and employment research was eliminated from the budget. However, funding totaling $6 million was restored to the University's budget for this program in 2006-07. Also, $4 million was provided in 2006-07 for the Gallo Substance Abuse Program at the San Francisco campus.

Funding for student academic preparation programs was once again a major issue in the budget process for all three years. In each year, the Governor's January budget proposed eliminating State funds for this program (totaling $17.3 million in 2005-06 and $19.3 million in 2006-07 and 2007-08), leaving only the University's $12 million in support for student academic preparation as called for in the Compact. In the end, the final budget act for all three years restored the State support. In fact, the budget for 2006-07 included an augmentation of $2 million for community college academic preparation programs. In addition, the debate over effectiveness of these programs led to development of a new accountability framework developed in 2005-06, and used as the basis for the University's first annual report on the framework in April, 2006. This framework is a significant step forward in enabling the University to assess the effectiveness of these programs in a demonstrably quantifiable way.

Similarly, the Governor's 2007-08 January budget had proposed elimination of State funds for labor and employment research. The Legislature augmented the University's budget by $6 million to restore funding for labor research to its original level when the program was initiated in 2000-01 and the final budget sustains the augmentation. Budget language accompanying the appropriation calls for 40% to be used for labor education programs and 60% for research on labor and employment.

Finally, the Legislature augmented the University's 2007-08 budget by $500,000 to support an increase for the California State Summer School for Mathematics and Science (COSMOS), an intensive

academic four-week residential program for talented and motivated high school students who have completed grades 8 to 12. This augmentation was sustained by the Governor. The University is grateful for the support of the Governor and the Legislature for this very worthwhile and successful program. It should be noted that two other legislative augmentations proposed for 2007-08, $1.5 million for agricultural research and $1.5 million for the Scripps Institute for Oceanography, were vetoed from the final budget act as part of the agreement reached between the Governor and legislative leadership to eliminate $700 million from the legislative version of the budget.

In the 2005-06 budget, fee increases were implemented as follows:

- an 8% increase in undergraduate student fees;
- a 10% increase in graduate academic student fees;
- increases ranging from 3% - 10% in professional school fees;
- a 5% increase in nonresident tuition for undergraduate students.

In 2006-07, the State provided funding to avoid planned increases in student fees.

In 2007-08, student fee increases of 7% for mandatory systemwide fees were implemented for all students, except 10% increases in the professional school fee were implemented for Law at the Berkeley, Davis, and Los Angeles campuses, and for Business at the Berkeley and Los Angeles campuses.

The budget in also continued $14 million in temporary start-up funds for the Merced campus and provided increases for annuitant health benefits and lease revenue bond payments, consistent with past practice. The State-funded budget for 2007-08 totaled $3.274 billion, which was a 6.4% increase over the prior year.

The budget in all three years also provided temporary start-up funds for the Merced campus ($14 million in 2005-06 and 2006-07, $10 million in 2007-08) as well as increases for annuitant health benefits and lease revenue bond payments, consistent with past practice. The State-funded budget for 2005-06 totaled $2.845 billion, which was a 5% increase over the prior year. The State-funded budget for 2006-07 was $3.077 billion and constituted an 8.2% increase over 2005-06. The State-funded budget for 2007-08 was $3.259 billion, which was a 5.9% increase over the prior year.

There were several initiatives the University had proposed in 2007-08 that were not funded in the final budget for that year.

- **Employer Retirement Contributions.** The University had requested that employer and employee contributions be reinstated by July 1, 2007. This issue was discussed at length throughout the budget process; however, the final budget does not include funds to reinstate support of the State's share of employer contributions, which had been estimated to be $60 million in the first year. The Governor's May Revision proposed budget language that would have stated the Governor's and Legislature's intent to fund employer contributions to the University's retirement plan (UCRP), once employee contributions are reinstated, at rates comparable to employer contributions provided to the Public Employees Retirement System. Unfortunately, neither house acted on this language.

  The University continues to believe that the State should support its efforts to ensure the fiscal viability of the retirement plan and that State support should be provided for the UCRP at a level similar to that provided for other State employees.

- **California Institutes for Science and Innovation.** As part of the Governor's Research Initiative announced in December, 2006, the January Governor's budget proposed increasing core support for the California Institutes for Science and Innovation by a total of $15 million, bringing the total State funding for operations to $19.8 million. The funding proposed by the Governor was needed to ensure that each Institute had a minimum level of support with which to operate, which in turn would act as seed money to continue to attract funds from industry and governmental sources. Unfortunately, the Legislature did not support the Governor's request and no funds for this purpose were contained in the final budget.
- **Funding for Petascale Computing.** The National Science Foundation (NSF) launched a national bidding process for the design and management of a $200 million petascale computer which would become operational in 2011 as the world's fastest supercomputer. The University requested and the Governor proposed including $5 million in the 2007-08 budget as State matching funds in support of the University's bid to win this competition. The final version of the budget did not include these funds. However, the issue became moot with the announcement that the award was made instead to the University of Illinois.
- **Funding for Casa de California.** For several years, the State budget had contained language authorizing the University to use operating funds (up to $7 million) to support renovations needed for the University's educational facility in Mexico City, *Casa de California.* As part of the final negotiations on the budget, the Governor agreed to veto $700 million from the Legislative version of the budget. Included among these vetoes was a total of $500,000 eliminated from the University's budget as well as the language authorizing use of State operating funds for maintaining and renovating the facility. It is the Governor's intention that no State funds be used for this facility.

Second State Fiscal Crisis in a Decade — 2008-09

The current fiscal year proved to be very difficult fiscally for the State. The ongoing structural deficit was estimated to be about $6 billion when the University developed its plan for 2008-09 last November and ended up totaling closer to $14.5 billion when the Governor and the Legislature negotiated a final budget. The State addressed its problem through a combination of budget cuts, borrowing, and revenue enhancements such as closing tax loopholes, among other actions.

For the University, the budget was constrained, falling short of funding basic costs. In developing the Governor's Budget, the Department of Finance first "funded" a normal workload budget consistent with the Compact with the Governor and then proposed a 10% reduction (totaling $332 million) to that higher budget to address the State's fiscal situation. The net result in the Governor's proposal between 2007-08 and 2008-09 was a reduction to the University's base budget of $108 million (excluding lease revenue bond payments and one-time funds). Thus, several items from the University's 2008-09 budget request were first "funded" and then that funding was subsequently eliminated.

The Governor's May revision proposed to restore $98.5 million of the cut proposed in January, and this proposal was sustained through the signing of the budget act. However, action occurred in October, after the final budget act had been passed, which further reduces the University's budget by $33.1 million. During negotiations on the budget, legislative leadership and the Governor agreed that the Department of Finance would take an additional $340 million in reductions from State agencies once the budget was completed. This

agreement is not reflected in the budget act itself, but will be reflected in the Final Change Book, a publication that shows each budget change to State-funded programs in more detail than appears in the budget act. A portion of that reduction is being achieved through an Executive Order issued by the Governor in July to eliminate contract and temporary employees from the State-funded roster. The $33.1 million reduction is the University's proportionate share of the remainder that must be saved from State agencies.

Thus, the University's current year budget is $48.7 million less than the State General Fund budget for the previous year, when lease revenue bonds and one-time funds are excluded. With expected cost increases that must be funded, it is estimated the University will need to redirect a total of $148.7 million from existing resources, which is equivalent to a 4.9% reduction in State General Funds.

Major elements of the proposed spending plan are shown in Display XXI-3 and described in brief detail below. The plan includes an assumption that at least $28 million in savings is achieved through the restructuring of the Office of the President.

As shown in the display, while revenue from the State is reduced, student fees and increases in UC General Funds provide a net revenue increase of $129 million.

Funded Expenditures. Expenditures on the display are grouped into two categories. The first group of expenditures represents those programs for which a specific funding source for the increase is identified. They include:

- professional school cost increases and enrollment growth — the $12.1 million (net of financial aid) from increased professional school fees will be used to help fund cost increases at the professional schools;
- return to aid of one-third of the increased fee revenue to be used to provide financial aid for needy students — most needy students with family incomes of $60,000 or less will receive grant aid to offset the fee increase and most needy middle income students with family income below $100,000 will have one-half of their fee increase covered with grants;
- a second increment of new funding for student mental health, funded from the Registration Fee increase — with the $8 million added in 2008-09, a total of $12 million will have been infused into these programs over a two-year period;
- one-time funding of $10 million for operational support for the California Institutes for Science and Innovation.

Partially Funded Expenditures. The second group of expenditures consists of mandatory costs for which the campuses will need to use new non-State revenue and funds redirected from existing resources. These include:

- continuation costs totaling $32.4 million for salary increases incurred during the 2007-08 budget year (salary increases were effective October 1, so the one-fourth of the year that was not previously funded must now be funded);
- academic merit increases for the approximately one-third of the faculty who are eligible for these increases in the budget year ($27.5 million);
- health benefit cost increases are expected to rise by $29.6 million, significantly more than has been budgeted in recent years;
- enrollment growth of approximately 5,000 FTE ($78.7 million based on the marginal cost of instruction) — campuses accommodated planned enrollment growth because to do otherwise would have given inadequate notice to students and their families who made plans based on an assumption enrollment slots would be available;

- a third increment of funding to augment graduate student support ($10 million);
- purchased utilities have been underfunded for several years on many campuses — all campuses will experience 20% - 30% increases in gas and electricity costs in the coming year.

The final State budget act provides a total of $3.250 billion in State General Funds for the University's budget. However, as mentioned earlier, the University has been directed to return $33.1 million in savings, reducing the University's net budget to $3.217 billion, or, as shown in Display XXI-3, to $3.032 billion when lease revenue payments one-time funding are excluded. This represents a decrease over the prior year of 1.7%.

DISPLAY XXI-3: UNIVERSITY OF CALIFORNIA 2008-09 FINAL BUDGET PLAN
(DOLLARS IN MILLIONS)

State funding for UC declined by $48.7 million in 2008-09. The budget plan will require nearly $150 million in redirections from existing programs in order to fund mandatory cost increases in a number of areas.

REVENUE		
2007-08 Operating Revenue		
State General Funds	$ 3,080.7	
UC General Funds	$ 576.8	
Student Fee Revenue	$ 1,574.2	
Total	$ 5,231.7	$ 5,231.7
2008-09 New Revenue		
State General Funds (January)	$ (108.7)	
State General Funds (May revision)	$ 98.5	
Labor Research Line Item Veto	$ (5.4)	
October 10, 2008 reduction	$ (33.1)	
UC General Funds	$ 24.5	
Projected Reduction in UCGF (STIP loss)	$ (7.3)	
Student Fee Revenue	$ 160.4	
Net New Revenue	$ 128.9	**$ 128.9**
Total 2008-09 Operating Revenue		$ 5,360.6
EXPENDITURES		
2007-08 Operating Expenditures	$ 5,231.7	$ 5,231.7
UCOP Savings	$ (28.1)	**$ (28.1)**
2008-09 Campus Expenditures		
Funded:		
Professional School Cost Increases and Growth	$ 12.1	
Student Financial Aid	$ 57.5	
Student Mental Health	$ 8.0	
California Institutes for Science and Innovation	$ 10.0	
Subtotal	$ 87.6	**$ 87.6**
Partially Funded or Unfunded:		
Continuation Costs of October 1, 2007 Salary Increases	$ 32.4	
Academic Merit Increases (1.78% of base)[1]	$ 27.5	
Health Benefit Cost Increases[2]	$ 29.6	
Enrollment Growth Net of Financial Aid (5,000 FTE students)	$ 78.7	
Graduate Student Support	$ 10.0	
Purchased Utility Deficits	$ 40.0	
Subtotal	$ 218.2	**$ 218.2**
Net Campus Reductions[3]		**$ (148.7)**
Total 2008-09 Operating Expenditures		$ 5,360.7

(1) In addition, campuses will likely use additional funds from internal redirection to provide faculty salary increases for retention purposes.
(2) Estimated cost to maintain employer share at 87%. Additional reserve funds will be used on a one-time basis to offset increases in employee contributions and reduce the impact on take-home pay.
(3) Does not include non-salary price increase of $25 million.

Amended by The Regents, November 21, 2008.
Changes shown in red.

APPENDIX DISPLAY 1: BUDGET FOR CURRENT OPERATIONS
EXPENDITURES BY PROGRAM AND FUND TYPE
(DOLLARS IN THOUSANDS)

	2008-09 BUDGET			2009-10 PROPOSED			PROPOSED INCREASES		
	STATE & UC GENERAL FUNDS[1]	RESTRICTED FUNDS	TOTAL FUNDS	STATE & UC GENERAL FUNDS[1]	RESTRICTED FUNDS	TOTAL FUNDS	STATE & UC GENERAL FUNDS[1]	RESTRICTED FUNDS	TOTAL FUNDS
INSTRUCTION									
General Campus	$ 1,690,213	$ 780,688	$ 2,470,901	$ 1,831,358	$ 810,446	$ 2,641,804	$ 141,145	$ 29,758	$ 170,903
Health Sciences	377,773	690,313	1,068,086	400,539	720,040	1,120,579	22,766	29,727	52,493
Summer Session	--	11,131	11,131	0	11,131	11,131	--	--	0
University Extension	--	203,153	203,153	--	208,232	208,232	--	5,079	5,079
RESEARCH	315,349	327,418	642,767	330,749	337,234	667,983	15,400	9,816	25,216
PUBLIC SERVICE									
Campus Public Service	56,071	102,615	158,686	56,071	106,207	162,278	--	3,592	3,592
Cooperative Extension	45,483	17,731	63,214	45,483	18,529	64,012	--	798	798
ACADEMIC SUPPORT									
Libraries	186,492	95,166	281,658	186,492	98,211	284,703	--	3,045	3,045
Organized Activities	193,845	587,825	781,670	193,845	627,209	821,054	--	39,384	39,384
TEACHING HOSPITALS	53,538	4,827,626	4,881,164	53,538	5,117,284	5,170,822	--	289,658	289,658
STUDENT SERVICES	--	582,052	582,052	--	610,229	610,229	--	28,177	28,177
INSTITUTIONAL SUPPORT	333,258	392,071	725,329	333,258	411,588	744,846	--	19,517	19,517
OPERATION AND MAINTENANCE OF PLANT	457,242	134,978	592,220	491,042	140,377	631,419	33,800	5,399	39,199
STUDENT FINANCIAL AID	60,339	634,036	694,375	60,339	660,530	720,869	--	26,494	26,494
AUXILIARY ENTERPRISES	--	945,476	945,476	--	1,002,205	1,002,205	--	56,729	56,729
PROVISIONS FOR ALLOCATION	64,566	26,427	90,993	74,765	26,427	101,192	10,199	--	10,199
UNIVERSITY OPPORTUNITY FUND AND SPECIAL PROGRAMS	--	205,000	205,000	--	211,000	211,000	--	6,000	6,000
SUBTOTAL	$ 3,834,169	$ 10,563,706	$ 14,397,875	$ 4,057,479	$ 11,116,879	$ 15,174,358	$ 223,310	$ 553,173	$ 776,483
PROGRAM MAINTENANCE									
Compensation and Other Cost Increases	--	--	--	496,849	0	496,849	496,849	0	496,849
TOTAL UNIVERSITY	$ 3,834,169	$ 10,563,706	$ 14,397,875	$ 4,554,328	$ 11,116,879	$ 15,671,207	$ 720,159	$ 553,173	$ 1,273,332

[1] UC General Funds do not support Teaching Hospitals. For all other budgeted programs, UC General Funds represent about 16% of the General Funds budget while State General Funds represent the remaining 84%.
In 2009-10, proposed State and UC General Funds includes a possible $109.6 million buyout of student fee increases.

APPENDIX DISPLAY 2: GENERAL CAMPUS AND HEALTH SCIENCES
FULL-TIME EQUIVALENT STUDENT ENROLLMENTS

	2007-08		2008-09	
	Budgeted	**Actual**	**Budgeted**	**Estimated**
BERKELEY				
General Campus	32,535	34,229	32,535	34,606
Health Sciences	761	760	761	761
Total	33,296	34,989	33,296	35,367
DAVIS				
General Campus	27,700	28,199	27,700	28,636
Health Sciences	1,910	2,151	1,910	2,198
Total	29,610	30,350	29,610	30,834
IRVINE				
General Campus	26,050	26,924	26,050	27,301
Health Sciences	1,184	1,344	1,184	1,382
Total	27,234	28,268	27,234	28,683
LOS ANGELES				
General Campus	33,390	34,290	33,390	34,640
Health Sciences	3,935	3,840	3,935	3,890
Total	37,325	38,130	37,325	38,530
MERCED				
General Campus	2,000	1,903	2,000	2,877
RIVERSIDE				
General Campus	17,159	17,238	17,159	18,002
Health Sciences	48	48	48	48
Total	17,207	17,286	17,207	18,050
SAN DIEGO				
General Campus	26,375	26,641	26,375	27,610
Health Sciences	1,409	1,674	1,409	1,752
Total	27,784	28,315	27,784	29,362
SAN FRANCISCO				
Health Sciences	3,784	4,141	3,784	4,285
SANTA BARBARA				
General Campus	22,000	21,919	22,000	22,526
SANTA CRUZ				
General Campus	16,075	16,012	16,075	16,464
UNIVERSITYWIDE				
General Campus	203,284	207,355	203,284	212,662
Health Sciences	13,031	13,958	13,031	14,316
Reserve	(60)	-	(60)	-
Total	216,255	221,313	216,255	226,978

APPENDIX DISPLAY 3: GENERAL CAMPUS
FULL-TIME EQUIVALENT STUDENT ENROLLMENTS

	2007-08		2008-09	
	Budgeted	Actual	Budgeted	Estimated
BERKELEY				
Undergraduate	24,435	26,002	24,435	26,448
Graduate	8,100	8,227	8,100	8,158
Total	32,535	34,229	32,535	34,606
DAVIS				
Undergraduate	23,340	23,897	23,340	24,266
Graduate	4,360	4,302	4,360	4,370
Total	27,700	28,199	27,700	28,636
IRVINE				
Undergraduate	22,550	23,646	22,550	23,805
Graduate	3,500	3,278	3,500	3,496
Total	26,050	26,924	26,050	27,301
LOS ANGELES				
Undergraduate	25,690	26,585	25,690	26,842
Graduate	7,700	7,705	7,700	7,798
Total	33,390	34,290	33,390	34,640
MERCED				
Undergraduate	1,860	1,782	1,860	2,701
Graduate	140	121	140	176
Total	2,000	1,903	2,000	2,877
RIVERSIDE				
Undergraduate	15,059	15,233	15,059	15,920
Graduate	2,100	2,005	2,100	2,082
Total	17,159	17,238	17,159	18,002
SAN DIEGO				
Undergraduate	22,575	22,976	22,575	23,911
Graduate	3,800	3,665	3,800	3,699
Total	26,375	26,641	26,375	27,610
SANTA BARBARA				
Undergraduate	19,000	19,003	19,000	19,555
Graduate	3,000	2,916	3,000	2,971
Total	22,000	21,919	22,000	22,526
SANTA CRUZ				
Undergraduate	14,475	14,579	14,475	14,950
Graduate	1,600	1,433	1,600	1,514
Total	16,075	16,012	16,075	16,464
UNIVERSITYWIDE				
Undergraduate	168,984	173,703	168,984	178,398
Graduate	34,300	33,652	34,300	34,264
Reserve	(60)		(60)	
Total	203,224	207,355	203,224	212,662

Amended by The Regents, November 21, 2008.

Changes shown in red.

APPENDIX DISPLAY 4: INCOME AND FUNDS AVAILABLE

(DOLLARS IN THOUSANDS)

	Estimated 2008-09	Proposed 2009-10	Proposed Changes
STATE APPROPRIATIONS			
General Fund	$ 3,217,297	$ 3,835,152	$ 617,855
General Fund / Possible Student Fee Increase		109,648	109,648
Special Funds	73,011	73,354	343
TOTAL, STATE APPROPRIATIONS	$ 3,290,308	$ 4,018,154	$ 727,846
UNIVERSITY SOURCES			
General Funds Income			
Student Fees			
Nonresident Tuition	$ 257,243	$ 264,851	$ 7,608
Application for Admission and Other Fees	28,000	28,000	--
Interest on General Fund Balances	26,500	26,500	--
Federal Contract & Grant Overhead	252,377	259,377	7,000
DOE Allowance for O/H & Management	1,300	1,300	--
Overhead on State Agency Agreements	18,500	18,500	--
Other	10,100	11,000	900
Subtotal	$ 594,020	$ 609,528	$ 15,508
Prior Year Income Balance	22,852	--	(22,852)
Total UC General Fund Income	$ 616,872	$ 609,528	$ (7,344)
Special Funds Income			
GEAR UP State Grant Program	$ 3,500	$ 3,500	$ --
United States Appropriations	17,250	17,250	--
Local Government	96,639	96,639	--
Student Fees			
Educational Fee	1,391,234	1,428,411	37,177
Registration Fee	188,329	193,352	5,023
Special Fee for Law and Medicine	1,914	1,914	--
Professional School Fees	153,183	155,644	2,461
University Extension Fees	203,153	208,232	5,079
Summer Session Fees	11,131	11,131	--
Other Fees	296,956	317,743	20,787
Sales & Services - Teaching Hospitals	4,827,626	5,117,284	289,658
Sales & Services - Educational Activities	1,024,991	1,117,240	92,249
Sales & Services - Support Activities	519,774	566,554	46,780
Endowments	215,983	215,983	--
Auxiliary Enterprises	945,476	1,002,205	56,729
Contract and Grant Off-the-Top Overhead	111,500	117,000	5,500
DOE Management Fee	33,500	33,500	--
University Opportunity Fund	205,000	211,000	6,000
Other	243,556	228,943	(14,613)
Total Special Funds	$ 10,490,695	$ 11,043,525	$ 552,830
TOTAL, UNIVERSITY SOURCES	$ 11,107,567	$ 11,653,053	$ 545,486
TOTAL INCOME AND FUNDS AVAILABLE	$ 14,397,875	$ 15,671,207	$ 1,273,332

INDEX

UNIVERSITY OF CALIFORNIA
Office of the President
University Budget Office
1111 Franklin Street, 10th Floor
Oakland, CA 94607-5220
Tel. (510) 987-9122
http://budget.ucop.edu